# CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

March 22, 2018

David Soule, PE Rio Grande Engineering 1606 Central SE Suite 201 Albuquerque, NM 87106

Re: Lot 19 Block 4 Volcano Cliffs SAD 228

6539 Vista Del Prado NW

Request Permanent C.O. - Accepted

Engineer's Stamp dated: 10-16-17 (D10D003T19)

Certification dated: 3/20/18

PO Box 1293

Dear Mr. Soule,

Albuquerque

Based on the Certification received on 3/20/2018, the site is acceptable for release of Certificate of Occupancy by Hydrology.

NM 87103

If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

www.cabq.gov

Sincerely,

James D. Hughes, P.E.

Principal Engineer, Hydrology

Planning Department

RR/JH

C: File D10D003T19



## City of Albuquerque

#### Planning Department

#### Development & Building Services Division

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

| Project Title:   |              | Building Permit #:  | City Drainage #:                         |  |  |  |  |  |
|--|--------------|---|--|--|--|--|--|--|
|  |              |   | 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 CERTIFIC   | CATION       | <del></del>   | SITE PLAN FOR SUB'D APPROVAL             |  |  |  |  |  |
|  |              | SITE PLAN FOR B   | SITE PLAN FOR BLDG. 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  |  |  |  |  |  |  |
|  |              |   |  |  |  |  |  |  |
|  |              | PAVING PERMIT   |  |  |  |  |  |  |
| TRAFFIC CIRCULATION LAYOU  | Γ (TCL)      |   | APPROVAL                                 |  |  |  |  |  |
| TRAFFIC CIRCULATION LAYOUT TRAFFIC IMPACT STUDY (TIS)                | Γ (TCL)      | PAVING PERMIT   | APPROVAL<br>ERTIFICATION                 |  |  |  |  |  |
|  |              | PAVING PERMIT GRADING/ PAD C  | APPROVAL<br>ERTIFICATION                 |  |  |  |  |  |
| TRAFFIC IMPACT STUDY (TIS)   | L PLAN (ESC) | PAVING PERMIT GRADING/ PAD C WORK ORDER APP   | APPROVAL<br>ERTIFICATION<br>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<br>ERTIFICATION<br>ROVAL<br>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<br>ERTIFICATION<br>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: \_\_\_\_

### Weighted E Method

|                |          |           |    |             |     |             |     |             |     |          | 100-Year, 6-hr. |         |      |
|----------------|----------|-----------|----|-------------|-----|-------------|-----|-------------|-----|----------|-----------------|---------|------|
|                | Area     | Area Area |    | Treatment A |     | Treatment B |     | Treatment C |     | ment D V | Veighted        | Volume  | Flow |
|                | (sf)     | (acres)   | %  | (acres)     | %   | (acres)     | %   | (acres)     | %   | (acres)  | (ac-ft)         | (ac-ft) | cfs  |
| UPLAND         | 27131.00 | 0.623     | 0% | 0           | 10% | 0.062       | 40% | 0.2491      | 50% | 0.311    | 0.807           | 0.042   | 1.48 |
| ALLOWED        | 14177.00 | 0.325     | 0% | 0           | 10% | 0.033       | 40% | 0.1302      | 50% | 0.163    | 1.448           | 0.039   | 1.1  |
| PROPOSED total | 14177.00 | 0.325     | 0% | 0           | 38% | 0.124       | 32% | 0.1041      | 30% | 0.098    | 1.162           | 0.032   | 0.9  |

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

Qa= 1.29 Qb= 2.03 Eb = 0.67Ec = 0.99Qc= 2.87 Qd= 4.37

**ONSITE Conditions** 

FIRST FLUSH WATER QUALITY VOLUME

REQUIRED

WATER QUALITY

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 lot to east per the master drainage plan. We are ponding the water harvest volume generated by the site there is not measurable upland flow. This plan has a shallow water harvest pond in excess of the drainage regulations. This plan is in conformance to the master drainage plan

**PROVIDED** 

#### TURNED BLOCKS

Weir Equation:

 $Q=CLH^{3/2}$ 

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

drainage thru walls

Q=2.92 cfs  $\hat{C} = 2.95$ H = 0.5 ft

L = Length of weir

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

Therefore 1.48 cfs requires 3 openings and 2 turned blocks

OUTFALL

Therefore 2.46 cfs requires 5 openings and 3 turned blocks

I David Soule, NMPE 14522, of the firm Rio Grande Engineering, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intend of the approved plan dated  $\frac{10/16/17}{}$ . The record information edited on the original design document has performed by me or under my direct supervision and is true and correct to the best of my knowledge and belief. The asbuilt survey was provided by THOMAS PATRICK NMPS 12651. The certification is submitted in support of a request for PERMANENT CERTIFICATE OF OCCUPANCY. The record information presented heron is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on this record document are advised to obtain independent verification of its accuracy before using it for any other purpose



3/20/18

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

EROSION CONTROL NOTES:

3-17-18

G& D CERTIFICATION

SCALE: 1"=20'

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.

