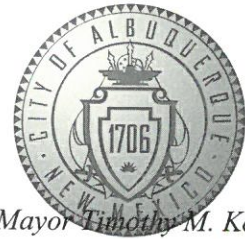


CITY OF ALBUQUERQUE

Planning Department

Brennan Williams, Director



Mayor Timothy M. Keller

September 4, 2019

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

RE: **Lot 16 Block 4 Volcano Cliffs Unit 19 SAD 228**
6527 Vista Del Prado NW
Grading and Drainage Plan
Engineers Stamp Date 6/11/19 (D10D003T16)
Pad Certification Date 7/29/19

Dear Mr. Soule,

Based upon the information provided in your submittal received 8/29/19, 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 dated 6/11/19 and Pad Certification Date 7/29/19.

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 924-3986 or Rudy Rael at 924-3999.

Sincerely,

Shahab Biazar, P.E.
City Engineer, Planning
Division Manager

RR/SB
C: File D10D003T16



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

6527 vista del prado
Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: LOT 16, BLOCK 4 VOLCANO CLIFFS UNIT 19
City Address: 6527 vista del prado
Applicant: twighlgt homes _____ **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.			
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				
upland	37113.00	0.852	0%	0	20%	0.170	46%	0.3919	34%	0.290	1.259	0.089	2.74
ALLOWED	13975.00	0.321	0%	0	20%	0.064	46%	0.1476	34%	0.109	1.259	0.034	1.03
PROPOSED	13975.00	0.321	0%	0	20%	0.064	39%	0.1251	41%	0.132	1.328	0.035	1.06
COMPARISON												0.002	

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	PROVIDED
(CF)	(CF)	(CF)
162	205	205

WATER QUALITY FLOOD CONTROL	80 <th>205</th>	205
-----------------------------	-----------------	-----

Narrative

This site is within the SAD 226 Master Drainage plan boundaries. The site is to maintain existing patterns and drain to the the adjacent roadway to the south per the master drainage plan. We are ponding the water harvest volume generated by the site there is 2.74 CFS of future upland flow. This plan does exceed the allowed impervious area therefore we are required to retain 80 cubic feet This plan is in conformance to the master drainage plan

TURNED BLOCKS

Weir Equation:

