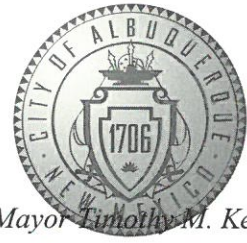


CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

May 1, 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 4/30/18 (D10D003R3)

Dear Mr. Dourte,

Based upon the information provided in your submittal received 4/30/18, this plan is approved for Grading Permit.

PO Box 1293

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

Albuquerque

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

NM 87103

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

www.cabq.gov

Sincerely,

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

RR/JDH
C: File D10D003R3



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2016)

Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____

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

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

diego.candelariahomes@gmail.com

Check all that Apply:

DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION

TYPE OF SUBMITTAL:

☐ ENGINEER/ARCHITECT CERTIFICATION

☐ CONCEPTUAL G & D PLAN

☒ GRADING PLAN

☐ DRAINAGE MASTER PLAN

☐ DRAINAGE REPORT

☐ CLOMR/LOMR

☐ TRAFFIC CIRCULATION LAYOUT (TCL)

☐ TRAFFIC IMPACT STUDY (TIS)

☐ OTHER (SPECIFY) _____

☐ PRE-DESIGN MEETING?

IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☒ 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: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

April 30, 2018

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

RE: Lot 3, Block 3, Unit 22, Volcano Cliffs Subd., SAD 228 (D10D003R3)
6328 Camino Alto NW

Dear Mr. Hughes,

Thank you for your letter dated April 24, 2018 (enclosed) regarding the above referenced project. The following is in response to your items:

1. The note to turn blocks 3" above grade has been added.
2. The note regarding the garden wall/retaining wall has been added.
3. A cross section of the wall has been added.

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

Sincerely,



Richard Dourte, PE
RHD Engineering, LLC

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.

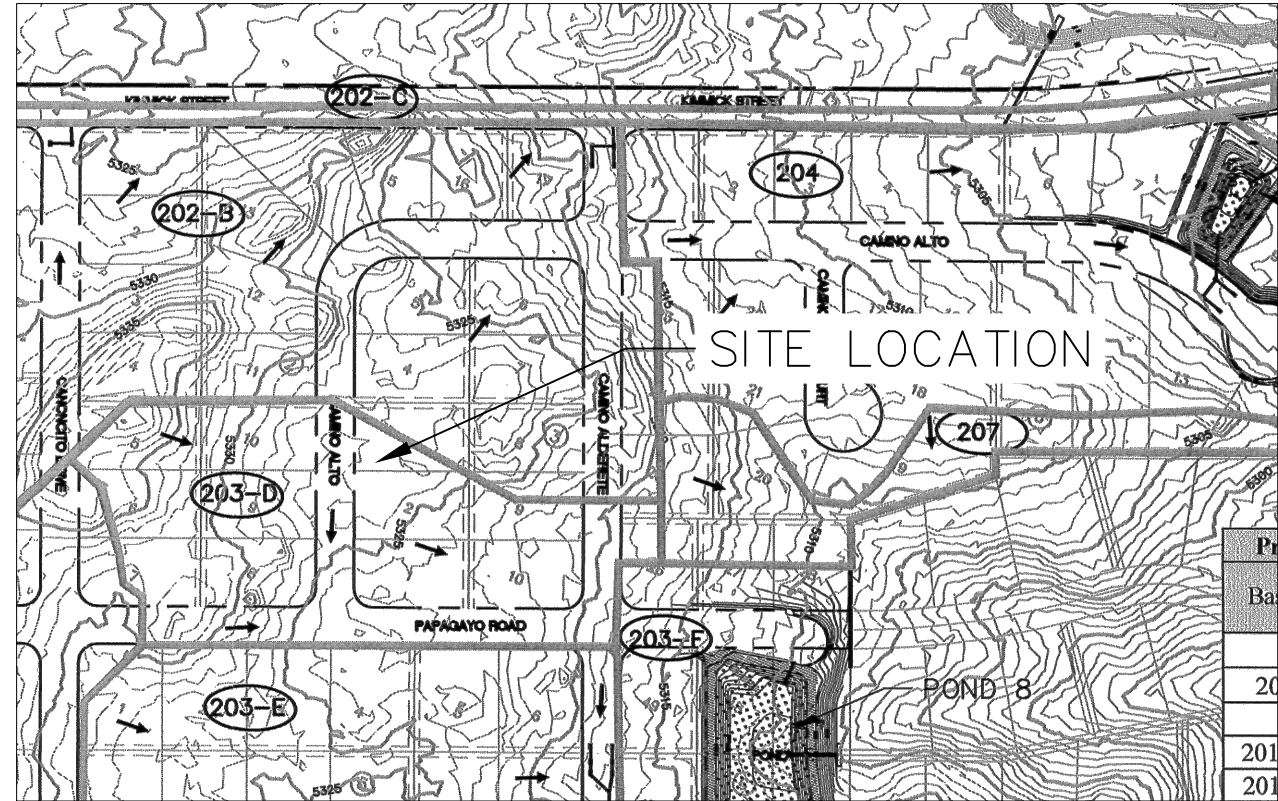
Prior to building permit approval a pad certification will be required.

