

CITY OF ALBUQUERQUE



September 26, 2007

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

Re: Candlelight Foothills Unit 1, SIA/Financial Guarantee Release
Engineer's Stamp dated 12-13-06 (J23-D3A)
Certification dated 9-24-07

Dear Mr. Biazar,

P.O. Box 1293

Based upon the information provided in your submittal received 9-25-07, the above referenced certification is approved for release of SIA and Financial Guarantee.

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

Albuquerque

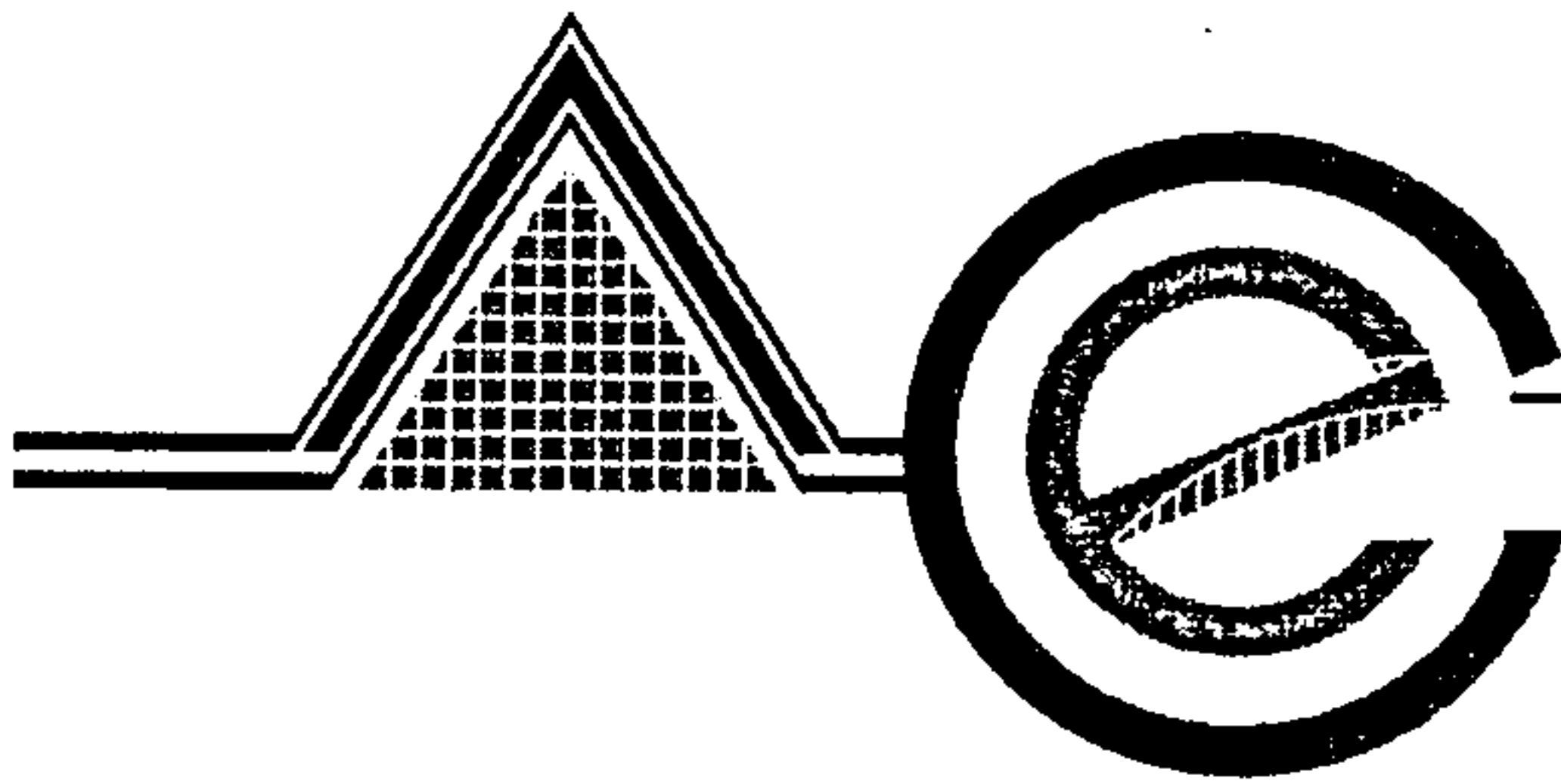
New Mexico 87103

www.cabq.gov

Sincerely,

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

C: Marilyn Maldonado, COA# 683181
File



ADVANCED ENGINEERING and CONSULTING, LLC

*Consulting
Design
Development
Management
Inspection
Surveying*

September 24, 2007

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

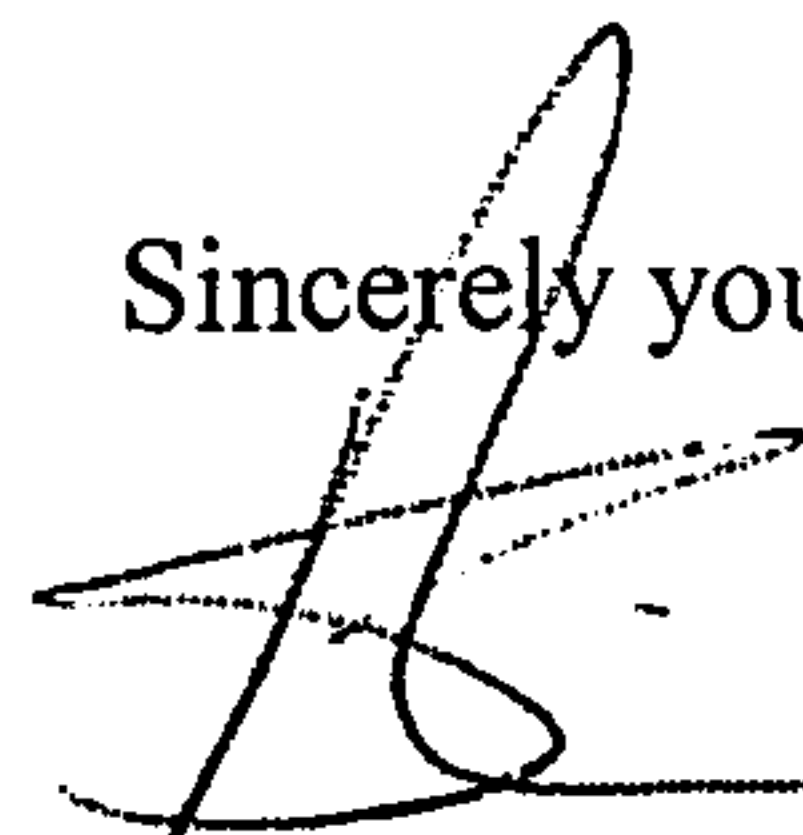
RE: GRADING AND DRAINAGE PLAN CERTIFICATION FOR LOT 20-A,
CANDLELIGHT FOOTHILLS, UNIT 1 SUBDIVISION (J23 / D3A)

Dear Mr. Bingham:

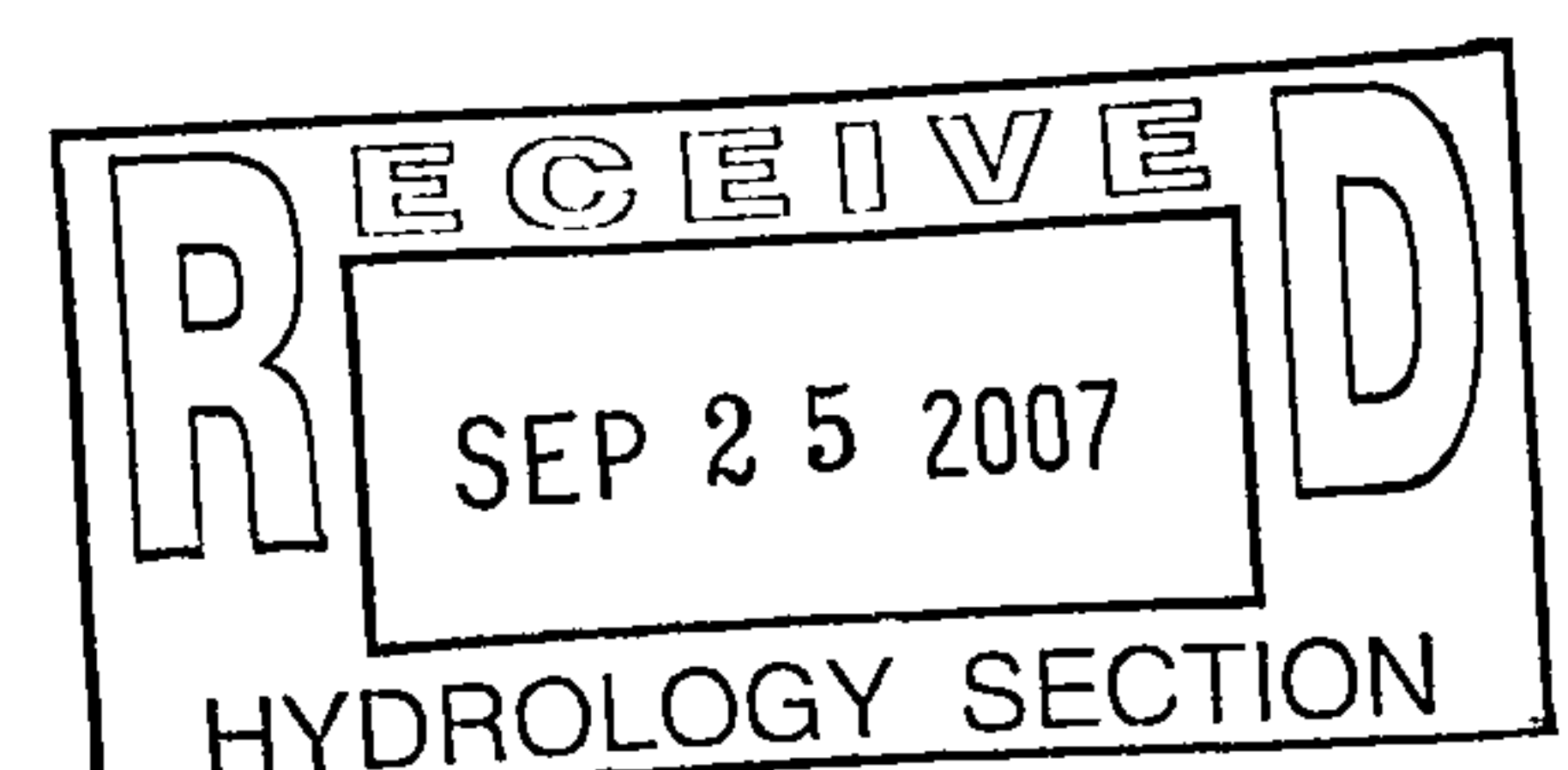
This submittal is to request approval of the grading and drainage certification of the above mentioned project. As-built elevations are shown on the plan. All the pads and retaining walls as well as the concrete channel are built. See attached grading plan for as-built elevations.

