



# LANDS OF SALAZAR

## *Drainage Management Plan*

October 2006  
Revised November 13, 2006

*Prepared for:*

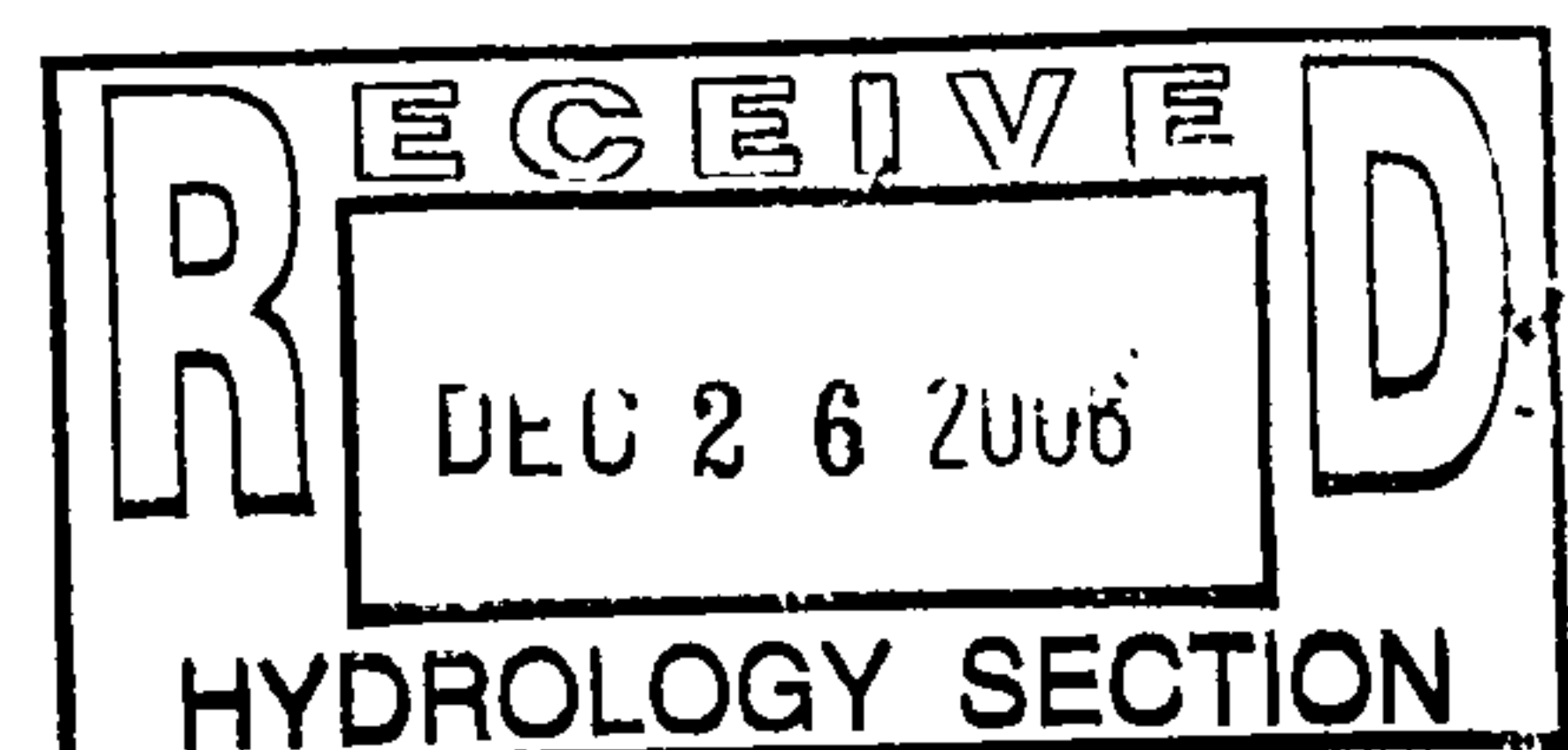
*Salazar Family Trust*

*Prepared By:*

**Community Sciences Corporation**  
P.O. Box 1328 / 4481 Corrales Road  
Corrales, New Mexico 87048  
505/897.0000



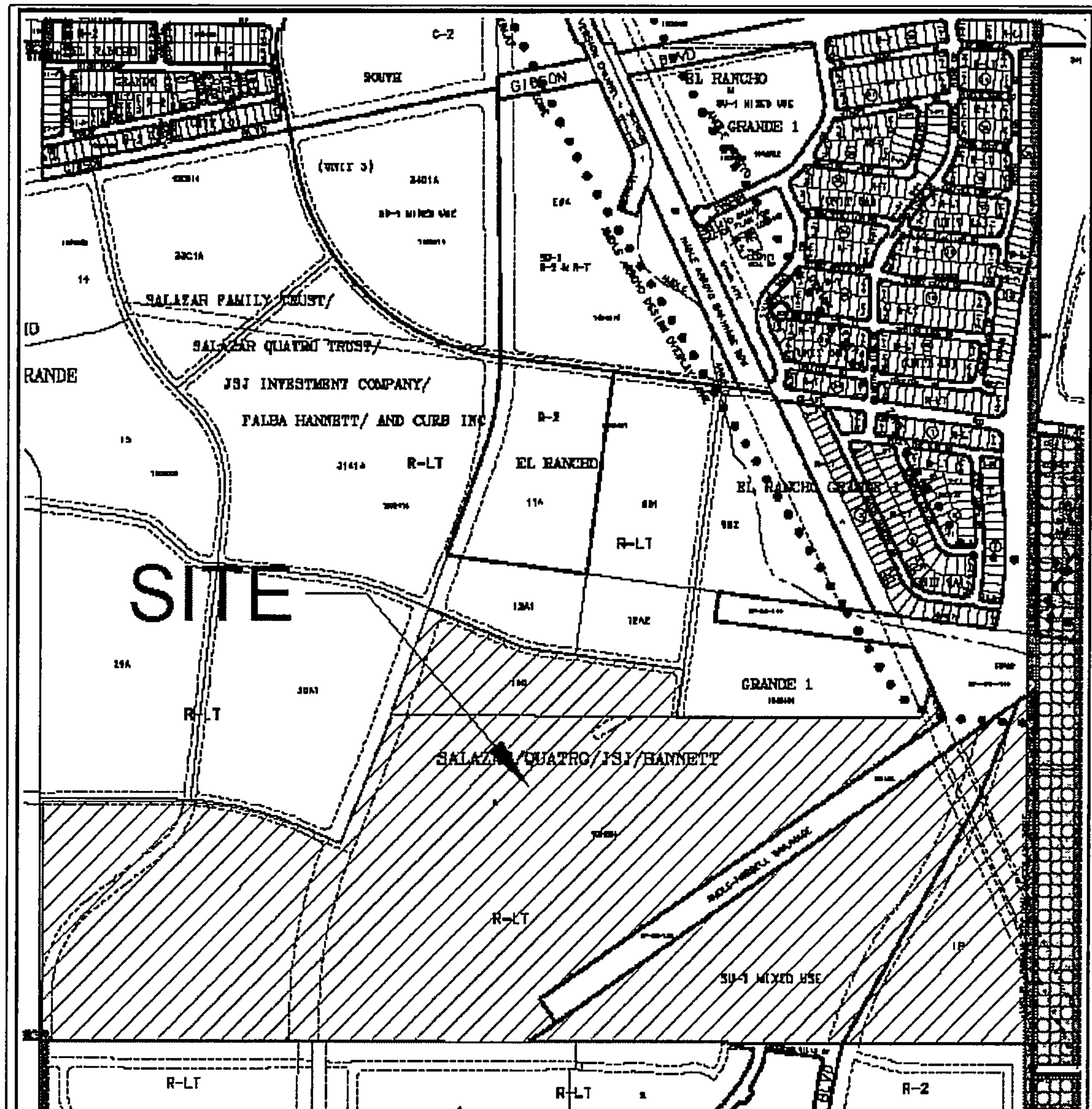
**Brian L. Speicher, P.E.**



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The property, Lands comprised of 189.96 acres zoned RD, is to be developed on the west side of Unser Blvd. and east of Morrissey Street, near the intersection of 98<sup>th</sup> Street and Dennis Chavez Blvd. The site location is shown in figure 1 within atlas map N-9.



**FIGURE 1 Zone Atlas Map N-9**



RR 595-02



**FIGURE 2 FEMA – FIRM Map 35001C0336E and C0338E**

## PREVIOUS STUDIES

There are no previous studies which encompass the site. However, the drainage improvements to the west of the property included in the development of Anderson Heights has intercepted all flows entering the site. The analysis of the hydrology and design of the improvements were conducted by Mark Goodwin & Assoc. A portion of the site was included in the analysis of Anderson Heights by Wilson & Company. This area is designated as Basin 3 in this study. The flows from this basin have been designated as 108.03 for discharge to a storm drain at the northeast corner of the basin.

## EXISTING DRAINAGE CONDITIONS

The site is currently undeveloped. Topography consists of sparse vegetation and native grasses and chamisa. It has a cross-slope of approximately 3.0 to 4.5%. The site accepts no offsite flows. The existing drainage is to the east via surface flow to the Amole Detention Basin with a discharge into the detention basin of 366.5 cfs and a volume of 9.3 ac.ft. The existing discharge computations from AHYMO for the site are summarized in table 3.

## RAINFALL

The hydrological analysis is based on the 100-year frequency, 6-hour duration storm, as represented in Section 22, Part A, Hydrology, of the Development Process Manual. Rainfall intensities per this report are as follows:

Zone	P60	P360	P1440
1	1.87	2.20	2.66

TABLE 1 Rainfall Intensity

## HYDROLOGY

AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE
0.29681	366.45	9.298	0.58737	1.532	1.9296

TABLE 2 Existing AHYMO Summary

268.66 cfs using compute LT TP AS included  
CL  
1-11-07

## DEVELOPED DRAINAGE CONDITIONS

### DESIGN-CRITERIA

The drainage plan presented in this report has been prepared in accordance with the City of Albuquerque Drainage Ordinances and Chapter 22 of the Development Process Manual DPM. The analysis included in this report is to support the submission of Bulk Land Plats for the Site, and to outline the overall management plan of storm runoff in future developments.

### LAND TREATMEMNT

Residential DPM-Eqn. a-4, Section 22 --  $\%D = 7((N*N)+(5*N))^{1/2}$

Treatment Type /Basin	A	B	C	D
1 ✓	9%	18%	26%	47%
2 ✓	9%	18%	26%	47%
3 ✓	0%	0%	10%	90%
4 ✓	9%	17%	26%	48%
5 ✓	0%	0%	43%	57%
6 ✓	8%	16%	24%	<del>51%</del> 52
7 ✓	8%	16%	24%	<del>51%</del> 52
8 ✓	8%	16%	24%	<del>51%</del> 52
✓ 9	0%	0%	10%	90%
10	0%	100%	0%	0%

TABLE 3 Developed Land Treatments

### HYDROLOGY

BASIN	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE
1	0.00590	12.69	0.439	1.39530	1.499	3.36
2	0.05455	117.17	4.059	1.39530	1.499	3.356
3	0.00548	15.12	0.573	1.95764	1.499	4.307
4	0.03791	81.99	2.848	1.40878	1.499	3.38
5	0.02262	55.30	1.959	1.62353	1.499	3.82
6	<del>0.02262</del>	<del>50.02</del>	<del>1.754</del>	<del>1.45366</del>	<del>1.499</del>	<del>3.455</del>
7	<del>0.03791</del>	<del>83.81</del>	<del>2.939</del>	<del>1.45366</del>	<del>1.499</del>	<del>3.455</del>
8	<del>0.03789</del>	<del>83.78</del>	<del>2.938</del>	<del>1.45366</del>	<del>1.499</del>	<del>3.455</del>
9	<del>0.05689</del>	<del>156.68</del>	<del>5.94</del>	<del>1.95765</del>	<del>1.499</del>	<del>4.303</del>
10	0.00458	6.29	0.174	0.7134	1.499	2.146

TABLE 4 Proposed AHYMO Summary

1030124  
Not per AHYMO

41.74 cfs  
Before  
6 → 60 wrong

See AHYMO  
or plan  
CL 1-11-07

## HYDRAULICS

The developed runoff from the site will be transported via surface flow i.e. curb & gutter until street capacity is reached. The flows will then be collected in storm drain systems for outfall to the Amole Detention Pond. This system would begin with the collection of the runoff from basins west of 98<sup>th</sup> Street. The system runs east it and will collect the flows from the subsequent drainage areas. The system is anticipated to be constructed adjacent to or within existing drainage ways.

An additional storm drain system was designed, with adjacent development, and serves a portion of the site (Basins 1, B & C).

The final discharge point for both of these systems is the Amole Pond. The capacity of this pond has not been analyzed as part of this report, but it is anticipated the analysis would show adequate capacity within the facility.

Basin <sup>110 basin 12 CL 1-11-07</sup>12 discharge is based on undeveloped conditions. It is anticipated that this parcel will be deeded to AMAFCA in a land exchange and included in future detention expansion. If the tract is developed instead, the development would be required to retain the flows pending design of downstream improvements.

## CONCLUSION

No adverse impact will result due to the future conditions of the site. The final discharge point has adequate capacity to accommodate the runoff volume. The majority of the runoff that historically reached the facility has been diverted away from the site.

The data included in this report quantifies the runoff potential from the site and the feasibility of drainage transport. The analysis demonstrates the overall drainage impact and the ability of the site to develop. Additional analysis and design will be required to show how future developments reference and adhere to the recommendations of this report.

ARROWOOD REPORT EXCERPTS



**Off-Site** The land treatments for the remaining off-site basins were assumed to be 6.0 DU's per acre, based on surrounding development and land treatments considered in Reference 1, 2 & 4.

