CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



September 22, 2025

Gilbert Aldaz Applied Engineering & Surveying, Inc. 1605 Blair Drive NE Albuquerque, NM 87112

RE: 2103 Los Luceros Rd NW Grading & Drainage Plan

Engineer's Stamp Date: 09/08/2025

Hydrology File: H12D025 Case # HYDR-2025-00324

Dear Mr. Aldaz:

Based upon the information provided in your submittal received 09/08/2025, the Grading & Drainage Plan **is not** approved for Building Permit. The following comments need to be addressed for approval of the above referenced project:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

- 1. Per the 6-5-5-3 of the Sidewalk Ordinance, the property owner of the property is responsible for building the curb & gutter, and sidewalk along Los Luceros and Carlota. The project will have to go to the Development Facilitation Team (DFT) for approval of the Infrastructure List unless a variance is granted. Please show the curb & gutter, and sidewalk on the plans.
- 2. Please provide the Benchmark information (location, description and elevation) for the survey contour information provided.
- 3. Since this site is in the Valley region, please follow Article 6-5 Valley Drainage Criteria of the DPM. The following conditions must be applied to the site:
 - A permanent perimeter wall or barrier around the development is required to contain the 100 year 24 hour storm developed runoff

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, 505-924-3420) 14 days prior to any earth disturbance.

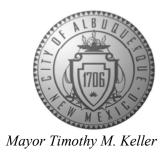
If you have any questions, please contact me at 505-924-3314 or amontoya@cabq.gov.

Sincerely,

anth Mars

CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



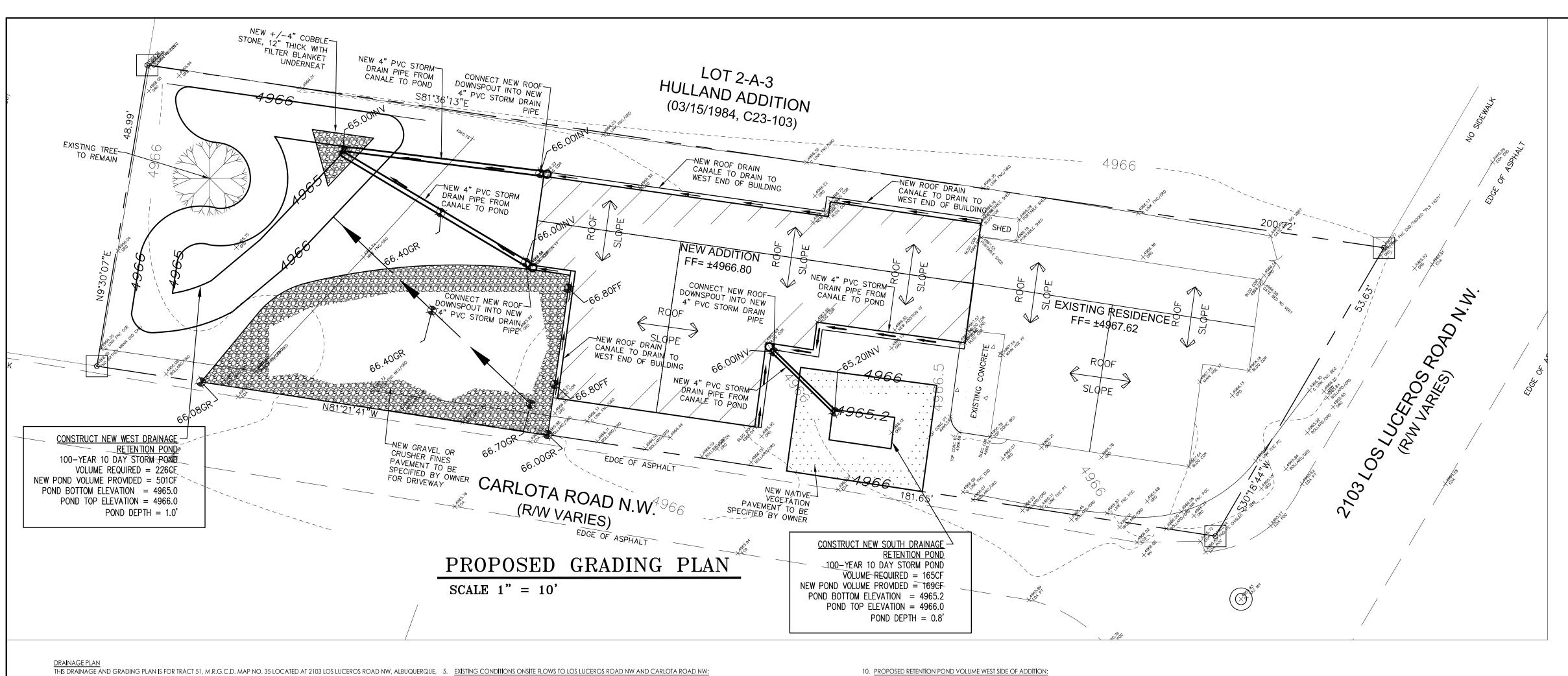
Anthony Montoya, Jr., P.E. Senior Engineer, Hydrology Planning Department, Development Review Services

