

# CITY OF ALBUQUERQUE



November 7, 2007

Shahab Biazar, P.E.  
**Advanced Engineering and Consulting, LLC**  
4416 Anaheim Avenue NE  
Albuquerque, NM 87113

**RE: Villas Las Mananitas Subdivision, (H-13/D050)**  
**Engineers Certification for Release of Financial Guaranty**  
**Engineers Stamp dated 6/6/06, W.O. # 791581**  
**Engineers Certification dated 10/22/07**

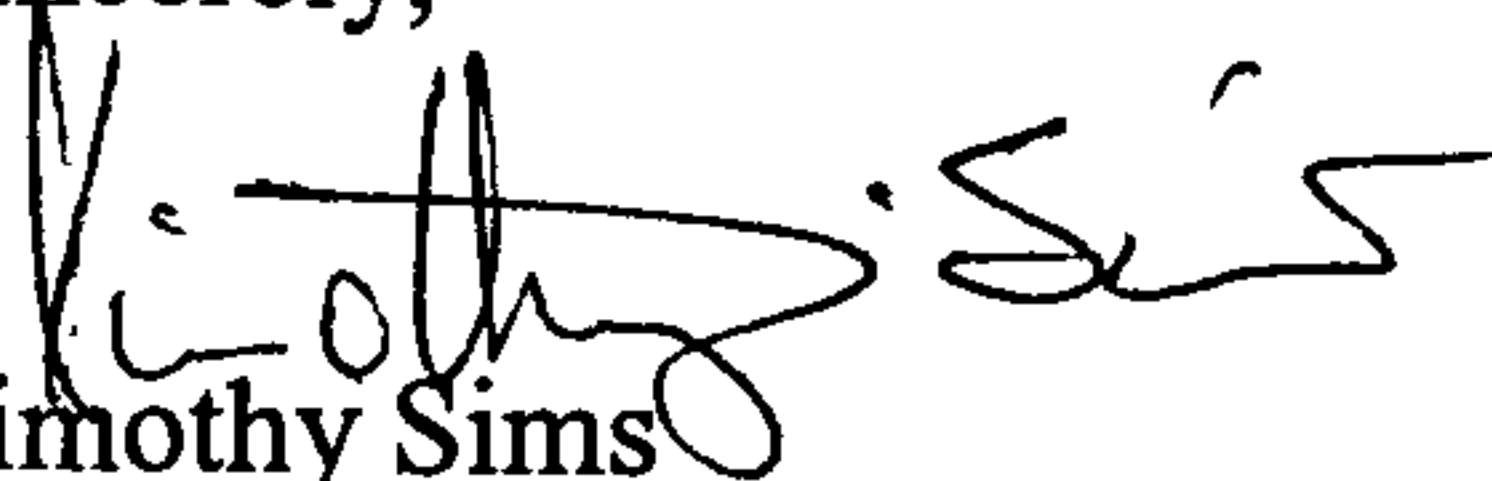
Based upon the information provided in your Engineer's Certification Submittal dated 11/06/07, the above referenced plan is adequate to satisfy the Grading and Drainage Certification for Release of Financial Guaranty.

P.O. Box 1293

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

Sincerely,

Albuquerque



Timothy Sims  
Plan Checker-Hydrology  
Development and Building Services

New Mexico 87103

C: Marilyn Maldonado  
File  
WO # 791581

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

# DRAINAGE INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: VILLAS LAS MANANITAS SUBDIVISION ZONE ATLAS/DRG. FILE #: H13 / D50  
DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: 791581

LEGAL DESCRIPTION: TRACTS 87A1B, 87A2, 87B1, 87B2, 87B3, 88, 89A, 89B1, 89B2A, & THE LANDS E. MAES TRACTS A1 & A2  
CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Advanced Engineering and Consulting, LLC  
ADDRESS: 4416 Anaheim Ave., NE  
CITY, STATE: Albuquerque, New Mexico

CONTACT: Shahab Biazar  
PHONE: (505) 899-5570  
ZIP CODE: 87113

OWNER: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_

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

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

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

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

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

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

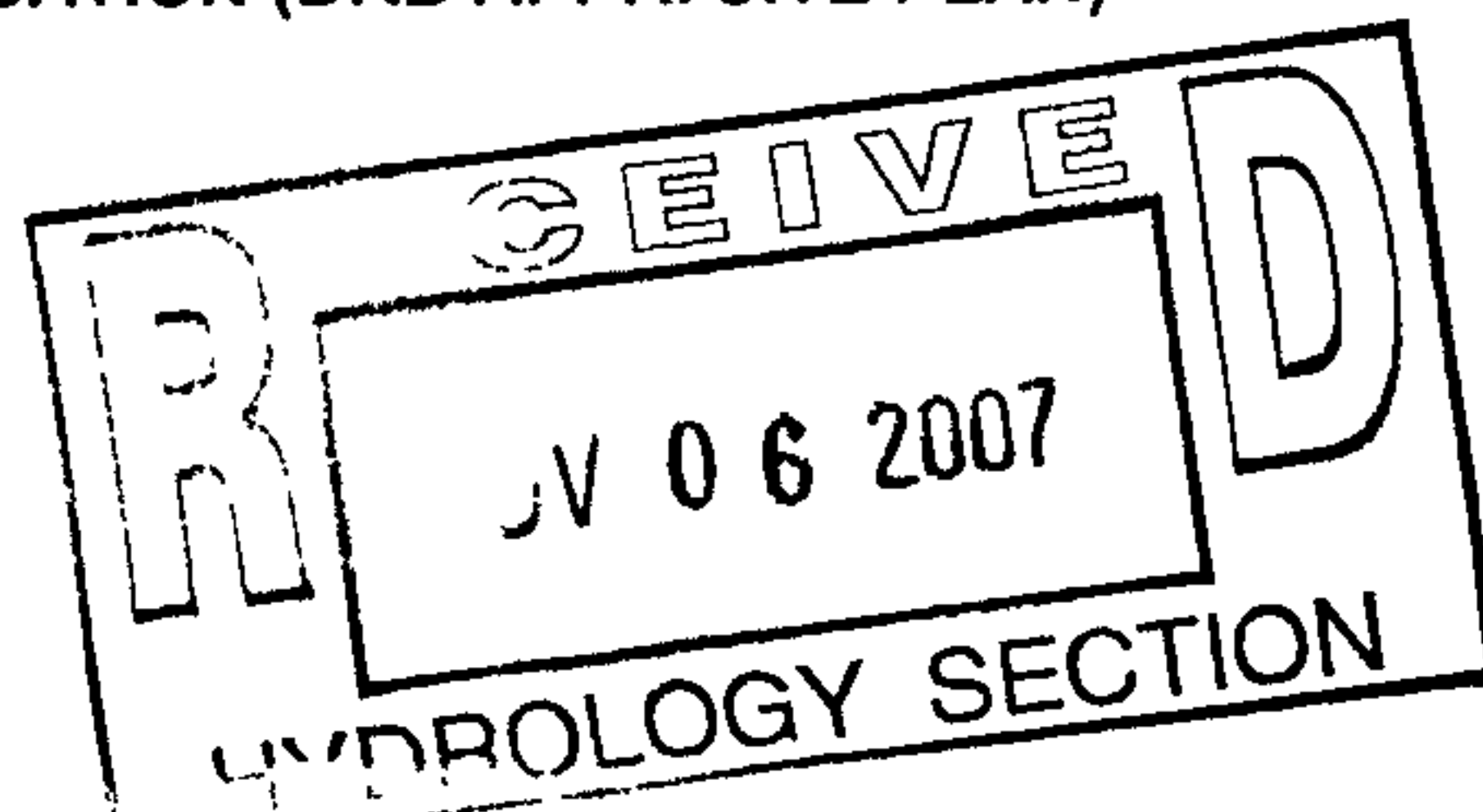
CONTACT: \_\_\_\_\_  
PHONE: \_\_\_\_\_  
ZIP CODE: \_\_\_\_\_

