# CITY OF ALBUQUERQUE

*Planning Department*
Alan Varela, Director

*Mayor Timothy M. Keller*

May 28, 2025

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

**RE: Nusenda Credit Union**
**2801 Juan Tabo NE**
**Permanent C.O. – Accepted**
**Engineer's Certification Date:4/10/25**
**Engineer's Stamp Date: 8/8/22**
**Hydrology File: H21D020**
**Case # HYDR-2025-00124**

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Dear Mr. Walla:

Based on the Certification received 4/11/2025 and the site visit on 4/14/2025, this letter serves as an approval from the Hydrology Section for a Permanent Certificate of Occupancy to be issued by the Building and Safety Division.

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

Sincerely,

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

## LEGAL DESCRIPTION

TRACT B-2 and 13a, BLOCK 79, SNOW HEIGHTS ADDITION, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

## BASIS OF ELEVATIONS

ELEVATION DATUM IS BASED ON 1988 FROM AGRS MONUMENT "10_H22"" PUBLISHED ELEVATION (FEET) = 5613.801

## GENERAL NOTES

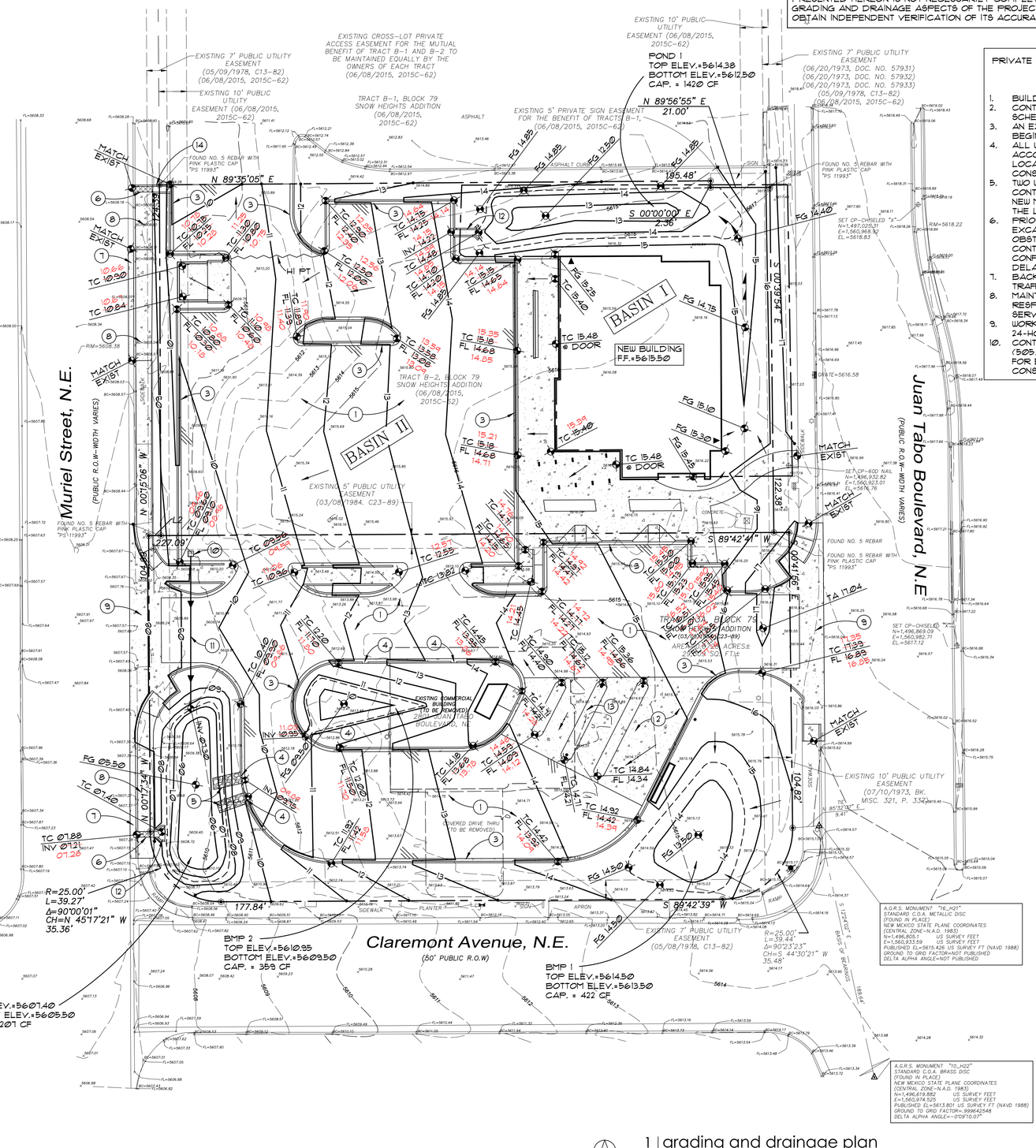
A FIELD VERIFY ALL SPOT ELEVATIONS SHOWN AT EXISTING CURB AND GUTTER AT ROADWAYS

