# CITY OF ALBUQUERQUE

Planning Department
Suzanne Lubar, Director



December 11, 2017

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

RE: Lot 9 Block 10 Volcano Cliffs Unit 22 SAD 228 6400 Petirrojo NW Grading and Drainage Plan Engineers Stamp Date 12/7/17 (D10D003F9)

Dear Mr. Soule,

Based upon the information provided in your submittal received 12/7/17, this plan is approved for **Grading 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 12/7/17.

Prior to Building Permit approval, a Pad Certification must be accepted.

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 924-3977.

Sincerely,

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

James D. Hughes, P.E.

Principal Engineer, Hydrology

Planning Department

RR/JDH 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#:		k Order#:					
Legal Description:								
City Address:								
Engineering Firm:		Cont	act:					
Address:								
Phone#:	Fax#:	E-ma	ail:					
Owner:		Cont	act:					
Address:								
Phone#:	Fax#:	E-ma	ail:					
Architect:		Cont	act:					
Address:								
Phone#:	Fax#:	E-ma	ail:					
Other Contact:		Cont	act:					
Address:								
Phone#:	Fax#:	E-ma	ail:					
Check all that Apply:  DEPARTMENT:  HYDROLOGY/ DRAINAGE			ROVAL/ACCEPTANCE SOUGHT:					
TRAFFIC/ TRANSPORTATION			BUILDING PERMIT APPROVAL					
MS4/ EROSION & SEDIMENT CO	NTROL	CERTIFICATE OF	OCCUPANCY					
TYPE OF SUBMITTAL:		PRELIMINARY PI	AT APPROVAL					
ENGINEER/ ARCHITECT CERTIFICATION		<del></del>	SITE PLAN FOR SUB'D APPROVAL					
		SITE PLAN FOR B	LDG. PERMIT APPROVAL					
CONCEPTUAL G & D PLAN		FINAL PLAT APP	FINAL PLAT APPROVAL					
GRADING PLAN		SIA/ RELEASE OF	SIA/ RELEASE OF FINANCIAL GUARANTEE					
DRAINAGE MASTER PLAN		FOUNDATION PE	FOUNDATION PERMIT APPROVAL					
DRAINAGE REPORT		GRADING PERMI	GRADING PERMIT APPROVAL					
CLOMR/LOMR		SO-19 APPROVAL	SO-19 APPROVAL					
		PAVING PERMIT						
TRAFFIC CIRCULATION LAYOU	Γ (TCL)		APPROVAL					
TRAFFIC CIRCULATION LAYOUT TRAFFIC IMPACT STUDY (TIS)	Γ (TCL)	PAVING PERMIT	APPROVAL ERTIFICATION					
		PAVING PERMIT GRADING/ PAD C	APPROVAL ERTIFICATION					
TRAFFIC IMPACT STUDY (TIS)	L PLAN (ESC)	PAVING PERMIT GRADING/ PAD C WORK ORDER APP	APPROVAL ERTIFICATION ROVAL					
TRAFFIC IMPACT STUDY (TIS) EROSION & SEDIMENT CONTRO	L PLAN (ESC)	PAVING PERMIT GRADING/ PAD C WORK ORDER APP CLOMR/LOMR PRE-DESIGN MEET	APPROVAL ERTIFICATION ROVAL ING					
TRAFFIC IMPACT STUDY (TIS) EROSION & SEDIMENT CONTRO	L PLAN (ESC)	PAVING PERMIT GRADING/ PAD C WORK ORDER APP CLOMR/LOMR PRE-DESIGN MEET	APPROVAL ERTIFICATION ROVAL					
TRAFFIC IMPACT STUDY (TIS) EROSION & SEDIMENT CONTRO OTHER (SPECIFY)	L PLAN (ESC)	PAVING PERMIT GRADING/ PAD C WORK ORDER APP CLOMR/LOMR PRE-DESIGN MEET OTHER (SPECIFY	APPROVAL ERTIFICATION ROVAL ING					

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

# CITY OF ALBUQUERQUE

Planning Department
Suzanne Lubar, Director



December 6, 2017

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

RE: Lot 9 Block 10 Volcano SAD 228
6400 Petirrojo NW
Volcano Cliffs Subdivision
Grading and Drainage Plan
Engineers Stamp Date 12/4/17 (D10D003F9)

Dear Mr. Soule,

Based upon the information provided in your submittal received 12/4/17, this plan cannot be approved for Grading Permit until the following comments are addressed.

PO Box 1293

- Show the 10' PUE in the rear yard. ADDED
- Provide the upstream flows entering the site. ADDED

Albuquerque

• The openings in the garden wall should be placed in the SE corner of the east wall. Provide the flows exiting this area. ADDED

Prior to building permit approval a pad certification will be required.

