

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

August 29, 2023

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

RE: **Lot 12 Block 11 Unit 5 SAD 227**
7908 Emerald Dr. NW
Volcano Cliffs Subdivision
Grading and Drainage Plan
Engineers Stamp Date 8/28/2023 (E10D126)

Mr. Soule,

Based upon the information provided in your submittal received 8/29/2023, this plan is approved for Grading Permit.

PO Box 1293

Prior to Building permit approval a Pad Certification will be required, provided by the Engineer or a registered Land Surveyor.

Albuquerque

Advise the owner contractor not to use dirt as a ramp to climb the curb, use lumber or crusher fines for this purpose. Place this note on the plan.

NM 87103

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. Also, if a swimming pool is to be placed after this approval a new grading and drainage plan will need to be resubmitted showing the changes for the land treatments.

www.cabq.gov

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist is required.

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

Sincerely,

Tiequan Chen, P.E.
Principal Engineer, Hydrology
Planning Department, Development Review Services

RR/TC
C: 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: LOT 12, Block 11 VOLCANO CLIFFS UNIT 5
City Address: 7908 EMERALD

Applicant: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: RIO GRANDE ENGINEERING **Contact:** DAVID SOULE
Address: PO BOX 93924 ALB NM 87199
Phone#: 505.321.9099 **Fax#:** 505.872.0999 **E-mail:** david@riograndeengineering.com

TYPE OF DEVELOPMENT: _____ PLAT ☒ RESIDENCE _____ DRB SITE _____ ADMIN SITE

Check all that Apply:

DEPARTMENT:
☒ HYDROLOGY/ DRAINAGE
_____ TRAFFIC/ TRANSPORTATION

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?

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
_____ FLOODPLAIN DEVELOPMENT PERMIT
_____ OTHER (SPECIFY) _____

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

Weighted E Method

								100-Year, 6-hr.			24 hour
Basin	Area (sf)	Area (acres)	Treatment A % (acres)	Treatment B % (acres)	Treatment C % (acres)	Treatment D % (acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (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

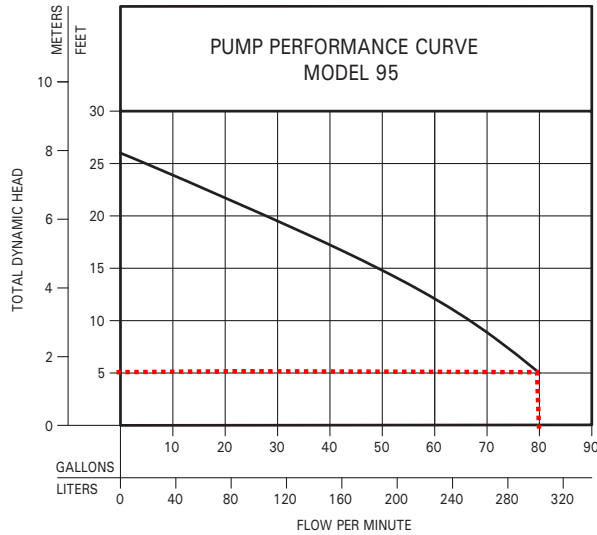
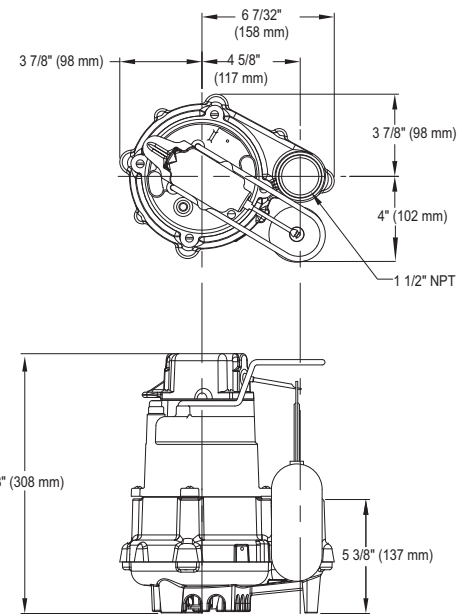
FIRST FLUSH WATER QUALITY VOLUME	REQUIRED (CF)	PROVIDED (CF)
WATER QUALITY	0	1234
FLOOD CONTROL	0	1234
TOTAL VOLUME GENERATE	1918	2073

