

# CITY OF ALBUQUERQUE

*Planning Department*  
Alan Varela, Director



*Mayor Timothy M. Keller*

March 14, 2022

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

**RE: 5120 Northern Trail NW**  
**Permanent C.O. - Approved**  
**Engineer's Certification Date: 3/9/22**  
**Engineer's Stamp Date: 1/8/21**  
**Hydrology File: F11D017A**

Dear Mr. Soule:

PO Box 1293

Based on the certification received 3/9/22 and a site visit on 3/18/22, this certification is approved for 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:** 5120 NORTHERNTRAILS **Building Permit #:** \_\_\_\_\_ **Hydrology File #:** \_\_\_\_\_  
**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_  
**Legal Description:** LOT 108 QUAKER HEIGHTS  
**City Address:** 5120 NORTHERNTRAILS

**Applicant:** GUSTAVO MALDONADO **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?

**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) \_\_\_\_\_

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

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

COA STAFF:

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

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



Weighted E Method												
										100-Year, 6-hr.		15-day.
Basin	Area	Area	Treatment A	Treatment B	Treatment C	Treatment D	Weighted E	Volume	Flow	Volume		
	(sf)	(acres)	%	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs	(ac-ft)		
ALLOWED	33913.00	0.779	100%	0.779	0%	0.000	0%	0	0%	0.000	0.530	1.21
PROPOSED	33913.00	0.779	10%	0.078	30%	0.234	31%	0.2413	29%	0.226	1.252	0.034
COMPARISON								0.047				0.111

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= 0.53  
Eb= 0.78  
Ec= 1.13  
Ed= 2.12  
Qa= 1.56  
Qb= 2.28  
Qc= 3.14  
Qd= 4.7

ONSITE Conditions	FIRST FLUSH WATER QUALITY VOLUME	TOTAL	PROVIDED
	INCREASE	100-YEAR, 6-HOUR	
	100-YEAR 10DAY	0	4283
WATER QUALITY	0		
FLOOD CONTROL	3352	3539	4283

Narrative  
This site is within a fully developed area of albuquerque. The area does not have curb and gutter. The site lies within flood zone X. The site currently drains 1.21 cfs to the adjacent right of way. The proposed drainage solution retains the increase in developed storm water generated during the 100 year 10-day event. The site retains all the flow generated during the 6 hour event. The ponds are shallow and will overflow to the street in an emergency conditions

I, DAVID SOULE HAVE PERSONALLY INPECTED THE SITE. I HEREBY CERTIFY THE PAD HAS BEEN CONSTRUCTED SUCH THAT IT IS IN SUBSTANTIAL CONFORMANCE TO THE APPROVED GRADING PLAN DATED1/8/21