Under developed conditions, the development will discharge as it has historically, to the Amole Detention Basin. Free discharge is allowed from the proposed development with the conveyance of offsite flows. On-site flows will be collected by a storm drain system and conveyed into the Amole Detention Basin.

In the developed condition, off-site flows will be routed through the proposed storm drain system. The off-site area includes portions of El Rancho Grande Subdivision as obtained from reference 2. Basin areas labeled 00002 and 00003, which were obtained from reference 2, were modified for this analysis to accommodate proposed infrastructure. Peak flows were interpolated based on the basin areas and peak flows given in Exhibit 4 of the report entitled "Master Storm Drain Basin Map". Except for small bypass flows established in Reference 3, Anderson Heights Subdivision (designated as Basins 60122 and 60123 in reference 1) runoff will be retained on-site in the interim condition, while it will be routed through the South Power Line Diversion into the Rio Bravo Channel in the future condition. See Figures 3 and 4 for the existing and proposed basin boundaries.

### MODELING RESULTS

Table 1 shows land treatment applied to on-site and off-site basins, along with peak discharges and the total runoff volumes resulting from the 100-year, 6-hour storm event.

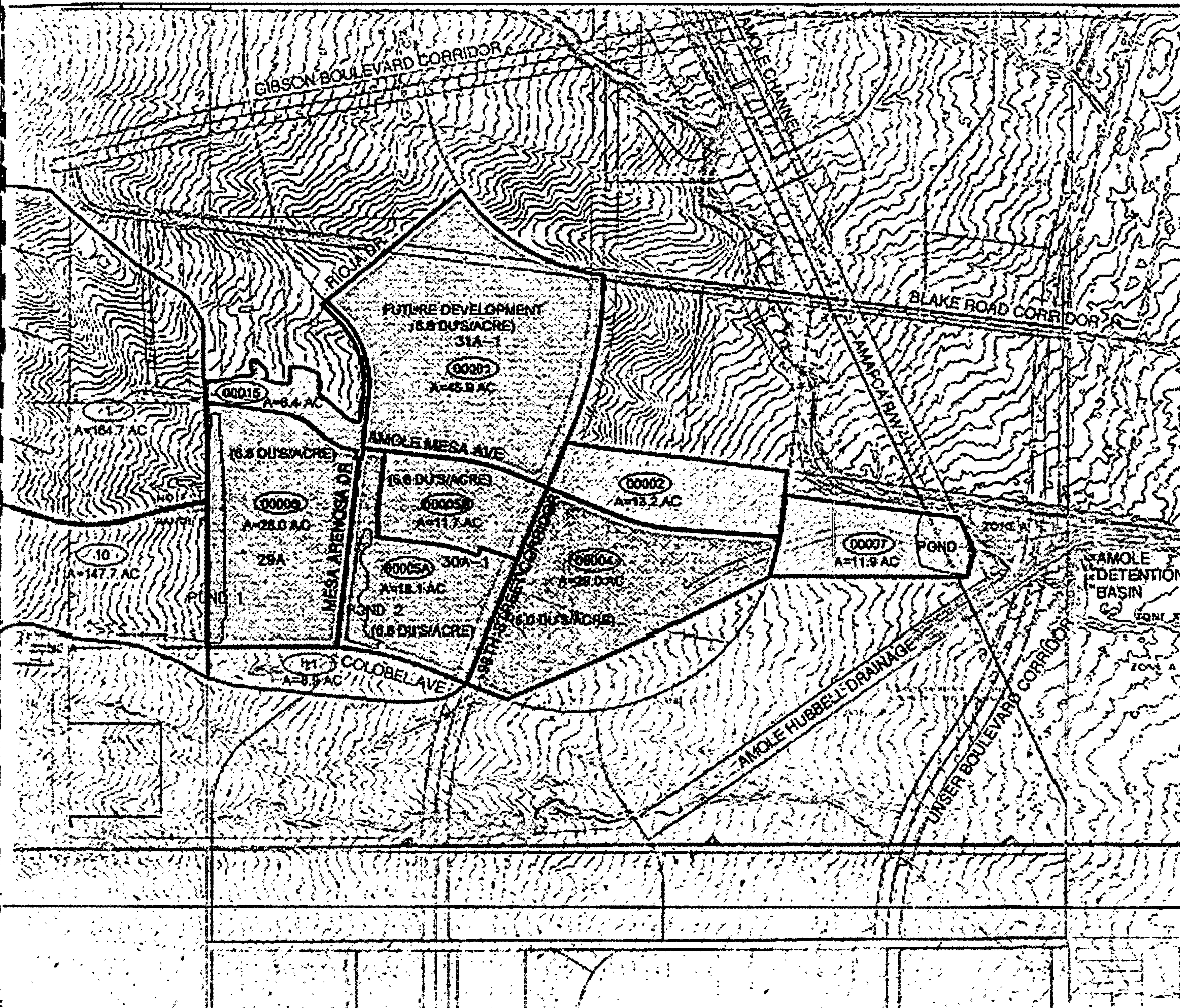
Table 1. Hydrologic Summary

Sub-basin	Acres	DUs/Acre	T <sub>p</sub>	Land Treatments				Q <sub>peak</sub> (cfs)	Volume (ac-ft)	Methodology/Notes
A	B	C	D							
ONSITE										
00001	45.9	6.8	0.13	0	0	37	63	174.87	6.132	DPM for D
00005A	18.1	6.8	0.13	0	0	37	63	69.00	2.418	DPM for D
00005B	11.7	6.8	0.13	0	0	37	63	44.61	1.563	DPM for D
00006	28.0	6.8	0.13	0	0	37	63	106.70	3.740	
OFFSITE										
15	6.4	---	0.13	0	0	20	80	24.00	0.848	DERIVED FROM REFERENCE 2
00002	13.2	---	0.13	0	19	26	55	46.42	1.599	DERIVED FROM REFERENCE 4
00004	29.0	6.0	0.13	0	0	43	57	108.03	3.738	DPM for D
00007	11.9	---	0.13	80	0	20	0	19.06	0.529	School Site
1	164.69	---	0.1992	95	0	5	0	175.77	6.299	DERIVED FROM REFERENCE 3
10	147.68	---	0.2812	95	0	5	0	112.96	5.648	DERIVED FROM REFERENCE 3
11	8.92	---	0.13	95	0	5	0	12.14	0.341	DERIVED FROM REFERENCE 3

October 11, 2004

9





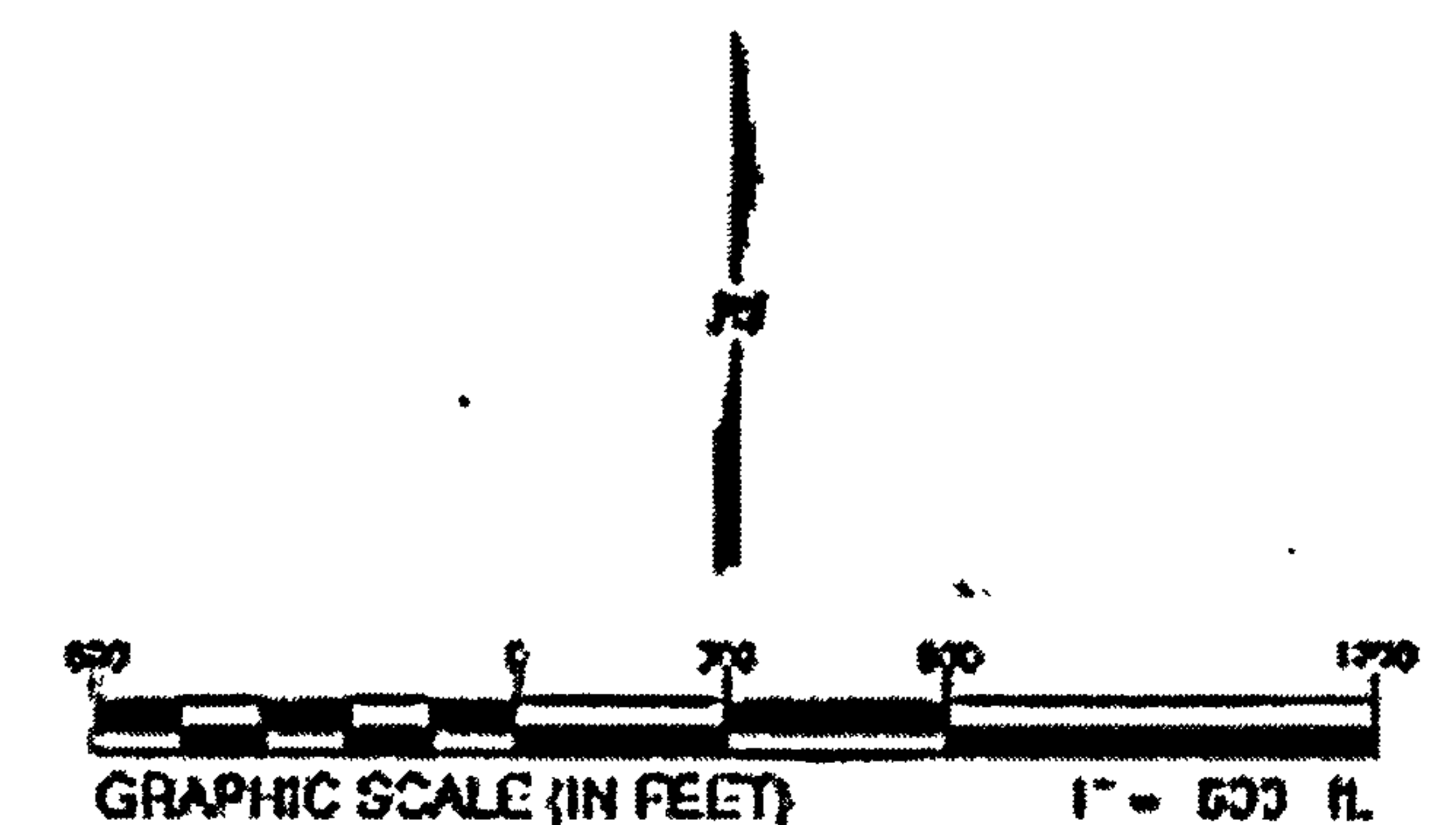
# LEGEND

- REFERENCE: ONSITE, CREATED IN THIS REPORT
- REFERENCE: OFFSITE, DRAINAGE STUDY FOR EL RAMON GRANDE UNITS 14 AND 15, DATED OCTOBER 10, 2003, REVISED NOVEMBER 20, 2003
- REFERENCE: OFFSITE, CREATED IN THIS REPORT
- 00004 BASIN ID LABEL
- PROPOSED BASIN BOUNDARY
- PROPOSED INTERIM DETENTION POND
- \* BASIN BOUNDARY REVISED IN THIS REPORT TO ACCOMMODATE PROPOSED INFRASTRUCTURE

## BASIN TABLE

BASIN	AREA	@ 100 (CFS) @ 900 AC-FT	
00004	29.9 AC	40.46	1.3
00005	18.1 AC	36.8	2.1
00006	11.7 AC	44.7	1.8
00007	38.5 AC	92.8	3.3
00008	11.9 AC	16.1	0.53
00015	8.4 AC	24.0	0.89
1	164.7 AC	175.8	6.3
10	147.7 AC	133.0	5.6
11	8.9 AC	12.1	0.34

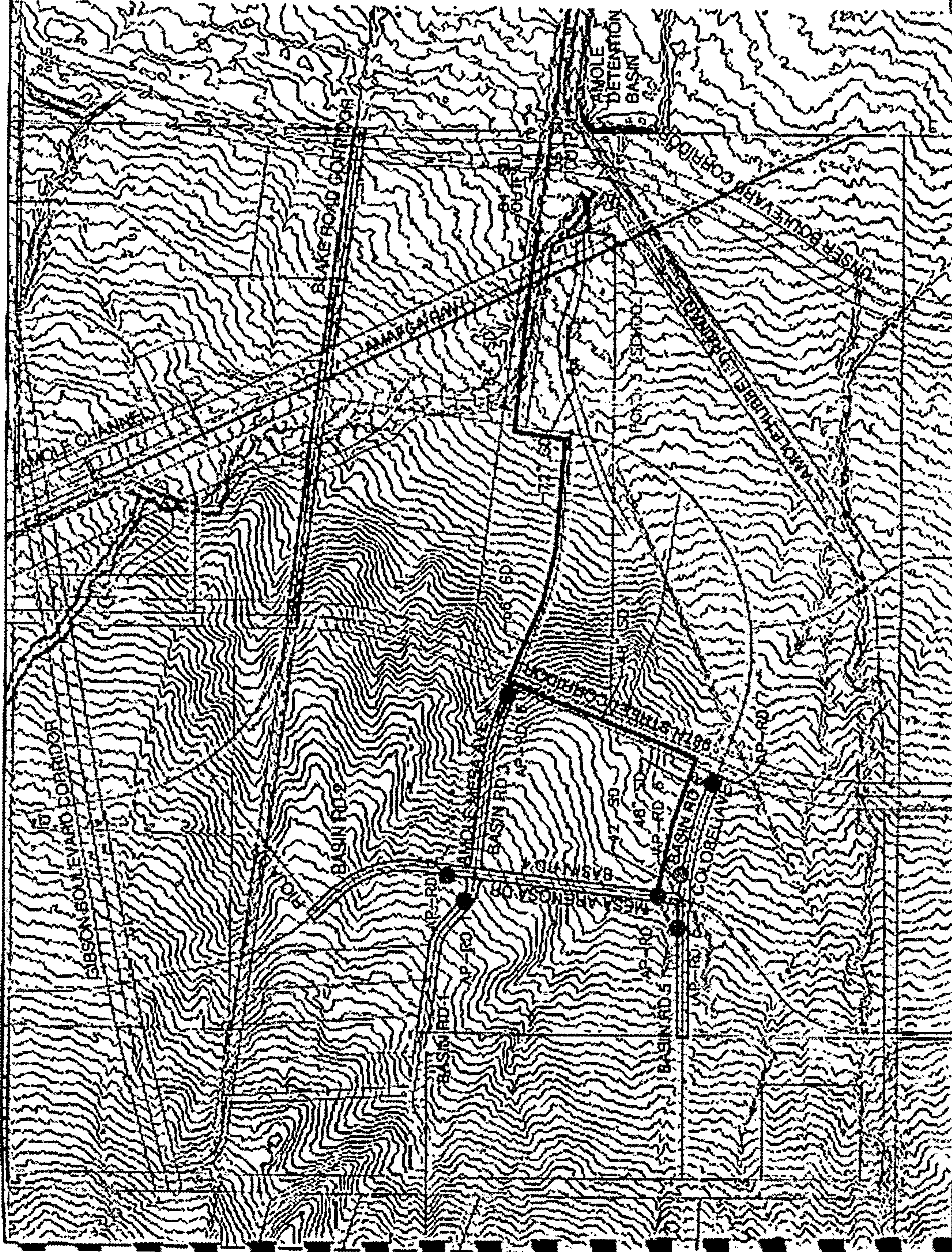
NOTE: BASINS 0004 AND 0007 WERE NOT MODIFIED IN INTERIM CONDITIONS. UNDER EXISTING CONDITIONS, DRAINAGE FROM THESE BASINS DOES NOT ENTER THE PROJECT SITE.