PO Box 1293

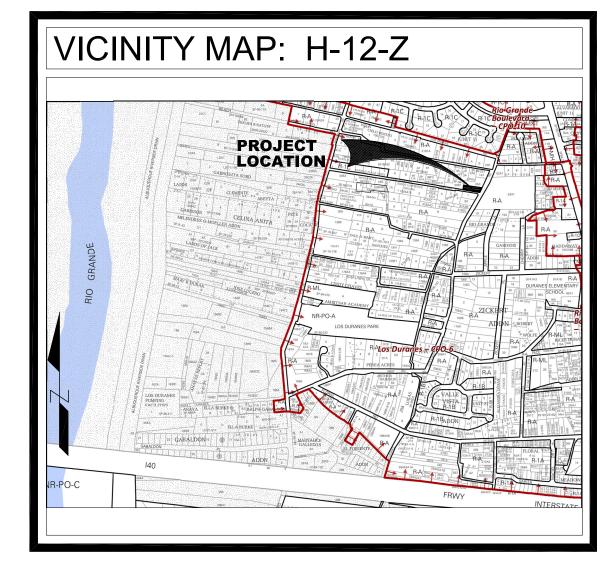
Albuquerque

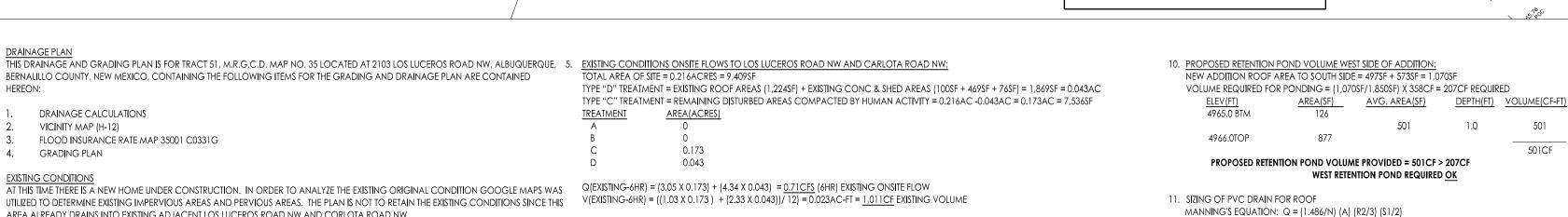
NM 87103

www.cabq.gov



FLOOD INSURANCE RATE MAP 35001C0331H 08/16/2012

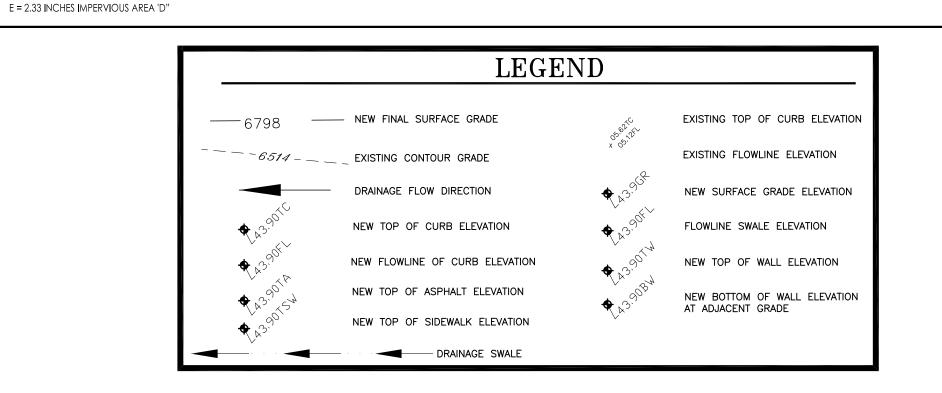




Q(PROPOSED-6HR) = 0.75CFS, 3 - 4" PVC PIPES, Q = +/-0.25CFSA = AREA OF PIPE = $A = \Pi(D/2)^2$, D = 4" = 0.33', A = 3.14 X $(0.33/2)^2 = 0.0855$ SF N = MANNINGS ROUGHNESS = 0.011 R = HYDRAULIC RADIUS = D / 4 = 0.33' / 4 = 0.0825 S = SLOPE = (66.00 - 65.00) / 34FT = 0.0294 FT/FT WORST CASE $Q = (1.486/N) (A) (R2/3) (S1/2) = (1.486/0.011) \times (0.0855) \times (0.0825) **2/3 \times (0.0294) **1/2$ = 0.37CFS > 0.25CFS REQUIRED USE 3 - 4" PVC DRAINS CONNECTED TO DOWNSPOUT LEADERS OK



