

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

June 17, 2025

Mike Walla, P.E.
Walla Engineering
6501 Americas Pwky NE, Suite 301
Albuquerque, NM 87110

RE: The Bertin / Meinel Residence
8024 Emerald NW
Grading and Drainage Plans
Engineer's Stamp Date: 6/17/25
Hydrology File: E10D128
Case # HYDR-2025-00213

Dear Mr. Walla:

PO Box 1293

Based upon the information provided in your submittal received 6/17/2025, the Grading plan is **approved** for Grading Permit and Building Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

Albuquerque

PRIOR TO CERTIFICATE OF OCCUPANCY:

NM 87103

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

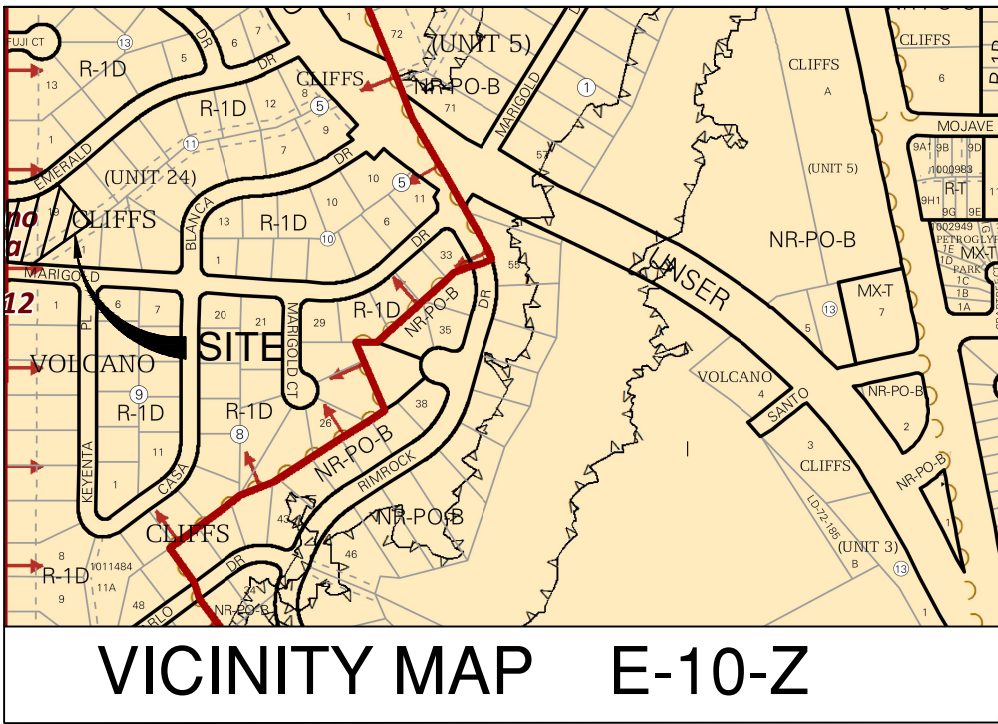
www.cabq.gov

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3314 or amontoya@cabq.gov.

Sincerely,

Anthony Montoya, Jr., P.E., CFM
Senior Engineer, Hydrology
Planning Department, Development Review Services



TEMPORARY BENCHMARK

PROJECT BENCHMARK CP 100 IS A TERRA LAND SURVEY 1/2" REBAR WITH PLASTIC CAP STAMPED "TERRA CONTROL" ELEVATION = 5,329.06 FEET (NAVD 1988 VERTICAL DATUM).

PROJECT BENCHMARK

PROJECT BM IS ACS CONTROL STATION "SEC COR S21, S22, S28, S27". THE STATION MARK IS A USGLO SECTION CORNER DISC SET IN A 12 INCH CONCRETE POST POURED AROUND THE ORIGINAL IRON PIPE 1 FOOT ABOVE GROUND AND IS STAMPED S 21, S22, S28, S27, T11N R2E, 1911. ELEVATION = 5,330.151' (NAVD VERTICAL DATUM).