WH = WEEP HOLE

WYERT = 17.2



LEGAL DESCRIPTION:
LOT 19, BLOCK 4 VOLCANO CLIFFS UNIT 19

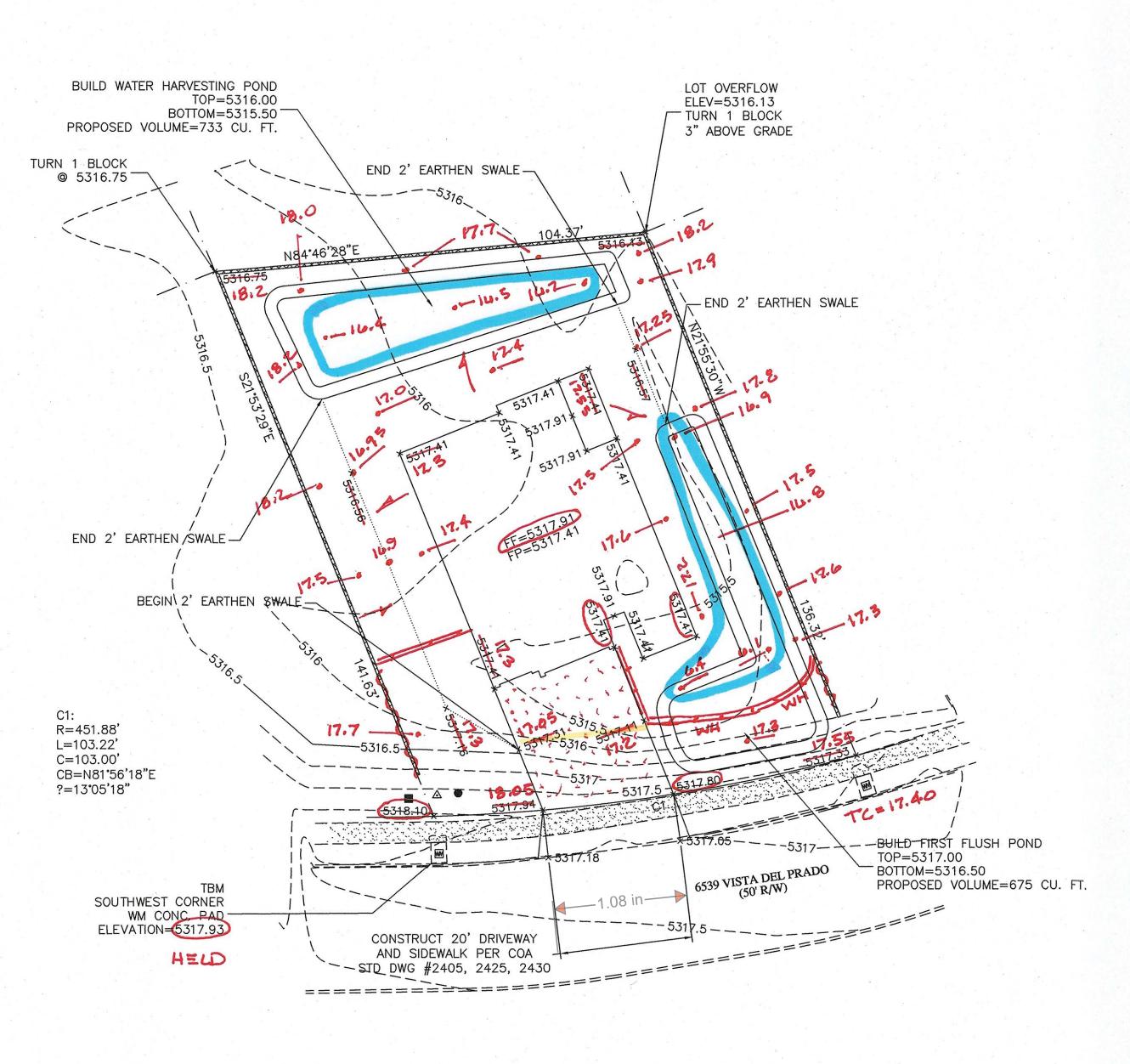
NOTES:

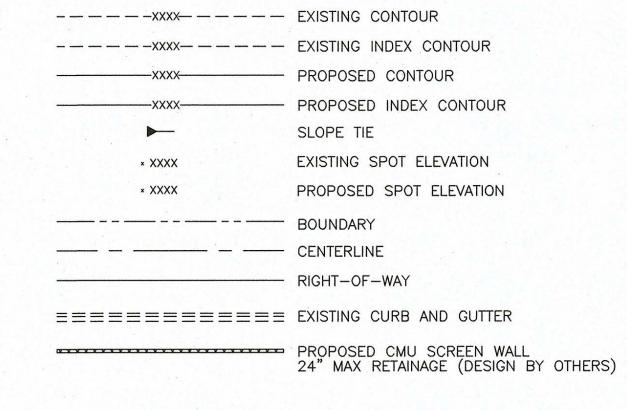
LEGEND

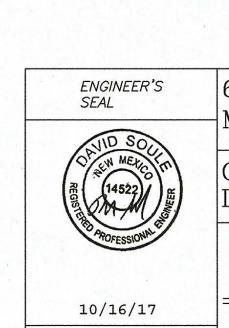
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE

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

3. ANY PERIMETER WALLS MUST BE PERMITED SEPARATELY. ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.







DAVID SOULE

P.E. #14522

6539 VISTA DEL PRADO MAESTAS RESIDENCE GRADING AND DRAINAGE PLAN

Rio Grande Lingineering 1606 CENTRAL AVENUE SE SUITE 201

DRAWN

BY WCWJ

DATE

8-19-17

21779-LAYOUT-8-18-1

SHEET #

JOB #

21779

ALBUQUERQUE, NM 87106 (505) 872-0999

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.