Team Radio
Drainage Report

Prepared For:

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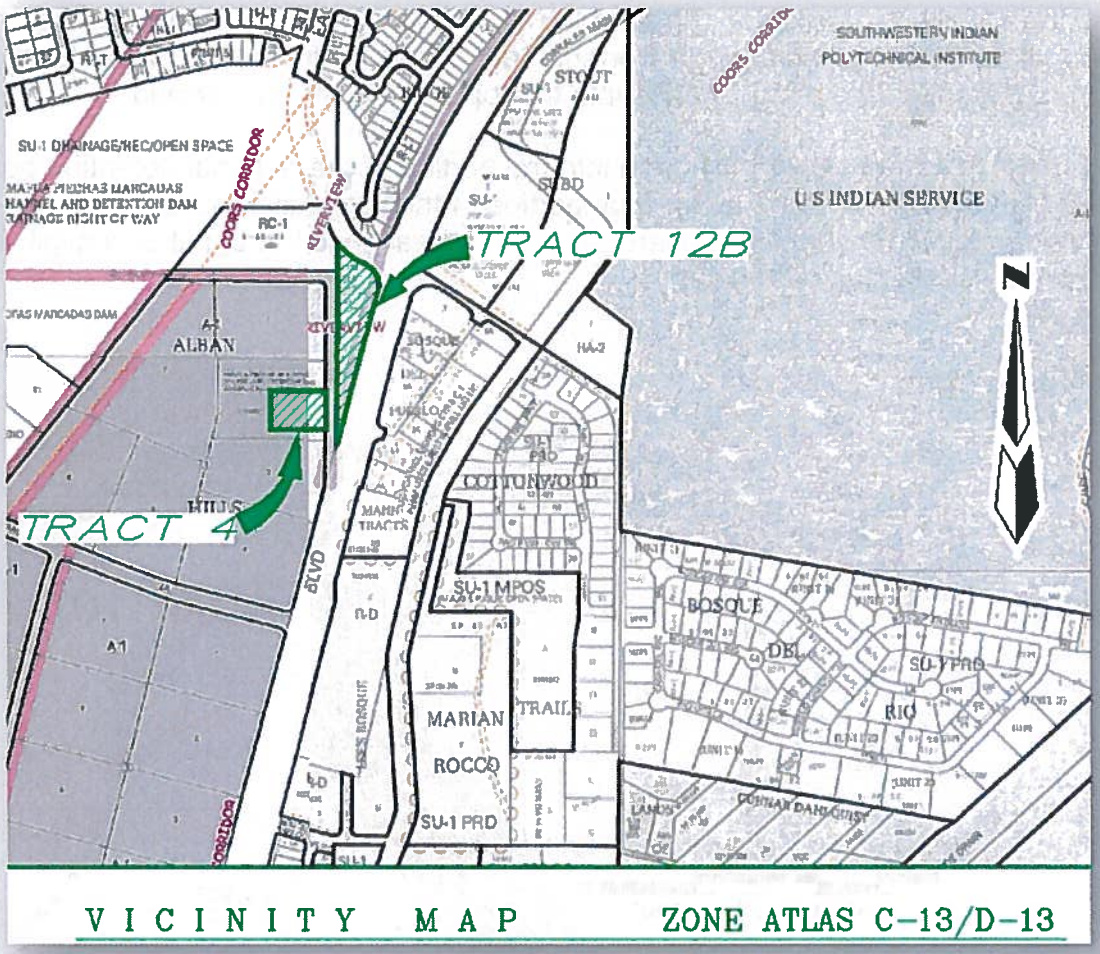
Contents

Legal Description & Vicinity Map

Parcel 12B Riverview Addition containing 2.1483 acres in the City of Albuquerque and Tract 4 of the Piedras Marcadas Channel and Detention Dam Right of Way containing 4.23 acres in AMAFCA's jurisdiction.



Floodplain

There are not any special Flood Hazard Zones on or near this site as shown on Flood Insurance Rate Map Number 35001c0116G revised September 26, 2008.

Stormwater Management Plan

The peak 100 year stormwater runoff rates from this site will be less than the rate established by the *North Coors Drainage Management Plan – Middle Area* (Smith Feb '97) such that the capacity of the downstream double 21" RCPs is not exceeded. The *North Coors Drainage Management Plan – Middle Area* (Smith Feb '97) is accepted by AMAFCA and by the City of Albuquerque. When several of the culverts under Coors Blvd. were plugged as part of the construction of the *Bosque Del Pueblo Final Grading &Drainage Plan* (Greiner, 1989), a de facto pond was created on these properties unknown to the owners until recently. The Team Radio development will construct a new improved regional pond in accordance with an AMAFCA Turnkey Agreement date September 26, 2014. Drainage infrastructure west of the Team Radio site will then be maintained by AMAFCA. The new regional pond will cut the peak 100-YR flow rate from the 39.1 acre upstream offsite basins plus the onsite 2 acre basin to about half of the originally planned runoff rate (90 cfs reduced 53.21 cfs).

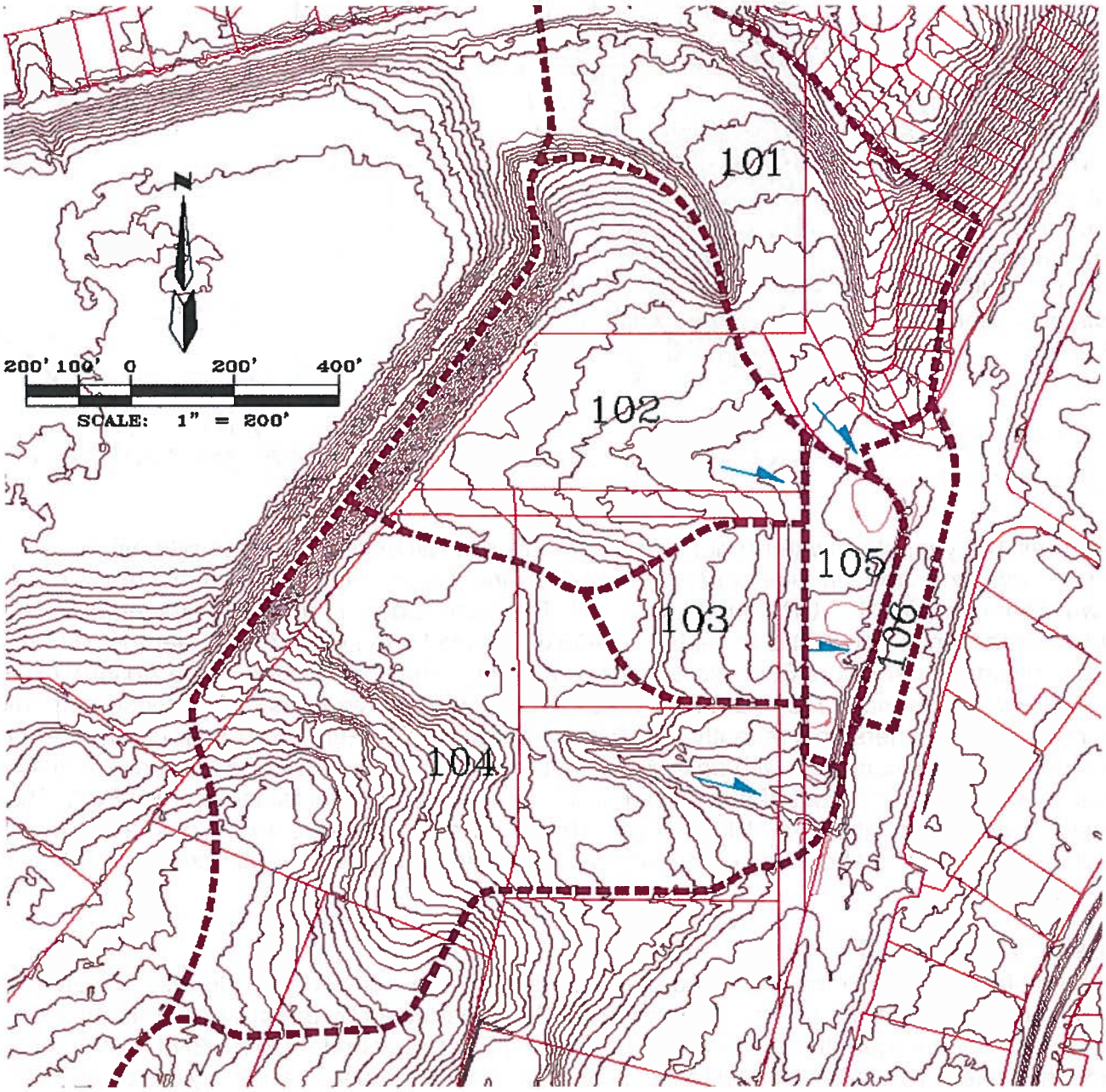
Upstream Offsite Flows

Drainage from Eagle Ranch Road and from Coors Blvd., Basins 101 and 106 respectively will be conveyed through Parcel 12B in a storm drain to be constructed by the developer and maintained by the City of Albuquerque. It will outfall into an existing 60" culver under Coors Blvd., NMDOT owned and Maintained. The 60" culvert will be extended as part of the construction by the developer. Offsite flows from Basins 102 and 103 are diverted by a roadside ditch west of Calle Nortena to a sump in Calle Nortena where they flow on the surface over the Calle Nortena roadway and into this

site. There they will be joined by the onsite drainage (basin 105) and all will be conveyed on the surface through the parking lot to a concrete rundown that will drain the first flush into the onsite Storm Water Quality pond. The rundown will drain higher flows into the regional detention pond located on both sides of Calle Nortena near the 60" outfall under Coors Blvd. At peak stage the regional detention pond spreads into the top 0.57' of the SWQ pond.

Offsite flows from Basin104 drain into the portion of the regional detention pond located on the AMAFCA right of way Tract 4. That portion of the regional pond is connected to the portion on Parcel 12B by a 48" RCP which is oversized so that head loss through it is negligible and the pond is at the same elevation on both sides.

Basin Map



Hydrology

AHYMO S4 is used for the hydrology calculations as contained in the Appendix of the Drainage Report. Ground cover is based on existing conditions in basin 101, the *North Coors Drainage Management Plan – Middle Area* (Smith Feb '97) in basins 102,103, and 104, and ground cover is based on Post development conditions in basins 105 and 106. The input and output results are summarized in the following table.

HYDROLOGY SUMMARY

Description	AHYMO BASIN ID	AREA		Ground Cover (%)				Peak 100-YR Flow Q_{100} (cfs)		Peak 10-YR Flow Q_{100} (cfs)		Peak 10-YR Flow Q_{100} (cfs)		SWQ Volume
		(Ac)	(Sq mi)	A	B	C	D	Incru	Total	Incru	Total	Incru	Total	(Ac.Ft.)
Eagle Ranch RD.	101	8.5	0.01328	0.0	0.0	76.0	24.0	30.06	30.06	18.02	18.02	8.89	8.89	0.078
Offsite west	102	10.4	0.01625	50.0	16.6	16.7	16.7	26.72	56.72	12.59	30.61	3.72	12.61	0.067
Offsite west	103	2.2	0.00344	50.0	16.6	16.7	16.7	5.62	62.33	2.65	33.26	0.78	13.39	0.014
Alban/AMAFCA	104	16.7	0.02609	50.0	16.6	16.7	16.7	43.04	105.37	20.28	53.54	6.00	19.39	0.107
Onsite	105	2.0	0.00313	0.0	0.0	20.0	80.0	8.51	113.82	5.53	59.07	3.38	22.77	0.061
Coors Rd	106	1.3	0.00203	0.0	0.0	0.0	100.0	5.83	119.62	3.88	62.85	2.48	25.21	0.050
Discharge from	Pond							53.21		40.41		18.65		

Precipitation values are from DPM Section 22.2, Table A-2, Zone 1. The Pond volume calculations were performed using the conic equation with the following results.

Pond volume Calculations							Outfall Hydraulic Calculations						
	AMAFCA Parcel		Team Radio Site		Total On & Off-site		Double 21" RCPs				60" RCP		Outlet Capacity
							Inlet Control		Outlet Control		Inlet Control		
Elevation	Area (SF)	Vol (Ac-Ft)	Area (SF)	Vol (Ac-Ft)	Area (SF)	Vol (Ac-Ft)	HW/D	Q (cfs)	H (ft)	Q (cfs)	HW/D	Q (cfs)	Q (cfs)
5001.0	1,098	0.00	1,867	0.00	2,965	0.00	2.29	46.0	7.7	44.4	0.13	7.0	7.0
5002.0	10,582	0.12	3,635	0.06	14,217	0.18	2.86	54.4	8.7	48.0	0.33	22.0	22.0
5003.0	15,936	0.42	5,635	0.17	21,571	0.59	3.43	63.0	9.7	50.5	0.53	46.0	46.0
5004.0	19,201	0.82	7,985	0.32	27,186	1.14	4.00	68.0	10.7	52.6	0.73	82.0	52.6
5005.0	22,769	1.30	16,700	0.60	39,469	1.90	4.57	75.0	11.7	55.4	0.93	122.0	55.4
5006.0	26,640	1.87	34,740	1.18	61,380	3.05	5.14	80.0	12.7	57.6	1.13	160.0	57.6

The pond discharge is set equal to the smallest of three capacity calculations as summarized in the table above. Inlet control at the 60" RCP on the west side of Coors limits discharge rates at depths of 2' and less while the discharge rate at greater depths is limited by outlet control in the double 21" RCPs. The following table summarizes the pond routing results. The capacity is established by the two nomographs for Concrete Pipe Culverts Flowing Full and for Concrete Pipe Culverts with Inlet Control from the Bureau of Public Roads Jan 1963 as contained in the Appendix of the Drainage Report.

The Team Radio Pond Summary Table

Event Recurance Interval	Peak Inflow (cfs)	Peak Outflow (cfs)	Peak Storage Volume	Peak Stage (ft)
2-YR	25.21	18.65	0.14	5001.77
10-YR	62.85	40.41	0.49	5002.77
100-YR	119.62	53.34	1.34	5004.26

Hydraulic Calculations

HGL calculations for the storm drain that parallels Coors Rd between Eagle Ranch Road and the existing 60" RCP under Coors Rd begin at the downstream end with the 100yr pond elevation at the moment when the peak flow rate enters the storm drain at Eagle Ranch Rd. From AHYMO the peak of basin 101 occurs at 1.53 hours when the pond stage is 5003.26. The peak flow rate in the 36" RCP is equal to 35.89cfs, the sum of basins 101 and 106.

Alternatively when the peak stage of the pond occurs, at 1.73 hours, the peak inflow is 52.47cfs which is 44% of the peak flow. At that moment the beginning HGL elevation at the downstream end is 5004.26 and the prorated flow in the 36" pipe is 15.74cfs.

The hydraulic grade line elevation was calculated using WSPGW at each of these two moments of the 100 year storm, peak inflow and peak pond stage, and the higher of the two elevations is shown on the pipe profiles along with the peak flow rate and corresponding velocity. The flow rates in the storm drains in Eagle Ranch Rd. are based on the record drawings for Eagle Ridge Subdivision, City Project # 702181.

The backwater effect of the pond on the 100 year surface drainage from The Team Radio site, including drainage from upstream offsite basins 102 and 103 that drain on the surface through The Team Radio site, was analyzed using HEC-RAS for the moment in the hydrograph where the peak flow rate of 41 cfs occurs, at 1.53 hours, when the pond stage is 5003.26. The analysis determined that the 100-yr elevation at The Team Radio site is 5004.85 which is higher than the peak 100 year pond stage of 5004.26. The lowest parking lot elevation is 5004.20 where the normal 100 year flow depth is 0.82' using Plate 22.3 D-4 for 41cfs at 0.50% slope compared to 0.65' depth backwater from the concrete spillway.

Storm Water Quality Calculations

The required volume is based on a 0.6" precipitation event that produces 0.46" runoff from impervious surfaces only and is shown for each basin in the Hydrology Summary table on page 5. The required volume for The Team Radio site is 0.61 ac-ft. The concrete spillway is designed to drain north into the SWQ pond(s) until the 0.67 ac-ft pond(s) fill up to elevation 5003.70, then it spills south into the detention pond.

Survey

The existing conditions as shown on the plans were surveyed by Aldrich Land Surveying revised October 27, 2014.

