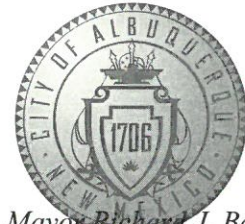


# CITY OF ALBUQUERQUE

Planning Department  
Suzanne Lubar, Director



Mayor Richard J. Berry

July 7, 2017

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

RE: **Lot 3 Block 9 Unit 5 Volcano Cliffs SAD 227**  
**6208 Keyenta Pl NW**  
**Grading and Drainage Plan**  
**Engineers Stamp Date 7/5/17 (D10D031)**

Dear Mr. Soule,

Based upon the information provided in your submittal received 5/9/17, this plan is approved for Grading Permit. **Prior to building permit approval the following comments must be addressed.**

PO Box 1293

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 7/5/17.

Albuquerque

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

New Mexico 87103

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

www.cabq.gov

Sincerely,

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

RR/JH  
C: File

Weighted E Method

| Basin    | Area     |         | Treatment A |         | Treatment B |         | Treatment C |         | Treatment D |         | Weighted |         | 100-Year, 6-hr. |      |
|----------|----------|---------|-------------|---------|-------------|---------|-------------|---------|-------------|---------|----------|---------|-----------------|------|
|          | (sf)     | (acres) | %           | (acres) | %           | (acres) | %           | (acres) | %           | (acres) | (ac-ft)  | (ac-ft) | Volume          | Flow |
| ALLOWED  | 11888.00 | 0.273   | 0%          | 0       | 10%         | 0.027   | 40%         | 0.1082  | 50%         | 0.136   | 1.448    | 0.033   |                 | 0.97 |
| PROPOSED | 11888.00 | 0.273   | 0%          | 0       | 15%         | 0.041   | 39%         | 0.1064  | 46%         | 0.126   | 1.393    | 0.032   |                 | 0.94 |
| 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

