CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director

Mayor Timothy M. Keller

April 24, 2018

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

RE: **Lot 3 Block 3 Unit 22 SAD 228**
6328 Camino Alto NW
Volcano Cliffs Subdivision
Grading and Drainage Plan
Engineers Stamp Date 4/16/18 (D10D003R3)

Dear Mr. Dourte,

Based upon the information provided in your submittal received 4/16/18, this plan cannot be approved for Grading Permit until the following comments are addressed.

- Place turn blocks 3" above grade.
- Provide a note stating that a permit is required for the retaining wall and any future garden wall. This is the plan to follow dated 4/16/18 when applying for a perimeter block wall.
- Provide a cross section of the retaining walls showing location of wall pertaining to the lot lines. If encroaching into adjacent lots a written letter of approval from owners of the adjacent lots is required.

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

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

If you have any questions, please contact me at 924-3695 or Rudy Rael at 924-3977.

Sincerely,

James D. Hughes, P.E.
Principal Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2016)

Project Title: 6328 Camino Alto NW Building Permit #: _____ Hydrology File #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: Lot 3, Block 3, Volcano Cliffs Unit 22

City Address: 6328 Camino Alto NW

Applicant: RHD Engineering, LLC Contact: Richard Dourte

Address: 4305 Purple Sage Ave. NW

Phone#: 505-288-1621 Fax#: _____ E-mail: rhdengineering@outlook.com

Other Contact: Candelaria Homes Contact: Diego Candelaria

Address: _____

Phone#: _____ Fax#: _____ E-mail: diego.candelariahomes@gmail.com

Check all that Apply:

DEPARTMENT:

X HYDROLOGY/ DRAINAGE

___ TRAFFIC/ TRANSPORTATION

TYPE OF SUBMITTAL:

___ ENGINEER/ARCHITECT CERTIFICATION

___ CONCEPTUAL G & D PLAN

X GRADING PLAN

___ DRAINAGE MASTER PLAN

___ DRAINAGE REPORT

___ CLOMR/LOMR

___ TRAFFIC CIRCULATION LAYOUT (TCL)

___ TRAFFIC IMPACT STUDY (TIS)

___ OTHER (SPECIFY) _____

NO PRE-DESIGN MEETING?

IS THIS A RESUBMITTAL?: ___ Yes X No

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

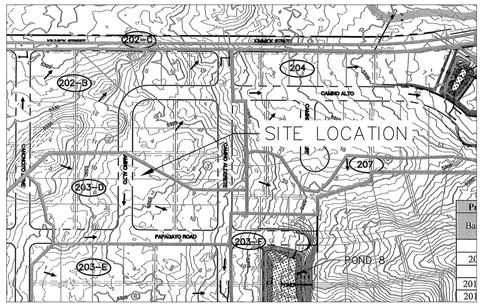
___ CLOMR/LOMR

___ OTHER (SPECIFY) _____

DATE SUBMITTED: April 16, 2018 By: Richard Dourte

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



EXCERPT FROM SAD 228 DRAINAGE REPORT

Project: 6328 CAMINO ALTO NW
Drainage Calculations - Zone 1
Total Lot Area (ac) = 0.3099

Depth (inches) at 100yr Storm					
Zone	P60	P360	P1440	P4days	P10days
1	1.87	2.20	2.66	3.12	3.67

Excess Precipiation, E(inches) - 6 HR				
	Treatment			
Zone	A	B	C	D
1	0.44	0.67	0.99	1.97

Weighted E= ((E$_A$*A$_A$)+(E$_B$*A$_B$)+(E$_C$*A$_C$)+(E$_D$*A$_D$))/(A$_A$+A$_B$+A$_C$+A$_D$)
V360=(Weighted E *P360)/12 in/ft
V1440= V360+A$_D$*(P1440-P360)/12in/ft
V4days=V360+A$_D$*(P4day-P360)/12in/ft
V10days=V360+A$_D$*(P10days-P360)/12in/ft

Peak Discharge (CFS/ACRE) 100 YR				
	Treatment			
Zone	A	B	C	D
1	1.29	2.03	2.87	4.37

**********SAD 228 Permittable Design Conditions**********

Area	SQ. FT	Acres
(0%)A=	0	0.000
(10%)B=	1350	0.031
(40%)C=	5400	0.124
(50%)D=	6750	0.155
Total	13500	0.310
Weighted E=	1.448	

Design Flows (CFS)			
Area	SQ. FT	Acres	Peak Discharge (100 YR)
A=	0	0.000	0.00
B=	1349.9	0.031	0.06
C=	5399.7	0.124	0.36
D=	6749.6	0.155	0.68
Total (CFS)			1.10

	V360	V1440	V4days	V10days
Cubic feet	1629.0	1887.7	2146.5	2455.8
Acre-ft	0.04	0.04	0.05	0.06

**********PROPOSED CONDITIONS**********

Area	SQ. FT	Acres
A=	0	0.000
B=	1350	0.031
C=	5570	0.128
D=	6580	0.151
Total	13500	0.310
Weighted E=	1.436	

Design Flows (CFS)			
Area	SQ. FT	Acres	Peak Discharge (100 YR)
A=	0	0.000	0.00
B=	1350	0.031	0.06
C=	5570	0.128	0.37
D=	6580	0.151	0.66
Total (CFS)			1.09

	V360	V1440	V4days	V10days
Cubic feet	1615.1	1867.4	2119.6	2421.2
Acre-ft	0.04	0.04	0.05	0.06

The 100 year peak flows for this developed site is 1.09 CFS and the SAD 228 permissible design flows are 1.1 CFS for an increase of -0.01 CFS.

First Flush Ponding Requirement = A$_D$ *0.46 in/12in/ft = 252 CF

DRAINAGE NARRATIVE:

1. THIS SITE IS LOCATED WITHIN THE SAD 228 DRAINAGE MASTER PLAN AREA.
2. A DRAINAGE BASIN BOUNDARY IS LOCATED ON THIS SITE. APPROXIMATELY ½ OF THIS SITE IS TO DRAIN TO THE NORTHWEST AND THE OTHER PORTION IS TO DRAIN TO THE SOUTHEAST.
3. THE VOLUMES OF THE FIRST FLUSH PONDS ARE 130CF +130CF=260CF, THIS IS GREATER THAN THE REQUIRED PONDING OF 252CF.

GENERAL NOTES:

1. THIS SITE IS NOT LOCATED IN A FEMA FLOOD HAZARD ZONE (REFER TO THE FIRM MAP 35001C0012G, 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 MANUFACTURER RECOMMENDATIONS.
4. MODIFICATIONS OR ADJUSTMENTS TO EXISTING DRAINAGE STRUCTURES/EROSION MITIGIATION IMPROVEMENTS SHALL BE DONE IN THE SAME MANNER AS THE ORIGINAL IMPROVEMENT.
5. ALL SWPPP REQUIREMENTS SHALL BE ADHERED TO.
6. 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.
7. ALL WORK IN THE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS.
8. THIS GRADING PLAN IS TO BE UTILIZED AND A COPY PROVIDED TO THE CITY WHEN APPLYING FOR THE CONSTRUCTION OF ANY GARDEN OR RETAINING WALLS, WITH RESPECT TO THIS SITE.
9. THE SURVEY INFORMATION WAS PROVIDED BYCONSTRUCTION SURVEYS TECHNOLOGIES, INC.
10. FOR SITE DIMENSIONS, BUILDING AND INFRASTRUCTURE LOCATION REFER TO THE SITE PLAN.

EROSION CONTROL NOTES:

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 RESPONSIBILITY OF THE CONTRACTOR.

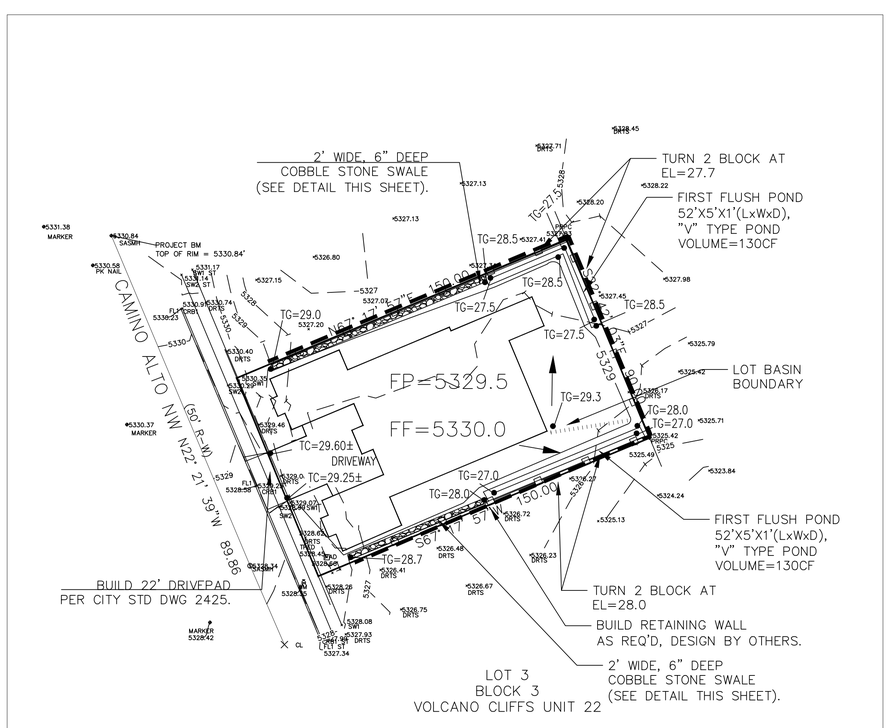
CAUTION:

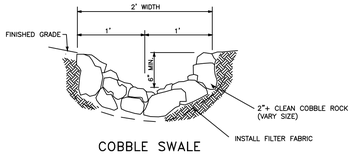
EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.

N W E S

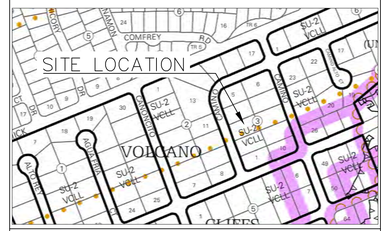
0 30 60 Feet

SCALE 1'=30'





COBBLE SWALE



VICINITY MAP: D10-Z

FIRM MAP: 35001C0012G

LEGAL DESCRIPTION:

LOT 3, BLOCK 3, VOLCANO CLIFFS UNIT 22
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. RETAIN THE FIRST .46" OF STORM RUNOFF FROM ENTIRE DEVELOPMENT TO CONFORM TO THE WATER QUALITY REQURIEMENTS

LEGEND

- TC=46.00 / FL=46.00 — PROPOSED SPOT ELEVATION
- TW=44.00 — TOP OF WALL ELEVATION
- 5601 — EXISTING CONTOUR
- 5600 — EXISTING INDEX CONTOUR
- 5601 — PROPOSED CONTOUR
- 5600 — PROPOSED INDEX CONTOUR
- LOT LINE
- RIGHT-OF-WAY
- PROPOSED RETAINING WALL (DESIGN BY OTHERS)
- PROPOSED WALL
- EXISTING CURB AND GUTTER
- PROPOSED EDGE OF CONCRETE
- PROPOSED FLOWLINE
- EXISTING WALL
- PROPOSED BASIN BOUNDARY

I HAVE PERSONALLY INSPECTED THE PROPERTY ON 4-12-18. NO EARTHWORK HAS BEEN PERFORMED AND THE SITE IS CONSISTENT WITH THE TOPO SHOWN.

Richard Dourte P.E. #10854

ENGINEER'S SEAL

RICHARD H. DOURTE NEW MEXICO 10854 REGISTERED PROFESSIONAL ENGINEER

4/16/18

Richard Dourte P.E. #10854

Title
6328 CAMINO ALTO NW

GRADING AND DRAINAGE PLAN

DRAWN BY

DATE

D.dwg

SHEET # 1 of 1

JOB #

RHD Engineering, LLC
4305 Purple Sage Ave. NW
Albuquerque, NM 87120
(505) 288-1621