

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

October 26, 2023

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

RE: **Lot 12 Block 3 Unit 22 SAD 228**
6509 Camino Del Oeste NW
Volcano Cliffs Subdivision
Grading and Drainage Plan
Engineers Stamp Date 12/20/2022 (D10D003U14)
Pad Certificate Date: 1/12/2023
CO Certification Date: 7/28/2023

PO Box 1293

Mr. Soule,

Albuquerque

Based on the Certification received on 10/26/2023, the site is acceptable for release of Certificate of Occupancy by Hydrology.

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

NM 87103

Sincerely,

www.cabq.gov

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

RR/TC
C: File D10D003U14

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

December 21, 2022

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

RE: **Lot 14 Block 3 Unit 19 SAD 228**
6509 Camino Del Oeste NW
Volcano Cliffs Subdivision
Grading and Drainage Plan Date: 10/24/2022
Revised Grading and Drainage Plan Date: 12/20/2022
File Number (D10D003U14)

Mr. Soule,

Based upon the information provided in your submittal received 12/20/2022, this plan is approved for Grading Permit and will now be the plan of record.

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.

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 the grading and drainage plan will change and will need to be resubmitted.

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 924-3695 or Rudy Rael at 924-3977.

Sincerely,

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

RR/SB
C: File D10D003U14



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 6509 caminodeloeste **Building Permit #:** _____ **Hydrology File #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: LOT 12, Block 3 VOLCANO CLIFFS UNIT 19
City Address: 6509 camino del oeste

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

Basin	Area		Treatment A		Treatment B		Treatment C		Treatment D		100-Year, 6-hr.		24 hour	
	(sf)	(acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	% (acres)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)	Flow cfs
ALLOWED	16824.00	0.388	0%	0	20%	0.077	46%	0.1777	34%	0.131	1.345	0.043	0.68	0.048
PROPOSED	16824.00	0.388	0%	0	28%	0.108	21%	0.0811	51%	0.197	1.546	0.050	0.47	0.057
COMPARISON														0.009

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= 0.55
Eb= 0.73
Ec= 0.95
Ed= 2.24

Qa= 1.54
Qb= 2.16
Qc= 2.87
Qd= 4.12.

ONSITE Conditions

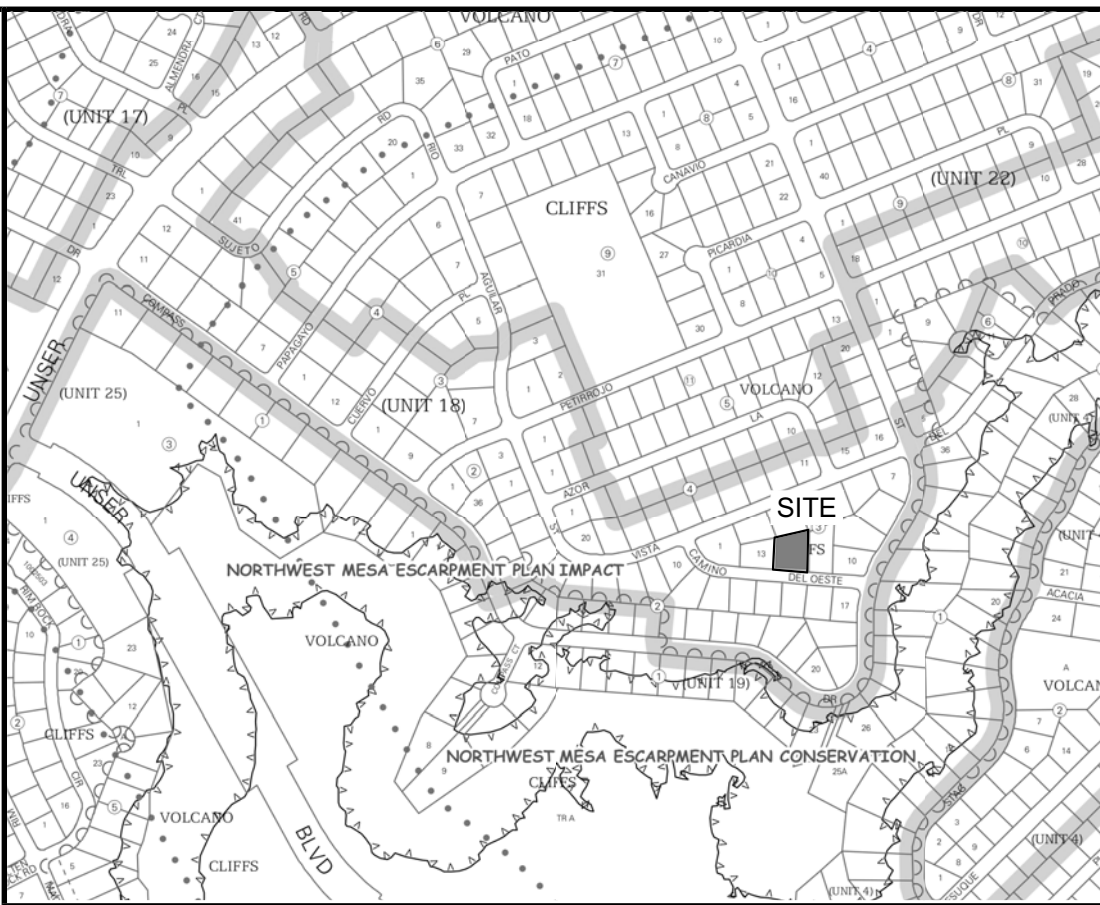
FIRST FLUSH WATER QUALITY VOLUME REQUIRED (CF)	PROVIDED (CF)
0	396
392	