EXISTING ORIGINAL CONDITIONS SCALE 1" = 30'



OTAL AREA OF SITE = 0.216ACRES = 9,409SF

(100SF) + EXISTING SHED (76SF) = 3,250SF = 0.075AC

. <u>DIFFERENCE BETWEEN PROPOSED AND EXISTING CONDITIONS</u>

= 150CF = 0.003AC-FT INCREASE IN VOLUME

NEW HOUSE ADDITION IMPERVIOUS AREA = 1,850SF = 0.043AC

P. PROPOSED RETENTION POND VOLUME SOUTH SIDE OF ADDITION: NEW ADDITION ROOF AREA TO SOUTH SIDE = 780SF

= 0.05CFS INCREASE IN FLOW

P(6HR) = 2.29IN, P(10DAY) = 3.62IN

4966.0TOP

TYPE "D" TREATMENT = PROPOSED HOUSE ADDITION AREAS (1,850SF) + EXISTING ROOF AREA (1,224SF) + EXISTING CONCRETE AREA

TYPE "C" TREATMENT = REMAINING DISTURBED AREAS COMPACTED BY HUMAN ACTIVITY = 0.216AC -0.075AC = 0.141AC = 6,159SF

= 0.008AC-FT X 43,560CF/AC = 358CF POND VOLUME REQUIRED FOR PROPOSED CONDITIONS FOR A 10-DAY STORM

AVG. AREA(SF) DEPTH(FT) VOLUME(CF-FT)

Q(PROPOSED-6HR) = $(3.05 \times 0.141) + (4.34 \times 0.075) = 0.76CFS (6HR) PROPOSED ONSITE FLOW$ $V(PROPOSED-6HR) = ((1.03 \times 0.141) + (2.33 \times 0.075))/12) = 0.027AC-FT = 1.161CF PROPOSED VOLUME$

DELTA Q(100YEAR 6-HOUR PEAK FLOW) = 0.76CFS(PROPOSED) - 0.71CFS(EXISTING)

INCLUDE ADDITIONAL VOLUME FOR 100-YEAR 10DAY STORM FOR NEW HOUSE ADDITION:

V(PROPOSED-10DAYS) = 0.003AC-FT INCREASE IN VOLUME + ((0.043) X (3.62IN - 2.29IN)/12IN/FT

SOUTH RETENTION POND REQUIRED OK

DELTA V(100YEAR 6-HOUR VOLUME) = 1,161CF(PROPOSED) - 1,011CF(EXISTING)

V(PROPOSED-10DAYS) = V(6HR) + ((A(IMP) X (P(10DAYS) - P(6HR))/12IN/FT

VOLUME REQUIRED FOR PONDING = (780SF/1,850SF) X 358CF = 151CF REQUIRED

PROPOSED RETENTION POND VOLUME PROVIDED = 169CF > 151CF

BERNALILLO COUNTY, NEW MEXICO, CONTAINING THE FOLLOWING ITEMS FOR THE GRADING AND DRAINAGE PLAN ARE CONTAINED

THE SITE'S EXISTING TOPOGRAPHY IS RELATIVELY FLAT THROUGHOUT THE TRACT HAVING AN EXISTING CONTOUR ELEVATION OF 4966 AROUND

OFFSITE FLOWS

BASED ON A FIELD VISIT AND TOPOGRAPHIC CONTOUR INFORMATION FROM THE CITY AGIS SYSTEM THE ENTIRE AREA OF THIS PART OF THE

VALLEY IS RELATIVELY FLAT. THE EXISTING HOUSE FINISH FLOOR AND THE NEW HOUSE FINISH FLOOR ELEVATION IS 4966.80, WHICH IS ABOUT

INCREASE IN IMPERVIOUS FLOWS FROM ONLY THE NEW ADDITION IN ORDER TO NOT CREATE ADDITIONAL DOWNSTREAM VOLUME ISSUES.