**WATSON & COMPANY**  
2840 W. MONTANA ROAD S.E.  
SUITE 120  
MIDLAND, NEW MEXICO  
89104  
(505) 699-6801

TRACTS 29, 30, 31  
DRAINAGE MANAGEMENT PLAN  
FIGURE 3A  
**PROPOSED INTERIM  
CONDITIONS**



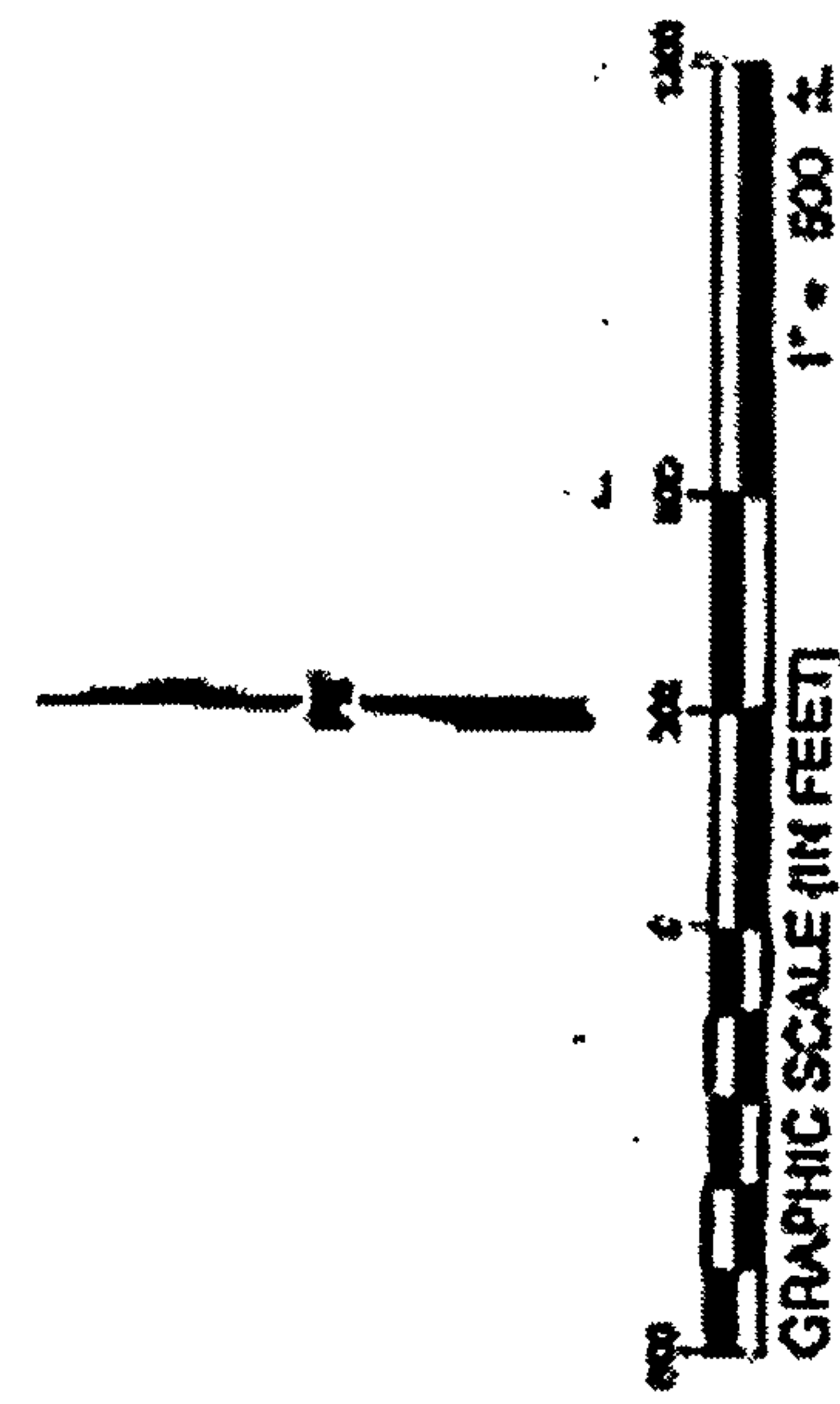


LEGEND

- PROJECT SITE
- TRU MAP PANEL J800723380
- PROPOSED STORM SEWER LINE
- PROPOSED STREET BASINS

OFFSITE STREET CAPACITY TABLE

AP	SLOPE (P)	P100 (CUB)	D100 (IN)
AP-RD 1	2.17	3.2	0.20
AP-RD 2	3.60	2.8	0.34
AP-RD 3	3.45	25.0	0.41
AP-RD 4	0.89	6.8	0.34
AP-RD 5	2.70	2.2	0.25
AP-RD 6	2.70	9.0	0.38
AP-RD 7	3.16	11.4	0.40



**WILSON & COMPANY**  
1000 W. 10TH AVE. S.W.  
SUITE 100  
DENVER, CO 80202  
(303) 733-1111

TRACTS 29, 30, 31  
DRAINAGE MANAGEMENT PLAN  
FIGURE 5

OFFSITE STREET CAPACITY



AHYMO CALCULATION



# EXISTING DRAINAGE CONDITIONS

AHYMO PROGRAM SUMMARY TABLE (AHYMO\_97) -

- VERSION: 1997.02c

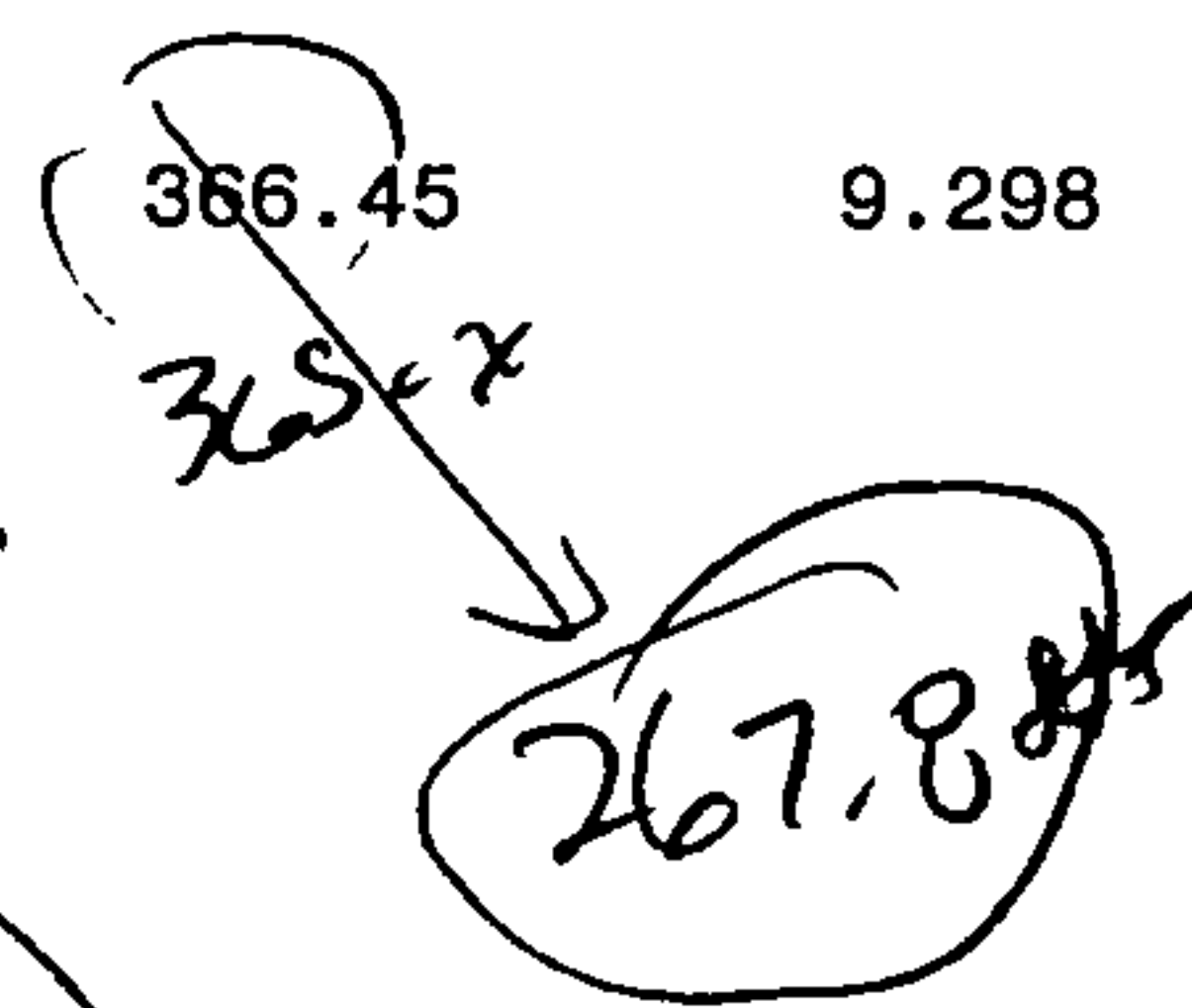
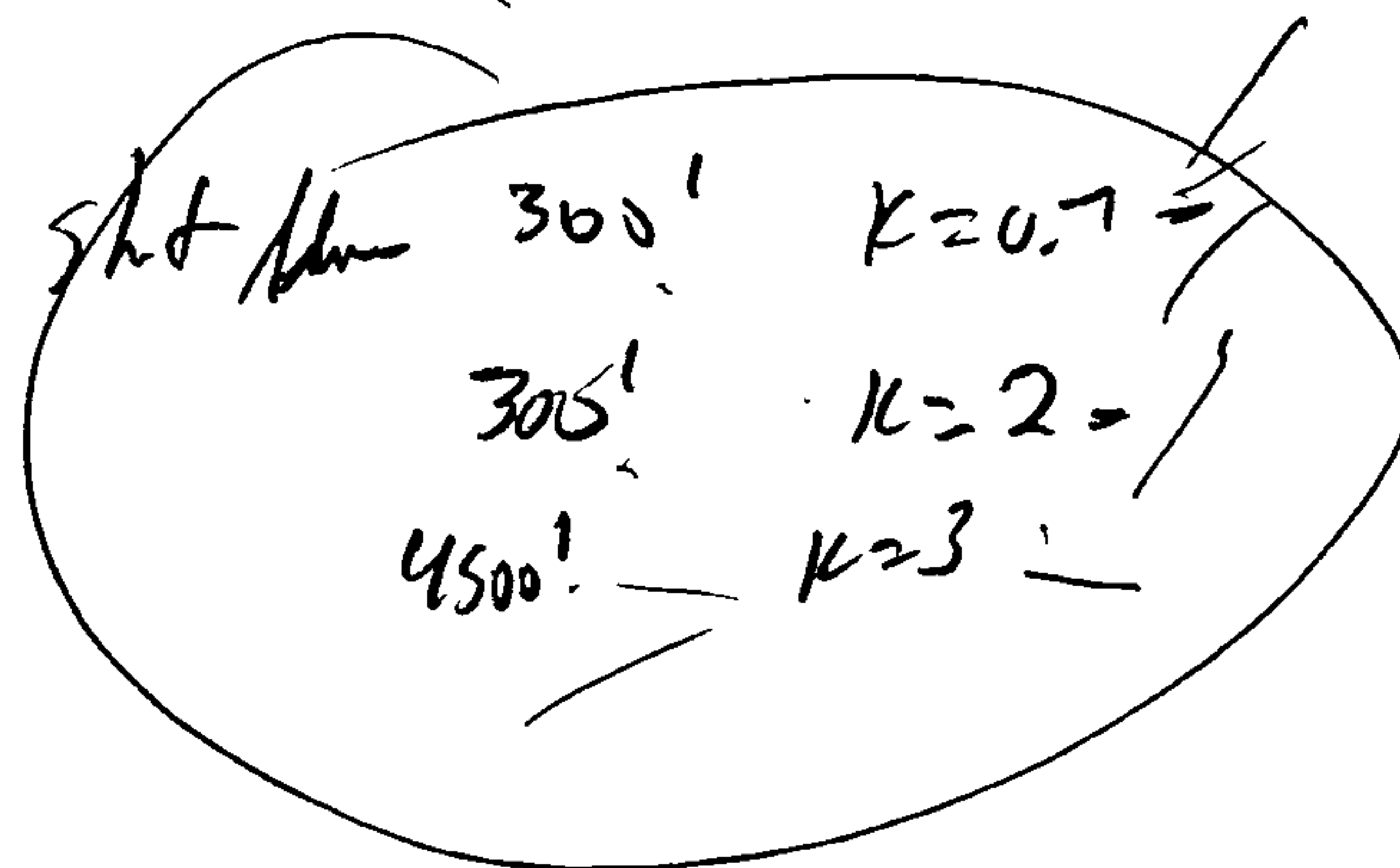
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COMMAND	HYDROGRAPH IDENTIFICATION	FROM ID NO.	TO ID NO.	AREA (SQ MI)	PEAK DISCHARGE (CFS)	RUNOFF VOLUME (AC-FT)	RUNOFF (INCHES)	TIME TO PEAK (HOURS)	CFS PER ACRE	PAGE = 1	NOTATION
START											
RAINFALL TYPE= 1											TIME= .00
COMPUTE NM HYD	EXISTING	-	1	.29681	366.45	9.298	.58737	1.532	1.929		RAIN6= 2.300
FINISH											PER IMP= .00