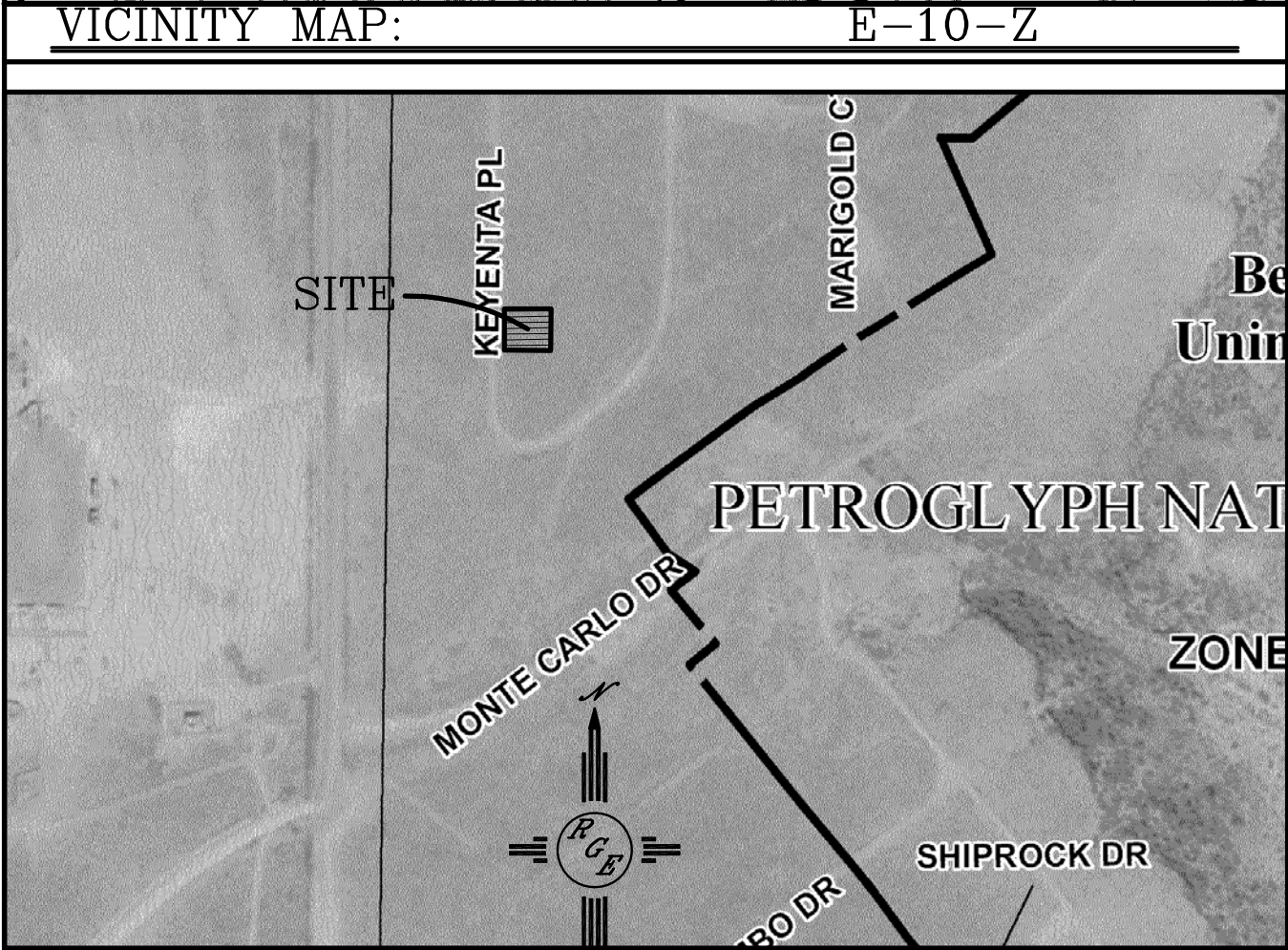
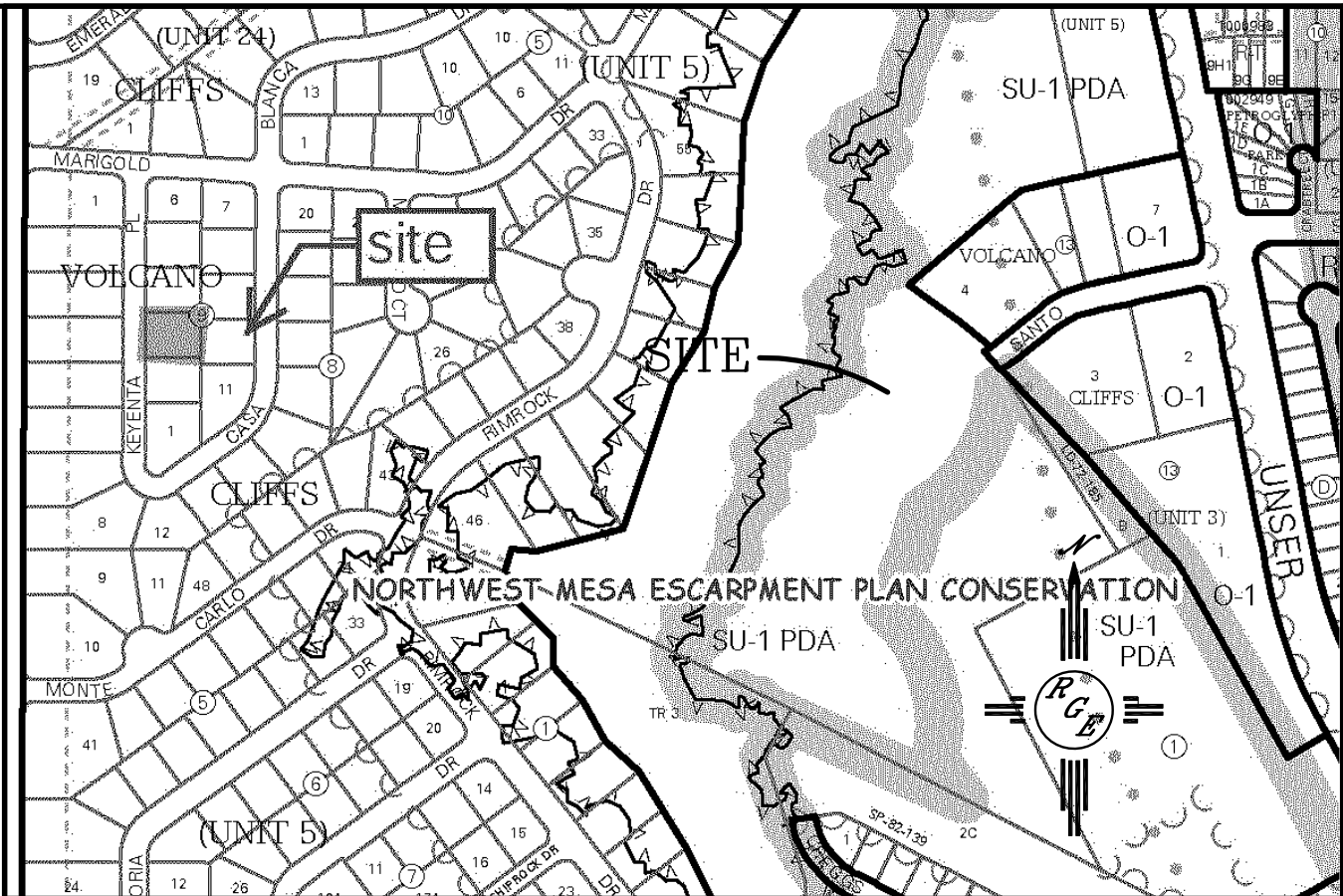
| FIRST FLUSH WATER QUALITY VOLUME | REQUIRED | PROVIDED |
|----------------------------------|----------|----------|
| WATER QUALITY                    | (CF)     | (CF)     |
|                                  | 155      | 766      |

