

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

October 5, 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
6536 Papagayo NW
Volcano Cliffs Subdivision
Grading and Drainage Plan
Engineers Stamp Date; 7/25/18 (D10D003I17)
Pad Certification Date; 10/4/18**

Dear Mr. Dourte,

Based upon the information provided in your submittal received 10/4/18, this plan cannot be approved for Building Permit until the following comment is addressed.

- Remove the dirt from the street and the public sidewalk. Explain to the contractor that dirt curb ramps are not allowed in the street. Use lumber, gravel or a pavement base for this ramping.

If you have any questions, please contact me at 924-3995 or Rudy Rael at 924-3977.

Sincerely,

Renee Brissette, P.E.
Senior Engineer, Hydrology
Planning Department

RR/RB
C: File D10D003I17

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 6536 Papagayo NW **Building Permit #:** _____ **Hydrology File #:** D10D00317
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: Lot 7-A-1 & 6-A-1, Block 9, Unit 18, Volcano Cliffs Sub'd (SAD 228)
City Address: 6536 Papagayo NW

Applicant: RHD Engineering, LLC **Contact:** Richard Dourte
Address: 4305 Purple Sage Ave. NW
Phone#: 505.288.1621 **Fax#:** _____ **E-mail:** rhdenengineering@outlook.com

Other Contact: Candelaria Homes **Contact:** Diego Candelaria
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** diego.candelariahomes@gmail.com

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL? Yes _____ No

DEPARTMENT _____ TRANSPORTATION HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ENGINEER/ARCHITECT CERTIFICATION
- PAD CERTIFICATION
- CONCEPTUAL G & D PLAN
- GRADING PLAN
- DRAINAGE REPORT
- DRAINAGE MASTER PLAN
- FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ELEVATION CERTIFICATE
- CLOMR/LOMR
- TRAFFIC CIRCULATION LAYOUT (TCL)
- TRAFFIC IMPACT STUDY (TIS)
- STREET LIGHT LAYOUT
- OTHER (SPECIFY) _____
- PRE-DESIGN MEETING?

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
- FLOODPLAIN DEVELOPMENT PERMIT
- OTHER (SPECIFY) _____

DATE SUBMITTED: October 4, 2018 **By:** Richard Dourte

COA STAFF: _____

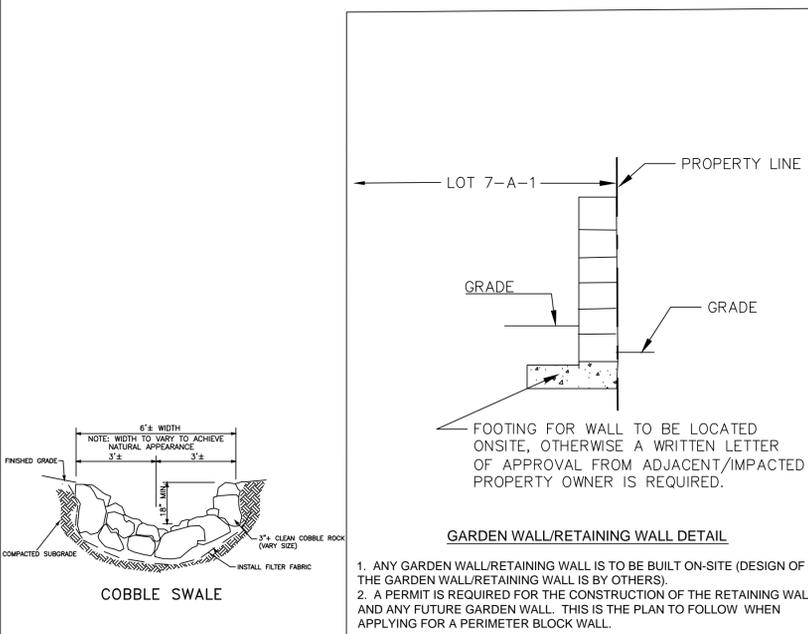
ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

