

# CITY OF ALBUQUERQUE

Planning Department  
Alan Varela, Director



Mayor Timothy M. Keller

September 22, 2025

Ted Barber, P.E.  
Incline Engineering  
236 Tanno Road  
Santa Fe, NM 87506

**RE: 3816 Capistrano Ct. NE**  
**Grading and Drainage Plan**  
**Engineer's Stamp Date: 9/8/25**  
**Hydrology File: G21D-16A**  
**Case # HYDR-2025-00323**

Dear Mr. Barber:

PO Box 1293

Based upon the information provided in your resubmittal received 9/8/2025, the Grading & Drainage Plan is approved for Building Permit and Grading Permit.

Albuquerque

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

NM 87103

**PRIOR TO CERTIFICATE OF OCCUPANCY:**

www.cabq.gov

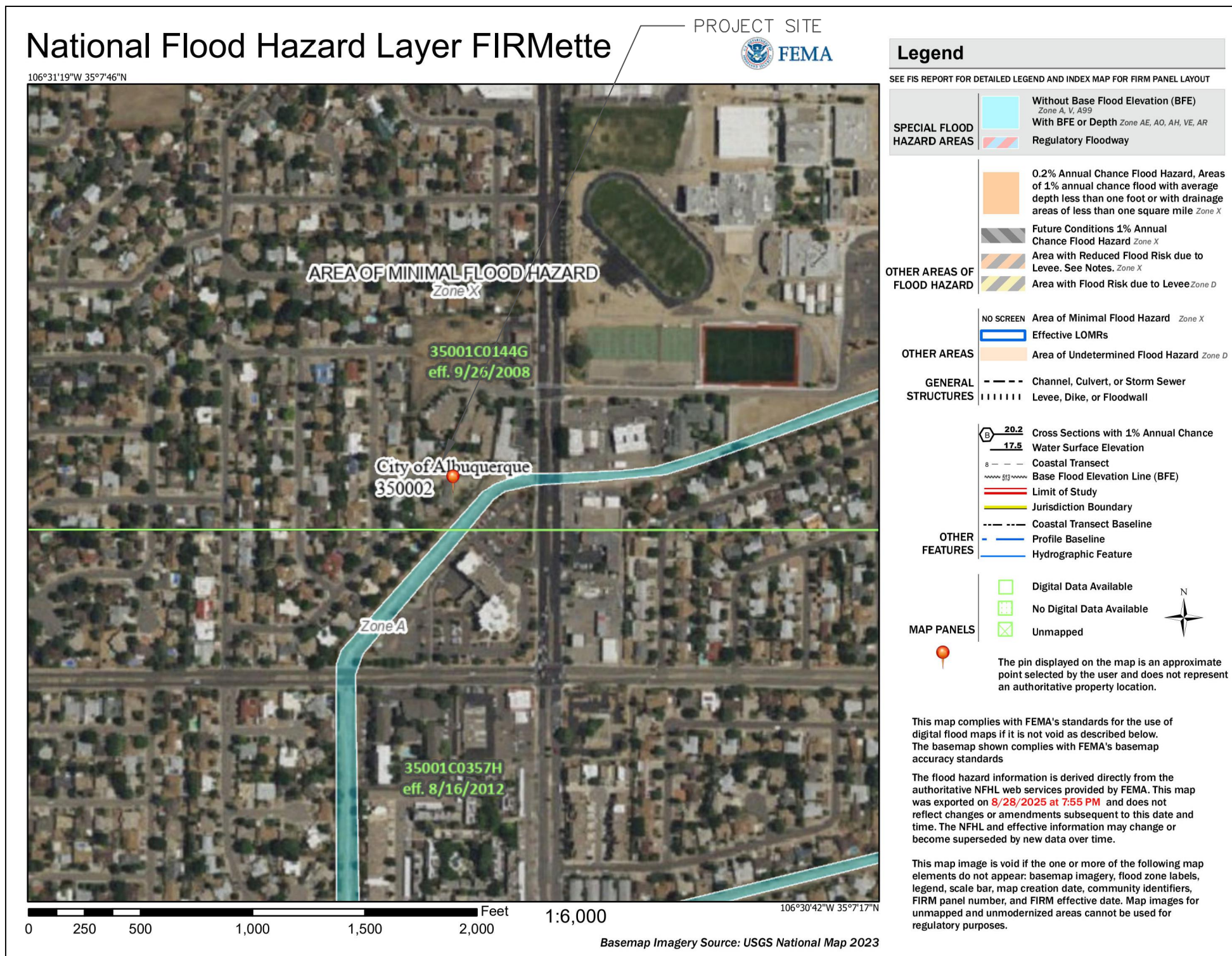
1. Engineer's Certification, per the DPM Part 6-14 (F) : *Engineer's Certification Checklist For Non-Subdivision* is required.