3



$$+ \frac{29681 \text{ mi}^2}{640 \text{ ac}} = 189.95 \text{ ac}$$

$$A_{70} = 132.96 \text{ ac} \times 1.29 \text{ cfs/ac} = 171.52$$

$$B_{10} = 18.99 \text{ ac} \times 2.03 \text{ cfs/ac} = 38.55$$

$$C_{20} = 37.9 \text{ ac} \times 2.87 \text{ cfs/ac} = 109.0$$

319.07

AHYMO PROGRAM (AHYMO\_97) - - Version: 1997.02c  
RUN DATE (MON/DAY/YR) = 10/09/2006  
START TIME (HR:MIN:SEC) = 11:54:37 USER NO.= AHYMO-I-9702c01000Q29-AH  
INPUT FILE = F:\N595-0-1\03M-LA-1\CIVIL\030\595-03-1.DAT

\*  
\*  
\*  
\*

START  
RAINFALL

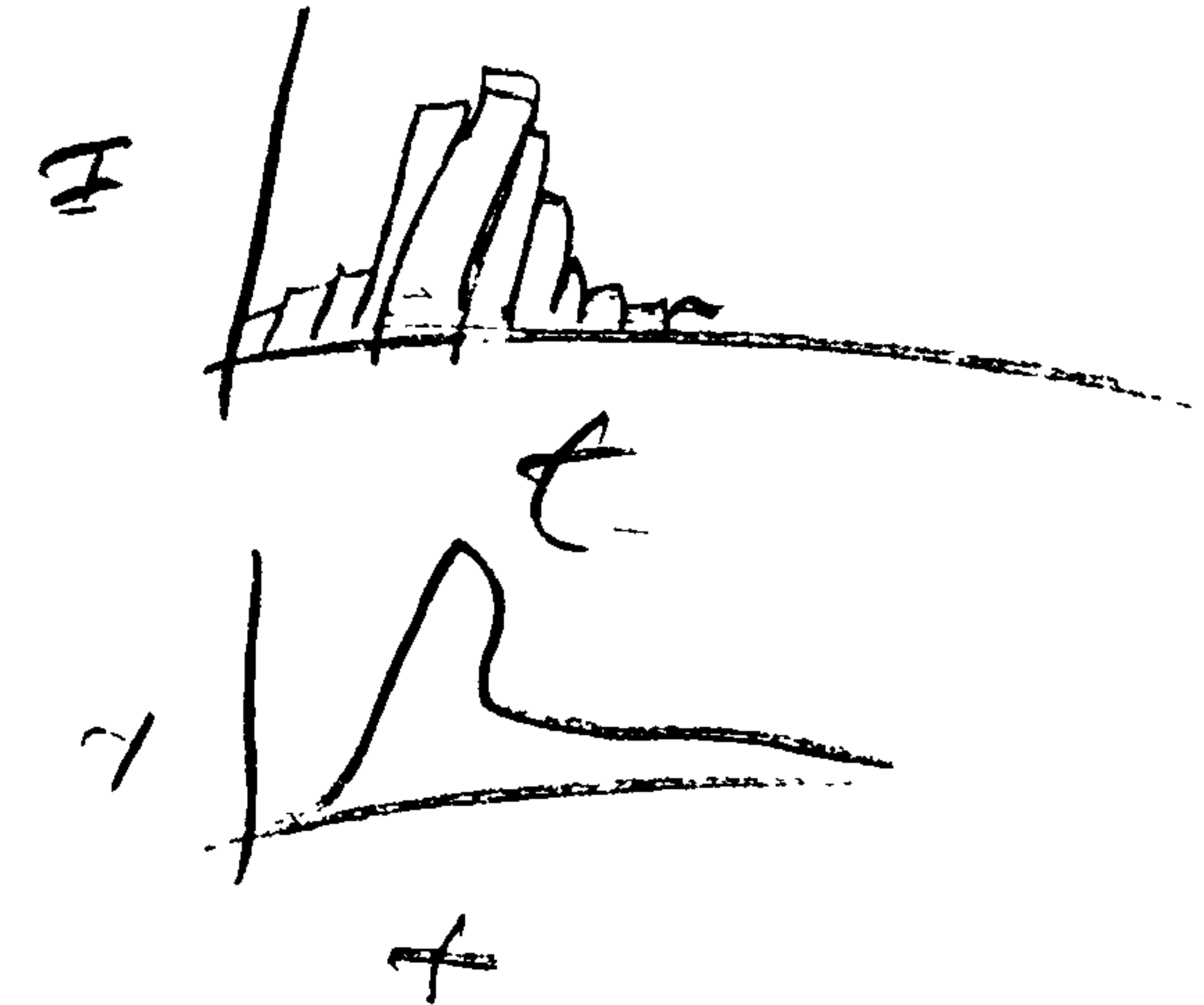
\*\*\*\*\*  
\*LANDS OF SALAZAR  
\*100 YEAR EXISTING CONDITIONS  
\*\*\*\*\*  
TIME=0.0 HR PUNCH CODE=0 PRINT LINES=-6  
TYPE=1 RAIN QUARTER=0.0  
RAIN ONE=1.90 IN RAIN SIX=2.30 IN  
RAIN DAY=2.80 IN DT=0.0333 HRS

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.

DT = .033300 HOURS			END TIME = 5.994000 HOURS			
.0000	.0023	.0047	.0071	.0096	.0122	.0147
.0174	.0201	.0229	.0257	.0287	.0317	.0348
.0379	.0412	.0446	.0480	.0516	.0553	.0591
.0631	.0672	.0715	.0760	.0806	.0855	.0906
.0960	.1016	.1076	.1128	.1184	.1244	.1368
.1652	.2090	.2719	.3580	.4712	.6156	.7956
1.0153	1.2263	1.3129	1.3857	1.4504	1.5092	1.5634
1.6136	1.6606	1.7046	1.7460	1.7850	1.8219	1.8569
1.8900	1.9213	1.9511	1.9794	2.0062	2.0139	2.0202
2.0261	2.0318	2.0373	2.0425	2.0476	2.0524	2.0571
2.0617	2.0661	2.0704	2.0745	2.0786	2.0825	2.0864
2.0901	2.0938	2.0974	2.1009	2.1043	2.1077	2.1110
2.1142	2.1174	2.1205	2.1235	2.1265	2.1295	2.1324
2.1353	2.1381	2.1408	2.1436	2.1463	2.1489	2.1515
2.1541	2.1566	2.1592	2.1616	2.1641	2.1665	2.1689
2.1712	2.1736	2.1759	2.1781	2.1804	2.1826	2.1848
2.1870	2.1891	2.1913	2.1934	2.1955	2.1975	2.1996
2.2016	2.2036	2.2056	2.2076	2.2095	2.2114	2.2134
2.2153	2.2171	2.2190	2.2209	2.2227	2.2245	2.2263
2.2281	2.2299	2.2316	2.2334	2.2351	2.2369	2.2386
2.2403	2.2419	2.2436	2.2453	2.2469	2.2486	2.2502
2.2518	2.2534	2.2550	2.2566	2.2581	2.2597	2.2613
2.2628	2.2643	2.2658	2.2674	2.2689	2.2703	2.2718
2.2733	2.2748	2.2762	2.2777	2.2791	2.2805	2.2820
2.2834	2.2848	2.2862	2.2876	2.2890	2.2903	2.2917
2.2931	2.2944	2.2958	2.2971	2.2984	2.2998	

COMPUTE NM HYD

\*\*\*\*\*  
ID=1 HYD NO=EXISTING DA=0.296810 SQ MI  
PER A=70 PER B=10 PER C=20 PER D=0  
TP=-0.1333 HR MASS RAIN=-1

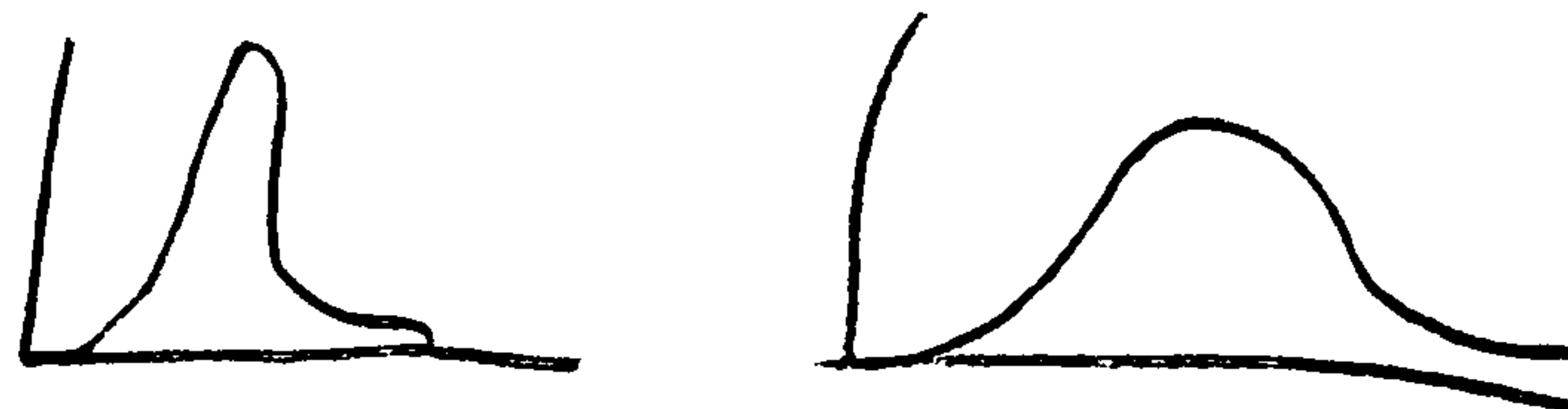


K = .127040HR TP = .133300HR K/TP RATIO = .953035 SHAPE CONSTANT, N = 3.708318  
UNIT PEAK = 746.43 CFS UNIT VOLUME = 1.000 B = 335.23 P60 = 1.9000  
AREA = .296810 SQ MI IA = .57500 INCHES INF = 1.46000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD DT = .033300

\*  
PRINT HYD \*\*\*\*\*  
ID=1 CODE=1

# HYDROGRAPH FROM AREA EXISTING

RUNOFF VOLUME = .58737 INCHES = 9.2979 ACRE-FEET  
PEAK DISCHARGE RATE = 366.45 CFS AT 1.532 HOURS BASIN AREA = .2968 SQ. MI.  
\*  
FINISH  
NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 11:54:37



# PROPOSED DRAINAGE CONDITIONS

AHYMO PROGRAM SUMMARY TABLE (AHYMO\_97) -  
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- VERSION: 1997.02c

RUN DATE (MON/DAY/YR) =12/21/2006  
USER NO.= AHYMO-I-9702c01000Q29-AH

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= .00
RAINFALL	TYPE= 1									RAIN6= 2.300
COMPUTE NM HYD	DA1	-	1	.00590	12.69	.439	1.39530	1.499	3.360	PER IMP= 47.00
COMPUTE NM HYD	DA2	-	2	.05455	117.17	4.059	1.39530	1.499	3.356	PER IMP= 47.00
COMPUTE NM HYD	DA3	-	3	.00548	15.12	.573	1.95764	1.499	4.307	PER IMP= 90.00
COMPUTE NM HYD	DA4	-	4	.03791	81.99	2.848	1.40878	1.499	3.380	PER IMP= 48.00
COMPUTE NM HYD	DA5	-	5	.02262	55.30	1.959	1.62353	1.499	3.820	PER IMP= 57.00
COMPUTE NM HYD	DA6	-	6	.01617	35.87	1.259	1.45971	1.499	3.465	PER IMP= 52.00
COMPUTE NM HYD	DA7	-	7	.02278	50.51	1.773	1.45971	1.499	3.465	PER IMP= 52.00
COMPUTE NM HYD	DA8	-	8	.06038	133.87	4.700	1.45971	1.499	3.464	PER IMP= 52.00
COMPUTE NM HYD	DA9	-	9	.01063	29.30	1.110	1.95764	1.499	4.305	PER IMP= 90.00
COMPUTE NM HYD	DA10	-	10	.03043	41.74	1.158	.71340	1.532	2.143	PER IMP= .00
ADD HYD	AP1	2& 3	20	.06003	132.28	4.632	1.44666	1.499	3.443	
ADD HYD	AP2	20& 4	21	.09794	214.27	7.480	1.43200	1.499	3.419	
ADD HYD	DA5DA6	5& 6	22	.03879	91.17	3.218	1.55522	1.499	3.672	
ADD HYD	AP3	22&21	23	.13673	305.44	10.697	1.46696	1.499	3.490	
ADD HYD	AP4	23& 7	24	.15951	355.95	12.471	1.46592	1.499	3.487	
ADD HYD	AP5	8& 9	25	.07101	163.16	5.811	1.53426	1.499	3.590	
FINISH										