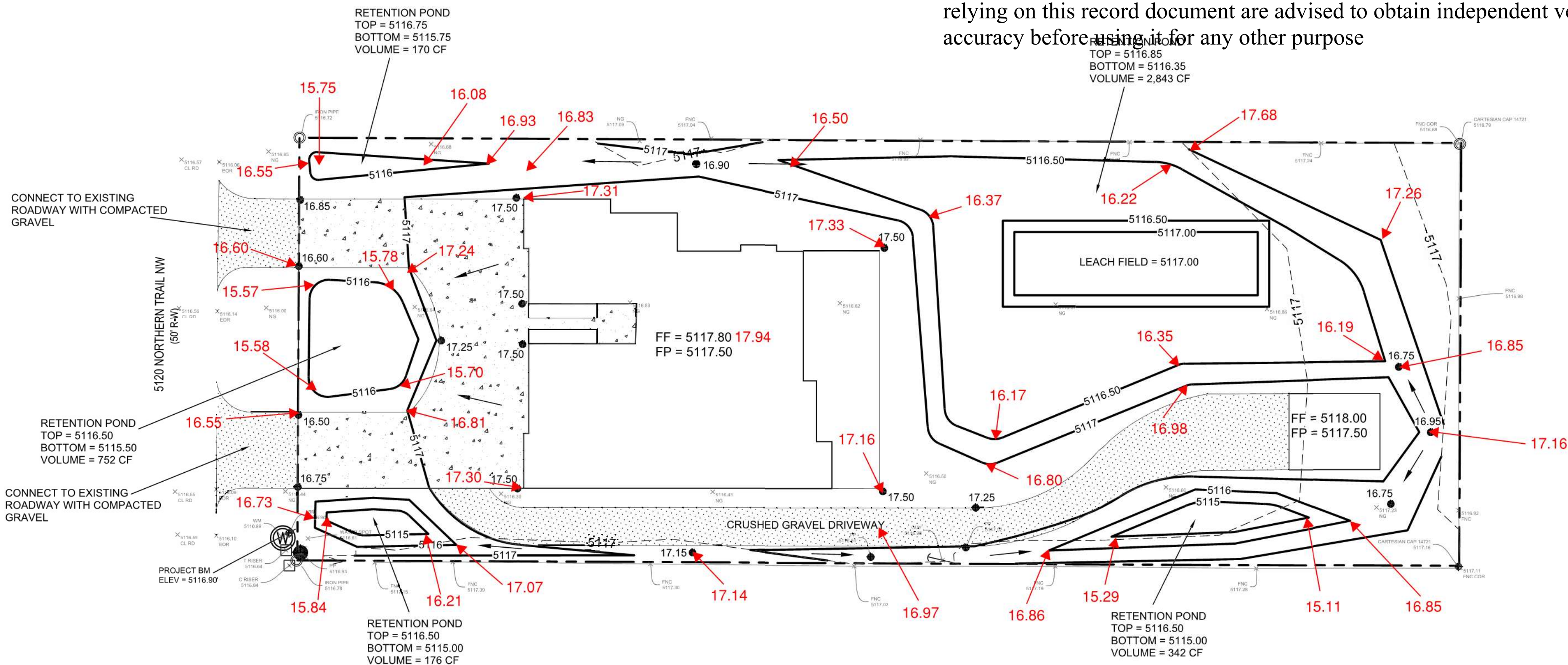


2/2/21

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 1/8/21. 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 LORENZO DOMINQUEZ NMPLS #10461. 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



3/9/22



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.

"AS-BUILT"



