

CITY OF ALBUQUERQUE

Planning Department
Suzanne Lubar, Director



Mayor Richard J. Berry

June 28, 2017

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

**RE: Lot 15 Block 4 Unit 22 Volcano Cliffs SAD 228
6423 Canavio St.NW
Grading and Drainage Plan
Engineers Stamp Date 4/27/17 (D10D003D15)
Pad Certification Dated 6/26/17**

Dear Mr. Soule,

Based upon the information provided in your submittal received 6/27/17, this plan is approved for Building Permit.

Please inform the builder to attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology. Also, notify the owner/contractor that a separate permit for any fence is required, and this is the plan to be used for the placement of the fence.

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,

James D. Hughes, P.E.
Principal Engineer, Hydrology
Planning Department

RR/JH
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: _____

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 (ac-ft)	Volume (ac-ft)	Flow cfs			
UPLAND	19183.00	0.440	0%	0	10% 0.044	40% 0.1762	50% 0.220	1.448	0.053	1.58		
ALLOWED	13730.00	0.315	0%	0	10% 0.032	40% 0.1261	50% 0.158	1.448	0.038	1.11		
PROPOSED	13730.00	0.315	0%	0	30% 0.095	33% 0.104	37% 0.117	1.257	0.033	1.00		
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 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)
144 621

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 rear yard is too low to drain to the street and but ponding and swales will provide positive drainage from house and allow patterns per the master drainage plan. We are ponding the water harvest volume generated by the site. We are allowing the upland flow to enter the site. This plan has shallow water harvest ponds in excess of the drainage regulations. This plan is in conformance to the master drainage plan

TURNED BLOCKS

Weir Equation:

$Q = CLH^{3/2}$

wale 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.
Therefore each turned block has 1.04 cfs capacity

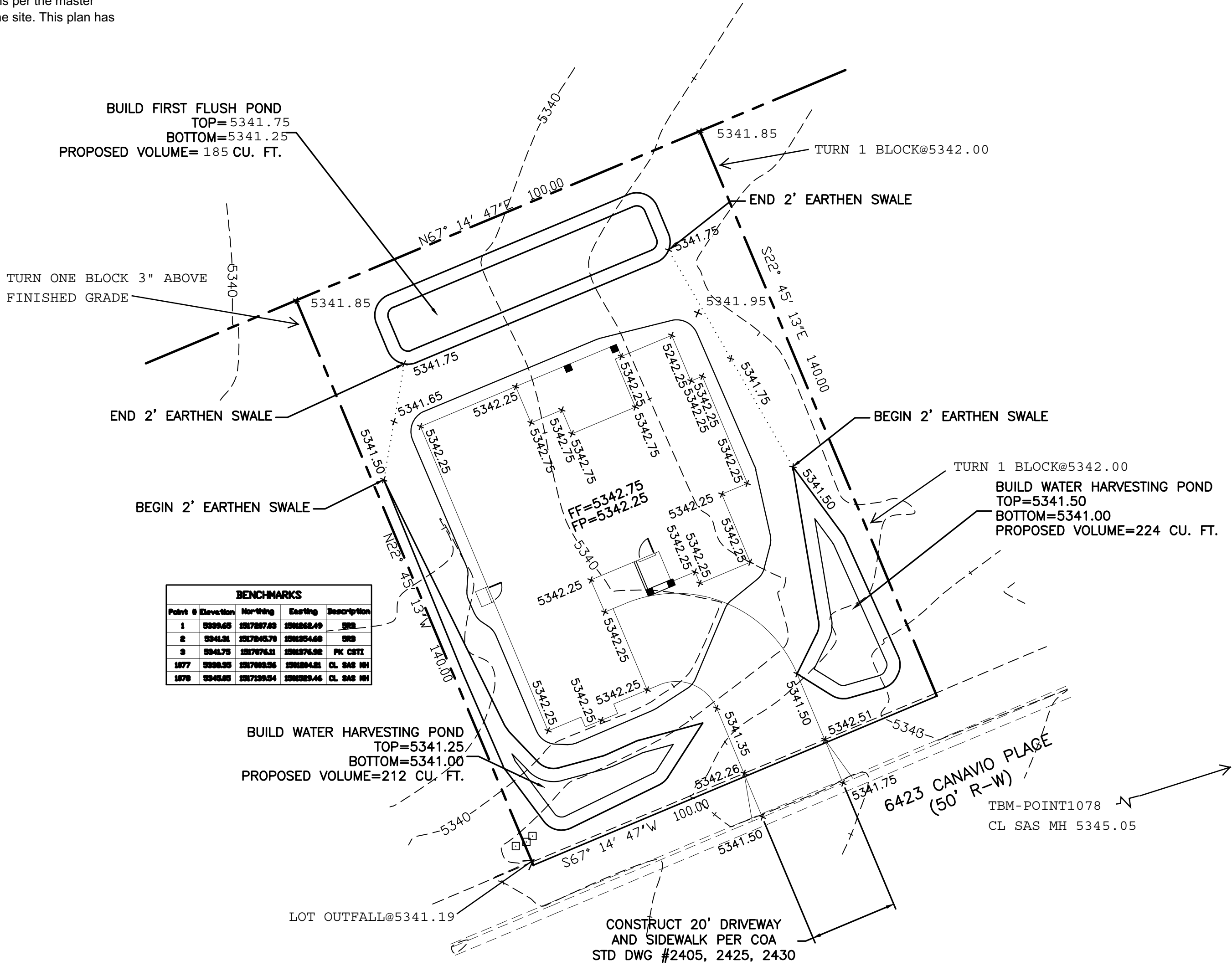
I, DAVID SOULE HAVE PERSONALLY INSPECTED THE SITE. I HEREBY CERTIFY THE PAD HAS BEEN CONSTRUCTED SUCH THAT IT IS IN SUBSTANTIAL CONFORMANCE TO THE APPROVED GRADING PLAN DATED 4/27/17