□(s16.67h8.5v0T□&18D

AHYMO PROGRAM (AHYMO\_97) - - Version: 1997.02c  
RUN DATE (MON/DAY/YR) = 12/21/2006  
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\* \*\*\*\*\*  
\* \*LANDS OF SALAZAR  
\* \*100 YEAR ULTIMATE CONDITIONS  
\* \*\*\*\*\*  
START TIME=0.0 HR PUNCH CODE=0 PRINT LINES=-6  
RAINFALL TYPE=1 RAIN QUARTER=0.0  
RAIN ONE=1.90 IN RAIN SIX=2.30 IN  
RAIN DAY=2.80 IN DT=0.0333 HRS

COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2 - PEAK AT 1.40 HR.  
DT = .033300 HOURS END TIME = 5.994000 HOURS

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.0174	.0201	.0229	.0257	.0287	.0317	.0348
.0379	.0412	.0446	.0480	.0516	.0553	.0591
.0631	.0672	.0715	.0760	.0806	.0855	.0906
.0960	.1016	.1076	.1128	.1184	.1244	.1368
.1652	.2090	.2719	.3580	.4712	.6156	.7956
1.0153	1.2263	1.3129	1.3857	1.4504	1.5092	1.5634
1.6136	1.6606	1.7046	1.7460	1.7850	1.8219	1.8569
1.8900	1.9213	1.9511	1.9794	2.0062	2.0139	2.0202
2.0261	2.0318	2.0373	2.0425	2.0476	2.0524	2.0571
2.0617	2.0661	2.0704	2.0745	2.0786	2.0825	2.0864
2.0901	2.0938	2.0974	2.1009	2.1043	2.1077	2.1110
2.1142	2.1174	2.1205	2.1235	2.1265	2.1295	2.1324
2.1353	2.1381	2.1408	2.1436	2.1463	2.1489	2.1515
2.1541	2.1566	2.1592	2.1616	2.1641	2.1665	2.1689
2.1712	2.1736	2.1759	2.1781	2.1804	2.1826	2.1848
2.1870	2.1891	2.1913	2.1934	2.1955	2.1975	2.1996
2.2016	2.2036	2.2056	2.2076	2.2095	2.2114	2.2134
2.2153	2.2171	2.2190	2.2209	2.2227	2.2245	2.2263
2.2281	2.2299	2.2316	2.2334	2.2351	2.2369	2.2386
2.2403	2.2419	2.2436	2.2453	2.2469	2.2486	2.2502
2.2518	2.2534	2.2550	2.2566	2.2581	2.2597	2.2613
2.2628	2.2643	2.2658	2.2674	2.2689	2.2703	2.2718
2.2733	2.2748	2.2762	2.2777	2.2791	2.2805	2.2820
2.2834	2.2848	2.2862	2.2876	2.2890	2.2903	2.2917
2.2931	2.2944	2.2958	2.2971	2.2984	2.2998	

\* \*\*\*\*\*  
COMPUTE NM HYD ID=1 HYD NO=DA1 DA=0.005903 SQ MI  
✓ PER A=9 PER B=18 PER C=26 PER D=47

TP=-0.1333 HR MASS RAIN=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420  
UNIT PEAK = 10.954 CFS UNIT VOLUME = .9984 B = 526.28 P60 = 1.9000  
AREA = .002774 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

K = .124177HR TP = .133300HR K/TP RATIO = .931559 SHAPE CONSTANT, N = 3.797308  
UNIT PEAK = 8.0133 CFS UNIT VOLUME = .9986 B = 341.42 P60 = 1.9000  
AREA = .003129 SQ MI IA = .45189 INCHES INF = 1.11528 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

\*  
PRINT HYD ID=1 CODE=1

#### HYDROGRAPH FROM AREA DA1

RUNOFF VOLUME = 1.39530 INCHES = .4393 ACRE-FEET  
PEAK DISCHARGE RATE = 12.69 CFS AT 1.499 HOURS BASIN AREA = .0059 SQ. MI.

\*  
COMPUTE NM HYD ID=2 HYD NO=DA2 DA=0.054545 SQ MI  
PER A=9 PER B=18 PER C=26 PER D=47  
TP=-0.1333 HR MASS RAIN=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420  
UNIT PEAK = 101.21 CFS UNIT VOLUME = .9992 B = 526.28 P60 = 1.9000  
AREA = .025636 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

K = .124177HR TP = .133300HR K/TP RATIO = .931559 SHAPE CONSTANT, N = 3.797308  
UNIT PEAK = 74.044 CFS UNIT VOLUME = 1.000 B = 341.42 P60 = 1.9000  
AREA = .028909 SQ MI IA = .45189 INCHES INF = 1.11528 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

\*  
PRINT HYD ID=2 CODE=1

#### HYDROGRAPH FROM AREA DA2

RUNOFF VOLUME = 1.39530 INCHES = 4.0590 ACRE-FEET  
PEAK DISCHARGE RATE = 117.17 CFS AT 1.499 HOURS BASIN AREA = .0545 SQ. MI.

\*  
COMPUTE NM HYD                   \*\*\*\*\*  
ID=3 HYD NO=DA3 DDA=0.005484 SQ MI  
✓ PER A=0 PER B=0 PER C=10 PER D=90  
TP=-0.1333 HR MASS RAIN=-1

K = .072649HR    TP = .133300HR    K/TP RATIO = .545000    SHAPE CONSTANT, N = 7.106420  
UNIT PEAK = 19.486    CFS    UNIT VOLUME = .9987    B = 526.28    P60 = 1.9000  
AREA = .004936 SQ MI    IA = .10000 INCHES    INF = .04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

K = .106205HR    TP = .133300HR    K/TP RATIO = .796738    SHAPE CONSTANT, N = 4.498737  
UNIT PEAK = 1.5927    CFS    UNIT VOLUME = .9925    B = 387.15    P60 = 1.9000  
AREA = .000548 SQ MI    IA = .35000 INCHES    INF = .83000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

\*  
PRINT HYD                   \*\*\*\*\*  
ID=3 CODE=1

#### HYDROGRAPH FROM AREA DA3

RUNOFF VOLUME = 1.95764 INCHES    = .5726 ACRE-FEET  
PEAK DISCHARGE RATE = 15.12 CFS    AT 1.499 HOURS    BASIN AREA = .0055 SQ. MI.

\*  
COMPUTE NM HYD                   \*\*\*\*\*  
✓ ID=4 HYD NO=DA4 DA=0.037906 SQ MI  
PER A=9 PER B=17 PER C=26 PER D=48  
TP=-0.1333 HR MASS RAIN=-1

K = .072649HR    TP = .133300HR    K/TP RATIO = .545000    SHAPE CONSTANT, N = 7.106420  
UNIT PEAK = 71.834    CFS    UNIT VOLUME = .9992    B = 526.28    P60 = 1.9000  
AREA = .018195 SQ MI    IA = .10000 INCHES    INF = .04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

K = .124050HR    TP = .133300HR    K/TP RATIO = .930610    SHAPE CONSTANT, N = 3.801356  
UNIT PEAK = 50.527    CFS    UNIT VOLUME = 1.000    B = 341.70    P60 = 1.9000  
AREA = .019711 SQ MI    IA = .45096 INCHES    INF = 1.11269 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

\*  
PRINT HYD                   \*\*\*\*\*  
ID=4 CODE=1

# HYDROGRAPH FROM AREA DA4

RUNOFF VOLUME = 1.40878 INCHES = 2.8480 ACRE-FEET  
 PEAK DISCHARGE RATE = 81.99 CFS AT 1.499 HOURS BASIN AREA = .0379 SQ. MI.

\*  
 COMPUTE NM HYD \*\*\*\*\*  
 ID=5 HYD NO=DA5 DA=0.022621 SQ MI  
 ✓ PER A=0 PER B=0 PER C=43 PER D=57  
 TP=-0.1333 HR MASS RAIN=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420  
 UNIT PEAK = 50.906 CFS UNIT VOLUME = .9991 B = 526.28 P60 = 1.9000  
 AREA = .012894 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

K = .106205HR TP = .133300HR K/TP RATIO = .796738 SHAPE CONSTANT, N = 4.498737  
 UNIT PEAK = 28.251 CFS UNIT VOLUME = 1.000 B = 387.15 P60 = 1.9000  
 AREA = .009727 SQ MI IA = .35000 INCHES INF = .83000 INCHES PER HOUR  
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

\*  
 PRINT HYD \*\*\*\*\*  
 ID=5 CODE=1

# HYDROGRAPH FROM AREA DA5

RUNOFF VOLUME = 1.62353 INCHES = 1.9587 ACRE-FEET  
 PEAK DISCHARGE RATE = 55.30 CFS AT 1.499 HOURS BASIN AREA = .0226 SQ. MI.

\*  
 COMPUTE NM HYD ✓ \*\*\*\*\*  
 ID=6 HYD NO=DA6 DA=0.016173 SQ MI  
 PER A=8 PER B=16 PER C=24 PER D=52  
 TP=-0.1333 HR MASS RAIN=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420  
 UNIT PEAK = 33.203 CFS UNIT VOLUME = .9990 B = 526.28 P60 = 1.9000  
 AREA = .008410 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

K = .123844HR TP = .133300HR K/TP RATIO = .929063 SHAPE CONSTANT, N = 3.807983



UNIT PEAK = 19.926 CFS UNIT VOLUME = .9997 B = 342.16 P60 = 1.9000  
AREA = .007763 SQ MI IA = .45000 INCHES INF = 1.11000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

\*  
PRINT HYD ID=6 CODE=1

#### HYDROGRAPH FROM AREA DA6

RUNOFF VOLUME = 1.45971 INCHES = 1.2591 ACRE-FEET  
PEAK DISCHARGE RATE = 35.87 CFS AT 1.499 HOURS BASIN AREA = .0162 SQ. MI.

\*  
COMPUTE NM HYD ID=7 HYD NO=DA7 DA=0.022779 SQ MI  
PPER A=8 PER B=16 PER C=24 PER D=52  
TP=-0.1333 HR MASS RAIN=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420  
UNIT PEAK = 46.765 CFS UNIT VOLUME = .9991 B = 526.28 P60 = 1.9000  
AREA = .011845 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

K = .123844HR TP = .133300HR K/TP RATIO = .929063 SHAPE CONSTANT, N = 3.807983  
UNIT PEAK = 28.065 CFS UNIT VOLUME = .9999 B = 342.16 P60 = 1.9000  
AREA = .010934 SQ MI IA = .45000 INCHES INF = 1.11000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

\*  
PRINT HYD ID=7 CODE=1

#### HYDROGRAPH FROM AREA DA7

RUNOFF VOLUME = 1.45971 INCHES = 1.7734 ACRE-FEET  
PEAK DISCHARGE RATE = 50.51 CFS AT 1.499 HOURS BASIN AREA = .0228 SQ. MI.

\*  
COMPUTE NM HYD ID=8 HYD NO=DA8 DA=0.060377 SQ MI  
PER A=8 PER B=16 PER C=24 PER D=52  
TP=-0.1333 HR MASS RAIN=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420

UNIT PEAK = 123.95 CFS UNIT VOLUME = .9993 B = 526.28 P60 = 1.9000  
AREA = .031396 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

K = .123844HR TP = .133300HR K/TP RATIO = .929063 SHAPE CONSTANT, N = 3.807983  
UNIT PEAK = 74.389 CFS UNIT VOLUME = 1.000 B = 342.16 P60 = 1.9000  
AREA = .028981 SQ MI IA = .45000 INCHES INF = 1.11000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

\* \*\*\*\*\*  
PRINT HYD ID=8 CODE=1

#### HYDROGRAPH FROM AREA DA8

RUNOFF VOLUME = 1.45971 INCHES = 4.7004 ACRE-FEET  
PEAK DISCHARGE RATE = 133.87 CFS AT 1.499 HOURS BASIN AREA = .0604 SQ. MI.

\* \*\*\*\*\*  
COMPUTE NM HYD ID=9 HYD NO=DA9 DA=0.010633 SQ MI  
PER A=0 PER B=0 PER C=10 PER D=90  
TP=-0.1333 HR MASS RAIN=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420  
UNIT PEAK = 37.782 CFS UNIT VOLUME = .9991 B = 526.28 P60 = 1.9000  
AREA = .009570 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

K = .106205HR TP = .133300HR K/TP RATIO = .796738 SHAPE CONSTANT, N = 4.498737  
UNIT PEAK = 3.0882 CFS UNIT VOLUME = .9962 B = 387.15 P60 = 1.9000  
AREA = .001063 SQ MI IA = .35000 INCHES INF = .83000 INCHES PER HOUR  
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

\* \*\*\*\*\*  
PRINT HYD ID=9 CODE=1

#### HYDROGRAPH FROM AREA DA9

RUNOFF VOLUME = 1.95764 INCHES = 1.1102 ACRE-FEET  
PEAK DISCHARGE RATE = 29.30 CFS AT 1.499 HOURS BASIN AREA = .0106 SQ. MI.

\*  
 COMPUTE NM HYD ID=10 HYD NO=DA10 DA=0.030426 SQ MI  
 ✓ PER A=0 PER B=100 PER C=0 PER D=0  
 TP=-0.1333 HR MASS RAIN=-1

K = .130761HR TP = .133300HR K/TP RATIO = .980950 SHAPE CONSTANT, N = 3.599930  
 UNIT PEAK = 74.764 CFS UNIT VOLUME = 1.000 B = 327.55 P60 = 1.9000  
 AREA = .030426 SQ MI IA = .50000 INCHES INF = 1.25000 INCHES PER HOUR  
 RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033300

\*  
 PRINT HYD ID=10 CODE=1

#### HYDROGRAPH FROM AREA DA10

RUNOFF VOLUME = .71340 INCHES = 1.1576 ACRE-FEET  
 PEAK DISCHARGE RATE = 41.74 CFS AT 1.532 HOURS BASIN AREA = .0304 SQ. MI.