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.

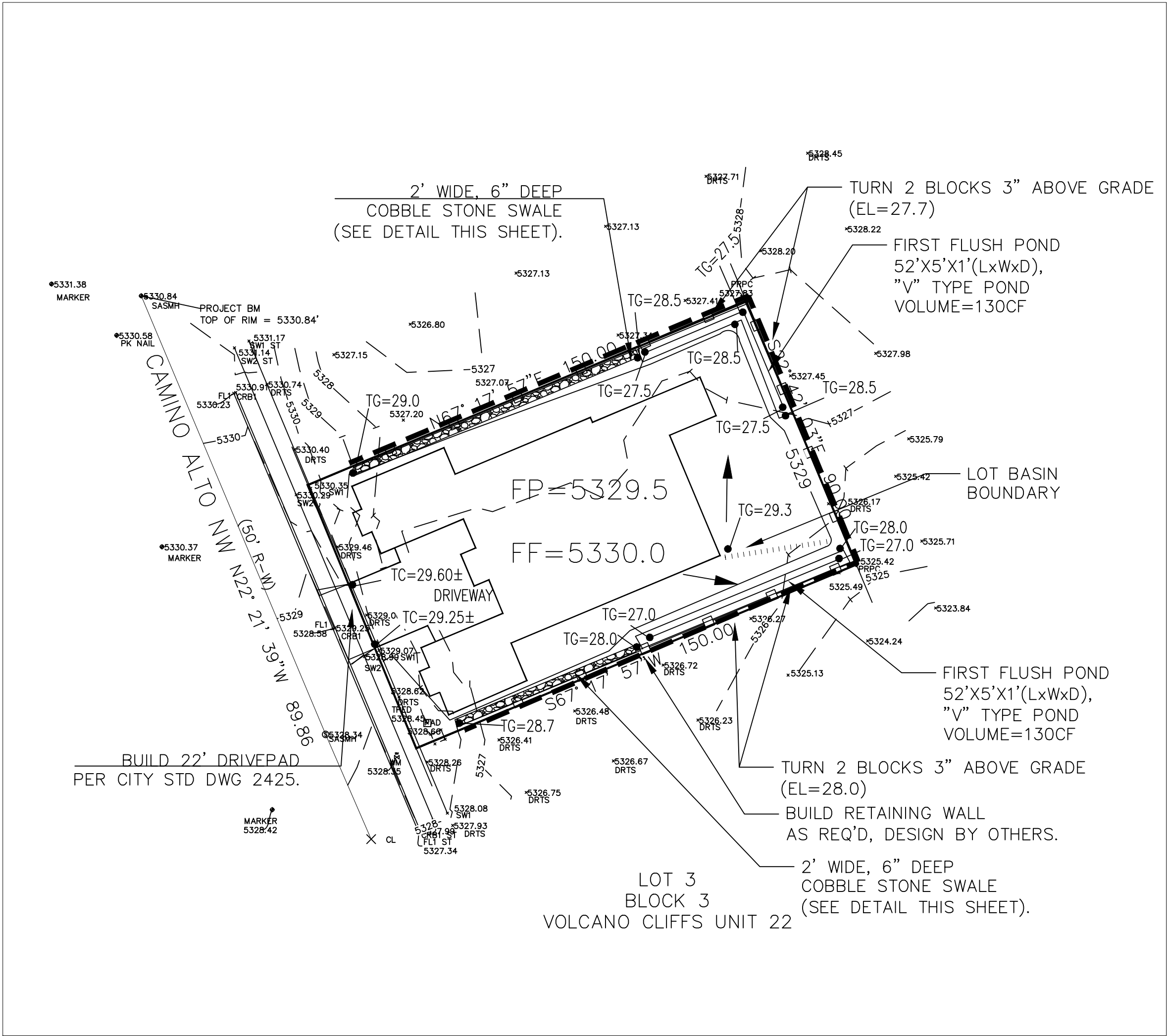
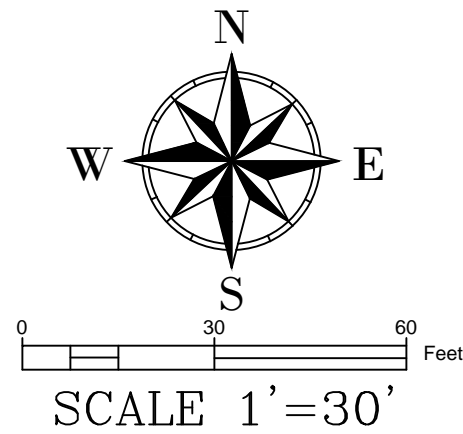
Sincerely,

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



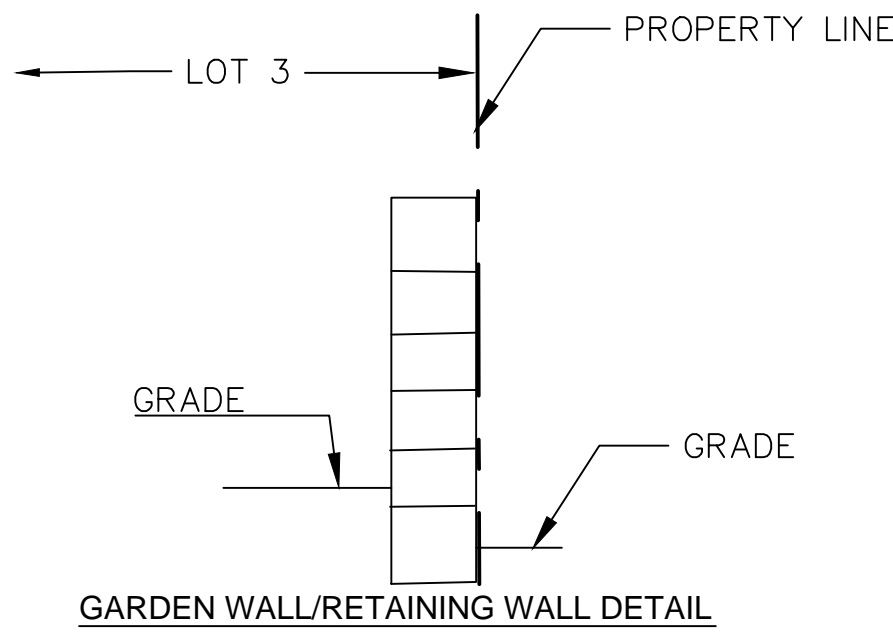
EXCERPT FROM SAD 228 DRAINAGE REPORT

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
1	1.87	2.20	2.66	3.12
Weighted E= ((Ea* A_a)+(Eb* A_b)+(Ec* A_c)+(Ed* A_d))/(A_a + A_b + A_c + A_d)				
$V_{360}=(\text{Weighted E} * P_{360})/12 \text{ in/ft}$				
$V_{1440}=V_{360}+A_d*(P_{1440}-P_{360})/12 \text{ in/ft}$				
$V_{4days}=V_{360}+A_d*(P_{4days}-P_{360})/12 \text{ in/ft}$				
$V_{10days}=V_{360}+A_d*(P_{10days}-P_{360})/12 \text{ in/ft}$				
Excess Precipitation, E(inches) - 6 HR				
Treatment				
Zone	A	B	C	D
1	0.44	0.67	0.99	1.97
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	Design Flows (CFS)	
(0%)A=	0	0.000	Area	SQ. FT
(10%)B=	1350	0.031	A=	0
(40%)C=	5400	0.124	B=	1349.9
(50%)D=	6750	0.155	C=	5399.7
Total	13500	0.310	D=	6749.6
Weighted E=	1.448		Total (CFS)	1.10
*****PROPOSED CONDITIONS*****				
Area	SQ. FT	Acres	Design Flows (CFS)	
A=	0	0.000	Area	SQ. FT
B=	1350	0.031	A=	0
C=	5570	0.128	B=	1350
D=	6580	0.151	C=	5570
Total	13500	0.310	D=	6580
Weighted E=	1.436		Total (CFS)	1.09
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 = $A_d * 0.46 \text{ in/12in/ft} = 252 \text{ CF}$				

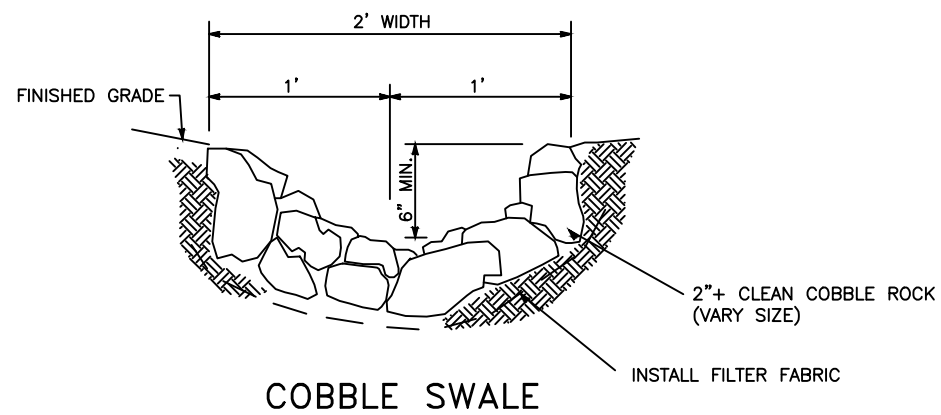


DRAINAGE NARRATIVE:

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



- ANY GARDEN WALL/RETAINING WALL IS TO BE BUILT ON-SITE (DESIGN OF THE GARDEN WALL/RETAINING WALL IS BY OTHERS).
- A PERMIT IS REQUIRED FOR THE CONSTRUCTION OF THE RETAINING WALL AND ANY FUTURE GARDEN WALL. THIS IS THE PLAN TO FOLLOW (4-30-18) WHEN APPLYING FOR A PERIMETER BLOCK WALL.



GENERAL NOTES:

- THIS SITE IS NOT LOCATED IN A FEMA FLOOD HAZARD ZONE (REFER TO THE FIRM MAP 35001C0012G, EXCERPT ATTACHED).
- RHD ENGINEERING, LLC RECOMMENDS THAT THE OWNER OBTAIN A GEOTECHNICAL REPORT PRIOR TO DESIGN OF BUILDING FOOTING/FOUNDATION.
- SLOPE STABILAZATION SHALL BE USED ON SLOPES GREATER THAN A 3:1 SLOPE, PER MANUFACTURER RECOMMENDATIONS.
- MODIFICATIONS OR ADJUSTMENTS TO EXISTING DRAINAGE STRUCTURES/EROSION MITIGATION IMPROVEMENTS SHALL BE DONE IN THE SAME MANNER AS THE ORIGINAL IMPROVEMENT.
- ALL SWPPP REQUIREMENTS SHALL BE ADHERED TO.
- 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.
- ALL WORK IN THE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS.
- 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.
- THE SURVEY INFORMATION WAS PROVIDED BYCONSTRUCTION SURVEYS TECHNOLOGIES, INC.
- FOR SITE DIMENSIONS, BUILDING AND INFRASTRUCTURE LOCATION REFER TO THE SITE PLAN.

EROSION CONTROL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
- 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.



VICINITY MAP: D10-Z



FIRM MAP: 35001C00112G

LEGAL DESCRIPTION:

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

NOTES:

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

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
Richard Dourte P.E. #10854

ENGINEER'S SEAL	Title	DRAWN BY
	6328 CAMINO ALTO NW	DATE
	GRADING AND DRAINAGE PLAN	Day
		SHEET #
		1 of 1
		JOB #