6/26/17

CAUTION:

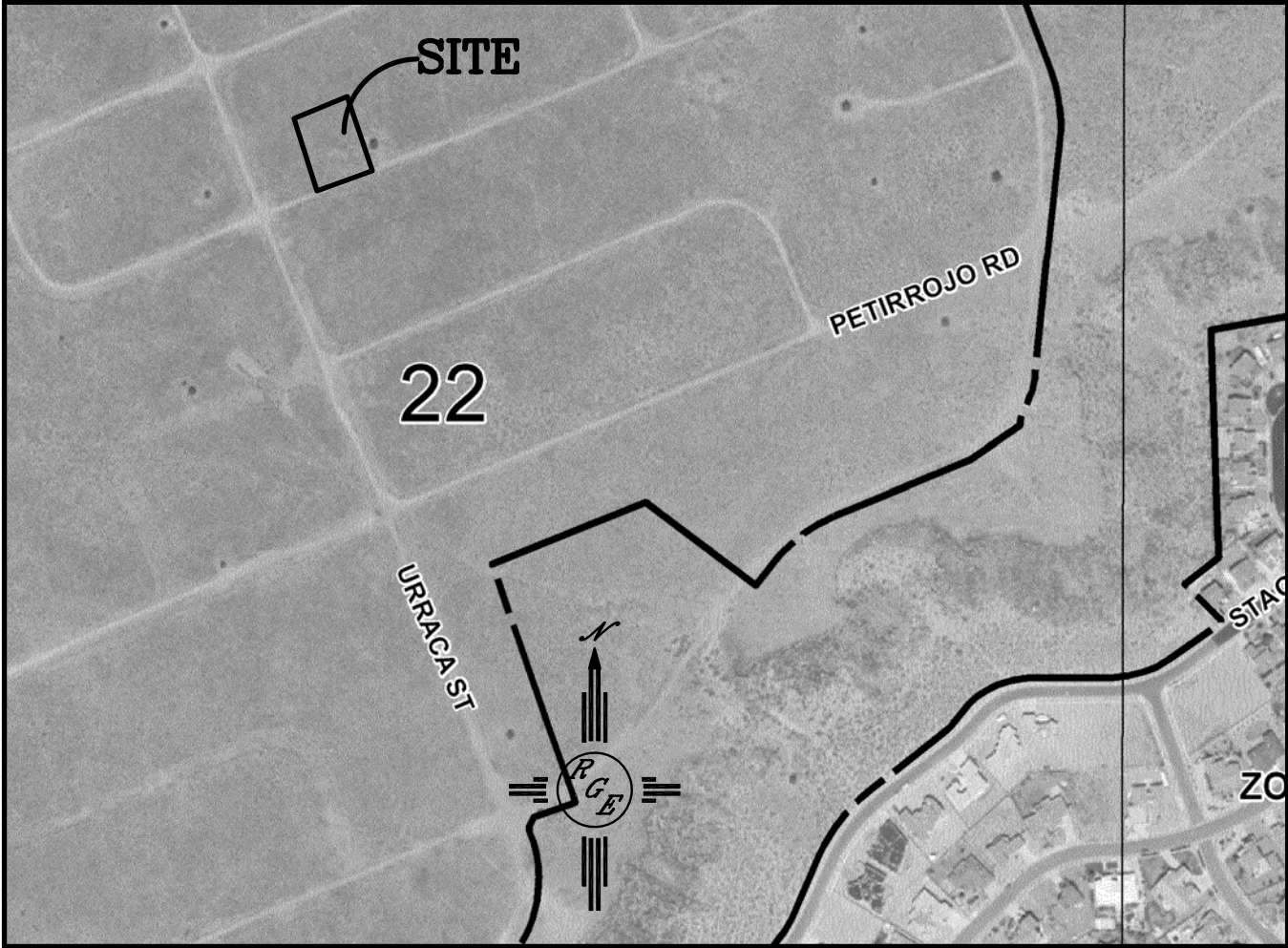