## CHECK TYPE OF SUBMITTAL:

\_\_\_\_ DRAINAGE REPORT  
\_\_\_\_ DRAINAGE PLAN 1ST SUBMITTAL, REQUIRES TCL OR EQUAL  
\_\_\_\_ CONCEPTUAL GRADING & DRAINAGE PLAN  
\_\_\_\_ GRADING PLAN  
\_\_\_\_ EROSION CONTROL PLAN  
☒ ENGINEER'S CERTIFICATION (HYDROLOGY)  
\_\_\_\_ CLOMR / LOMR  
\_\_\_\_ TRAFFIC CIRCULATION LAYOUT (TCL)  
\_\_\_\_ ENGINEER'S CERTIFICATION (TCL)  
\_\_\_\_ ENGINEER'S 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  
☒ APPROVAL OF AS-BUILT GRADES



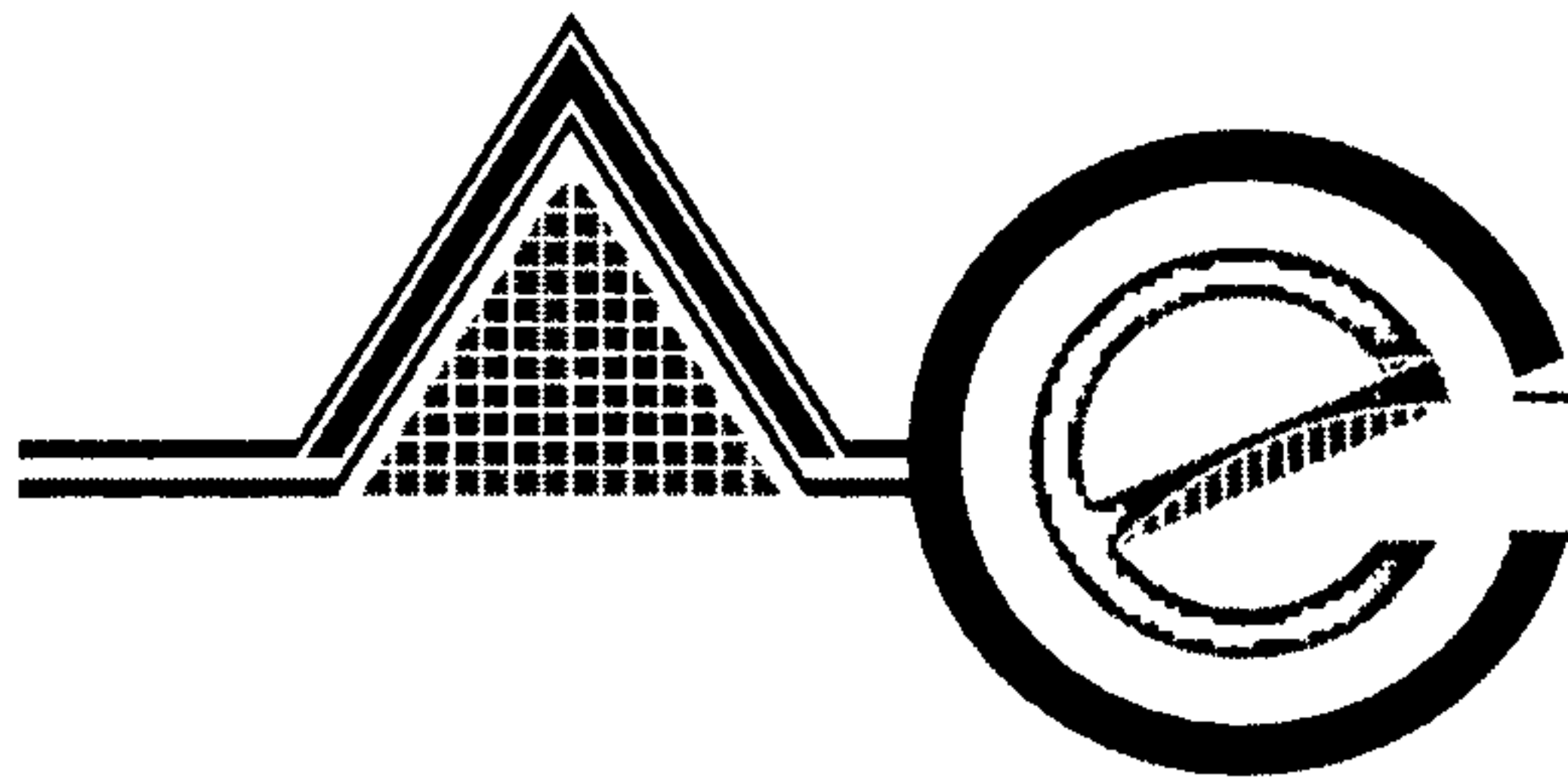
## WAS A PRE-DESIGN CONFERENCE ATTENDED:

\_\_\_\_ YES  
☒ NO  
\_\_\_\_ COPY PROVIDED

DATE SUBMITTED: 11/ 05/2007 BY: Shahab Biazar, P.E.

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 submittals may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5)
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 containing five (5) acres or more



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ADVANCED ENGINEERING and CONSULTING, LLC

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*Consulting  
Design  
Development  
Management  
Inspection  
Surveying*

November 5, 2007

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

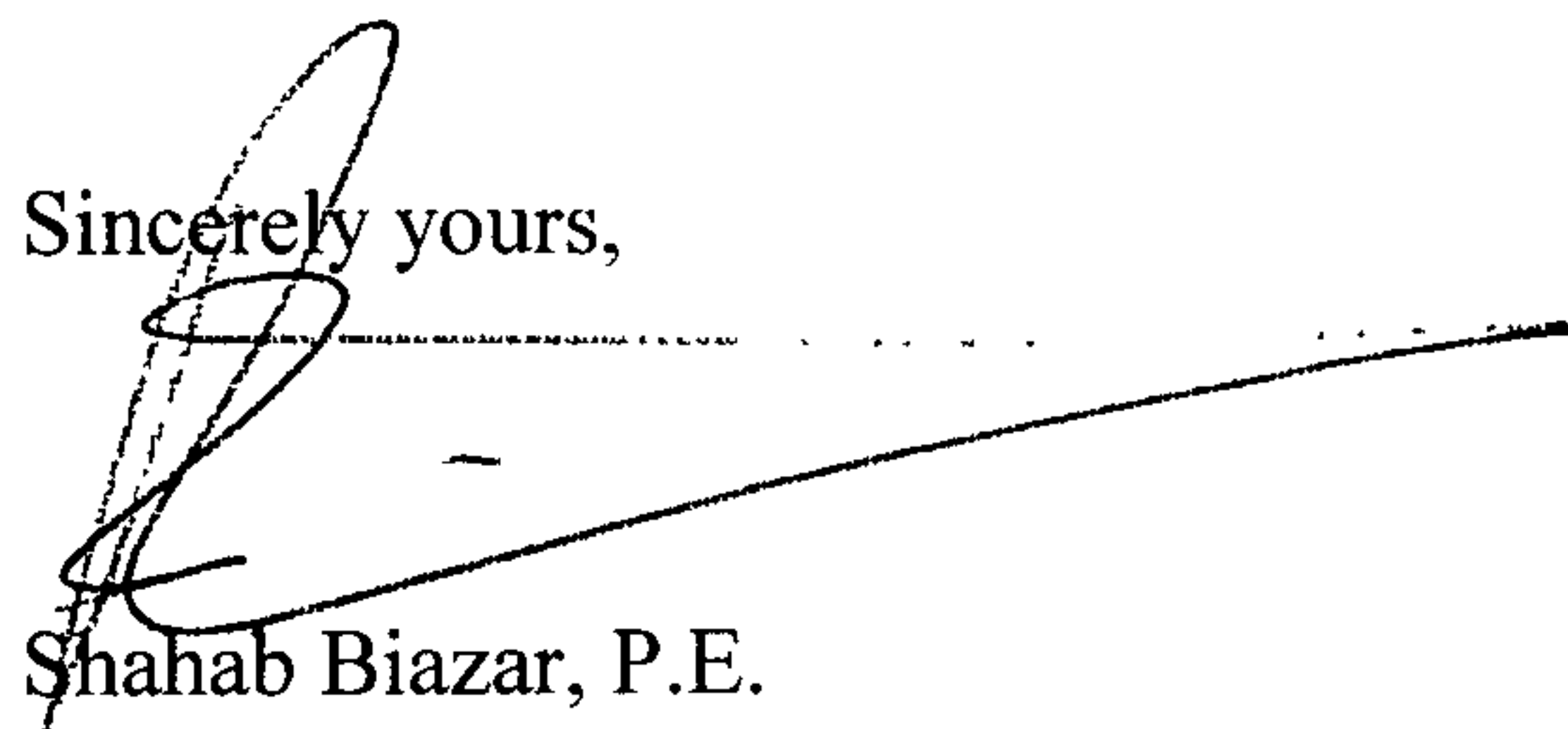
RE: CERTIFICATION OF GRADES AND RELEASE OF FINANCIAL GUARANTEE FOR  
VILLAS LAS MANANITAS SUBDIVISION (H13 / D50)

Dear Mr. Bingham:

This letter is in request of Certification of Grades and Release of Financial Guarantee 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 06/06/2006. All the pavement and storm drain structures are in place.