\*  
 ADD HYD ID=20 HYD NO=AP1 IDS=2 AND 3  
 \*  
 PRINT HYD ID=20 CODE=1

#### HYDROGRAPH FROM AREA AP1

RUNOFF VOLUME = 1.44666 INCHES = 4.6315 ACRE-FEET  
 PEAK DISCHARGE RATE = 132.28 CFS AT 1.499 HOURS BASIN AREA = .0600 SQ. MI.

\*  
 ADD HYD ID=21 HYD NO=AP2 IDS=20 AND 4  
 \*  
 PRINT HYD ID=21 CODE=1

#### HYDROGRAPH FROM AREA AP2

RUNOFF VOLUME = 1.43200 INCHES = 7.4796 ACRE-FEET  
 PEAK DISCHARGE RATE = 214.27 CFS AT 1.499 HOURS BASIN AREA = .0979 SQ. MI.

\*

ADD HYD ID=22 HYD NO=DA5DA6 IDS=5 AND 6

\*

PRINT HYD ID=22 CODE=1

HYDROGRAPH FROM AREA DA5DA6

RUNOFF VOLUME = 1.55522 INCHES = 3.2177 ACRE-FEET  
PEAK DISCHARGE RATE = 91.17 CFS AT 1.499 HOURS BASIN AREA = .0388 SQ. MI.

\*

ADD HYD ID=23 HYD NO=AP3 IDS=22 AND 21

\*

PRINT HYD ID=23 CODE=1

HYDROGRAPH FROM AREA AP3

RUNOFF VOLUME = 1.46696 INCHES = 10.6973 ACRE-FEET  
PEAK DISCHARGE RATE = 305.44 CFS AT 1.499 HOURS BASIN AREA = .1367 SQ. MI.

\*

ADD HYD ID=24 HYD NO=AP4 IDS=23 AND 7

\*

PRINT HYD ID=24 CODE=1

HYDROGRAPH FROM AREA AP4

RUNOFF VOLUME = 1.46592 INCHES = 12.4707 ACRE-FEET  
PEAK DISCHARGE RATE = 355.95 CFS AT 1.499 HOURS BASIN AREA = .1595 SQ. MI.

\*

ADD HYD ID=25 HYD NO=AP5 IDS=8 AND 9

\*

PRINT HYD ID=25 CODE=1

HYDROGRAPH FROM AREA AP5

RUNOFF VOLUME = 1.53426 INCHES = 5.8105 ACRE-FEET  
PEAK DISCHARGE RATE = 163.16 CFS AT 1.499 HOURS BASIN AREA = .0710 SQ. MI.



\*

FINISH

NORMAL PROGRAM FINISH  
□(s0p10h4099T□&16D

END TIME (HR:MIN:SEC) = 11:22:56

**DRAINAGE PLANS**

lands of salazar.txt

\*\*\*\*\*

\* FILE: EXPRESSSIONS OF LIFE.TXT

\*\*\*\*\*

START TIME = 0.0 PUNCH CODE = 0

\*S THE IA/INF METHOD

\*\*\*\*\*

RAINFALL TYPE=1 QUARTER=0.0 HOUR=1.90 IN SIX=2.30 IN  
DAY=2.80 DT=0.033333

COMPUTE LT TP

LCODE=1 NK=2 ISLOPE=0  
LENGTH=300 FT SLOPE=.03 K=.7  
LENGTH=5000 FT SLOPE=.03 K=2

COMPUTE NM HYD

ID=1 HYD NO=existing DA=0.296810  
PER A=70 PER B=10 PER C=20 PER D=0  
TP=0.0 MASSRAIN=-1  
ID=1 CODE=10

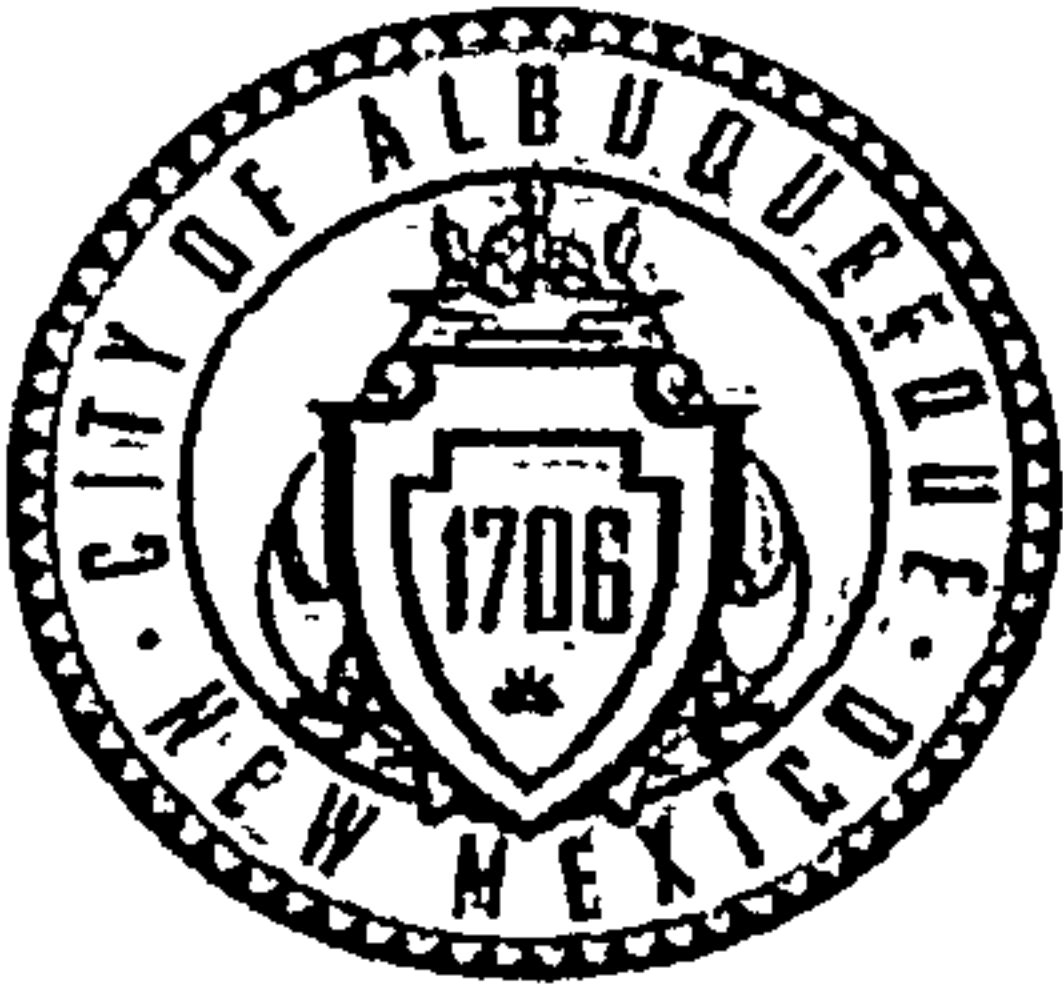
PRINT HYD

PLOT HYD

ID=1

FINISH

*Cwds*



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09 2015)

Project Title: Tracts A-1-A & A-1-B Lands of Salazar Family Trust, Et AL Building Permit #: \_\_\_\_\_ City Drainage #: N09D011

DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ Work Order#: \_\_\_\_\_

Legal Description: Tracts A-1-A & A-1-B Lands of Salazar Family Trust, Et AL

City Address: 98th St at Colobel Ave

Engineering Firm: Mark Goodwin & Associates Contact: Doug hughes

Address: PO Box 90606 Albuquerque NM 87199

Phone#: 505-828-2200 Fax#: 505-897-7539 E-mail: doug@goodwinengineers.com

Owner: Salazar Family Trust Contact: Kelth Meyer

Address: 700 Carlisle Blvd SE, Albuquerque Nm 87106

Phone#: (505) 878-0001 Fax#: \_\_\_\_\_ E-mail: kelthmeyer@gotspaceusa.com

Architect: n/a Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Other Contact: \_\_\_\_\_ Contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Check all that Apply:

### DEPARTMENT:

- ☒ HYDROLOGY/ DRAINAGE  
☐ TRAFFIC/ TRANSPORTATION  
☐ MS4/ EROSION & SEDIMENT CONTROL

### TYPE OF SUBMITTAL:

- ☐ ENGINEER/ ARCHITECT CERTIFICATION  
  
☐ CONCEPTUAL G & D PLAN  
☐ GRADING PLAN  
☐ DRAINAGE MASTER PLAN  
☐ DRAINAGE REPORT  
☒ CLOMR/LOMR  
  
☐ TRAFFIC CIRCULATION LAYOUT (TCL)  
☐ TRAFFIC IMPACT STUDY (TIS)  
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)  
  
☐ OTHER (SPECIFY) \_\_\_\_\_

IS THIS A RESUBMITTAL?: ☐ Yes ☒ No

DATE SUBMITTED: 5/03/2016 By: Doug Hughes

LOA STAFF: \_\_\_\_\_ ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

### CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ BUILDING PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY  
  
☐ PRELIMINARY PLAT APPROVAL  
☐ SITE PLAN FOR SUB'D APPROVAL  
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE  
☐ FOUNDATION PERMIT APPROVAL  
☐ GRADING PERMIT APPROVAL  
☐ SO-19 APPROVAL  
☐ PAVING PERMIT APPROVAL  
☐ GRADING/ PAD CERTIFICATION  
☐ WORK ORDER APPROVAL  
☒ CLOMR/LOMR  
  
☐ PRE-DESIGN MEETING  
☐ OTHER (SPECIFY) \_\_\_\_\_

*In Rudy's  
office*

*Rec'd  
5/4/2016*

## **Abiel X. Carrillo**

---

**From:** Abiel X. Carrillo  
**Sent:** Tuesday, May 24, 2016 9:05 AM  
**To:** 'Doug Hughes'  
**Subject:** LOMR - Lands of Salazar N09D011

Doug,

Like I mentioned over the phone, these are our only comments, so I will mark the submittal as approved. If you'd like, next time you are at the City you can just drop off a revised Annotated FIRM and write up for item 1 instead of making a new submittal.

1. I recommend (not require) that you speak to the fact that the Detention Pond 17 is completely detached from the property.
2. Include the removal of the 98<sup>th</sup> Street ROW from the Floodplain.

Any question just let me know.

### **Abiel Carrillo, PE, CFM**

Principal Engineer - Hydrology  
Planning Department  
Development Review Services Division  
City of Albuquerque  
505-924-3986  
[acarrillo@cabq.gov](mailto:acarrillo@cabq.gov)  
600 2<sup>nd</sup> Street NW  
Albuquerque, NM 87102

*Hardcopy in Rudy Rael's office*



Hightlass at Anderson Hous Ant? <sup>W6</sup> 708103

Anderson Hights Unit 2 753984

but 50 East and west of her

N, S, E, W

Take photos at 6185

Now put 2003

# CITY OF ALBUQUERQUE



January 11, 2007

Brian L. Speicher, P.E.  
Community Sciences Corporation  
P.O. Box 1328  
Corrales, NM 87048

**Re: Lands of Salazar Drainage Management Plan**  
**Engineer's Stamp dated 12-20-06 (N9/D11)**

Dear Mr. Speicher,

Based upon the information provided in your submittal dated 12-26-06, the above referenced plan is approved for Conceptual Drainage Management Plan.

If you have any questions, you can contact me at 924-3695.

P.O. Box 1293

Albuquerque

New Mexico 87103

[www.cabq.gov](http://www.cabq.gov)

Sincerely,

Curtis A. Cherne, E.I.  
Engineering Associate, Planning Dept.  
Development and Building Services

C: file

# DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Lands of Salazar

DRB #: 1005224

EPC#: \_\_\_\_\_

ZONE MAP/DRG. FILE #: N-9/D11

WORK ORDER#: \_\_\_\_\_

LEGAL DESCRIPTION: \_\_\_\_\_

CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Community Sciences Corporation

ADDRESS: PO Box 1328

CITY, STATE: Corrales, NM

CONTACT: Brian L. Speicher

PHONE: 923-9552

ZIP CODE: 87048

OWNER: Salazar Family Trust ET AL

ADDRESS: 1016 Summit NE

CITY, STATE: Albuquerque, NM

CONTACT: Tom Salazar

PHONE: 266-3025

ZIP CODE: 87106

ARCHITECT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_

PHONE: \_\_\_\_\_

ZIP CODE: \_\_\_\_\_

SURVEYOR: Community Sciences Corporation

ADDRESS: PO Box 1328

CITY, STATE: Corrales, NM

CONTACT: Tom Patrick

PHONE: 923-9558

ZIP CODE: 87048

CONTRACTOR: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_

PHONE: \_\_\_\_\_

ZIP CODE: \_\_\_\_\_

## CHECK TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1<sup>st</sup> SUBMITTAL, **REQUIRES TCL or equal**
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☒ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (TCL)
- ☐ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ☐ OTHER

## CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA / FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY (PERM.)
- ☐ CERTIFICATE OF OCCUPANCY (TEMP.)
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☒ OTHER (SPECIFY)