LEGAL DESCRIPTION

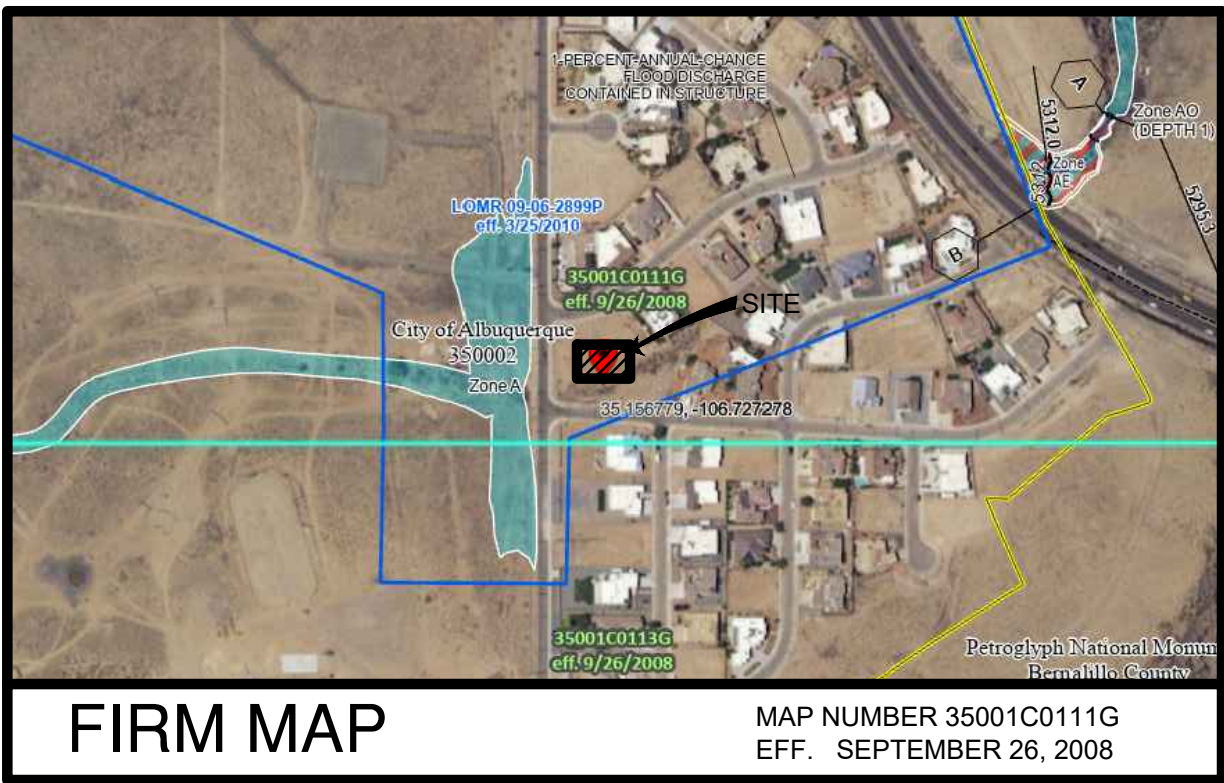
LOT NUMBERED 19 IN BLOCK NUMBERED 11, OF VOLCANO CLIFFS, UNIT NO. 5 FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON NOVEMBER 1, 1967, IN PLAT BOOK D3, FOLIO 175.

LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- NEW SPOT ELEVATION
- NEW CONTOUR
- TP TOP OF PAVING
- FG FINISHED GRADE
- FF FINISHED FLOOR
- ROOF DRAIN
- FLOW DIRECTION
- DRAINAGE SWALE
- NEW PAVING

SHEET KEYNOTES

- NEW CONCRETE DRIVEPAD PER CITY OF ALBUQUERQUE STANDARD DRAWING #2425A
- TWO (2) 1700 GALLON CISTERNS FOR STORM WATER QUALITY VOLUME STORAGE
- GRAVEL OR CONCRETE PAVING AT DRIVE ED ED
- 6"Ø PVC STORM DRAIN WITH MINIMUM 1% SLOPE TO CISTERNS