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

Sincerely yours,


Shahab Biazar, P.E.

CPN?



DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(Rev. 12/05)

PROJECT TITLE: Lot 20-A, Candlelight Foothills, Unit 1 Subdivision ZONE ATLAS/DRG. FILE #: J-23 / D3A
 DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: Lot 20-A, Candlelight Foothills, Unit 1 Subdivision
 CITY ADDRESS: _____

ENGINEERING FIRM: Advanced Engineering and Consulting, LLC CONTACT: Shahab Biazar
 ADDRESS: 4416 Anaheim Ave., NE PHONE: (505) 899-5570
 CITY, STATE: Albuquerque, New Mexico ZIP CODE: 87113

OWNER: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 CITY, STATE: _____ ZIP CODE: _____

ARCHITECT: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 CITY, STATE: _____ ZIP CODE: _____

SURVEYOR: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 CITY, STATE: _____ ZIP CODE: _____

CONTRACTOR: _____ CONTACT: _____
 ADDRESS: _____ PHONE: _____
 CITY, STATE: _____ ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

_____ DRAINAGE REPORT
 _____ DRAINAGE PLAN 1ST SUBMITTAL
 _____ DRAINAGE PLAN RESUBMITTAL
 _____ CONCEPTUAL GRADING & DRAINAGE PLAN
 _____ GRADING PLAN
 _____ EROSION CONTROL PLAN
☒ ENGINEER'S CERTIFICATION (HYDROLOGY)
 _____ CLOMR / LOMR
 _____ TRAFFIC CIRCULATION LAYOUT (TCL)
 _____ ENGINEER/ARCHITECT CERT (TCL)
 _____ ENGINEER/ARCHITECT CERT (DRB S.P.)
 _____ ENGINEER/ARCHITECT CERT (AA)
 _____ OTHER (SPECIFY)

approved plan stamp date
 WAS A PRE-DESIGN CONFERENCE ATTENDED: 12-13-06

YES
☒ NO
 COPY PROVIDED

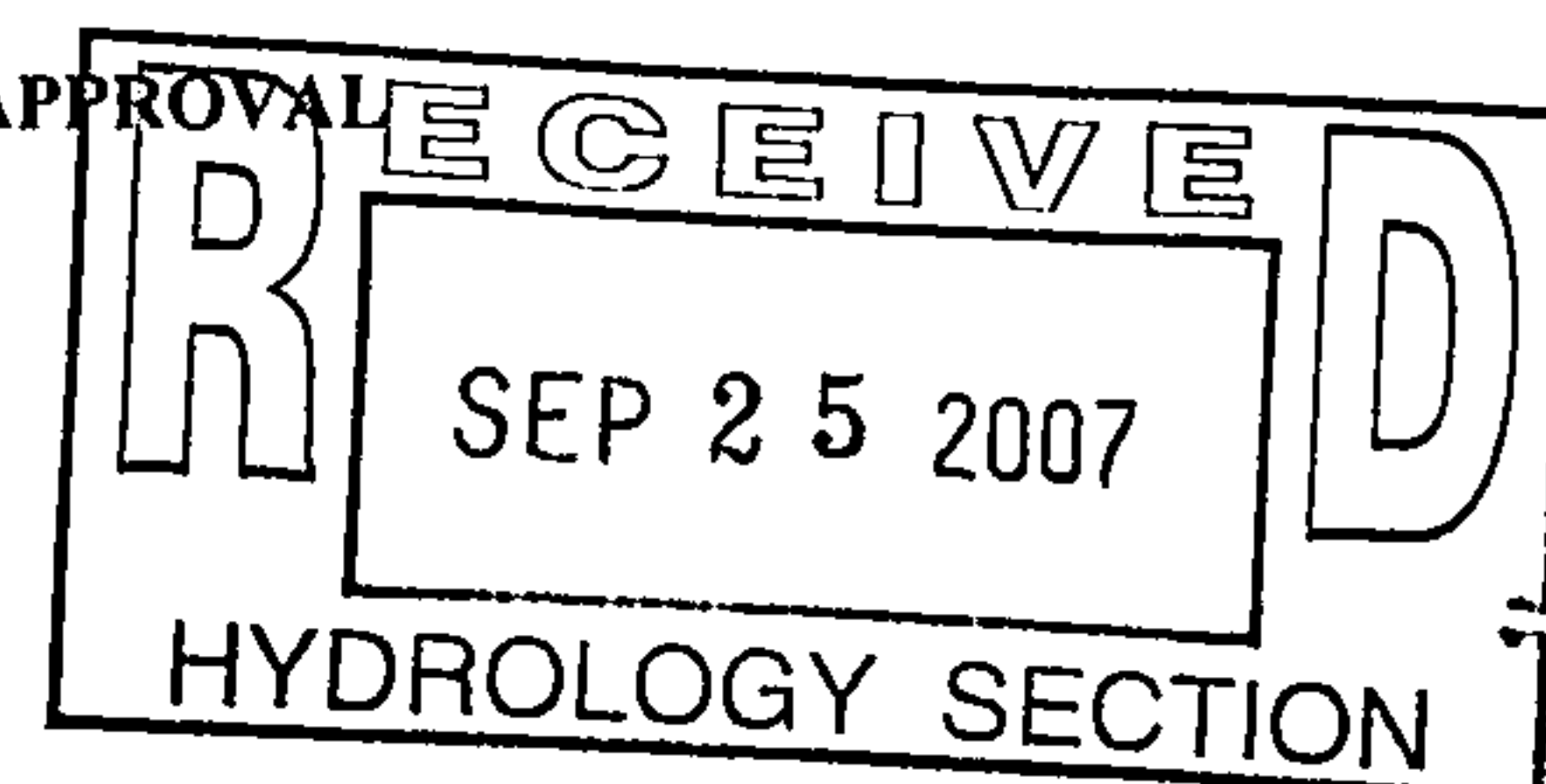
CPN 683181
Candlelight Foothills Unit 1

DATE SUBMITTED: 09 / 24 / 2007

BY: Shahab Biazar, P.E.

CHECK TYPE OF APPROVAL SOUGHT:

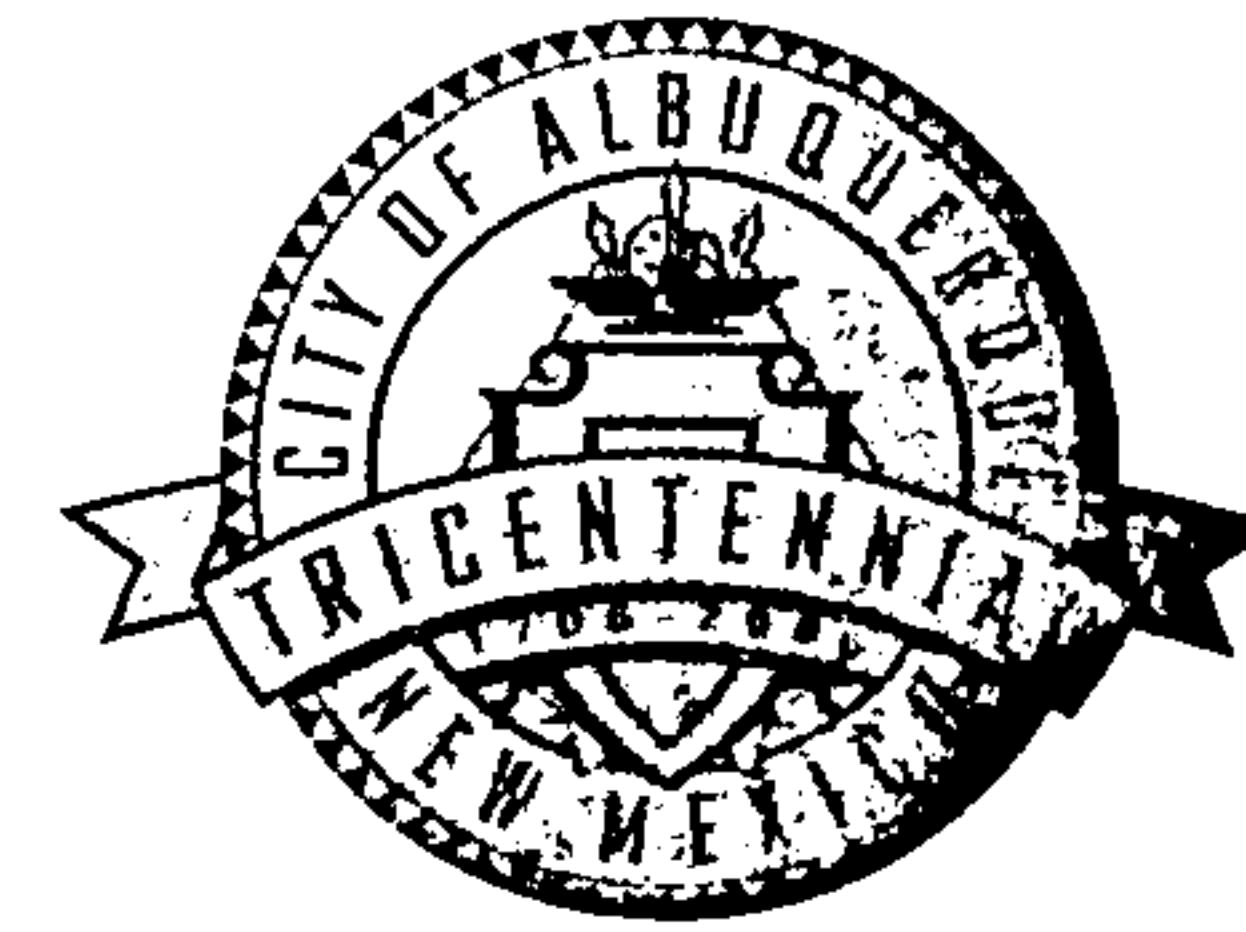
☒ SIA / FINANCIAL GUARANTEE RELEASE
 _____ PRELIMINARY PLAT APPROVAL
 _____ S. DEV. PLAN FOR SUB'D. APPROVAL
 _____ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL
 _____ SECTOR PLAN APPROVAL
 _____ FINAL PLAT APPROVAL
 _____ FOUNDATION PERMIT APPROVAL
 _____ BUILDING PERMIT APPROVAL
 _____ CERTIFICATE OF OCCUPANCY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



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) and Sector Plans.
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.

CITY OF ALBUQUERQUE



February 15, 2007

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

**Re: Lot 20A, Candlelight Foothills amended Grading Plan
Engineer's Stamp dated 12-13-06 (J23/D3A)**

Dear Mr. Biazar,

Based upon the information provided in your submittal dated 12-20-06, the above referenced plan is approved as amended. This will now be the plan that must be certified for Release of SIA and Financial Guarantee. This is also the plan that **must** be adhered to when applying for Building Permits.

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

Sincerely,

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

C: file

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

DRAINAGE INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Lot 20-A, Candlelight Foothills, Unit 1 Subdivision ZONE ATLAS/DRG. FILE #: J-23 / D3A
DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: Lot 20-A, Candlelight Foothills, Unit 1 Subdivision
CITY ADDRESS: 1424 Nemesia Place, NE, Albuquerque, NM

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
☐ OTHER (SPECIFY) _____

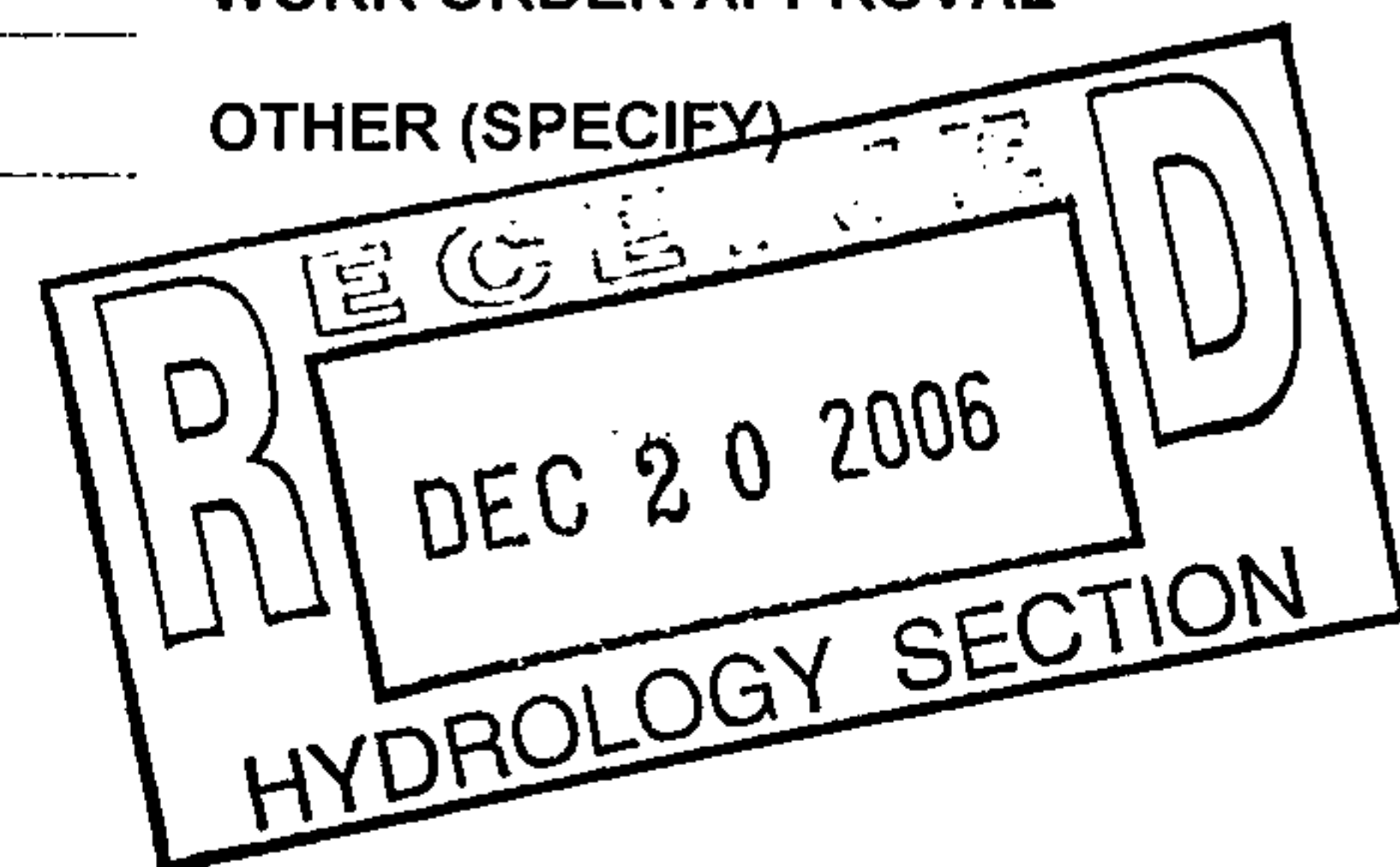
WAS A PRE-DESIGN CONFERENCE ATTENDED:

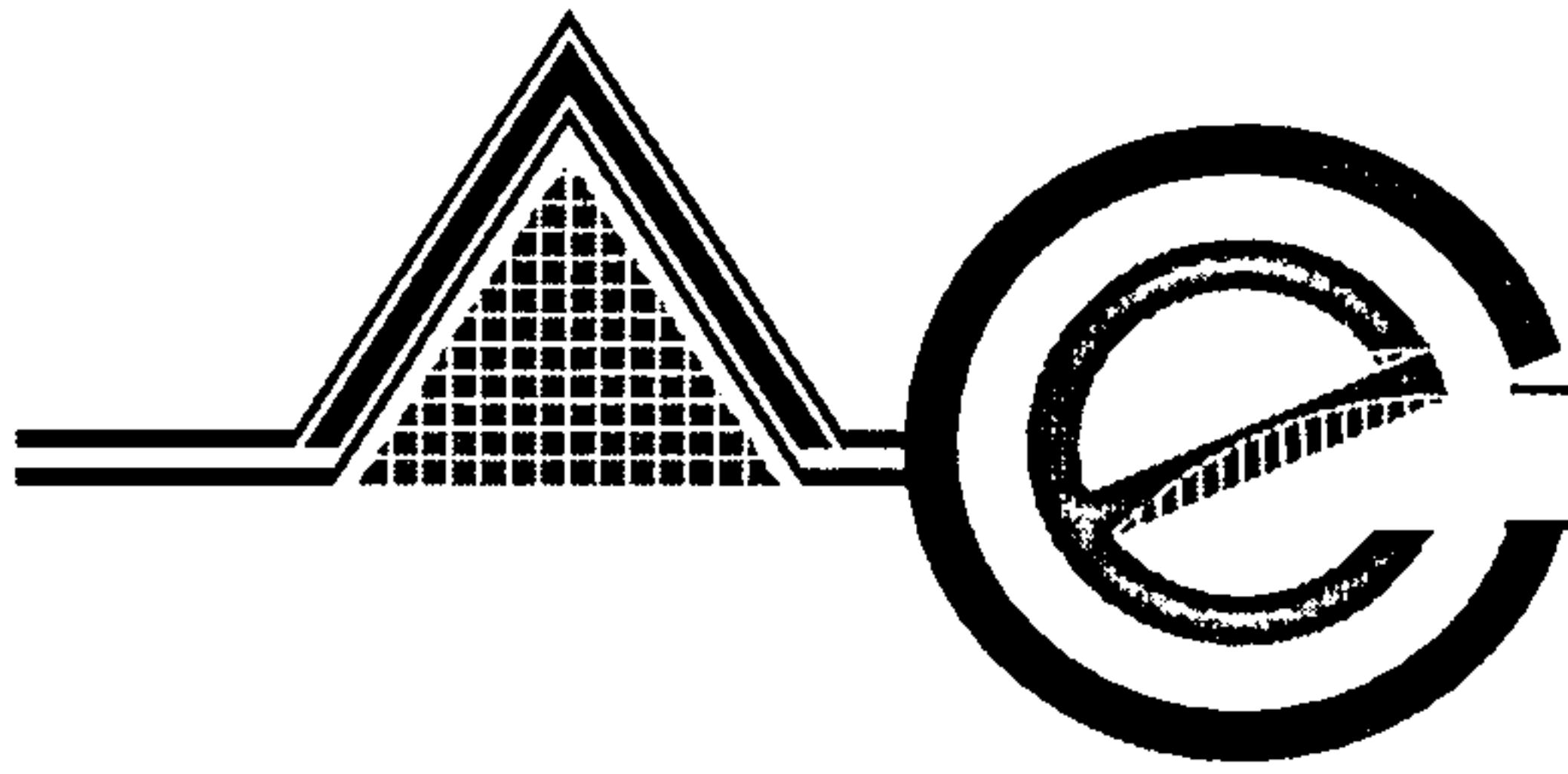
☐ YES
☒ NO
☐ COPY PROVIDED

DATE SUBMITTED: 12 / 18 / 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*

December 18, 2006

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

RE: GRADING AND DRAINAGE PLAN MODIFICATION FOR LOT 20-A, CANDLELIGHT
FOOTHILLS, UNIT 1 SUBDIVISION (J23 / D3A)

Dear Mr. Bingham:

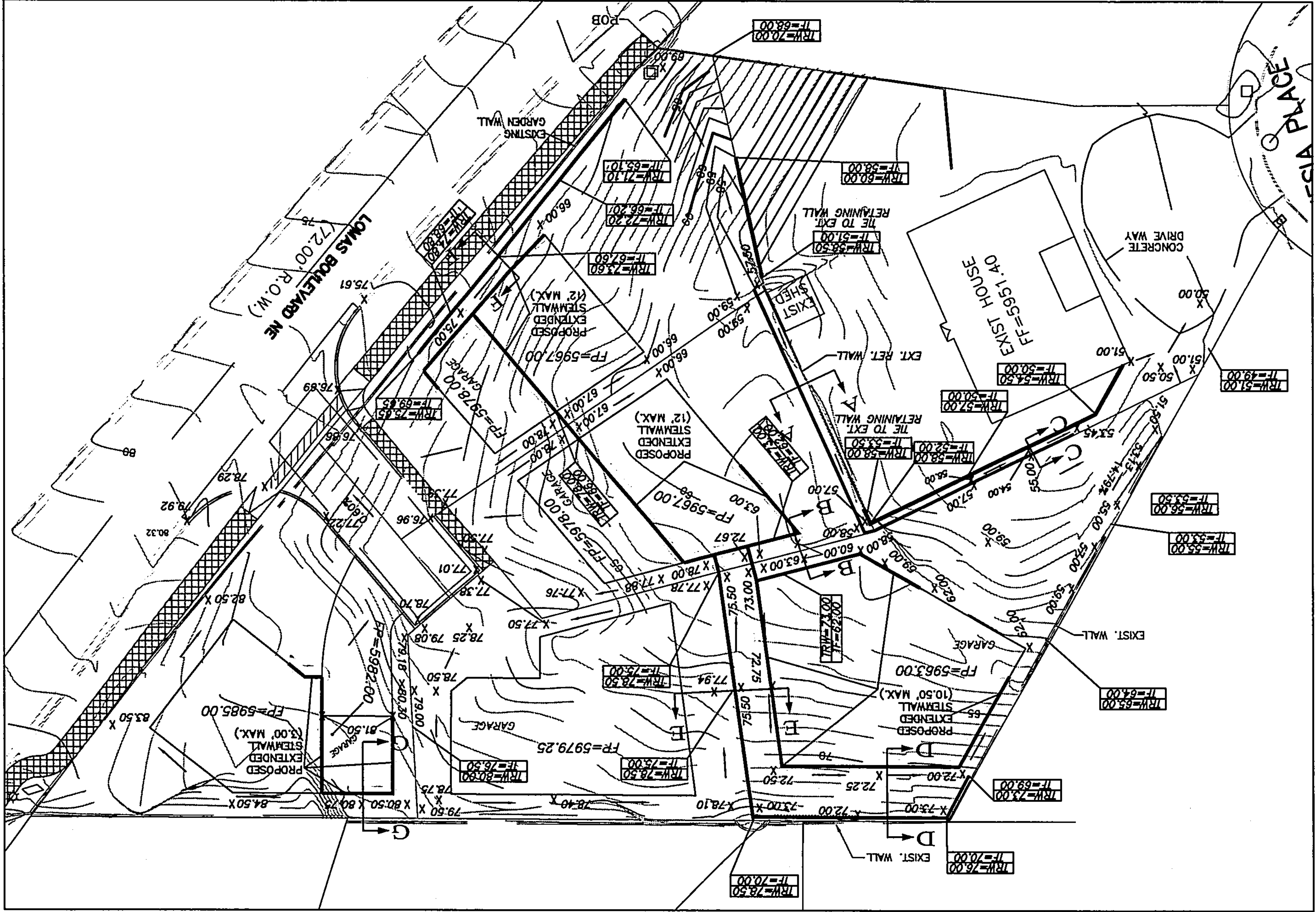
This submittal is for the grading and drainage plan changes for Lot 20-A Candlelight Foothills subdivision. Some of the pads grades and wall grades have been changed. Lot 20-A-2 used to drain through Lot 20-A-3, and it is changed to drain to Saifi Way and then to Lomas. The concrete channel was shortened so it would intercept the runoff at the corner of Lots 20-A-6 and Lot 20-A-4. Attached please find the exhibit for the walls which will be built prior to grading certification, and the walls which will be built under the building permit for the individual houses. The concrete channel will be built prior to grading certification.

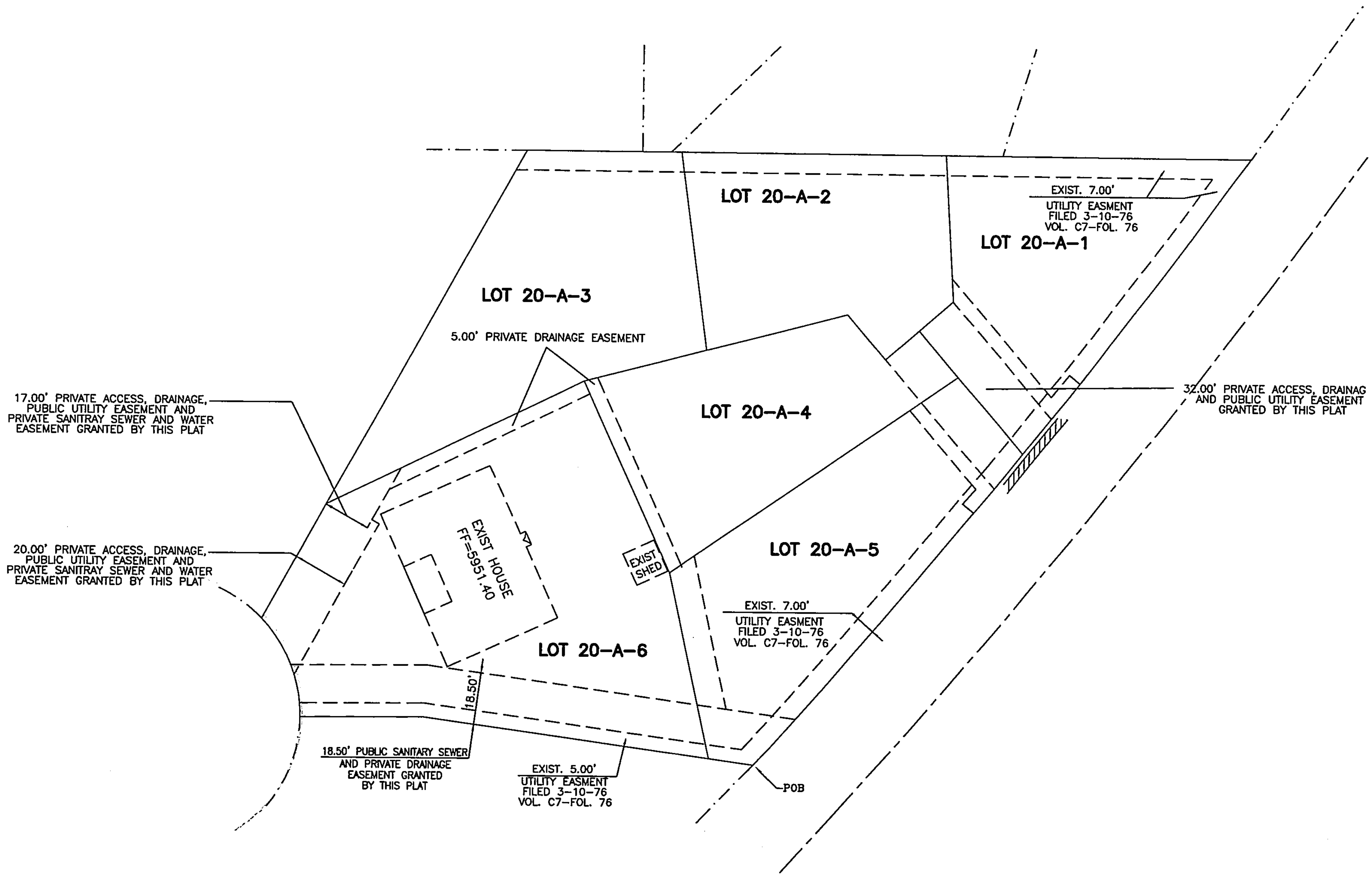
Please contact me if there are any questions or concerns regarding this submittal.

