PLANS/PLATS ON FILE

FILE DESC: C-23/D001D

PLANS/PLATS 6

Photograph(s)
Follow
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PLEASE NOTE:

ORIGINAL PHOTOGRAPHS ARE

STORED WITH THE MASTER ROLL.

1350 7211142 POLAROID 9

C23/DID

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Voris Construction ZONE ATLAS/DRNG. FILE #: C-23/D1d

LEGAL DESCRIPTION: Lot 652, Sandia Heights South, Unit 6

CITY ADDRESS: 652 Cougar Loop N. E., Albuquerque, New Mexico

ENGINEERING FIRM: TECH, Inc. CONTACT: Nathan J. Riley

ADDRESS: ~~3121 Carlisle N. E. 87110~~ P.O. Box 11571 87192 PHONE: 884-3311

OWNER: Kelly Voris CONTACT: Kelly Voris

ADDRESS: 500 Oakwood Pl. N. E. PHONE: 293-6553

ARCHITECT: CONTACT:

ADDRESS: PHONE:

SURVEYOR: TECH, Inc. CONTACT: Robert Sexton

ADDRESS: 3121 Carlisle N. E. PHONE: 844-3311

CONTRACTOR: Kelly Voris Construction CONTACT: Kelly Voris

ADDRESS: 500 Oakwood Pl. N. E. PHONE: ~~293-6553~~ 298-2922

PRE-DESIGN MEETING:

___ YES

X NO

___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. ___

EPC NO. ___

PROJ. NO. ___

RECEIVED SEP 03 1985 HYDROLOGY SECTION

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

X DRAINAGE PLAN

___ CONCEPTUAL GRADING & DRAINAGE PLAN

___ GRADING PLAN

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL

___ PRELIMINARY PLAT APPROVAL

___ SITE DEVELOPMENT PLAN APPROVAL

___ FINAL PLAT APPROVAL

X BUILDING PERMIT APPROVAL

___ FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

___ OTHER ___ (SPECIFY)

DATE SUBMITTED: September 3, 1985

BY: Nathan J. Riley

BOARD OF COUNTY COMMISSIONERS
PATRICK J. PADILLA, CHAIRMAN
DISTRICT 1
ORLANDO VIGIL, MEMBER
DISTRICT 2
LENTON MALRY, MEMBER
DISTRICT 3
PATRICIA H. CASSIDY, MEMBER
DISTRICT 4
MARION M. COTTRELL, MEMBER
DISTRICT 5
ALEX ABEYTA, JR., COUNTY MANAGER

County of Bernalillo

State of New Mexico

620 LOMAS, N.W.
ALBUQUERQUE, NEW MEXICO 87102

BOB STOVER, SHERIFF
JAMES B. LEWIS, TREASURER
DOLORES C. WALLER, COUNTY CLERK
JACK H. DARLING, ASSESSOR
ROBERT H. SCOTT,
PROBATE JUDGE

October 1, 1985

Mr. Hormnzd Rassam
Tech Inc.
P.O. Box 11571
Albuquerque, NM 87192

REF: DRAINAGE PLAN FOR LOT 652, UNIT 6, SANDIA HEIGHTS SOUTH (C23-D1D)
RECEIVED SPETEMBER 3, 1985

Dear Mr. Rassam:

I have reviewed the referenced plan dated August 30, 1985 and forward the following comments:

1. Please recompute your off-site contributary flows or use the FIRM depth of flow for the arroyo.

2. Please correct the floodplain outline to show 1 foot depth.

3. I do not believe you have enough information to define the 100-year depth for the south arroyo.

4. Please address how close the floodplain extends to the residence and the minimum difference in elevation between the finish floor and the 100-year floodplain water surface elevations. Both of these factors can force the need for further protection of the residence.

5. Please show all structures, walls and fences.

If you should have any questions, please call me at 766-7644.

Sincerely,

Carlos A. Montoya

Carlos A. Montoya, PE
City/County Flood Plain Admin.

CAM:mrk

RECEIVED
OCT 0 9 1985
HYDROLOGY SECTION

TECH, Inc.
3121 Carlisle N.E.
Albuquerque
New Mexico
87110
505/884-3311

Carlos Montoya, P.E.
Hydrology Dept.
123 Central N.W.
Albuquerque, New Mexico
87102

October 7, 1985

RE: DRAINAGE PLAN FOR LOT 652 UNIT 6, SANDIA HEIGHTS SOUTH
(C23 - DID)

Dear Mr. Montoya:

This letter is in reply to items 1 thru 5 before final approval for a building permit is granted.