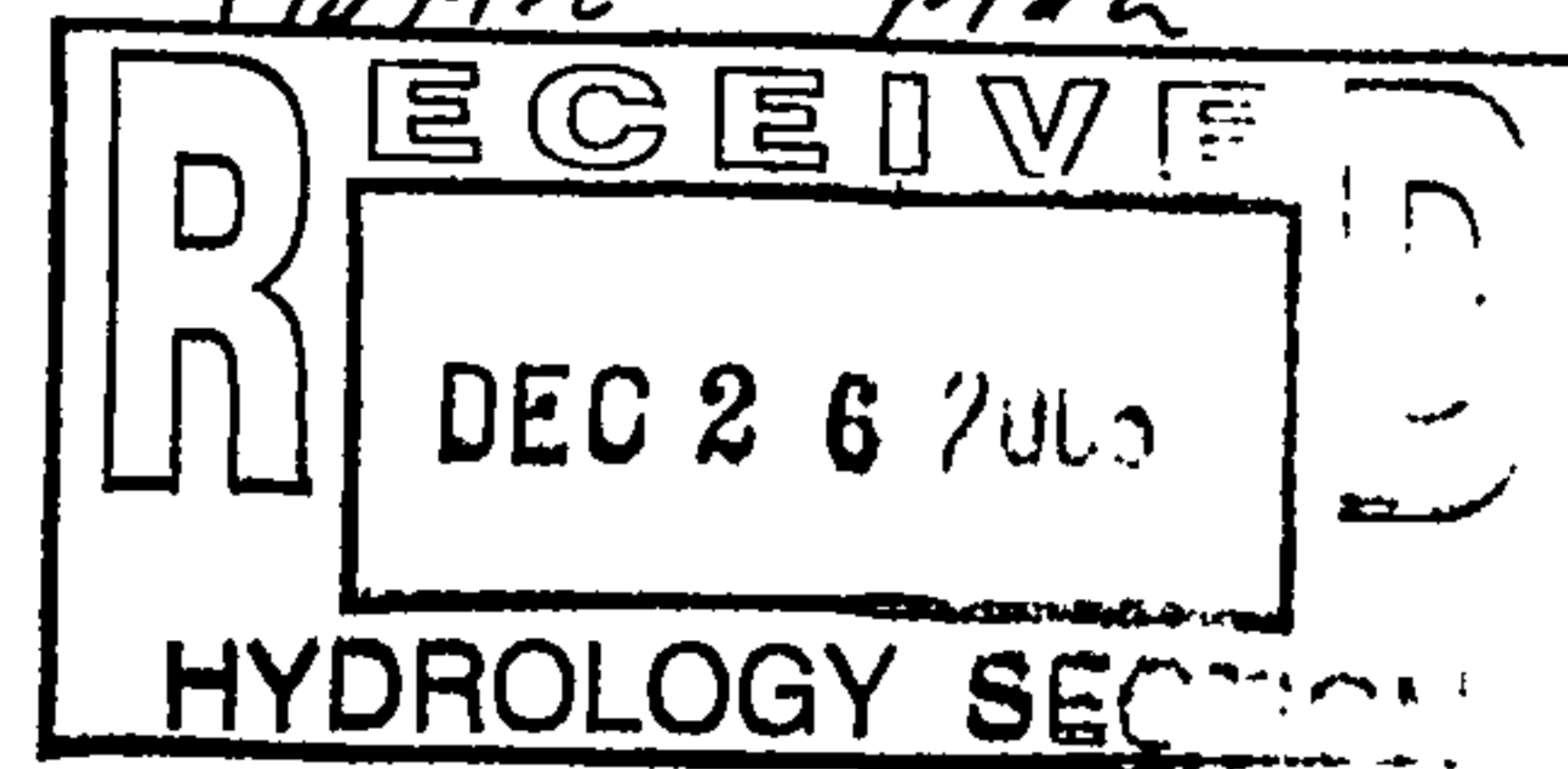
## WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☒ YES
- ☐ NO
- ☐ COPY PROVIDED

*Concurrence of Conceptual  
Drainage Interim Plan*

DATE SUBMITTED: 12/26/06

BY: Brian L. Speicher



Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or more.

# CITY OF ALBUQUERQUE



November 30, 2006

Brian L. Speicher, P.E.  
Community Sciences Corporation  
P.O. Box 1328  
Corrales, NM 87048

**Re: Salazar Family Trust Conceptual Drainage Plan**  
**Engineer's Stamp dated 11-17-06 (N9/D11)**

Dear Mr. Speicher,

Based upon the information provided in your submittal dated 11-17-06, the above referenced plan cannot be approved for Conceptual Drainage Plan until the following comment is addressed:

- It is still not clear which basins are included in the analysis points. Per our telephone conversation, we were to meet to discuss this. Please call to schedule a meeting.

P.O. Box 1293

Albuquerque

New Mexico 87103

[www.cabq.gov](http://www.cabq.gov)

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, E.I.  
Engineering Associate, Planning Dept.  
Development and Building Services

C: file  
Brad Bingham



## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(Rev. 12/05)

PROJECT TITLE: SALAZAR FAMILY TRUST ZONE MAP/DRG. FILE # N-9/D11  
 DRB#: \_\_\_\_\_ EPC#: \_\_\_\_\_ WORK ORDER#: \_\_\_\_\_

LEGAL DESCRIPTION: TRACT A SALAZAR FAMILY TRUST  
 CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: CSC  
 ADDRESS: P.O. Box 1328  
 CITY, STATE: CORRALES, NM

CONTACT: RON HENSLEY  
 PHONE: 877-0000 ext. 111  
 ZIP CODE: 87048

OWNER: SALAZAR FAMILY TRUST  
 ADDRESS: \_\_\_\_\_  
 CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 ZIP CODE: \_\_\_\_\_

ARCHITECT: N/A  
 ADDRESS: \_\_\_\_\_  
 CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 ZIP CODE: \_\_\_\_\_

SURVEYOR: CSC  
 ADDRESS: \_\_\_\_\_  
 CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 ZIP CODE: \_\_\_\_\_

CONTRACTOR: N/A  
 ADDRESS: \_\_\_\_\_  
 CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 ZIP CODE: \_\_\_\_\_

## TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT  
☐ DRAINAGE PLAN 1<sup>st</sup> SUBMITTAL  
☐ DRAINAGE PLAN RESUBMITTAL  
☐ CONCEPTUAL G & D PLAN  
☐ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEER'S CERT (HYDROLOGY)  
☐ CLOMR/LOMR  
☐ TRAFFIC CIRCULATION LAYOUT  
☐ ENGINEER/ARCHITECT CERT (TCL)  
☐ ENGINEER/ARCHITECT CERT (DRB S.P.)  
☐ ENGINEER/ARCHITECT CERT (AA)  
☒ OTHER (SPECIFY) RESUBMIT

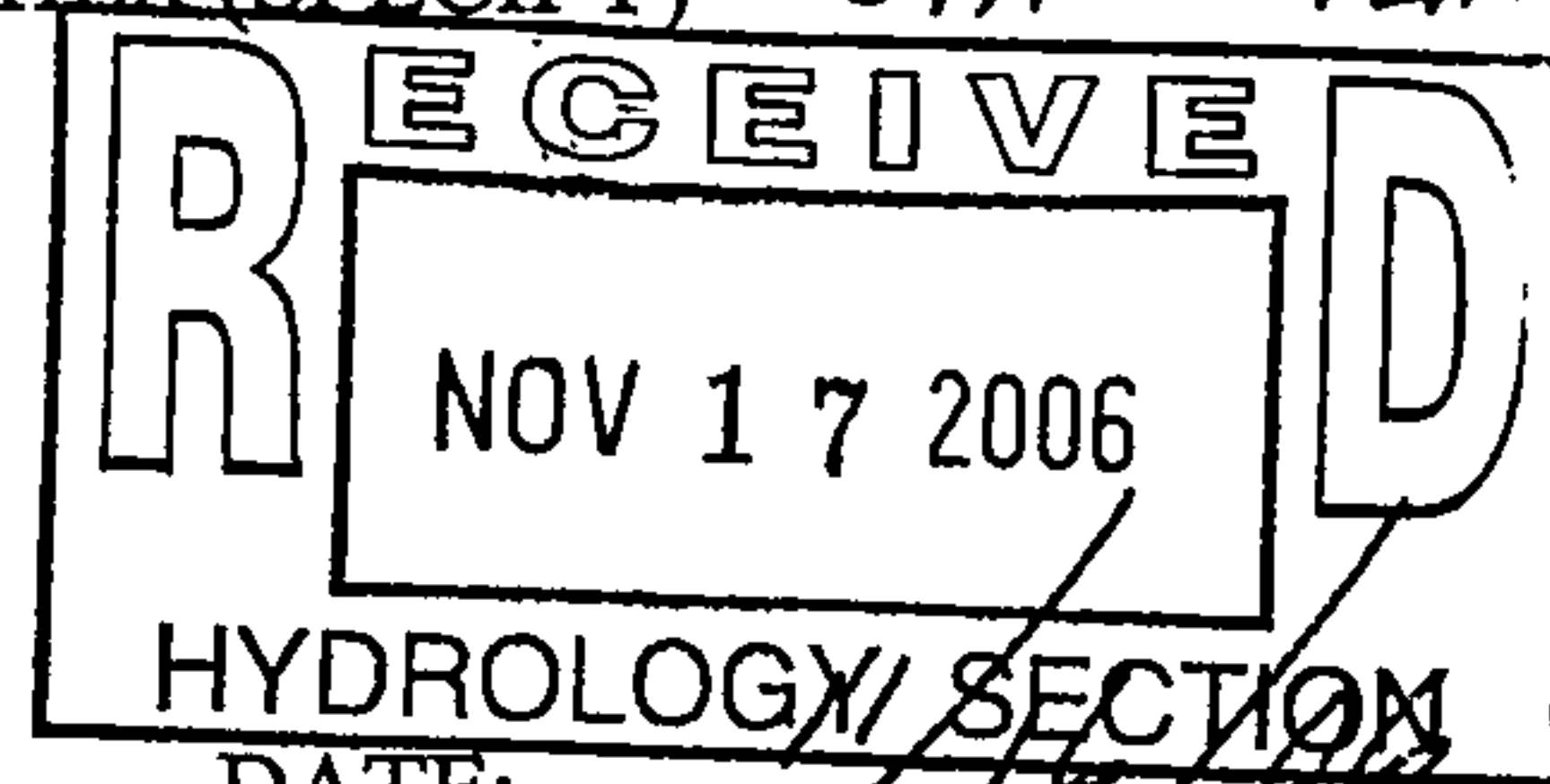
## CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SIA/FINANCIAL GUARANTEE RELEASE  
☐ PRELIMINARY PLAT APPROVAL  
☐ S. DEV. PLAN FOR SUB'D APPROVAL  
☐ S. DEV. FOR BLDG. PERMIT APPROVAL  
☐ SECTOR PLAN APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ FOUNDATION PERMIT APPROVAL  
☐ BUILDING PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY (PERM)  
☐ CERTIFICATE OF OCCUPANCY (TEMP)  
☐ GRADING PERMIT APPROVAL  
☐ PAVING PERMIT APPROVAL  
☐ WORK ORDER APPROVAL  
☒ OTHER (SPECIFY) OTHER PLATTING

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES  
☐ NO  
☐ COPY PROVIDED

SUBMITTED BY: Ron E. Hensley



DATE: 11/16/06

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope to the proposed development define the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans.
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres.
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more.

# CITY OF ALBUQUERQUE

595-02m-610.610



October 23, 2006

RECEIVED

OCT 25 2006

Brian L. Speicher, P.E.  
Community Sciences Corporation  
P.O. Box 1328  
Corrales, NM 87048

**Re: Salazar Family Trust Conceptual Drainage Plan**  
**Engineer's Stamp dated 10-10-06 (N9/D11)**

Dear Mr. Speicher,

Based upon the information provided in your submittal dated 10-11-06, the above referenced plan cannot be approved for Conceptual Drainage Plan until the following comments are addressed:

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

*Comments Addressed*

- Please provide a table that includes the Basin, API, street flow and pipe flow.
- Add excerpt from Arrowwood justifying Basins 1, 2, and 4 draining into Colobel and 98<sup>th</sup>.
- Add Sacate Blanco Channel R/W into either Basin 8 or 9 and plan accordingly.
- Basin 11 appears to be made up of mostly Unser Blvd. Please update the land treatment type, corresponding runoff and volume.
- Provide for the case in which Basin 12 is not deeded to AMAFCA.
- Would it be possible to provide a plan that wasn't as dark and also to improve the Vicinity Map and FEMA Map so they are legible?

If you have any questions, you can contact me at 924-3695.