Sincerely yours,

Shahab Biazar, P.E.

100





LOT 20-A-2

LOT 20-A-1

LOT 20-A-3

5.00' PRIVATE DRAINAGE EASEMENT

LOT 20-A-4

32.00' PRIVATE ACCESS, DRAINAG
AND PUBLIC UTILITY EASEMENT
GRANTED BY THIS PLAT

LOT 20-A-5

LOT 20-A-6

EXIST HOUSE
FF=5651.40

EXIST
SHED

EXIST. 7.00'
UTILITY EASEMENT
FILED 3-10-76
VOL. C7-FOL. 76

18.50' PUBLIC SANITARY SEWER
AND PRIVATE DRAINAGE
EASEMENT GRANTED
BY THIS PLAT

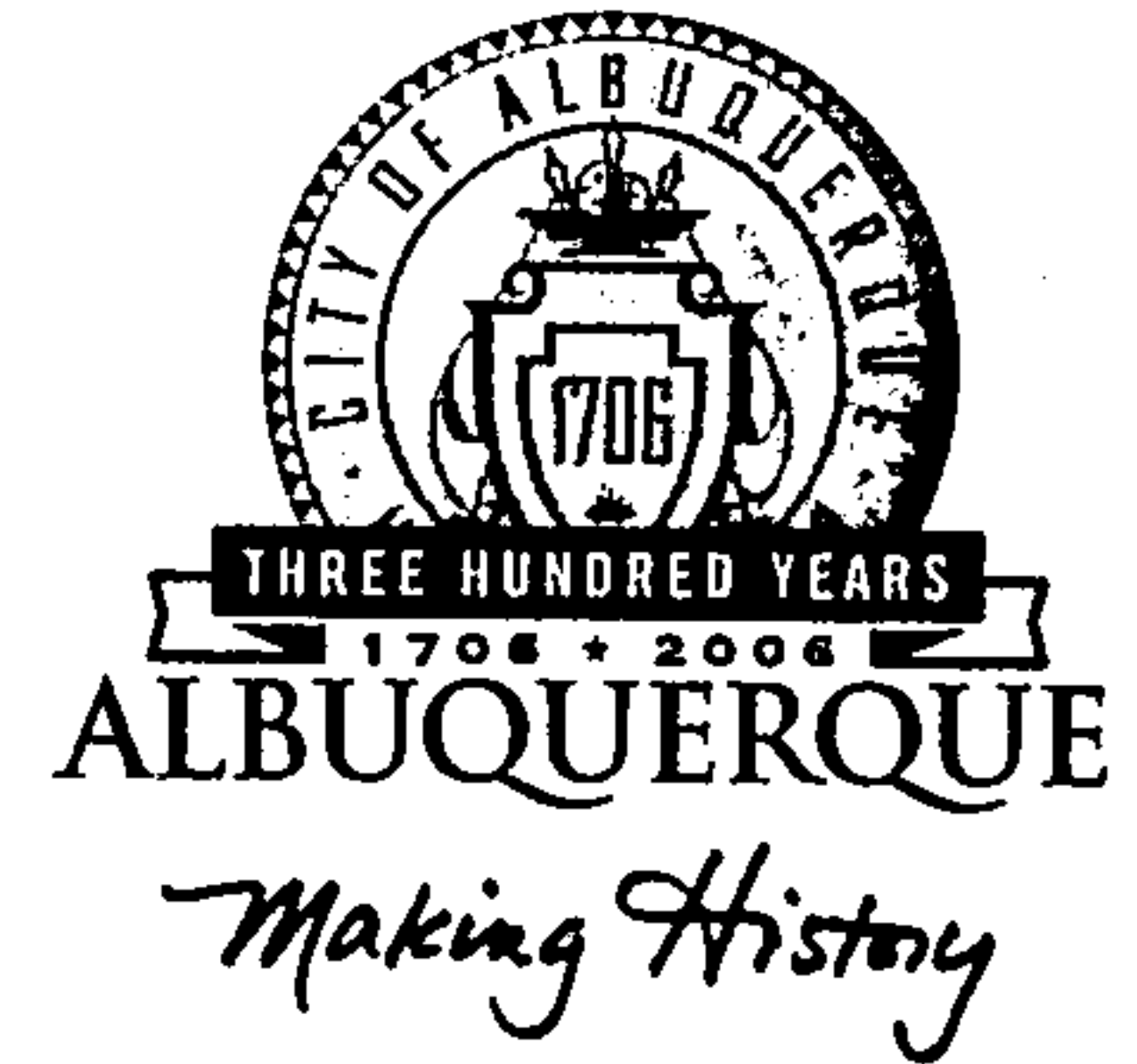
EXIST. 5.00'
UTILITY EASEMENT
FILED 3-10-76
VOL. C7-FOL. 76

POB

17.00' PRIVATE ACCESS, DRAINAGE,
PUBLIC UTILITY EASEMENT AND
PRIVATE SANITARY SEWER AND WATER
EASEMENT GRANTED BY THIS PLAT

20.00' PRIVATE ACCESS, DRAINAGE,
PUBLIC UTILITY EASEMENT AND
PRIVATE SANITARY SEWER AND WATER
EASEMENT GRANTED BY THIS PLAT

CITY OF ALBUQUERQUE



April 29, 2005

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

**Re: Lot 20A, Candlelight Foothills subdivision Drainage Report
Engineer's Stamp dated 4-19-05 (J23/D3A)**

Dear Mr. Biazar,

Based upon the information provided in your submittal dated 4-19-05, the above referenced report is approved for Preliminary Plat action by the DRB. Once that board approves the plan, please submit a mylar copy for my signature in order to obtain a Rough 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 924-3986.

Sincerely,

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

C: file

P.O. Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

DRAINAGE INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: Lot 20-A, Candlelight Foothills, Unit 1 Subdivision ZONE ATLAS/DRG. FILE #: J-23 / D3A
DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: Lot 20-A, Candlelight Foothills, Unit 1 Subdivision
CITY ADDRESS: 1424 Nemesia Place, NE, Albuquerque, NM

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 (Resubm.)

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

4/18/05
N-Verbal
BLB

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

~~any~~ BUILDING PERMIT APPROVAL

CERTIFICATE OF OCCUPANCY (PERM.)

CERTIFICATE OF OCCUPANCY (TEMP.)

☒ GRADING PERMIT APPROVAL

PAVING PERMIT APPROVAL

WORK ORDER APPROVAL

OTHER (SPECIFY)