Hydrology Calculations

Bertin/Meinel Residence – Site Area = 0.892 acres

Design Criteria: City of Albuquerque Development Process Manual – June 2020

Chapter 6 Drainage, Flood Control, and Erosion Control

Procedure for 40-Acre and Smaller Basins

Precipitation Zone 1 per Section 6-2(A)(1), Table 6.2.7 and Figure 6.2.3

Excess Precipitation, E, per Table 6.2.13

Peak Discharge for Small Watersheds: per Table 6.2.14

PRE-DEVELOPED CONDITIONS – Project Site

Land Treatment	Area (ac)	Excess Precip. "E" (in)	Peak Q (cfs/ac)	Coefficient C
A	0.733	0.55	1.54	0.34
B	0.159	0.73	2.16	0.47
C	0.000	0.95	2.87	0.63
D	0.000	2.24	4.12	0.90

Weighted E: $[(0.733 \times 0.55) + (0.159 \times 0.73)] / 0.892 = 0.582$ in

$V_{360} = 0.582 \times 0.892 \times 43560 / 12 = 1885$ CF

Total Qp = $(0.733 \times 1.54) + (0.159 \times 2.16) = 1.47$ CFS

POST-DEVELOPED CONDITIONS – Project Site

Land Treatment	Area (ac)	Excess Precip. "E" (in)	Peak Q (cfs/ac)	Coefficient C
A	0.000	0.55	1.54	0.34
B	0.683	0.73	2.16	0.47
C	0.000	0.95	2.87	0.63
D	0.209	2.24	4.12	0.90

Weighted E: $[(0.683 \times 0.73) + (0.209 \times 2.24)] / 0.892 = 0.967$ in

$V_{360} = 0.967 \times 0.892 \times 43560 / 12 = 3130$ CF

Total Qp = $(0.683 \times 2.16) + (0.209 \times 4.12) = 2.336$ CFS

Rational Method Check: 12-minute Peak Intensity, I = 4.58 in/hr

Q = CIA = $(0.47 \times 4.58 \times 0.683) + (0.90 \times 4.58 \times 0.209) = 2.332$ CFS OK

Storm Water Quality Volume, (SWQV)

Impervious Area = 0.209 ac

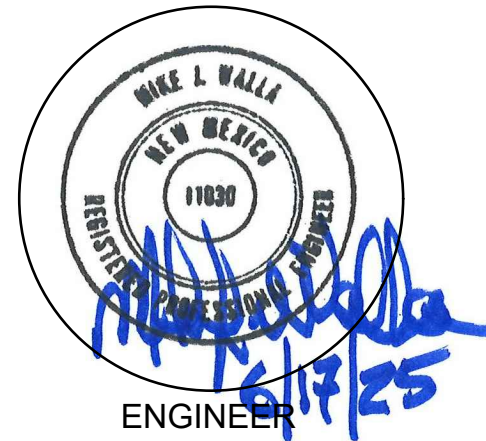
BMP Volume Required: $0.42" \times 0.209 \times 43560 / 12 = 319$ CF = 2384 gallons

Storage volume provided is 2 – 1700 gallon Cisterns = 3400 gallons > 2384 gallons so OK

Walla
ENGINEERING LTD
Structural Engineering
Civil Engineering
500 Marquette Avenue NW • Suite 1500
Albuquerque • New Mexico • 87102
(505) 881-3008

CONTRACTOR

ECOTerra
DESIGN • BUILD
BUILDING A SUSTAINABLE FUTURE



THE BERTIN / MEINEL
RESIDENCE

8024 EMERALD NW
ALBUQUERQUE,
NEW MEXICO

A1 GRADING AND DRAINAGE PLAN

1" = 20'



City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 6/17/2025
BY: [Signature]
HydroTeam # E10D128
THE APPROVAL OF THESE PLANS/REPORTS SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTIONS FOR ERRORS OR DIMENSIONS IN PLANS, SPECIFICATIONS, OR CONSTRUCTION DOCUMENTS, SUCH APPROVED PLANS/REPORTS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.
THE APPROVAL OF THESE PLANS/REPORTS SHALL EXPIRE TWO (2) YEARS AFTER THE APPROVAL DATE IF NO BUILDING PERMIT HAS BEEN PULLED ON THE DEVELOPMENT.

GRADING and
DRAINAGE PLAN

C-101