## DRAINAGE CERTIFICATION

I, MIKE WALLA, NMPE 11030, OF THE FIRM WALLA ENGINEERING, LTD., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 8-8-2022. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED FROM BRIAN MARTINEZ, NMPS 18374. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 4-7-2025 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF THE ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY. THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THE PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

MIKE I. WALLA NEW MEXICO 17030 REGISTERED PROFESSIONAL ENGINEER
4/10/25


joe slagle architect
P.O. Box 10362
Abq, NM 87184


## PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY NOTICE TO CONTRACTOR (SPECIAL ORDER 13 - "80-13")

1. BUILD SIDEWALK CULVERT PER COA STD. DWG. 2236.
2. CONTACT STORM DRAIN MAINTENANCE AT (505) 857-8033 TO SCHEDULE A MEETING PRIOR TO FORMING.
3. AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
4. 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.
5. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE LINE LOCATING SERVICE, NEW MEXICO ONE, DIAL "811", OR CALL (505) 260-1990, FOR THE LOCATION OF EXISTING UTILITIES.
6. 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 CONFLICTCAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
7. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
8. MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
9. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
10. CONTRACTOR MUST CONTACT STORM DRAIN MAINTENANCE AT (505) 857-8033 TO SCHEDULE A CONSTRUCTION INSPECTION. FOR EXCAVATING AND BARRICADING INSPECTION, CONTACT CONSTRUCTION COORDINATION AT (505) 924-3416.

## Hydrology Calculations

Nusenda @ 2801 Juan Tabo NE – Site Area = 1.292 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 3 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 – Entire Site

| Land Treatment | Area (ac) | Excess Precip. "E" (in) | Peak Q (cfs/ac) | Coefficient C |
|---|---|---|---|---|
| A | 0.000 | 0.67 | 1.84 | 0.37 |
| B | 0.417 | 0.86 | 2.49 | 0.50 |
| C | 0.000 | 1.09 | 3.17 | 0.64 |
| D | 0.876 | 2.58 | 4.49 | 0.91 |

Weighted E: [(0.417 x 0.86) + (0.876 x 2.58)]/1.292 = 2.027 in
$V_{360}$ = 2.027 x 1.292 x 43560/12 = 9505 CF
Total Qp = (0.417 x 2.49) + (0.876 x 4.49) = 4.97 CFS

POST-DEVELOPED CONDITIONS – Entire Site

| Land Treatment | Area (ac) | Excess Precip. "E" (in) | Peak Q (cfs/ac) | Coefficient C |
|---|---|---|---|---|
| A | 0.000 | 0.67 | 1.84 | 0.37 |
| B | 0.376 | 0.86 | 2.49 | 0.50 |
| C | 0.000 | 1.09 | 3.17 | 0.64 |
| D | 0.916 | 2.58 | 4.49 | 0.91 |