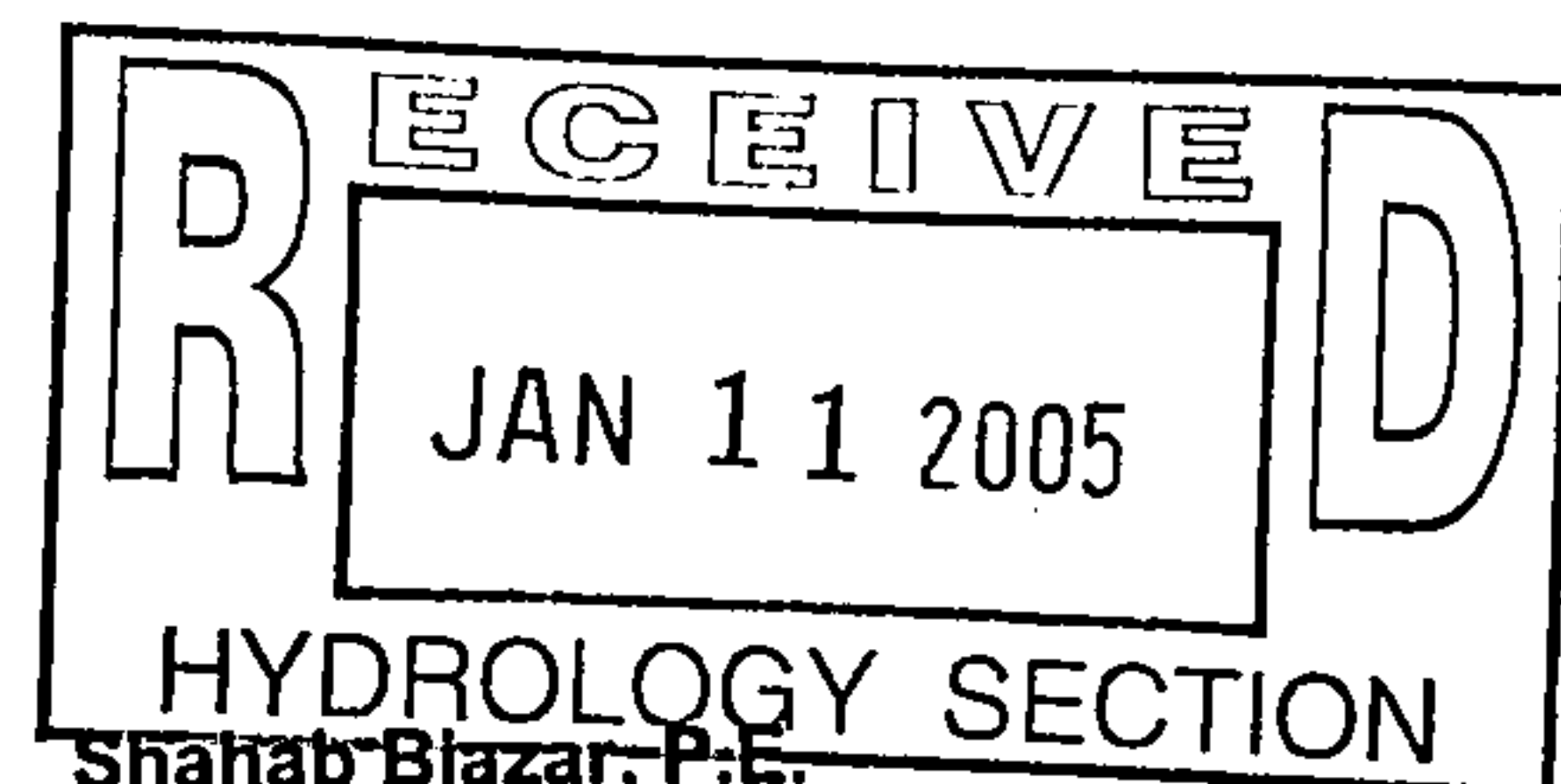
WAS A PRE-DESIGN CONFERENCE ATTENDED:

YES
☒ NO

COPY PROVIDED

DATE SUBMITTED: 01 / 03 / 2004

BY:



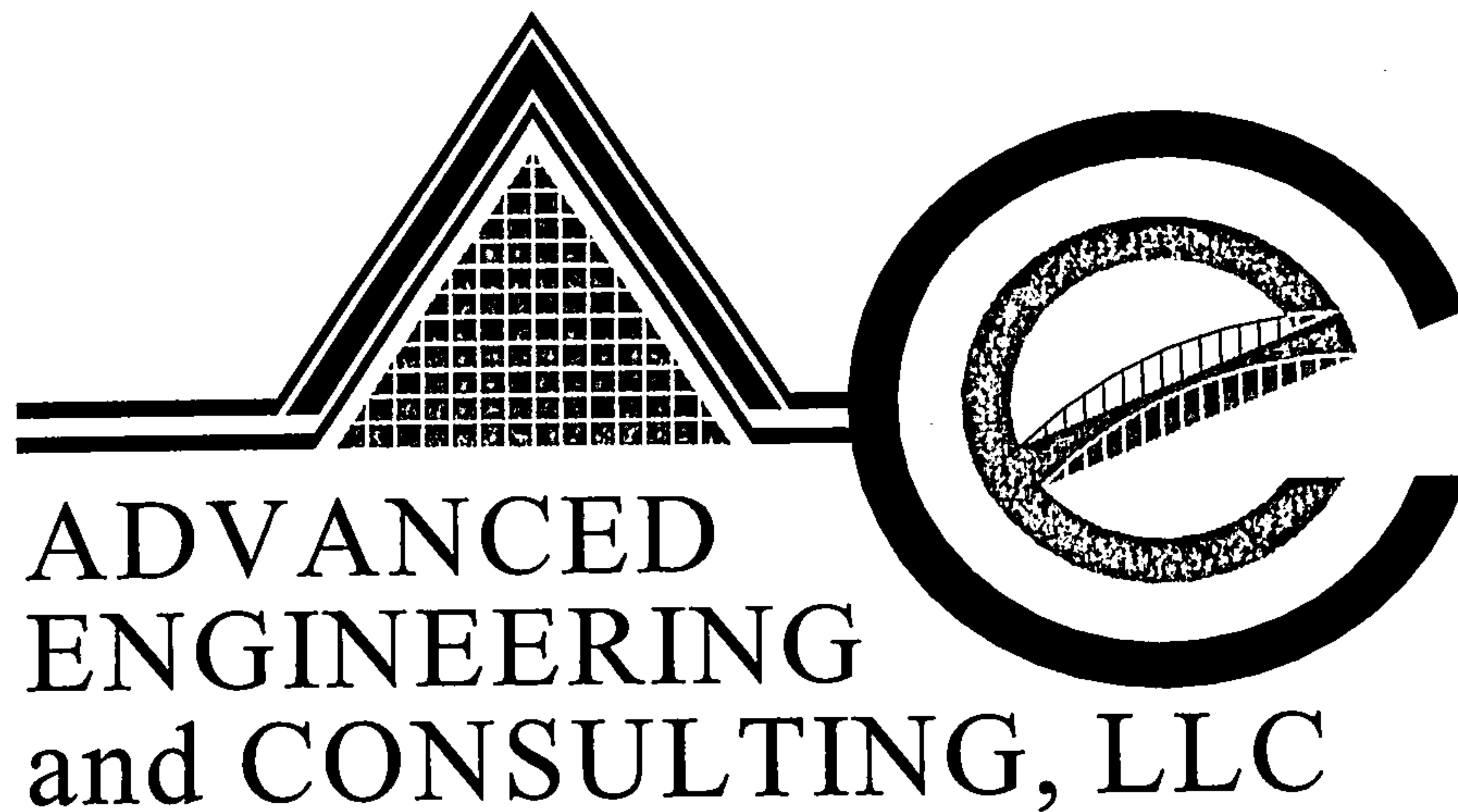
Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittals may be required based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

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3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or containing five (5) acres or more

DRAINAGE REPORT
FOR

LOT 20-A, CANDLELIGHT
FOOTHILLS UNIT 1
SUBDIVISION

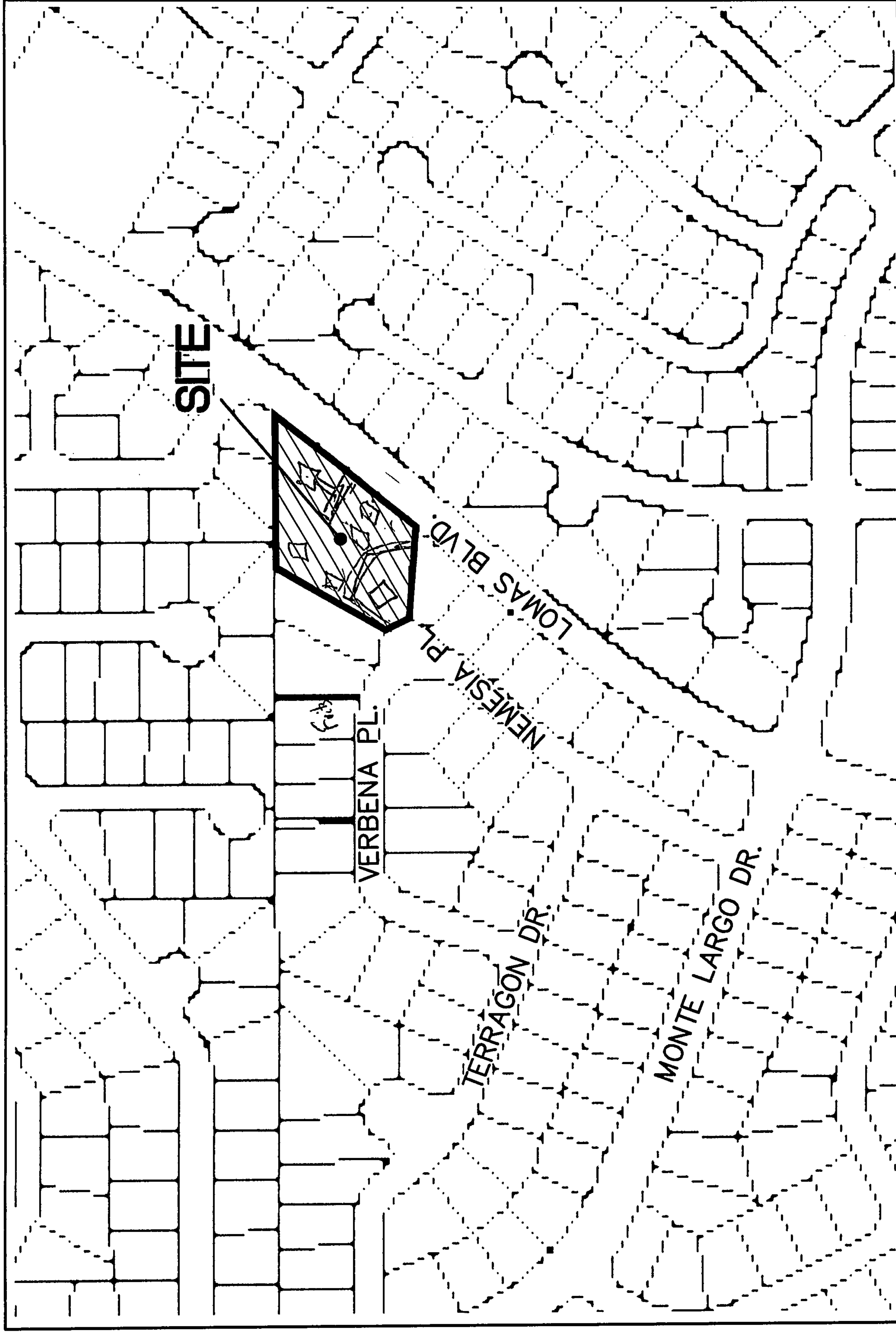
Prepared by:



4416 Anaheim Ave., NE
Albuquerque, New Mexico 87113

January, 2005





Location

Lot 20-A Candlelight Foothills Unit1, is located at 1424 Nemesia Place, NE. The total area of the site is ± 1.132 acres. See attached Zone Atlas page number J-23 for exact location. The owner is proposing to subdivide this Tract into a 6 lot subdivision.

Purpose

The purpose of this drainage report is to present a grading and drainage solution for the proposed sites. We are requesting rough grading approval, site development plan for subdivision purposes, site development plan for building permit, final plat approval and building permit.

Existing Drainage Conditions

This drainage plan previously has been submitted under the City Drainage number J23/D3A. This tract consists an existing house which will remain on site. We have redesigned this site with some changes. The site was analyzed under two drainage basin. Basin A at existing conditions drains to Basin B and then out to Nemesia Place. Basin A along with Basin B will drain Nemesia Place. There are no offsite runoff which enter the site. The site is surrounded by the existing roads and developments and no offsite runoff enters this tract. The site does not fall within a 100-year Floodplain.

Proposed Conditions and On-Site Drainage Management Plan

Under the proposed conditions the drainage patterns will remain as the existing conditions. The runoff from Basin A and B will remain the same. Basin A will drain west to a 2' wide channel, then north and again west to Basin B and from there to Nemesia Place. See grading plan for detail and drainage patterns. The increase in the runoff is fairly minor and should not have any impact on the existing drainage structures within the streets.

Calculations

City of Albuquerque, Development Process Manual, Section 22.2, Hydrology Section was used for runoff calculations.

AHYMO INPUT DATA (Rainfall and Land Treatment Data)

The site is @ Zone 4

DEPTH (INCHES) @ 100-YEAR STORM

$$P_{60} = 2.23 \text{ inches}$$

$$P_{360} = 2.90 \text{ inches}$$

$$P_{1440} = 3.65 \text{ inches}$$

DEPTH (INCHES) @ 10-YEAR STORM

$$\begin{aligned} P_{60} &= 2.23 \times 0.667 \\ &= 1.49 \text{ inches} \end{aligned}$$

$$P_{360} = 1.93$$

$$P_{1440} = 2.43$$

LAND TREATMENT

Based on the historical conditions:

$$A=100.00\%$$

Based on the developed conditions:

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

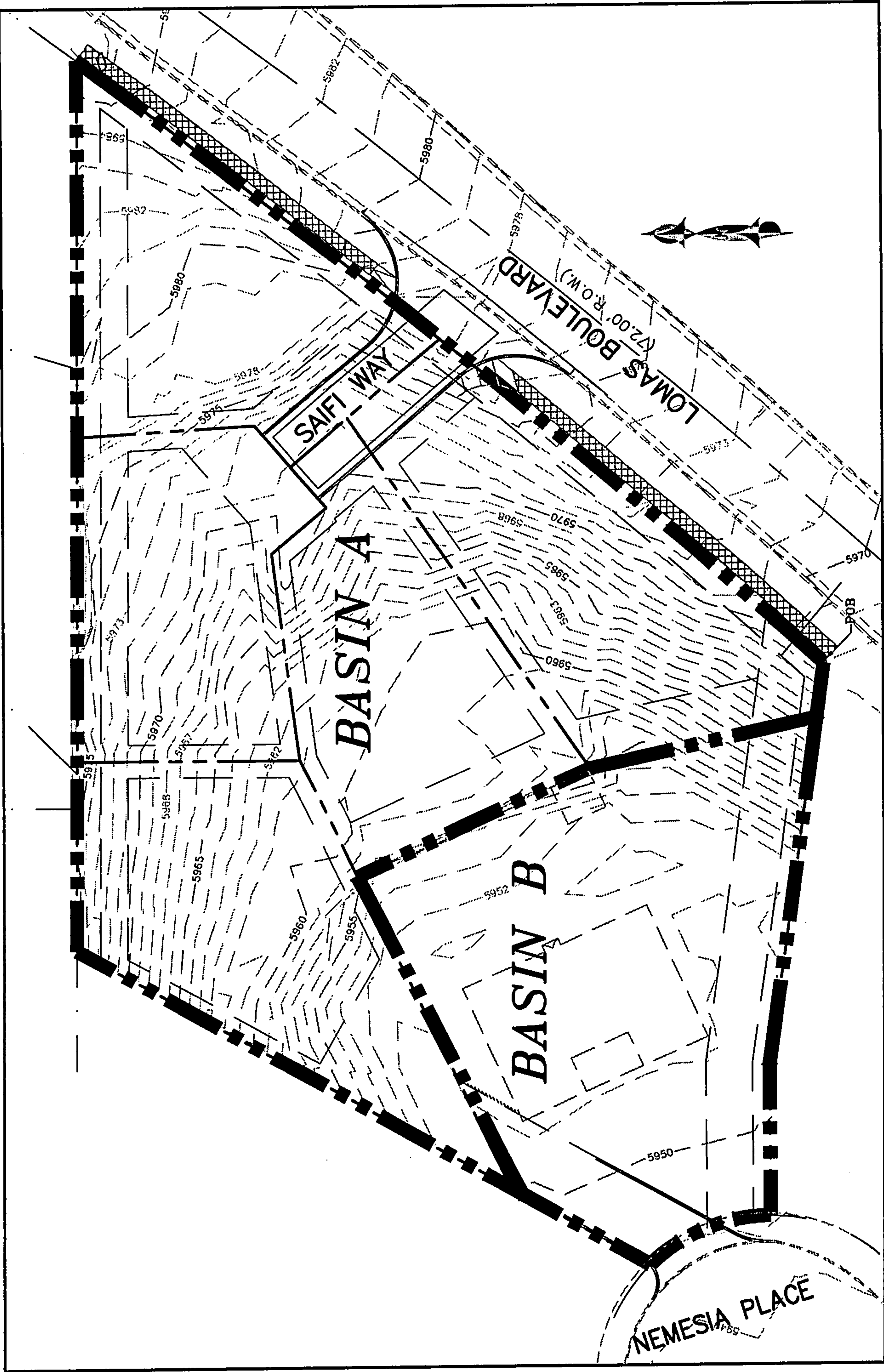
$$N = 6/1.1132 = 5.39$$

$$D = 7 \sqrt{(5.39^2 + 5 \times 5.39)} = 44.90 \approx 45.00\%$$

$$\text{Assume } C = 28\% \text{ and } B = 27\%$$

See the summary output from AHYMO calculations.

