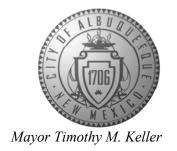
# CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



April 11, 2024

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

RE: Las Miradas Townhouses – Lot 10 9012 El Ojito Court NW Revised Grading and Drainage Plan Engineer's Stamp Date: 04/01/24

Hydrology File: C12D003B3A

Dear Mr. Aldaz:

PO Box 1293

Based upon the information provided in your submittal received 04/03/2024, the Revised Grading & Drainage Plan is approved for Building Permit, and Grading 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

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 924-3995 or <u>rbrissette@cabq.gov</u>.

Sincerely,

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

Renée C. Brissette

Planning Department



# **City of Albuquerque**

Planning Department
Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (DTIS)

Project Title:		Hydrology File #	
Legal Description:			
City Address, UPC, OR Parcel	:		
Applicant/Agent:		Contact:	
Address:			
Email:			
Applicant/Owner:		Contact:	
Address:		Phone:	
Email:			
(Please note that a DFT SITE is or	ne that needs Site Plan A	pproval & ADMIN SITE is one that does not need it.)	
TYPE OF DEVELOPMENT:	PLAT (#of lots)	RESIDENCE	
	DFT SITE	ADMIN SITE	
RE-SUBMITTAL: YES	NO		
DED A DEMENT. TO A NI	SDODT A TION	HVDDOLOGV/DD A DIA CE	
<b>DEPARTMENT:</b> TRANS	SPORTATION	HYDROLOGY/DRAINAGE	
Check all that apply under Both	the Type of Submittal	and the Type of Approval Sought:	
TYPE OF SUBMITTAL:		TYPE OF APPROVAL SOUGHT:	
ENGINEER/ARCHITECT CERTIFICATION		BUILDING PERMIT APPROVAL	
PAD CERTIFICATION		CERTIFICATE OF OCCUPANCY	
CONCEPTUAL G&D PLAN		CONCEPTUAL TCL DFT APPROVAL	
GRADING & DRAINAGE PLAN		PRELIMINARY PLAT APPROVAL	
DRAINAGE REPORT		FINAL PLAT APPROVAL	
DRAINAGE MASTER PLAN		SITE PLAN FOR BLDG PERMIT DFT	
CLOMR/LOMR		APPROVAL	
TRAFFIC CIRCULATION LAYOUT (TCL) ADMINISTRATIVE		SIA/RELEASE OF FINANCIAL GUARANTEE	
		FOUNDATION PERMIT APPROVAL	
TRAFFIC CIRCULATION LAYOUT FOR DFT APPROVAL		GRADING PERMIT APPROVAL	
TRAFFIC IMPACT STUDY (TIS)		SO-19 APPROVAL	
STREET LIGHT LAYOUT		PAVING PERMIT APPROVAL	
OTHER (SPECIFY)		GRADING PAD CERTIFICATION	
- 111211 (C1 2011 1)		WORK ORDER APPROVAL	
		CLOMR/LOMR	
		OTHER (SPECIFY)	
DATE SUBMITTED:			

# DRAINAGE CALCULATIONS

THIS DRAINAGE PLAN IS FOR TWO NEW TOWNHOUSES ON EL OJITO COURT NW WITHIN LOTS 9 & 10 LAS MIRADAS TOWNHOUSES PROJECTED SECTION 13, TOWNSHIP 11 NORTH, RANGE 2 EAST, N.M.P.M. TOWN OF ALAMEDA GRANT, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, CONTAINING THE FOLLOWING ITEMS FOR THE GRADING AND DRAINAGE PLAN ARE CONTAINED HEREON:

### 1. DRAINAGE CALCULATIONS

2. VICINITY MAP (C-12)

3.FLOOD INSURANCE RATE MAP 35001 C0116G 4.GRADING PLAN

AS SHOWN BY THE VICINITY MAP, THE SITE CONTAINS APPROXIMATELY 0.17 ACRES AND IS WITHIN AN EXISTING SUBDIVISION AND THESE 2 LOTS REMAIN UNDEVELOPED. THERE IS AN EXISTING GRADING AND DRAINAGE PLAN (C12D003B3) DEVELOPED FOR THE ORIGINAL SUBDIVISION IN 2006 WHICH WAS APPROVED BY THE CITY OF ALBUQUERQUE HYDROLOGY DEPARTMENT.