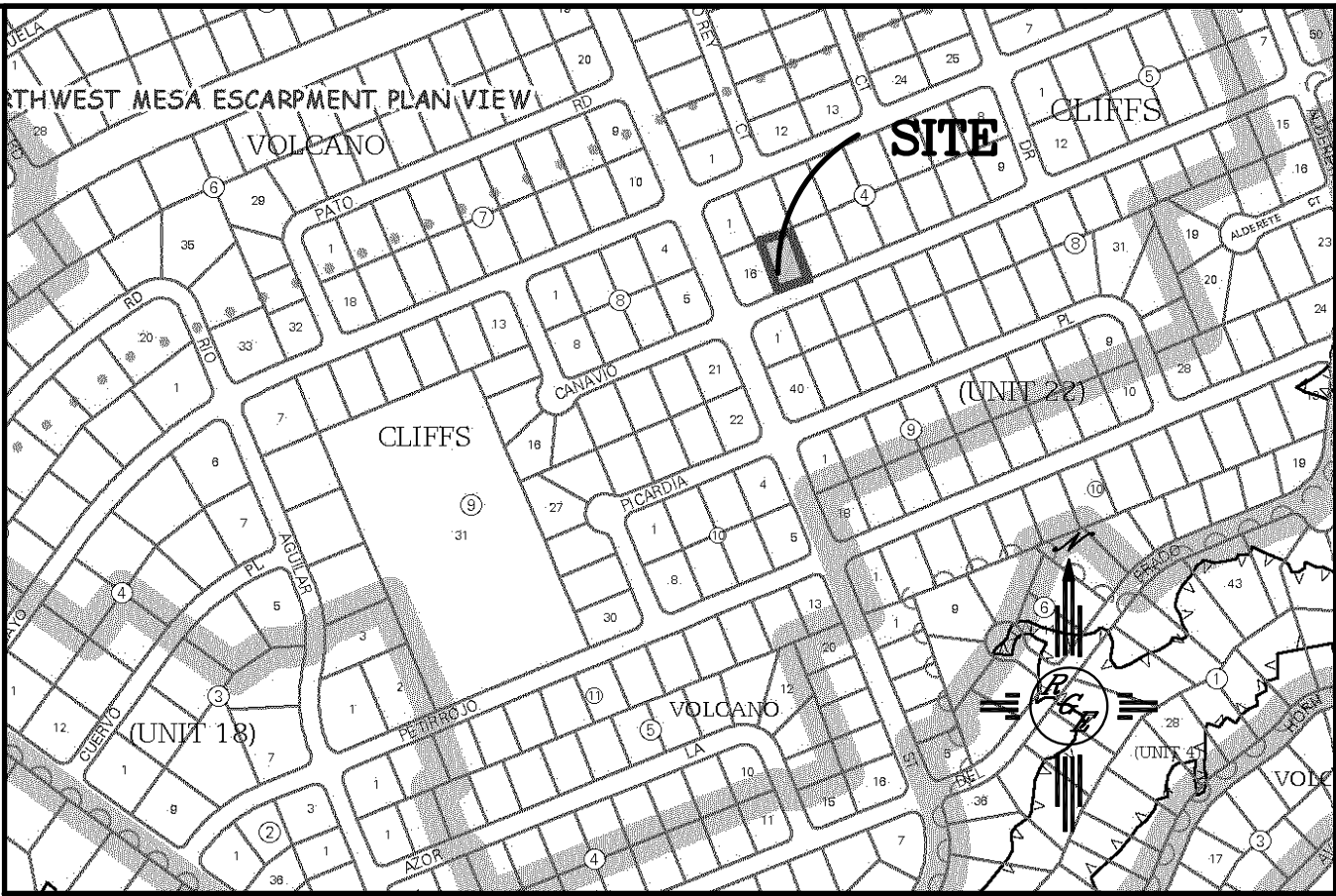
EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.



