

# CITY OF ALBUQUERQUE

*Planning Department*  
Brennon Williams, Director



*Mayor Timothy M. Keller*

August 6, 2020

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

RE: **Montgomery Carwash**  
**3525 Montgomery Blvd. NE**  
**Request for Certificate of Occupancy - Permanent**  
**Hydrology Final Inspection –Approved**  
**Grading and Drainage Plan Stamp Date: 4/1/19**  
**Certification Dated: 7/30/20**

Dear Mr. Soule,

PO Box 1293

Based on the submittal received on 7/30/20 and field inspection 8/6/20, this certification is approved in support of Permanent Certificate of Occupancy by Hydrology.

Albuquerque

If you have any questions, please contact me at 924-3986 or [earmijo@cabq.gov](mailto:earmijo@cabq.gov).

Sincerely,

NM 87103

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

Ernest Armijo, P.E.  
Principal Engineer, Planning Dept.  
Development Review Services



# City of Albuquerque

Planning Department  
Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

**Project Title:** MONTGOMERY CARWASH **Building Permit #:** \_\_\_\_\_ **Hydrology File #:** F16D053

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

**Legal Description:** TRACT G2A2 MONTGOMERY COMPLEX

**City Address:** 3525 MONTGOMERY

**Applicant:** LBJ, LLC **Contact:** \_\_\_\_\_

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

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

**Other Contact:** RIO GRANDE ENGINEERING **Contact:** DAVID SOULE

**Address:** PO BOX 93924 ALB NM 87199

**Phone#:** 505.321.9099 **Fax#:** 505.872.0999 **E-mail:** david@riograndeengineering.com

**TYPE OF DEVELOPMENT:** \_\_\_\_\_ PLAT \_\_\_\_\_ RESIDENCE \_\_\_\_\_ DRB SITE ☒ ADMIN SITE

Check all that Apply:

### DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE  
☐ TRAFFIC/ TRANSPORTATION

### TYPE OF SUBMITTAL:

☒ ENGINEER/ARCHITECT CERTIFICATION  
☐ PAD CERTIFICATION  
☐ CONCEPTUAL G & D PLAN  
☐ GRADING PLAN  
☐ DRAINAGE REPORT  
☐ DRAINAGE MASTER PLAN  
☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC  
☐ ELEVATION CERTIFICATE  
☐ CLOMR/LOMR  
☐ TRAFFIC CIRCULATION LAYOUT (TCL)  
☐ TRAFFIC IMPACT STUDY (TIS)  
☐ STREET LIGHT LAYOUT  
☐ OTHER (SPECIFY) \_\_\_\_\_  
☐ PRE-DESIGN MEETING?

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

### 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  
☐ FLOODPLAIN DEVELOPMENT PERMIT  
☐ OTHER (SPECIFY) \_\_\_\_\_

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

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

FEE PAID: \_\_\_\_\_



Weighted E Method

MONTGOMERY CARWASH

| Existing Developed Basins            |              |                 |             |                   |             |                   |             |                   |             |                   |                 |       |                             |       |
|--------------------------------------|--------------|-----------------|-------------|-------------------|-------------|-------------------|-------------|-------------------|-------------|-------------------|-----------------|-------|-----------------------------|-------|
| Basin                                | Area<br>(sf) | Area<br>(acres) | Treatment A |                   | Treatment B |                   | Treatment C |                   | Treatment D |                   | 100 Year, 6-hr. |       | 10-day<br>Volume<br>(ac-ft) |       |
|                                      |              |                 | Weight (%)  | Volume<br>(ac-ft) | Weight (%)  | Volume<br>(ac-ft) | Weight (%)  | Volume<br>(ac-ft) | Weight (%)  | Volume<br>(ac-ft) |                 |       |                             |       |
| UPLAND (DIVERGED WITH VALLEY CUTTER) |              |                 |             |                   |             |                   |             |                   |             |                   |                 |       |                             |       |
| BASIN A                              | 5872         | 0.137           | 0%          | 0                 | 6.9%        | 0.006             | 21.9%       | 0.029             | 73%         | 6.100             | 1.832           | 0.021 | 6.55                        | 0.036 |
| SUBBASIN A-1                         | 3689         | 0.089           | 0%          | 0                 | 6.9%        | 0.006             | 21.9%       | 0.019             | 73%         | 0.060             | 1.832           | 0.014 | 0.38                        | 0.022 |
| BASIN B                              | 9481         | 0.217           | 0%          | 0                 | 4.9%        | 0.009             | 18.0%       | 0.039             | 79%         | 0.169             | 1.888           | 0.034 | 0.84                        | 0.057 |
| BASIN C                              | 21150        | 0.483           | 0%          | 0                 | 3.9%        | 0.015             | 5.9%        | 0.024             | 92%         | 0.447             | 2.030           | 0.082 | 2.21                        | 0.142 |
| SUBBASIN C-1                         | 4691         | 0.103           | 0%          | 0                 | 3.9%        | 0.009             | 8.9%        | 0.065             | 92%         | 0.099             | 2.030           | 0.017 | 0.10                        | 0.009 |
| TOTAL                                | 40483.00     | 0.929           | 0%          | 0                 | 4.9%        | 0.037             | 11.9%       | 0.111             | 94%         | 0.781             | 1.949           | 0.151 | 4.10                        | 0.230 |