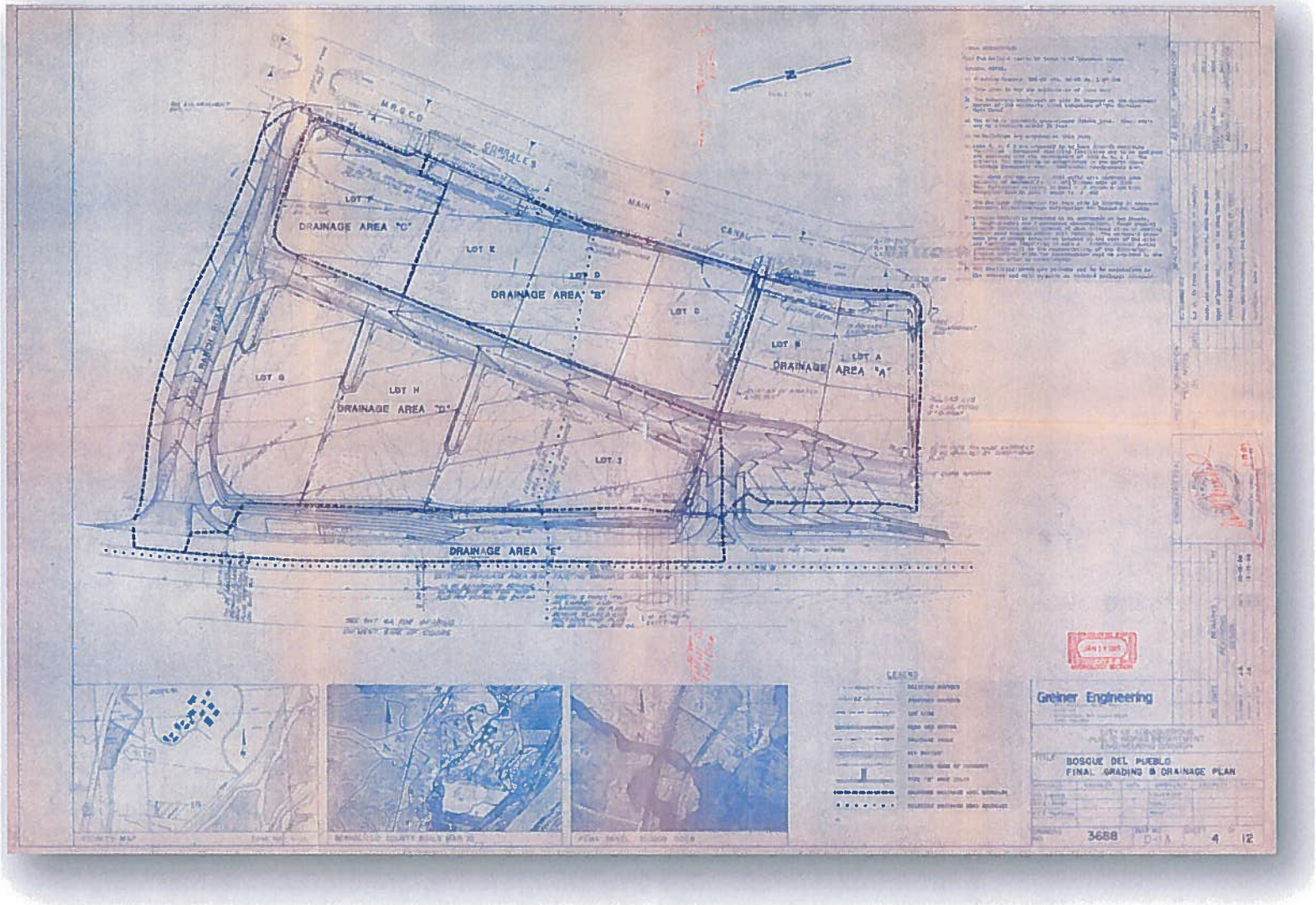
Benchmark

All elevations in this report are based on NGVD29 ASC Monument "R. Alameda B. No. 2" Elev. = 5058.25. Add 2.83' to the elevations in this report to convert to NAVD 88.

Soils

Earthwork construction is to be in accordance with the Geotechnical Engineering Services Job No. 1-40102, 101.7 The Team Office Building by GeoTest Inc. February 11, 2014.

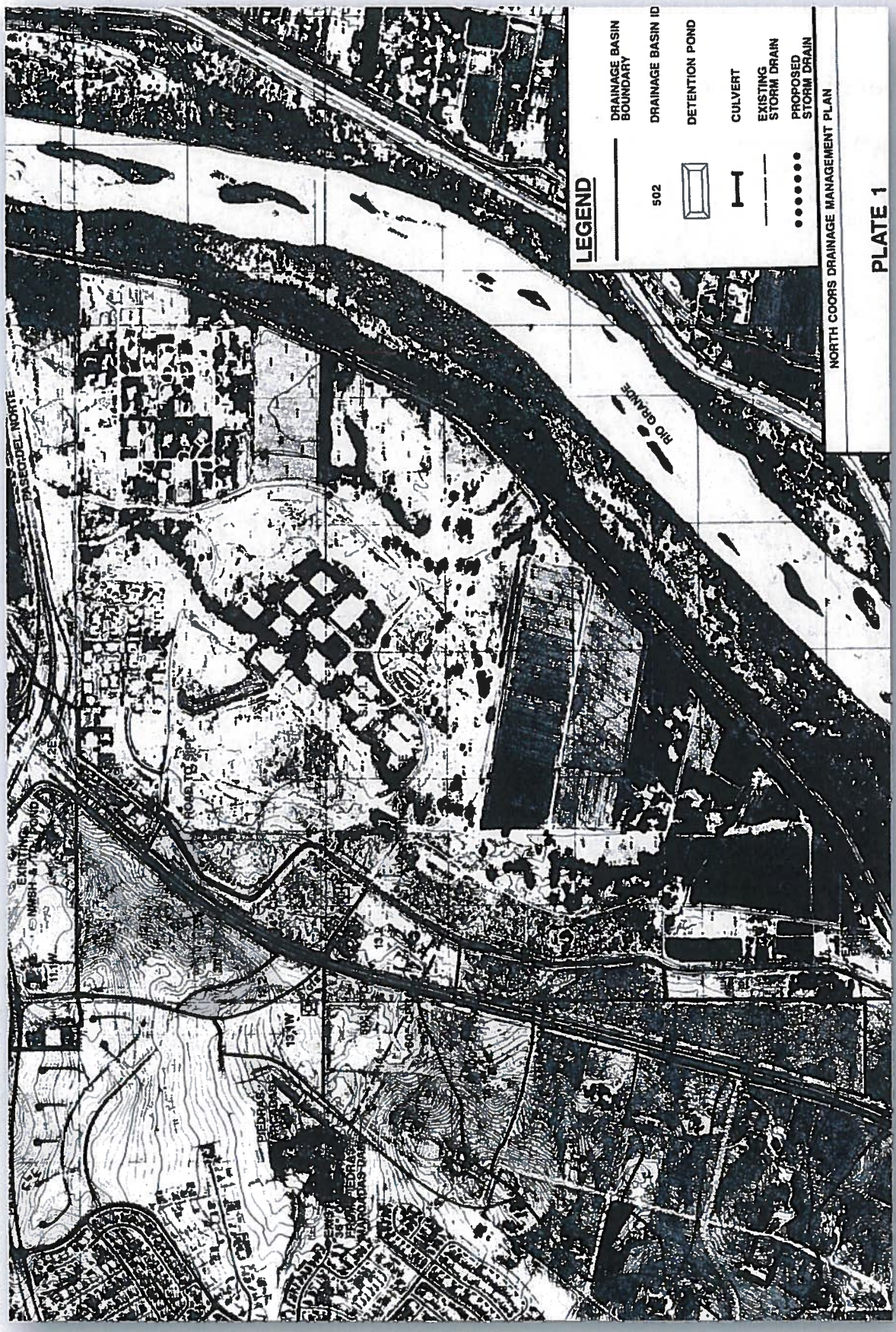
Planning History



The Piedras Marcadas Dam was constructed in 1984. Then the *Bosque Del Pueblo Final Grading &Drainage Plan* (Greiner, 1989) shows the plugging of several storm drain culverts under Coors leaving only the two existing 60" RCPs to drain this 41 acre basin, and that plan also shows the two 21" RCPs that were constructed through the downstream property thus limiting the discharge to the Corrales Main Canal to about 45 cfs. Because that is the maximum amount of flow that will fit through the two 21" pipes without overtopping Coors at the north end of this site and Calle Nortena at the south end of this site.

North Coors Drainage Management Plan

Then the *North Coors Drainage Management Plan Middle Area* (Smith, 1997) shows the following 100 Year discharge rates for the same 41 acre basin that drains through the existing two 60"/21" culverts but it planned for the flows to cross Coors Blvd. at three different locations, including 2 culverts to the north that were plugged.



Summary of North Coors DMP, 1997

Basin ID	Area (Sq Mi)	Area (Ac)	100 Yr Flow Rate (cfs)	Discharge per acre (cfs/ac)	Allowable Discharge
12.2W	0.00691	4.42	15.2	3.44	15
13.1W	0.01020	6.53	20.67	3.17	8
14.1W	0.05117	32.75	66.95	2.04	67
Total	**0.06828**	**43.70**	**102.82**		**90**

Appendix

AHYMO 100 YR Input

```
                                2014-10-17 100 yr final
START                   0.0 HRS  PUNCH CODE=0  PRINT LINES=-6
*S                      THE TEAM OFFICE BUILDING 100-YR, 6-HR DEVELOPED
CONDITIONS
LOCATION                ALBUQUERQUE
RAINFALL                TYPE=1  RAIN QUARTER=0.0  RAIN ONE=1.87
                        RAIN SIX=2.22       RAIN DAY=2.66       DT=.01
COMPUTE NM HYD          ID=1 HYD=101 DA=0.0133 SQ MI
                        PER A=0 B=0 C=76 D=24
                        TP=0.133333 HRS RAIN=-1
PRINT HYD               ID=1 CODE=1
COMPUTE NM HYD          ID=2 HYD=102 DA=0.0162 SQ MI
                        PER A=50 B=16.6 C=16.7 D=16.7
                        TP=0.133333 HRS RAIN=-1
PRINT HYD               ID=2 CODE=1
COMPUTE NM HYD          ID=3 HYD=103 DA=0.0034 SQ MI
                        PER A=50 B=16.6 C=16.7 D=16.7
                        TP=0.133333 HRS RAIN=-1
PRINT HYD               ID=3 CODE=1
COMPUTE NM HYD          ID=4 HYD=104 DA=0.0261 SQ MI
                        PER A=50 B=16.6 C=16.7 D=16.7
                        TP=0.133333 HRS RAIN=-1
PRINT HYD               ID=4 CODE=1
COMPUTE NM HYD          ID=5 HYD=105 DA=0.0031 SQ MI
                        PER A=0 B=0 C=20 D=80
                        TP=0.133333 HRS RAIN=-1
PRINT HYD               ID=5 CODE=1
COMPUTE NM HYD          ID=6 HYD=106 DA=0.0020 SQ MI
                        PER A=0 B=0 C=0 D=100
                        TP=0.133333 HRS RAIN=-1
PRINT HYD               ID=6 CODE=1
ADD HYD                 ID=7 HYD=200 IDS= 1 & 2
ADD HYD                 ID=8 HYD=201 IDS= 7 & 3
ADD HYD                 ID=9 HYD=202 IDS= 8 & 4
ADD HYD                 ID=10 HYD=203 IDS= 9 & 5
ADD HYD                 ID=11 HYD=204 IDS= 10 & 6
PRINT HYD               ID=11 CODE=1
ROUTE RESERVOIR         ID=12 HYD=305 INFLOW ID=11  CODE=5
                        OUTFLOW (CFS)          STORAGE (AC FT)    ELEV (FT)
                        0                      0.00               5000
                        7                      0.01               5001
                        22                     0.18               5002
                        46                     0.59               5003
                        52.6                   1.14               5004
                        55.4                   1.90               5005
                        57.6                   3.05               5006
PRINT HYD               ID=12 CODE=1
FINISH
```

←(s16.67h8.5v0T←&18D
AHYMO PROGRAM SUMMARY TABLE (AHYMO-S4) - Ver. S4.01a, Rel: 01a RUN DATE (MON/DAY/YR) =10/17/2014
INPUT FILE = C:\Users\doug\Desktop\2014-10-17 100 yr final.txt USER NO.= AHYMO_Temp_User:20122010

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1 NOTATION
START										TIME= 0.00
*S	THE TEAM OFFICE BUILDING 100-YR, 6-HR DEVELOPED CONDITIONS									
LOCATION	ALBUQUERQUE									
RAINFALL TYPE= 1 NOAA 14										RAIN6= 2.220
COMPUTE NM HYD	101.00	-	1	0.01330	30.06	0.923	1.30184	1.530	3.531	PER IMP= 24.00
COMPUTE NM HYD	102.00	-	2	0.01620	26.72	0.833	0.96382	1.540	2.578	PER IMP= 16.70
COMPUTE NM HYD	103.00	-	3	0.00340	5.62	0.175	0.96382	1.540	2.584	PER IMP= 16.70
COMPUTE NM HYD	104.00	-	4	0.02610	43.04	1.342	0.96382	1.540	2.577	PER IMP= 16.70
COMPUTE NM HYD	105.00	-	5	0.00310	8.51	0.297	1.79603	1.530	4.289	PER IMP= 80.00
COMPUTE NM HYD	106.00	-	6	0.00200	5.83	0.210	1.97253	1.520	4.557	PER IMP= 100.00
ADD HYD	200.00	1& 2	7	0.02950	56.72	1.756	1.11619	1.530	3.004	
ADD HYD	201.00	7& 3	8	0.03290	62.33	1.931	1.10044	1.530	2.960	
ADD HYD	202.00	8& 4	9	0.05900	105.37	3.273	1.04000	1.540	2.790	
ADD HYD	203.00	9& 5	10	0.06210	113.82	3.569	1.07773	1.540	2.864	
ADD HYD	204.00	10& 6	11	0.06410	119.62	3.780	1.10565	1.530	2.916	
ROUTE RESERVOIR	305.00	11	12	0.06410	53.34	3.780	1.10565	1.730	1.300	AC-FT= 1.341
FINISH										

←(s0p10h4099T←&16D

AHYMO 100-YR Summary

←(s16.67h8.5v0T←&18D

AHYMO PROGRAM (AHYMO-S4) - Version: S4.01a - Rel: 01a
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START TIME (HR:MIN:SEC) = 16:45:39 USER NO.= AHYMO_Temp_User:20122010
INPUT FILE = C:\Users\doug\Desktop\2014-10-17 100 yr final.txt

START 0.0 HRS PUNCH CODE=0 PRINT LINES=-6
*S THE TEAM OFFICE BUILDING 100-YR, 6-HR DEVELOPED CONDITIONS
LOCATION ALBUQUERQUE
City of Albuquerque soil infiltration values (LAND FACTORS) used for computations.

Land Treatment	Initial Abstr.(in)	Unif. Infilt.(in/hour)
A	0.65	1.67
B	0.50	1.25
C	0.35	0.83
D	0.10	0.04

RAINFALL TYPE=1 RAIN QUARTER=0.0 RAIN ONE=1.87
RAIN SIX=2.22 RAIN DAY=2.66 DT=.01

6-HOUR RAINFALL DIST. - BASED ON NOAA ATLAS 14 FOR CONVECTIVE AREAS (NM & AZ) - D1
DT = 0.010000 HOURS END TIME = 6.000000 HOURS

0.0000	0.0005	0.0009	0.0014	0.0019	0.0023	0.0028
0.0033	0.0037	0.0042	0.0048	0.0053	0.0058	0.0063
0.0068	0.0073	0.0079	0.0084	0.0090	0.0096	0.0101
0.0107	0.0113	0.0119	0.0125	0.0130	0.0137	0.0144
0.0150	0.0157	0.0163	0.0170	0.0177	0.0183	0.0195
0.0209	0.0223	0.0238	0.0252	0.0266	0.0280	0.0294
0.0309	0.0325	0.0341	0.0357	0.0373	0.0389	0.0405
0.0421	0.0437	0.0454	0.0472	0.0489	0.0507	0.0524
0.0542	0.0559	0.0577	0.0595	0.0613	0.0631	0.0650
0.0668	0.0686	0.0705	0.0723	0.0742	0.0761	0.0780
0.0799	0.0819	0.0838	0.0857	0.0876	0.0896	0.0917
0.0939	0.0960	0.0982	0.1004	0.1025	0.1047	0.1068
0.1092	0.1116	0.1141	0.1165	0.1190	0.1214	0.1239
0.1263	0.1298	0.1352	0.1406	0.1460	0.1514	0.1568
0.1622	0.1676	0.1730	0.1803	0.1875	0.1948	0.2020
0.2093	0.2165	0.2238	0.2310	0.2402	0.2503	0.2605
0.2706	0.2807	0.2909	0.3010	0.3112	0.3230	0.3382
0.3534	0.3687	0.3839	0.3991	0.4144	0.4296	0.4448
0.4711	0.4974	0.5237	0.5499	0.5762	0.6025	0.6288
0.6551	0.7105	0.7805	0.8506	0.9206	0.9906	1.0606
1.1307	1.2007	1.2603	1.2991	1.3379	1.3767	1.4156
1.4544	1.4932	1.5320	1.5708	1.5903	1.6098	1.6293
1.6488	1.6683	1.6878	1.7073	1.7268	1.7415	1.7538
1.7661	1.7784	1.7907	1.8029	1.8152	1.8275	1.8385
1.8471	1.8556	1.8641	1.8726	1.8811	1.8896	1.8982
1.9067	1.9129	1.9191	1.9254	1.9316	1.9378	1.9441
1.9503	1.9565	1.9618	1.9665	1.9712	1.9759	1.9806
1.9854	1.9901	1.9948	1.9987	2.0010	2.0033	2.0056