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



BASIN LAYOUT

NTS

RUNOFF CALCULATION RESULTS

BASIN AREA

ON-SITE	AREA (SF)	AREA (AC)	AREA (MI²)
BASIN A	34,463.34	0.7912	0.001236
BASIN B	14,028.49	0.3220	0.000503

HISTORICAL

ON-SITE	Q-100 CFS	Q-10 CFS
BASIN A	1.75	0.63
BASIN B	0.72	0.26

PROPOSED

ON-SITE	Q-100 CFS	Q-10 CFS
BASIN A	3.33	2.04
BASIN B	1.37	0.84

AHYMO INPUT FILE

```
*
* ZONE 4
*
*****
*      100-YEAR,  6-HR STORM (UNDER HISTORICAL CONDITIONS)      *
*****
*
START
RAINFALL          TYPE=1 RAIN QUARTER=0.0 IN
                   RAIN ONE=2.23 IN RAIN SIX=2.90 IN
                   RAIN DELAY=3.65 IN DT=0.03333 HR

* BASIN A
COMPUTE NM HYD    ID=1 HYD NO=101.0 AREA=0.001236 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

* BASIN B
COMPUTE NM HYD    ID=1 HYD NO=102.0 AREA=0.000503 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
RAINFALL          TYPE=1 RAIN QUARTER=0.0 IN
                   RAIN ONE=2.23 IN RAIN SIX=2.90 IN
                   RAIN DELAY=3.65 IN DT=0.03333 HR

* BASIN A
COMPUTE NM HYD    ID=1 HYD NO=103.0 AREA=0.001236 SQ MI
                  PER A=0.00 PER B=27.00 PER C=28.00 PER D=45.00
                  TP=0.1333 HR MASS RAINFALL=-1

* BASIN B
COMPUTE NM HYD    ID=1 HYD NO=104.0 AREA=0.000503 SQ MI
                  PER A=0.00 PER B=27.00 PER C=28.00 PER D=45.00
                  TP=0.1333 HR MASS RAINFALL=-1

*
*****
*      10-YEAR,   6-HR STORM (UNDER HISTORICAL CONDITIONS)      *
*****
*
START
RAINFALL          TYPE=1 RAIN QUARTER=0.0 IN
                   RAIN ONE=1.49 IN RAIN SIX=1.93 IN
                   RAIN DELAY=2.43 IN DT=0.03333 HR

* BASIN A
COMPUTE NM HYD    ID=1 HYD NO=105.0 AREA=0.001236 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

* BASIN B
COMPUTE NM HYD    ID=1 HYD NO=106.0 AREA=0.000503 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 PROPOSED CONDITIONS)          *
*****
*
START
RAINFALL          TYPE=1 RAIN QUARTER=0.0 IN
                  RAIN ONE=1.49 IN RAIN SIX=1.93 IN
                  RAIN DELAY=2.43 IN DT=0.03333 HR

* BASIN A
COMPUTE NM HYD    ID=1 HYD NO=107.0 AREA=0.001236 SQ MI
                  PER A=0.00 PER B=27.00 PER C=28.00 PER D=45.00
                  TP=0.1333 HR MASS RAINFALL=-1

* BASIN B
COMPUTE NM HYD    ID=1 HYD NO=108.0 AREA=0.000503 SQ MI
                  PER A=0.00 PER B=27.00 PER C=28.00 PER D=45.00
                  TP=0.1333 HR MASS RAINFALL=-1

*
FINISH
```


SUMMARY OUTPUT FILE

AHYMO PROGRAM SUMMARY TABLE (AHYMO_97) -
INPUT FILE = 200242

- VERSION: 1997.02d

RUN DATE (MON/DAY/YR) =01/10/2005
USER NO.= AHYMO-I-9702c01000R31-AH

[illegible]

Rectangular Channel Analysis & Design
Open Channel - Uniform flow

Worksheet Name: 200442

Comment: 2' CONCRETE CHANNEL FLOW CAPACITY

Solve For Depth

Given Input Data:

Bottom Width.....	2.00 ft
Manning's n.....	0.012
Channel Slope....	0.0040 ft/ft
Discharge.....	3.33 cfs

Computed Results:

Depth.....	0.46 ft
Velocity.....	3.62 fps
Flow Area.....	0.92 sf
Flow Top Width...	2.00 ft
Wetted Perimeter.	2.92 ft
Critical Depth...	0.44 ft
Critical Slope...	0.0045 ft/ft
Froude Number....	0.94 (flow is Subcritical)



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

August 28, 2002

Shahab Biazar, P.E.
Advanced Engineering and Consulting, LLC
10205 Snowflake Ct. NW
Albuquerque, NM 87114

**Re: Lot 20-A Candlelight Foothills Unit 1 Subdivision Grading & Drainage Plan – Revised.
Engineer's stamp dated 8/22/02 (J23/D3A)**

Dear Mr. Biazar,

You submitted a revised plan for the above referenced project dated August 23, 2002. You revised the project to include an extra tier of retaining wall based on height requirements per Code Enforcement.

Based on the information provided in your revised submittal, the plan is approved for:

- Final Plat action by the Development Review Board.
- Building Permit.
- SO-19 (required for construction within the city right-of-way).

For the Building Permit, please attach a copy of this approved plan to the construction sets before sign-off by Hydrology.

Before release of the Certificate of Occupancy, the following are required: (1) Engineer's Certification of the grading and drainage plan per the DPM checklist, and (2) a copy of the grading and drainage plan with approval sign-off by the City's field inspector for the SO-19.

If you have any questions, please call me at 924-3988.

Sincerely,

Nancy Musinski, P.E.
Hydrology/Utility Development
City of Albuquerque Public Works

cc: Matt Cline, Drainage Inspector (letter w/plan)
Pam Lujan, Permits (letter only)
file

DRAINAGE INFORMATION SHEET

(REV. 11/01/2001)

PROJECT TITLE: Lot 20-A, Candlelight Foothills, Unit 1 Subdivision

ZONE ATLAS/DRG. FILE #: J-23 / D3A

DRB #: _____ EPC #: _____

WORK ORDER #: _____

LEGAL DESCRIPTION: Lot 20-A, Candlelight Foothills, Unit 1 Subdivision

CITY ADDRESS: 1402 Broadway SE, Albuquerque NM

ENGINEERING FIRM: Advanced Engineering and Consulting, LLC

ADDRESS: 10205 Snowflake Ct. NW

CITY, STATE: Albuquerque, New Mexico

CONTACT: Shahab Biazar

PHONE: (505) 899-5570

ZIP CODE: 87114

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

☐ 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

SO-19

AUG 23 2002

HYDROLOGY SECTION

WAS A PRE-DESIGN CONFERENCE ATTENDED:

☐ YES

☐ NO

☐ COPY PROVIDED

DATE SUBMITTED: 08 / 22 / 02

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



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 8, 2002

Shahab Biazar, P.E.
Advanced Engineering and Consulting, LLC
10205 Snowflake Ct. NW
Albuquerque, NM 87114

Re: Lot 20-A Candlelight Foothills Unit 1 Subdivision Grading & Drainage Plan, Engineer's stamp dated 12/26/01 (J23/D3A)

Dear Mr. Biazar,

Based on the information provided in your submittal dated January 3, 2002, the above referenced plan is approved for:

- Final Plat action by the Development Review Board.
- Building Permit.
- SO-19 (required for construction within the city right-of-way).

For the Building Permit, please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Before release of the Certificate of Occupancy, the following are required: (1) Engineer's Certification of the grading and drainage plan per the DPM checklist, and (2) a copy of the grading and drainage plan with approval sign-off by the City's field inspector for the SO-19.

If you have any questions, please call me at 924-3988.

Sincerely,

Nancy Musinski, P.E.
Hydrology/Utility Development
City of Albuquerque Public Works

cc: Matt Cline, Drainage Inspector (letter w/plan)
Pam Lujan, Permits (letter only)
file



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 18, 2001

Shahab Biazar, P.E.
Advanced Engineering and Consulting, LLC
10205 Snowflake Ct. NW
Albuquerque, NM 87114

Re: Lot 20-A Candlelight Foothills Unit 1 Subdivision Grading & Drainage Plan, Engineer's stamp dated 12/07/01 (J23/D3A)

Dear Mr. Biazar,

Based on the information provided in your submittal dated December 10, 2001, the above referenced plan is approved for Preliminary Plat/Site Plan action by the Development Review Board.

However, the plan cannot be approved for Final Plat, Building Permit, and SO-19 until you address the following issues:

1. Please reverse the direction of the arrows on the section A-A symbol in the plan view.
2. For the Section A-A detail, show the property line. Dimension the property line and the new retaining wall from the existing retaining wall.
3. More on Section A-A: The plan view shows an existing garden wall symbol, but the section detail shows an existing retaining wall. I had to refer to the old Louis Gross plan to determine the intent in this area. Please clarify your plan.
4. At the westernmost corner of Lot 20-A-2, there is a gap with spot elevation 69.60. I assume this is an opening into the 2-foot wide concrete drainage rundown. Please call out the opening and width.
5. On the Section B-B detail, you show an existing garden wall. Show this on the plan.
6. In your submittal letter dated Dec. 7, 2001, you mention adding a note to the plan, stating that the owners of the properties are responsible for reconstructing the swale in the public utility easement. Please do add this note to the plan. Show the existing public utility easements on the plan.
7. Please review and re-write Erosion Control Plan and Pollution Prevention Plan Notes 5 and 6. Note 5 does not make sense. Note 6 is unclear. **When** must the disturbed areas be re-vegetated, and **by whom**?

If you have any questions, please call me at 924-3988.

Sincerely,

Nancy Musinski, P.E.
Hydrology/Utility Development
City of Albuquerque Public Works

cc: file



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 3, 2001

Shahab Biazar PE
Advanced Engineering and Consulting
10205 Snowflake Ct NW
Albuquerque, NM 87114

Re: Lot 20A, Candlelight Foothills subdivision Drainage Plan
Engineer's Stamp dated 10-26-01 (J23/D3A)

Dear Mr. Biazar,

Based upon the information provided in your submittal dated 10-26-01, the above referenced site cannot be approved for Site Development Plan for Building Permit, Site Development for Subdivision, Preliminary Plat or Building Permit until the following minor comments are addressed:

- The concrete swale should extend to the curb and a sidewalk culvert installed. Also, please provide the thickness of all structural elements.
- The channel is to be in an existing 5' PUE. Are there any existing facilities there? Have the utilities been advised of this proposal?
- All private drainage easements should encompass the footing of the wall plus possible excavation requirements. You will need to show that a "garden wall is extended above the retaining wall.
- Please show that each lot will either drain to the private street or to the private easement with property walls or something similar.

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

Sincerely,

Bradley L. Bingham, PE
Sr. Engineer PWD
Development and Building Services

C: file