COMPARISON

Equation:

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

Volume = Weighted D \* Total Area

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

Where for 100-year, 6-hour storm (zone 2)

|    | Basin A | Basin B | Basin C | Basin D | Basin E | Basin F | Basin G | Basin H | Basin I | Basin J | Basin K | Basin L | Basin M | Basin N | Basin O | Basin P | Basin Q | Basin R | Basin S | Basin T | Basin U | Basin V | Basin W | Basin X | Basin Y | Basin Z |
|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Qa | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qb | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qc | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qd | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qe | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qf | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qg | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qh | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qi | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qj | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qk | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Ql | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qm | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qn | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qo | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qp | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qq | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qr | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qs | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qt | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qu | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qv | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qw | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qx | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qy | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |
| Qz | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    | 0.03    |

DRAINAGE NARRATIVE

THIS SITE IS A REDEVELOPMENT OF AN EXISTING SITE. PER F160053 THE SITE DISCHARGES 3.7 CFS TO MONTGOMERY AS SHEET FLOW. THE SITE ACCEPTS 8.9 CFS FROM THE UPLAND SITE. WE ARE PROPOSING TO MAINTAIN EXISTING PATTERNS AND CONTINUE TO FREE DISCHARGE TO MONTGOMERY VIA THE EXISTING DRIVEWAY. THE SITE DISCHARGES 3.7 CFS WHICH IS 30 CFS GREATER THAN HISTORICAL WHICH IS DOMINANT. THE FIRST FLUSH VOLUME RETAINED ON-SITE. THE FIRST FLUSH VOLUME FOR EACH BASIN HAS BEEN CALCULATED. THE SUB BASIN FOR EACH POND HAS BEEN SHOWN. THE AREAS BYPASSING PONDS HAS BEEN DETERMINED AND THE OWNER ELECTS TO PAY A FEE IN LIEU FOR THE UNTREATED VOLUME OF 382 CUBIC FEET AMOUNTING TO \$3,144.26

CURB/CHANNEL AT EAST FACE OF BUILDING

| Top Width | Bottom Width | Depth | Area | WP   | R    | Slope     | Q Provided | Q Required | Velocity |
|-----------|--------------|-------|------|------|------|-----------|------------|------------|----------|
| 10        | 10           | 1     | 1    | 0.07 | 2.01 | 0.3551694 | 0.9        | 9.45       | 4.43     |
| 10        | 10           | 1     | 1    | 0.07 | 2.01 | 0.3551694 | 0.9        | 9.45       | 4.43     |

Manning's Equation:

$Q = 1.486 \cdot A \cdot R^{2/3} \cdot S^{1/2}$

A = Area

R = D/R

S = Slope

n = 0.015



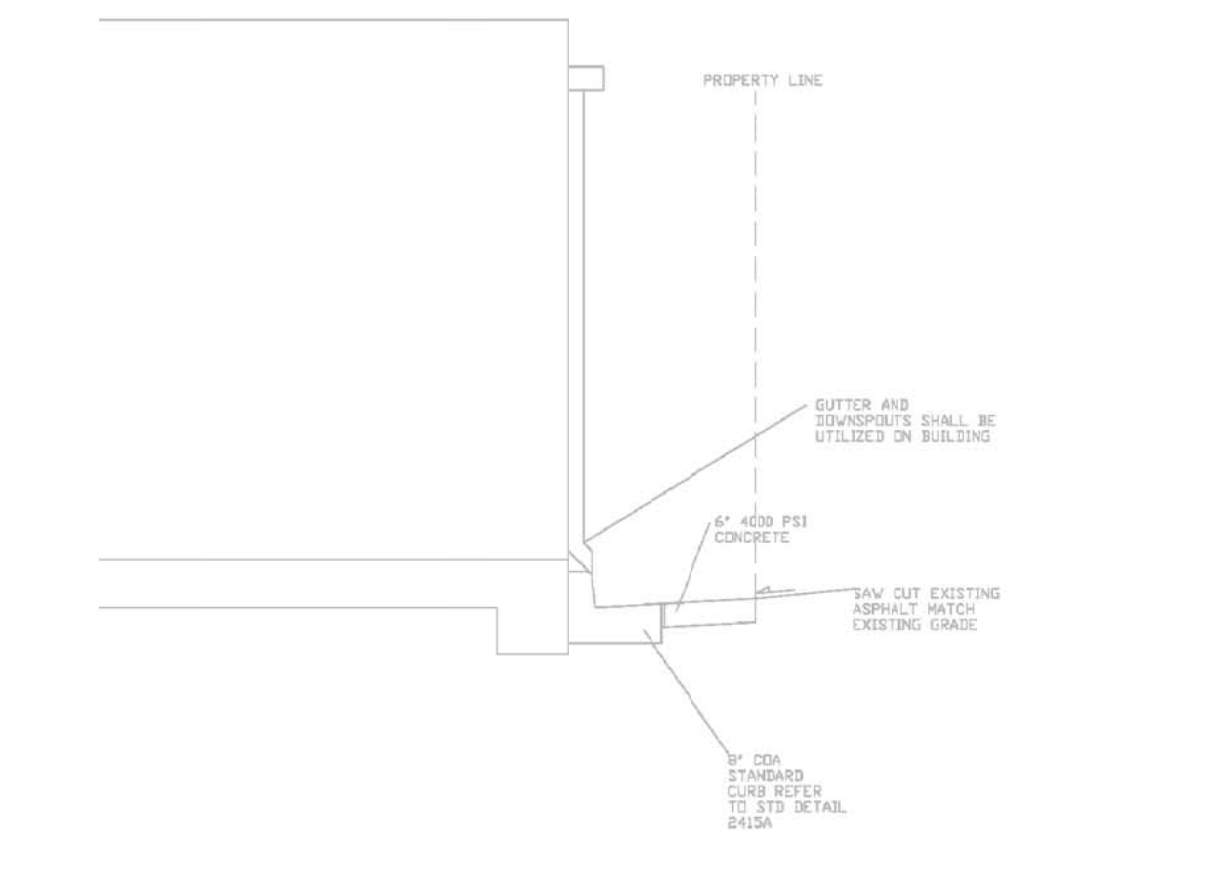
I David Soule, NMPE 14522, of the firm Rio Grande Engineering, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intend of the approved plan dated 4/1/19. The record information edited on the original design document has performed by me or under my direct supervision and is true and correct to the best of my knowledge and belief. The as-built 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