AHYMO 100-YR Output

2.0079	2.0102	2.0125	2.0148	2.0171	2.0191	2.0211
2.0232	2.0252	2.0272	2.0293	2.0313	2.0333	2.0351
2.0368	2.0385	2.0401	2.0418	2.0435	2.0452	2.0468
2.0484	2.0500	2.0515	2.0530	2.0546	2.0561	2.0576
2.0592	2.0607	2.0622	2.0637	2.0651	2.0666	2.0681
2.0696	2.0710	2.0725	2.0735	2.0742	2.0749	2.0756
2.0763	2.0770	2.0777	2.0784	2.0791	2.0798	2.0805
2.0812	2.0819	2.0826	2.0833	2.0839	2.0846	2.0853
2.0859	2.0865	2.0872	2.0878	2.0885	2.0891	2.0897
2.0904	2.0910	2.0916	2.0922	2.0928	2.0934	2.0941
2.0947	2.0953	2.0959	2.0965	2.0971	2.0977	2.0983
2.0989	2.0995	2.1001	2.1006	2.1012	2.1018	2.1023
2.1029	2.1035	2.1040	2.1046	2.1051	2.1057	2.1062
2.1068	2.1073	2.1079	2.1084	2.1090	2.1095	2.1100
2.1106	2.1111	2.1116	2.1122	2.1127	2.1132	2.1138
2.1143	2.1148	2.1153	2.1158	2.1163	2.1168	2.1173
2.1178	2.1183	2.1188	2.1193	2.1198	2.1202	2.1207
2.1212	2.1217	2.1222	2.1227	2.1232	2.1236	2.1241
2.1246	2.1251	2.1256	2.1260	2.1265	2.1269	2.1274
2.1279	2.1283	2.1288	2.1292	2.1297	2.1301	2.1306
2.1310	2.1315	2.1319	2.1324	2.1328	2.1332	2.1337
2.1341	2.1346	2.1350	2.1354	2.1359	2.1363	2.1367
2.1372	2.1376	2.1380	2.1385	2.1389	2.1393	2.1397
2.1402	2.1406	2.1410	2.1414	2.1418	2.1423	2.1427
2.1431	2.1435	2.1439	2.1443	2.1447	2.1452	2.1456
2.1460	2.1464	2.1468	2.1472	2.1476	2.1480	2.1484
2.1488	2.1492	2.1496	2.1500	2.1504	2.1508	2.1512
2.1516	2.1520	2.1524	2.1528	2.1532	2.1535	2.1539
2.1543	2.1547	2.1551	2.1555	2.1559	2.1562	2.1566
2.1570	2.1574	2.1578	2.1582	2.1585	2.1589	2.1593
2.1597	2.1600	2.1604	2.1608	2.1612	2.1615	2.1619
2.1623	2.1626	2.1630	2.1634	2.1637	2.1641	2.1645
2.1648	2.1652	2.1656	2.1659	2.1663	2.1666	2.1670
2.1674	2.1677	2.1681	2.1684	2.1688	2.1691	2.1695
2.1699	2.1702	2.1706	2.1709	2.1713	2.1716	2.1720
2.1723	2.1727	2.1730	2.1733	2.1737	2.1740	2.1744
2.1747	2.1751	2.1754	2.1757	2.1761	2.1764	2.1768
2.1771	2.1774	2.1778	2.1781	2.1784	2.1788	2.1791
2.1794	2.1798	2.1801	2.1804	2.1808	2.1811	2.1814
2.1818	2.1821	2.1824	2.1827	2.1831	2.1834	2.1837
2.1840	2.1844	2.1847	2.1850	2.1853	2.1856	2.1860
2.1863	2.1866	2.1869	2.1872	2.1876	2.1879	2.1882
2.1885	2.1888	2.1891	2.1894	2.1898	2.1901	2.1904
2.1907	2.1910	2.1913	2.1916	2.1919	2.1922	2.1926
2.1929	2.1932	2.1935	2.1938	2.1941	2.1944	2.1947
2.1950	2.1953	2.1956	2.1959	2.1962	2.1965	2.1968
2.1971	2.1974	2.1977	2.1980	2.1983	2.1986	2.1989
2.1992	2.1995	2.1998	2.2001	2.2004	2.2007	2.2009
2.2012	2.2015	2.2018	2.2021	2.2024	2.2027	2.2030
2.2033	2.2036	2.2038	2.2041	2.2044	2.2047	2.2050
2.2053	2.2056	2.2058	2.2061	2.2064	2.2067	2.2070

```
                2.2073  2.2075  2.2078  2.2081  2.2084  2.2087  2.2089
                2.2092  2.2095  2.2098  2.2101  2.2103  2.2106  2.2109
                2.2112  2.2114  2.2117  2.2120  2.2123  2.2125  2.2128
                2.2131  2.2133  2.2136  2.2139  2.2142  2.2144  2.2147
                2.2150  2.2152  2.2155  2.2158  2.2160  2.2163  2.2166
                2.2168  2.2171  2.2174  2.2176  2.2179  2.2182  2.2184
                2.2187  2.2189  2.2192  2.2195  2.2197  2.2200

COMPUTE NM HYD       ID=1 HYD=101 DA=0.0133 SQ MI
                     PER A=0 B=0 C=76 D=24
                     TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   12.599    CFS   UNIT VOLUME =   0.9990       B =   526.28      P60 = 1.8700
     AREA =     0.003192 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.105893HR    TP =  0.133333HR    K/TP RATIO =  0.794199     SHAPE CONSTANT, N =  4.514592
     UNIT PEAK =   29.425    CFS   UNIT VOLUME =   0.9995       B =   388.14      P60 = 1.8700
     AREA =     0.010108 SQ MI    IA =   0.35000 INCHES    INF =   0.83000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD            ID=1 CODE=1

                                  PARTIAL HYDROGRAPH   101.00


    RUNOFF VOLUME =     1.30184 INCHES     =       0.9234 ACRE-FEET
    PEAK DISCHARGE RATE =      30.06 CFS  AT   1.530 HOURS   BASIN AREA =  0.0133 SQ. MI.


COMPUTE NM HYD       ID=2 HYD=102 DA=0.0162 SQ MI
                     PER A=50 B=16.6 C=16.7 D=16.7
                     TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   10.678    CFS   UNIT VOLUME =   0.9988       B =   526.28      P60 = 1.8700
     AREA =     0.002705 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.145614HR    TP =  0.133333HR    K/TP RATIO =  1.092107     SHAPE CONSTANT, N =  3.235735
     UNIT PEAK =   30.415    CFS   UNIT VOLUME =   0.9995       B =   300.52      P60 = 1.8700
     AREA =     0.013495 SQ MI    IA =   0.55996 INCHES    INF =   1.41790 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD            ID=2 CODE=1

                                  PARTIAL HYDROGRAPH   102.00
```

```
    RUNOFF VOLUME =      0.96382 INCHES      =        0.8327 ACRE-FEET
    PEAK DISCHARGE RATE =      26.72 CFS  AT    1.540 HOURS    BASIN AREA =  0.0162 SQ. MI.


COMPUTE NM HYD        ID=3 HYD=103 DA=0.0034 SQ MI
                      PER A=50 B=16.6 C=16.7 D=16.7
                      TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   2.2412    CFS   UNIT VOLUME =   0.9945       B =   526.28      P60 = 1.8700
     AREA =     0.000568 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.145614HR    TP =  0.133333HR    K/TP RATIO =  1.092107     SHAPE CONSTANT, N =  3.235735
     UNIT PEAK =   6.3834    CFS   UNIT VOLUME =   0.9977       B =   300.52      P60 = 1.8700
     AREA =     0.002832 SQ MI    IA =   0.55996 INCHES    INF =   1.41790 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD             ID=3 CODE=1

                                  PARTIAL HYDROGRAPH   103.00


    RUNOFF VOLUME =      0.96382 INCHES      =        0.1748 ACRE-FEET
    PEAK DISCHARGE RATE =       5.62 CFS  AT    1.540 HOURS    BASIN AREA =  0.0034 SQ. MI.


COMPUTE NM HYD        ID=4 HYD=104 DA=0.0261 SQ MI
                      PER A=50 B=16.6 C=16.7 D=16.7
                      TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   17.204    CFS   UNIT VOLUME =   0.9993       B =   526.28      P60 = 1.8700
     AREA =     0.004359 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.145614HR    TP =  0.133333HR    K/TP RATIO =  1.092107     SHAPE CONSTANT, N =  3.235735
     UNIT PEAK =   49.002    CFS   UNIT VOLUME =   0.9997       B =   300.52      P60 = 1.8700
     AREA =     0.021741 SQ MI    IA =   0.55996 INCHES    INF =   1.41790 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD             ID=4 CODE=1

                                  PARTIAL HYDROGRAPH   104.00
```

```
    RUNOFF VOLUME =      0.96382 INCHES      =        1.3416 ACRE-FEET
    PEAK DISCHARGE RATE =       43.04 CFS  AT    1.540 HOURS    BASIN AREA =  0.0261 SQ. MI.


COMPUTE NM HYD        ID=5 HYD=105 DA=0.0031 SQ MI
                      PER A=0 B=0 C=20 D=80
                      TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   9.7887    CFS   UNIT VOLUME =   0.9987       B =   526.28       P60 = 1.8700
     AREA =     0.002480 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.105893HR    TP =  0.133333HR    K/TP RATIO =  0.794199     SHAPE CONSTANT, N =  4.514592
     UNIT PEAK =   1.8048    CFS   UNIT VOLUME =   0.9924       B =   388.14       P60 = 1.8700
     AREA =     0.000620 SQ MI    IA =   0.35000 INCHES    INF =   0.83000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD             ID=5 CODE=1

                                  PARTIAL HYDROGRAPH   105.00


    RUNOFF VOLUME =      1.79603 INCHES      =        0.2969 ACRE-FEET
    PEAK DISCHARGE RATE =        8.51 CFS  AT    1.530 HOURS    BASIN AREA =  0.0031 SQ. MI.


COMPUTE NM HYD        ID=6 HYD=106 DA=0.0020 SQ MI
                      PER A=0 B=0 C=0 D=100
                      TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   7.8942    CFS   UNIT VOLUME =   0.9984       B =   526.28       P60 = 1.8700
     AREA =     0.002000 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD             ID=6 CODE=1

                                  PARTIAL HYDROGRAPH   106.00


    RUNOFF VOLUME =      1.97253 INCHES      =        0.2104 ACRE-FEET
    PEAK DISCHARGE RATE =        5.83 CFS  AT    1.520 HOURS    BASIN AREA =  0.0020 SQ. MI.


ADD HYD               ID=7 HYD=200 IDS= 1 & 2
```

```
ADD HYD              ID=8 HYD=201 IDS= 7 & 3
ADD HYD              ID=9 HYD=202 IDS= 8 & 4
ADD HYD              ID=10 HYD=203 IDS= 9 & 5
ADD HYD              ID=11 HYD=204 IDS= 10 & 6
PRINT HYD            ID=11 CODE=1
```

PARTIAL HYDROGRAPH 204.00

RUNOFF VOLUME = 1.10565 INCHES = 3.7798 ACRE-FEET
PEAK DISCHARGE RATE = 119.62 CFS AT 1.530 HOURS BASIN AREA = 0.0641 SQ. MI.

```
ROUTE RESERVOIR      ID=12 HYD=305 INFLOW ID=11  CODE=5
```

OUTFLOW (CFS)	STORAGE (AC FT)	ELEV (FT)
0	0.00	5000
7	0.01	5001
22	0.18	5002
46	0.59	5003
52.6	1.14	5004
55.4	1.90	5005
57.6	3.05	5006

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
0.00	0.00	5000.00	0.000	0.00
0.05	0.00	5000.00	0.000	0.00
0.10	0.00	5000.00	0.000	0.00
0.15	0.00	5000.00	0.000	0.00
0.20	0.00	5000.00	0.000	0.00
0.25	0.00	5000.00	0.000	0.00
0.30	0.00	5000.00	0.000	0.00
0.35	0.00	5000.00	0.000	0.00
0.40	0.00	5000.00	0.000	0.00
0.45	0.00	5000.00	0.000	0.00
0.50	0.00	5000.00	0.000	0.00
0.55	0.00	5000.00	0.000	0.00
0.60	0.00	5000.00	0.000	0.00
0.65	0.00	5000.00	0.000	0.00
0.70	0.00	5000.00	0.000	0.00
0.75	0.00	5000.00	0.000	0.00
0.80	0.00	5000.00	0.000	0.00
0.85	0.02	5000.00	0.000	0.01
0.90	0.31	5000.03	0.000	0.19
0.95	0.90	5000.10	0.001	0.69
1.00	1.62	5000.19	0.002	1.35
1.05	2.68	5000.33	0.003	2.31

1.10	3.86	5000.49	0.005	3.46
1.15	5.00	5000.66	0.007	4.60
1.20	6.32	5000.84	0.008	5.85
1.25	8.18	5001.01	0.011	7.08
1.30	11.46	5001.06	0.020	7.90
1.35	18.93	5001.20	0.044	10.02
1.40	41.00	5001.59	0.110	15.79
1.45	81.48	5002.22	0.271	27.33
1.50	113.28	5002.87	0.537	42.92
1.55	118.64	5003.44	0.832	48.90
1.60	103.94	5003.90	1.087	51.96
1.65	82.35	5004.15	1.255	53.02
1.70	61.99	5004.25	1.332	53.31
1.75	46.12	5004.25	1.334	53.31
1.80	34.44	5004.18	1.279	53.11
1.85	26.21	5004.06	1.184	52.76
1.90	20.62	5003.86	1.064	51.69
1.95	16.89	5003.62	0.931	50.09
2.00	14.11	5003.37	0.791	48.41
2.05	11.73	5003.10	0.648	46.69
2.10	9.81	5002.80	0.508	41.17
2.15	8.37	5002.51	0.390	34.27
2.20	7.23	5002.27	0.292	28.57
2.25	6.29	5002.08	0.212	23.88
2.30	5.51	5001.81	0.147	19.09
2.35	4.86	5001.52	0.099	14.83
2.40	4.29	5001.31	0.063	11.69
2.45	3.67	5001.16	0.036	9.33
2.50	3.07	5001.03	0.016	7.50
2.55	2.60	5000.47	0.005	3.29
2.60	2.24	5000.34	0.003	2.39
2.65	1.95	5000.29	0.003	2.05
2.70	1.70	5000.25	0.003	1.79
2.75	1.49	5000.22	0.002	1.56

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
2.80	1.31	5000.20	0.002	1.37
2.85	1.15	5000.17	0.002	1.20
2.90	1.01	5000.15	0.002	1.06
2.95	0.89	5000.13	0.001	0.93
3.00	0.79	5000.12	0.001	0.83
3.05	0.71	5000.11	0.001	0.74
3.10	0.63	5000.09	0.001	0.66
3.15	0.56	5000.08	0.001	0.59
3.20	0.50	5000.07	0.001	0.52
3.25	0.45	5000.07	0.001	0.47
3.30	0.41	5000.06	0.001	0.43
3.35	0.37	5000.06	0.001	0.39
3.40	0.34	5000.05	0.001	0.35

3.45	0.31	5000.05	0.000	0.32
3.50	0.28	5000.04	0.000	0.29
3.55	0.26	5000.04	0.000	0.27
3.60	0.24	5000.04	0.000	0.25
3.65	0.22	5000.03	0.000	0.23
3.70	0.20	5000.03	0.000	0.21
3.75	0.19	5000.03	0.000	0.19
3.80	0.18	5000.03	0.000	0.18
3.85	0.17	5000.02	0.000	0.18
3.90	0.17	5000.02	0.000	0.17
3.95	0.16	5000.02	0.000	0.16
4.00	0.16	5000.02	0.000	0.16
4.05	0.15	5000.02	0.000	0.15
4.10	0.15	5000.02	0.000	0.15
4.15	0.15	5000.02	0.000	0.15
4.20	0.15	5000.02	0.000	0.15
4.25	0.14	5000.02	0.000	0.14
4.30	0.14	5000.02	0.000	0.14
4.35	0.14	5000.02	0.000	0.14
4.40	0.14	5000.02	0.000	0.14
4.45	0.14	5000.02	0.000	0.14
4.50	0.14	5000.02	0.000	0.14
4.55	0.14	5000.02	0.000	0.14
4.60	0.14	5000.02	0.000	0.14
4.65	0.14	5000.02	0.000	0.14
4.70	0.14	5000.02	0.000	0.14
4.75	0.15	5000.02	0.000	0.14
4.80	0.15	5000.02	0.000	0.15
4.85	0.15	5000.02	0.000	0.15
4.90	0.15	5000.02	0.000	0.15
4.95	0.16	5000.02	0.000	0.16
5.00	0.16	5000.02	0.000	0.16
5.05	0.16	5000.02	0.000	0.16
5.10	0.17	5000.02	0.000	0.17
5.15	0.17	5000.02	0.000	0.17
5.20	0.18	5000.02	0.000	0.18
5.25	0.18	5000.03	0.000	0.18
5.30	0.18	5000.03	0.000	0.18
5.35	0.19	5000.03	0.000	0.19
5.40	0.19	5000.03	0.000	0.19
5.45	0.19	5000.03	0.000	0.19
5.50	0.20	5000.03	0.000	0.20
5.55	0.20	5000.03	0.000	0.20

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
5.60	0.21	5000.03	0.000	0.21
5.65	0.21	5000.03	0.000	0.21
5.70	0.22	5000.03	0.000	0.21
5.75	0.22	5000.03	0.000	0.22

```
      5.80        0.22    5000.03       0.000       0.22
      5.85        0.23    5000.03       0.000       0.23
      5.90        0.23    5000.03       0.000       0.23
      5.95        0.24    5000.03       0.000       0.24
      6.00        0.24    5000.03       0.000       0.24
      6.05        0.24    5000.03       0.000       0.24
      6.10        0.21    5000.03       0.000       0.22
      6.15        0.13    5000.02       0.000       0.16
      6.20        0.08    5000.01       0.000       0.10
      6.25        0.05    5000.01       0.000       0.06
      6.30        0.03    5000.01       0.000       0.04
      6.35        0.03    5000.00       0.000       0.03
      6.40        0.02    5000.00       0.000       0.02
      6.45        0.02    5000.00       0.000       0.02
      6.50        0.01    5000.00       0.000       0.01
      6.55        0.01    5000.00       0.000       0.01
      6.60        0.01    5000.00       0.000       0.01
      6.65        0.01    5000.00       0.000       0.01
      6.70        0.00    5000.00       0.000       0.00
 PEAK DISCHARGE =       53.339 CFS - PEAK OCCURS AT HOUR    1.73
 MAXIMUM WATER SURFACE ELEVATION =     5004.264
 MAXIMUM STORAGE =        1.3407 AC-FT      INCREMENTAL TIME=    0.010000HRS

PRINT HYD            ID=12 CODE=1

                                        HYDROGRAPH FROM AREA   305.00


    RUNOFF VOLUME =     1.10565 INCHES     =       3.7798 ACRE-FEET
    PEAK DISCHARGE RATE =      53.34 CFS  AT   1.730 HOURS   BASIN AREA =  0.0641 SQ. MI.


FINISH

    NORMAL PROGRAM FINISH          END TIME (HR:MIN:SEC) = 16:45:39
←(s0p10h4099T←&16D
```