$$Q=CLH^{3/2}$$

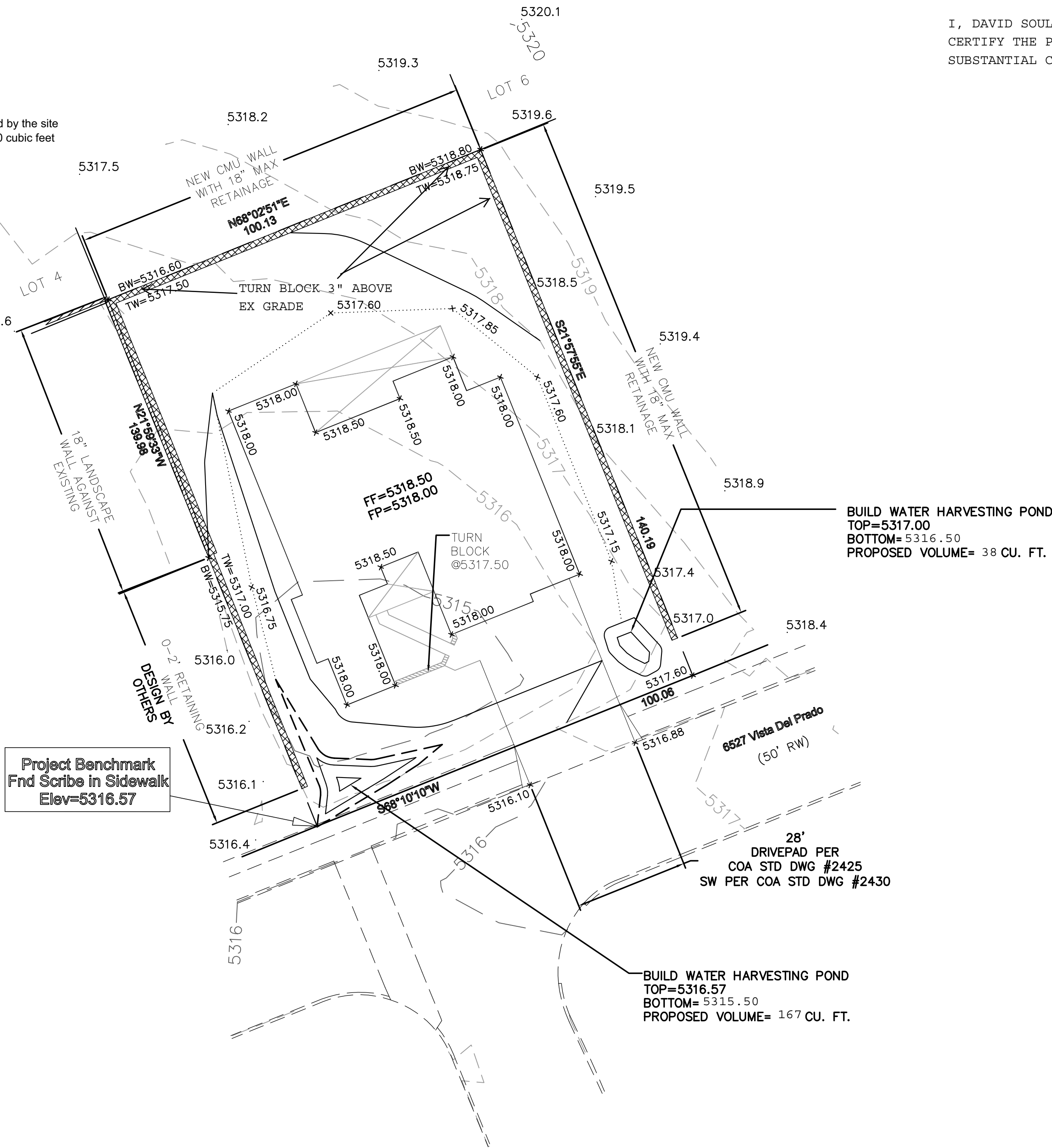
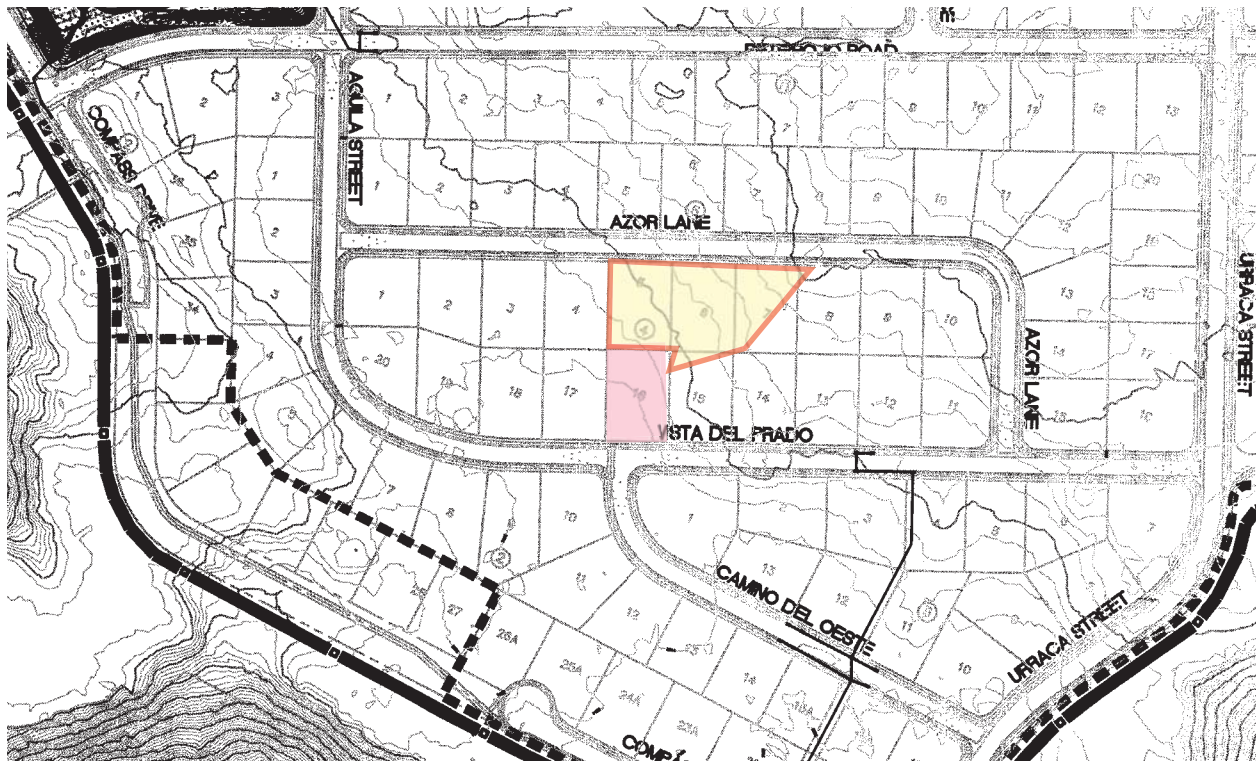
West drainage swale thru walls