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

Sincerely yours,



Shahab Biazar, P.E.

# CITY OF ALBUQUERQUE



May 18, 2006

Shahab Biazar, P.E.  
Advanced Engineering & Consulting, LLC  
4416 Anaheim Ave. NE  
Albuquerque, NM 87113

**Re: Villas Las Mananitas Subdivision, Tracts 87A1B, 87A2, 87B1, 87B2, 87B3, 88, 89A, 89B1, 89B2A & The Lands E. Maes Tracts A1 & A2  
Drainage Report - Engineer's Stamp dated 4-17-06 (H13-D50)**

Dear Mr. Biazar,

Based upon the information provided in your submittal dated 4-20-06, the above referenced plan is approved for Preliminary Plat and Site Development Plan for Subdivision action by the DRB. Once that board has approved the plan, please submit a mylar copy of the grading plan for my signature in order to obtain a Grading Permit.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. Refer to the attachment that is provided with this letter for details. If you have any questions please feel free to call the Municipal Development Department Hydrology section at 768-3654 (Charles Caruso).

If you have any questions, you can contact me at 924-3990.

Sincerely,

Phillip J. Lovato, E.I., C.F.M.  
Engineering Associate, Hydrology,  
Development and Building Services,  
Planning Department

cc: Charles Caruso, DMD  
file

P.O. Box 1293

Albuquerque

New Mexico 87103

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



# DRAINAGE INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: VILLAS LAS MANANITAS SUBDIVISION ZONE ATLAS/DRG. FILE #: H13/D50  
DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_

LEGAL DESCRIPTION: TRACTS 87A1B, 87A2, 87B1, 87B2, 87B3, 88, 89A, 89B1, 89B2A, & THE LANDS E. MAES TRACTS A1 & A2  
CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Advanced Engineering and Consulting, LLC  
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CITY, STATE: Albuquerque, New Mexico

CONTACT: Shahab Biazar  
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CITY, STATE: \_\_\_\_\_

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

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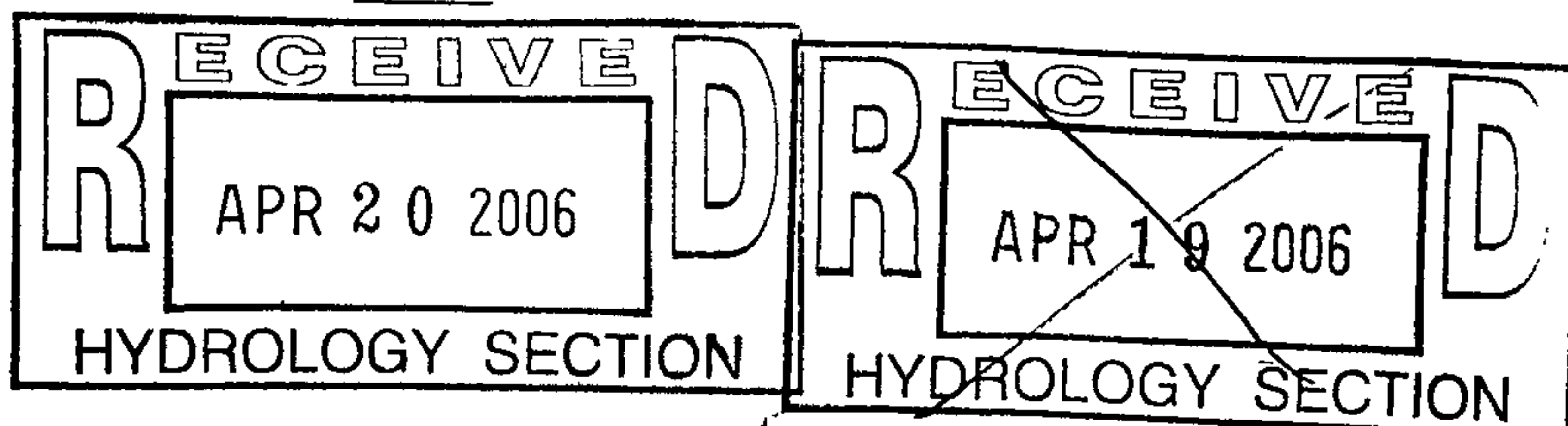
- ☒ DRAINAGE REPORT  
☐ DRAINAGE PLAN 1ST SUBMITTAL, REQUIRES TCL OR EQUAL  
☐ CONCEPTUAL GRADING & DRAINAGE PLAN  
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☐ ENGINEER'S CERTIFICATION (HYDROLOGY)  
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☐ TRAFFIC CIRCULATION LAYOUT (TCL)  
☐ ENGINEER'S CERTIFICATION (TCL)  
☐ ENGINEER'S CERTIFICATION (DRB APPR. SITE PLAN)  
☐ OTHER

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☒ PRELIMINARY PLAT APPROVAL  
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☐ 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



DATE SUBMITTED: 04 / 17 / 2006 BY: Shahab Biazar, P.E.

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DRAINAGE REPORT  
FOR

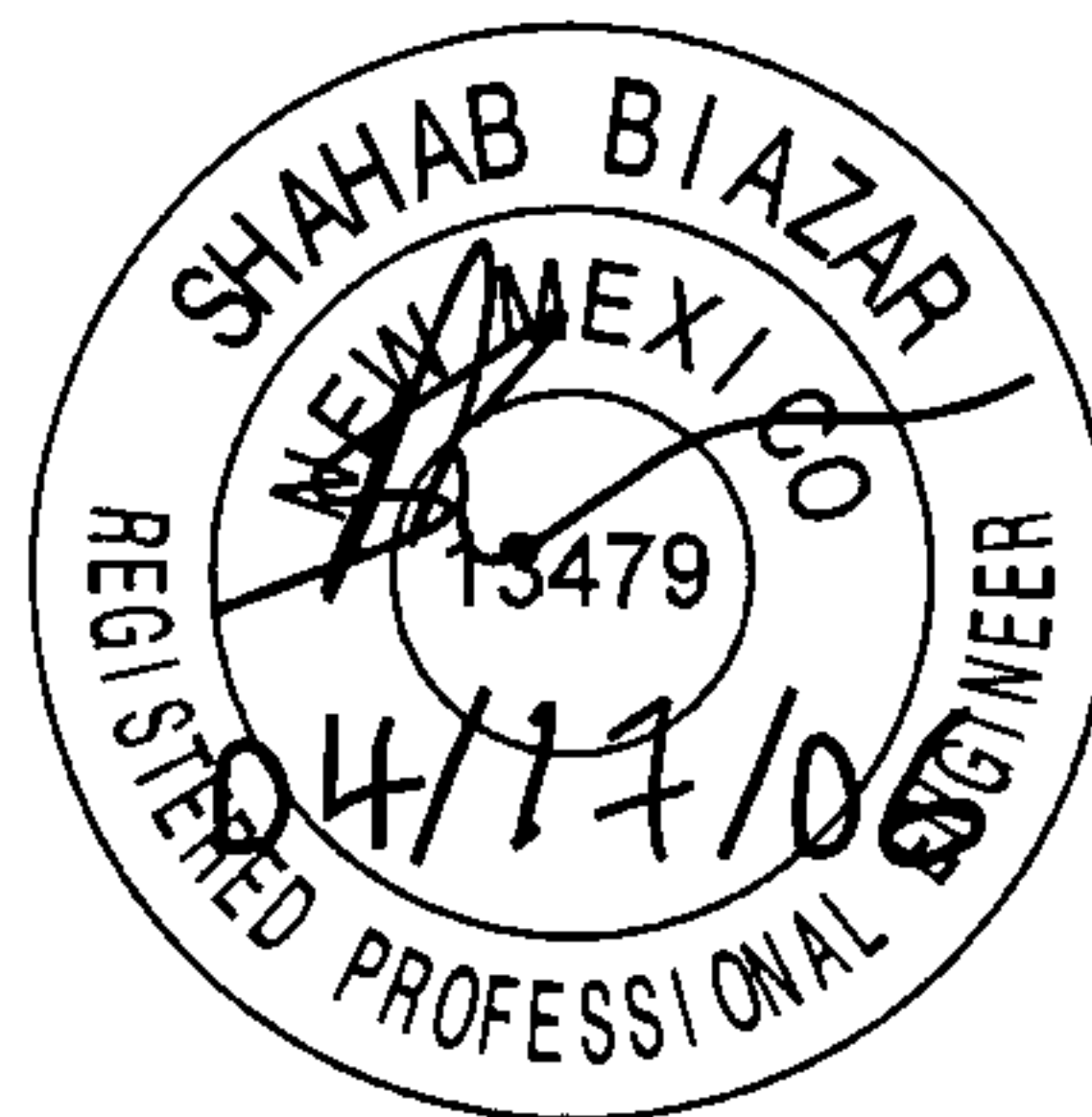
# VILLAS LAS MANANITAS SUBDIVISION

Prepared by:

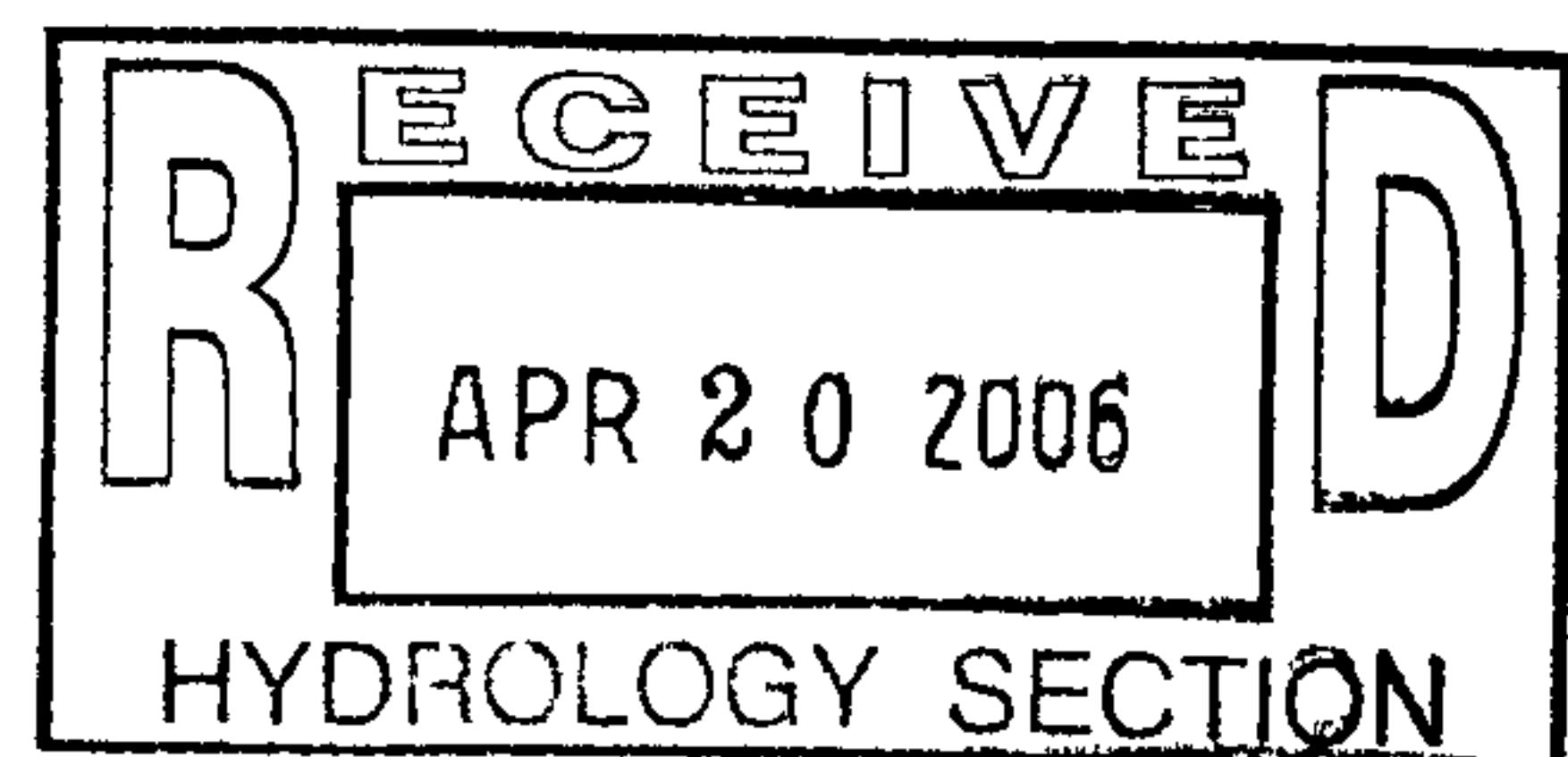


4416 Anaheim Ave., NE  
Albuquerque, New Mexico 87113

April, 2006



Shahab Biazar  
PE NO. 13479







**Location**

Villas Las Mananitas Subdivision is a 16 Lot Subdivision which is located at between Rio Grande Boulevard and Meadow View Road just north of Indian School. See attached Zone Atlas page number H-13 for exact location.

**Purpose**

The purpose of this drainage report is to present a grading and drainage solution for the proposed site. We are requesting rough grading approval, building permit approval, site plan for building permit approval, site plan for subdivision approval, and Preliminary and Final Plat approval.

**Existing Drainage Conditions**

This site is fairly flat. There are no offsite runoff. ~~The runoff on-site partly drains to Rio Grande Boulevard and partly to Meadow View Road.~~ From there the runoff is intercepted by storm sewer inlets within the street. The site does not fall within a 100-Year Floodplain.

**Proposed Conditions and On-Site Drainage Management Plan**

The on-site drainage pattern will remain the same as existing conditions. The site is analyzed into two Basins A and B. Basin A (with a flow rate of 1.67 cfs) surface flows into Meadow View Road. Basin B will drain to two proposed inlets on-site, and then the runoff will be discharged into Rio Grande Boulevard storm sewer system via 18" storm sewer pipe.



The two proposed inlets (Type Single C) are designed for a runoff of 18.05 cfs each where the runoff generated from Basin B is only 5.84 cfs. The overall runoff from Basin A and B has increased in runoff by 3.09 cfs (from 4.42 cfs to 7.51 cfs). The increase in runoff is nominal, and it should not have an impact on the capacity of the exiting storm sewer structures.

Also, the site is located near the exiting inlets within the street, and the runoff from this site enters the system and leaves the system before upper portion of the basin (contributing basin to the inlets within the street) drains to the inlets.

### **Calculations**

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



# **RUNOFF CALCULATIONS**

(INPUT DATA FOR AHYMO CALCULATIONS)

The site is @ Zone 2

## **DEPTH (INCHES) @ 100-YEAR STORM**

$$P_{60} = 2.01 \text{ inches}$$

$$P_{360} = 2.35 \text{ inches}$$

$$P_{1440} = 2.75 \text{ inches}$$

## **DEPTH (INCHES) @ 10-YEAR STORM**

$$\begin{aligned} P_{60} &= 2.01 \times 0.667 \\ &= 1.34 \text{ inches} \end{aligned}$$

$$P_{360} = 1.57$$

$$P_{1440} = 1.83$$

See this report for input file and summary output from AHYMO calculations.

Also see the following table for the runoff results.

## LAND TREATMENT

Based on the historical conditions:

$$A \equiv 100.00\%$$

Based on the developed conditions:

$$D = 7 \sqrt{(N^2 + 5N)}, \quad \text{Where } N = \text{units/acre, } N \leq 6 \quad (\text{From DPM Section 22.2-Hydrology, Page A5, Table A-5})$$

$$N = 16/2.83 = 5.65$$

$$D = 7 \sqrt{(5.65^2 + 5 \cdot 5.65)} = 54.30 \quad \text{USE } D \equiv 56.00\%$$

$$\text{Assume } C \equiv 22\% \text{ and } B \equiv 22\%$$

See the summary output from AHYMO calculations.

Also see the following runoff tables for a summary of the results.