AHYMO 10 YR Input

```
                                2014-10-17 10 yr final
START                   0.0 HRS  PUNCH CODE=0  PRINT LINES=-6
*S                      THE TEAM OFFICE BUILDING 10-YR, 6-HR DEVELOPED CONDITIONS
LOCATION                ALBUQUERQUE
RAINFALL                TYPE=1  RAIN QUARTER=0.0  RAIN ONE=1.25
                        RAIN SIX=1.47      RAIN DAY=1.77      DT=.01
COMPUTE NM HYD          ID=1 HYD=101 DA=0.0133 SQ MI
                        PER A=0 B=0 C=76 D=24
                        TP=0.133333 HRS RAIN=-1
PRINT HYD               ID=1 CODE=1
COMPUTE NM HYD          ID=2 HYD=102 DA=0.0162 SQ MI
                        PER A=50 B=16.6 C=16.7 D=16.7
                        TP=0.133333 HRS RAIN=-1
PRINT HYD               ID=2 CODE=1
COMPUTE NM HYD          ID=3 HYD=103 DA=0.0034 SQ MI
                        PER A=50 B=16.6 C=16.7 D=16.7
                        TP=0.133333 HRS RAIN=-1
PRINT HYD               ID=3 CODE=1
COMPUTE NM HYD          ID=4 HYD=104 DA=0.0261 SQ MI
                        PER A=50 B=16.6 C=16.7 D=16.7
                        TP=0.133333 HRS RAIN=-1
PRINT HYD               ID=4 CODE=1
COMPUTE NM HYD          ID=5 HYD=105 DA=0.0031 SQ MI
                        PER A=0 B=0 C=20 D=80
                        TP=0.133333 HRS RAIN=-1
PRINT HYD               ID=5 CODE=1
COMPUTE NM HYD          ID=6 HYD=106 DA=0.0020 SQ MI
                        PER A=0 B=0 C=0 D=100
                        TP=0.133333 HRS RAIN=-1
PRINT HYD               ID=6 CODE=1
ADD HYD                 ID=7 HYD=200 IDS= 1 & 2
ADD HYD                 ID=8 HYD=201 IDS= 7 & 3
ADD HYD                 ID=9 HYD=202 IDS= 8 & 4
ADD HYD                 ID=10 HYD=203 IDS= 9 & 5
ADD HYD                 ID=11 HYD=204 IDS= 10 & 6
PRINT HYD               ID=11 CODE=1
ROUTE RESERVOIR         ID=12 HYD=305 INFLOW ID=11  CODE=5
                        OUTFLOW (CFS)          STORAGE (AC FT)    ELEV (FT)
                        0                      0.00               5000
                        7                      0.01               5001
                        22                     0.18               5002
                        46                     0.59               5003
                        52.6                   1.14               5004
                        55.4                   1.90               5005
                        57.6                   3.05               5006

PRINT HYD               ID=12 CODE=1
FINISH
```

←(s16.67h8.5v0T←&18D

AHYMO PROGRAM SUMMARY TABLE (AHYMO-S4) - Ver. S4.01a, Rel: 01a RUN DATE (MON/DAY/YR) =10/17/2014

INPUT FILE = C:\Users\doug\Desktop\2014-10-17 10 yr final.txt USER NO.= AHYMO_Temp_User:20122010

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	NOTATION
START										TIME= 0.00
*S	THE TEAM OFFICE BUILDING 10-YR, 6-HR DEVELOPED CONDITIONS									
LOCATION	ALBUQUERQUE									
RAINFALL TYPE= 1 NOAA 14										RAIN6= 1.470
COMPUTE NM HYD	101.00	-	1	0.01330	18.02	0.509	0.71827	1.530	2.117	PER IMP= 24.00
COMPUTE NM HYD	102.00	-	2	0.01620	12.59	0.384	0.44449	1.540	1.214	PER IMP= 16.70
COMPUTE NM HYD	103.00	-	3	0.00340	2.65	0.081	0.44449	1.540	1.218	PER IMP= 16.70
COMPUTE NM HYD	104.00	-	4	0.02610	20.28	0.619	0.44449	1.540	1.214	PER IMP= 16.70
COMPUTE NM HYD	105.00	-	5	0.00310	5.53	0.182	1.10139	1.530	2.789	PER IMP= 80.00
COMPUTE NM HYD	106.00	-	6	0.00200	3.88	0.132	1.23822	1.520	3.028	PER IMP= 100.00
ADD HYD	200.00	1& 2	7	0.02950	30.59	0.893	0.56790	1.540	1.620	
ADD HYD	201.00	7& 3	8	0.03290	33.24	0.974	0.55514	1.540	1.579	
ADD HYD	202.00	8& 4	9	0.05900	53.52	1.593	0.50618	1.540	1.417	
ADD HYD	203.00	9& 5	10	0.06210	59.01	1.775	0.53589	1.540	1.485	
ADD HYD	204.00	10& 6	11	0.06410	62.85	1.907	0.55780	1.540	1.532	
ROUTE RESERVOIR	305.00	11	12	0.06410	40.41	1.907	0.55780	1.660	0.985	AC-FT= 0.494
FINISH										

←(s0p10h4099T←&16D

AHYMO 10-YR Summary

←(s16.67h8.5v0T←&l8D

AHYMO PROGRAM (AHYMO-S4) - Version: S4.01a - Rel: 01a
RUN DATE (MON/DAY/YR) = 10/17/2014
START TIME (HR:MIN:SEC) = 16:55:48 USER NO.= AHYMO_Temp_User:20122010
INPUT FILE = C:\Users\doug\Desktop\2014-10-17 10 yr final.txt

START 0.0 HRS PUNCH CODE=0 PRINT LINES=-6
*S THE TEAM OFFICE BUILDING 10-YR, 6-HR DEVELOPED CONDITIONS
LOCATION ALBUQUERQUE
City of Albuquerque soil infiltration values (LAND FACTORS) used for computations.

Land Treatment	Initial Abstr.(in)	Unif. Infilt.(in/hour)
A	0.65	1.67
B	0.50	1.25
C	0.35	0.83
D	0.10	0.04

RAINFALL TYPE=1 RAIN QUARTER=0.0 RAIN ONE=1.25
RAIN SIX=1.47 RAIN DAY=1.77 DT=.01

6-HOUR RAINFALL DIST. - BASED ON NOAA ATLAS 14 FOR CONVECTIVE AREAS (NM & AZ) - D1
DT = 0.010000 HOURS END TIME = 6.000000 HOURS

0.0000	0.0003	0.0006	0.0009	0.0012	0.0015	0.0018
0.0021	0.0023	0.0027	0.0030	0.0033	0.0036	0.0040
0.0043	0.0046	0.0049	0.0053	0.0056	0.0060	0.0064
0.0067	0.0071	0.0075	0.0078	0.0082	0.0086	0.0090
0.0094	0.0099	0.0103	0.0107	0.0111	0.0115	0.0123
0.0132	0.0140	0.0149	0.0158	0.0167	0.0176	0.0185
0.0194	0.0204	0.0214	0.0224	0.0234	0.0244	0.0254
0.0264	0.0274	0.0285	0.0296	0.0307	0.0318	0.0329
0.0340	0.0351	0.0362	0.0374	0.0385	0.0397	0.0408
0.0420	0.0431	0.0443	0.0454	0.0466	0.0478	0.0490
0.0502	0.0514	0.0526	0.0539	0.0551	0.0563	0.0576
0.0590	0.0604	0.0617	0.0631	0.0644	0.0658	0.0671
0.0686	0.0702	0.0717	0.0732	0.0748	0.0763	0.0779
0.0794	0.0817	0.0853	0.0889	0.0925	0.0961	0.0997
0.1033	0.1070	0.1106	0.1154	0.1203	0.1251	0.1299
0.1348	0.1396	0.1445	0.1493	0.1555	0.1622	0.1690
0.1758	0.1826	0.1894	0.1961	0.2029	0.2108	0.2210
0.2312	0.2414	0.2515	0.2617	0.2719	0.2821	0.2922
0.3098	0.3274	0.3450	0.3625	0.3801	0.3977	0.4152
0.4328	0.4699	0.5167	0.5635	0.6103	0.6571	0.7039
0.7507	0.7975	0.8374	0.8633	0.8893	0.9152	0.9411
0.9671	0.9930	1.0190	1.0449	1.0580	1.0710	1.0840
1.0971	1.1101	1.1231	1.1362	1.1492	1.1590	1.1673
1.1755	1.1837	1.1919	1.2001	1.2083	1.2165	1.2239
1.2296	1.2353	1.2410	1.2467	1.2524	1.2580	1.2637
1.2694	1.2736	1.2778	1.2819	1.2861	1.2903	1.2944
1.2986	1.3028	1.3063	1.3094	1.3126	1.3157	1.3189
1.3220	1.3252	1.3284	1.3309	1.3324	1.3338	1.3353

AHYMO 10 YR Output

1.3367	1.3382	1.3396	1.3410	1.3425	1.3438	1.3450
1.3463	1.3476	1.3489	1.3502	1.3514	1.3527	1.3539
1.3549	1.3559	1.3570	1.3580	1.3591	1.3601	1.3612
1.3622	1.3632	1.3641	1.3651	1.3661	1.3670	1.3680
1.3689	1.3699	1.3708	1.3718	1.3727	1.3736	1.3745
1.3755	1.3764	1.3773	1.3779	1.3784	1.3788	1.3793
1.3797	1.3801	1.3806	1.3810	1.3815	1.3819	1.3823
1.3828	1.3832	1.3836	1.3841	1.3845	1.3849	1.3853
1.3857	1.3861	1.3865	1.3869	1.3873	1.3877	1.3882
1.3885	1.3889	1.3893	1.3897	1.3901	1.3905	1.3909
1.3913	1.3917	1.3920	1.3924	1.3928	1.3932	1.3935
1.3939	1.3943	1.3947	1.3950	1.3954	1.3957	1.3961
1.3964	1.3968	1.3971	1.3975	1.3978	1.3982	1.3985
1.3989	1.3992	1.3996	1.3999	1.4003	1.4006	1.4009
1.4013	1.4016	1.4019	1.4023	1.4026	1.4029	1.4033
1.4036	1.4039	1.4042	1.4045	1.4049	1.4052	1.4055
1.4058	1.4061	1.4064	1.4067	1.4070	1.4073	1.4077
1.4080	1.4083	1.4086	1.4089	1.4092	1.4095	1.4098
1.4101	1.4104	1.4107	1.4110	1.4113	1.4116	1.4118
1.4121	1.4124	1.4127	1.4130	1.4133	1.4136	1.4138
1.4141	1.4144	1.4147	1.4150	1.4152	1.4155	1.4158
1.4161	1.4163	1.4166	1.4169	1.4172	1.4174	1.4177
1.4180	1.4183	1.4185	1.4188	1.4191	1.4193	1.4196
1.4199	1.4201	1.4204	1.4207	1.4209	1.4212	1.4214
1.4217	1.4220	1.4222	1.4225	1.4227	1.4230	1.4233
1.4235	1.4238	1.4240	1.4243	1.4245	1.4248	1.4250
1.4253	1.4255	1.4258	1.4261	1.4263	1.4266	1.4268
1.4270	1.4273	1.4275	1.4278	1.4280	1.4283	1.4285
1.4288	1.4290	1.4293	1.4295	1.4297	1.4300	1.4302
1.4305	1.4307	1.4309	1.4312	1.4314	1.4316	1.4319
1.4321	1.4324	1.4326	1.4328	1.4331	1.4333	1.4335
1.4338	1.4340	1.4342	1.4345	1.4347	1.4349	1.4351
1.4354	1.4356	1.4358	1.4361	1.4363	1.4365	1.4367
1.4370	1.4372	1.4374	1.4376	1.4379	1.4381	1.4383
1.4385	1.4387	1.4390	1.4392	1.4394	1.4396	1.4398
1.4401	1.4403	1.4405	1.4407	1.4409	1.4411	1.4414
1.4416	1.4418	1.4420	1.4422	1.4424	1.4426	1.4429
1.4431	1.4433	1.4435	1.4437	1.4439	1.4441	1.4443
1.4445	1.4448	1.4450	1.4452	1.4454	1.4456	1.4458
1.4460	1.4462	1.4464	1.4466	1.4468	1.4470	1.4472
1.4474	1.4476	1.4478	1.4480	1.4482	1.4484	1.4486
1.4488	1.4490	1.4492	1.4494	1.4496	1.4498	1.4500
1.4502	1.4504	1.4506	1.4508	1.4510	1.4512	1.4514
1.4516	1.4518	1.4520	1.4522	1.4524	1.4526	1.4528
1.4530	1.4532	1.4534	1.4535	1.4537	1.4539	1.4541
1.4543	1.4545	1.4547	1.4549	1.4551	1.4553	1.4554
1.4556	1.4558	1.4560	1.4562	1.4564	1.4566	1.4568
1.4569	1.4571	1.4573	1.4575	1.4577	1.4579	1.4580
1.4582	1.4584	1.4586	1.4588	1.4590	1.4591	1.4593
1.4595	1.4597	1.4599	1.4600	1.4602	1.4604	1.4606
1.4608	1.4609	1.4611	1.4613	1.4615	1.4617	1.4618

```
                1.4620  1.4622  1.4624  1.4625  1.4627  1.4629  1.4631
                1.4632  1.4634  1.4636  1.4638  1.4639  1.4641  1.4643
                1.4645  1.4646  1.4648  1.4650  1.4651  1.4653  1.4655
                1.4657  1.4658  1.4660  1.4662  1.4663  1.4665  1.4667
                1.4668  1.4670  1.4672  1.4673  1.4675  1.4677  1.4678
                1.4680  1.4682  1.4683  1.4685  1.4687  1.4688  1.4690
                1.4692  1.4693  1.4695  1.4697  1.4698  1.4700

COMPUTE NM HYD       ID=1 HYD=101 DA=0.0133 SQ MI
                     PER A=0 B=0 C=76 D=24
                     TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   12.599    CFS   UNIT VOLUME =   0.9990       B =   526.28      P60 = 1.2500
     AREA =     0.003192 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.108042HR    TP =  0.133333HR    K/TP RATIO =  0.810320     SHAPE CONSTANT, N =  4.414318
     UNIT PEAK =   28.953    CFS   UNIT VOLUME =   0.9995       B =   381.91      P60 = 1.2500
     AREA =     0.010108 SQ MI    IA =   0.35000 INCHES    INF =   0.83000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD            ID=1 CODE=1

                                  PARTIAL HYDROGRAPH   101.00


    RUNOFF VOLUME =     0.71827 INCHES      =       0.5095 ACRE-FEET
    PEAK DISCHARGE RATE =      18.02 CFS  AT   1.530 HOURS   BASIN AREA =  0.0133 SQ. MI.


COMPUTE NM HYD       ID=2 HYD=102 DA=0.0162 SQ MI
                     PER A=50 B=16.6 C=16.7 D=16.7
                     TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   10.678    CFS   UNIT VOLUME =   0.9988       B =   526.28      P60 = 1.2500
     AREA =     0.002705 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.157603HR    TP =  0.133333HR    K/TP RATIO =  1.182028     SHAPE CONSTANT, N =  3.002506
     UNIT PEAK =   28.544    CFS   UNIT VOLUME =   0.9995       B =   282.03      P60 = 1.2500
     AREA =     0.013495 SQ MI    IA =   0.55996 INCHES    INF =   1.41790 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD            ID=2 CODE=1

                                  PARTIAL HYDROGRAPH   102.00
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```
    RUNOFF VOLUME =      0.44449 INCHES      =        0.3840 ACRE-FEET
    PEAK DISCHARGE RATE =       12.59 CFS  AT    1.540 HOURS    BASIN AREA =  0.0162 SQ. MI.


COMPUTE NM HYD        ID=3 HYD=103 DA=0.0034 SQ MI
                      PER A=50 B=16.6 C=16.7 D=16.7
                      TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   2.2412    CFS   UNIT VOLUME =   0.9945       B =   526.28      P60 = 1.2500
     AREA =     0.000568 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.157603HR    TP =  0.133333HR    K/TP RATIO =  1.182028     SHAPE CONSTANT, N =  3.002506
     UNIT PEAK =   5.9908    CFS   UNIT VOLUME =   0.9975       B =   282.03      P60 = 1.2500
     AREA =     0.002832 SQ MI    IA =   0.55996 INCHES    INF =   1.41790 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD             ID=3 CODE=1

                                  PARTIAL HYDROGRAPH   103.00


    RUNOFF VOLUME =      0.44449 INCHES      =        0.0806 ACRE-FEET
    PEAK DISCHARGE RATE =       2.65 CFS  AT    1.540 HOURS    BASIN AREA =  0.0034 SQ. MI.


COMPUTE NM HYD        ID=4 HYD=104 DA=0.0261 SQ MI
                      PER A=50 B=16.6 C=16.7 D=16.7
                      TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   17.204    CFS   UNIT VOLUME =   0.9993       B =   526.28      P60 = 1.2500
     AREA =     0.004359 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.157603HR    TP =  0.133333HR    K/TP RATIO =  1.182028     SHAPE CONSTANT, N =  3.002506
     UNIT PEAK =   45.988    CFS   UNIT VOLUME =   0.9997       B =   282.03      P60 = 1.2500
     AREA =     0.021741 SQ MI    IA =   0.55996 INCHES    INF =   1.41790 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD             ID=4 CODE=1

                                  PARTIAL HYDROGRAPH   104.00
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```
    RUNOFF VOLUME =      0.44449 INCHES      =        0.6187 ACRE-FEET
    PEAK DISCHARGE RATE =      20.28 CFS  AT    1.540 HOURS    BASIN AREA =  0.0261 SQ. MI.


COMPUTE NM HYD       ID=5 HYD=105 DA=0.0031 SQ MI
                     PER A=0 B=0 C=20 D=80
                     TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   9.7887    CFS   UNIT VOLUME =   0.9987       B =   526.28      P60 = 1.2500
     AREA =     0.002480 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.108042HR    TP =  0.133333HR    K/TP RATIO =  0.810320     SHAPE CONSTANT, N =  4.414318
     UNIT PEAK =   1.7759    CFS   UNIT VOLUME =   0.9922       B =   381.91      P60 = 1.2500
     AREA =     0.000620 SQ MI    IA =   0.35000 INCHES    INF =   0.83000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD            ID=5 CODE=1

                                  PARTIAL HYDROGRAPH   105.00


    RUNOFF VOLUME =      1.10139 INCHES      =        0.1821 ACRE-FEET
    PEAK DISCHARGE RATE =       5.53 CFS  AT    1.530 HOURS    BASIN AREA =  0.0031 SQ. MI.


COMPUTE NM HYD       ID=6 HYD=106 DA=0.0020 SQ MI
                     PER A=0 B=0 C=0 D=100
                     TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   7.8942    CFS   UNIT VOLUME =   0.9984       B =   526.28      P60 = 1.2500
     AREA =     0.002000 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD            ID=6 CODE=1

                                  PARTIAL HYDROGRAPH   106.00


    RUNOFF VOLUME =      1.23822 INCHES      =        0.1321 ACRE-FEET
    PEAK DISCHARGE RATE =       3.88 CFS  AT    1.520 HOURS    BASIN AREA =  0.0020 SQ. MI.


ADD HYD              ID=7 HYD=200 IDS= 1 & 2
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ADD HYD              ID=8 HYD=201 IDS= 7 & 3
ADD HYD              ID=9 HYD=202 IDS= 8 & 4
ADD HYD              ID=10 HYD=203 IDS= 9 & 5
ADD HYD              ID=11 HYD=204 IDS= 10 & 6
PRINT HYD            ID=11 CODE=1

                                PARTIAL HYDROGRAPH   204.00


    RUNOFF VOLUME =     0.55780 INCHES     =       1.9069 ACRE-FEET
    PEAK DISCHARGE RATE =      62.85 CFS  AT   1.540 HOURS   BASIN AREA =  0.0641 SQ. MI.


ROUTE RESERVOIR      ID=12 HYD=305 INFLOW ID=11  CODE=5
                     OUTFLOW (CFS)         STORAGE (AC FT)   ELEV (FT)
                     0                     0.00              5000
                     7                     0.01              5001
                     22                    0.18              5002
                     46                    0.59              5003
                     52.6                  1.14              5004
                     55.4                  1.90              5005
                     57.6                  3.05              5006

  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *

    TIME       INFLOW     ELEV       VOLUME     OUTFLOW
    (HRS)      (CFS)      (FEET)     (AC-FT)    (CFS)

     0.00        0.00    5000.00       0.000       0.00
     0.05        0.00    5000.00       0.000       0.00
     0.10        0.00    5000.00       0.000       0.00
     0.15        0.00    5000.00       0.000       0.00
     0.20        0.00    5000.00       0.000       0.00
     0.25        0.00    5000.00       0.000       0.00
     0.30        0.00    5000.00       0.000       0.00
     0.35        0.00    5000.00       0.000       0.00
     0.40        0.00    5000.00       0.000       0.00
     0.45        0.00    5000.00       0.000       0.00
     0.50        0.00    5000.00       0.000       0.00
     0.55        0.00    5000.00       0.000       0.00
     0.60        0.00    5000.00       0.000       0.00
     0.65        0.00    5000.00       0.000       0.00
     0.70        0.00    5000.00       0.000       0.00
     0.75        0.00    5000.00       0.000       0.00
     0.80        0.00    5000.00       0.000       0.00
     0.85        0.00    5000.00       0.000       0.00
     0.90        0.00    5000.00       0.000       0.00
     0.95        0.00    5000.00       0.000       0.00
     1.00        0.00    5000.00       0.000       0.00
     1.05        0.25    5000.02       0.000       0.13
```