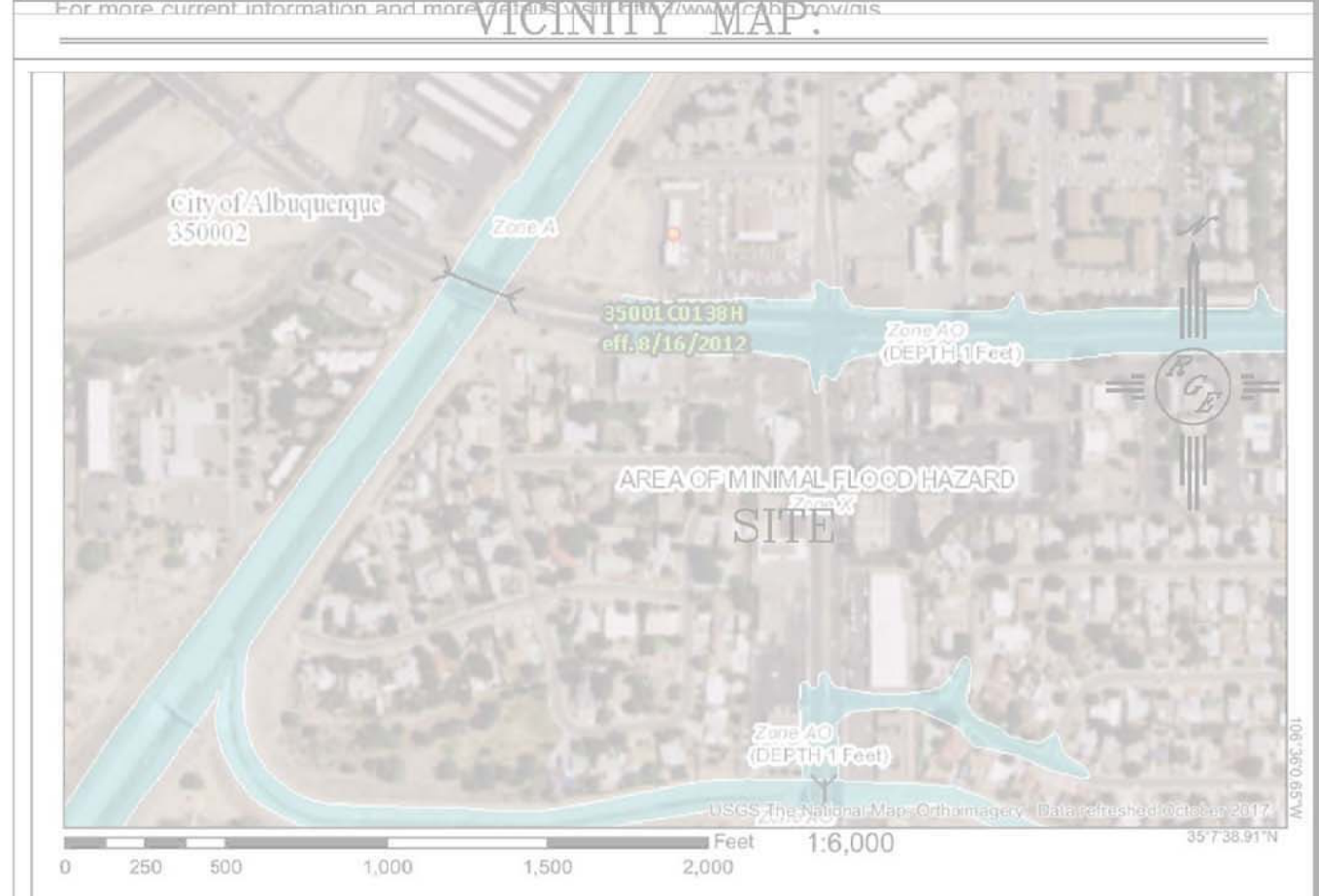
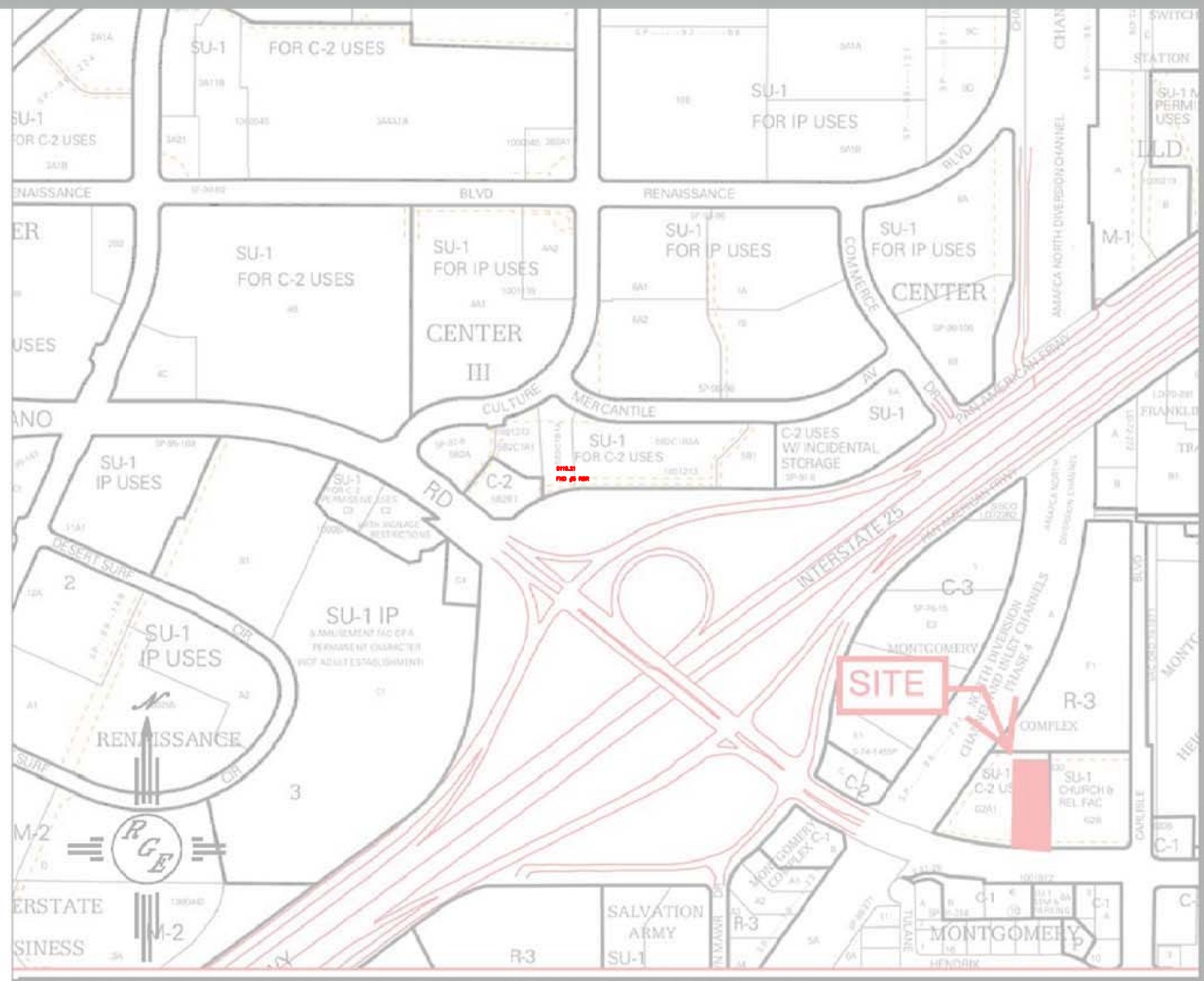
7/30/20

