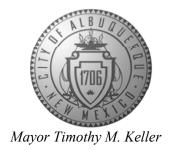
CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



October 20, 2023

David Soule, P.E. Rio Grande Engineering PO Box 93924 Albuquerque, New Mexico 87199

RE: Volcano Cliffs Unit 5 lot 12 block 7 SAD 227 7908 Emerald Dr. NW
Grading and Drainage Plan
Engineers Stamp Date; 8/28/2023 (E10D126)
Pad Certification Date; 10/19/2023

Mr. Soule,

Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 10/19/2023, this plan is approved for Building permit.

Please inform the builder/owner to attach a copy of this approved plan and this letter to the construction sets in the permitting process prior to sign-off by Hydrology.

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained, with the approved G&D plan and Pad Certification. Inform the owner & Contractor that dirt is not allowed in the public right of way to climb the curb. Crusher fines or lumber are allowed. If dirt is used this will delay the permitting process.

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,

Tiequan Chen, P.E.

Principal Engineer, Hydrology

Planning Department, Development Review Services

RR/TC File E10D126



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 7908 EMERALD	Building Permit #:	Hydrology File #:
DRB#:	EPC#:	Work Order#:
Legal Description: LOI 12, BIOCK	11 VOLCANO CLIFFS UNI	T 5
City Address: 7908 EMERALD	- 19/	
Applicant:		Contact:
Address:		
Phone#:	Fax#:	_ E-mail:
Other Contact: RIO GRANDE ENGINE	ERING	Contact: DAVID SOULE
Address. 10 2011 30321 1122 1111	U, 199	
Phone#: 505.321.9099	Fax#: 505.872.0999	E-mail: david@riograndeengineering.com
TYPE OF DEVELOPMENT:PLAT	X RESIDENCE DRI	S SITE ADMIN SITE
Check all that Apply:		
DEPARTMENT: X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICATION X PAD CERTIFICATION CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT PERMIT A ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) TRAFFIC IMPACT STUDY (TIS)	BUILDING PE CERTIFICATE PRELIMINAR SITE PLAN FO SITE PLAN FO FINAL PLAT SIA/ RELEASI PPLIC FOUNDATION GRADING PE SO-19 APPRO PAVING PERI GRADING/ PA	E OF OCCUPANCY Y PLAT APPROVAL OR SUB'D APPROVAL OR BLDG. PERMIT APPROVAL APPROVAL E OF FINANCIAL GUARANTEE N PERMIT APPROVAL RMIT APPROVAL VAL MIT APPROVAL D CERTIFICATION
STREET LIGHT LAYOUT	WORK ORDER	APPROVAL
OTHER (SPECIFY)	CLOMR/LOM	
PRE-DESIGN MEETING? IS THIS A RESUBMITTAL?: YesX No	OTHER (SPEC	DEVELOPMENT PERMIT CIFY)
DATE SUBMITTED:		
COA STAFF:	ELECTRONIC SUBMITTAL RECEIVED:	
	FEE PAID:	

Weighted E Method

										100-Year, 6-hr.			24 hour	
Basin	Area	Area	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E	Volume	Flow	Volume
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs	(ac-ft)
ALLOWED	16433.00	0.377	0%	0	20%	0.075	46%	0.1735	34%	0.128	1.259	0.040	1.21	0.045
PROPOSED	16433.00	0.377	0%	0	20%	0.075	47%	0.1773	33%	0.124	1.249	0.039	1.21	0.044
COMPARISON												0.000		0.000

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted D * Total Area

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

Where for 100-year, 6-hour storm- zone 1

Ea= 0.44	Qa= 1.29
Eb= 0.67	Qb= 2.03
Ec= 0.99	Qc= 2.87
Ed= 1.97	Qd= 4.37

ONSITE Conditions

Narrative

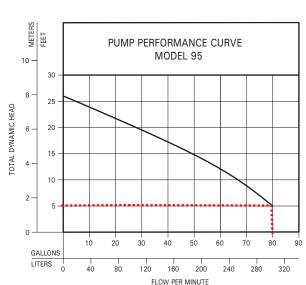
FIRST FLUSH WATER QUALITY VOLUME

	REQUIRED	PROVIDED
	(CF)	(CF)
WATER QUALITY	0	1234
FLOOD CONTROL	0	1234
TOTAL VOLUME GENERATE	1918	2073

This site is within the SAD 227 Master Drainage plan boundaries. The site is to maintain existing patterns. Due to city height restrictions we must maintain the average natural grade. The site does not exceed the SAD 228 developed conditions assumptions therefore ponding is not required. Upland flow is allowed to enter and pass throught sight within existing drainage easement. Due to height restrictions, the pad is not able to be raised, therfore the site will not drain to the street. A sump pump has been added to drain the rear yard. The pump curve shows a discharge rate of .16 cfs, therefor the pond will drain in 3.3 hours This plan is in conformance to the master drainage plan

PRODUCT SPECIFICATIONS

	Horse Power	1/2]
R	Voltage	115	1
	Phase	1 Ph	1
MOTOR	Hertz	60 Hz]
5	RPM	3450	6 7/32" ——
Σ	Туре	Permanent split capacitor	(158 mm)
	Insulation	Class B	3 7/8" (98 mm) 4 5/8" (117 mm)
	Amps	10.5	
	Operation	Automatic	37/8" (98 mm
	Auto On/Off Points	9-1/2" (24 cm) / 2-1/2" (6.4 cm)	
	Discharge Size	1-1/2" NPT	
	Solids Handling	1/2" (12 mm) spherical solids	4" (102 mm)
<u>∟</u>	Cord Length	15' (4.6 m)	
PUMP	Cord Type	UL listed, 3-wire, grounded plug	1 1/2" NP
4	Max. Head	26' (7.9 m)	
	Max. Flow Rate	80 GPM (303 LPM)]
	Max. Operating Temp.	130° F (54° C)	
	Cooling	Oil filled	
	Motor Protection	Auto reset thermal overload	
	Сар	Cast iron]
	Motor Housing	Cast iron	12 1/8" (308 mm)
	Pump Housing	Cast iron	
S	Base	Cast iron	
A	Upper Bearing	Sleeve bearing	5 3/8" (137 mm)
2	Lower Bearing	Ball bearing	
Щ	Mechanical Seals	Carbon and ceramic	
MATERIALS	Impeller Type	Non-clogging vortex]
	Impeller	Engineered thermoplastic	SK3129
	Hardware	Stainless steel	
	Motor Shaft	AISI 1215 cold rolled steel	
	Gasket	Neoprene]

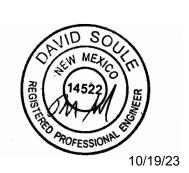




CONSTRUCT ALL SWALES AND EROSION PROTECTION (SHOWN HATCHED) BELOW ADJACENT GRADE TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY. ----' PLACE 2" LAYER OF GRAVEL AT FLOW LINE

EARTHEN SWALE

I, DAVID SOULE HAVE PERSONALLY INPECTED THE SITE. I HEREBY CERTIFY THE PAD HAS BEEN CONSTRUCTED SUCH THAT IT IS IN SUBSTANTIAL CONFORMANCE TO THE APPROVED GRADING PLAN DATED 8/28/23



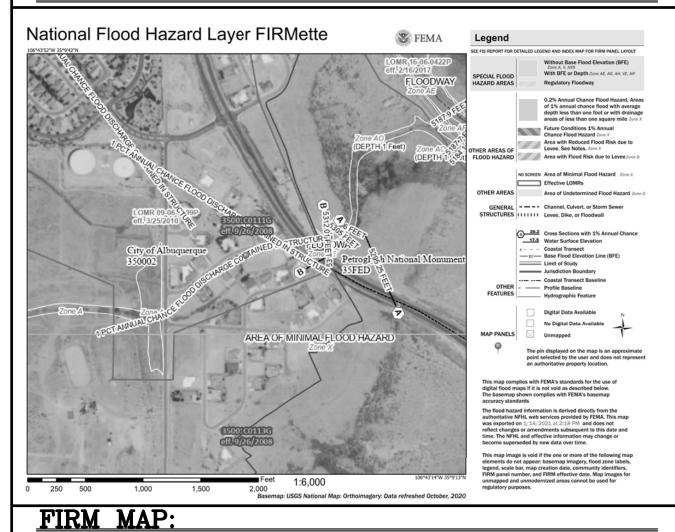
BENCHMARK SET PK NAIL ELEVATION=5319.19~ 13 LF OF À" PVC PIPE UNDER SIDEWALK HIGHEST NATIVE GRADE= 5319.88 EX BLOCK WALL 127 LF OF 2" FORCE MAIN DISCHARGE TO FACE OF CURB PER COA STD DWG 2235 SO-19 PERMIT REQUIRED 251 ≭5317.41 NG FF= 5318.78 FP= 5318.28 AVERAGE NATIVE GRADE= 5318.28 EARTHEN LOWEST NATIVE SWALE -GRADE= 5316.68 252 *5317.32 NG 1-ZOELLER N95 SUMP PUMP - PLACED IN 24" CMP CULVERT WITH OPEN GRATE 253 ×5318.68 NG 254 *5318.88 NG RETENTION POND TOP= 5317.00 BOTTOM= 5316.00 VOLUME= 2073 CF 256 *5318.36 NG

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.
- 5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



VICINITY MAP:



LEGAL DESCRIPTION:

LOT 12 BLOCK 11 UNIT 5 VOLCANO CLIFFS SUBDIVISON CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NOTES:

- 1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- 2. ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
- 3. ANY PERIMETER WALLS MUST BE PERMITED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.

4. SURVEY INFORMATION PROVIDED BY COMMUNITY SCIENCES CORPORATION USING NAVD

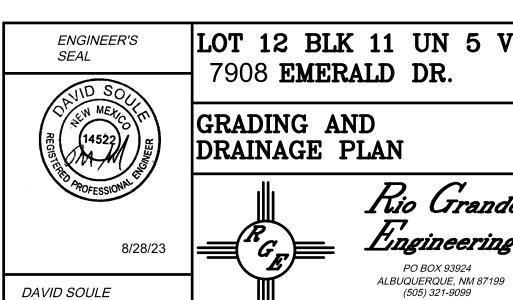
- 5. A PAD ELEVATION CERTIFICATION SHALL BE REQUIRED PRIOR TO RELEASE OF BUILDING

LEGEND

P.E. #14522

XXXX	EXISTING CONTOUR
XXXX	EXISTING INDEX CONTOUR
	PROPOSED CONTOUR
XXXX	PROPOSED INDEX CONTOUR
* XXXX	EXISTING SPOT ELEVATION
■ XXXX	PROPOSED SPOT ELEVATION
	BOUNDARY
	ADJACENT BOUNDARY
=========	EXISTING CURB AND GUTTER
$-\!$	PROPOSED EARTHEN SWALE
A A A	PROPOSED CONCRETE
	PROPOSED PONDING

SCALE: 1"=20'



LOT 12 BLK 11 UN 5 VC DRAWN BY DEM DATE 8-26-23 Lot 12 Blk 11 Un 5 VC .DWG Rio Grande SHEET# C1 Lingineering PO BOX 93924 JOB#

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.