1.10	1.27	5000.13	0.001	0.89
1.15	2.56	5000.30	0.003	2.12
1.20	3.76	5000.48	0.005	3.35
1.25	5.00	5000.65	0.007	4.55
1.30	6.54	5000.86	0.009	5.99
1.35	9.27	5001.02	0.013	7.23
1.40	17.73	5001.13	0.032	8.92
1.45	39.48	5001.53	0.100	14.92
1.50	58.51	5002.11	0.224	24.58
1.55	62.44	5002.44	0.361	32.58
1.60	54.37	5002.68	0.457	38.23
1.65	42.37	5002.77	0.494	40.37
1.70	31.48	5002.73	0.480	39.54
1.75	23.41	5002.62	0.434	36.86
1.80	17.75	5002.47	0.373	33.30
1.85	13.83	5002.31	0.308	29.50
1.90	10.98	5002.16	0.245	25.80
1.95	8.98	5002.02	0.186	22.38
2.00	7.48	5001.75	0.137	18.17
2.05	6.14	5001.51	0.097	14.69
2.10	5.04	5001.33	0.065	11.89
2.15	4.24	5001.18	0.040	9.66
2.20	3.62	5001.06	0.020	7.90
2.25	3.12	5000.63	0.006	4.44
2.30	2.71	5000.42	0.004	2.91
2.35	2.38	5000.36	0.004	2.49
2.40	2.08	5000.31	0.003	2.18
2.45	1.75	5000.27	0.003	1.87
2.50	1.42	5000.22	0.002	1.53
2.55	1.17	5000.18	0.002	1.26
2.60	0.99	5000.15	0.001	1.05
2.65	0.84	5000.13	0.001	0.89
2.70	0.72	5000.11	0.001	0.76
2.75	0.62	5000.09	0.001	0.65

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
2.80	0.53	5000.08	0.001	0.56
2.85	0.46	5000.07	0.001	0.48
2.90	0.40	5000.06	0.001	0.42
2.95	0.35	5000.05	0.001	0.36
3.00	0.31	5000.05	0.000	0.32
3.05	0.27	5000.04	0.000	0.28
3.10	0.24	5000.04	0.000	0.25
3.15	0.21	5000.03	0.000	0.22
3.20	0.19	5000.03	0.000	0.19
3.25	0.17	5000.02	0.000	0.17
3.30	0.15	5000.02	0.000	0.15
3.35	0.13	5000.02	0.000	0.14
3.40	0.12	5000.02	0.000	0.12

3.45	0.10	5000.02	0.000	0.11
3.50	0.09	5000.01	0.000	0.10
3.55	0.08	5000.01	0.000	0.09
3.60	0.07	5000.01	0.000	0.08
3.65	0.06	5000.01	0.000	0.07
3.70	0.06	5000.01	0.000	0.06
3.75	0.05	5000.01	0.000	0.05
3.80	0.04	5000.01	0.000	0.05
3.85	0.04	5000.01	0.000	0.04
3.90	0.04	5000.01	0.000	0.04
3.95	0.03	5000.00	0.000	0.03
4.00	0.03	5000.00	0.000	0.03
4.05	0.03	5000.00	0.000	0.03
4.10	0.03	5000.00	0.000	0.03
4.15	0.03	5000.00	0.000	0.03
4.20	0.03	5000.00	0.000	0.03
4.25	0.03	5000.00	0.000	0.03
4.30	0.03	5000.00	0.000	0.03
4.35	0.03	5000.00	0.000	0.03
4.40	0.03	5000.00	0.000	0.03
4.45	0.03	5000.00	0.000	0.03
4.50	0.03	5000.00	0.000	0.03
4.55	0.02	5000.00	0.000	0.02
4.60	0.02	5000.00	0.000	0.02
4.65	0.02	5000.00	0.000	0.02
4.70	0.02	5000.00	0.000	0.02
4.75	0.03	5000.00	0.000	0.03
4.80	0.03	5000.00	0.000	0.03
4.85	0.03	5000.00	0.000	0.03
4.90	0.03	5000.00	0.000	0.03
4.95	0.04	5000.01	0.000	0.04
5.00	0.04	5000.01	0.000	0.04
5.05	0.05	5000.01	0.000	0.05
5.10	0.06	5000.01	0.000	0.05
5.15	0.06	5000.01	0.000	0.06
5.20	0.06	5000.01	0.000	0.06
5.25	0.07	5000.01	0.000	0.07
5.30	0.07	5000.01	0.000	0.07
5.35	0.08	5000.01	0.000	0.08
5.40	0.08	5000.01	0.000	0.08
5.45	0.09	5000.01	0.000	0.08
5.50	0.09	5000.01	0.000	0.09
5.55	0.10	5000.01	0.000	0.09

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
5.60	0.10	5000.01	0.000	0.10
5.65	0.11	5000.02	0.000	0.11
5.70	0.11	5000.02	0.000	0.11
5.75	0.12	5000.02	0.000	0.12

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      5.80       0.12    5000.02       0.000       0.12
      5.85       0.13    5000.02       0.000       0.13
      5.90       0.13    5000.02       0.000       0.13
      5.95       0.14    5000.02       0.000       0.13
      6.00       0.14    5000.02       0.000       0.14
      6.05       0.15    5000.02       0.000       0.15
      6.10       0.13    5000.02       0.000       0.14
      6.15       0.08    5000.01       0.000       0.10
      6.20       0.05    5000.01       0.000       0.06
      6.25       0.03    5000.00       0.000       0.03
      6.30       0.02    5000.00       0.000       0.02
      6.35       0.01    5000.00       0.000       0.02
      6.40       0.01    5000.00       0.000       0.01
      6.45       0.01    5000.00       0.000       0.01
      6.50       0.01    5000.00       0.000       0.01
      6.55       0.00    5000.00       0.000       0.01
      6.60       0.00    5000.00       0.000       0.00
 PEAK DISCHARGE =       40.408 CFS - PEAK OCCURS AT HOUR    1.66
 MAXIMUM WATER SURFACE ELEVATION =     5002.767
 MAXIMUM STORAGE =        0.4945 AC-FT      INCREMENTAL TIME=    0.010000HRS

PRINT HYD            ID=12 CODE=1

                                        HYDROGRAPH FROM AREA   305.00


    RUNOFF VOLUME =     0.55780 INCHES     =       1.9069 ACRE-FEET
    PEAK DISCHARGE RATE =      40.41 CFS  AT   1.660 HOURS   BASIN AREA =  0.0641 SQ. MI.



FINISH

    NORMAL PROGRAM FINISH          END TIME (HR:MIN:SEC) = 16:55:48
←(s0p10h4099T←&l6D
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AHYMO 2YR Input

2014-10-17 2 yr final

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START                0.0 HRS  PUNCH CODE=0  PRINT LINES=-6
*S                   THE TEAM OFFICE BUILDING 2-YR, 6-HR DEVELOPED CONDITIONS
LOCATION             ALBUQUERQUE
RAINFALL             TYPE=1  RAIN QUARTER=0.0  RAIN ONE=0.81
                     RAIN SIX=0.95      RAIN DAY=1.15      DT=.01
COMPUTE NM HYD       ID=1 HYD=101 DA=0.0133 SQ MI
                     PER A=0 B=0 C=76 D=24
                     TP=0.133333 HRS RAIN=-1
PRINT HYD            ID=1 CODE=1
COMPUTE NM HYD       ID=2 HYD=102 DA=0.0162 SQ MI
                     PER A=50 B=16.6 C=16.7 D=16.7
                     TP=0.133333 HRS RAIN=-1
PRINT HYD            ID=2 CODE=1
COMPUTE NM HYD       ID=3 HYD=103 DA=0.0034 SQ MI
                     PER A=50 B=16.6 C=16.7 D=16.7
                     TP=0.133333 HRS RAIN=-1
PRINT HYD            ID=3 CODE=1
COMPUTE NM HYD       ID=4 HYD=104 DA=0.0261 SQ MI
                     PER A=50 B=16.6 C=16.7 D=16.7
                     TP=0.133333 HRS RAIN=-1
PRINT HYD            ID=4 CODE=1
COMPUTE NM HYD       ID=5 HYD=105 DA=0.0031 SQ MI
                     PER A=0 B=0 C=20 D=80
                     TP=0.133333 HRS RAIN=-1
PRINT HYD            ID=5 CODE=1
COMPUTE NM HYD       ID=6 HYD=106 DA=0.0020 SQ MI
                     PER A=0 B=0 C=0 D=100
                     TP=0.133333 HRS RAIN=-1
PRINT HYD            ID=6 CODE=1
ADD HYD              ID=7 HYD=200 IDS= 1 & 2
ADD HYD              ID=8 HYD=201 IDS= 7 & 3
ADD HYD              ID=9 HYD=202 IDS= 8 & 4
ADD HYD              ID=10 HYD=203 IDS= 9 & 5
ADD HYD              ID=11 HYD=204 IDS= 10 & 6
PRINT HYD            ID=11 CODE=1
ROUTE RESERVOIR      ID=12 HYD=305 INFLOW ID=11  CODE=5
                     OUTFLOW (CFS)          STORAGE (AC FT)    ELEV (FT)
                     0                      0.00               5000
                     7                      0.01               5001
                     22                     0.18               5002
                     46                     0.59               5003
                     52.6                   1.14               5004
                     55.4                   1.90               5005
                     57.6                   3.05               5006

