

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

March 3, 2025

Philip Clark, P.E.
Clark Consulting Engineers
19 Ryan Road
Edgewood, NM 87015

**RE: 824 Candelaria NW
Grading and Drainage Plan
Engineer's Stamp Date: 2/5/25
Hydrology File: G14D099
Case # HYDR-2025-00038**

Dear Mr. Clark:

PO Box 1293

Albuquerque

Based upon the information provided in your submittal received 02/14/2025, the Grading and Drainage Plan is approved for Building Permit and Grading Permit. **Since this site is relatively flat and grades to the road, a pad certification is not needed for this project.** 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:

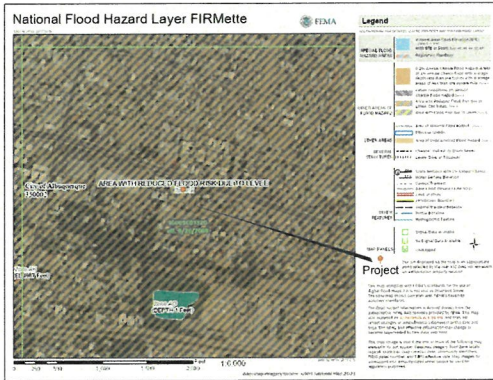
1. Engineer's Certification, per the DPM Part 6-14 (F): Engineer's Certification Checklist For Non-Subdivision is required.

www.cabq.gov

If you have any questions, please contact me at 505-924-3914 or amontoya@cabq.gov.

Sincerely,

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



PROJECT IS LOCATED IN ZONE X, NOT WITHIN A SPECIAL FLOOD HAZARD AREA

FIRM MAP REF: PANEL # C0332 G

9/26/08

GRADING & DRAINAGE PLAN

THE SINGLE FAMILY DETACHED RESIDENTIAL PROJECT IS LOCATED IN THE NORTH VALLEY AREA OF ALBUQUERQUE APPROXIMATELY 2-1/2 MILES NORTH OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE CITY OF ALBUQ. DEVELOPMENT PROCESS MANUAL (DPM), CH. 6, SIGNED 6/8/20 - DRAINAGE, FLOOD AND EROSION CONTROL. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

1. EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND EXISTING IMPROVEMENTS: INCLUDING DRIVEPAD AND FENCING
2. PROPOSED IMPROVEMENTS: 3600 SF RESIDENT FOOTPRINT, NEW EXPANDED DRIVEWAY / GRADE ELEVATIONS, BERMS OR BARRIERS, AND SWALES.
3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
4. QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF-SITE FLOWS WHICH CONTRIBUTE TO THE DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS.

THE PURPOSE OF THE PLAN IS TO ESTABLISH CRITERIA FOR CONTROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE WEST AND THE EAST BY RESIDENCES. CANDELARIA RD NW, A MINOR ARTERIAL STREET IS PAVED WITH CURB, GUTTER AND ATTACHED 6' SIDEWALK, AND IS MAINTAINED BY THE CITY OF ALBUQUERQUE. THE SITE CURRENTLY HAS SLOPES AT 0 TO LESS THAN 1% BUT IS GENERALLY FLAT.

HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED, SINCE CANDELARIA IS IMPROVED MINIMAL GRADING IS PROPOSED WITHIN THE CITY R.O.W. FREE DISCHARGE OF DEVELOPED FLOW IS ACCEPTABLE, HOWEVER THE SITE IS FLAT THEREFORE A FLAT NW VALLEY GRADING SCHEME IS EMPLOYED. THIS PLAN ROUTES DEVELOPED RUNOFF THROUGH/TO THE PROPOSED LANDSCAPE AREAS.

THE SITE IS NOT IMPACTED ADVERSELY BY ANY OFF-SITE DRAINAGE FLOWS.