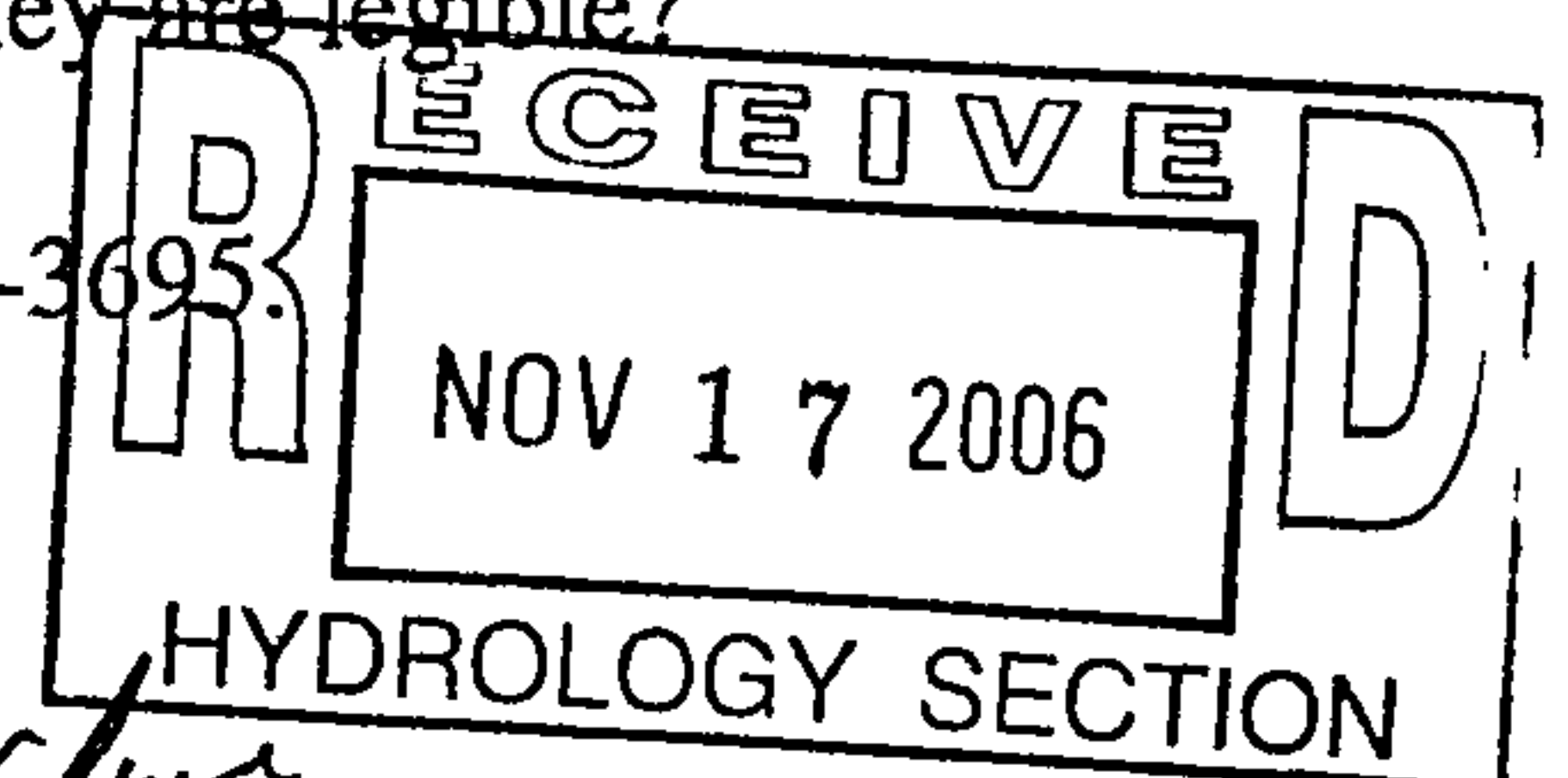
Sincerely,

*Curtis A. Cherne*

Curtis A. Cherne, E.I.  
Engineering Associate, Planning Dept.  
Development and Building Services

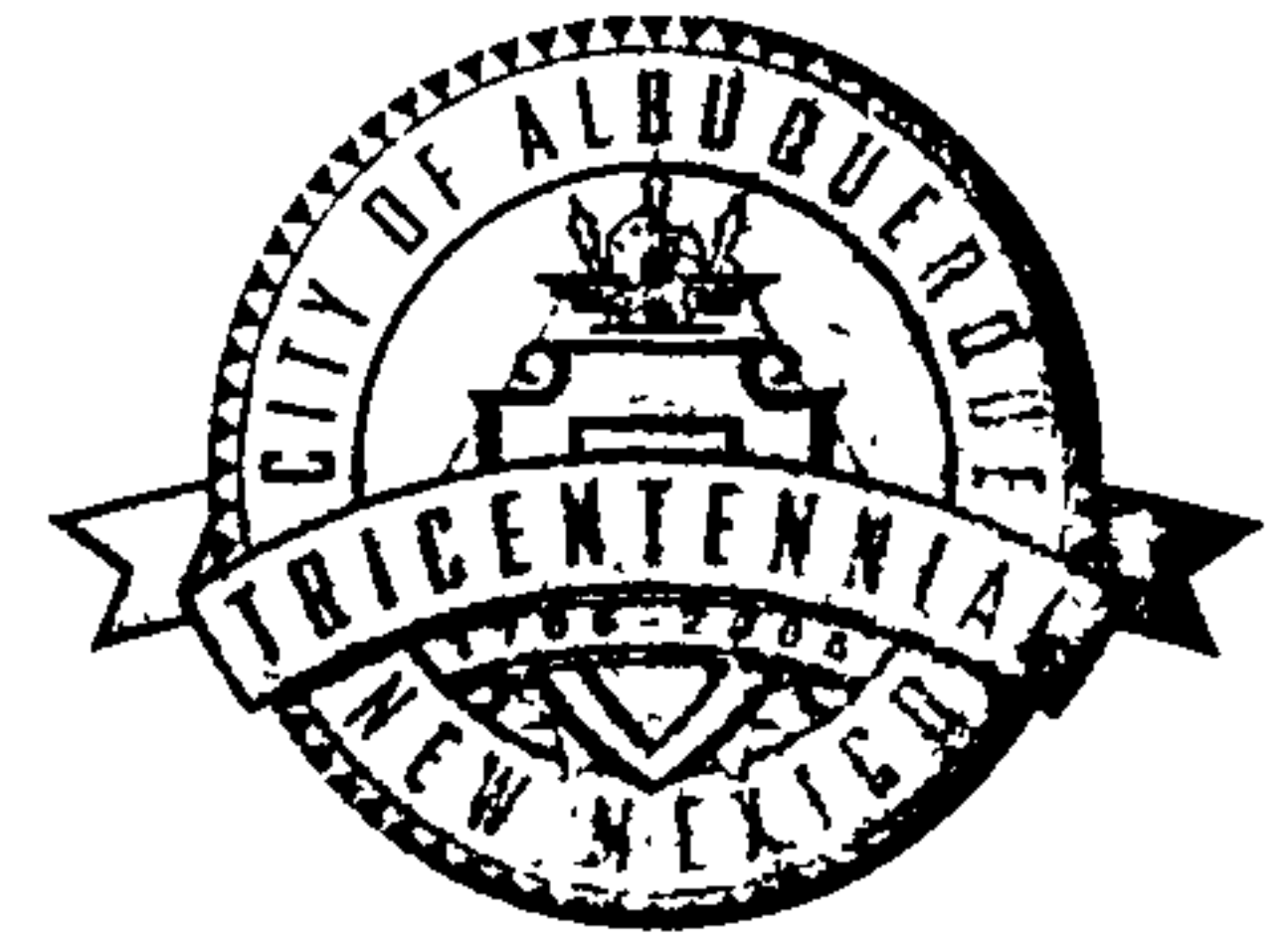
*BM*

C: file



*CFS  
BLS  
CAS  
RE*

# CITY OF ALBUQUERQUE



October 23, 2006

Brian L. Speicher, P.E.  
Community Sciences Corporation  
P.O. Box 1328  
Corrales, NM 87048

**Re: Salazar Family Trust Conceptual Drainage Plan**  
**Engineer's Stamp dated 10-10-06 (N9/D11)**

Dear Mr. Speicher,

Based upon the information provided in your submittal dated 10-11-06, the above referenced plan cannot be approved for Conceptual Drainage Plan until the following comments are addressed:

P.O. Box 1293

- Please provide a table that includes the Basin, API, street flow and pipe flow.

Albuquerque

- Add excerpt from Arrowwood justifying Basins 1, 2, and 4 draining into Colobel and 98<sup>th</sup>.

New Mexico 87103

- Add Sacate Blanco Channel R/W into either Basin 8 or 9 and plan accordingly.

[www.cabq.gov](http://www.cabq.gov)

- Basin 11 appears to be made up of mostly Unser Blvd. Please update the land treatment type, corresponding runoff and volume.

- Provide for the case in which Basin 12 is not deeded to AMAFCA.

- Would it be possible to provide a plan that wasn't as dark and also to improve the Vicinity Map and FEMA Map so they are legible?

If you have any questions, you can contact me at 924-3695.

Sincerely,

Curtis A. Cherne, E.I.  
Engineering Associate, Planning Dept.  
Development and Building Services

C: file



# DRAINAGE INFORMATION SHEET

(REV. 11/01/2001)

PROJECT TITLE: LANDS OF SALAZAR DRAINAGE MANAGEMENT PLAN ZONE MAP/DRG. FILE #: N-9/D-11  
 DRB #: N/A EPC#: N/A WORK ORDER#: N/A  
 LEGAL DESCRIPTION: RIO BRAVO TRACTS A-1-A, A-1-B, A-1-C + 13-D-1  
 CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Community Sciences Corp.  
 ADDRESS: P.O. Box 1328  
 CITY, STATE: CORRALES, NM

CONTACT: BRINN L. SPEICHER  
 PHONE: 923-9552  
 ZIP CODE: 87048 897-0000

OWNER: TOM SALAZAR  
 ADDRESS: 1016 Summit Dr. NE  
 CITY, STATE: ALBUQUERQUE, NM

CONTACT: TOM SALAZAR  
 PHONE: 977-3322  
 ZIP CODE: 87106

ARCHITECT: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 ZIP CODE: \_\_\_\_\_

SURVEYOR: Community Sciences Corp.  
 ADDRESS: \_\_\_\_\_  
 CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 ZIP CODE: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 CITY, STATE: \_\_\_\_\_

CONTACT: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 ZIP CODE: \_\_\_\_\_

## CHECK TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☒ DRAINAGE PLAN
- ☒ CONCEPTUAL GRADING & DRAINAGE PLAN
- ☐ GRADING PLAN
- ☐ EROSION CONTROL PLAN
- ☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
- ☐ CLOMP/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEERS CERTIFICATION (TCL)
- ☐ ENGINEERS CERTIFICATION (DRB APPR. SITE PLAN)
- ☐ OTHER

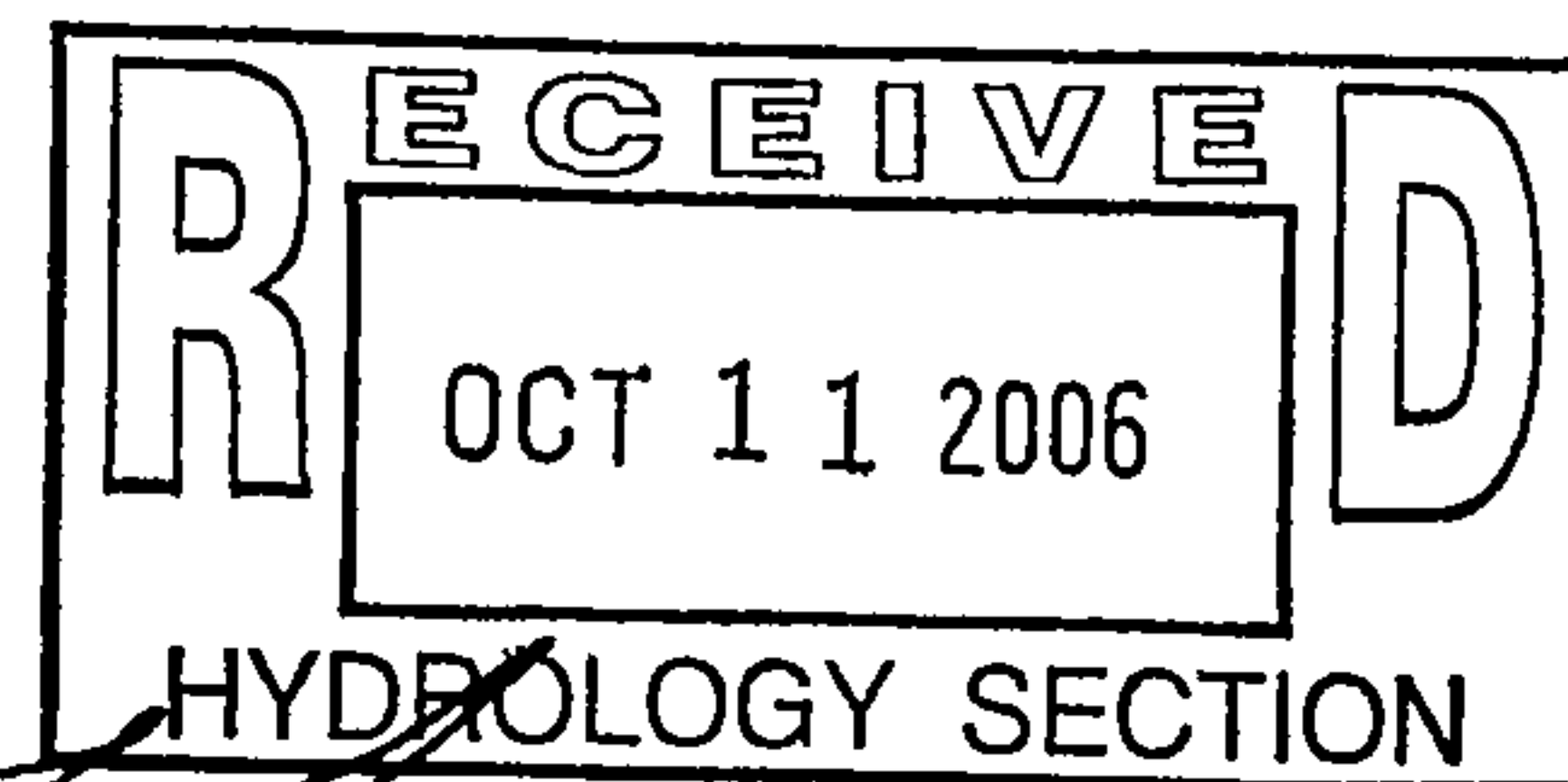
## CHECK TYPE OF APPROVAL SOUGHT:

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- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D. APPROVAL
- ☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY (PERM.)
- ☐ CERTIFICATE OF OCCUPANCY (TEMP.)
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☒ OTHER (SPECIFY) Drainage Mgmt Plan

## WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☒ YES
- ☐ NO
- ☐ COPY PROVIDED

DATE SUBMITTED: OCT. 10, 2006 BY: Brinn



Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

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2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5)
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or