**RUNOFF CALCULATION RESULTS**

BASIN	AREA (SF)	AREA (AC)	AREA (MI <sup>2</sup> )
ON-SITE A	27170.85	0.6238	0.000975
ON-SITE B	95947.82	2.2027	0.003442

**EXISTING**

BASIN	Q-100 CFS	Q-10 CFS
ON-SITE A	0.98	0.23
ON-SITE B	3.44	0.82

**PROPOSED**

BASIN	Q-100 CFS	Q-10 CFS
ON-SITE A	1.67	0.81
ON-SITE B	5.84	2.84

## AHYMO INPUT FILE

```
* ZONE 2
*****
*          100-YEAR,  6-HR STORM (UNDER EXISITNG CONDITIONS)          *
*****
START      TIME=0.0
RAINFALL   TYPE=1 RAIN QUARTER=0.0 IN
           RAIN ONE=2.01 IN RAIN SIX=2.35 IN
           RAIN DAY=2.75 IN DT=0.03333 HR

* ON-SITE BAISN A
COMPUTE NM HYD      ID=1 HYD NO=101.0 AREA=0.000975 SQ MI
                   PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
                   TP=0.1333 HR MASS RAINFALL=-1

* ON-SITE BAISN B
COMPUTE NM HYD      ID=1 HYD NO=102.0 AREA=0.003442 SQ MI
                   PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
                   TP=0.1333 HR MASS RAINFALL=-1
*****
*          10-YEAR,  6-HR STORM (UNDER EXISTING CONDITIONS)          *
*****
START      TIME=0.0
RAINFALL   TYPE=1 RAIN QUARTER=0.0 IN
           RAIN ONE=1.34 IN RAIN SIX=1.57 IN
           RAIN DAY=1.83 IN DT=0.03333 HR

* ON-SITE BAISN A
COMPUTE NM HYD      ID=1 HYD NO=111.0 AREA=0.000975 SQ MI
                   PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
                   TP=0.1333 HR MASS RAINFALL=-1

* ON-SITE BAISN B
COMPUTE NM HYD      ID=1 HYD NO=112.0 AREA=0.003442 SQ MI
                   PER A=100.00 PER B=0.00 PER C=0.00 PER D=0.00
                   TP=0.1333 HR MASS RAINFALL=-1
*****
*          100-YEAR,  6-HR STORM (UNDER PROPOSED CONDITIONS)          *
*****
START      TIME=0.0
RAINFALL   TYPE=1 RAIN QUARTER=0.0 IN
           RAIN ONE=2.01 IN RAIN SIX=2.35 IN
           RAIN DAY=2.75 IN DT=0.03333 HR

* ON-SITE BAISN A
COMPUTE NM HYD      ID=1 HYD NO=103.0 AREA=0.000975 SQ MI
                   PER A=100.00 PER B=22.00 PER C=22.00 PER D=56.00
                   TP=0.1333 HR MASS RAINFALL=-1

* ON-SITE BAISN B
COMPUTE NM HYD      ID=1 HYD NO=104.0 AREA=0.003442 SQ MI
                   PER A=100.00 PER B=22.00 PER C=22.00 PER D=56.00
                   TP=0.1333 HR MASS RAINFALL=-1
*****
*          10-YEAR,  6-HR STORM (UNDER PROPOSED CONDITIONS)          *
*****
START      TIME=0.0
RAINFALL   TYPE=1 RAIN QUARTER=0.0 IN
           RAIN ONE=1.34 IN RAIN SIX=1.57 IN
           RAIN DAY=1.83 IN DT=0.03333 HR

* ON-SITE BAISN A
COMPUTE NM HYD      ID=1 HYD NO=113.0 AREA=0.000975 SQ MI
                   PER A=100.00 PER B=22.00 PER C=22.00 PER D=56.00
                   TP=0.1333 HR MASS RAINFALL=-1

* ON-SITE BAISN B
COMPUTE NM HYD      ID=1 HYD NO=114.0 AREA=0.003442 SQ MI
                   PER A=100.00 PER B=22.00 PER C=22.00 PER D=56.00
                   TP=0.1333 HR MASS RAINFALL=-1
*****
*
FINISH
```

# SUMMARY OUTPUT FILE

AHYMO PROGRAM SUMMARY TABLE (AHYMO\_97) -  
INPUT FILE = 606

- VERSION: 1997.02d

RUN DATE (MON/DAY/YR) =04/11/2006  
USER NO.= AHYMO-I-9702c01000R31-AH

[illegible]





# STORM DROP INLET DRAINAGE CAPACITY

## Single 'C' (in ponding conditions)

### Area at the grate:

$$\begin{aligned} L &= 44 \frac{3}{8}'' - 2(6''_{\text{ends}}) - 7(\frac{1}{2}''_{\text{middle bars}}) \\ &= 28 \frac{7}{8}'' \\ &= 2.41' \end{aligned}$$

$$\begin{aligned} W &= 25 \frac{1}{2}'' - 13(\frac{1}{2}''_{\text{middle bars}}) \\ &= 19'' \\ &= 1.58' \end{aligned}$$

$$\begin{aligned} \text{Area} &= 2.41' \times 1.58' \\ &= 3.81 \text{ ft}^2 \end{aligned}$$

$$\begin{aligned} \text{Effective Area} &= 3.81 - 3.81 (0.5_{\text{clogging factor}}) \\ &= 1.91 \text{ ft}^2 \text{ at the grate} \end{aligned}$$

Also see attached exhibit for grate effective area.

### Are @ the Throat:

Orifice Equation  $\Rightarrow Q = CA\sqrt{2gH}$   $C = 0.6$

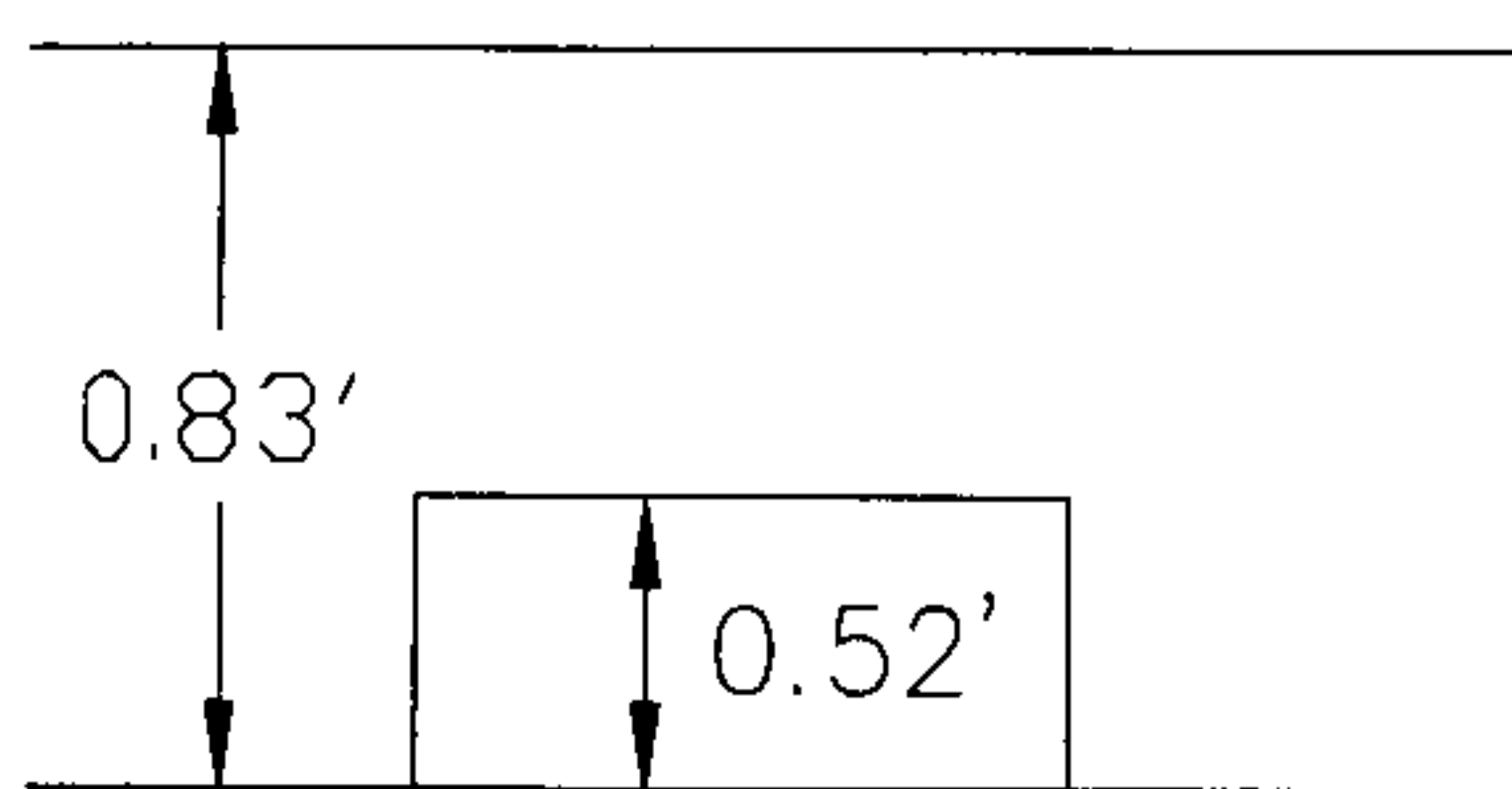
$$L = 47 \frac{3}{8}'' = 3.9479'$$

$$\begin{aligned} H &= 10 \frac{3}{4}'' - 4 \frac{1}{2}'' \\ &= 6 \frac{1}{4}'' = 0.5208' \end{aligned}$$