Q= 2.92 cfs
C= 2.95
H= 0.5 ft
L= Length of weir

$$Q = 2.95 * .5 * ((0.5)^{3/2})$$

Each opening is 6"x6"
Each block has two openings
Each opening has .52 cfs capacity

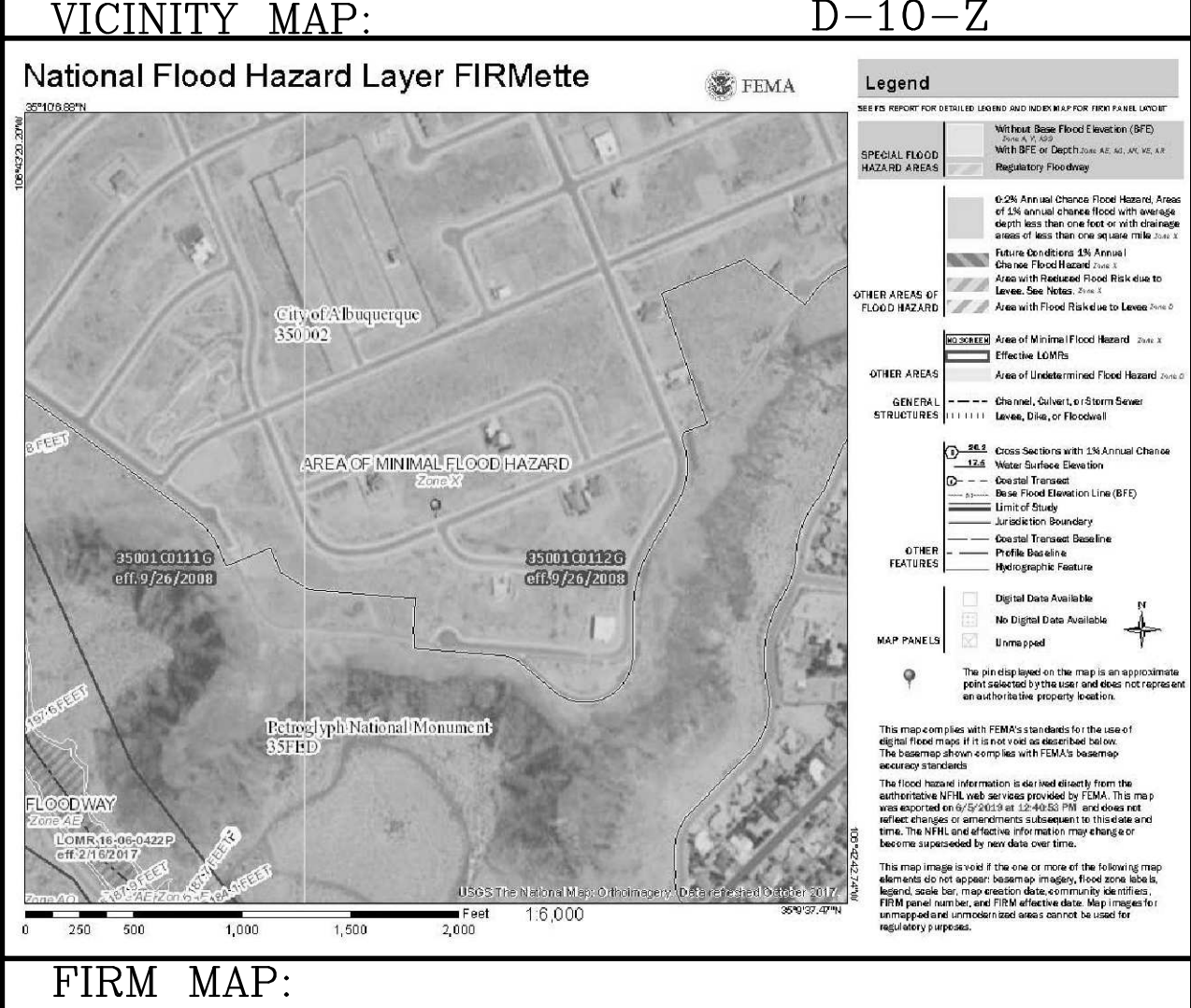
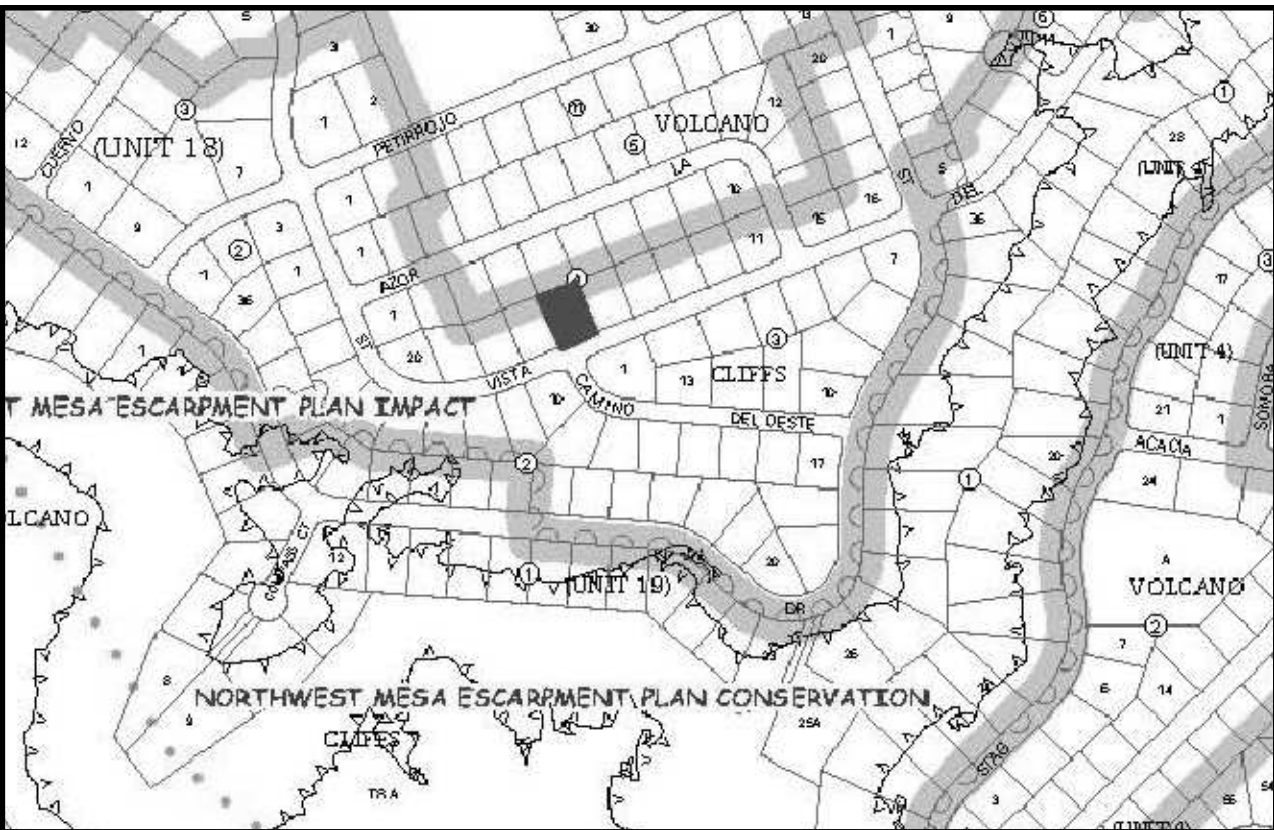
For phase 3 lots
Therefore 2.74 cfs requires 6 openings and 3 turned blocks



