# CITY OF ALBUQUERQUE

*Planning Department*
Alan Varela, Director

*Mayor Timothy M. Keller*

June 28, 2023

David Soule, P.E.
Rio Grande Engineering
P.O. Box 93924
Albuquerque, NM 87199

**RE: 709 Towner Ave NW**
**Grading and Drainage Plan**
**Engineer's Stamp Date: 06/20/23**
**Hydrology File: H14D006**

Dear Mr. Soule:

Based upon the information provided in your submittal received 06/20/2023, the Grading and Drainage Plan is approved for Building Permit and Grading Permit. **Since this site is relatively flat and grades to the road, a pad certification is not needed for this project.** Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): Engineer's Certification Checklist For Non-Subdivision is required.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov .

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

# City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

**Project Title:** 709 TOWNER NE Building Permit #:_____ Hydrology File #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: LOTS 49 AND 50, BLOCK 2 TOWNER ADDITION

City Address: 709 TOWNER NE

**Applicant:** _____ 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 X RESIDENCE ___ DRB SITE ___ ADMIN SITE

Check all that Apply:

**DEPARTMENT:**

X HYDROLOGY/ DRAINAGE

___ TRAFFIC/ TRANSPORTATION

**TYPE OF SUBMITTAL:**

___ ENGINEER/ARCHITECT CERTIFICATION

___ PAD CERTIFICATION

___ CONCEPTUAL G & D PLAN

X 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 X No

**TYPE OF APPROVAL/ACCEPTANCE SOUGHT:**

X 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**

| Basin | Area (sf) | Area (acres) | Treatment A % | Treatment A (acres) | Treatment B % | Treatment B (acres) | Treatment C % | Treatment C (acres) | Treatment D % | Treatment D (acres) | 100-Year, 6-hr. Weighted E (ac-ft) | 100-Year, 6-hr. Volume (ac-ft) | 100-Year, 6-hr. Flow cfs | 100 yr 24-HOUR Volume (ac-ft) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HISTORICAL | 7230.00 | 0.166 | 0% | 0 | 50% | 0.083 | 30% | 0.050 | 20% | 0.033 | 1.098 | 0.015 | 0.46 | 0.017 |
| REAR | 4980.00 | 0.114 | 0% | 0 | 32% | 0.037 | 50% | 0.057 | 18% | 0.021 | 1.112 | 0.011 | 0.33 | 0.012 |
| FRONT | 2250.00 | 0.052 | 0% | 0 | 20% | 0.010 | 30% | 0.015 | 50% | 0.026 | 1.551 | 0.007 | 0.17 | 0.008 |

**Equations:**

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

Volume = Weighted D * Total Area

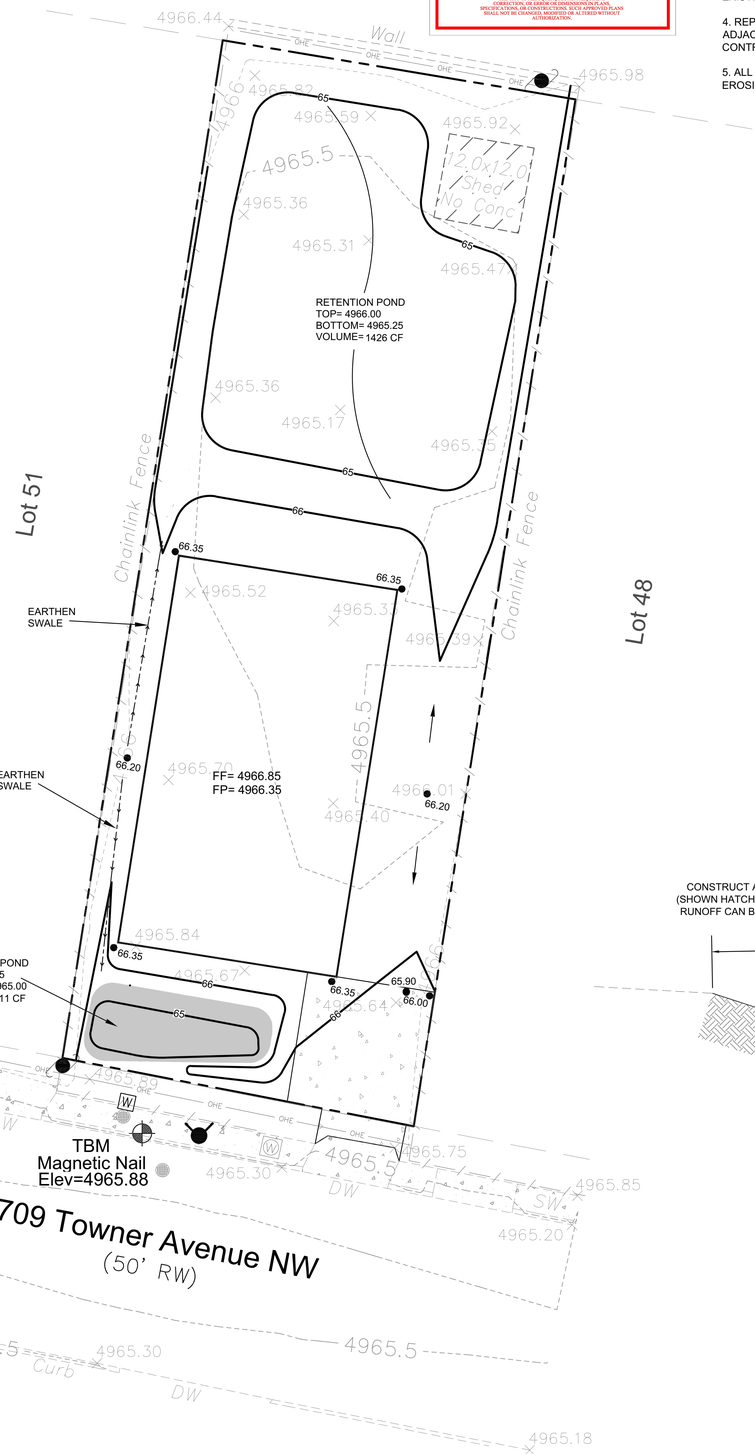
Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