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.



TYPICAL SECTION AT EAST PROPERTY LINE



FIRM MAP:

LEGAL DESCRIPTION:

TRACT G-2-A, MONTGOMERY COMPLEX

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
  2. TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THIS PLAN WAS OBTAINED BY COMMUNITY SCIENCES, DATED AUGUST 2018. NAVD 88 DATUM
  3. ALL DISTURBED AREAS MUST BE RESEED OR LANDSCAPED PRIOR TO FINAL C.O.
- ALL AREAS OUTSIDE THE BUILDING ENVELOPE MUST BE RESEED WITH NATIVE MIX

LEGEND

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

|   |                                     |  |
|---|-------------------------------------|--|
| ENGINEER'S<br>SEAL  | TRACT G-2-A-2<br>MONTGOMERY COMPLEX | DRAWN<br>BY JDG  |
|  |                                     | DATE<br>10-31-2018   |
|   | GRADING AND<br>DRAINAGE PLAN        |  |
|   | 4/1/19                              |  <div><i>Rio Grande<br/>Engineering</i><br/>1606 CENTRAL AVENUE SE<br/>SUITE 201<br/>ALBUQUERQUE, NM 87106<br/>(505) 872-0899</div> |
| DAVID SOULE<br>P.E. #14522  |                                     | JOB #  |

CSC AS-BUILT DONE 07-28-20