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.

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 6/11/19



LEGAL DESCRIPTION:

LOT 7, BLOCK 13, PARADISE HEIGHTS UNIT 1

NOTES:

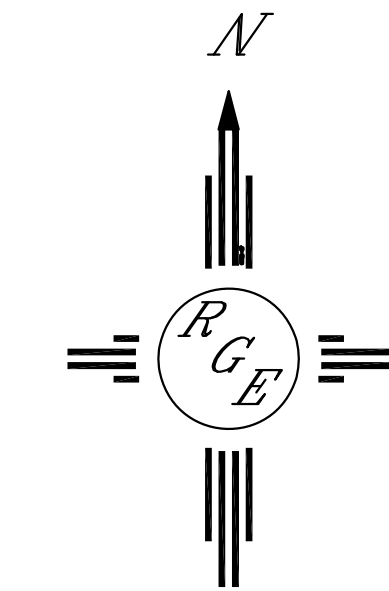
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL CURB AND GUTTER TO 6" HEADER UNLESS OTHERWISE NOTED.
3. ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
4. ANY CURBS OR PAVEMENT NEGATIVELY IMPACTED BY CONSTRUCTION ACTIVITY SHALL BE REPLACED TO MATCH EXISTING CONDITIONS.
5. ALL SITE WORK SHALL CONFORM TO BERNAILLO COUNTY STANDARDS FOR PUBLIC WORKS CONSTRUCTION EDITION 9

LEGEND

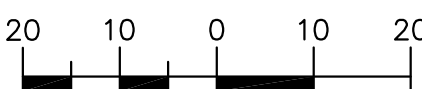
---	5414	EXISTING CONTOUR
---	5415	EXISTING INDEX CONTOUR
---	5414	PROPOSED CONTOUR
---	5415	PROPOSED INDEX CONTOUR
---		SLOPE TIE
•	4048.25	EXISTING SPOT ELEVATION
•	4048.25	PROPOSED SPOT ELEVATION
---		BOUNDARY
---		CENTERLINE
---		RIGHT-OF-WAY
---		PROPOSED CURB
---		EXISTING CURB AND GUTTER
---		EXISTING SIDEWALK
---		PROPOSED RETAINING WALL DESIGN BY OTHERS
---		FLOW LINE

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.



GRAPHIC SCALE



SCALE: 1"=60'

<div>ENGINEER'S SEAL</div> <div>DAVID SOULE NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 14522</div> <div>6/11/19</div> <div>DAVID SOULE P.E. #14522</div>	6527 VISTA DEL PRADO	DRAWN BY WCWJ
	GRADING AND DRAINAGE PLAN	DATE 6-10-19
	<div> <div></div> <div>Rio Grande Engineering</div> <div>1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999</div> </div>	2108053-LAYOUT-6-10-19
		SHEET #
		JOB # 2109053