PRINT HYD            ID=12 CODE=1
FINISH
```

←(s16.67h8.5v0T←&l8D

AHYMO PROGRAM SUMMARY TABLE (AHYMO-S4) - Ver. S4.01a, Rel: 01a RUN DATE (MON/DAY/YR) =10/17/2014

INPUT FILE = C:\Users\doug\Desktop\2014-10-17 2 yr final.txt USER NO.= AHYMO_Temp_User:20122010

COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	NOTATION	
START										TIME=	0.00
*S	THE TEAM OFFICE BUILDING 2-YR, 6-HR DEVELOPED CONDITIONS										
LOCATION		ALBUQUERQUE									
RAINFALL TYPE= 1 NOAA 14										RAIN6=	0.950
COMPUTE NM HYD	101.00	-	1	0.01330	8.89	0.239	0.33685	1.540	1.044	PER IMP=	24.00
COMPUTE NM HYD	102.00	-	2	0.01620	3.72	0.121	0.13993	1.540	0.359	PER IMP=	16.70
COMPUTE NM HYD	103.00	-	3	0.00340	0.78	0.025	0.13993	1.540	0.361	PER IMP=	16.70
COMPUTE NM HYD	104.00	-	4	0.02610	6.00	0.195	0.13993	1.540	0.359	PER IMP=	16.70
COMPUTE NM HYD	105.00	-	5	0.00310	3.38	0.106	0.63910	1.530	1.703	PER IMP=	80.00
COMPUTE NM HYD	106.00	-	6	0.00200	2.48	0.080	0.74705	1.520	1.940	PER IMP=	100.00
ADD HYD	200.00	1& 2	7	0.02950	12.61	0.360	0.22869	1.540	0.668		
ADD HYD	201.00	7& 3	8	0.03290	13.40	0.385	0.21951	1.540	0.636		
ADD HYD	202.00	8& 4	9	0.05900	19.39	0.580	0.18430	1.540	0.514		
ADD HYD	203.00	9& 5	10	0.06210	22.75	0.686	0.20700	1.540	0.572		
ADD HYD	204.00	10& 6	11	0.06410	25.21	0.765	0.22385	1.540	0.615		
ROUTE RESERVOIR	305.00	11	12	0.06410	18.65	0.765	0.22385	1.630	0.455	AC-FT=	0.142
FINISH											

←(s0p10h4099T←&l6D

AHYMO 2-YR Summary

←(s16.67h8.5v0T←&18D

AHYMO PROGRAM (AHYMO-S4) - Version: S4.01a - Rel: 01a
RUN DATE (MON/DAY/YR) = 10/17/2014
START TIME (HR:MIN:SEC) = 16:58:35 USER NO.= AHYMO_Temp_User:20122010
INPUT FILE = C:\Users\doug\Desktop\2014-10-17 2 yr final.txt

START 0.0 HRS PUNCH CODE=0 PRINT LINES=-6
*S THE TEAM OFFICE BUILDING 2-YR, 6-HR DEVELOPED CONDITIONS
LOCATION ALBUQUERQUE
City of Albuquerque soil infiltration values (LAND FACTORS) used for computations.

Land Treatment	Initial Abstr.(in)	Unif. Infilt.(in/hour)
A	0.65	1.67
B	0.50	1.25
C	0.35	0.83
D	0.10	0.04

RAINFALL TYPE=1 RAIN QUARTER=0.0 RAIN ONE=0.81
RAIN SIX=0.95 RAIN DAY=1.15 DT=.01

6-HOUR RAINFALL DIST. - BASED ON NOAA ATLAS 14 FOR CONVECTIVE AREAS (NM & AZ) - D1
DT = 0.010000 HOURS END TIME = 6.000000 HOURS

0.0000	0.0002	0.0004	0.0006	0.0007	0.0009	0.0011
0.0013	0.0015	0.0017	0.0019	0.0021	0.0023	0.0025
0.0027	0.0029	0.0031	0.0034	0.0036	0.0038	0.0041
0.0043	0.0045	0.0048	0.0050	0.0052	0.0055	0.0057
0.0060	0.0063	0.0065	0.0068	0.0071	0.0073	0.0078
0.0084	0.0089	0.0095	0.0101	0.0106	0.0112	0.0118
0.0124	0.0130	0.0136	0.0143	0.0149	0.0155	0.0162
0.0168	0.0175	0.0182	0.0189	0.0196	0.0203	0.0210
0.0216	0.0223	0.0230	0.0238	0.0245	0.0252	0.0260
0.0267	0.0274	0.0282	0.0289	0.0296	0.0304	0.0312
0.0320	0.0327	0.0335	0.0343	0.0350	0.0358	0.0367
0.0375	0.0384	0.0393	0.0401	0.0410	0.0419	0.0427
0.0437	0.0446	0.0456	0.0466	0.0476	0.0486	0.0496
0.0505	0.0520	0.0543	0.0567	0.0590	0.0614	0.0637
0.0660	0.0684	0.0707	0.0739	0.0770	0.0801	0.0833
0.0864	0.0896	0.0927	0.0958	0.0998	0.1042	0.1086
0.1130	0.1174	0.1218	0.1262	0.1306	0.1357	0.1423
0.1489	0.1555	0.1621	0.1687	0.1753	0.1819	0.1884
0.1998	0.2112	0.2226	0.2340	0.2454	0.2568	0.2681
0.2795	0.3035	0.3339	0.3642	0.3945	0.4249	0.4552
0.4855	0.5159	0.5417	0.5585	0.5753	0.5921	0.6089
0.6257	0.6426	0.6594	0.6762	0.6846	0.6931	0.7015
0.7100	0.7184	0.7269	0.7353	0.7438	0.7501	0.7554
0.7608	0.7661	0.7714	0.7767	0.7821	0.7874	0.7921
0.7958	0.7995	0.8032	0.8069	0.8106	0.8143	0.8180
0.8217	0.8244	0.8271	0.8298	0.8325	0.8352	0.8379
0.8406	0.8433	0.8455	0.8476	0.8496	0.8517	0.8537
0.8557	0.8578	0.8598	0.8615	0.8624	0.8633	0.8643

AHYMO 2 yr Output

0.8652	0.8661	0.8670	0.8679	0.8689	0.8697	0.8705
0.8713	0.8721	0.8729	0.8738	0.8746	0.8754	0.8761
0.8768	0.8774	0.8781	0.8788	0.8794	0.8801	0.8808
0.8814	0.8820	0.8826	0.8832	0.8839	0.8845	0.8851
0.8857	0.8863	0.8869	0.8875	0.8881	0.8887	0.8892
0.8898	0.8904	0.8910	0.8914	0.8917	0.8920	0.8923
0.8925	0.8928	0.8931	0.8934	0.8937	0.8940	0.8942
0.8945	0.8948	0.8950	0.8953	0.8956	0.8959	0.8961
0.8964	0.8966	0.8969	0.8972	0.8974	0.8977	0.8979
0.8982	0.8984	0.8987	0.8989	0.8992	0.8994	0.8997
0.8999	0.9001	0.9004	0.9006	0.9009	0.9011	0.9013
0.9016	0.9018	0.9021	0.9023	0.9025	0.9027	0.9030
0.9032	0.9034	0.9036	0.9039	0.9041	0.9043	0.9045
0.9047	0.9050	0.9052	0.9054	0.9056	0.9058	0.9061
0.9063	0.9065	0.9067	0.9069	0.9071	0.9073	0.9075
0.9077	0.9079	0.9081	0.9083	0.9086	0.9088	0.9090
0.9092	0.9094	0.9095	0.9097	0.9099	0.9101	0.9103
0.9105	0.9107	0.9109	0.9111	0.9113	0.9115	0.9117
0.9119	0.9121	0.9123	0.9125	0.9126	0.9128	0.9130
0.9132	0.9134	0.9135	0.9137	0.9139	0.9141	0.9143
0.9145	0.9146	0.9148	0.9150	0.9152	0.9153	0.9155
0.9157	0.9159	0.9160	0.9162	0.9164	0.9166	0.9167
0.9169	0.9171	0.9173	0.9174	0.9176	0.9178	0.9179
0.9181	0.9183	0.9184	0.9186	0.9188	0.9189	0.9191
0.9193	0.9194	0.9196	0.9198	0.9199	0.9201	0.9203
0.9204	0.9206	0.9208	0.9209	0.9211	0.9212	0.9214
0.9216	0.9217	0.9219	0.9220	0.9222	0.9224	0.9225
0.9227	0.9228	0.9230	0.9231	0.9233	0.9235	0.9236
0.9238	0.9239	0.9241	0.9242	0.9244	0.9245	0.9247
0.9248	0.9250	0.9252	0.9253	0.9255	0.9256	0.9258
0.9259	0.9261	0.9262	0.9264	0.9265	0.9267	0.9268
0.9269	0.9271	0.9272	0.9274	0.9275	0.9277	0.9278
0.9280	0.9281	0.9283	0.9284	0.9286	0.9287	0.9288
0.9290	0.9291	0.9293	0.9294	0.9296	0.9297	0.9298
0.9300	0.9301	0.9303	0.9304	0.9305	0.9307	0.9308
0.9310	0.9311	0.9312	0.9314	0.9315	0.9316	0.9318
0.9319	0.9321	0.9322	0.9323	0.9325	0.9326	0.9327
0.9329	0.9330	0.9331	0.9333	0.9334	0.9335	0.9337
0.9338	0.9339	0.9341	0.9342	0.9343	0.9345	0.9346
0.9347	0.9349	0.9350	0.9351	0.9353	0.9354	0.9355
0.9356	0.9358	0.9359	0.9360	0.9362	0.9363	0.9364
0.9365	0.9367	0.9368	0.9369	0.9370	0.9372	0.9373
0.9374	0.9376	0.9377	0.9378	0.9379	0.9381	0.9382
0.9383	0.9384	0.9386	0.9387	0.9388	0.9389	0.9390
0.9392	0.9393	0.9394	0.9395	0.9397	0.9398	0.9399
0.9400	0.9401	0.9403	0.9404	0.9405	0.9406	0.9407
0.9409	0.9410	0.9411	0.9412	0.9413	0.9415	0.9416
0.9417	0.9418	0.9419	0.9420	0.9422	0.9423	0.9424
0.9425	0.9426	0.9427	0.9429	0.9430	0.9431	0.9432
0.9433	0.9434	0.9436	0.9437	0.9438	0.9439	0.9440
0.9441	0.9442	0.9444	0.9445	0.9446	0.9447	0.9448

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                0.9449  0.9450  0.9451  0.9453  0.9454  0.9455  0.9456
                0.9457  0.9458  0.9459  0.9460  0.9461  0.9463  0.9464
                0.9465  0.9466  0.9467  0.9468  0.9469  0.9470  0.9471
                0.9472  0.9473  0.9475  0.9476  0.9477  0.9478  0.9479
                0.9480  0.9481  0.9482  0.9483  0.9484  0.9485  0.9486
                0.9487  0.9488  0.9489  0.9491  0.9492  0.9493  0.9494
                0.9495  0.9496  0.9497  0.9498  0.9499  0.9500

COMPUTE NM HYD       ID=1 HYD=101 DA=0.0133 SQ MI
                     PER A=0 B=0 C=76 D=24
                     TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   12.599    CFS   UNIT VOLUME =   0.9990       B =   526.28      P60 = .81000
     AREA =     0.003192 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.112435HR    TP =  0.133333HR    K/TP RATIO =  0.843267     SHAPE CONSTANT, N =  4.224349
     UNIT PEAK =   28.039    CFS   UNIT VOLUME =   0.9995       B =   369.86      P60 = .81000
     AREA =     0.010108 SQ MI    IA =   0.35000 INCHES    INF =   0.83000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD            ID=1 CODE=1

                                  PARTIAL HYDROGRAPH   101.00


    RUNOFF VOLUME =     0.33685 INCHES     =       0.2389 ACRE-FEET
    PEAK DISCHARGE RATE =       8.89 CFS  AT   1.540 HOURS   BASIN AREA =  0.0133 SQ. MI.


COMPUTE NM HYD       ID=2 HYD=102 DA=0.0162 SQ MI
                     PER A=50 B=16.6 C=16.7 D=16.7
                     TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   10.678    CFS   UNIT VOLUME =   0.9988       B =   526.28      P60 = .81000
     AREA =     0.002705 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.160412HR    TP =  0.133333HR    K/TP RATIO =  1.203095     SHAPE CONSTANT, N =  2.954084
     UNIT PEAK =   28.143    CFS   UNIT VOLUME =   0.9995       B =   278.06      P60 = .81000
     AREA =     0.013495 SQ MI    IA =   0.55996 INCHES    INF =   1.41790 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD            ID=2 CODE=1

                                  PARTIAL HYDROGRAPH   102.00
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    RUNOFF VOLUME =      0.13993 INCHES      =        0.1209 ACRE-FEET
    PEAK DISCHARGE RATE =        3.72 CFS  AT    1.540 HOURS    BASIN AREA =  0.0162 SQ. MI.


COMPUTE NM HYD        ID=3 HYD=103 DA=0.0034 SQ MI
                      PER A=50 B=16.6 C=16.7 D=16.7
                      TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   2.2412    CFS   UNIT VOLUME =   0.9945       B =   526.28       P60 = .81000
     AREA =     0.000568 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.160412HR    TP =  0.133333HR    K/TP RATIO =  1.203095     SHAPE CONSTANT, N =  2.954084
     UNIT PEAK =   5.9065    CFS   UNIT VOLUME =   0.9974       B =   278.06       P60 = .81000
     AREA =     0.002832 SQ MI    IA =   0.55996 INCHES    INF =   1.41790 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD             ID=3 CODE=1

                                  PARTIAL HYDROGRAPH   103.00


    RUNOFF VOLUME =      0.13993 INCHES      =        0.0254 ACRE-FEET
    PEAK DISCHARGE RATE =        0.78 CFS  AT    1.540 HOURS    BASIN AREA =  0.0034 SQ. MI.


COMPUTE NM HYD        ID=4 HYD=104 DA=0.0261 SQ MI
                      PER A=50 B=16.6 C=16.7 D=16.7
                      TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   17.204    CFS   UNIT VOLUME =   0.9993       B =   526.28       P60 = .81000
     AREA =     0.004359 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.160412HR    TP =  0.133333HR    K/TP RATIO =  1.203095     SHAPE CONSTANT, N =  2.954084
     UNIT PEAK =   45.341    CFS   UNIT VOLUME =   0.9997       B =   278.06       P60 = .81000
     AREA =     0.021741 SQ MI    IA =   0.55996 INCHES    INF =   1.41790 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD             ID=4 CODE=1

                                  PARTIAL HYDROGRAPH   104.00
```

```
    RUNOFF VOLUME =      0.13993 INCHES      =        0.1948 ACRE-FEET
    PEAK DISCHARGE RATE =        6.00 CFS  AT    1.540 HOURS    BASIN AREA =  0.0261 SQ. MI.


COMPUTE NM HYD        ID=5 HYD=105 DA=0.0031 SQ MI
                      PER A=0 B=0 C=20 D=80
                      TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   9.7887    CFS   UNIT VOLUME =   0.9987       B =   526.28      P60 = .81000
     AREA =     0.002480 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000


     K =  0.112435HR    TP =  0.133333HR    K/TP RATIO =  0.843267     SHAPE CONSTANT, N =  4.224349
     UNIT PEAK =   1.7199    CFS   UNIT VOLUME =   0.9917       B =   369.86      P60 = .81000
     AREA =     0.000620 SQ MI    IA =   0.35000 INCHES    INF =   0.83000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD             ID=5 CODE=1

                                  PARTIAL HYDROGRAPH   105.00


    RUNOFF VOLUME =      0.63910 INCHES      =        0.1057 ACRE-FEET
    PEAK DISCHARGE RATE =        3.38 CFS  AT    1.530 HOURS    BASIN AREA =  0.0031 SQ. MI.


COMPUTE NM HYD        ID=6 HYD=106 DA=0.0020 SQ MI
                      PER A=0 B=0 C=0 D=100
                      TP=0.133333 HRS RAIN=-1

     K =  0.072666HR    TP =  0.133333HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =  7.106428
     UNIT PEAK =   7.8942    CFS   UNIT VOLUME =   0.9984       B =   526.28      P60 = .81000
     AREA =     0.002000 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
     RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.010000

PRINT HYD             ID=6 CODE=1

                                  PARTIAL HYDROGRAPH   106.00


    RUNOFF VOLUME =      0.74705 INCHES      =        0.0797 ACRE-FEET
    PEAK DISCHARGE RATE =        2.48 CFS  AT    1.520 HOURS    BASIN AREA =  0.0020 SQ. MI.


ADD HYD               ID=7 HYD=200 IDS= 1 & 2
```

```
ADD HYD              ID=8 HYD=201 IDS= 7 & 3
ADD HYD              ID=9 HYD=202 IDS= 8 & 4
ADD HYD              ID=10 HYD=203 IDS= 9 & 5
ADD HYD              ID=11 HYD=204 IDS= 10 & 6
PRINT HYD            ID=11 CODE=1
```

PARTIAL HYDROGRAPH 204.00

RUNOFF VOLUME = 0.22385 INCHES = 0.7652 ACRE-FEET
PEAK DISCHARGE RATE = 25.21 CFS AT 1.540 HOURS BASIN AREA = 0.0641 SQ. MI.

```
ROUTE RESERVOIR      ID=12 HYD=305 INFLOW ID=11  CODE=5
                     OUTFLOW (CFS)        STORAGE (AC FT)   ELEV (FT)
                     0                    0.00              5000
                     7                    0.01              5001
                     22                   0.18              5002
                     46                   0.59              5003
                     52.6                 1.14              5004
                     55.4                 1.90              5005
                     57.6                 3.05              5006
```

* * * * * * * * * * * * * * * * *

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
0.00	0.00	5000.00	0.000	0.00
0.05	0.00	5000.00	0.000	0.00
0.10	0.00	5000.00	0.000	0.00
0.15	0.00	5000.00	0.000	0.00
0.20	0.00	5000.00	0.000	0.00
0.25	0.00	5000.00	0.000	0.00
0.30	0.00	5000.00	0.000	0.00
0.35	0.00	5000.00	0.000	0.00
0.40	0.00	5000.00	0.000	0.00
0.45	0.00	5000.00	0.000	0.00
0.50	0.00	5000.00	0.000	0.00
0.55	0.00	5000.00	0.000	0.00
0.60	0.00	5000.00	0.000	0.00
0.65	0.00	5000.00	0.000	0.00
0.70	0.00	5000.00	0.000	0.00
0.75	0.00	5000.00	0.000	0.00
0.80	0.00	5000.00	0.000	0.00
0.85	0.00	5000.00	0.000	0.00
0.90	0.00	5000.00	0.000	0.00
0.95	0.00	5000.00	0.000	0.00
1.00	0.00	5000.00	0.000	0.00
1.05	0.00	5000.00	0.000	0.00

1.10	0.00	5000.00	0.000	0.00
1.15	0.09	5000.01	0.000	0.04
1.20	0.87	5000.08	0.001	0.55
1.25	2.22	5000.25	0.002	1.74
1.30	3.66	5000.45	0.005	3.16
1.35	5.37	5000.68	0.007	4.74
1.40	8.32	5001.00	0.010	7.02
1.45	15.78	5001.10	0.027	8.51
1.50	23.42	5001.34	0.068	12.08
1.55	25.04	5001.60	0.112	15.96
1.60	21.69	5001.75	0.138	18.28
1.65	16.77	5001.77	0.141	18.53
1.70	12.47	5001.68	0.126	17.26
1.75	9.46	5001.55	0.104	15.28
1.80	7.36	5001.41	0.080	13.15
1.85	5.91	5001.28	0.057	11.13
1.90	4.85	5001.16	0.037	9.36
1.95	4.02	5001.06	0.020	7.84
2.00	3.30	5000.67	0.007	4.66
2.05	2.59	5000.41	0.004	2.89
2.10	2.01	5000.31	0.003	2.20
2.15	1.61	5000.25	0.002	1.74
2.20	1.31	5000.20	0.002	1.41
2.25	1.09	5000.17	0.002	1.16
2.30	0.91	5000.14	0.001	0.97
2.35	0.76	5000.12	0.001	0.81
2.40	0.64	5000.10	0.001	0.68
2.45	0.51	5000.08	0.001	0.56
2.50	0.39	5000.06	0.001	0.43
2.55	0.30	5000.05	0.000	0.33
2.60	0.24	5000.04	0.000	0.26
2.65	0.20	5000.03	0.000	0.21
2.70	0.16	5000.02	0.000	0.17
2.75	0.13	5000.02	0.000	0.14

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
2.80	0.10	5000.02	0.000	0.11
2.85	0.08	5000.01	0.000	0.09
2.90	0.07	5000.01	0.000	0.07
2.95	0.06	5000.01	0.000	0.06
3.00	0.05	5000.01	0.000	0.05
3.05	0.04	5000.01	0.000	0.04
3.10	0.03	5000.00	0.000	0.04
3.15	0.03	5000.00	0.000	0.03
3.20	0.02	5000.00	0.000	0.03
3.25	0.02	5000.00	0.000	0.02
3.30	0.02	5000.00	0.000	0.02
3.35	0.02	5000.00	0.000	0.02
3.40	0.01	5000.00	0.000	0.01

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      3.45       0.01    5000.00       0.000       0.01
      3.50       0.01    5000.00       0.000       0.01
      3.55       0.01    5000.00       0.000       0.01
      3.60       0.01    5000.00       0.000       0.01
      3.65       0.01    5000.00       0.000       0.01
      3.70       0.01    5000.00       0.000       0.01
      3.75       0.00    5000.00       0.000       0.00
 PEAK DISCHARGE =       18.652 CFS - PEAK OCCURS AT HOUR    1.63
 MAXIMUM WATER SURFACE ELEVATION =     5001.777
 MAXIMUM STORAGE =        0.1421 AC-FT      INCREMENTAL TIME=    0.010000HRS

PRINT HYD            ID=12 CODE=1

                                        HYDROGRAPH FROM AREA   305.00


    RUNOFF VOLUME =     0.22385 INCHES     =       0.7652 ACRE-FEET
    PEAK DISCHARGE RATE =      18.65 CFS  AT   1.630 HOURS   BASIN AREA =  0.0641 SQ. MI.