THE EXISTING TOPOGRAPHY HAS THE WEST HALF SLOPING TOWARDS THE ASPHALT PAVED EL OJITO COURT FOR THE WEST ENTRY AREA AND THE EAST HALF OF THE SITE SLOPES TO A PAVED PRIVATE ACCESS ON THE EAST SIDE OF THE LOTS 9 AND 10. THIS SITE IS LOCATED WITHIN FLOOD ZONE X, AREA OF MINIMAL FLOOD HAZARD AND IS NOT WITHIN A DESIGNATED 100-YEAR FLOODPLAIN, (SEE ATTACHED FIRM MAP 35001 C0116G).

THERE IS AN EXISTING RESIDENCE ON THE NORTH SIDE OF LOT 9 AND AN EXISTING RESIDENCE ON THE SOUTH SIDE OF LOT 10.

#### **OFFSITE FLOWS**

BASED ON A FIELD VISIT AND TOPOGRAPHIC CONTOUR INFORMATION ON THE NORTH SIDE OF LOT 9, IT APPEARS THE EXISTING RESIDENCE HAS SOME ROOF DRAINAGE THAT MAY COME INTO THIS SITE, A DRAINAGE SWALE WILL BE PROVIDED TO DIVERT ANY FLOWS AWAY FROM THE PROPOSED RESIDENCE FOR LOT 9.

AS SHOWN BY THE PLAN, THE PROJECT CONSISTS OF 2 NEW TOWNHOUSES. THE PLAN IS TO HAVE THE GARAGES FACE THE EAST ALLEY WAY. THE RESIDENCE WILL BE DESIGNED AS A SPLIT LEVEL TO REFLECT THE ORIGINAL GRADING DESIGN INTENT. THE MAIN FINISH FLOOR ELEVATION WILL BE SET BASED AT A ELEVATION ABOVE THE CURB OF EL OJITO COURT NW AND THE GARAGE WILL BE SET AT 4 FEET LOWER IN ORDER FOR EASE OF ACCESS TO THE EXISTING ALLEY ON THE EAST SIDE OF THE PROPERTY. A 4 FOOT RETAINING WALL WILL BE REQUIRED BETWEEN THE MAIN FLOOR AND THE GARAGE AS SHOWN ON THIS PLAN.

THE ROOF DRAINAGE WILL BE DIVERTED TO THE EAST END USING A ROOF DRAIN CANALE AND WILL BE DISCHARGED INTO THE PAVED ALLEY DRIVE ON THE EAST SIDE. THE FRONT PORTION OF THE ENTRY ON THE WEST END WILL BE GRADED TO DRAIN TO THE WEST AND ONTO EL OJITO COURT NW. PER THE ORIGINAL APPROVED GRADING AND DRAINAGE PLAN (C12D003B3) FREE DISCHARGE IS APPROPRIATE FOR THESE TWO LOTS.

THE CALCULATIONS WHICH APPEAR HEREON, ANALYZE BOTH THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR, 6 HOUR RAINFALL RUNOFF FOR PEAK FLOWS AND STORM DURATION FOR VOLUME REQUIREMENTS. THE PROCEDURE WILL FOLLOW THE DEVELOPMENT PROCESS MANUAL (DPM), CHAPTER 6 (DRAINAGE, FLOOD AND EROSION CONTROL) FOR CALCULATIONS AND DRAINAGE REQUIREMENTS.