Point #	Elevation	Horizontal	Starting	Description
1	5341.85	282707.05	5341.85	END
2	5341.85	282707.05	5341.85	END
3	5341.75	282707.05	5341.75	END
4	5341.75	282707.05	5341.75	END
5	5341.75	282707.05	5341.75	END
6	5341.75	282707.05	5341.75	END
7	5341.75	282707.05	5341.75	END
8	5341.75	282707.05	5341.75	END
9	5341.75	282707.05	5341.75	END
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18	5341.75	282707.05	5341.75	END
19	5341.75	282707.05	5341.75	END
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21	5341.75	282707.05	5341.75	END
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93	5341.75	282707.05	5341.75	END
94	5341.75	282707.05	5341.75	END
95	5341.75	282707.05	5341.75	END
96	5341.75	282707.05	5341.75	END
97	5341.75	282707.05	5341.75	END
98	5341.75	282707.05	5341.75	END
99	5341.75	282707.05	5341.75	END
100	5341.75	282707.05	5341.75	END

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.



LEGAL DESCRIPTION:

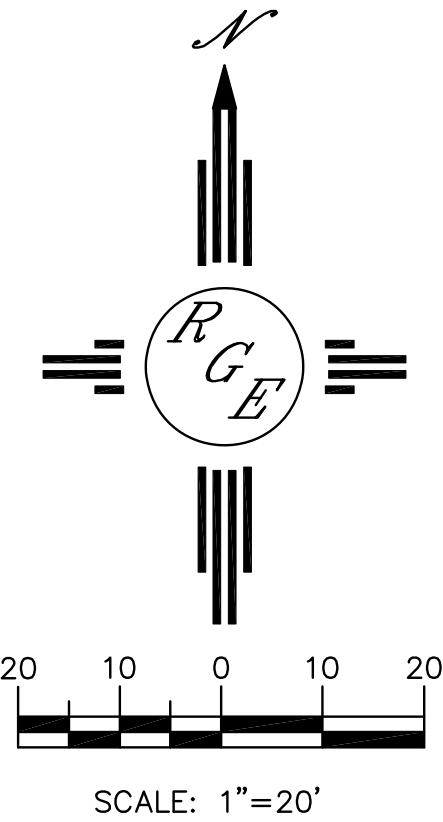
LOT 15 BLOCK 4 UNIT NO. 22 VOLCANO CLIFFS SUBDIVISION

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. A PAD CERTIFICATION IS REQUIRED PRIOR TO ISSUANCE OF BUILDING PERMIT

LEGEND

- - - - - EXISTING CONTOUR
- - - - - EXISTING INDEX CONTOUR
- - - - - PROPOSED CONTOUR
- - - - - PROPOSED INDEX CONTOUR
- - - - - SLOPE TIE
- + + + + + EXISTING SPOT ELEVATION
- + + + + + PROPOSED SPOT ELEVATION
- - - - - BOUNDARY
- - - - - CENTERLINE
- - - - - RIGHT-OF-WAY
- = = = = = EXISTING CURB AND GUTTER
- - - - - PROPOSED CMU SCREEN WALL 0'-3' MAX RETAINAGE (DESIGN BY OTHERS)



ENGINEER'S SEAL 4/27/17 DAVID SOULE P.E. #14522	6423 CANAVIO PLACE	DRAWN BY WCWJ DATE 4-26-17 21731-LAYOUT-4-26-17
	GRADING AND DRAINAGE PLAN 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	SHEET # — JOB # 21731