"Valley Drainage Criteria"

PER SECTION 6-5 (A), OF THE DPM - SINGLE-LOT DEVELOPMENT

CALCULATIONS

DESIGN CRITERIA

HYDROLOGIC METHODS PER CHAPTER 6, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM)

2020 EDITION FOR CITY OF ALBUQUERQUE

DISCHARGE RATE: $Q = Q_{PEAK} \times AREA$ Peak Discharge Rates For Small Watersheds"

VOLUMETRIC DISCHARGE: $VOLUME = E_{Weighted} \times AREA$

$P100-6 Hr = 2.29 In.$, Zone 2, $P100-10 Day = 3.6 In.$, $TC = 12 Min.$

DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [] = 10 YEAR VALUES

EXISTING CONDITIONS

TOTAL AREA = 0.26 ACRES, WHERE EXCESS PRECIP. "W" = 1.03 in.
PEAK DISCHARGE, $Q100 = 0.79 CFS$, WHERE UNIT PEAK DISCHARGE = 3.05 CFS/AC.
THEREFORE: $VOLUME 100 = 972 CF$

DEVELOPED CONDITIONS

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

	AREA	LAND TREATMENT	Q Peak	E
UNDEVELOPED	0.00-Ac (0.00%)	A	1.71(0.41)	0.62(0.15)
LANDSCAPING, Native, Harvest	0.06-Ac (23%)	B	2.36(0.95)	0.80(0.30)
GRAVEL & COMPACTED SOIL	0.06-Ac (23%)	C	3.02(1.59)	1.03(0.48)
ROOF - PAVEMENT	0.14-Ac (54%)	D	4.34(2.71)	2.33(1.51)
	0.26-Ac			

THEREFORE: $E_{Weighted} = 1.679 In.$ & $VOLUME 100 = 1584 CF$
 $Q100 = 0.93 CFS$

PART 6-5(A) SINGLE-LOT RESIDENTIAL DEVELOPMENT AND ADDITIONS

FOR LOTS LESS THAN 1 ACRE, WATER HARVESTING ON THE LOT IS REQUIRED. THE WATER HARVESTING VOLUME GOAL IS TO CAPTURE 1/2 INCH OF RUNOFF FROM IMPERVIOUS AREAS ON THE SITE. THEREFORE: $6098 SF \times 0.57/12 = 254 CF$

1. ROOF FLOWS SHOULD BE DIRECTED TO THE WATER HARVESTING AREA(S).
2. RUNOFF SHOULD NOT ADVERSELY IMPACT ADJACENT PROPERTIES.
3. THE FINISHED PAD ELEVATION IS RECOMMENDED TO BE A MINIMUM OF 12 INCHES ABOVE THE EDGE OF PAVEMENT OR ROADWAY.

TOTAL ESTIMATED HARVEST AREA / VOLUME
.26 AC. = 11326 SF - 6000 SF (IMPROVEMENTS ABOVE 68.75)
= 5326 SF ; THEN $(5326 \times 0.2) / 2 \times 0.5' DEPTH = 1332 C.F.$

City of Albuquerque Planning Department Development Review Services HYDROLOGY SECTION APPROVED