Where for 100-year, 6-hour storm(zone1)

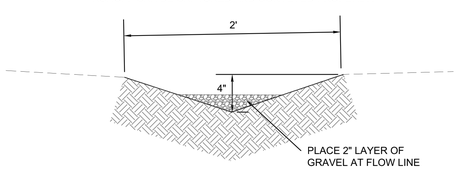
Ea= 0.55 Qa= 1.54
Eb= 0.73 Qb= 2.16
Ec= 0.95 Qc= 2.87
Ed= 2.24 Qd= 4.12

| Developed Conditons | | | TOTAL VOLUME GENERATED | RETAINED |
|---|---|---|---|---|
| DISCHARGE PROPOSED | 0.50 | CFS | 887 CF | 0 |
| EXISTING DISCHARGE | 0.46 | CFS | 758 CF | |
| DIFFERENCE | 0.04 | CFS | 129.02 CF | CF |
| FLOW TO STREET | 0.17 | | 365.81 CF | 111 CF |
| FLOW TO REAR | 0.33 | | 521.157 CF | 1426 CF |

This site is an redevelopment of a previously developed lot. The existing house was demolished at some point in the past (1959 areal on GIS shows).There is no master drainage plan for this area, all lots currently free discharge. The drainage solution is to retain the increase in flow generated by the redevelopment based upon the 24 hour volumes. The front ponds will overflow to the street and the rear pond retains well in excess the generated flow and will overflow historical in emergency.




CONSTRUCT ALL SWALES AND EROSION PROTECTION (SHOWN HATCHED) BELOW ADJACENT GRADE TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY.




EARTHEN SWALE
NTS

**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.

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
**APPROVED**
DATE: 06/28/23
BY: Renée C. Brissette
HydroTrans # H14D006
THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS CORRECTION, OR ERROR OF OMISSIONS ON PLANS, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED, OR ALTERED WITHOUT AUTHORIZATION.

## EROSION CONTROL NOTES:

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

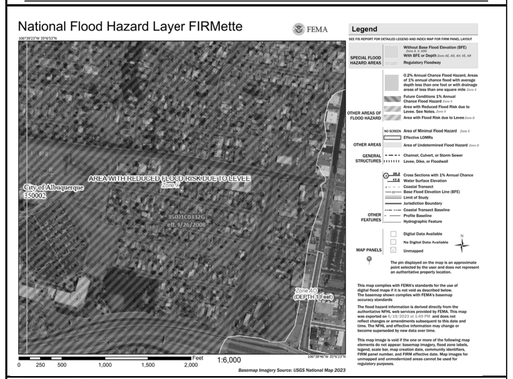
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.

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: H-14-Z




## FIRM MAP:

## LEGAL DESCRIPTION:

LOTS 49 AND 50, BLOCK 2 TOWNER ADDITION
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.

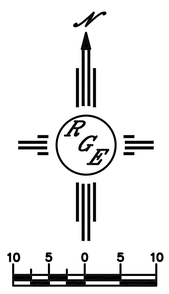
3. ANY PERIMETER WALLS MUST BE PERMITED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.

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

- XXXX — EXISTING CONTOUR
- XXXX — EXISTING INDEX CONTOUR
- XXXX — PROPOSED CONTOUR
- XXXX — PROPOSED INDEX CONTOUR
- XXXX — EXISTING SPOT ELEVATION
- XXXX — PROPOSED SPOT ELEVATION
- BOUNDARY
- ADJACENT BOUNDARY
- EXISTING CURB AND GUTTER
- PROPOSED EARTHEN SWALE
- PROPOSED CONCRETE
- FLOW DIRECTION




SCALE: 1"=10'

ENGINEER'S SEAL
DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER
6/20/23
DAVID SOULE
P.E. #14522

**LOTS 49 & 50, BLK 2 TOWNER ADDITION**
**709 TOWNER AVENUE NW**

**GRADING AND DRAINAGE PLAN**

Rio Grande Engineering
PO BOX 93924
ALBUQUERQUE, NM 87199
(505) 321-9099

DRAWN BY DEM
DATE 6-19-23
709 TOWNER AVE .DWG
SHEET # C1
JOB #