Weir Equation  $\Rightarrow Q = CLH^{3/2}$   $C = 2.7$

$$\begin{aligned} \text{Area} &= 3.9479' \times 0.5208 \\ &= 2.06 \text{ SF @ the Throat} \end{aligned}$$

### THROAT



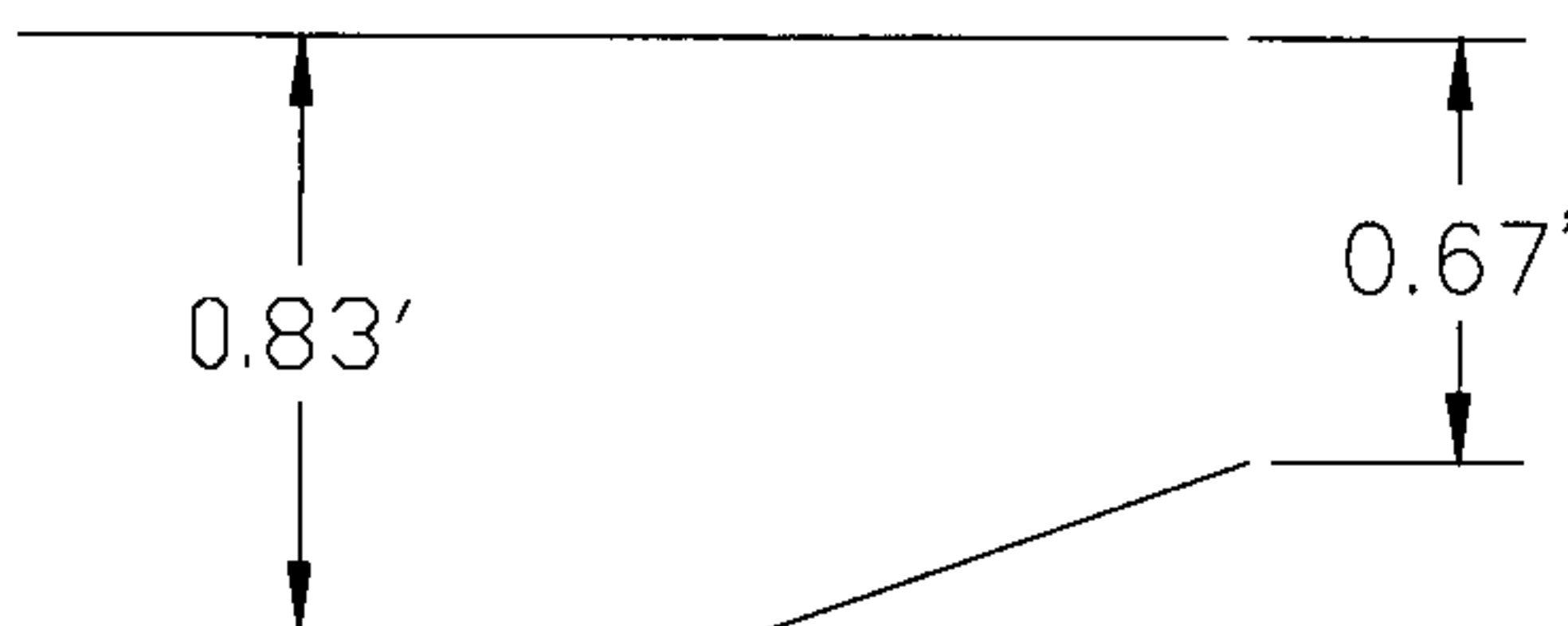
$$H = 0.83$$

$$Q = CA\sqrt{2gH}$$

$$Q = 0.60(2.30)\sqrt{2(32.2)(0.83)}$$

$$Q = 10.09 \text{ CFS}$$

### GRATE



$$H = (0.83 + 0.67)/2$$

$$Q = CA\sqrt{2gH}$$

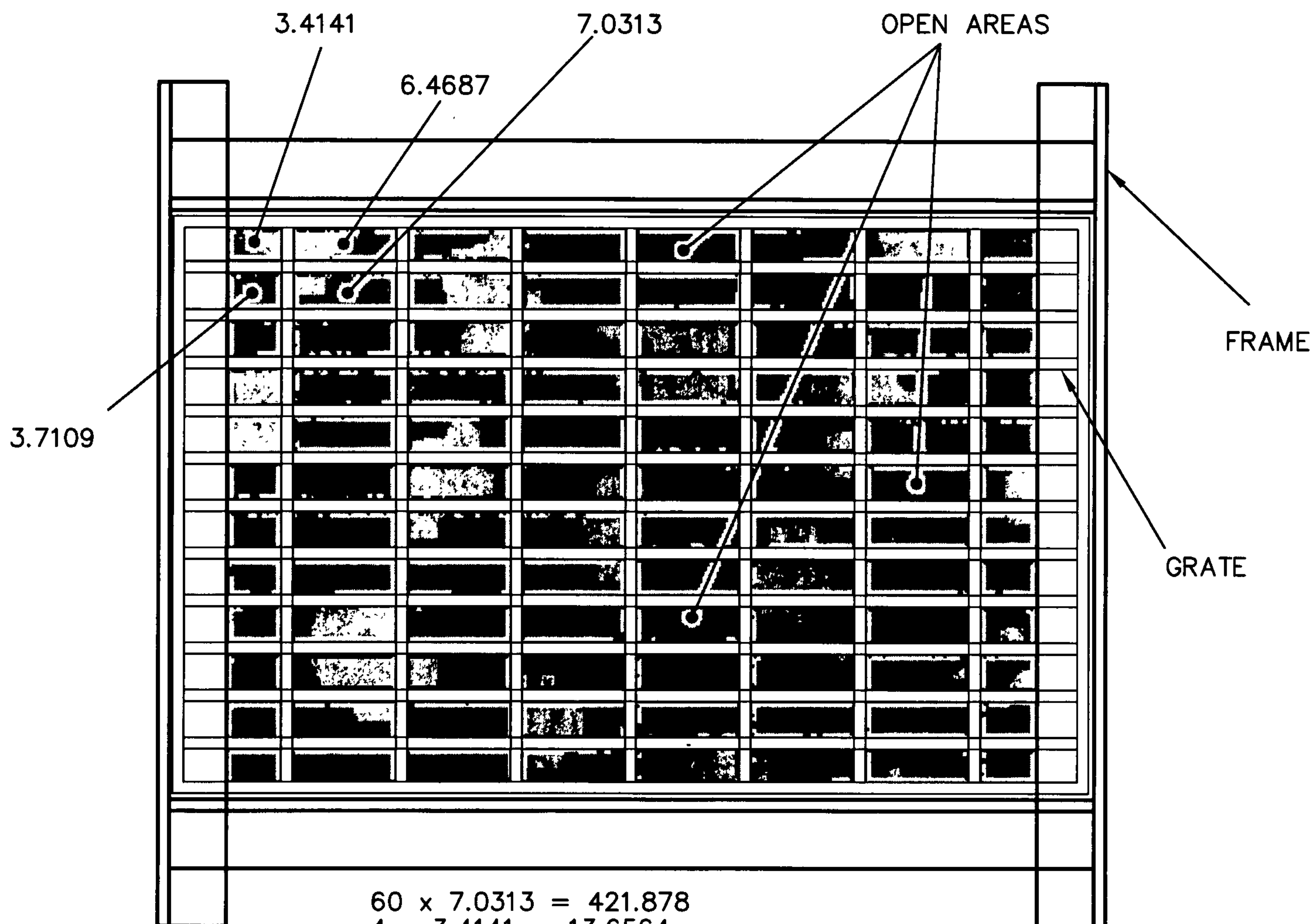
$$Q = 0.60(1.91)\sqrt{2(32.2)(0.75)}$$

$$Q = 7.96 \text{ CFS}$$

### TOTAL

$$Q = 10.09 + 7.96 = 18.05 \text{ CFS}$$

**Total Runoff for Basin B = 5.84 cfs << Inlet Capacity = 36.10 cfs (18.05 x 2)**



## GRATE EFFECTIVE AREA

NTS

Circular Channel Analysis & Design  
Solved with Manning's Equation

Open Channel - Uniform flow

Worksheet Name: 606

Comment: INLET-B TO MH-C TO INLET-A TO MH-B TO MH-A

Solve For Actual Depth

Given Input Data:

Diameter.....	1.50 ft
Slope.....	0.0030 ft/ft
Manning's n.....	0.012
Discharge.....	6.00 cfs

Computed Results:

Depth.....	1.18 ft
Velocity.....	4.02 fps
Flow Area.....	1.49 sf
Critical Depth....	0.95 ft
Critical Slope....	0.0053 ft/ft
Percent Full.....	78.79 %
Full Capacity.....	6.23 cfs
QMAX @.94D.....	6.70 cfs
Froude Number.....	0.64 (flow is Subcritical)

$$Q = \frac{1.486}{n} A R^{2/3} S^{1/2}$$

$$= \frac{1.486}{0.012} \left( \frac{1.767}{3.14} \right) \left( \frac{1.5}{1003} \right)^{2/3} (0.003)^{1/2}$$

$$= 10.7 \text{ cfs}$$

$$A = \pi r^2 = \pi (1)^2 = 3.14 \text{ ft}^2$$

$$R = \frac{A}{P} = \frac{3.14}{2\pi r} = \frac{3.14}{2 \times 1} = 0.5 \text{ ft}$$

$$\frac{3.14}{2 \times 1} = 0.5$$



Villas Las Mananitas Subdivision- Indian School and Rio Grande  
Site Visit 12-8-06

The grade of the subdivision is about 2' above the grade of the property to the west. In one small area about 50-60' north of Indian school on the west property line the dirt is loosely piled a little higher.



Photos above taken from Indian School looking north near property line.





Indian School looking west at southwest corner



Indian School looking north- about 2' of fill



# CITY OF ALBUQUERQUE



July 7, 2006

Shahab Biazar, P.E.  
Advanced Engineering and Consulting, LLC  
4416 Anaheim Ave. NE  
Albuquerque, NM 87113

**Re: Villas las Mananitas Subdivision, Preliminary Plat  
Engineer's Stamp dated 6-06-06 (H13-D50)**

Dear Mr. Biazar,

Based upon the information provided in your submittal received 6-09-06, the above referenced plan is approved for Preliminary Plat action by the DRB. Once the DRB has approved the plan, please submit a mylar copy to me in order to obtain rough grading approval.

This project requires a National Pollutant Discharge Elimination System (NPDES) permit. If you have any questions regarding this permit please feel free to call the DMD Storm Drainage Design section at 768-3654 (Charles Caruso).

If you have any questions, you can contact me at 924-3981.

Sincerely,

Kristal D. Metro, P.E.  
Senior Engineer, Planning Dept.  
Development and Building Services

C: Charles Caruso, DMD Storm Drainage Design  
Bradley Bingham, DRB  
file

# DRAINAGE INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: VILLAS LAS MANANITAS SUBDIVISION ZONE ATLAS/DRG. FILE #: H13 / D50  
DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_

LEGAL DESCRIPTION: TRACTS 87A1B, 87A2, 87B1, 87B2, 87B3, 88, 89A, 89B1, 89B2A, & THE LANDS E. MAES TRACTS A1 & A2  
CITY ADDRESS: \_\_\_\_\_

ENGINEERING FIRM: Advanced Engineering and Consulting, LLC  
ADDRESS: 4416 Anaheim Ave., NE  
CITY, STATE: Albuquerque, New Mexico

CONTACT: Shahab Biazar  
PHONE: (505) 899-5570  
ZIP CODE: 87113

OWNER: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
CITY, STATE: \_\_\_\_\_

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

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

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

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

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

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

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

## CHECK TYPE OF SUBMITTAL:

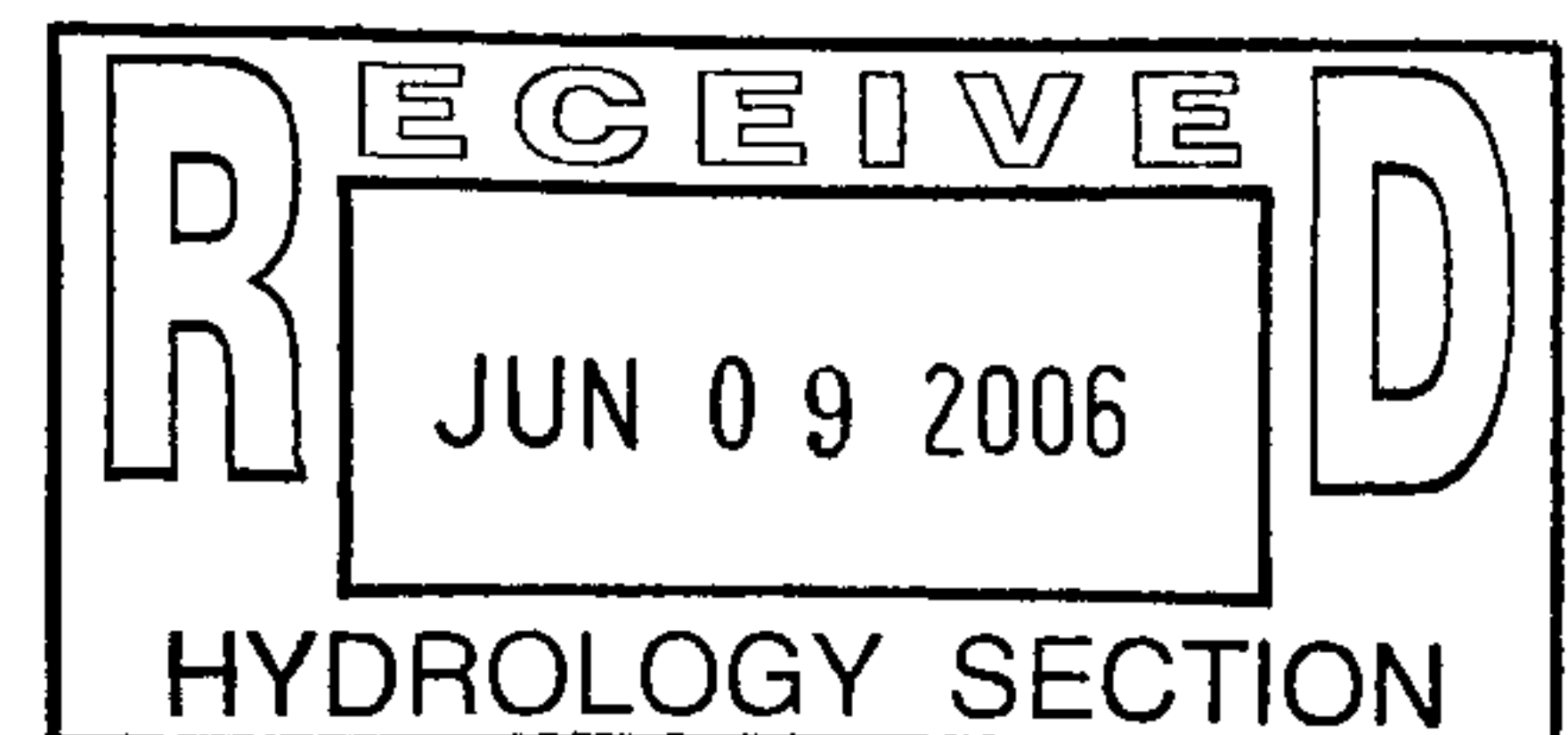
\_\_\_\_ DRAINAGE REPORT  
\_\_\_\_ DRAINAGE PLAN 1ST SUBMITTAL, REQUIRES TCL OR EQUAL  
\_\_\_\_ CONCEPTUAL GRADING & DRAINAGE PLAN  
☒ GRADING PLAN **RESUB**  
\_\_\_\_ EROSION CONTROL PLAN  
\_\_\_\_ ENGINEER'S CERTIFICATION (HYDROLOGY)  
\_\_\_\_ CLOMR / LOMR  
\_\_\_\_ TRAFFIC CIRCULATION LAYOUT (TCL)  
\_\_\_\_ ENGINEER'S CERTIFICATION (TCL)  
\_\_\_\_ ENGINEER'S 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:

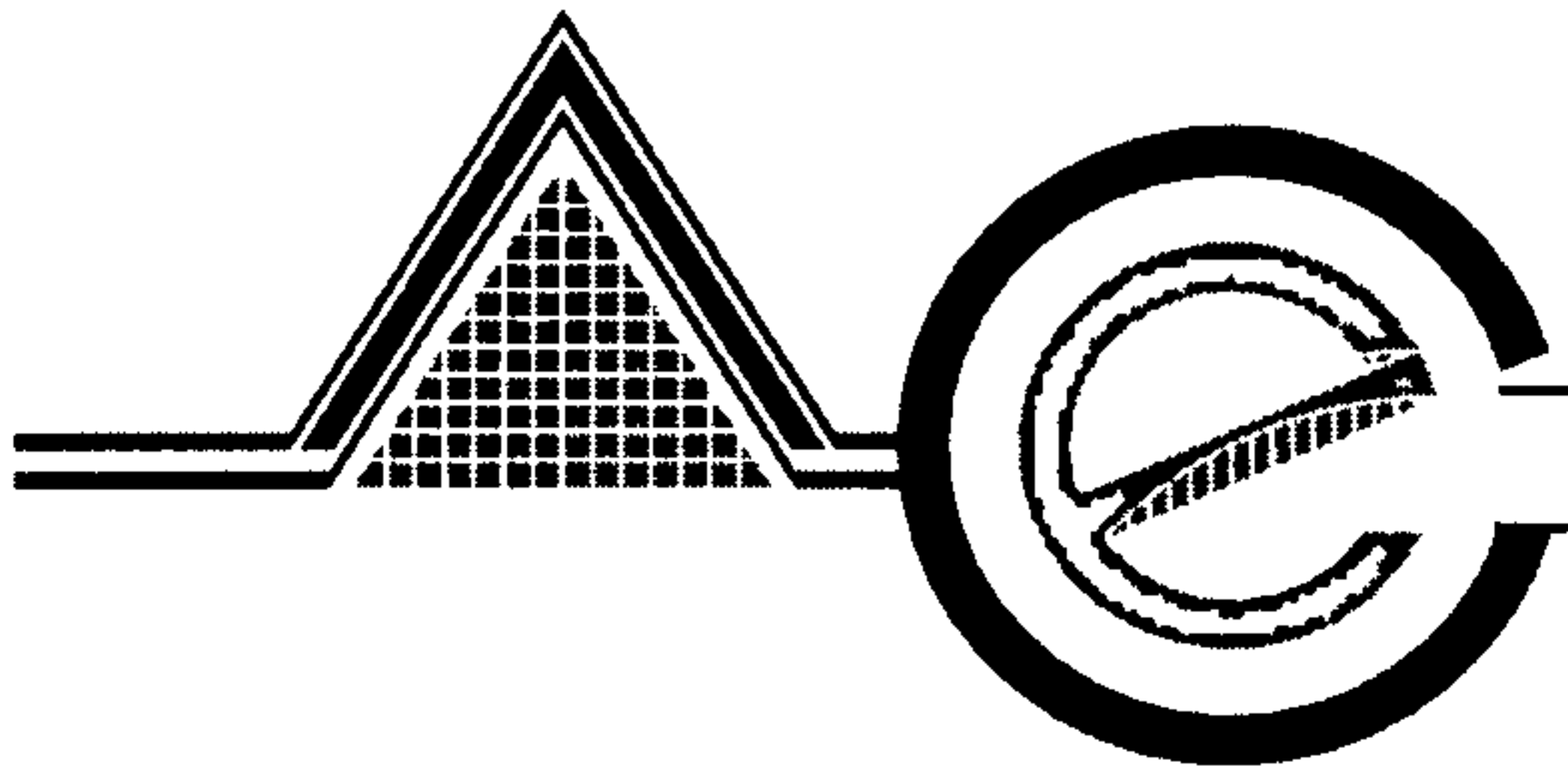
\_\_\_\_ YES  
☒ NO  
\_\_\_\_ COPY PROVIDED



DATE SUBMITTED: 06 / 06 / 2006 BY: Shahab Biazar, P.E.

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 submittals may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5)
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 containing five (5) acres or more



ADVANCED ENGINEERING and CONSULTING, LLC

*Consulting  
Design  
Development  
Management  
Inspection  
Surveying*

June 6, 2006

Mr. Phillip J. Lovato, E.I.  
Engineering Associate, Planning Dept.  
Development and Building Services  
600 Second Street NW  
Albuquerque, New Mexico 87102

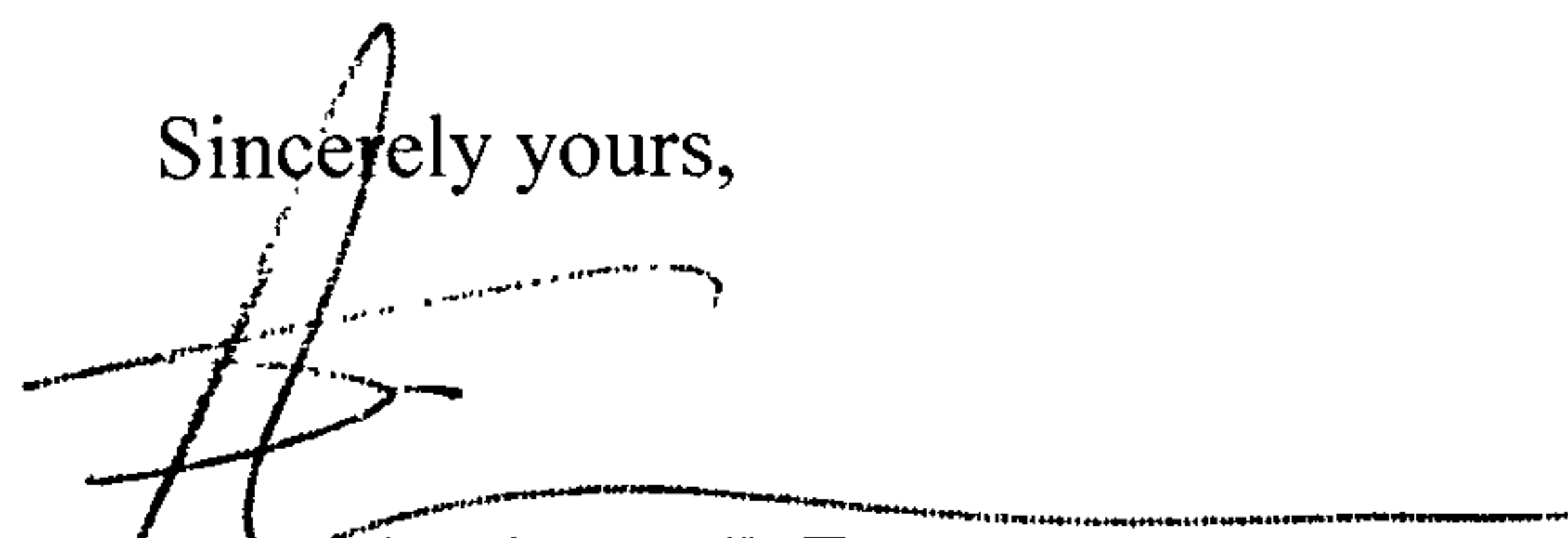
RE: VILLAS LAS MANANITAS SUBDIVISION (H13 / D50)

Dear Mr. Lovato:

This submittal is due some changes on the grading plan. The site has been lowered. The drainage pattern has remained the same as the originally approved grading plan with engineering stamp date of 4-17-06.

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

Sincerely yours,



Shahab Biazar, P.E.

