CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



January 24, 2019

Richard Dourte, P.E. RHD Engineering LLC 4305 Purple Sage Ave. NW Albuquerque, New Mexico 87120

RE: Lot 35 Block 6 Unit 2 SAD 227
7904 Kibo NW
Volcano Cliffs Subdivision
Grading and Drainage Plan
Engineers Stamp Date 1/22/19 (E10D056)

Dear Mr. Dourte,

Based upon the information provided in your submittal received 1/23/19, this plan cannot be approved for Grading Permit until the following comments are addressed.

PO Box 1293

- Provide a section of the NE corner showing how the flows will drain to Kibo Ave. or a pond which will hold the 100 year 10 day volume.
- Provide the easement on the west side of the property.

Albuquerque

Prior to building permit approval a pad certification will be required.

NM 87103

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist of this plan will be required.

www.cabq.gov

If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

James D. Hughes, P.E.

Principal Engineer, Hydrology

Planning Department

RR/JDH

C: File E10D056



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

-	•	#: Hydrology File #: <u>E10D056</u> Work Order#:
		work Order#:
City Address: 7904 Kibo Drive NW	10 CIIIIS 110. 2	
		Contact: Richard Dourte
Address: 4305 Purple Sage Ave. NW	, Alb. NM, 87120)
Phone#: 505.288.1621	Fax#:	E-mail: rhdengineering@outlook.com
Other Contact: Joe Simons Architecture		Contact: Joe Simons
Address: PO Box 67408, Alb. NM 87		
Phone#:	Fax#:	E-mail: joe@simonsarchitecture.com
TYPE OF DEVELOPMENT: PLA' IS THIS A RESUBMITTAL? X Yes		EESIDENCE DRB SITE ADMIN SITE
DEPARTMENT TRANSPORTATION		.OGY/DRAINAGE
Check all that Apply: TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICATI PAD CERTIFICATION CONCEPTUAL G & D PLAN X GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT PERMIT ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TO TRAFFIC IMPACT STUDY (TIS) STREET LIGHT LAYOUT OTHER (SPECIFY) PRE-DESIGN MEETING?	ON APPLIC CL)	TYPE OF APPROVAL/ACCEPTANCE SOUGHT: X 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 FLOODPLAIN DEVELOPMENT PERMIT OTHER (SPECIFY)
DATE SUBMITTED: 1-22-19	By: Richard I	Dourte
COA STAFF:		MITTAL RECEIVED:

FEE PAID:_____

RHD Engineering, LLC

Richard H. Dourte 4305 Purple Sage Ave. NW Albuquerque, NM 87120 (505)288-1621 rhdengineering@outlook.com

January 21, 2019

Mr. James D. Hughes, PE Principal Engineer, Planning Department Development Review Services 600 Second Street City of Albuquerque, NM 87102

RE: Lot 35, Block 6, Volcano Cliffs No. 2 Subd, SAD 227 (E10D056) 7904 Kibo dr NW

Dear Mr. Hughes,

Thank you for your letter dated January 17, 2019 (enclosed) regarding the above referenced project. The following is in response to your item(s):

- 1. A north arrow and scale was added.
- 2. The property line is called out.
- 3. The driveway goes thru the existing Kibo r/w, the original platting did not have a cul-de-sac at the location it presently does. The roadway easement for this cul-de-sac within this site has been shown.
- 4. A temporary bench mark has been shown (manhole in the street).

If you have any questions, please feel free to call me at 288-1621.

Sincerely,

Richard Dourte, PE

Richard Downte

RHD Engineering, LLC

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



January 17, 2019

Richard Dourte, P.E. RHD Engineering LLC 4305 Purple Sage Ave. NW Albuquerque, New Mexico 87120

RE: Lot 35 Block 6 Unit 2 SAD 227
7904 Kibo NW
Volcano Cliffs Subdivision
Grading and Drainage Plan
Engineers Stamp Date 1/10/19 (E10D056)

Dear Mr. Dourte,

Based upon the information provided in your submittal received 1/10/19, this plan cannot be approved for Grading Permit until the following comments are addressed.

PO Box 1293

Albuquerque

- Provide a scale and the north arrow.
- Provide the property line for the entire site.
- The driveway appears to be entering the site through another property, clarify.
- Provide a benchmark.

Prior to building permit approval a pad certification will be required.

NM 87103

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist of this plan will be required.

www.cabq.gov

If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

James D. Hughes, P.E.

Principal Engineer, Hydrology

Planning Department

RR/JDH

C: File E10D056

DRAINAGE NARRATIVE:

1. THIS SITE IS LOCATED WITHIN THE SAD 227 DRAINAGE PLAN. AN ALLOTMENT OF 3600SF OF IMPERVIOUS AREA PER LOT IS PERMITTED TO DRAIN TO THE SAD 227 STORM DRAIN SYSTEM. THIS SITE IS PROPOSED TO HAVE 3925SF OF IMPERVIOUS AREA. THE DIFFERENCE IN THE RUNOFF WILL NEED TO BE PONDED ONSITE. THIS SITE WOULD BE REQUIRED TO POND ONLY 26CF, SEE THE DRAINAGE CALCULATIONS BELOW. 2. BASIN N IS REQUIRED TO POND THE 100YR 6HR EVENT =391CF. THIS IS GREATER THAN THE FIRST FLUSH VOLUME OF 26CF. THE TWO PONDS FOR THIS AREA ARE 320CF+80CF= 400CF. THUS THE VOLUME PROVIDED IS GREATER THAN THE VOLUME REQUIRED. 3. BASIN S IS REQUIRED TO POND THE FIRST FLUSH VOLUME OF 86CF, THE POND VOLUME IS 100CF. THUS THE POND VOLUME PROVIDE IS GREATER THAN THE VOLUME REQUIRED.

Project: Lot 35, block 6, Vocano Cilffs no. 2

Drainage Calculations - Zone 1

Depth (inches) at 100yr Storm

 Zone
 P60
 P360
 P1440
 P4days
 P10days

 1
 1.87
 2.20
 2.66
 3.12
 3.67

 2
 2.01
 2.35
 2.75
 3.30
 3.95

 3
 2.14
 2.60
 3.10
 3.95
 4.90

 4
 2.23
 2.90
 3.65
 4.70
 5.95

 $\text{eighted E} = ((E_A*A_A) + (E_B*A_B) + (E_C*A_C) + (E_D*A_D))/(A_A + A_B + A_C + A_D)$

0.000 0%

0.000 0%

0.083 30%

0.275 100%

1422.0

0.03

0.118 63%

0.069 37%

0.187 100%

1035.4

First Flush Ponding Requirement for Basin S = Ap *0.34 in/12in/ft = 86 CF

Acres % Total

0.000 0%

0.021 23%

0.088 100%

411.8

First Flush Ponding Requirement for Basin N = AD *0.34 in/12in/ft = 26 CF

The 100 year peak flows for this developed site is 0.64CFS +.28CFS=.92CFS and the design flows are 0.91 CFS for an increase of .01 CFS. The 100 year 6 hr volume increase is (919CF+391CF)-1284CF=26CF.

V360=(Weighted E *P360)/12 in/ft

V₁₄₄₀= V₃₆₀+A_D*(P₁₄₄₀-P₃₆₀)/12in/ft

 $V_{4days}=V_{360}+A_{D}*(P_{4day}-P_{360})/12in/ft$

V10days=V360+AD*(P10days-P360)/12in/ft

12000

1284.0

0.03

8150

919.4

Weighted E= 1.284

Excess Precipiation, E(inches) - 6 HR

Peak Discharge (CFS/ACRE) 100 YR

Zone A B C D

3 1.87 2.60 3.45 5.02 4 2.20 2.92 3.73 5.25

rea SQ. FT Acres Peak Discharge (100 YR)
A= 0 0.000 0.000

1725.0

0.04

FT Acres Peak Discharge (100 YR)
0 0.000 0.000

1290.0

Area SQ. FT Acres Peak Discharge (100 YR)

501.4

0.00

0.34

0.30

0.64

0.19

Total (CFS)

Total (CFS)

1560.0

0.04

1151.3

466.1

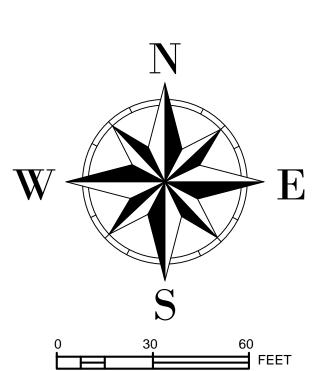
 1.29
 2.03
 2.87
 4.37

 1.56
 2.28
 3.14
 4.70

Treatment

0.36

0.91



Scale 1'' = 30'

GENERAL NOTES:

MANUFACTURER RECOMMENDATIONS.

1. THIS SITE IS NOT LOCATED IN A FEMA FLOOD HAZARD ZONE (REFER TO THE FIRM MAP 35001C0113G, EXCERPT ATTACHED).

2. RHD ENGINEERING, LLC RECOMMENDS THAT THE OWNER OBTAIN A GEOTECHNICAL

REPORT PRIOR TO DESIGN OF BUILDING FOOTING/FOUNDATION. 3. SLOPE STABILAZATION SHALL BE USED ON SLOPES GREATER THAN A 3:1 SLOPE, PER

4. ALL SWPPP REQUIREMENTS SHALL BE ADHERED TO.

5. ALL WORK ON THIS PLAN SHALL BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS. ALL APPLICABLE PERMITS SHALL BE OBTAINED PRIOR TO WORK COMMENCING.

6. ALL WORK IN THE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS.

7. THE SURVEY INFORMATION WAS PROVIDED BY MR. DAVID ACOSTA, NMPS 21082, CONSTRUCTION SURVEY TECHNOLGIES, INC.

EROSION CONTROL NOTES:

RESPONSIBILITY OF THE CONTRACTOR.

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.

3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS

INTO EXISTING RIGHT-OF-WAY. 4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT

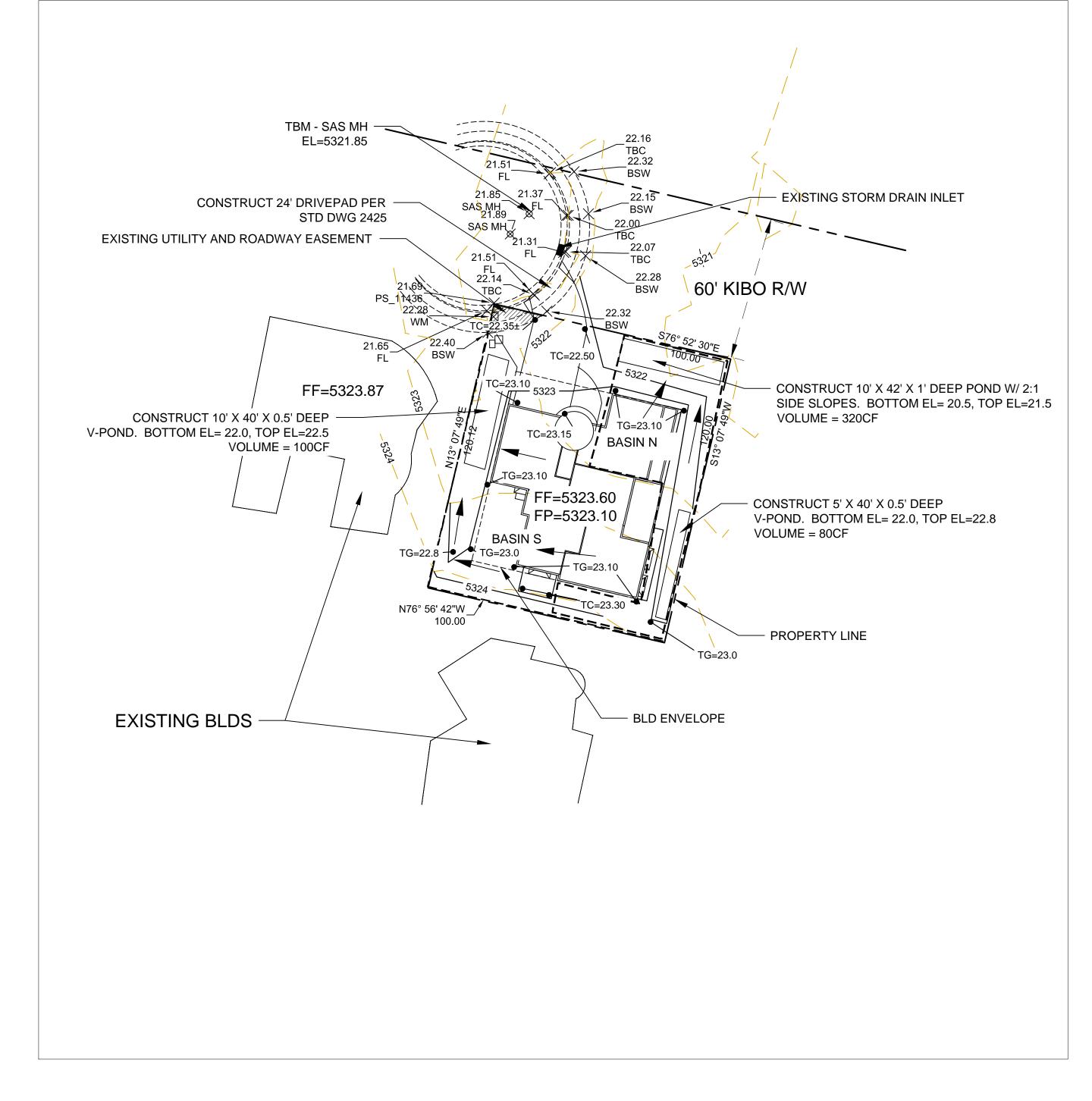
ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE

5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND

CAUTION:

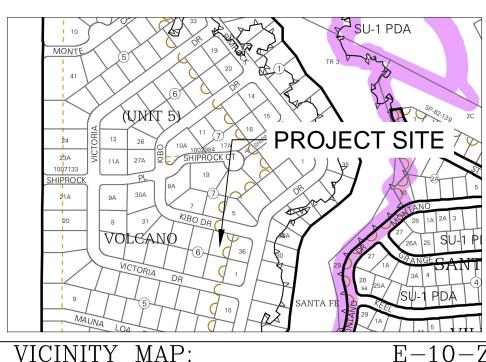
WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.



I, RICHARD DOURTE HAVE PERSONALLY INSPECTED THE PROPERTY ON

NO EARTHWORK HAS BEEN PERFORMED AND THE SITE IS





35001C0113G

LEGAL	DESCRI	PTION:
LOT 35, BLO	CK 6, VOLCANC	CLIFFS NO.
CITY OF AL	.BUQUERQUE	
BERNALILLO	COUNTY, NE	W MEXICO

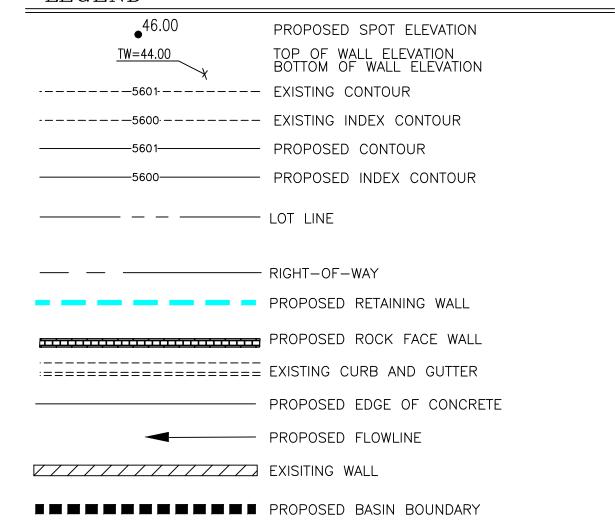
FIRM MAP

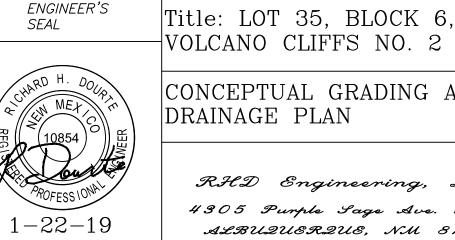
NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE

2. RETAIN THE FIRST .34" OF STORM RUNOFF FROM IMPERVIOUS AREA OF DEVELOPMENT TO CONFORM TO THE WATER QUALITY REQURIEMENTS.

LEGEND





Richard Dourte P.E. #10854

CONCEPTUAL GRADING AND DRAINAGE PLAN RHD Engineering, LLC

4305 Purple Sage Ave. NW ALBUQUERQUE, NM 87120 (505) 288-1621

SHEET # X of X JOB #

DATE