



Mayor Timothy M. Keller

December 3, 2021

Jackie McDowell, PE
McDowell Engineering, Inc.
7820 Beverly Hills Ave NE
Albuquerque, NM 87121

RE: **Lot 16 Block 4 Unit 22, S.A.D. 228**
Volcano Cliffs Subdivision
6427 Canavio Rd. NW
Grading and Drainage Plan
Engineers Stamp Date 12/2/2021 (D10D003D16)

Ms. McDowell,

Based upon the information provided in your submittal received 12/2/2021, this plan is approved for Grading Permit.

Prior to Building permit approval a Pad Certification will be required, provided by the Engineer or a registered Land Surveyor.

Please inform the builder/owner to attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology.

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained, with the approved G&D plan and if a pool is added later on a new grading permit will be required.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist of this plan will be required.

If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

Ernest Armijo, P.E.
Principal Engineer, Planning Dept.
Development Review Services



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: CANDELARIA - HASLAM LOT 16 **Building Permit #:** _____ **Hydrology File #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: 00160004VOLCANO CLIFFS SUBD UNIT 22
City Address: 6427 CANAVIO RD NW ALBUQUERQUE NM 87120

Applicant: MCDOWELL ENGINEERING, INC. **Contact:** JACKIE MCDOWELL
Address: 7820 BEVERLY HILLS AVE. NE, ALBUQUERQUE, NM 87122
Phone#: 505-828-2430 **Fax#:** 505-821-4857 **E-mail:** jackmcdowell@comcast.net

Other Contact: DIEGO CANDELARIA **Contact:** DIEGO CANDELARIA
Address: 1330 Crestview Dr. Los Lunas, NM 87035
Phone#: 505-480-5608 **Fax#:** _____ **E-mail:** diego@candelariahomes.com

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) ☒ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL? _____ Yes ☒ No

DEPARTMENT _____ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

_____ ENGINEER/ARCHITECT CERTIFICATION
_____ PAD CERTIFICATION
_____ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
_____ DRAINAGE REPORT
_____ DRAINAGE MASTER PLAN
_____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
_____ ELEVATION CERTIFICATE
_____ CLOMR/LOMR
_____ TRAFFIC CIRCULATION LAYOUT (TCL)
_____ TRAFFIC IMPACT STUDY (TIS)
_____ STREET LIGHT LAYOUT
_____ OTHER (SPECIFY) _____
_____ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☒ BUILDING PERMIT APPROVAL
_____ CERTIFICATE OF OCCUPANCY
_____ PRELIMINARY PLAT APPROVAL
_____ SITE PLAN FOR SUB'D APPROVAL
_____ SITE PLAN FOR BLDG. PERMIT APPROVAL
_____ FINAL PLAT APPROVAL
_____ SIA/ RELEASE OF FINANCIAL GUARANTEE
_____ FOUNDATION PERMIT APPROVAL
☒ GRADING PERMIT APPROVAL
_____ SO-19 APPROVAL
_____ PAVING PERMIT APPROVAL
_____ GRADING/ PAD CERTIFICATION
_____ WORK ORDER APPROVAL
_____ CLOMR/LOMR
_____ FLOODPLAIN DEVELOPMENT PERMIT
_____ OTHER (SPECIFY) PAD CERTIFICATION

DATE SUBMITTED: 12-2-21 **By:** JACKIE MCDOWELL

COA STAFF:

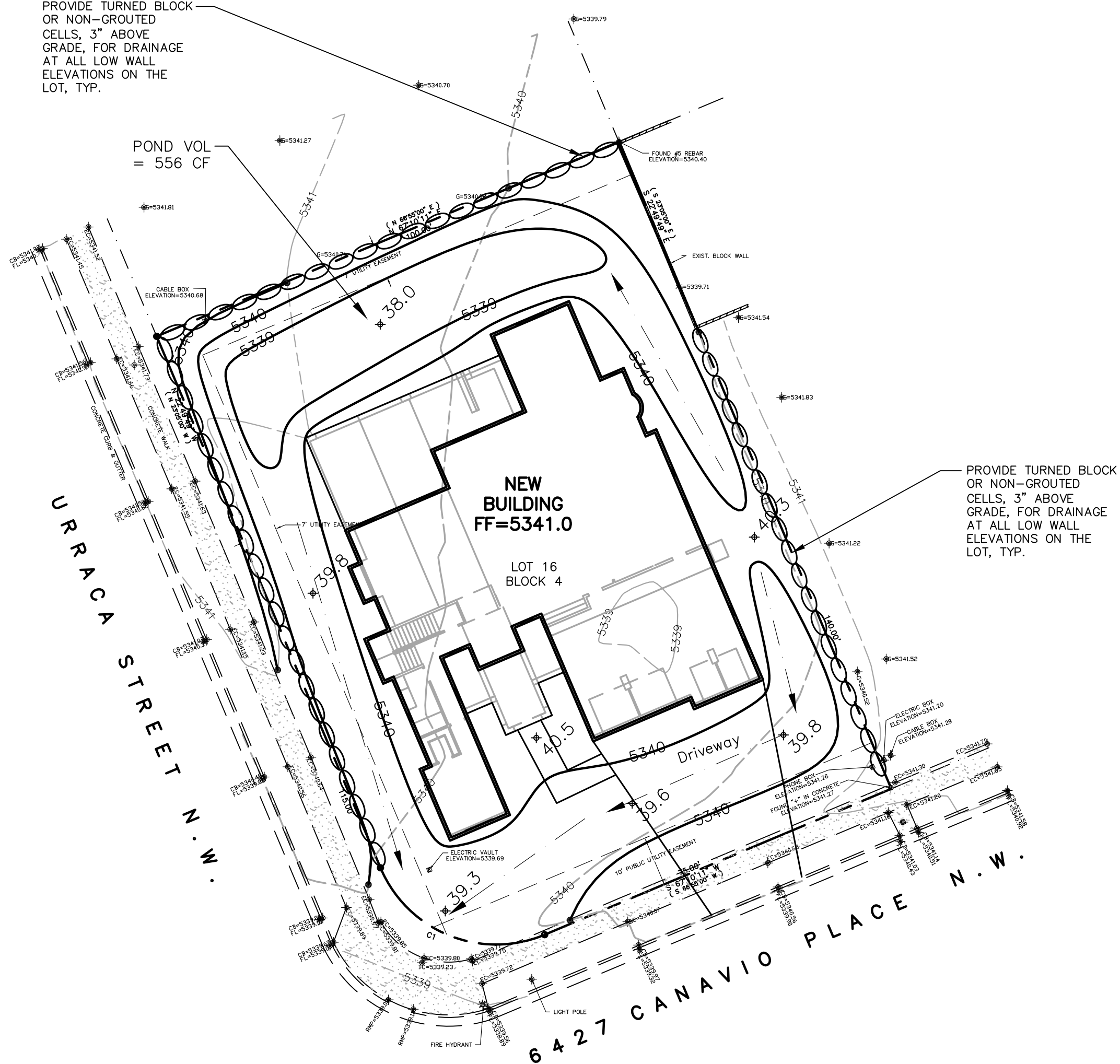
ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

CURVE	TABLE
100.00	100.00
100.00	100.00

PROVIDE TURNED BLOCK OR NON-GROUTED CELLS, 3" ABOVE GRADE, FOR DRAINAGE AT ALL LOW WALL ELEVATIONS ON THE LOT, TYP.

