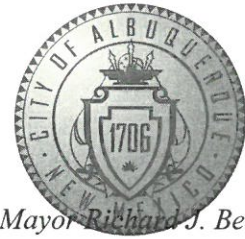


# CITY OF ALBUQUERQUE

Planning Department  
Suzanne Lubar, Director



Mayor Richard J. Berry

April 24, 2017

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

RE: **Lot 12 Block 9 Unit 18 Volcano Cliffs SAD 228**  
**8520 Papagayo NW**  
**Grading and Drainage Plan**  
**Engineers Stamp Date 4/21/17 (D10D003I12)**

Dear Mr. Soule,

Based upon the information provided in your submittal received 4/21/17, this plan is approved for Grading Permit. **Prior to building permit approval, a pad certification will be required.** A hold on the property will be placed until this certification has been approved.

Please inform the builder/owner to attach a copy of this approved plan 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 4/21/17.

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,

Dana Peterson, P.E.  
Senior Engineer, Hydrology  
Planning Department

RR/SB  
C: File



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

**Project Title:** \_\_\_\_\_ **Building Permit #:** \_\_\_\_\_ **City Drainage #:** \_\_\_\_\_

**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_

**Legal Description:** \_\_\_\_\_

**City Address:** \_\_\_\_\_

**Engineering Firm:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**Owner:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**Architect:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**Other Contact:** \_\_\_\_\_ **Contact:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Phone#:** \_\_\_\_\_ **Fax#:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

Check all that Apply:

**DEPARTMENT:**

- ☐ HYDROLOGY/ DRAINAGE  
☐ TRAFFIC/ TRANSPORTATION  
☐ MS4/ EROSION & SEDIMENT CONTROL

**TYPE OF SUBMITTAL:**

- ☐ ENGINEER/ ARCHITECT CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN  
☐ GRADING PLAN  
☐ DRAINAGE MASTER PLAN  
☐ DRAINAGE REPORT  
☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)  
☐ TRAFFIC IMPACT STUDY (TIS)  
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ OTHER (SPECIFY) \_\_\_\_\_

**CHECK 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
- ☐ PRE-DESIGN MEETING  
☐ OTHER (SPECIFY) \_\_\_\_\_

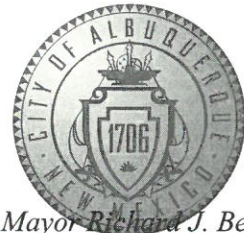
IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

**DATE SUBMITTED:** \_\_\_\_\_ **By:** \_\_\_\_\_

COA STAFF: \_\_\_\_\_ ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

# CITY OF ALBUQUERQUE

Planning Department  
Suzanne Lubar, Director



Mayor Richard J. Berry

April 21, 2017

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

RE: **Lot 12 Block 9 Unit 18 Volcano Cliffs SAD 228**  
**6520 Papagayo NW**  
**Grading and Drainage Plan**  
**Engineers Stamp Date 4/17/17 (D10D003I12)**

Dear Mr. Soule,

PO Box 1293

Based upon the information provided in your submittal received 4/18/17, this plan cannot be approved for Grading Permit until the following comments are addressed.

Albuquerque

- Provide an opening in Garden Wall at the SW corner. **Added**
- Provide the water quality ponds in the rear yard where cross lot flow is to be provided. Flows do not need to leave front yard. **Added**
- Provide calculations for the openings in the walls. **Attached**

New Mexico 87103

**Added note regarding pad certification**

If you have any questions, please contact me at 924-3999 or Rudy Rael at 924-3977.

[www.cabq.gov](http://www.cabq.gov)

Sincerely,

Shahab Biazar, P.E.  
City Engineer, Planning Department  
Development Building Services

RR/SB  
C: File



6520 PAPAGAYO										
Weighted E Method										
Basin	Area (sf)	Area (acres)	Treatment A % (acres)	Treatment B % (acres)	Treatment C % (acres)	Treatment D % (acres)	Weighted (ac-ft)	Volume (ac-ft)	Flow cfs	
ALLOWED	14545.00	0.334	0%	0%	100%	0.334	50%	0.167	1.44	0.040
PROPOSED	14545.00	0.334	0%	0%	37%	0.124	34%	0.1135	29%	0.097
total										

Equations:

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

Volume = Weighted D \* Total Area

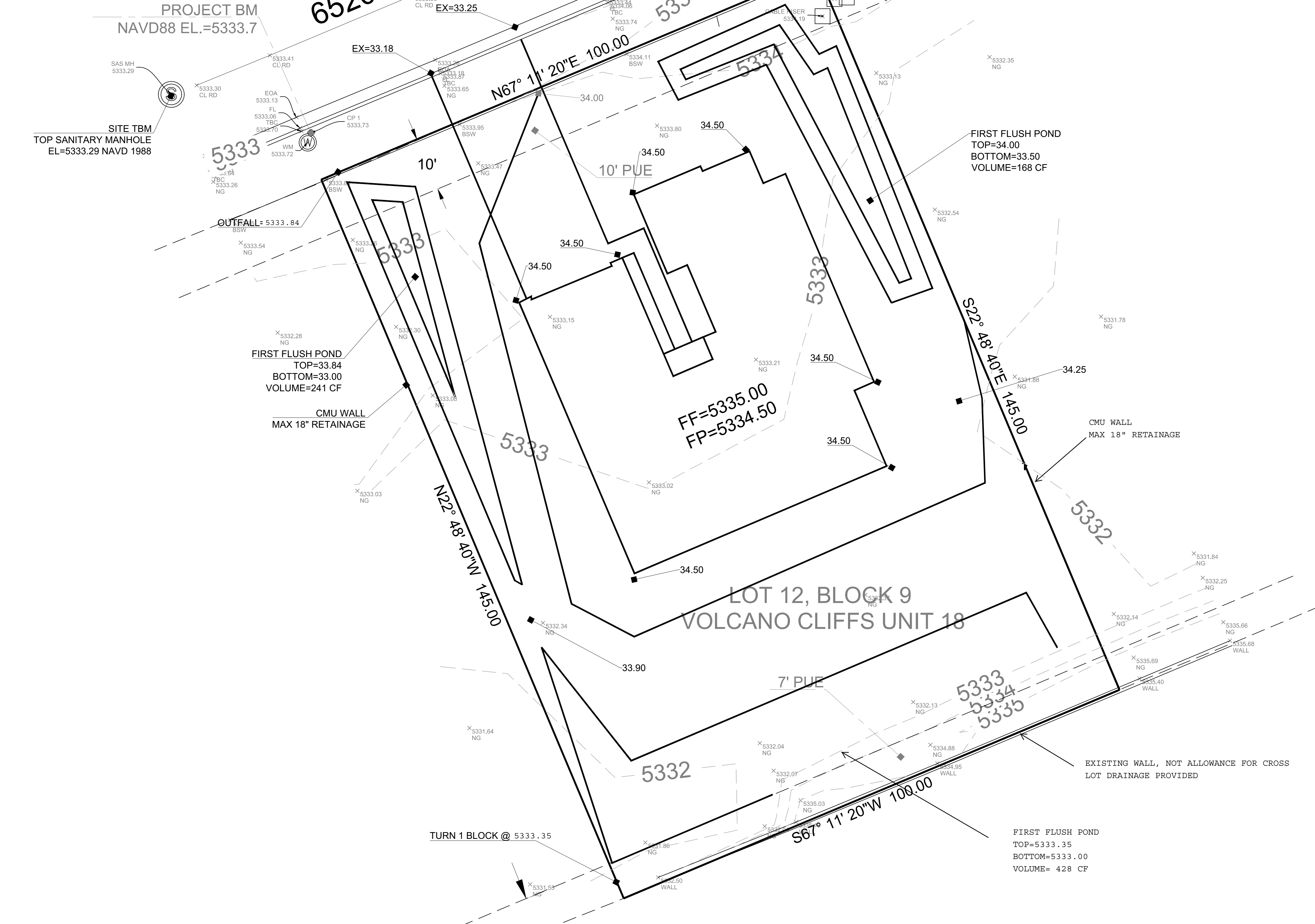
Flow = Qa \* Aa + Qb \* Ab + Qc \* Ac + Qd \* Ad

Where for 100-year, 6-hour storm- zone 1  
Ea= 0.44  
Eb= 0.67  
Ec= 0.99  
Ed= 1.97  
Qa= 1.29  
Qb= 2.03  
Qc= 2.87  
Qd= 4.37

ONSITE Conditions  
FIRST FLUSH WATER QUALITY VOLUME  
REQUIRED (CF) 120  
PROVIDED (CF) 409  
WATER QUALITY

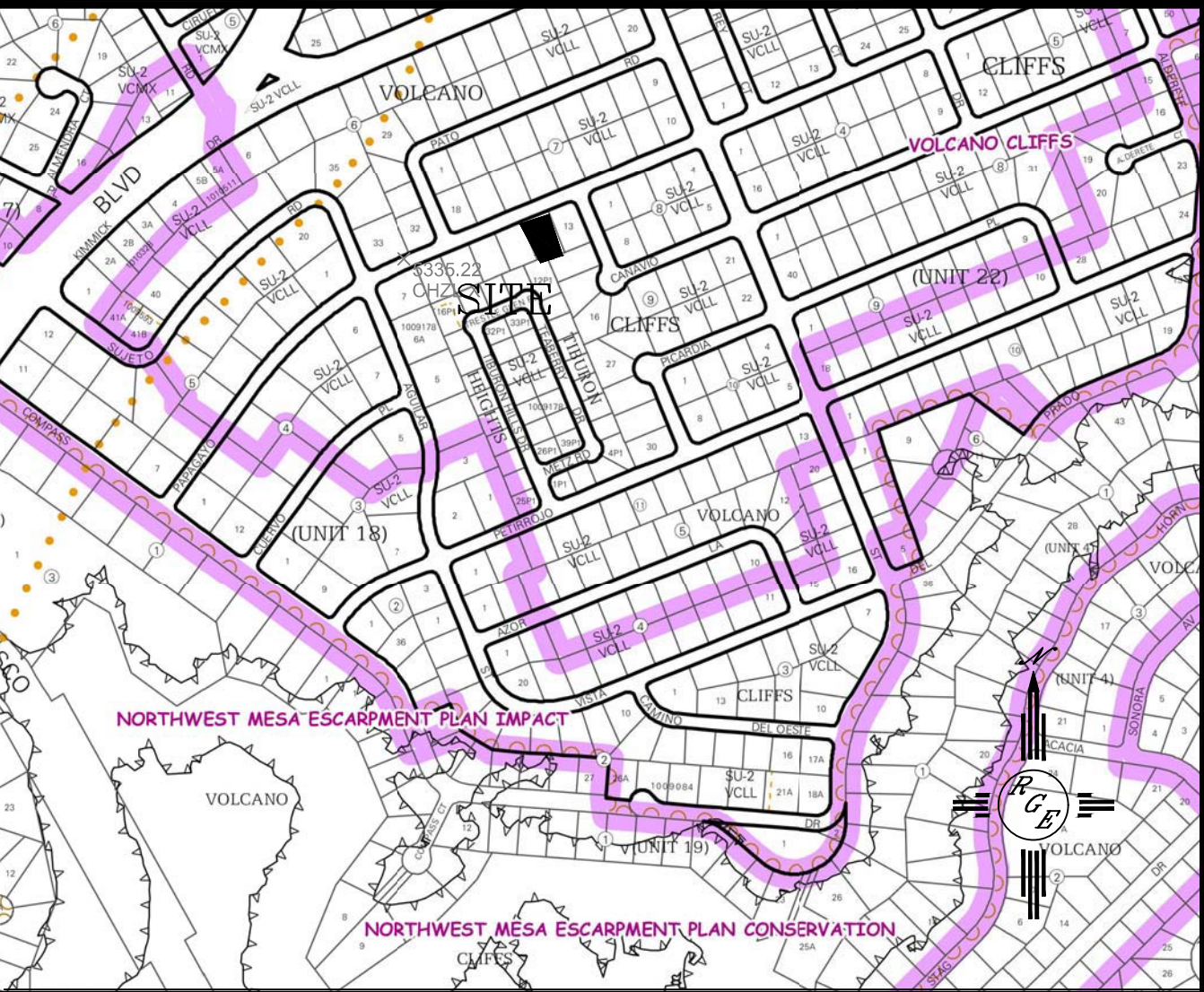
Narrative

This site is within the SAD 228 Master Drainage plan boundaries. The site is designed to drain the house and side yard to the street. The re yard is too low to drain to the street and will maintain existing patterns per the master drainage plan. We are ponding the water harvest volun generated by the site. There is no upland flow effecting the site. This plan has a shallow water harvest pond in excess of the drainage regulations. 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 (CITY) ACCEPTANCE OF ANY PROJECT.



VICINITY MAP:



FIRM MAP: FM35041C0112G

LEGAL DESCRIPTION:

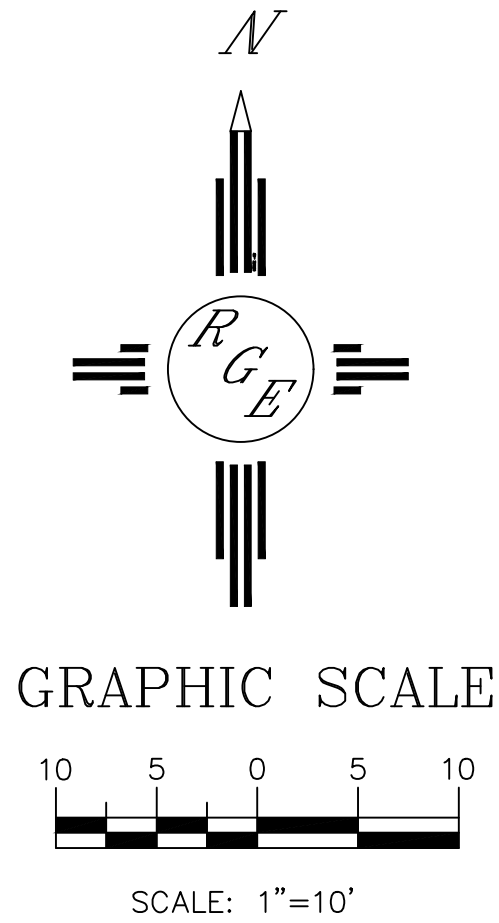
LOT 12 BLOCK 9, UNIT 18 VOLCANO CLIFFS


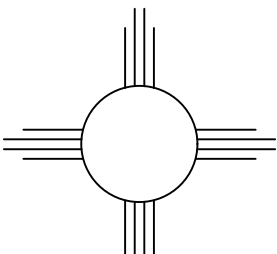
NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THIS PLAN WAS OBTAINED BY CSTI DATE APRIL 2017.
3. ALL DISTURBED AREAS MUST BE RESEED OR LANDSCAPED PRIOR TO FINAL C.O..
4. ALL AREAS OUTSIDE THE BUILDING ENVELOPE MUST BE RESEED WITH NATIVE MIX.
5. DUE TO EXISTING TOPOGRAPHY AND UNDEVELOPED NATURE OF THE DOWN STEAM AREA, PERIODIC MAINTENANCE OF PONDS AND SWALES ARE REQUIRED.
6. ALL WALLS SHALL BE CONSTRUCTED UNDER SPERATE PERMIT.
7. A PAD CERTIFICATION IS REQUIRED PRIOR TO ISSUANCE OF BUILDING PERMIT

LEGEND

- 5411--- EXISTING CONTOUR
- 5410--- EXISTING INDEX CONTOUR
- 5411--- PROPOSED CONTOUR
- 5410--- PROPOSED INDEX CONTOUR
- 100.00 PROPOSED FLOWLINE ELEVATIONS
- PROPERTY LINE



ENGINEER'S SEAL  4/21/17	LOT 12 BLOCK 9 VOLCANO CLIFFS UNIT 18	DRAWN BY JDG
	GRADING AND DRAINAGE PLAN	DATE 04-17-2017
DAVID SOULE P.E. #14522	 <i>Rio Grande Engineering</i> 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	SHEET # 1 OF 1
		JOB #



## TURNUED BLOCKS

Weir Equation:

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

West drainage swale thru walls

$$Q = 2.92 \text{ cfs}$$

$$C = 2.95$$

$$H = 0.5 \text{ ft}$$

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,**

**Therefore each turned block has 1.04 cfs capacity**