Narrative

This site is within the SAD 227 Master Drainage plan boundaries. The site is to maintain existing patterns and drain to the the adjacent roadway per the master drainage plan. We are ponding the water harvest volume generated by the site we are allowing the upland flow to pass thru the site. This plan has a shallow water harvest pond in excess of the drainage regulations. The site is not impacted by upland flows. This plan is in conformance to the master drainage plan

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.



FIRM MAP: FM35001C0113G

LEGAL DESCRIPTION:

LOT 3, BLOCK 9, VOLCANO CLIFFS UNIT 5

NOTES:

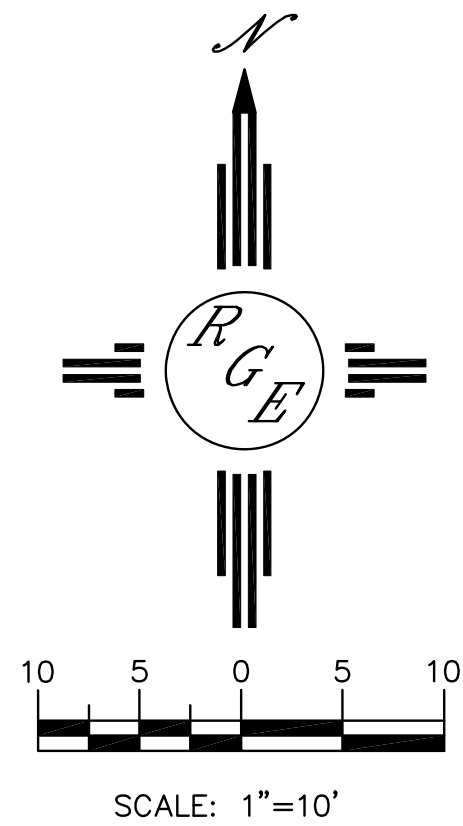
- ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- ANY SCREEN OR RETAINING WALL SHALL BE PERMITTED SEPERATELY. THIS PLAN MUST BE INCLUDED IN ANY PERMIT APPLICATION
- A PAD CERTIFICATION IS REQUIRED AFTER GRADING PRIOR TO RELEASE OF BUILDING PERMIT


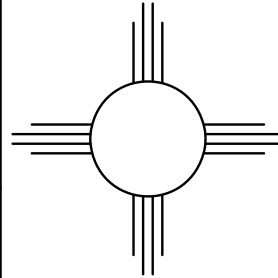
LEGEND

|     |      |     |                                        |
|-----|------|-----|----------------------------------------|
| --- | XXXX | --- | EXISTING CONTOUR                       |
| --- | XXXX | --- | EXISTING INDEX CONTOUR                 |
| --- | XXXX | --- | PROPOSED CONTOUR                       |
| --- | XXXX | --- | PROPOSED INDEX CONTOUR                 |
| --- | XXXX | --- | SLOPE TIE                              |
| +   | XXXX |     | EXISTING SPOT ELEVATION                |
| +   | XXXX |     | PROPOSED SPOT ELEVATION                |
| --- | ---  | --- | BOUNDARY                               |
| --- | ---  | --- | CENTERLINE                             |
| --- | ---  | --- | RIGHT-OF-WAY                           |
| --- | ---  | --- | EXISTING CURB AND GUTTER               |
| --- | ---  | --- | PROPOSED SCREEN WALL-18" MAX RETAINAGE |

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<br><br>7/5/17<br>DAVID SOULE<br>P.E. #14522 | 6208 KEYENTA PLACE                                                                                                                                                                                | DRAWN BY WCWJ<br>DATE 6-19-17<br>21754-LAYOUT-6-19-17 |
|                                                                                                                                                  | GRADING AND DRAINAGE PLAN                                                                                                                                                                         | SHEET #                                               |
|                                                                                                                                                  | <br>Rio Grande Engineering<br>1606 CENTRAL AVENUE SE<br>SUITE 201<br>ALBUQUERQUE, NM 87106<br>(505) 872-0989 | JOB # 21754                                           |