FINISH

    NORMAL PROGRAM FINISH          END TIME (HR:MIN:SEC) = 16:58:35
←(s0p10h4099T←&l6D
```

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Consulting Engineers
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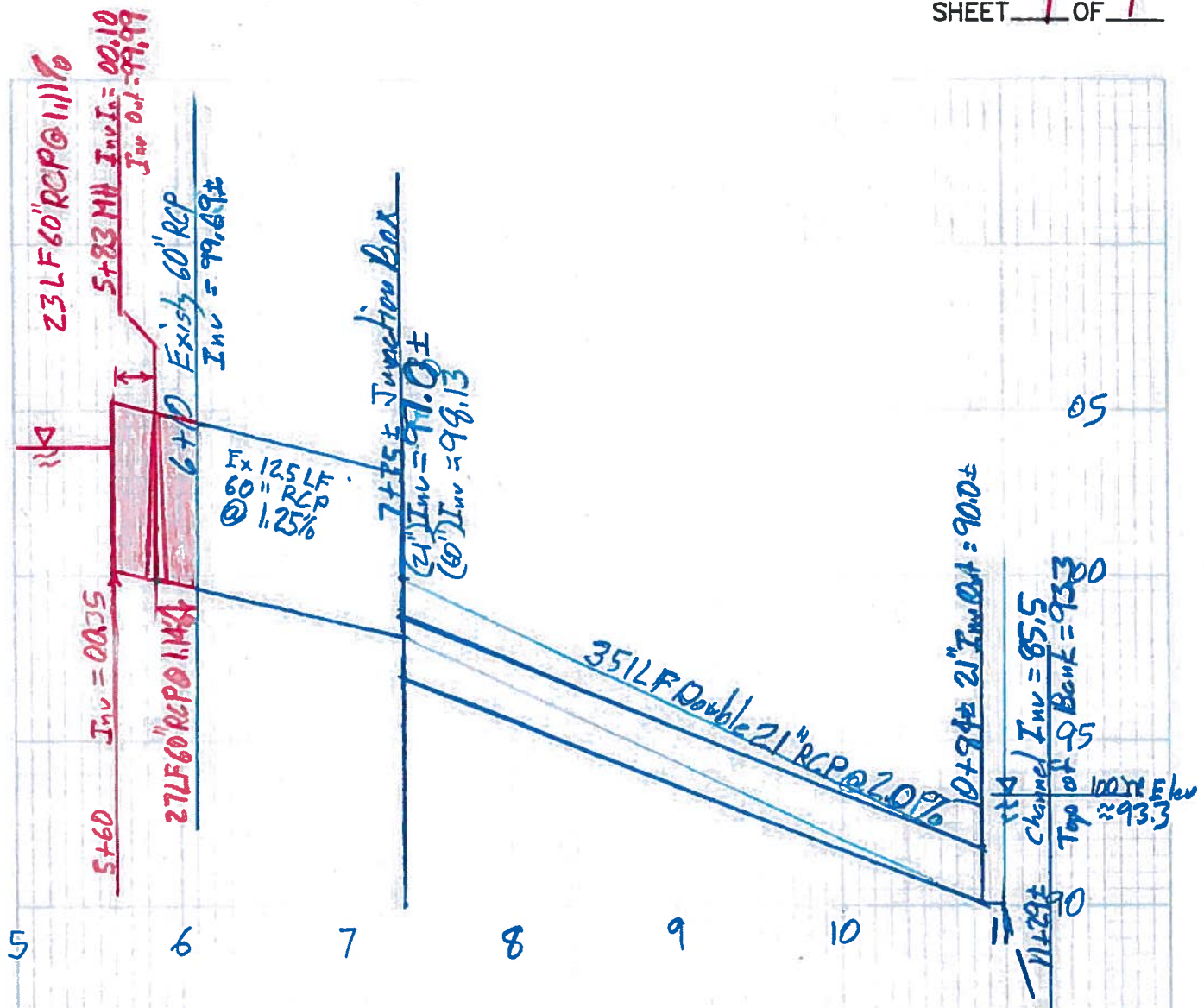
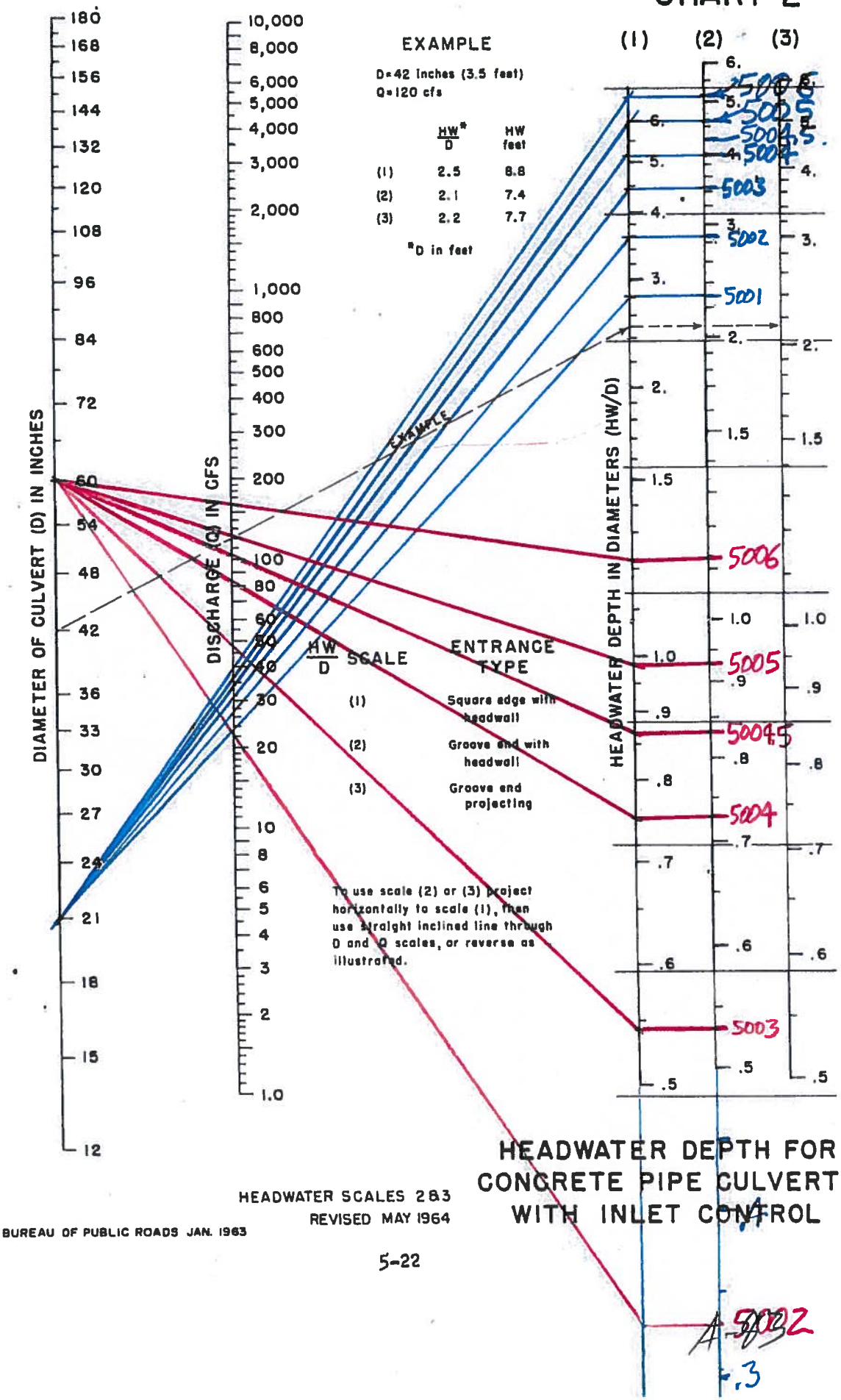
(505) 828-2200 FAX 797-9539

PROJECT Team Radio
SUBJECT Outfall Pipe
BY Doug H. DATE 10-8-2014
CHECKED DATE
SHEET 1 OF 1



Stationing and Vertical Datum, Per Piedras Morcadas (NGVD 1929) Principle Spillway Outlet Pipe Extension Record Drawings obtained from AMAFCA dated Oct 1, 1986. Similarly the "The Bosque Del Pueblo Final Grading & Drainage Plan" Dated 1-18-1989 Add 2.7' to convert elevations to the 1988 datum.

CHART 2

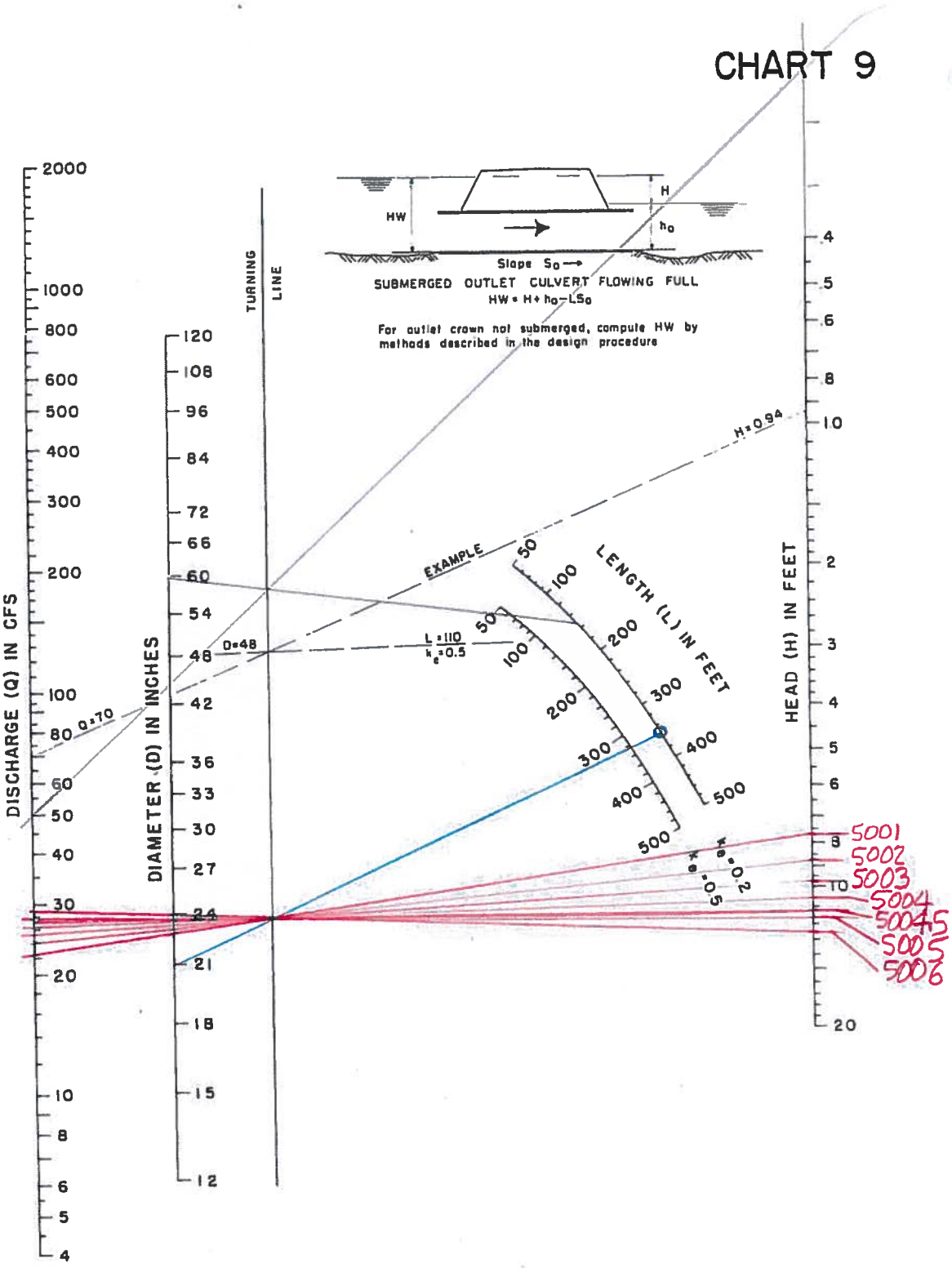


HEADWATER SCALES 2&3
REVISED MAY 1964

BUREAU OF PUBLIC ROADS JAN. 1963

HEADWATER DEPTH FOR CONCRETE PIPE CULVERTS WITH INLET CONTROL

CHART 9



HEAD FOR CONCRETE PIPE CULVERTS FLOWING FULL n = 0.012

BUREAU OF PUBLIC ROADS JAN 1963

A-84

The Team Radio

100 Year Postdeveloped conditions (Peak pond stage with 44% of peak flo

w October 20, 2014

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt or I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
1179.620	5000.200	4.060	5004.260	15.78	1.64	.04	5004.30	.00	1.21	.00	3.500	.000	.00	1 .0
240.380	.0021					.0002	.06	4.06	.00	1.42	.013	.00	.00	PIPE
1420.000	5000.700	3.621	5004.321	15.78	1.64	.04	5004.36	.00	1.21	.00	3.500	.000	.00	1 .0
61.545	.0022					.0002	.02	3.62	.00	1.39	.013	.00	.00	PIPE
1481.545	5000.836	3.500	5004.336	15.78	1.64	.04	5004.38	.00	1.21	.00	3.500	.000	.00	1 .0
161.491	.0022					.0002	.04	3.50	.00	1.39	.013	.00	.00	PIPE
1643.036	5001.192	3.175	5004.368	15.78	1.72	.05	5004.41	.00	1.21	2.03	3.500	.000	.00	1 .0
89.344	.0022					.0002	.02	3.18	.14	1.39	.013	.00	.00	PIPE
1732.380	5001.390	2.993	5004.383	15.78	1.80	.05	5004.43	.00	1.21	2.46	3.500	.000	.00	1 .0
JUNCT STR	.0083					.0003	.00	2.99	.17		.013	.00	.00	PIPE
1738.380	5001.440	2.959	5004.399	13.22	1.88	.05	5004.45	.00	1.16	.69	3.000	.000	.00	1 .0
100.310	.0022					.0003	.04	2.96	.10	1.36	.013	.00	.00	PIPE
1838.690	5001.660	2.771	5004.431	13.22	1.94	.06	5004.49	.04	1.16	1.59	3.000	.000	.00	1 .0
JUNCT STR	.0083					.0006	.00	2.81	.17		.013	.00	.00	PIPE
1844.690	5001.710	2.672	5004.382	6.69	2.13	.07	5004.45	.00	.92	.00	2.000	.000	.00	1 .0
74.951	.0102					.0009	.06	2.67	.00	.74	.013	.00	.00	PIPE
1919.641	5002.471	2.000	5004.471	6.69	2.13	.07	5004.54	.00	.92	.00	2.000	.000	.00	1 .0
19.039	.0102					.0008	.02	2.00	.00	.74	.013	.00	.00	PIPE

Program Package Serial Number: 1454

WATER SURFACE PROFILE LISTING Date:10-21-2014 Time:10:18: 6

The Team Radio
100 Year Postdeveloped conditions (Peak pond stage with 44% of peak flo
w October 20, 2014

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt or I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
1938.680	5002.665	1.814	5004.479	6.69	2.23	.08	5004.56	.00	.92	1.16	2.000	.000	.00	1 .0
10.709	.0102					.0008	.01	1.81	.25	.74	.013	.00	.00	PIPE
1949.389	5002.773	1.706	5004.479	6.69	2.34	.09	5004.56	.00	.92	1.42	2.000	.000	.00	1 .0
4.611	.0102					.0008	.00	1.71	.29	.74	.013	.00	.00	PIPE
1954.000	5002.820	1.660	5004.480	6.69	2.40	.09	5004.57	.00	.92	1.50	2.000	.000	.00	1 .0

Program Package Serial Number: 1454

WATER SURFACE PROFILE LISTING

Date:10-21-2014 Time:10:16:42

The Team Radio
100 Year Postdeveloped conditions
October 20, 2014

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt or I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
1179.620	5000.200	3.060	5003.260	35.89	4.02	.25	5003.51	.00	1.86	2.32	3.500	.000	.00	1 .0
161.300	.0021					.0012	.19	3.06	.36	2.33	.013	.00	.00	PIPE
1340.920	5000.536	2.893	5003.429	35.89	4.22	.28	5003.71	.00	1.86	2.65	3.500	.000	.00	1 .0
79.080	.0021					.0013	.10	2.89	.42	2.33	.013	.00	.00	PIPE
1420.000	5000.700	2.816	5003.517	35.89	4.33	.29	5003.81	.00	1.86	2.77	3.500	.000	.00	1 .0
128.199	.0022					.0014	.18	2.82	.44	2.28	.013	.00	.00	PIPE
1548.199	5000.983	2.682	5003.666	35.89	4.54	.32	5003.98	.00	1.86	2.96	3.500	.000	.00	1 .0
134.726	.0022					.0015	.21	2.68	.49	2.28	.013	.00	.00	PIPE
1682.924	5001.281	2.560	5003.841	35.89	4.76	.35	5004.19	.00	1.86	3.10	3.500	.000	.00	1 .0
49.456	.0022					.0017	.08	2.56	.54	2.28	.013	.00	.00	PIPE
1732.380	5001.390	2.521	5003.911	35.89	4.84	.36	5004.27	.00	1.86	3.14	3.500	.000	.00	1 .0
JUNCT STR	.0083					.0018	.01	2.52	.55		.013	.00	.00	PIPE
1738.380	5001.440	2.644	5004.084	30.06	4.56	.32	5004.41	.00	1.78	1.94	3.000	.000	.00	1 .0
100.310	.0022					.0018	.18	2.64	.44	2.36	.013	.00	.00	PIPE
1838.690	5001.660	2.600	5004.260	30.06	4.62	.33	5004.59	.31	1.78	2.04	3.000	.000	.00	1 .0
JUNCT STR	.0083					.0032	.02	2.91	.46		.013	.00	.00	PIPE
1844.690	5001.710	2.537	5004.247	15.21	4.84	.36	5004.61	.00	1.41	.00	2.000	.000	.00	1 .0
109.310	.0102					.0045	.49	2.54	.00	1.19	.013	.00	.00	PIPE

The Team Radio