DRAINAGE NARRATIVE:

- THIS SITE IS LOCATED WITHIN THE SAD 228 DRAINAGE MASTER PLAN AREA.
- THIS SITE IS TO DRAIN IN A WESTERLY DIRECTION, PER THE SAD 228 DRAINAGE MASTER PLAN.
- THE ALLOWABLE 100YR, 6HR FLOWS FROM THIS SITE IS 3.84CFS, THE FLOWS GENERATED BY THIS SITE IS 3.45CFS.
- THE VOLUME OF THE FIRST FLUSH POND IS 690CF. THIS IS GREATER THAN THE REQUIRED PONDING OF 479CF.
- WEIR EQUATION FOR EACH CELL OF A 8' CMU BLOCK:
 $Q = CL(H)^{1.5}$
 $C = 3.21$
 $L = 5'$
 $H = 5'$
 THUS $Q = 0.36CFS$, OR .72CFS PER BLOCK.
- THE OFFSITE FLOWS THAT THIS SITE IS REQUIRED TO ACCEPT IS FROM LOT 9, 0.36 AC AND THE PERMISSIBLE DEVELOPED FLOWS ARE 1.27 CFS, PER THE SAD 228 DRAINAGE PLAN. THE NUMBER OF CELLS NEEDED TO ALLOW THESE FLOWS TO PASS ARE 1.27/0.36 = 3.53 CELLS. THUS 2 BLOCKS (1.44CSF) NEED TO BE TURNED.

Project: 6536 Papagayo		
Drainage Calculations - Zone 1		
Total Lot Area (ac) = 1.0854		
Total Offsite Flow Area (ac) = 0.36		
Depth (inches) at 100yr Storm		
Zone	P ₅₀	P ₁₀₀
1	1.87	2.20
Excess Precipitation, E (inches) - 6 HR		
Zone	A	B
1	0.44	0.67
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)		
V ₃₆₀ =(Weighted E *P ₃₆₀)/12 in/ft		
V ₁₄₄₀ =V ₃₆₀ +A _D *(P ₁₄₄₀ -P ₃₆₀)/12 in/ft		
V _{10days} =V ₃₆₀ +A _D *(P _{10days} -P ₃₆₀)/12 in/ft		
V _{10days} =V ₃₆₀ +A _D *(P _{10days} -P ₃₆₀)/12 in/ft		
UPSTREAM FLOWS= (10%B+40%C+50%D)x area= 1.27CFS		
*****SAD 228 Permittable Design Conditions*****		
Area	SQ. FT	Acres
(0%)A=	0	0.000
(10%)B=	4728	0.109
(40%)C=	18912	0.434
(50%)D=	23640	0.543
Total	47280	1.085
Weighted E=	1.448	
V ₃₆₀	V ₁₄₄₀	V _{10days}
Cubic feet	5705.1	6611.3
Acre-ft	0.13	0.15
*****PROPOSED CONDITIONS*****		
Area	SQ. FT	Acres
A=	0	0.000
B=	5000	0.115
C=	29780	0.684
D=	12500	0.287
Total	47280	1.085
Weighted E=	1.215	
V ₃₆₀	V ₁₄₄₀	V _{10days}
Cubic feet	4788.1	5267.3
Acre-ft	0.11	0.12
The 100 year peak flows for this developed site is 3.45 CFS and the SAD 228 permissible design flows are 3.84 CFS for an increase of -0.39 CFS.		
First Flush Ponding Requirement = A _D *0.46 in/12in/ft = 479 CF		



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.

S.O.19 : NOTICE TO CONTRACTORS

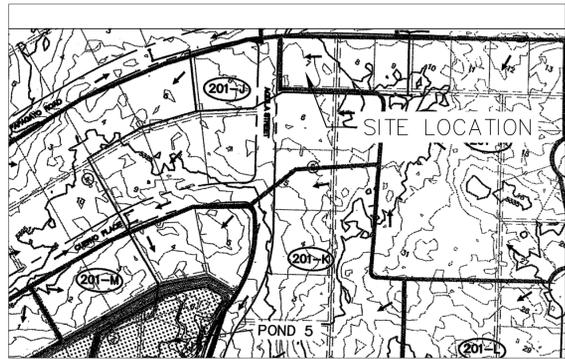
- AN EXCAVATION / CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF -WAY.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THRU UPDATE #8.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (CALL 811) FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL SOMPACTON SHALL BE ACCORDING TO TRAFFIC / STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE TE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
- THE WORK IN THE CITY ROW MUST BE INSPECTED AND ACCEPTED. THE CONTRACTOR MUST CONTACT JASON RODRIGUEZ AT 235-8016 AND CONSTRUCTION COORDINATION AT 924-3416 TO SCHEDULE INSPECTIONS.

GENERAL NOTES:

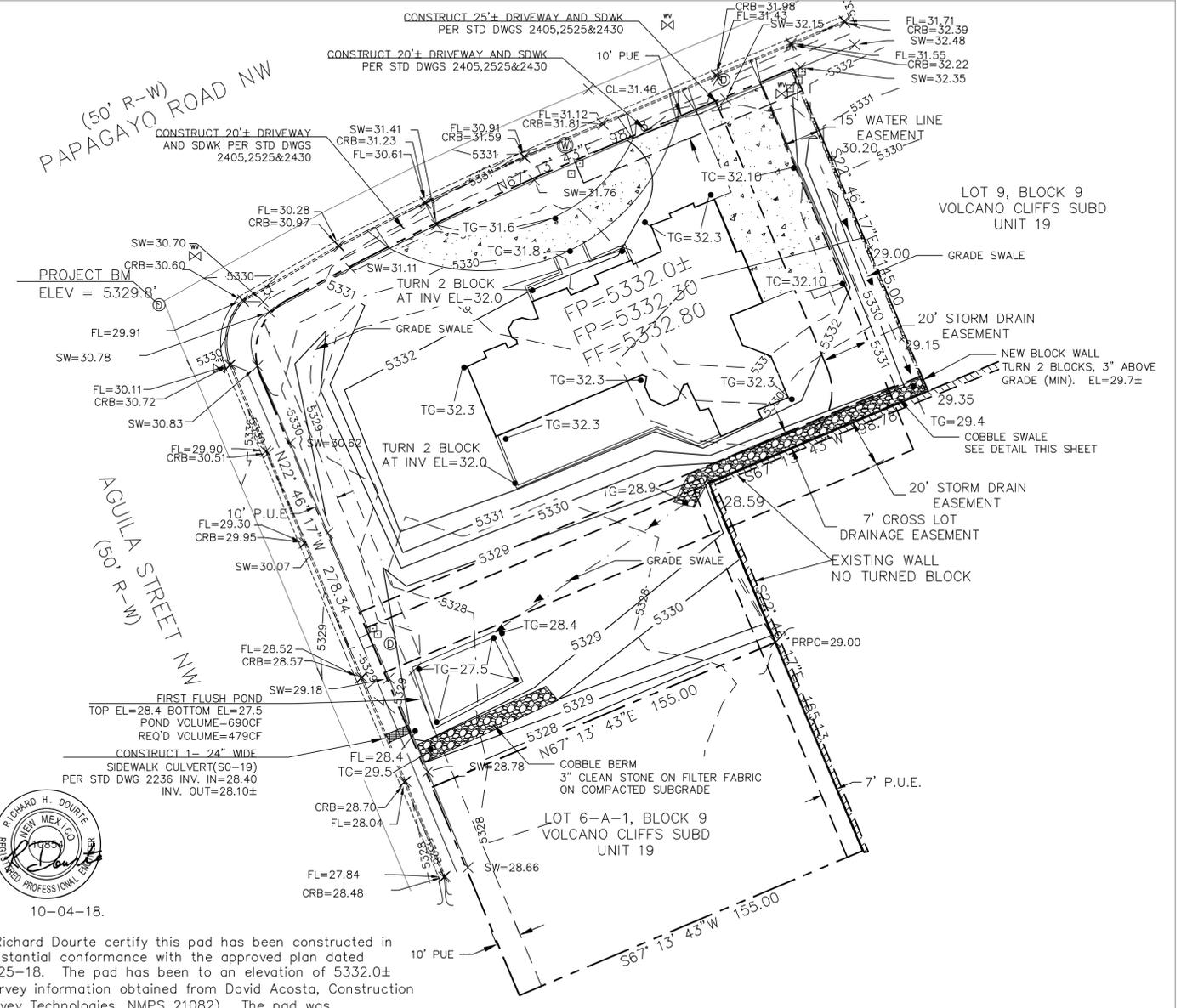
- THIS SITE IS NOT LOCATED IN A FEMA FLOOD HAZARD ZONE (REFER TO THE FIRM MAP 35001C0111G, EXCERPT ATTACHED).
- RHD ENGINEERING, LLC RECOMMENDS THAT THE OWNER OBTAIN A GEOTECHNICAL REPORT PRIOR TO DESIGN OF BUILDING FOOTING/FOUNDATION.
- SLOPE STABILIZATION SHALL BE USED ON SLOPES GREATER THAN A 3:1 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 BY CONSTRUCTION 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.