PROPOSED CONDITIONS

BASED ON THE SITE BEING RELATIVELY FLAT THE PLAN IS TO PROVIDE RETENTION PONDING FOR THE INCREASE OF IMPERIVOUS FLOWS FROM

THE CALCULATIONS WHICH APPEAR HEREON, ANALYZE BOTH THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR RUNOFF FOR

PEAK FLOWS AND STORM DURATION FOR VOLUME REQUIREMENTS. THE PROCEDURE WILL FOLLOW THE CHAPTER 6 (DRAINAGE, FLOOD AND

THE NEW HOUSE ADDITION UNDER CONSTRUCTION USING THE 100-YEAR 10 DAY STORM VOLUME STORM. THE PROPOSED CONDITION

INCLUDES DEDUCTING THE EXISTING CONCRETE DRIVEWAY THAT WAS REMOVED TO ACCOMMODATE THE NEW HOUSE ADDITION.

DOWNSTREAM CAPACITY
THIS WHOLE AREA OF THE VALLEY IS RELATIVELY FLAT AND CONTAINS NO DOWNSTREAM STORM DRAINS, THE PLAN IS TO CONTAIN THE

AREA ALREADY DRAINS INTO EXISTING ADJACENT LOS LUCEROS ROAD NW AND CORLOTA ROAD NW.

THIS SITE IS NOT LOCATED WITHIN A 100-YEAR FLOODPLAIN, (SEE ATTACHED FIRM MAP 35001 C0118G.

DRAINAGE CALCULATIONS

THE ENTIRE TRACT AS PER THE RECENT TOPOGRAPHIC SURVEY.

0.80' ABOVE CARLOTTA ROAD NW AND LOS LUCEROS ROAD NW.

EROSION CONTROL) FOR CALCULATIONS AND DRAINAGE REQUIREMENTS.

2. <u>DESIGN STORM = DEPTH (INCHES) AT 100-YEAR STORM:</u>

Q = 1.71 CFS/ACRE SOIL UNCOMPACTED "A"

Q = 2.36 CFS/ACRE LANDSCAPED "B" Q = 3.05 CFS/AC COMPACTED SOIL "C" Q = 4.34 CFS/ACRE IMPERVIOUS AREA "D"

E = 0.80 INCHES LANDSCAPED "B" E = 1.03 INCHES COMPACTED SOIL "C

3. PEAK DISCHARGE (CFS/ACRE) FOR 100-YEAR, ZONE 2, TABLE 6.8:

4. EXCESS PRECIPITATION, E (INCHES), FOR 100-YEAR, 6 HOUR STORM, ZONE 2, TABLE 6.7: E = 0.62 INCHES SOIL UNCOMPACTED "A"

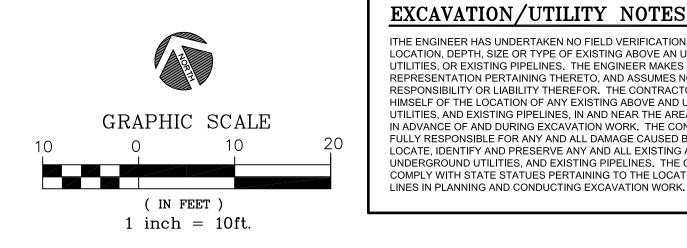
FOR WATERSHEDS LESS THAN OR EQUAL TO 40 ACRES

24-HOUR = 2.59 INCHES

10 DAY = 3.62 INCHES

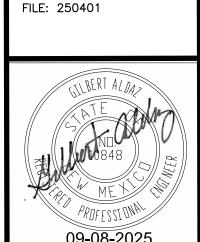
VICINITY MAP (H-12)

4. GRADING PLAN



EXCAVATION/UTILITY NOTES:

ITHE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXISTING ABOVE AN UNDERGROUND UTILITIES, OR EXISTING PIPELINES. THE ENGINEER MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM HIMSELF OF THE LOCATION OF ANY EXISTING ABOVE AND UNDERGROUND UTILITIES, AND EXISTING PIPELINES, IN AND NEAR THE AREA OF THE WORK, IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY HIS FAILURE TO LOCATE. IDENTIFY AND PRESERVE ANY AND ALL EXISTING ABOVE AND UNDERGROUND UTILITIES, AND EXISTING PIPELINES, THE CONTRACT SHALL COMPLY WITH STATE STATUES PERTAINING TO THE LOCATION OF THESE



GRADING AND DRAINAGE PLAN 2103 LOS LUCEROS ROAD NW ADRIAN OGLESBY

APPLIED Engineering & Suveying, Inc. 1605 BLAIR DRIVE NE, ALBUQUERQUE NEW MEXICO 87112, galdaz47@yahoo.com, (505)480-8125 SHEET NUMBER:

DATE/REVISIONS: