CITY OF ALBUQUERQUE

December 5, 2005

Mr. Shahab Biazar, PE
ADVANCED ENGINEERING &
CONSULTING, LLC
4416 Anaheim Avenue NE
Albuquerque, NM 87113

Re: LANDS OF TORRES, ELENA GALLEGOS GRANT, LOTS 3&4
2418 Manuel Torres Lane NW
Approval of Permanent Certificate of Occupancy (C.O.)
Engineer's Stamp dated 02/22/2005 (F-13/D27)
Certification dated 12/01/2005

Dear Shahab:

Based upon the information provided in your submittal received 12/02/2005, the above referenced certification is approved for release of Permanent Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3982.

Sincerely,

Arlene V. Portillo

Arlene V. Portillo
Plan Checker, Planning Dept. - Hydrology
Development and Building Services

C: CO Clerk
File

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

ADVANCED ENGINEERING and CONSULTING, LLC

Consulting
Design
Development
Management
Inspection
Surveying

December 1, 2005

Mr. Bradley L. Bingham, P.E.
Sr. Engineer, Planing Dept.
Development and Building Services
600 Second Street NW
Albuquerque, New Mexico 87102

RE: FINAL CERTIFICATION OF OCCUPANCY FOR LOT 4, LANDS OF TORRES (F13/D27)

Dear Mr. Bingham:

This letter is in request of Final Certification of Occupancy for the above mentioned project. I Shahab Biazar, NMPE, of the Advanced Engineering, LLC hereby certify that this project has been graded and will drain in substantial compliance with and design intent of the approved plan dated 02/22/05. Finished Floor Elevation is built 0.11' (at elevation of 4969.89') below the design elevation of 4970.00. The finished floor elevation is 1.89' above the 100-year flood elevation of 4968.00 (based on NAD 27).

Please contact me if there are any questions or concerns regarding this submittal.

Sincerely yours,

Shahab Biazar, P.E.

RECEIVED
DEC 02 2005
HYDROLOGY SECTION

4416 Anaheim Ave., N.E., Albuquerque, NM 87113 PH (505) 899-5570 FAX (505) 897-4996 EMAIL AECLLC@aol.com

CITY OF ALBUQUERQUE

March 14, 2005

Shahab Biazar PE
Advanced Engineering and Consulting
4416 Anaheim Ave NE
Albuquerque, NM 87113

Re: Tracts 3 & 4, Lands of Torres Drainage Report
Engineer's Stamp dated 2-22-05 (F13/D27)

Dear Mr. Biazar,

Based upon the information provided in your submittal dated 2-23-05, the above referenced report is approved for Building Permit. Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Prior to Certificate of Occupancy release, an Elevation Certificate will be required. Please forward a copy to this office.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Bradley L. Bingham, PE, CFM
Principal Engineer, Planning Dept.
Development and Building Services

C: file

P.O. Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

DRAINAGE REPORT
FOR

TRACTS 3 & 4
LANDS OF TORRES, ELENA GALLEGOS GRANT

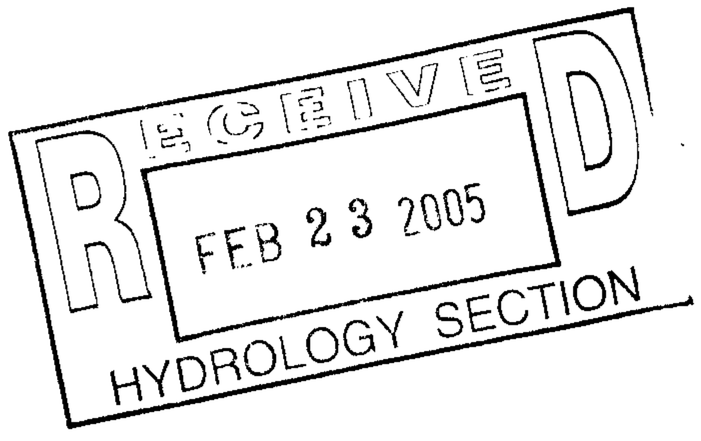
Prepared by:

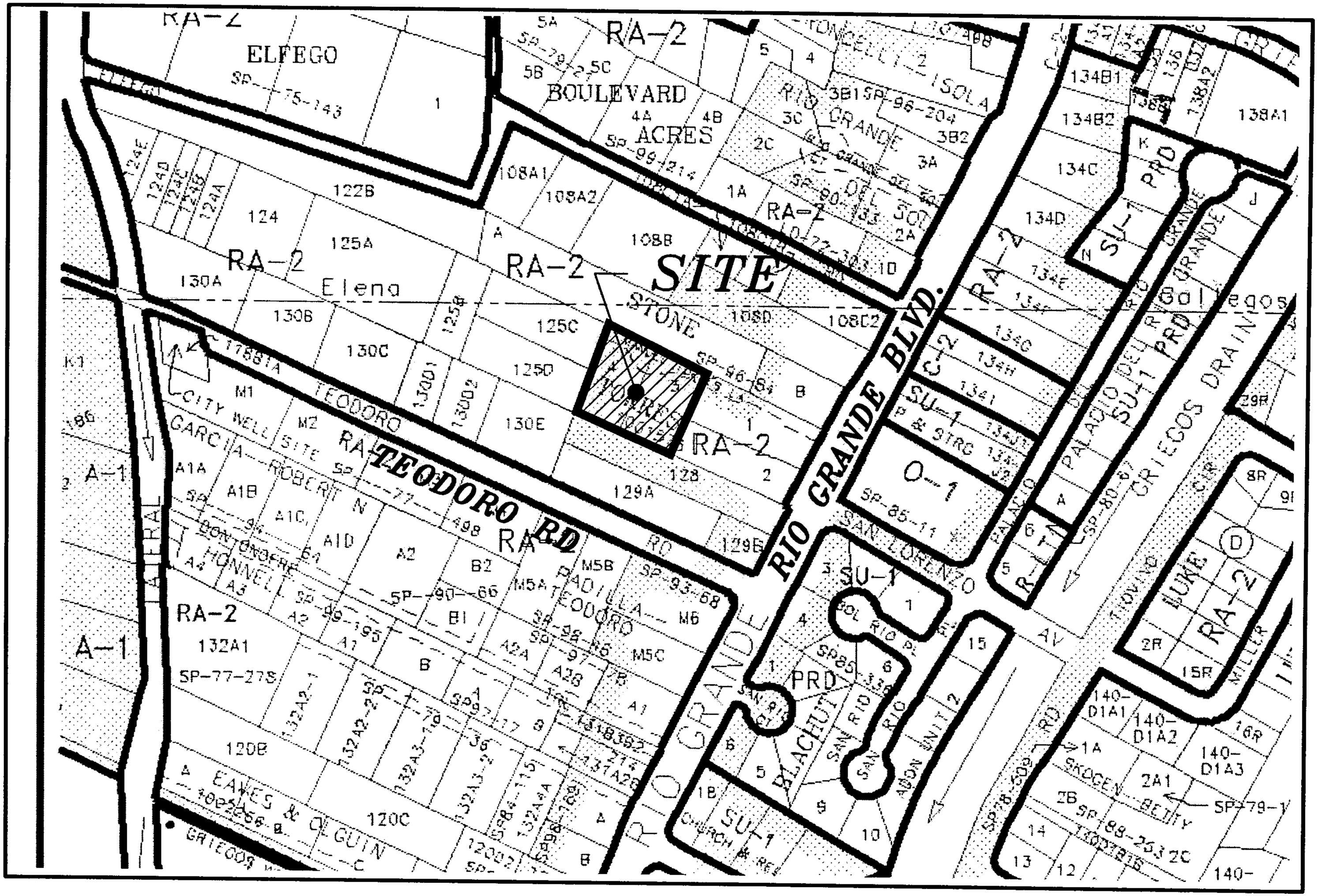
ADVANCED ENGINEERING and CONSULTING, LLC

4416 Anaheim Ave., NE
Albuquerque, New Mexico 87113

February, 2005

Shahab Biazar
PE NO. 13479





VICINITY MAP:

F-13-Z

Location

Tracts 3 and 4, Lands of Torres, Elena Gallegos Grant is located on Manuel Torres Lane. See attached Zone Atlas page F-13 for exact location.

Purpose

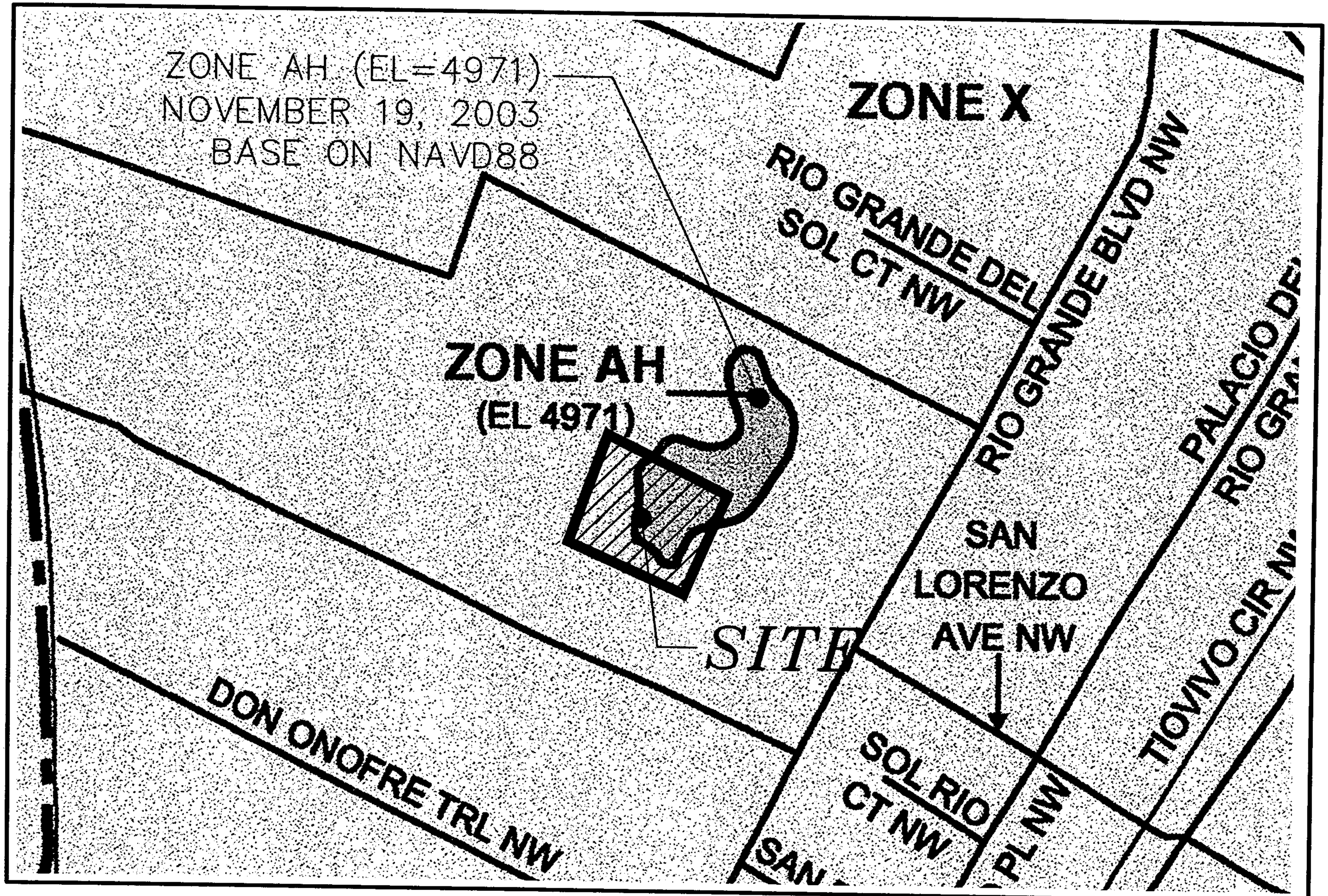
The purpose of this drainage report is to present a grading and drainage solution for the proposed buildings for Tracts 3 and 4. We are requesting rough grading approval and building permit approval.

Existing Drainage Conditions

Most of the sites surrounding Tracts 3 and 4 are fairly flat. There are no offsite runoff that enters this site. Portion of Tract 4 and most of Tract 3 fall within a 100-year storm runoff Zone AH (ELEV=4968.00 / BASE ON NAD 27). See attached FIRM map number 35001C0118 E for exact location. We also have shown the limits of the floodplain on the grading and drainage plan.

Proposed Conditions and On-Site Drainage Management Plan

Since the site is flat the runoff ponds on-site. The finished floor of the proposed buildings are placed 2' above the floodplain elevation (@ 4970.00'), some of the fill will be encroaching into the



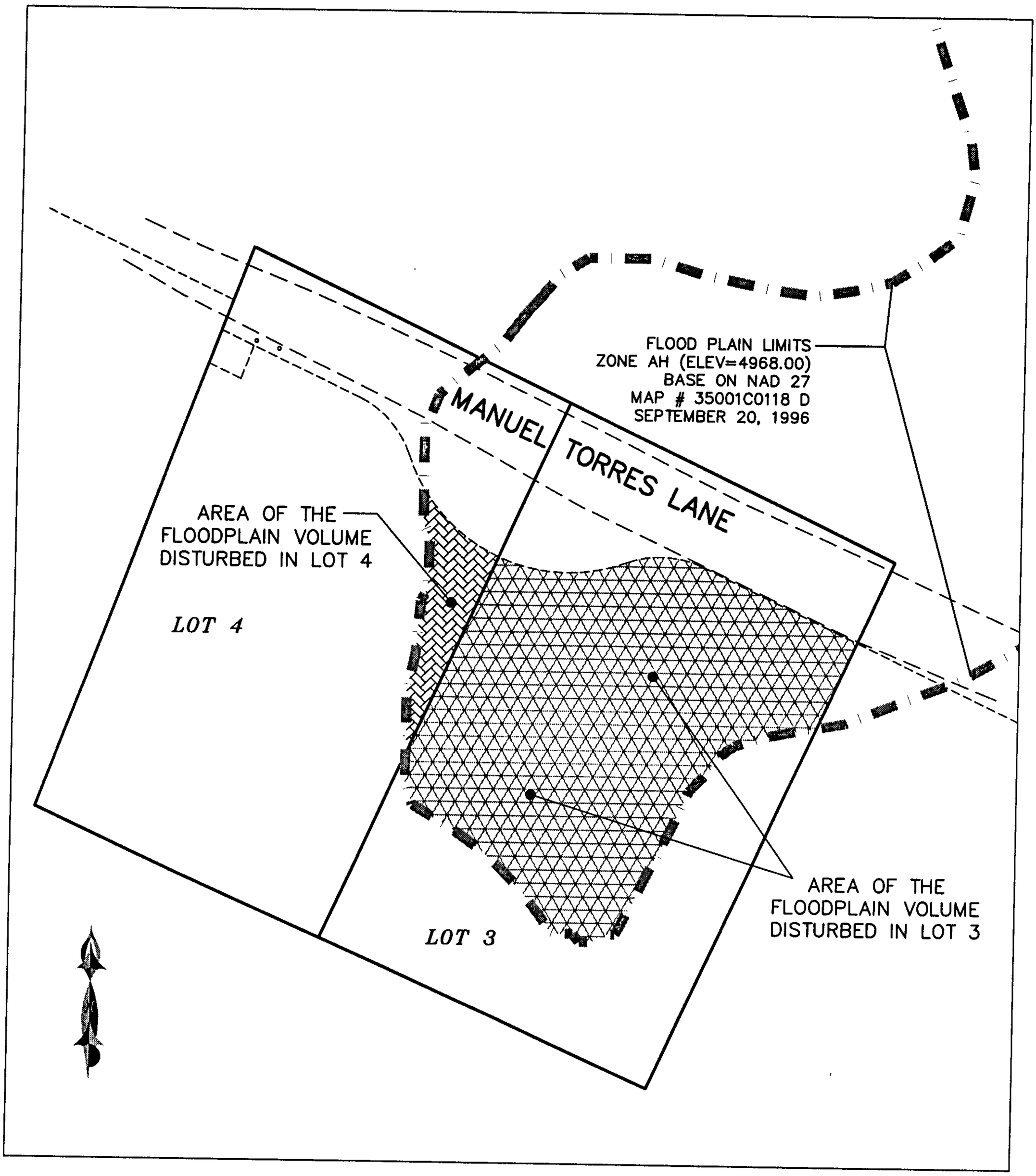
FIRM MAP: 35001C0118 E

BASE ON NGVD29
ZONE AH (EL.=4968.00)
SEPTEMBER 20, 1996

floodplain volume. Therefore, retention ponds are designed to compensate for the volume encroached into the floodplain. Lot 3 has an encroachment area of 8,140.56 sf (at an average depth of 0.65') which will require a ponding volume of 5,291.36 cf (8,140.56 x 0.65). The ponding volume provided for Lot 3 is 5,796.70 cf. Lot 4 will have an encroachment of 735.78 sf (at an average depth of 0.25') which will require a ponding volume of (183.95 cf). Ponding volume provided for Lot 4 is 1,012.00 cf

Calculations

City of Albuquerque, Development Process Manuel, Section 22.2, Hydrology Section, was used for runoff calculations. See this report for Summary Table for runoff results. See also this report for AHYMO input and output files for runoff calculations.



FLOODPLAIN VOLUME DISTURBANCE

NTS

RUNOFF CALCULATIONS

(INPUT DATA FOR AHYMO CALCULATIONS)

The site is @ Zone 2

DEPTH (INCHES) @ 100-YEAR STORM

P_{60} = 2.01 inches

P_{360} = 2.35 inches

P_{1440} = 2.75 inches

DEPTH (INCHES) @ 10-YEAR STORM

P_{60} = 2.01 x 0.667
= 1.34 inches

P_{360} = 1.57

P_{1440} = 1.83

See the summary output from AHYMO calculations.

Also see the following summary tables.

RUNOFF CALCULATION RESULTS

BASIN	AREA (SF)	AREA (AC)	AREA (MI^2)
LOT 3	16931.78	0.3887	0.000607
LOT 4	15880.59	0.3646	0.000570

PROPOSED

BASIN	Q-100 CFS	Q-10 CFS
LOT 3	0.61	0.15
LOT 4	0.57	0.14

HISTORICAL

BASIN	Q-100 CFS	Q-10 CFS
LOT 3	1.50	0.90
LOT 4	1.40	0.85

SUMMARY OUTPUT FILE

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) - - VERSION: 1997.02d RUN DATE (MON/DAY/YR) =02/21/2005
INPUT FILE = 200462 USER NO.= AHYMO-I-9702c01000R31-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	NOTATION	
START										TIME=	.00
RAINFALL TYPE= 1										RAIN6=	2.350
COMPUTE NM HYD	100.00	-	1	.00061	.61	.017	.53121	1.533	1.574	PER IMP=	.00
COMPUTE NM HYD	101.00	-	1	.00057	.57	.016	.53121	1.533	1.576	PER IMP=	.00
START										TIME=	.00
RAINFALL TYPE= 1										RAIN6=	1.570
COMPUTE NM HYD	110.00	-	1	.00061	.15	.004	.12517	1.533	.377	PER IMP=	.00
COMPUTE NM HYD	111.00	-	1	.00057	.14	.004	.12517	1.533	.377	PER IMP=	.00
START										TIME=	.00
RAINFALL TYPE= 1										RAIN6=	2.350
COMPUTE NM HYD	100.10	-	1	.00061	1.50	.052	1.59673	1.500	3.862	PER IMP=	56.00
COMPUTE NM HYD	101.10	-	1	.00057	1.41	.049	1.59673	1.500	3.866	PER IMP=	56.00
START										TIME=	.00
RAINFALL TYPE= 1										RAIN6=	1.570
COMPUTE NM HYD	110.10	-	1	.00061	.90	.030	.91675	1.500	2.326	PER IMP=	56.00
COMPUTE NM HYD	111.10	-	1	.00057	.85	.028	.91675	1.500	2.330	PER IMP=	56.00
FINISH											