The following items were addressed as follows:

1. The off site contributary flow calculations were deleted and the FIRM depth of flow for the arroyo was used.

2. The Flood Plain outline now shows a one foot depth.

3. The CFS information for the South arroyo was deleted.

4. Finish floor elevations, water surface elevations, distances from flood plain to the residence are noted.

5. All sturctures, walls, and fences are indicated.

If there are any questions, please call me at 884-3311.

Sincerely

Nathan J. Riley
Engineering Department

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Voris Construction ZONE ATLAS/DRNG. FILE #: C-23 / D1D

LEGAL DESCRIPTION: Lot 652, Sandia Heights South, Unit 6

CITY ADDRESS: 652 Cougar Loop N. E., Albuquerque, New Mexico

ENGINEERING FIRM: TECH, Inc. CONTACT: Nathan J. Riley

ADDRESS: 3121 Carlisle N. E. 87110 PHONE: 884-3311

OWNER: Kelly Voris CONTACT: Kelly Voris

ADDRESS: 500 Oakwood Place N. E. PHONE: 293-6553

ARCHITECT: None CONTACT: N/A

ADDRESS: PHONE:

SURVEYOR: TECH, Inc CONTACT: Robert Sexton

ADDRESS: 3121 Carlisle N. E. PHONE: 884-3311

CONTRACTOR: Kelly Voris CONTACT: Kelly Voris

ADDRESS: 500 Oakwood Place N. E. PHONE: 293-6553

RECEIVED
OCT 0 9 1985
HYDROLOGY SECTION

PRE-DESIGN MEETING:

___ YES
X NO
___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. ___
EPC NO. ___
PROJ. NO. ___

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT
X DRAINAGE PLAN
___ CONCEPTUAL GRADING & DRAINAGE PLAN
___ GRADING PLAN
___ EROSION CONTROL PLAN
___ ENGINEER'S CERTIFICAYION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL
___ PRELIMINARY PLAT APPROVAL
___ SITE DEVELOPMENT PLAN APPROVAL
___ FINAL PLAT APPROVAL
X BUILDING PERMIT APPROVAL
___ FOUNDATION PERMIT APPROVAL
___ CERTIFICATE OF OCCUPANCY APPROVAL
___ ROUGH GRADING PERMIT APPROVAL
___ GRADING/PAVING PERMIT APPROVAL
X OTHER Resubmittal (SPECIFY)

DATE SUBMITTED: October 7, 1985

BY: Nathan J. Riley NJR

BOARD OF COUNTY COMMISSIONERS
PATRICK J. PADILLA, CHAIRMAN
DISTRICT 1
ORLANDO VIGIL, MEMBER
DISTRICT 2
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PATRICIA H. CASSIDY, MEMBER
DISTRICT 4
MARION M. COTTRELL, MEMBER
DISTRICT 5
ALEX ABEYTA, JR., COUNTY MANAGER

County of Bernalillo

State of New Mexico

620 LOMAS, N.W.
ALBUQUERQUE, NEW MEXICO 87102

BOB STOVER, SHERIFF
JAMES B. LEWIS, TREASURER
DOLORES C. WALLER, COUNTY CLERK
JACK H. DARLING, ASSESSOR
ROBERT H. SCOTT,
PROBATE JUDGE

October 18, 1985

Mr. Hormnzd Rassem
Tech. Inc.
P.O. Box 11571
Albuquerque, NM 87192

RE: DRAINAGE PLAN FOR LOT 652, UNIT 6, SANDIA HEIGHTS SOUTH (C23-D1D)
RECEIVED OCTOBER 9, 1985

Dear Mr. Rassem:

I have reviewed the referenced plan and forward the following comments:

1. The floodplain has not been indicated correctly to show one foot of depth.
2. The discharge has not been calculated correctly, please correct.
3. I believe that the floodplain may encroach into the proposed structure. Please address how the house will be protected from the floodplain waters and from erosion.

If you have any questions, please contact this office at 766-7644.

Sincerely,

Carlos A. Montoya

Carlos A. Montoya
City/County Flood Plain Admin.

CAM/cl

RECEIVED
OCT 29 1985
HYDROLOGY SECTION

October 28,1985

Mr. Carlos Montoya
City/County Flood Plain Admin
620 Lomas N.W.
Albu. N.M. 87102

RE: DRAINAGE PLAN FOR LOT 652,UNIT 6, SANDIA HEIGHTS SOUTH (C23-DID) RECEIVED OCTOBER 9,1985

Dear Mr. Montoya,

The house will protected from erosion by the use of vegatation planted along the side of the house that parallels the floodplains runoff. There are native grasses, gourds,and chamisa already in place and doing well. In addition to that, I am planting Russin Olive trees because of there deeper root systems along the side of the arroyo.

The house is built on an UBC approved footing and stem of which there is an attached drawing.

I am well aware of an 100 year rain and its hazards. I feel that the use of vegatation for erosion control along with the elevation and contruction of the house will insure the protection from any flooding water. Thank you for your consideration on this matter.

Sincerely,

Kelly Voris

Kelly Voris
Voris Constuction

RECEIVED
OCT 29 1985
HYDROLOGY SECTION

TECH, Inc.
3121 Carlisle N.E.
Albuquerque
New Mexico
87110
505/884-3311

Carlos Montoya, P.E.
Hydrology Dept.
123 Central N.W.
Albuquerque, New Mexico
87102

RE: DRAINAGE PLAN FOR LOT 652 UNIT 6, SANDIA HEIGHTS SOUTH
(C23-DID)

Dear Mr. Montoya:

This letter is in reply to item 1 thru 3 before final approval for a building permit is granted.

The following items were addressed as follows:

1. The designated floodplain now shows a one foot depth.

2. The actual discharge has been corrected.

3. The floodplain does not encroach into the proposed structure. As a precaution to erosion the contractor has agreed to submit a cross section of the actual footing w/ elevations, and a proposed plan for future landscaping to prevent such erosion. See enclosures.

If you have any questions, please contact this office at 884-3311.

Sincerely

Nathan J. Riley

NATHAN J. RILEY
Engineering Dept.

cc: file
Kelly Voris

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Voris Construction ZONE ATLAS/DRNG. FILE #: C-23/D1D

LEGAL DESCRIPTION: Lot 652, Sandia Heights South, Unit 6

CITY ADDRESS: 652 Cougar Loop N. E., Albuquerque, New Mexico

ENGINEERING FIRM: TECH, Inc. CONTACT: Nathan J. Riley

ADDRESS: 3121 Carlisle N. E. 87110 PHONE: 884-3311

OWNER: Kelly Voris CONTACT: Kelly Voris

ADDRESS: 500 Oakwood Place N. E. PHONE: 293-6553

ARCHITECT: None CONTACT: N/A

ADDRESS: PHONE:

SURVEYOR: TECH, Inc CONTACT: Robert Sexton

ADDRESS: 3121 Carlisle N. E. PHONE: 884-3311

CONTRACTOR: Kelly Voris CONTACT: Kelly Voris

ADDRESS: 500 Oakwood Place N. E. PHONE: 293-6553

RECEIVED
OCT 29 1985
HYDROLOGY SECTION

PRE-DESIGN MEETING:

___ YES
X NO
___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. ___
EPC NO. ___
PROJ. NO. ___

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT
X DRAINAGE PLAN
___ CONCEPTUAL GRADING & DRAINAGE PLAN
___ GRADING PLAN
___ EROSION CONTROL PLAN
___ ENGINEER'S CERTIFICATION

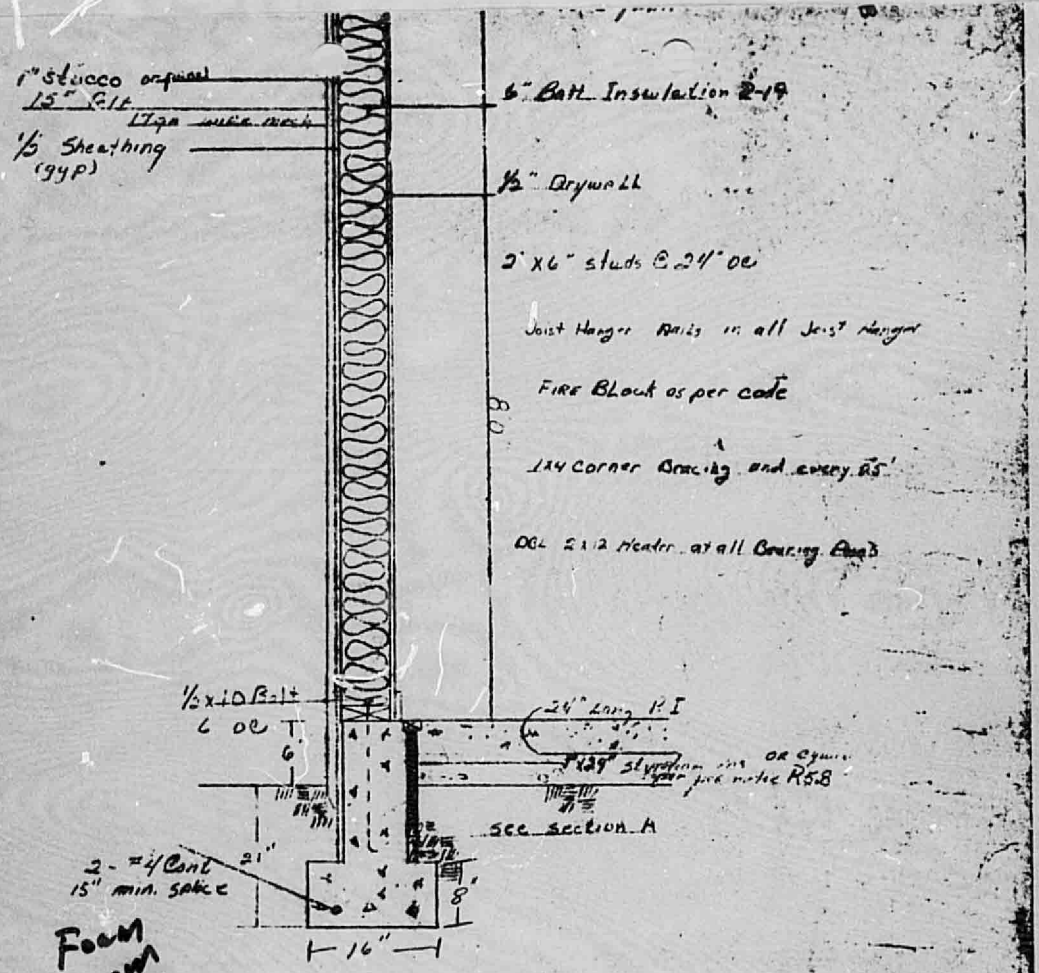
CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL
___ PRELIMINARY PLAT APPROVAL
___ SITE DEVELOPMENT PLAN APPROVAL
___ FINAL PLAT APPROVAL
X BUILDING PERMIT APPROVAL
___ FOUNDATION PERMIT APPROVAL
___ CERTIFICATE OF OCCUPANCY APPROVAL
___ ROUGH GRADING PERMIT APPROVAL
___ GRADING/PAVING PERMIT APPROVAL
X OTHER Resubmittal (SPECIFY)

DATE SUBMITTED: October 28 1985

BY: Nathan J. Riley

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.



Typical wall Section

scale 3/4" = 1'0

BOARD OF COUNTY COMMISSIONERS
PATRICK J. PADILLA, CHAIRMAN
DISTRICT 1
ORLANDO VIGIL, MEMBER
DISTRICT 2
LENTON MALRY, MEMBER
DISTRICT 3
PATRICIA H. CASSIDY, MEMBER
DISTRICT 4
MARION M. COTTRELL, MEMBER
DISTRICT 5
ALEX ABEYTA, JR., COUNTY MANAGER

County of Bernalillo

State of New Mexico

620 LOMAS, N.W.
ALBUQUERQUE, NEW MEXICO 87102

BOB STOVER, SHERIFF
JAMES B. LEWIS, TREASURER
DOLORES C. WALLER, COUNTY CLERK
JACK H. DARLING, ASSESSOR
ROBERT H. SCOTT,
PROBATE JUDGE

November 6, 1985

Nathan J. Riley
Tech, Inc.
3121 Carlisle Blvd., NE
Albuquerque, New Mexico 87110

RE: DRAINAGE PLAN FOR VORIS CONSTRUCTION
RECEIVED OCTOBER 29, 1985 (C-23/D1D)

Dear Mr. Riley:

I have reviewed the referenced plan and forward these comments:

1. The drainage area upstream of your site includes more acreage. The shaded area outlined on the flood maps indicate the limits of the floodplain, not the drainage basin. Please re-calculate the drainage area. Include in your calculations the velocity of flows in the arroyo.

2. The house, because of the proximity to the arroyo, needs to be protected from undercutting of stem wall, and patio wall (erosion) and the possibility of flows entering the structure. Vegetation is helpfull in controlling erosion, however, structural improvements need to be made.

If you have any questions or comments regarding this project, please call me at 766-7644.

Cordially,

Carlos A. Montoya

Carlos A. Montoya, P.E.
City/County Floodplain Administrator

cc: Kelly Voris
500 Oakwood Place, NE

CAM/bsj

RECEIVED
DEC 10 1985
HYDROLOGY SECTION

TECH, Inc.
3121 Carlisle N.E.
Albuquerque
New Mexico
87110
505/884-3311

Carlos A. Montoya, PE
City/County Floodplain Administrator
123 Central NW
Albuquerque, New Mexico 87102

November 26, 1985

RE: Drainage Plan for Lot 652 Unit 6, Sandia Heights South (C23-DID)

Dear Mr. Montoya:

This letter is in reply to items 1 and 2 before a Certificate of Occupancy can be issued.

The following items were addressed as follows:

1. The drainage area upstream of the building site now includes the flood basin. The drainage area has also been recalculated including velocity of flows in the arroyo.

2. The house, because of the proximity to the arroyo, now shows a constructed footing along the northside of the house which varies 6 to 12 feet away from the wall of the house. The new footing is a minimum of one foot below the footing and stem of the existing house.

Mr. Voris still plans to continue with the use of vegetation planted along the side of the house that parallels the floodplains runoff.

If you have any questions, please contact this office at 884-3311.

Sincerely,

Nathan J. Riley
Engineering Dept.

cc: Kelly Voris
file

PS/njr

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Voris Construction ZONE ATLAS/DRNG. FILE #: C-23

LEGAL DESCRIPTION: Lot 652, Sandia Heights South, Unit 6

CITY ADDRESS: 652 Cougar Loop N. E., Albuquerque, New Mexico

ENGINEERING FIRM: TECH, Inc. CONTACT: Nathan J. Riley

ADDRESS: 3121 Carlisle N. E. 87110 PHONE: 884-3311

OWNER: Kelly Voris CONTACT: Kelly Voris

ADDRESS: 500 Oakwood Place N. E. PHONE: 293-6553

ARCHITECT: None CONTACT: N/A

ADDRESS: PHONE:

SURVEYOR: TECH, Inc CONTACT:

ADDRESS: 3121 Carlisle N. E. PHONE: 884-3311

CONTRACTOR: Kelly Voris CONTACT: Kelly Voris

ADDRESS: 500 Oakwood Place N. E. PHONE: 293-6553

RECEIVED
DEC 10 1985
HYDROLOGY SECTION

PRE-DESIGN MEETING:

___ YES
X NO
___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. ___
EPC NO. ___
PROJ. NO. ___

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT
X DRAINAGE PLAN
___ CONCEPTUAL GRADING & DRAINAGE PLAN
___ GRADING PLAN
___ EROSION CONTROL PLAN
___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL
___ PRELIMINARY PLAT APPROVAL
___ SITE DEVELOPMENT PLAN APPROVAL
___ FINAL PLAT APPROVAL
___ BUILDING PERMIT APPROVAL
___ FOUNDATION PERMIT APPROVAL
X CERTIFICATE OF OCCUPANCY APPROVAL
___ ROUGH GRADING PERMIT APPROVAL
___ GRADING/PAVING PERMIT APPROVAL
X OTHER Resubmittal (SPECIFY)

DATE SUBMITTED: December 9, 1985

BY: Nathan J. Riley

FILE COPY

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

December 26, 1985

Mr. Nathan Riley
Tech Inc.
3121 Carlisle NE
Albuquerque, NM 87110

REF: DRAINAGE PLAN FOR VORIS CONSTRUCTION RECEIVED DECEMBER 10, 1985 (C23-D1D) (BP-85-474)

Dear Mr. Riley:

I have reviewed the referenced plan and forward the following comments:

1. The drainage plan is being submitted for Building Permit approval and not as a certification.

2. The off-site contributary flows velocity was not calculated correctly. We are requesting the arroyo velocity and not the watershed velocity.

3. Please show all easements on the drainage plan.

If you should have any questions, please feel free to call me at 766-7644.

Sincerely,

Roger A. Green, PE, for
Carlos A. Montoya, PE
City/County Flood Plain Admin.

CAM:mrk

RECEIVED
JAN 10 1986
HYDROLOGY SECTION

TECH

TECH, Inc.
3121 Carlisle N.E.
Albuquerque
New Mexico
87110
505/884-3311

Carlos A. Montoya, PE
City/County Floodplain Administrator
123 Central Ave. NW
Albuquerque, New Mexico 87102

Jan 9, 1986

RE: DRAINAGE PLAN FOR LOT 652, UNIT 6, SANDIA HEIGHTS SOUTH
(C23-DID)

Dear Mr. Montoya;

This letter is in reply to items 1 thru 3 before a Building Permit can be issued.

The following items were addressed as follows:

1. The type of approval sought is for a Building Permit.

2. The velocity of flows in the arroyo area and the watershed area were calculated.

3. All easements within the lot are shown.

If you have any questions, please contact this office at 884-3311.

Sincerely,

Nathan J. Riley

Nathan J. Riley
Engineering Dept.

PS:njr

THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

PROJECT TITLE: Vorie Construction ZONE ATLAS/Dwg. FILE #: O-23 / D1D

LEGAL DESCRIPTION: Lot 652, Sandia Heights South, Unit 6

CITY ADDRESS: 652 Cougar Loop N. E., Albuquerque, New Mexico

ENGINEERING FIRM: TECH, Inc. CONTACT: Nathan J. Riley

ADDRESS: 3121 Carlisle N. E. 87110 PHONE: 884-3311

OWNER: Kelly Vorie CONTACT: Kelly Vorie

ADDRESS: 500 Oakwood Place N. E. PHONE: 298-5922

ARCHITECT: None CONTACT: N/A

ADDRESS: PHONE:

SURVEYOR: TECH, Inc CONTACT: James Starcher

ADDRESS: 3121 Carlisle N. E. PHONE: 884-3311

CONTRACTOR: Kelly Vorie CONTACT: Kelly Vorie

ADDRESS: 500 Oakwood Place N. E. PHONE: 298-5922

RECEIVED
JAN 10 1986
HYDROLOGY SECTION

PRE-DESIGN MEETING:

___ YES
X NO
___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. ___
EPC NO. ___
PROJ. NO. ___

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT
X DRAINAGE PLAN
___ CONCEPTUAL GRADING & DRAINAGE PLAN
___ GRADING PLAN
___ EROSION CONTROL PLAN
___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

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___ SITE DEVELOPMENT PLAN APPROVAL
___ FINAL PLAT APPROVAL
X BUILDING PERMIT APPROVAL
___ FOUNDATION PERMIT APPROVAL
___ CERTIFICATE OF OCCUPANCY APPROVAL
___ ROUGH GRADING PERMIT APPROVAL
___ GRADING/PAVING PERMIT APPROVAL
X OTHER Resubmittal (SPECIFY)

DATE SUBMITTED: January 9, 1986

BY: Nathan J. Riley

BOARD OF COUNTY COMMISSIONERS
PATRICK J. PADILLA, CHAIRMAN DISTRICT 1
ORLANDO VIGIL, MEMBER DISTRICT 2
LENTON MALRY, MEMBER DISTRICT 3
PATRICIA H. CASSIDY, MEMBER DISTRICT 4
MARION M. COTTRELL, MEMBER DISTRICT 5
ALEX ABEYTA, JR., COUNTY MANAGER

County of Bernalillo

State of New Mexico

ONE CIVIC PLAZA, N.W.
ALBUQUERQUE, NEW MEXICO 87102

ALVIN J. CAMPBELL, SHERIFF
JAMES B. LEWIS, TREASURER
DOLORES C. WALLER, COUNTY CLERK
JACK H. DARLING, ASSESSOR
ROBERT H. SCOTT, PROBATE JUDGE

January 22, 1986

Nathan Riley
Tech, Inc.
3121 Carlisle Blvd., NE
Albuquerque, New Mexico 87110

RE: DRAINAGE PLAN FOR VORIS CONSTRUCTION
RECEIVED JANUARY 10, 1986 (C-23/D1D)

Dear Mr. Riley:

I have reviewed the referenced plan and forward the following comments:

1. Attached to this letter is a profile of the arroyo. If the arroyo were to scour, the 1 foot footing does not appear to protect the foundation. Unless you calculate a different scour depth, please use three (3) foot of depth below the arroyo flow line.

2. Also, in the attachments is an area where the channel may overflow. Please address what protection will be necessary for this area.

3. The velocity calculations were not done correctly. Please see my attachment for information in calculating velocity.

If you would like to schedule a meeting to discuss this project, please call me at 766-7644.

Cordially,

Carlos A. Montoya

Carlos A. Montoya, P.E.
City/County Floodplain Administrator

CAM/bsj

Attachment

DRAINAGE INFORMATION SHEET

C 23/010

PROJECT TITLE: DRAIN STUDY ZONE ATLAS/DRNG. FILE #: C-23-Z

LEGAL DESCRIPTION: LOT L&2 SANDIA HEIGHTS SOUTH UNIT 6

CITY ADDRESS: 653 COUGAR LOOP NE ALBQ

ENGINEERING FIRM: TECH, INC CONTACT: J. STARCHER

ADDRESS: 3121 CARLISLE PHONE: 884-3311

OWNER: VORIS CONST. CONTACT: KELLY VORIS

ADDRESS: 500 OAKWOOD PL PHONE: 298-5922

ARCHITECT: CONTACT:

ADDRESS: PHONE:

SURVEYOR: TECH, INC CONTACT: J. STARCHER

ADDRESS: 3121 CARLISLE PHONE: 884-3311

CONTRACTOR: VORIS CONST. CONTACT: KELLY VORIS

ADDRESS: 500 OAKWOOD PL PHONE: 298-5922

RECEIVED
APR 10 1986
HYDROLOGY SECTION

PRE-DESIGN MEETING:

___ YES

X NO

___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. ___

EPC NO. ___

PROJ. NO. ___

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

X DRAINAGE PLAN

___ CONCEPTUAL GRADING & DRAINAGE PLAN

___ GRADING PLAN

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL

___ PRELIMINARY PLAT APPROVAL

___ SITE DEVELOPMENT PLAN APPROVAL

___ FINAL PLAT APPROVAL

___ BUILDING PERMIT APPROVAL

___ FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

/ OTHER RESUBMIT (SPECIFY)

DATE SUBMITTED: APRIL 7, 1986

BY: Philip R. Smith

FILE COPY

BOARD OF COUNTY COMMISSIONERS
PATRICK J. PADILLA, CHAIRMAN
DISTRICT 1
ORLANDO VIGIL, MEMBER
DISTRICT 2
LENTON MALRY, MEMBER
DISTRICT 3
PATRICIA H. CASSIDY, MEMBER
DISTRICT 4
MARION M. COTTRELL, MEMBER
DISTRICT 5
ALEX ABEYTA, JR., COUNTY MANAGER

County of Bernalillo

State of New Mexico

ONE CIVIC PLAZA, N.W.
ALBUQUERQUE, NEW MEXICO 87102

ALVIN J. CAMPBELL, SHERIFF
JAMES B. LEWIS, TREASURER
DOLORES C. WALLER, COUNTY CLERK
JACK H. DARLING, ASSESSOR
ROBERT H. SCOTT, PROBATE JUDGE

April 23, 1986

Horumuzd Rassam
Tech, Inc.
3121 Carlisle Blvd., NE
Albuquerque, New Mexico 87110

RE: DRAINAGE PLAN FOR VORIS CONSTRUCTION
RECEIVED APRIL 10, 1986 (C-23/D1D) (BP-85-474)

Dear Mr. Rassam:

The above referenced plans are approved in compliance with the Floodplain Ordinance.

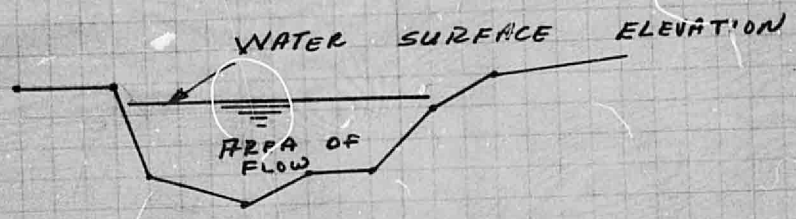
We are requesting the initial $20.00 fee to the Bernalillo County Administration.

If you have any questions, call me at 766-7644.