#### **DRAINAGE CALCULATIONS:**

#### PRECIPITATION ZONE = 1

#### 2. DESIGN STORM = DEPTH (INCHES) AT 100-YEAR STORM TABLE 6.2

6-HOUR = 2.17 INCHES 24-HOUR = 2.49 INCHES 10 DAY = 3.90 INCHES

### B. PEAK DISCHARGE (CFS/ACRE) FOR 100-YEAR, TABLE 6.8

Q = 1.54 CFS/ACRE SOIL UNCOMPACTED "A" Q = 2.16 CFS/ACRE LANDSCAPED "B"

Q = 2.87 CFS/AC COMPACTED SOIL "C"

Q = 4.12 CFS/ACRE IMPERVIOUS AREA "D" FOR WATERSHEDS LESS THAN OR EQUAL TO 40 ACRES

#### EXCESS PRECIPITATION, E (INCHES), FOR 100-YEAR, TABLE 6.7 E = 0.55 INCHES SOIL UNCOMPACTED "A"

E = 0.73 INCHES LANDSCAPED "B"

E = 0.95 INCHES COMPACTED SOIL "C" E = 2.24 INCHES IMPERVIOUS AREA 'D'

# EXISTING CONDITIONS ONSISTE FLOWS

TOTAL AREA OF SITE = 0.17ACRES IMPERVIOUS AREA "D" = 0 ACRES

SOIL COMPACTED BY HUMAN ACTIVITY "C" = 0.17ACRES

Q(EXISTING-6HR) =  $(2.87 \times 0.17) = 0.49$ CFS (6HR) EXISTING 100-YEAR ONSITE FLOW RATE INTO EL OJITO COURT AND PAVED PRIVATE ACCESS  $V(PROPOSED-6HR) = ((0.95 \times 0.0.17)/12) =$ 

0.0135AC-FT = 586CF EXISTING 100-YEAR ONSITE FLOW VOLUME INTO EL OJITO COURT AND PAVED PRIVATE ACCESS

# PROPOSED CONDITIONS ONSITE FLOWS IN EL OJITO COURT

DRAINAGE BASIN INTO EL OJITO COURT

TOTAL AREA = 1,323SF = 0.030ACRESDRIVEWAY AREA, TYPE "D" = 1,098SF = 0.025ACRES

SOIL COMPACTED BY HUMAN ACTIVITY "C" = 337SF = 0.007ACRES

# $Q(PROPOSED-6HR) = (2.87 \times 0.005) + ((4.12 \times 0.025) =$

0.12CFS (6HR) PROPOSED 100-YEAR ONSITE FLOW RATE INTO EL OJITO COURT NW  $V(PROPOSED-6HR) = ((0.95 \times 0.005) + (2.24 \times 0.025))/12) =$ 

0.005AC-FT = 220CF PROPOSED 100 YEAR ONSITE VOLUME INTO EL OJITO COURT NW

#### PROPOSED CONDITIONS ONSITE FLOWS IN PAVED PRIVATE DRIVE DRAINAGE BASIN INTO PAVED PRIVATE DRIVE

TOTAL AREA = 6,030SF = 0.138ACRES ROOF, SIDEWALK, ALLEY AND DRIVEWAY AREA, TYPE "D" = 5,025SF = 0.115ACRES

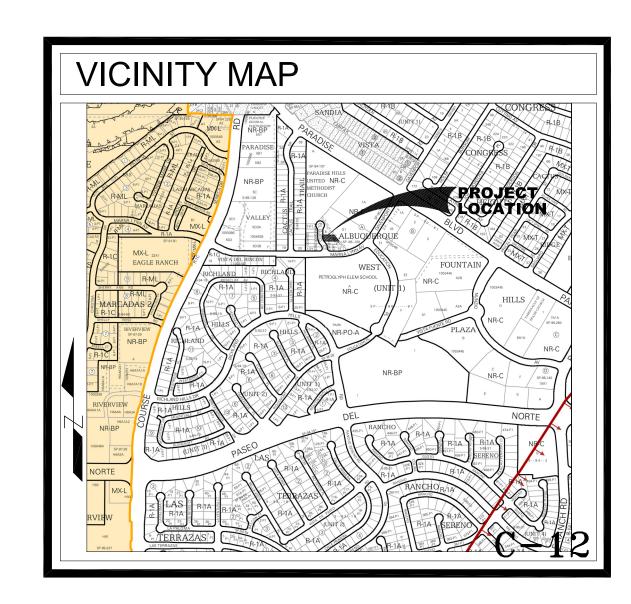
SOIL COMPACTED BY HUMAN ACTIVITY "C" = 1,005SF = 0.023ACRES AREA(ACRES)