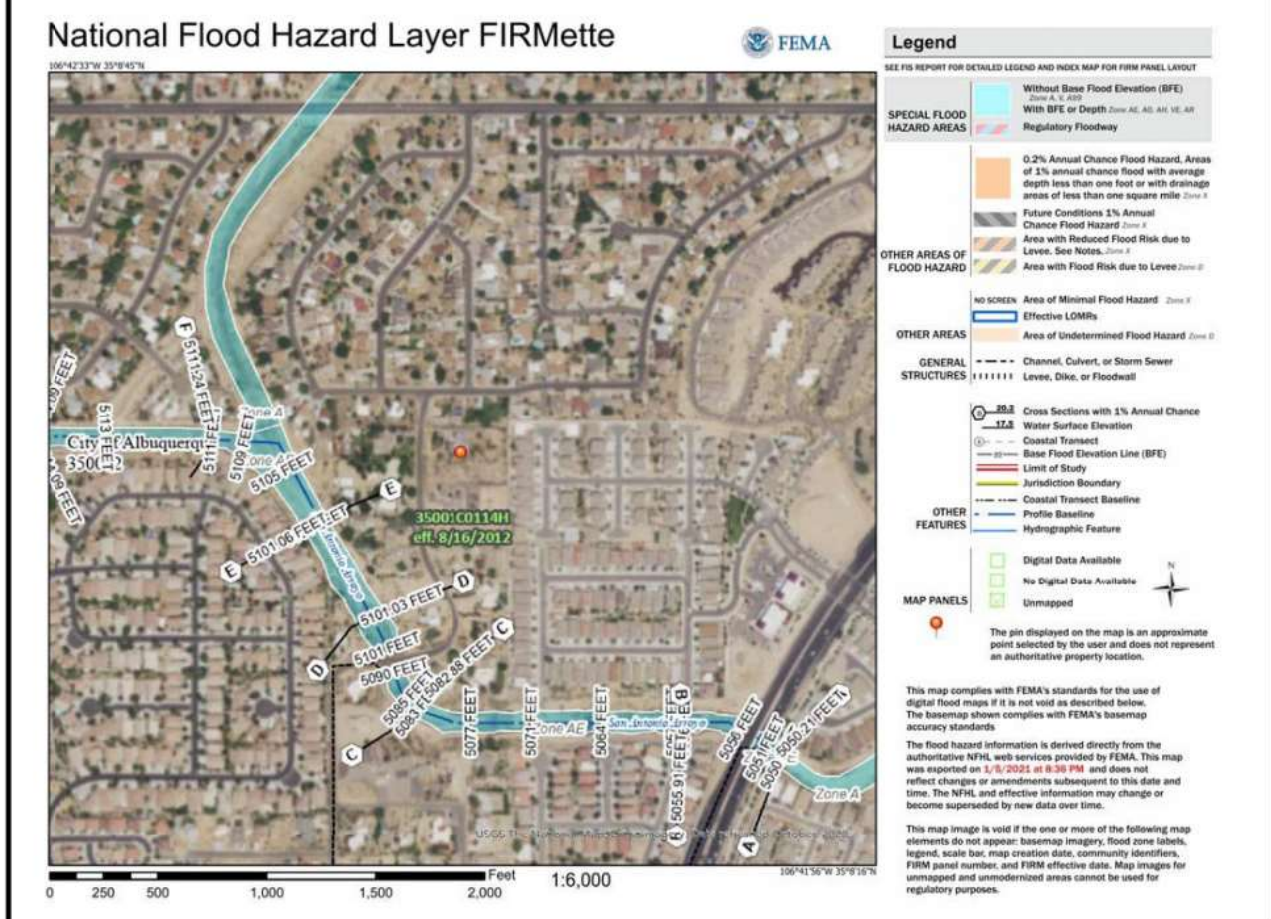
3/5/2022  
DATE

### 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.



VICINITY MAP: F-11-Z



FIRM MAP:

### LEGAL DESCRIPTION:

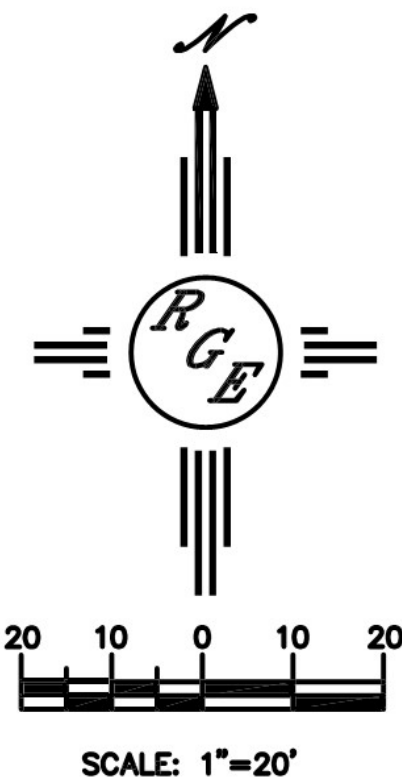
LOT 108 QUAKER HEIGHTS ADDN.  
CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

### 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. SURVEY INFORMATION PROVIDED BY COMMUNITY SCIENCES CORPORATION USING NAVD DATUM 1988.
5. A PAD ELEVATION CERTIFICATION SHALL BE REQUIRED PRIOR TO RELEASE OF BUILDING PERMIT.

### LEGEND

---	EXISTING CONTOUR
- - - -	EXISTING INDEX CONTOUR
---	PROPOSED CONTOUR
- - - -	PROPOSED INDEX CONTOUR
•	EXISTING SPOT ELEVATION
•	PROPOSED SPOT ELEVATION
---	BOUNDARY
---	ADJACENT BOUNDARY
=====	EXISTING CURB AND GUTTER
→	PROPOSED FLOW DIRECTION
[Pattern]	PROPOSED GRAVEL
[Pattern]	PROPOSED CONCRETE



ENGINEER'S SEAL	LOT 108 QUAKER HEIGHTS ADDN. 5120 NORTHERN TRAIL NW	DRAWN BY DEM
DAVID SOULE NEW MEXICO 14522 PROFESSIONAL ENGINEER	GRADING AND DRAINAGE PLAN	DATE 1-7-21
1/8/21	Rio Grande Engineering PO BOX 83924 ALBUQUERQUE, NM 87189 (505) 321-9039	SHEET # C1
DAVID SOULE P.E. #14522		JOB #