Narrative

This site is within the SAD 228 Master Drainage plan boundaries. The site is to maintain existing patterns and drain to the adjacent roadway. The site does exceed the SAD 228 developed conditions assumptions therefore ponding is required. No upland flow enter the site. Ponding is utilized to keep pad as low as possible due to height restrictions. This plan is in conformance to the master drainage plan.

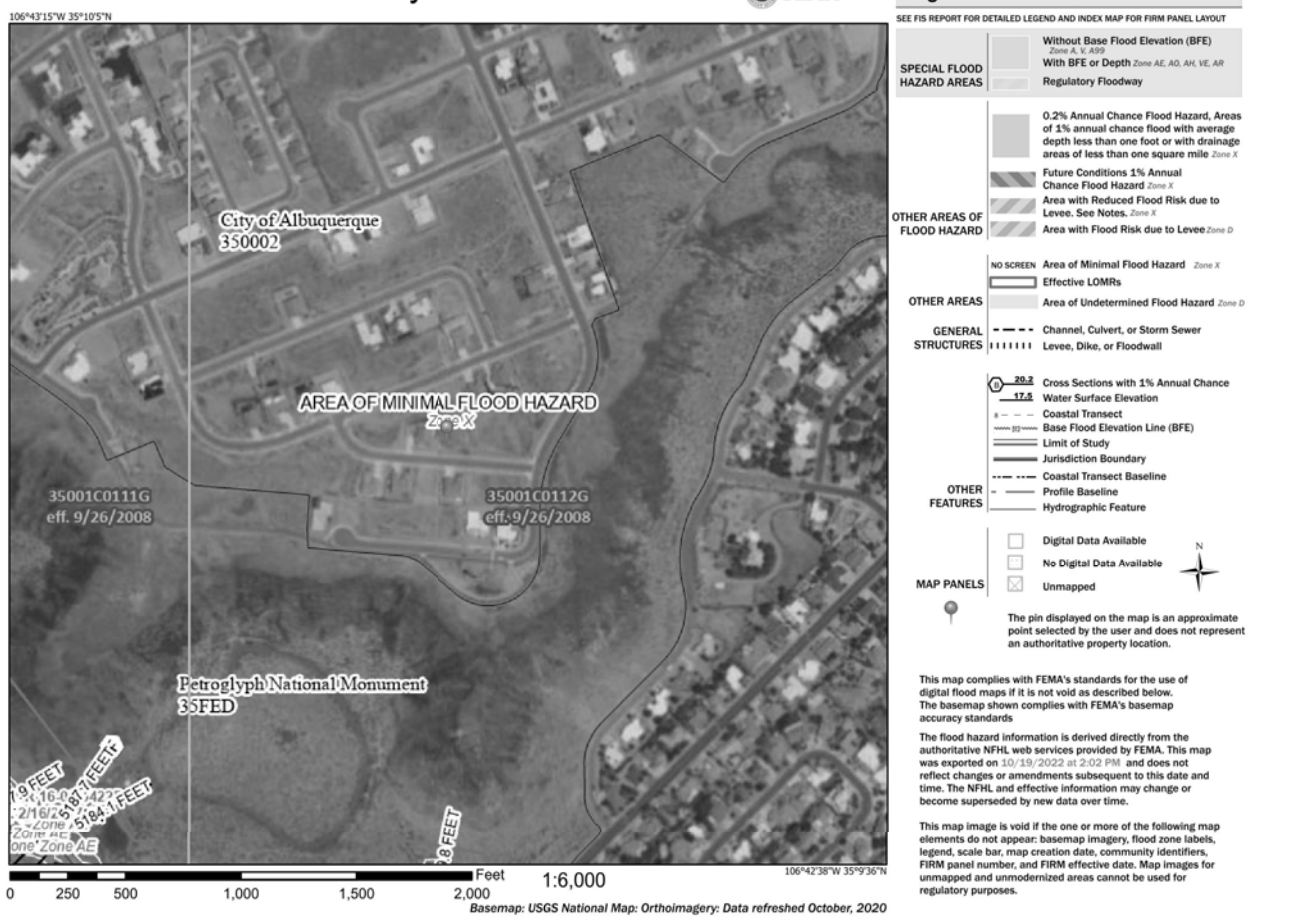
EROSION CONTROL NOTES:

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



VICINITY MAP: D-10-Z

National Flood Hazard Layer FIRMette



FIRM MAP:

LEGAL DESCRIPTION:

LOT 12 BLOCK 3 UNIT 19 VOLCANO CLIFFS SUBDIVISION
CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NOTES:

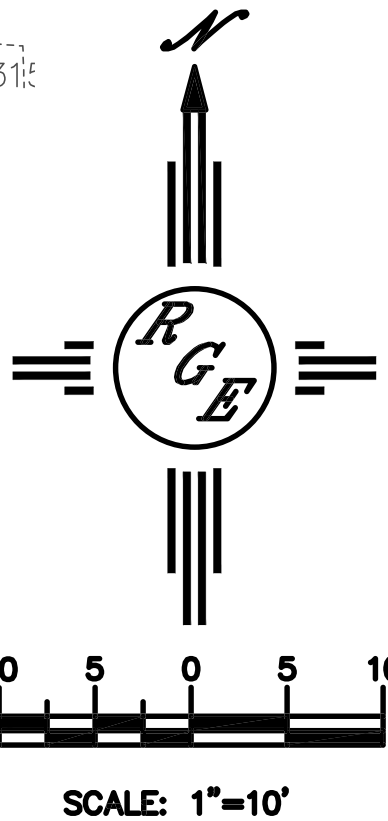
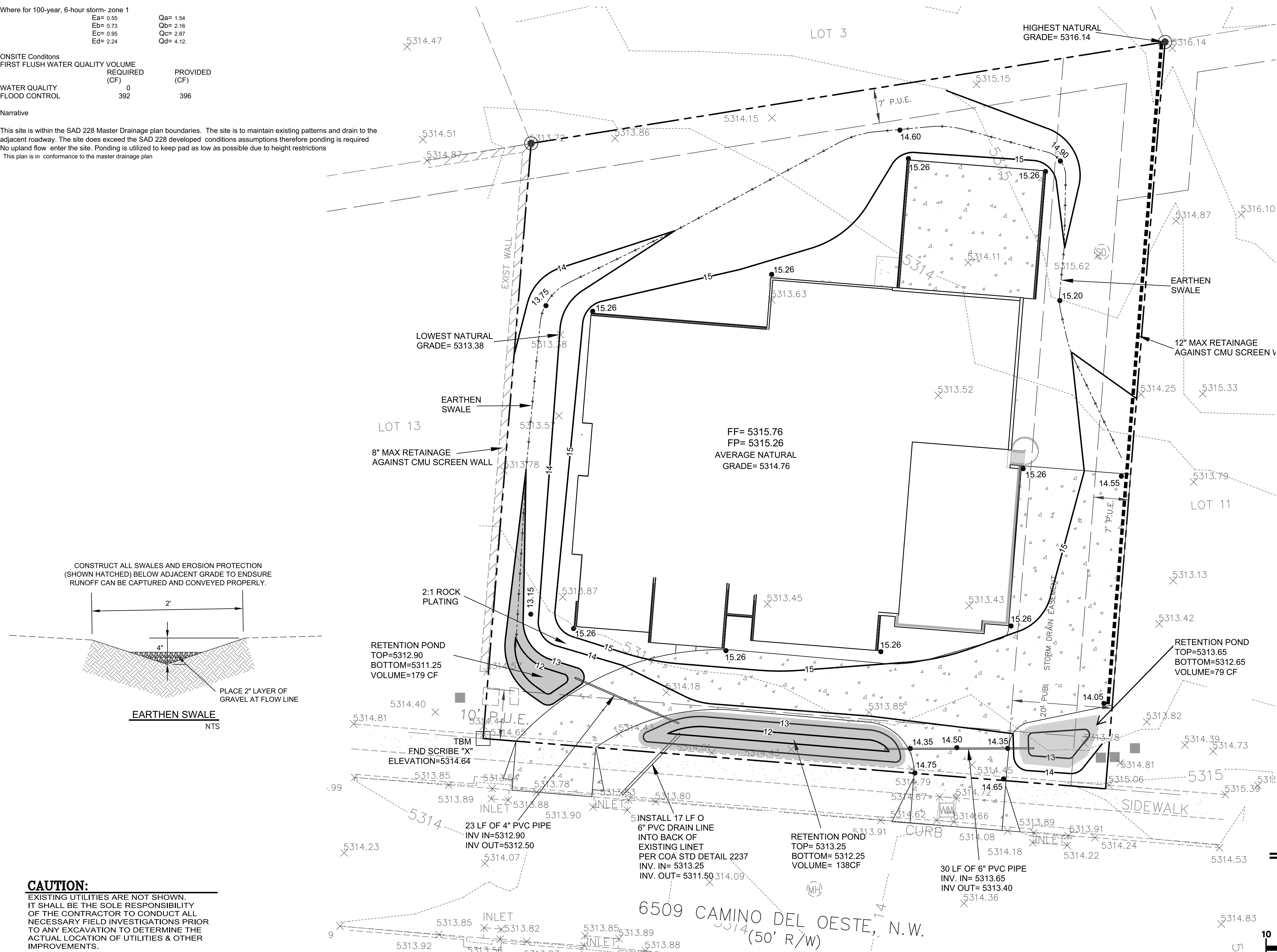
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
3. ANY PERIMETER WALLS MUST BE PERMITTED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
4. SURVEY INFORMATION PROVIDED BY COMMUNITY SCIENCES CORPORATION USING NAVD DATUM 1988.
5. 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 RETAINING WALL
-----<-----	PROPOSED PONDING
-----<-----	PROPOSED CONCRETE

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.



ENGINEER'S SEAL DAVID SOULE P.E. #14522	LOT 12 BLK 3 UN 19 VC 6509 CAMINO DEL OESTE GRADING AND DRAINAGE PLAN P.O. BOX 53924 ALBUQUERQUE, NM 87199 (505) 321-9099	DRAWN BY DEM
		DATE 12-14-22
		SHEET # C1
		JOB #

Weighted E Method

Basin	Area (sf)	Area (acres)	100-Year, 6-hr.					Flow cfs	24 hour Volume (ac-ft)					
			Treatment A % (acres)	Treatment B % (acres)	Treatment C % (acres)	Treatment D % (acres)	Weighted E (ac-ft)			Volume (ac-ft)				
ALLOWED PROPOSED COMPARISON	16824.00	0.386	0%	0	20%	0.077	48%	0.1777	34%	0.131	1.345	0.043	0.68	0.048
	16824.00	0.386	0%	0	28%	0.108	21%	0.0811	51%	0.197	1.546	0.050	0.47	0.057
												0.006		0.009

Equations:

Weighted E = $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d$ / (Total Area)