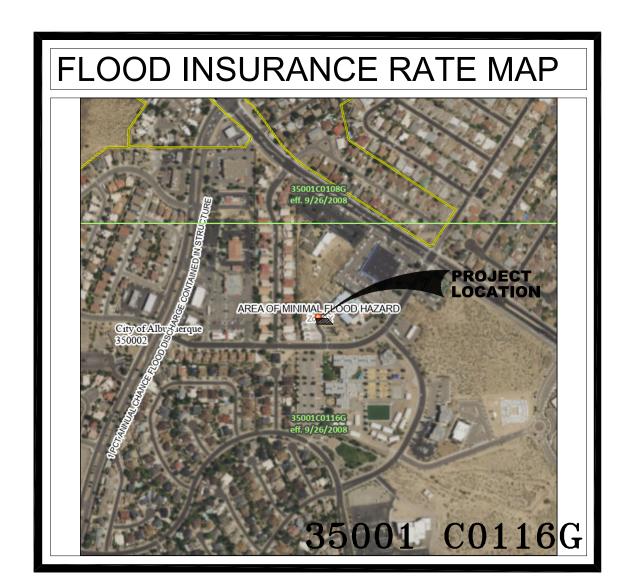
0.023 0.115

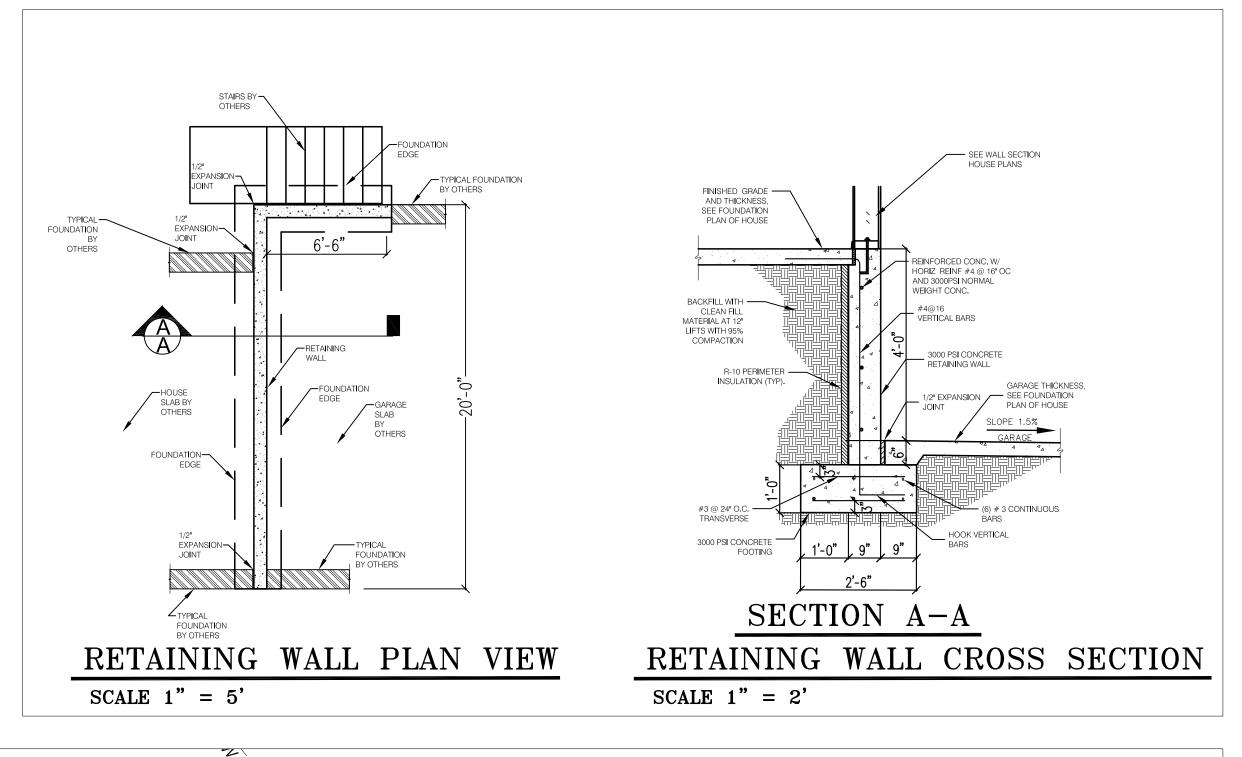
 $Q(PROPOSED-6HR) = (2.87 \times 0.023) + ((4.12 \times 0.115) =$ 