EXCERPT FROM SAD 228 DRAINAGE REPORT

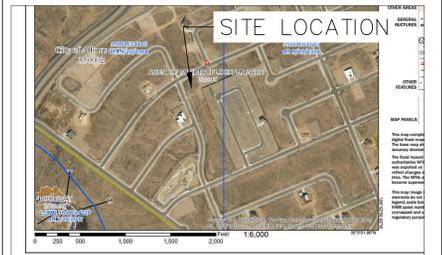


I, Richard Dourte certify this pad has been constructed in substantial conformance with the approved plan dated 7-25-18. The pad has been to an elevation of 5332.0± (survey information obtained from David Acosta, Construction Survey Technologies, NMPS 21082). The pad was constructed approximately 0.3ft lower than the design elevation. Minor adjustments to the grades in the proximity to the building may be needed. The drainage concept has not changed.

I, RICHARD DOURTE HAVE PERSONALLY INSPECTED THE PROPERTY ON 6-29-18 THE SITE IS CONSISTENT WITH THE TOPO SHOWN.
 Richard Dourte
 RICHARD DOURTE P.E. #10854
 DATE



VICINITY MAP: D-10-Z



FIRM MAP: 35001C0111G

LEGAL DESCRIPTION:

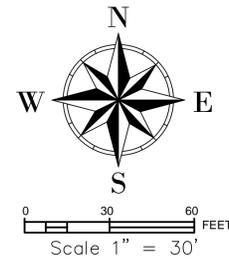
LOT 7-A-1, BLK 9, VOLCANO CLIFFS SUB D, UNIT 19
 CITY OF ALBUQUERQUE
 BERNALILLO COUNTY, NEW MEXICO

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

- 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
- PROPOSED WALL
- EXISTING CURB AND GUTTER
- PROPOSED EDGE OF CONCRETE
- PROPOSED FLOWLINE
- EXISTING WALL
- PROPOSED BASIN BOUNDARY



ENGINEER'S SEAL	Title 6536 PAPAGAYO NW	DRAWN BY
 RICHARD DOURTE P.E. #10854	GRADING AND DRAINAGE PLAN	DATE
	RHD Engineering, LLC 4305 Purple Sage Ave. NW ALBUQUERQUE, NM 87120 (505) 288-1621	SHEET # 1 of 1
Richard Dourte P.E. #10854	7/25/18	JOB #