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](mailto:jhughes@cabq.gov), 505-924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3314 or [amontoya@cabq.gov](mailto:amontoya@cabq.gov).

Sincerely,

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



**Hydrology (COA DPM Part 6-2(A) Procedure for 40-Acre and Smaller Basins)**

Precipitation Zone (as per COA DPM Chapter 6 FIGURE 6.2.3 Precipitation Zones) = Zone 4

Precipitation Depth (in) (as per COA DPM Chapter 6 TABLE 6.2.8) 100 yr storm  $P_{100,6} = 2.64$   $P_{100,24} = 3.6$

Peak Discharge (as per COA DPM Chapter 6 6.2.14) 100 yr storm

$Q_{0A}$ (cfs/ac) Treatment A =	2.09
$Q_{0B}$ (cfs/ac) Treatment B =	2.73
$Q_{0C}$ (cfs/ac) Treatment C =	3.41
$Q_{0D}$ (cfs/ac) Treatment D =	4.78

6-HOUR Excess Precipitation, E (in.) (as per COA DPM Chapter 6 TABLE 6.2.13)

Land Treatment	A	B	C	D
Excess Precipitation (in) E	0.76	0.95	1.2	3.34

**Existing Conditions**

Basin	Basin Area (acre)	Land Treatment Area (arce) A	$E_w$ (in)	$V_{360}$ (acft)	$V_{240}$ (acft)	$Q_{360}$ (cfs)
Site	0.521	0	0.413	0.108	1.643	0.071
Site	0.521	0	0.36	0.16	1.87	0.081

**Full Development Conditions**

Site	0.521	0	0.36	0.16	1.87	0.081	0.094	2.00
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Weighted  $C_{w1} = \frac{C_{w1}A_1 + C_{w2}A_2 + C_{w3}A_3 + C_{w4}A_4}{A_{total}}$

$V_{w1} = E_w \times A / 12 \text{ in/ft}$

$V_{w2} = V_{w1} + A \times (P_{6hr} - P_{w1}) / 12 \text{ in/ft}$

$Q_p = Q_{w1} + Q_{w2} + Q_{w3} + Q_{w4}$

**First Flush Calculations (as per COA DPM 6-12)**

Required Water Quality Retention Pond Volume =  $0.16 \times 0.42 = 248$  cuft

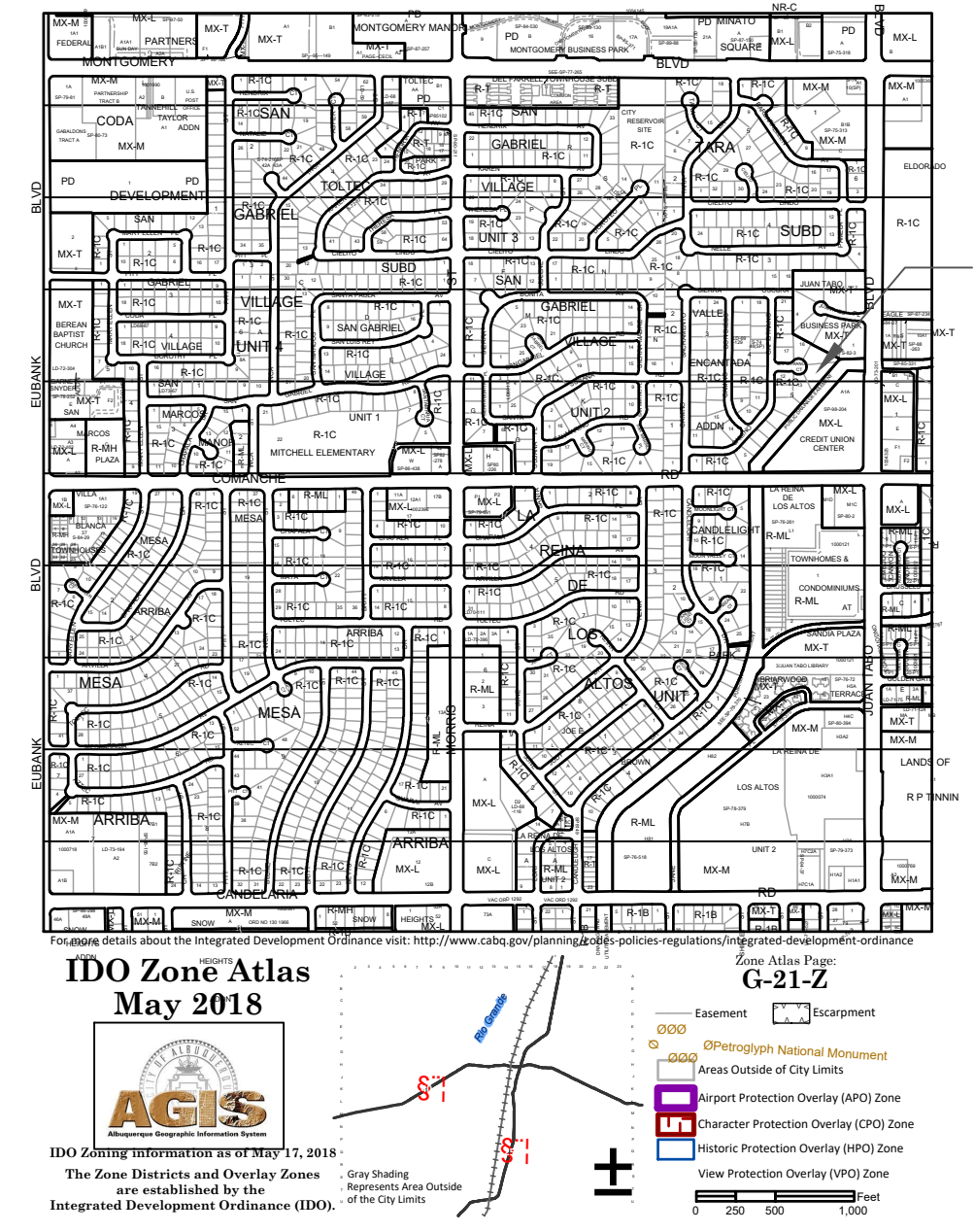
**Pond Rating Table**

Elev (ft)	Area (sqft)	Volume (acre-ft)	Cum Volume (acre-ft)	Cum Volume (cf)
5677	43	0.0010	0.0000	0
5678	123	0.0019	0.0019	83
5679	246	0.0042	0.0061	268

> 248

**Weir Design Flow for Pond Outlet**

(COA DPM Chapter 6 6-16(A))  $Q$  (cfs) =  $2.7 \times 1.33 \times 0.54 = 2.0 = 2.0$



- General Notes**
- Private Drainage Facilities within City Right-of-Way
- Notice to Contractor (Special Order 19 ~ "SO-19")
- Build sidewalk culvert per COA STD DWG 2236.
  - Contact Storm Maintenance at (505) 857-8033 to schedule a meeting prior to forming.
  - An excavation permit will be required before beginning any work within City Right-of-Way.
  - All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
  - Two working days prior to any excavation, the contractor must contact New Mexico One Call, dial "811" for (505) 260-1990 for the location of existing utilities.
  - Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
  - Backfill compaction shall be according to traffic/street use.
  - Maintenance of the facility shall be the responsibility of the owner of the property being served.
  - Work on arterial streets may be required on a 24-hour basis.
  - Contractor must contact Storm Maintenance at (505) 857-8033 to schedule a construction inspection. For excavating and barricading inspections, contact Construction Coordination at (505) 924-3416.

**DRAINAGE PLAN:**

**LEGAL DESCRIPTION:** LOT NUMBERED FOURTEEN (14) IN BLOCK NUMBERED FIVE (5) OF VALLE ENCANTADA ADDITION, TO THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT OF SAID ADDITION, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON NOVEMBER 16, 1967, IN PLAT BOOK D3, FOLIO 178.

**ELEVATIONS ARE BASED ON ACS MONUMENT "30-F21" HAVING AN ELEVATION OF 5606.788 FEET, NAVD 88.**

**SURVEY AND TOPO INFORMATION PRESENTED ON THIS PLAN ARE FROM "TOPOGRAPHIC MAP FOR LOT 14, BLOCK 5, VALLE ENCANTADA, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, SEPTEMBER 2025, DATED 9/3/25" BY BRIAN J. MARTINEZ, NMRPS 18374, OF CSI-CARTESIAN SURVEYS INC.**

**SITE AREA: 0.521 ACRES**

**EXISTING DRAINAGE CONDITIONS:**

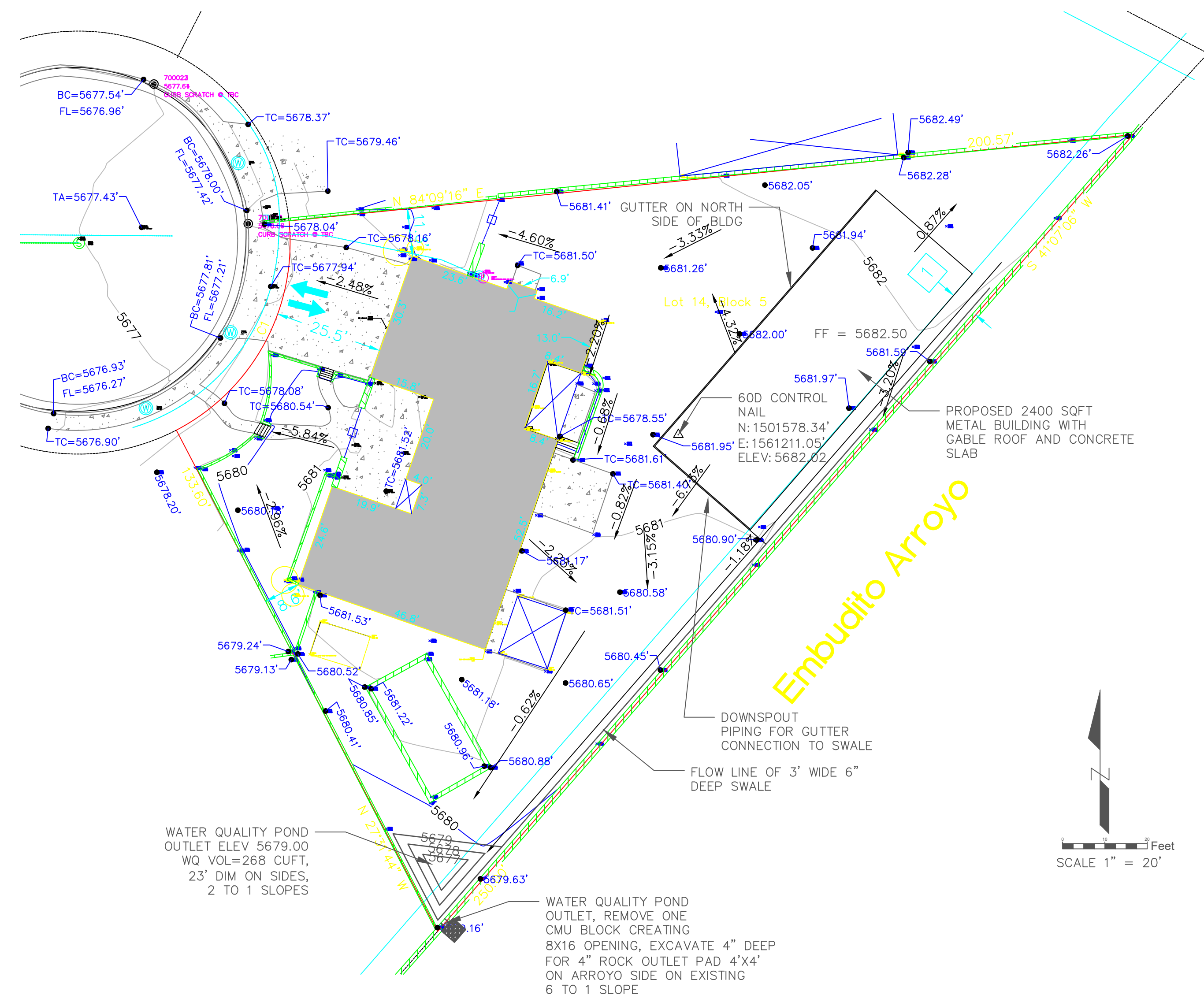
THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH CHAPTER 6, ARTICLE 6-2, SECTION 6-2(A), ENTITLED "PROCEDURE FOR 40-ACRE AND SMALLER BASINS." THE DESIGN STORM USED FOR BOTH UNDEVELOPED AND DEVELOPED CONDITIONS IS THE 100-YEAR, 6-HOUR STORM EVENT FOR RUNOFF. UNDER EXISTING CONDITIONS, THE PROPERTY HAS AN EXISTING RESIDENCE ADJACENT TO THE CUL-DE-SAC. THE SITE MOSTLY DRAINS FROM NORTHEAST TO SOUTHWEST TO A LOT SPOT ON THE PROPERTY. THE PEAK RUNOFF UNDER EXISTING CONDITIONS IS 1.92 CFS DURING A 100-YEAR, 6-HOUR STORM. THERE ARE NO OFF-SITE FLOWS THAT REACH THE PROPERTY.

**DEVELOPED DRAINAGE CONDITIONS:**

THE SITE CURRENTLY HAS A RESIDENCE AND WILL BE FULLY DEVELOPED WITH AN ADDITIONAL METAL BUILDING UNDER THIS PROJECT. THE EXISTING AND FULLY DEVELOPED AREAS AND LAND TREATMENTS ARE INDICATED ON DRAINAGE CALCULATIONS PRESENTED ON THIS SHEET ABOVE.

A WATER QUALITY POND WILL BE PROVIDED IN THE SOUTHWEST CORNER OF THE LOT WITH A VOLUME OF 268 CUFT WITH IS GREATER THAN THE CALCULATED FIRST FLUSH VOLUME OF 248 CUFT.

THE TOTAL SITE RUNOFF UNDER FUTURE FINAL DEVELOPED CONDITIONS IS 2.0 CFS. THE SOUTHWEST WATER QUALITY POND WILL DRAIN THROUGH A 8"x16" OPENING IN THE EXISTING CMU WALL AND DISCHARGE ACROSS 4" ROCK RIPRAP AND INTO THE EMBUDITO ARROYO.



**Legend**

- N 90°00'00" E**
- MEASURED BEARINGS AND DISTANCES
  - FOUND CURB SCRATCH ON BACK OF CURB, UNLESS MARKED OTHERWISE
  - COVERED AREA
  - CONCRETE
  - UTILITY PEDESTAL
  - BLOCK WALL
  - METAL FENCE
  - ELECTRIC METER
  - GAS METER
  - WATER METER
  - SANITARY SEWER MANHOLE
  - CURB CUT/INDICATION OF ACCESS TO ROADWAY
  - 5075.50 SPOT ELEVATION
  - BC 5075.50 BACK OF CURB ELEVATION
  - FL 5075.50 FLOW LINE ELEVATION
  - TA 5075.50 TOP OF ASPHALT ELEVATION
  - TC 5075.50 TOP OF CONCRETE ELEVATION
  - UNDERGROUND GAS UTILITY LINE
  - UNDERGROUND WATER UTILITY LINE
  - UNDERGROUND SANITARY SEWER LINE
  - SLOPE FINISHED/EXISTING GRADE SLOPE LABEL

**Easement Notes**

- 1) EXISTING 7' P.U.E. AND D.E. (11/16/1967, D3-178)

**City of Albuquerque Planning Department Development Review Services HYDROLOGY SECTION APPROVED**

DATE: 9/22/2025

BY: [Signature]

HydroTeam #: G21D016A

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 REQUESTING CORRECTIONS FOR ERRORS OR OMISSIONS 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 FILED ON THE DEVELOPMENT.



No.	Revision/Issue	Date

**Firm Name and Address**

INCLINE ENGINEERING AND SERVICES LLC  
TED L. BARBER, PE  
3404 FINNEGAN CT NE  
RIO RANCHO, NM 87144  
(505)577-6747

**Project Name and Address**

PROJECT BPR-2025-00843  
3816 CAPISTRANO  
ALBUQUERQUE, NM 87107

Project	Sheet
Date	GRADING AND DRAINAGE PLAN
Scale	