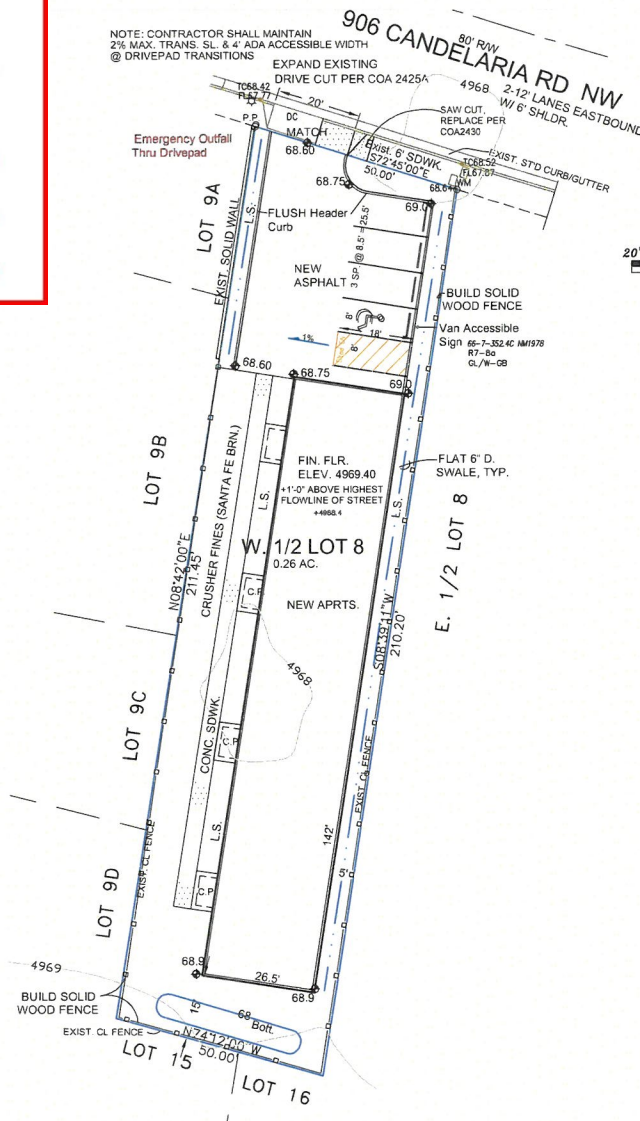
DATE: 3/3/2025

BY: *Quetta M. Montoya*

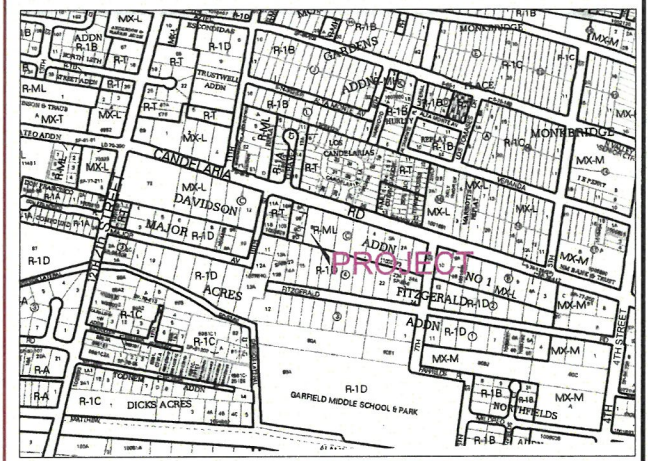
HydroTrans # G14D099

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.



SCALE: 1" = 20'



VICINITY MAP

G-14

NOTES

1. ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 2020 EDITION.
2. AN EXCAVATION/CONSTRUCTION PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R.O.W. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION.
3. 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.
4. ALL LANDSCAPING AREA SHALL BE SOFT-LINED WITH NATIVE VEGETATION AND/OR GRAVEL.
5. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION.
6. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
7. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION:
2 HORIZONTAL TO 1 VERTICAL, 2:1, <3' TALL. ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.

LEGEND

EXIST. SPOT ELEVATION	X4924.0
EXIST. CONTOUR	10
NEW SPOT ELEVATION (FINISH)	24.0
NEW CONTOUR	12
NEW SWALE	
DRAINAGE DIRECTION, EXISTING	
NEW CONCRETE CURB (0.5' HEIGHT)	
NEW P.C.C., CONCRETE	
TOP OF CURB, EXISTING	TC
TOP OF ASPHALT	TA
FLOWLINE	FL
EXISTING POWER POLE	O P.P.
FACE OF CURB/FACE OF CURB	F-F
EXISTING SHRUB VEGETATION	
EXISTING LIGHT POST	

PROJECT DATA

LEGAL DESCRIPTION

West 1/2 of LOT 8, BLOCK C, DAVIDSON ADDITION
ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

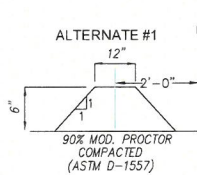
PROJECT BENCHMARK

TOP OF CURB AT THE Projected NE CORNER LOCATED IN CANDELARIA MSL ELEVATION = 4968.52 (FIELD CONFIRMED), AS TIED FROM COA 3-14" DIAMETER ALUM DISK, "23_G14", NAVD 88, 4969.30 LOCATED @ SE QUAD OF 7TH ST. NW.

TOPOGRAPHIC DESIGN SURVEY

COMPILED BY CCE PROVIDED BY ALPHA PRO SURVEYING, Dated JAN. 2025, ORTHOPHOTOGRAPHY, AND FIELD CONFIRMED.

I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO SIGNIFICANT EARTHWORK NOR MAJOR DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.



BERM SECTION

N/T'S OPTION, IN-LIEU OF 5'-6" TALL WOOD FENCE

2/6/25
PHILIP W. CLARK
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER

Clark Consulting Engineers Edgewood, New Mexico 87015	
Tels: (505) 281-2444 CELL: (505) 264-6042	
DATE	REVISION
WEST 1/2 OF LOT 8, BLK. C DAVIDSON ADDITION ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO	
906 CANDELARIA ST. NW	
GRADING & DRAINAGE PLAN	
DESIGNED BY: PWC	DRAWN BY: CCE
CHECKED BY: PWC	DATE: JAN. '25
JOB # SCHIF_MARQUEZ FILE # G/D	
GD-1	