100 Year Postdeveloped conditions
October 20, 2014

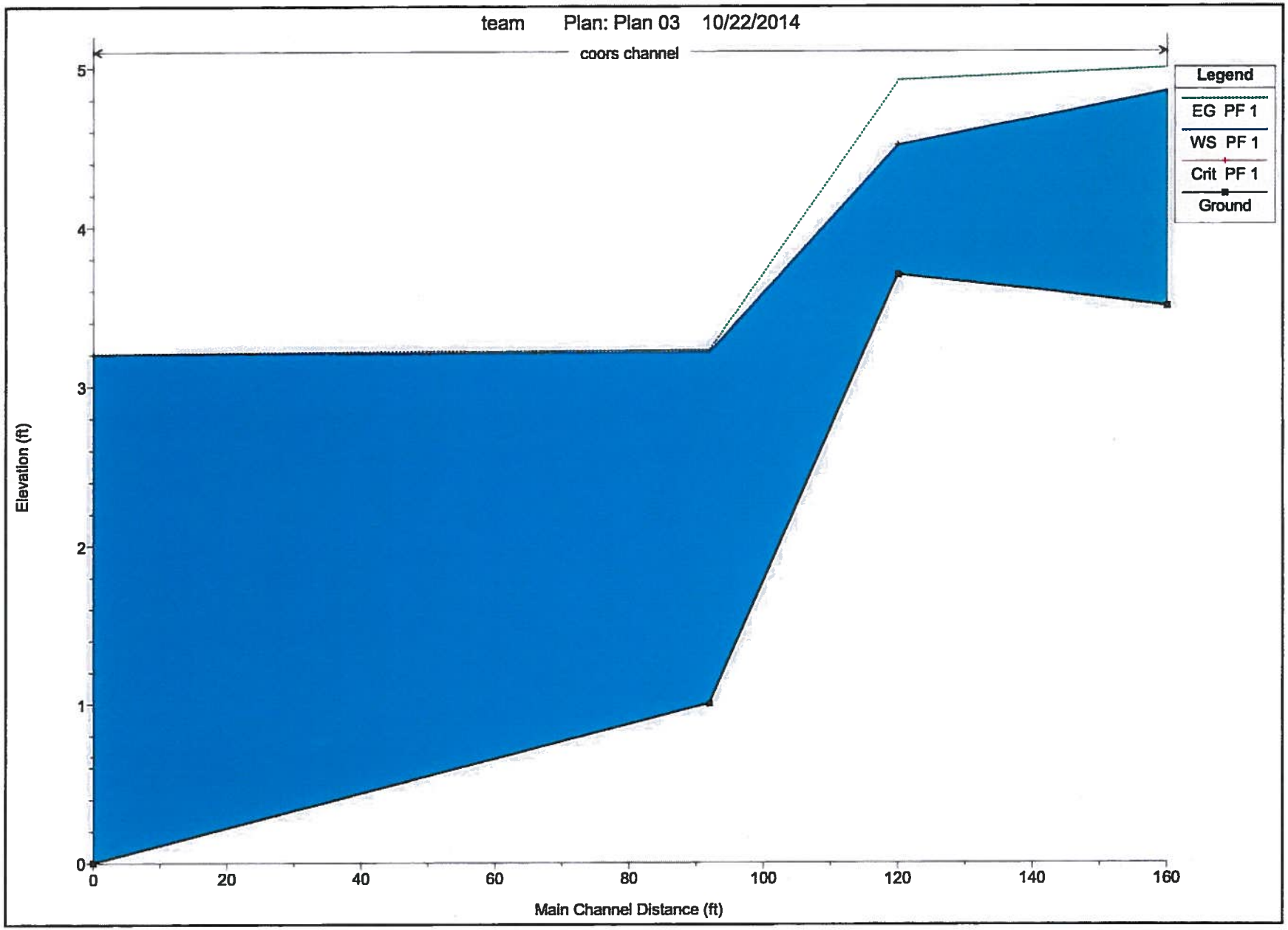
Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt or I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
1954.000	5002.820	2.047	5004.867	15.21	4.84	.36	5005.23	.00	1.41	.00	2.000	.000	.00	1 .0

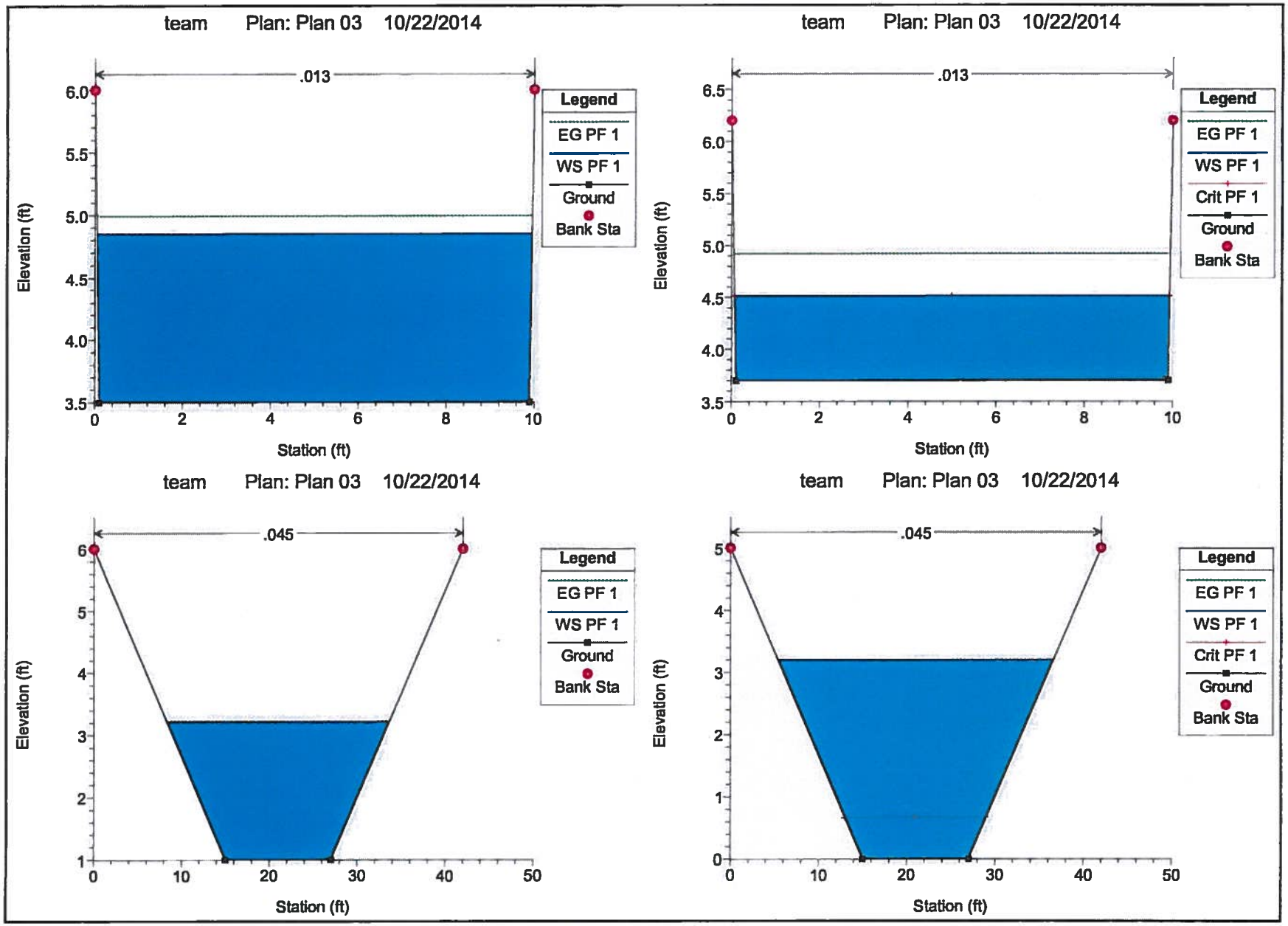
HEC-RAS Plan: Plan 03 River: coors Reach: channel Profile: PF 1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
channel	1180	PF 1	41.00	0.00	3.20	0.67	3.21	0.000117	0.59	69.12	31.20	0.07
channel	1272	PF 1	41.00	1.00	3.21		3.23	0.000490	0.99	41.23	25.27	0.14
channel	1300	PF 1	41.00	3.70	4.51	4.51	4.92	0.003251	5.13	7.99	9.86	1.01
channel	1340	PF 1	41.00	3.50	4.85		5.00	0.000668	3.08	13.31	9.91	0.47

HEC-RAS Plan: Plan 03 River: coors Reach: channel Profile: PF 1

Reach	River Sta	Profile	E.G. Elev	W.S. Elev	Vel Head	Frctn Loss	C & E Loss	Q Left	Q Channel	Q Right	Top Width
			(ft)	(ft)	(ft)	(ft)	(ft)	(cfs)	(cfs)	(cfs)	(ft)
channel	1180	PF 1	3.21	3.20	0.01				41.00		31.20
channel	1272	PF 1	3.23	3.21	0.02	0.02	0.00		41.00		25.27
channel	1300	PF 1	4.92	4.51	0.41	0.03	0.12		41.00		9.86
channel	1340	PF 1	5.00	4.85	0.15	0.05	0.03		41.00		9.91


team Plan: Plan 03 10/22/2014
coors channel
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Elevation (ft)
Main Channel Distance (ft)
0
1
2
3
4
5
0
20
40
60
80
100
120
140
160


team Plan: Plan 03 10/22/2014
.013
Elevation (ft)
Station (ft)
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
team Plan: Plan 03 10/22/2014
.013
Elevation (ft)
Station (ft)
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta
team Plan: Plan 03 10/22/2014
.045
Elevation (ft)
Station (ft)
Legend
EG PF 1
WS PF 1
Ground
Bank Sta
team Plan: Plan 03 10/22/2014
.045
Elevation (ft)
Station (ft)
Legend
EG PF 1
WS PF 1
Crit PF 1
Ground
Bank Sta

Plan: Plan 03 coors channel RS: 1340 Profile: PF 1

E.G. Elev (ft)	5.00	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.15	Wt. n-Val.		0.013	
W.S. Elev (ft)	4.85	Reach Len. (ft)	40.00	40.00	40.00
Crit W.S. (ft)		Flow Area (sq ft)		13.31	
E.G. Slope (ft/ft)	0.000668	Area (sq ft)		13.31	
Q Total (cfs)	41.00	Flow (cfs)		41.00	
Top Width (ft)	9.91	Top Width (ft)		9.91	
Vel Total (ft/s)	3.08	Avg. Vel. (ft/s)		3.08	
Max Chl Dpth (ft)	1.35	Hydr. Depth (ft)		1.34	
Conv. Total (cfs)	1586.1	Conv. (cfs)		1586.1	
Length Wtd. (ft)	40.00	Wetted Per. (ft)		12.50	
Min Ch El (ft)	3.50	Shear (lb/sq ft)		0.04	
Alpha	1.00	Stream Power (lb/ft s)	10.00	0.00	0.00
Frctn Loss (ft)	0.05	Cum Volume (acre-ft)		0.14	
C & E Loss (ft)	0.03	Cum SA (acres)		0.08	

Plan: Plan 03 coors channel RS: 1300 Profile: PF 1

E.G. Elev (ft)	4.92	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.41	Wt. n-Val.		0.013	
W.S. Elev (ft)	4.51	Reach Len. (ft)	28.00	28.00	28.00
Crit W.S. (ft)	4.51	Flow Area (sq ft)		7.99	
E.G. Slope (ft/ft)	0.003251	Area (sq ft)		7.99	
Q Total (cfs)	41.00	Flow (cfs)		41.00	
Top Width (ft)	9.86	Top Width (ft)		9.86	
Vel Total (ft/s)	5.13	Avg. Vel. (ft/s)		5.13	
Max Chl Dpth (ft)	0.81	Hydr. Depth (ft)		0.81	
Conv. Total (cfs)	719.1	Conv. (cfs)		719.1	
Length Wtd. (ft)	28.00	Wetted Per. (ft)		11.43	
Min Ch El (ft)	3.70	Shear (lb/sq ft)		0.14	
Alpha	1.00	Stream Power (lb/ft s)	10.00	0.00	0.00
Frctn Loss (ft)	0.03	Cum Volume (acre-ft)		0.13	
C & E Loss (ft)	0.12	Cum SA (acres)		0.07	

Plan: Plan 03 coors channel RS: 1272 Profile: PF 1

E.G. Elev (ft)	3.23	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.02	Wt. n-Val.		0.045	
W.S. Elev (ft)	3.21	Reach Len. (ft)	92.00	92.00	92.00
Crit W.S. (ft)		Flow Area (sq ft)		41.23	

Plan: Plan 03 coors channel RS: 1272 Profile: PF 1 (Continued)

E.G. Slope (ft/ft)	0.000490	Area (sq ft)		41.23	
Q Total (cfs)	41.00	Flow (cfs)		41.00	
Top Width (ft)	25.27	Top Width (ft)		25.27	
Vel Total (ft/s)	0.99	Avg. Vel. (ft/s)		0.99	
Max Chl Dpth (ft)	2.21	Hydr. Depth (ft)		1.63	
Conv. Total (cfs)	1852.1	Conv. (cfs)		1852.1	
Length Wtd. (ft)	92.00	Wetted Per. (ft)		25.99	
Min Ch El (ft)	1.00	Shear (lb/sq ft)		0.05	
Alpha	1.00	Stream Power (lb/ft s)	42.00	0.00	0.00
Frctn Loss (ft)	0.02	Cum Volume (acre-ft)		0.12	
C & E Loss (ft)	0.00	Cum SA (acres)		0.06	

Plan: Plan 03 coors channel RS: 1180 Profile: PF 1

E.G. Elev (ft)	3.21	Element	Left OB	Channel	Right OB
Vel Head (ft)	0.01	Wt. n-Val.		0.045	
W.S. Elev (ft)	3.20	Reach Len. (ft)			
Crit W.S. (ft)	0.67	Flow Area (sq ft)		69.12	
E.G. Slope (ft/ft)	0.000117	Area (sq ft)		69.12	
Q Total (cfs)	41.00	Flow (cfs)		41.00	
Top Width (ft)	31.20	Top Width (ft)		31.20	
Vel Total (ft/s)	0.59	Avg. Vel. (ft/s)		0.59	
Max Chl Dpth (ft)	3.20	Hydr. Depth (ft)		2.22	
Conv. Total (cfs)	3794.9	Conv. (cfs)		3794.9	
Length Wtd. (ft)		Wetted Per. (ft)		32.24	
Min Ch El (ft)	0.00	Shear (lb/sq ft)		0.02	
Alpha	1.00	Stream Power (lb/ft s)	42.00	0.00	0.00
Frctn Loss (ft)		Cum Volume (acre-ft)			
C & E Loss (ft)		Cum SA (acres)			

STREET CAPACITY

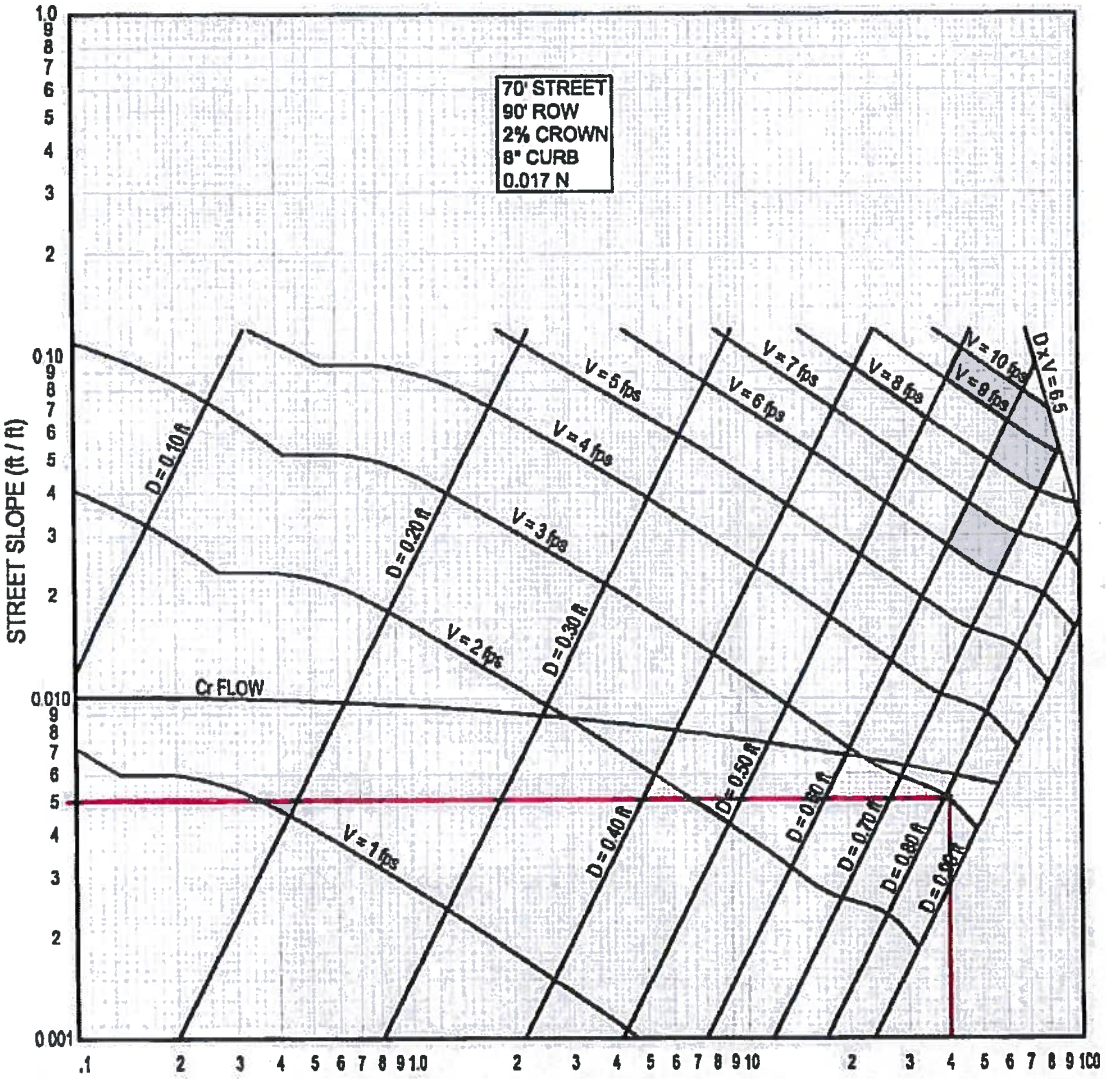


PLATE 22.3 D-4