Cordially,

Carlos A. Montoya, P.E.
City/County Floodplain Administrator

CAM/bsj

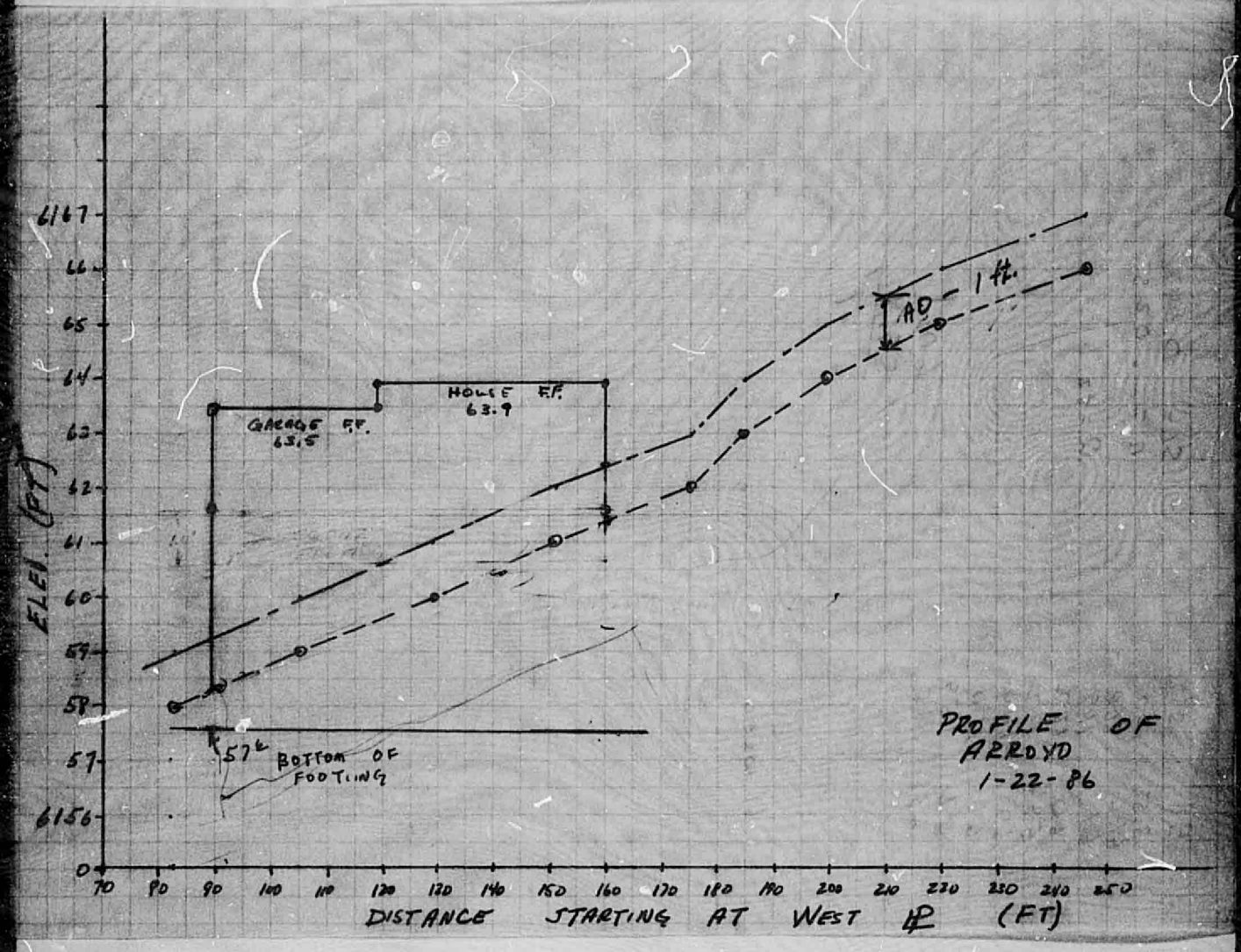


CROSS SECTION OF ARROYO

$$\text{VELOCITY OF ARROYO} = \frac{Q}{\text{AREA OF FLOW}}$$

USE MANNINGS EQUATION TO DETERMINE VELOCITY

$$VEL = \frac{1.49 \cdot R^{2/3} \, S^{1/2}}{n}$$


ELEV. (FT)
6167
66
65
64
63
62
61
60
59
58
57
6156
0
70
80
90
100
110
120
130
140
150
160
170
180
190
200
210
220
230
240
250
DISTANCE STARTING AT WEST ℄ (FT)
GARAGE F.F. 63.5
HOUSE F.F. 63.9
57¼
BOTTOM OF FOOTING
AD = 1 ft.
PROFILE OF ARROYO
1-22-86

El	sta
63.5	100
61.6	108
61	119
60	122
59.4	132
60	144
61	160
62	159
63	185

SL = 0.0478
n = .025

Q = 53.

60.1
59.4
.7

61 WSEL

```
WATER SURFACE ELEVATION        61
DISCHARGE        434.2793
AREA             31.57498
VELOCITY         13.7539
WETTED PERIMETER               29.11698
HYDRAULIC RADIUS               1.084418
SLOPE            .0478
ROUGHNESS COEF.                .025
VELOCITY HEAD                  2.93742
ENERGY HEAD      63.93742
WATER SURFACE ELEVATION    ?


WATER SURFACE ELEVATION        60.5
DISCHARGE        191.5247
AREA             18.34373
VELOCITY         10.44088
WETTED PERIMETER               25.57498
HYDRAULIC RADIUS               .7172531
SLOPE            .0478
ROUGHNESS COEF.                .025
VELOCITY HEAD                  1.692733
ENERGY HEAD      62.19274
WATER SURFACE ELEVATION    ?


WATER SURFACE ELEVATION        60
DISCHARGE        20.03891
AREA             3.569688
VELOCITY         5.613631
WETTED PERIMETER               12.62343
HYDRAULIC RADIUS               .2827827
```

```
SLOPE            .0478

ROUGHNESS COEF.                  .025

VELOCITY HEAD                    .4893301

ENERGY HEAD      60.48933
WATER SURFACE ELEVATION    ?



WATER SURFACE ELEVATION          60.3

DISCHARGE        118.8682

AREA             13.46772

VELOCITY         8.826159

WETTED PERIMETER                 24.15817

HYDRAULIC RADIUS                 .5574808

SLOPE            .0478

ROUGHNESS COEF.                  .025

VELOCITY HEAD                    1.209544

ENERGY HEAD      61.50965
WATER SURFACE ELEVATION    ?


WATER SURFACE ELEVATION          60.1

DISCHARGE        61.23205

AREA             8.829699

VELOCITY         6.934784

WETTED PERIMETER                 22.74136

HYDRAULIC RADIUS                 .3882661

SLOPE            .0478

ROUGHNESS COEF.                  .025

VELOCITY HEAD                    .7467581

ENERGY HEAD      60.84676
WATER SURFACE ELEVATION    ?
```

0.7 slope

PLAN/PLATS

ON

FILE