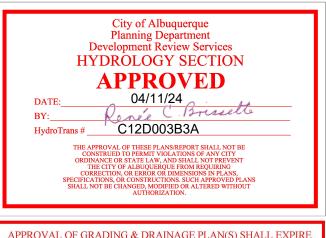
0.54CFS (6HR) PROPOSED 100-YEAR ONSITE FLOW RATE INTO EL OJITO COURT NW

 $V(PROPOSED-6HR) = ((0.95 \times 0.023) + (2.24 \times 0.115))/12) =$ 0.023AC-FT = 1,014CF PROPOSED 100 YEAR ONSITE VOLUME INTO EL OJITO COURT NW



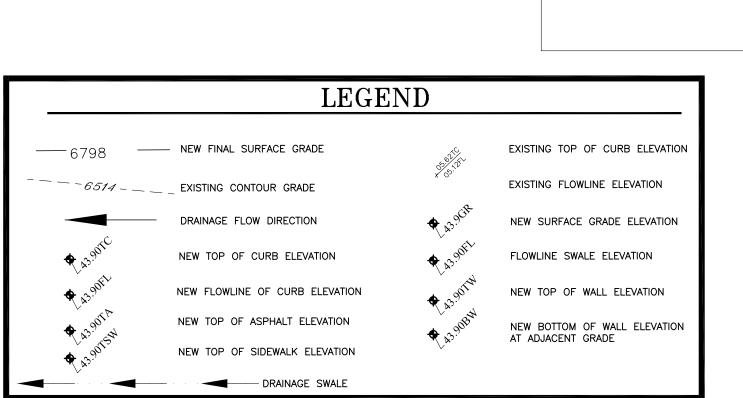






WO (2) YEARS AFTER THE APPROAL DATE BY THE CITY IF NO JILDING PERMIT HAS BEEN PULLED ON THE DEVELOPMENT

COA Survey Control Monument 7-C12 2003 NAD83 NMSP Central Zone N = 1523573.248 US FT E = 1512154,721 US FT Z = 5175.074 US FT NAVD 1988 Ground to grid = 0.999675222 Mapping Angle = -0\_14\_50.53 DRAINAGE SWALE, -DRAINAGE SWÄLE, GRADE TO DRAIN GRADE TO PRAW no Lot 9 -NEW RETAINING WALL (SEE SECTION THIS SHEET) NEW RESIDENCE SLQPE 1.5% GARAGE -NEW RETAINING WALL(SEE CÁNALE TO DRAIN TO EAST END OF BUILDING Project Benchmark CL SAS Manhole €.\* Elev 5177.80° ↔ N89°36'46"W NEW RETAINING SLOPE 1.5% WALL (SEE SECTION GARAGE THIS SHEET) Lot 10 LEW CONCRETE DRIVEWAY WALL (SEE SECTION \ THIS SHEET) 75.5FL -NEW ROOF DRAIN -NEW ROOF DRAIN CANALE TO DRAIN TO EAST END OF BUILDING CANALE TO DRAIN TO DRAINAGÉ SWALE,-EAST FNI OF BUILDING GRADE TO DRAIN SIDEWALK WITH CUTOFF WALL, 4 FEET BELOW TOP OF SIDEWALK



### 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

LINES IN PLANNING AND CONDUCTING EXCAVATION WORK.

UNDERGROUND UTILITIES, AND EXISTING PIPELINES. THE CONTRACT SHALL

COMPLY WITH STATE STATUES PERTAINING TO THE LOCATION OF THESE