NM 87103

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist of this plan will be required.

www.cabq.gov

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

James & Bugher

James D. Hughes, P.E

Principal Engineer, Hydrology

Planning Department

RR/JDH C: File

#### Weighted E Method

						100-Year, 6-hr.								
Basin	Area	Area	Treati	ment A	Treat	ment B	Treati	ment C	Treatr	nent DV	Veighted I	Volume	Flow	
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs	
UPLAND	48600.00	1.116	0%	0	10%	0.112	40%	0.4463	50%	0.558	1.448	0.135		3.95
ALLOWED	16203.00	0.372	0%	0	10%	0.037	40%	0.1488	50%	0.186	1.448	0.045	1	1.32
PROPOSED	16203.00	0.372	0%	0	20%	0.074	43%	0.1599	37%	0.138	1.289	0.040	1	1.21
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

Qa= 1.29 Ea= 0.44 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

PROVIDED REQUIRED (CF)

WATER QUALITY 1269

#### Narrative

This site is within the SAD 228 Master Drainage plan boundaries. The site has hight restrictions, therfore the pad is lowered as much as practic maintaining existing patterns and in conformance to the master drainage plan. We are ponding the water harvest volume generated by the site we are allowing the neglibable upland flow to pass thru the site. This plan has a shallow water harvest pond in excess of the drainage regulation This plan is in conformance to the master drainage plan

## TURNED BLOCKS

## Weir Equation:

 $Q=CLH^{3/2}$ 

wale thru walls

CONSTRUCT 34.50' DRIVEWAY AND SIDEWALK PER COA — STD DWG #2405, 2425, 2430

Project Benchmark

Fnd "X" in Scribe

Elev=5332.34

BEGIN 2' EARTHEN SWALE

UPLAND FLOW=3.95 CFS

TURN 4 BLOCK **©** 5327.50 -

END 2' EARTHEN

BUILD FIRST FLUSH POND TOP=5324.00 — BOTTOM=5322.50 REQUIRED VOLUME=1269 CU. FT.

TURN 1 BLOCK **©** 5324.00 -

ALTERNATE EVERY OTHER BLOCK FROM CORNER

5 TOTAL SHALL PASS 5.16 CFS

EX. 10' PUE

Q = 2.92 cfsC = 2.95H = 0.5 ftL = 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



INTO EXISTING RIGHT-OF-WAY.

BUILD FIRST FLUSH POND

END 2' EARTHEN

**SWALE** 

BEGIN 2' EARTHEN

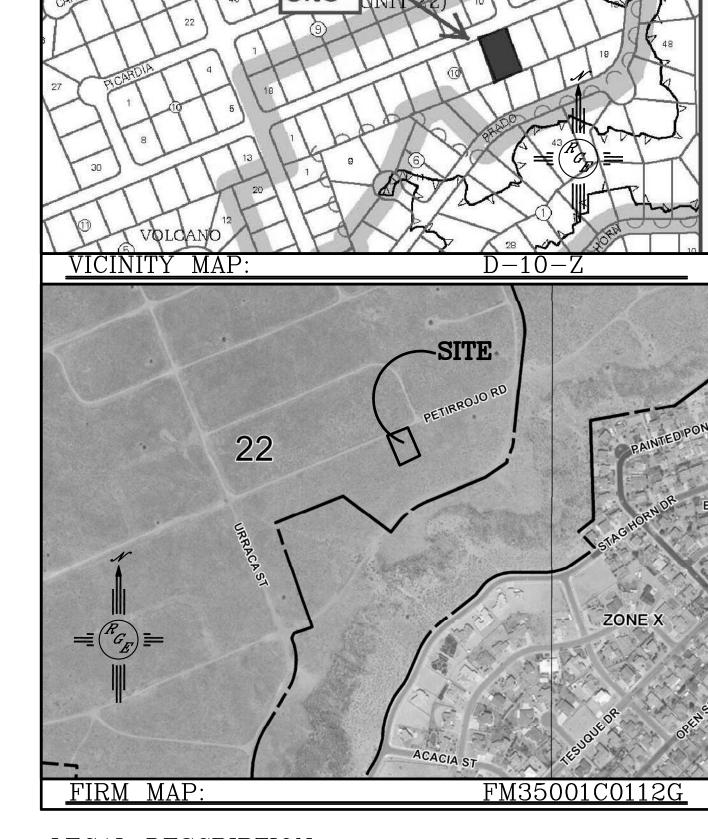
END 2' EARTHEN

SWALE

REQUIRED VOLUME=171 CU. FT.

\_TOP=5328.00 BOTTOM=5326.50

- 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
- 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.



LEGAL DESCRIPTION:

Lot 9, Block 10, Volcano Cliffs Unit 22

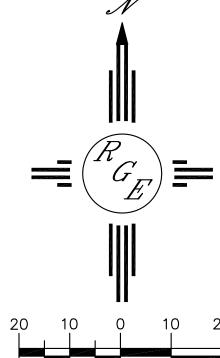
# NOTES:

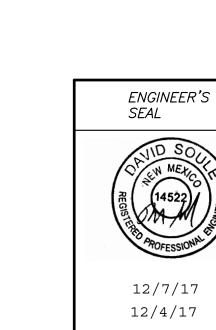
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE

2. ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.

---- Existing contour ---- EXISTING INDEX CONTOUR PROPOSED CONTOUR PROPOSED INDEX CONTOUR SLOPE TIE EXISTING SPOT ELEVATION × XXXX × XXXX PROPOSED SPOT ELEVATION — - - — BOUNDARY CENTERLINE - RIGHT-OF-WAY  $\equiv \equiv \text{EXISTING CURB AND GUTTER}$ 

PROPOSED CMU SCREEN WALL





DAVID SOULE P.E. #14522

O400 PETIKROJO NW	
	AWN WCWJ
	DATE
GRADING AND	?-01-17
DRAINAGE PLAN 21827-L	4YOUT-12-01-
	HEET #
Engineering	
1606 CENTRAL AVENUE SE	

SUITE 201

ALBUQUERQUE, NM 87106
(505) 872-0999

JOB #

21827

SCALE: 1"=20'

# 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.

LEGEND