Narrative

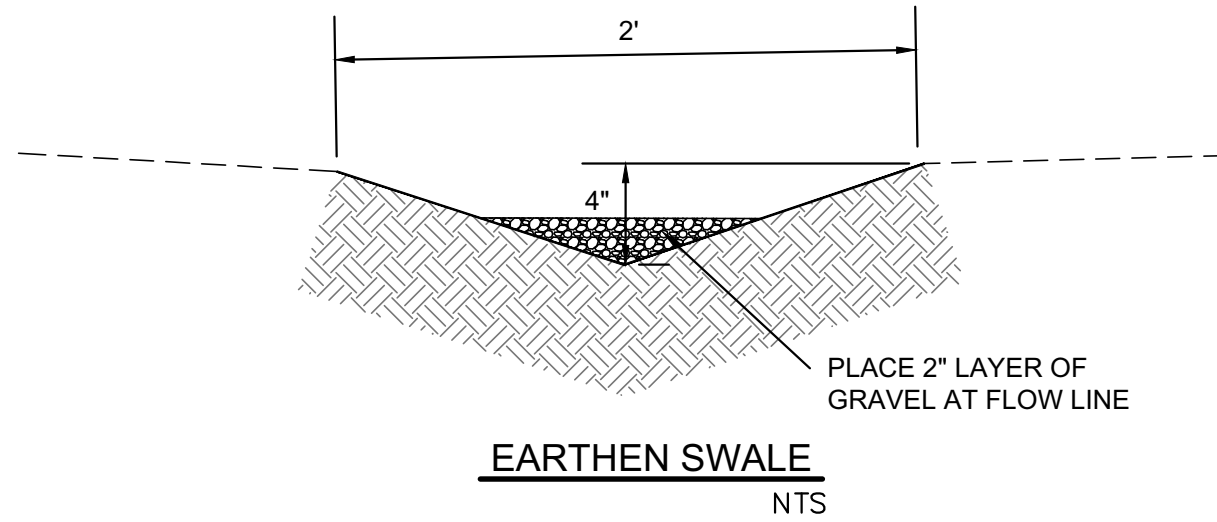
This site is within the SAD 227 Master Drainage plan boundaries. The site is to maintain existing patterns. Due to city height restrictions we must maintain th average natural grade.The site does not exceed the SAD 228 developed conditions assumptions therefore ponding is not required. Upland flow is 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

MOTOR	Horse Power	1/2
	Voltage	115
	Phase	1 Ph
	Hertz	60 Hz
PUMP	RPM	3450
	Type	Permanent split capacitor
	Insulation	Class B
	Amps	10.5
MATERIALS	Operation	Automatic
	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
	Cord Length	15' (4.6 m)
	Cord Type	UL listed, 3-wire, grounded plug
	Max. Head	26' (7.9 m)
	Max. Flow Rate	88 GPM (330 LPM)
	Max. Operating Temp.	130° F (54° C)
	Cooling	Oil filled
	Motor Protection	Auto reset thermal overload
	Cap	Cast iron
	Motor Housing	Cast iron
	Pump Housing	Cast iron
	Base	Cast iron
	Upper Bearing	Sleeve bearing
	Lower Bearing	Ball bearing
	Mechanical Seals	Carbon and ceramic
	Impeller Type	Non-clogging vortex
	Impeller	Engineered thermoplastic
	Hardware	Stainless steel
	Motor Shaft	AISI 1215 cold rolled steel
	Gasket	Neoprene

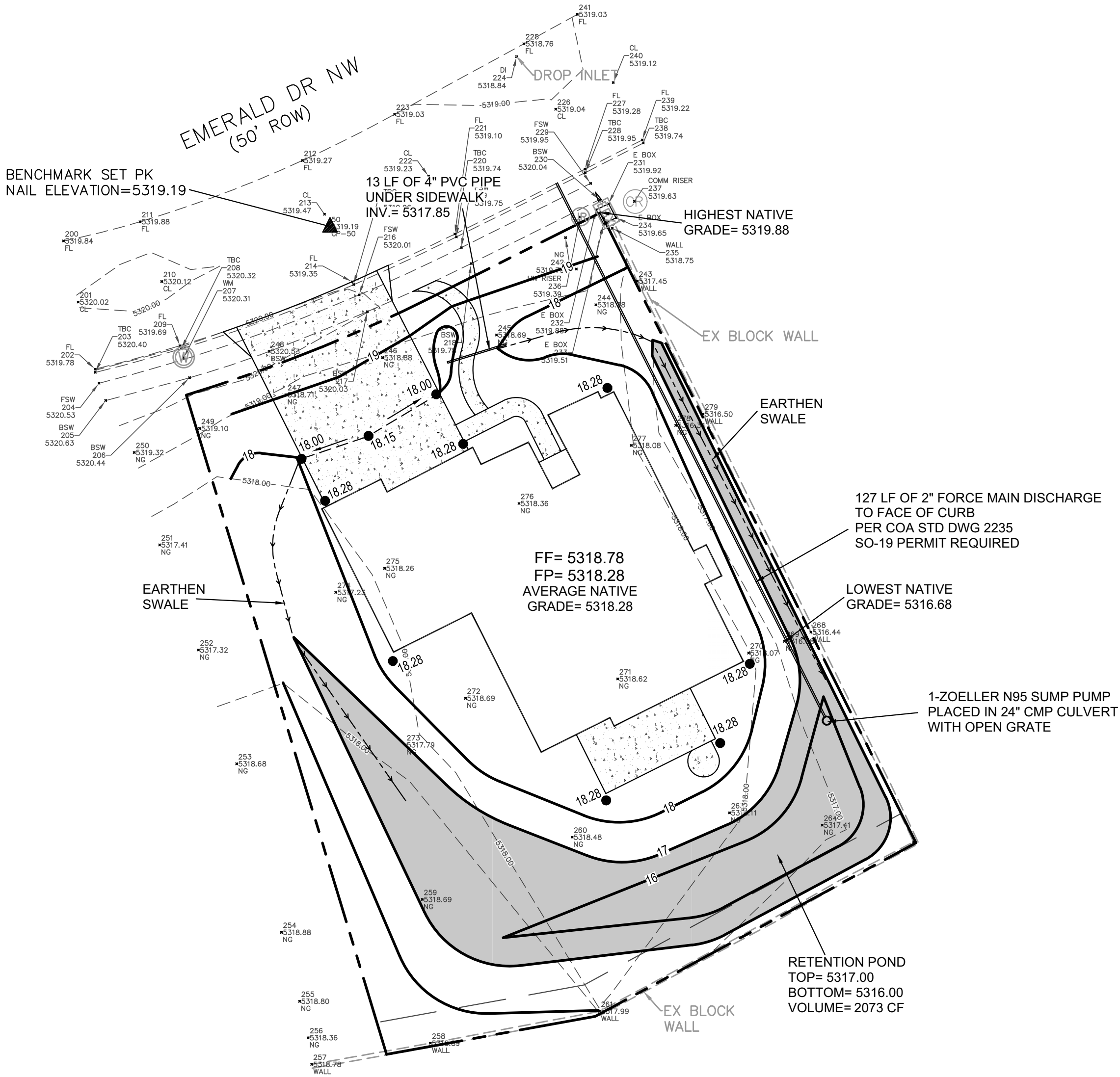


CONSTRUCT ALL SWALES AND EROSION PROTECTION (SHOWN HATCHED) BELOW ADJACENT GRADE TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY.



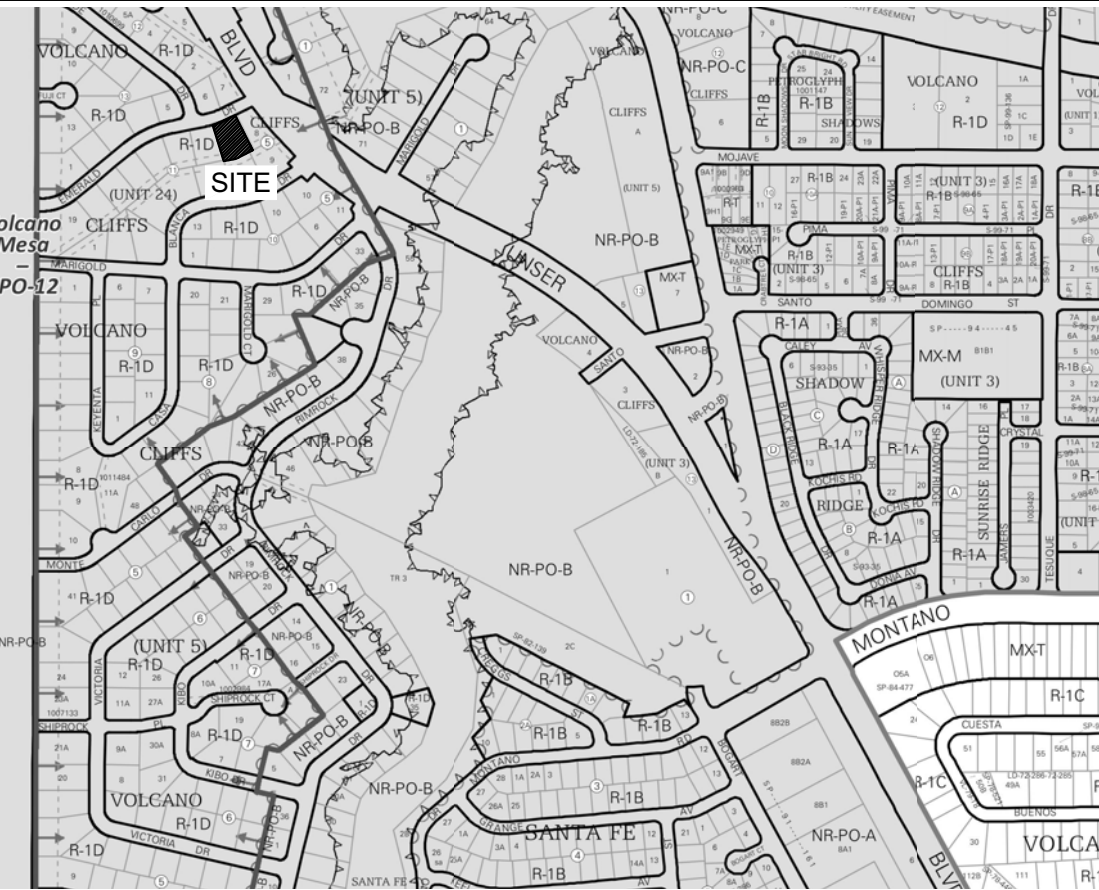
CAUTION:

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.

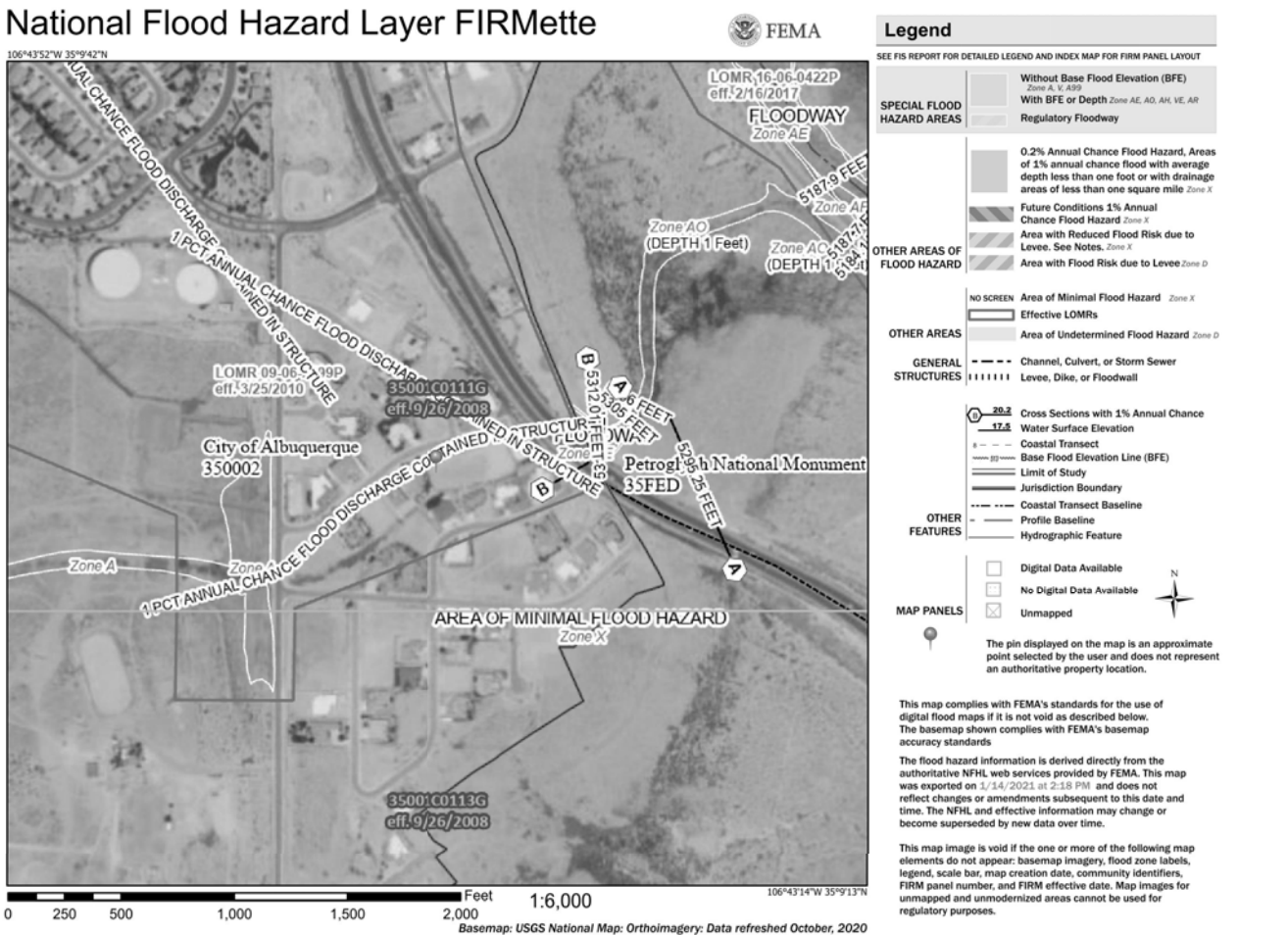


EROSION CONTROL NOTES:

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



VICINITY MAP:



FIRM MAP:

LEGAL DESCRIPTION:

LOT 12 BLOCK 11 UNIT 5 VOLCANO CLIFFS SUBDIVISION

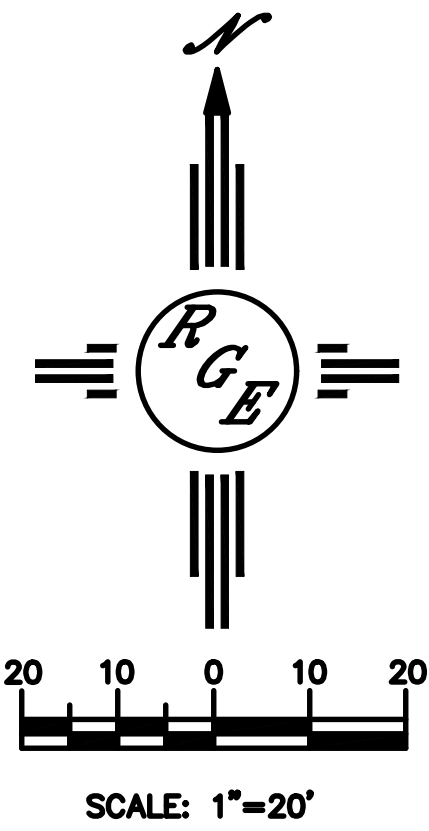
CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NOTES:

- ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
- ANY PERIMETER WALLS MUST BE PERMITTED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
- SURVEY INFORMATION PROVIDED BY COMMUNITY SCIENCES CORPORATION USING NAVD DATUM 1988.
- A PAD ELEVATION CERTIFICATION SHALL BE REQUIRED PRIOR TO RELEASE OF BUILDING PERMIT.

LEGEND

-----XXXX-----	EXISTING CONTOUR
-----XXXX-----	EXISTING INDEX CONTOUR
-----XXXX-----	PROPOSED CONTOUR
-----XXXX-----	PROPOSED INDEX CONTOUR
• XXXX	EXISTING SPOT ELEVATION
● XXXX	PROPOSED SPOT ELEVATION
-----	BOUNDARY
-----	ADJACENT BOUNDARY
=====	EXISTING CURB AND GUTTER
-----<-----	PROPOSED EARTHEN SWALE
-----	PROPOSED CONCRETE
-----	PROPOSED PONDING



ENGINEER'S SEAL DAVID SOULE NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 14522 8/28/23	LOT 12 BLK 11 UN 5 VC 7908 EMERALD DR. GRADING AND DRAINAGE PLAN Rio Grande Engineering P.O. BOX 53924 ALBUQUERQUE, NM 87199 (505) 321-9099	DRAWN BY DEM
		DATE 8-26-23
DAVID SOULE P.E. #14522		SHEET # C1
		JOB #