Volume = Weighted D * Total Area

Flow = $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

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

$E_a = 0.55$
 $E_b = 0.73$
 $E_c = 0.95$
 $E_d = 2.24$

$Q_a = 1.54$
 $Q_b = 2.16$
 $Q_c = 2.87$
 $Q_d = 4.12$

ONSITE Conditions

FIRST FLUSH WATER QUALITY

VOLUME REQUIRED (CF)

PROVIDED (CF)

WATER QUALITY FLOOD CONTROL

0

396

Narrative

This site is within the SAD 228 Master Drainage plan boundaries. The site is to maintain existing patterns and drain to the adjacent roadway. The site does exceed the SAD 228 developed conditions assumptions therefore ponding is required. No upland flow enter the site. Ponding is utilized to keep pad as low as possible due to height restrictions. This plan is in conformance to the master drainage plan.

I, DAVID SOULE HAVE PERSONALLY INSPECTED THE SITE. I HEREBY CERTIFY THE PAD HAS BEEN CONSTRUCTED SUCH THAT IT IS IN SUBSTANTIAL CONFORMANCE TO THE APPROVED GRADING PLAN DATED 12/20/22

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: D-10-Z

National Flood Hazard Layer FIRMette



FIRM MAP:

LEGAL DESCRIPTION:

LOT 12 BLOCK 3 UNIT 19 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

- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- PROPOSED INDEX CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- BOUNDARY
- ADJACENT BOUNDARY
- EXISTING CURB AND GUTTER
- PROPOSED EARTHEN SWALE
- PROPOSED RETAINING WALL
- PROPOSED PONDING
- PROPOSED CONCRETE