Weighted E: [(0.376 x 0.86) + (0.916 x 2.58)]/1.292 = 2.08 in
$V_{360}$ = 2.08 x 1.292 x 43560/12 = 9755 CF
Total Qp = (0.376 x 2.49) + (0.916 x 4.49) = 5.05 CFS

Rational Method Check: 12-minute Peak Intensity, I = 4.96 in/hr
Q = CIA = (0.50 x 4.96 x 0.376) + (0.91 x 4.96 x 0.916) = 5.066 CFS OK

Storm Water Quality Volume, (SWQV)
Impervious Area = 0.916 ac
BMP Volume Required: 0.42" x 0.916 x 43560/12 = 1397 CF

DEVELOPED CONDITIONS – BASIN I

| Land Treatment | Area (ac) | Excess Precip. "E" (in) | Peak Q (cfs/ac) | Coefficient C |
|---|---|---|---|---|
| A | 0.000 | 0.67 | 1.84 | 0.37 |
| B | 0.114 | 0.86 | 2.49 | 0.50 |
| C | 0.000 | 1.09 | 3.17 | 0.64 |
| D | 0.101 | 2.58 | 4.49 | 0.91 |

Weighted E: [(0.114 x 0.86) + (0.101 x 2.58)]/0.215 = 1.67 in
$V_{360}$ = 1.67 x 0.215 x 43560/12 = 1303 CF
Total Qp = (0.114 x 2.49) + (0.101 x 4.49) = 0.358 CFS

Pond 1 VOLUME:

| Contour | Area | Volume |
|---|---|---|
| 14.38 | 1666 SF | |
| 14.00 | 1285 SF | 561 CF |
| 13.00 | 432 SF | 859 CF |
| | TOTAL | 1420 CF > 1303 CF OK |

DEVELOPED CONDITIONS – BASIN II

| Land Treatment | Area (ac) | Excess Precip. "E" (in) | Peak Q (cfs/ac) | Coefficient C |
|---|---|---|---|---|
| A | 0.000 | 0.67 | 1.84 | 0.37 |
| B | 0.262 | 0.86 | 2.49 | 0.50 |
| C | 0.000 | 1.09 | 3.17 | 0.64 |
| D | 0.815 | 2.58 | 4.49 | 0.91 |

Weighted E: [(0.262 x 0.86) + (0.815 x 2.58)]/1.077 = 2.16 in
$V_{360}$ = 2.16 x 1.077 x 43560/12 = 8451 CF
Total Qp = (0.262 x 2.49) + (0.815 x 4.49) = 4.312 CFS

Storm Water Quality Volume (SWQV) Required: Impervious Area = 0.815 Ac
Redeveloped Site Rainfall = 0.26"
SWQV Req'd = 0.26"/12 in/ft x 0.815 AC x 43560 sf/AC = 769.2 CF

SWQV POND 2 VOLUME:

| Contour | Area | Volume |
|---|---|---|
| 07.40 | 1300 SF | |
| 07.00 | 928 SF | 446 CF |
| 06.00 | 594 SF | 761 CF |
| | Sub total | 1207 CF |

SWQV BMP 2 VOLUME:

| Contour | Area | Volume |
|---|---|---|
| 10.95 | 420 SF | |
| 10.00 | 336 SF | 359 CF |
| Total Volume | | 1566 CF > 769.2 CF OK |

## KEYED NOTES

1 ASPHALT PAVING PER DETAIL 1/C201
2 CONCRETE PAVING PER DETAIL 2/C201
3 CONCRETE CURB AND GUTTER PER DETAIL 3/C201
4 2'-0" WIDE CURB BREAK FOR DRAINAGE CONVEYANCE
5 4'-0" WIDE x 10'-0" GRAVEL RIPRAP RUNDOWN
6 2'-0" WIDE SIDEWALK CULVERT PER CITY OF ALBUQUERQUE STANDARD DRAWING #2236
7 REMOVE AND REPLACE EXISTING CURB AND GUTTER PER CITY OF ALBUQUERQUE STANDARD DRAWING #2415A
8 REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF ALBUQUERQUE STANDARD DRAWING #2430
9 REMOVE AND REPLACE EXISTING DRIVE ACCESS PER CITY OF ALBUQUERQUE STANDARD DRAWING #2426
10 CONCRETE CATCH BASIN PER DETAIL 4/C201 - TG=09.00 INV OUT = 07.80
11 8"ϕ PVC C900 STORM DRAIN - 1% SLOPE
12 CONCRETE POND OVERFLOW RUNDOWN PER DETAIL 5/C201
13 CONCRETE ISLAND PER DETAIL 6/C201
14 CONCRETE RUNDOWN PER DETAIL 5/C201

## LEGEND

PROPERTY LINE
NEW BUILDING LINE
5615 EXISTING CONTOUR
15 NEW CONTOUR
5500 NEW SPOT ELEVATION
NEW FLOW DIRECTION ARROW
SWALE
FF FINISH FLOOR
TA TOP OF ASPHALT
TC TOP OF CONCRETE OR CURB
FL FLOW LINE
TG TOP OF GRATE
INV INVERT
ROOF DRAIN LOCATION
NEW CONCRETE PAVING/SIDEWALK
NEW AC PAVING
BASIN BORDER LINE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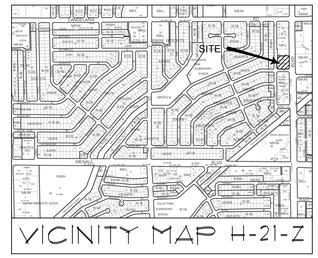


## Grading & Drainage Design Narrative

**Subject Property**: Nusenda Credit Union – 2801 Juan Tabo NE, Albuquerque, NM
**Area of Site:** 1.292 Acre
**Reference:** City of Albuquerque Development Process Manual (DPM)
**Project Description:** The development is the construction of a new 3500 SF, single story structure with a drive up banking canopy and new concrete and asphalt paved access sidewalks and vehicle parking.
**Predeveloped Conditions:** The existing site is two lots that will be combined into one. The southern lot has an existing bank building that will be demolished along with the existing paving to create the new facility while the northern lot has some broken paved surfaces that will be removed. The site will be regraded and the new building will be constructed north of the existing building pad. Both of the current lots direct runoff from east to west across the site in sheet flow pattern that ends up in Muriel St. at the west border of the site. From there the developed runoff appears to proceed west on surface facilities in Claremont Ave. eventually ending up in the Piedra Lisa Arroyo or below grade storm drain in Menaul Blvd.
**Developed Runoff:** The new development will remove all existing structures and regrade the entire site. Basin I encompasses only the new building and the landscaped area on the NEC of the site. This basin will have a pond that will capture all of the 100-yr runoff volume. Basin II is basically the rest of the site and will have two smaller BMP areas along with a retention pond located at the SWC of the site. These facilities will capture a runoff volume exceeding the required Storm Water Quality Volume (SWQV) for a redeveloped site. Excess runoff volume will discharge to Muriel St. as it has previously but the new development will reduce this historic runoff volume and flow considerably.

# GRADING and DRAINAGE PLAN

A NEW BRANCH FOR:

NUSENDA CREDIT UNION
2801 JUAN TABO BLVD NE
ALBUQUERQUE, NM

MIKE I. WALLA NEW MEXICO 17030 REGISTERED PROFESSIONAL ENGINEER
4/10/25

revisions
1 REVISED 9-6-23
2 REVISED 5-16-24
3 REVISED 6-28-24

date:
8-8-22
sheet:
C101