ENGINEER'S SEAL



12/20/22

DAVID SOULE P.E. #14522

LOT 12 BLK 3 UN 19 VC 6509 CAMINO DEL OESTE

GRADING AND DRAINAGE PLAN



DRAWN BY DEM

DATE 12-14-22

Lot 12 Blk 3 Un 19 VC- Revised.dwg

SHEET # C1

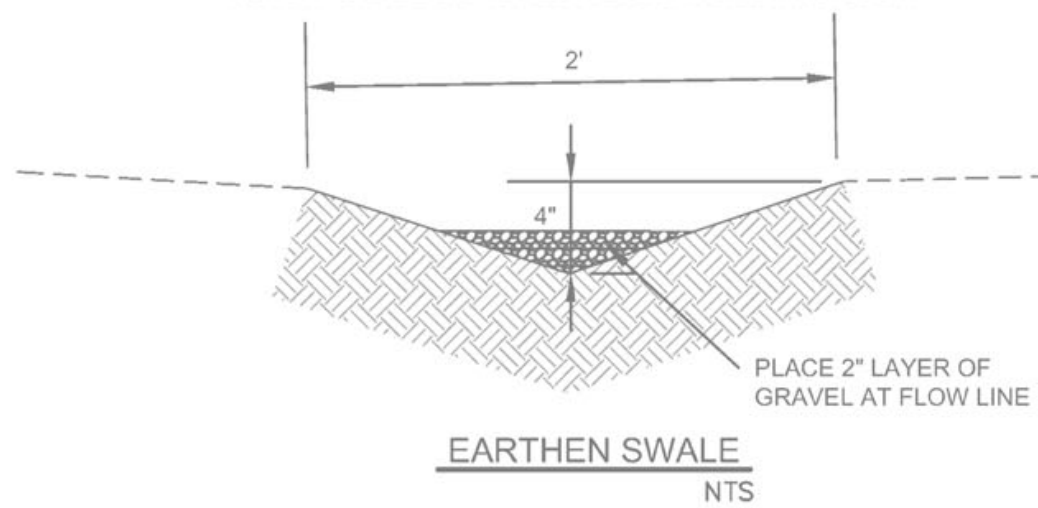
JOB #

Asbuilt
LOT 12, BLOCK 3
VOLCANO CLIFFS UNIT 19

DATE	09/08/23
CREW	MJM/JTD
DRAFTING	AHM
GPS	PRIMO
JN	N1408-01



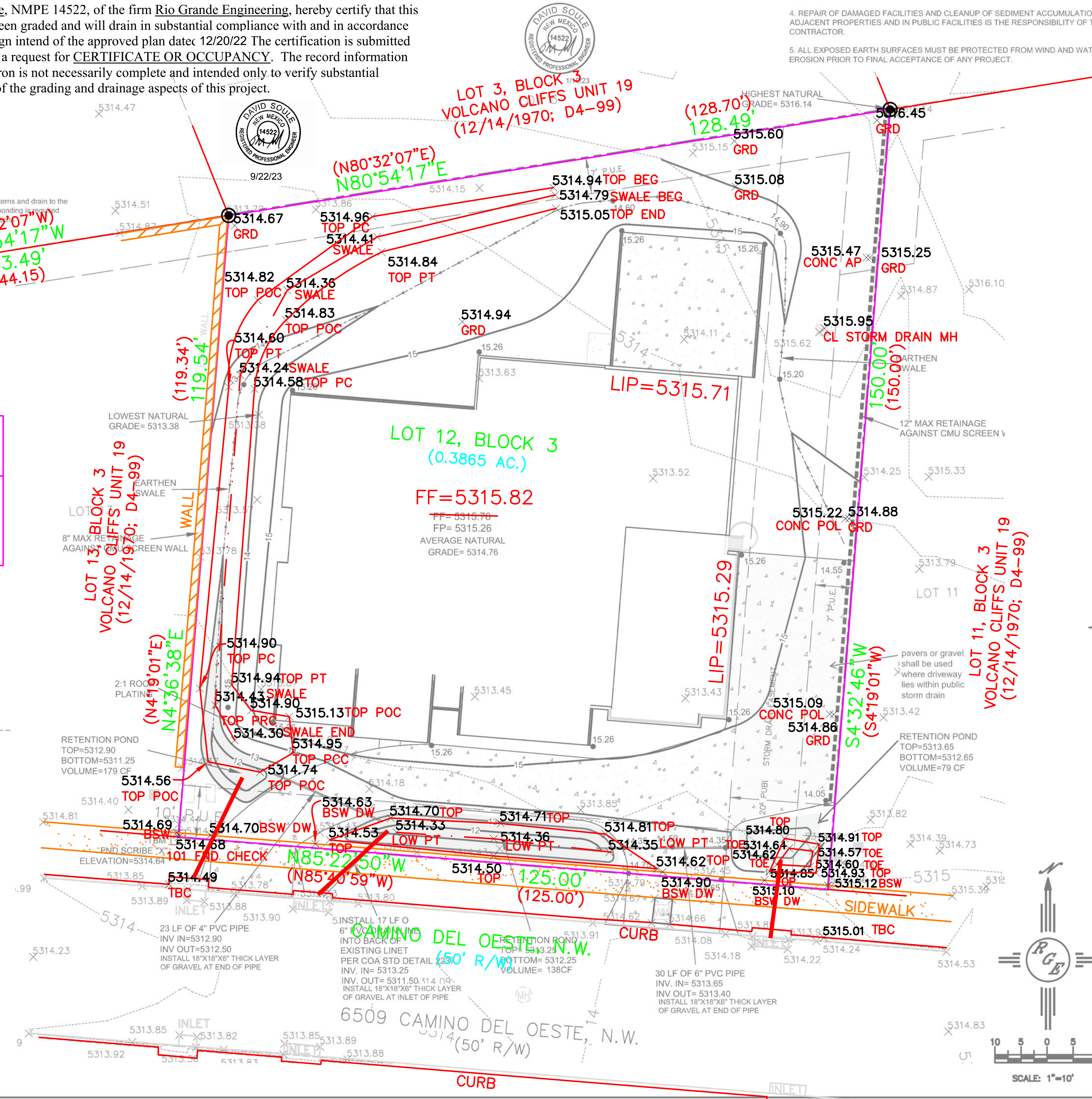
CONSTRUCT ALL SWALES AND EROSION PROTECTION (SHOWN HATCHED) BELOW ADJACENT GRADE TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY.



EARTHEN SWALE NTS

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.





City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 6509 caminodeloeste **Building Permit #:** _____ **Hydrology File #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: LOT 12, Block 3 VOLCANO CLIFFS UNIT 19
City Address: 6509 camino del oeste

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: _____