POND VOL = 556 CF



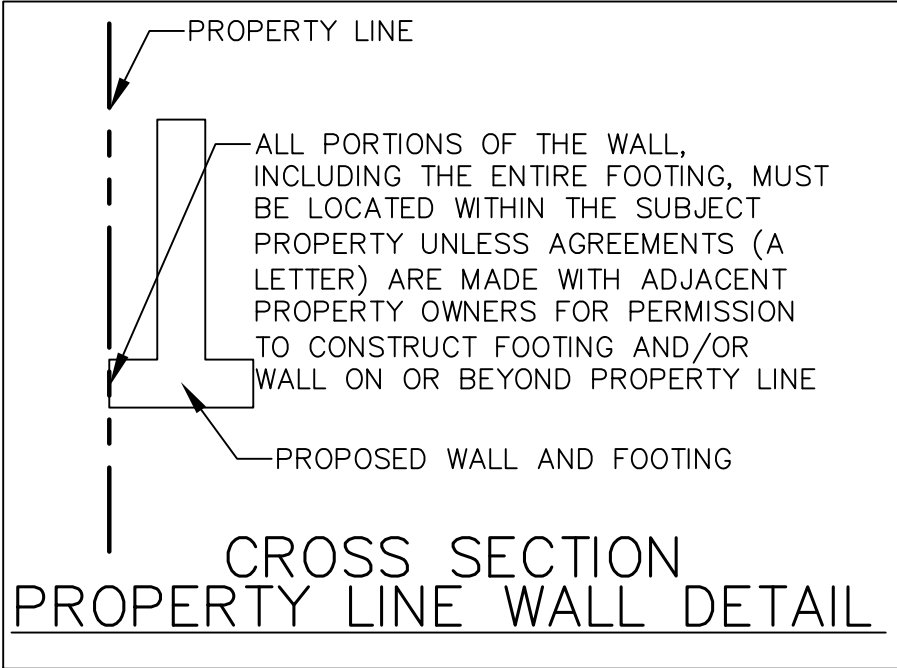
PROVIDE TURNED BLOCK OR NON-GROUTED CELLS, 3" ABOVE GRADE, FOR DRAINAGE AT ALL LOW WALL ELEVATIONS ON THE LOT, TYP.

This is the plan to be used for any garden walls and any openings in the walls shall be placed 3" above final grade in the rear yard to allow for cross lot drainage from west to east (upstream to downstream).

PROPERTY LINE WALLS AND GARDEN WALLS SHALL HAVE TURNED BLOCKS OR WEEP HOLES FOR DRAINAGE. ALL OPENINGS IN THE WALLS SHALL BE 3" ABOVE GRADE.

STANDARD GRADING NOTE: THE MAXIMUM GRADED SIDE SLOPE SHALL NOT EXCEED 3 FEET (HORIZONTALLY) TO 1 FOOT (VERTICALLY). AREAS DISTURBED BY GRADING WHICH WILL NOT BE TREATED WITH LANDSCAPING SHALL BE SEEDDED.

STANDARD WALL AND PAD CERTIFICATION NOTES:
ALL PERMITER GARDEN WALLS SHALL BE PERMITTED SEPARATELY.
A PAD CERTIFICATION IS REQUIRED BEFORE THE BUILDING PERMIT IS RELEASED.



DRAINAGE PLAN

SCOPE:

Pursuant to the latest City of Albuquerque and Bernalillo County Ordinances, the Drainage Plan shown hereon outlines the drainage management criteria for controlling developed runoff on and exiting the project site. A single family home is proposed for the site with associated parking, access, landscaping, and utility improvements.

EXISTING CONDITIONS:

Presently, the 0.32 acre site is undeveloped. The site is bounded on the north, and east by private property, on the west by Urraca Street, and on the south by Canavio Pl. NW. The site is level. As shown on FEMA Panel #112G, the site is not located in a 100 year flood plain.

PROPOSED CONDITIONS:

Per the SAD 227 and 228 Drainage Reports by Wilson & Company, drainage from the lots have been master planned to be intercepted by drainage features downstream of the properties. First flush ponding is required on all developments. As shown by the plan, the building is located in the center of the lot. Negligible off-site flows enter the site due to existing grades from the north and east and will continue to be allowed to historically flow through the site. On site flows will drain around the structure to new grades and flow to the ponding area and street. All roof drainage will discharge from the roof to the lot and be directed around the structure to the drainage paths.

Supplemental calculations are shown as part of this Grading and Drainage plan.

CALCULATIONS:

The calculations shown hereon define the 100 year-6 hour design storm falling within the project area under existing and developed conditions. The Hydrology is per "Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque, New Mexico in cooperation with Bernalillo County, New Mexico and the Albuquerque Metropolitan Arroyo Flood Control Authority.

PROPERTY ADDRESS:

6427 CANAVIO RD NW ALBUQUERQUE NM 87120

Areas: (acres)	Existing	Proposed
Treatment A	0.32	0.00
Treatment B	0.00	0.12
Treatment C	0.00	0.06
Treatment D	0.00	0.14
Total (acres) =	0.32	0.32

POND VOLUME PROVIDED:

ELEV.	AREA	VOL. (CF)
5339	1112	
		556
5338	0	
	SUB-TOTAL	556

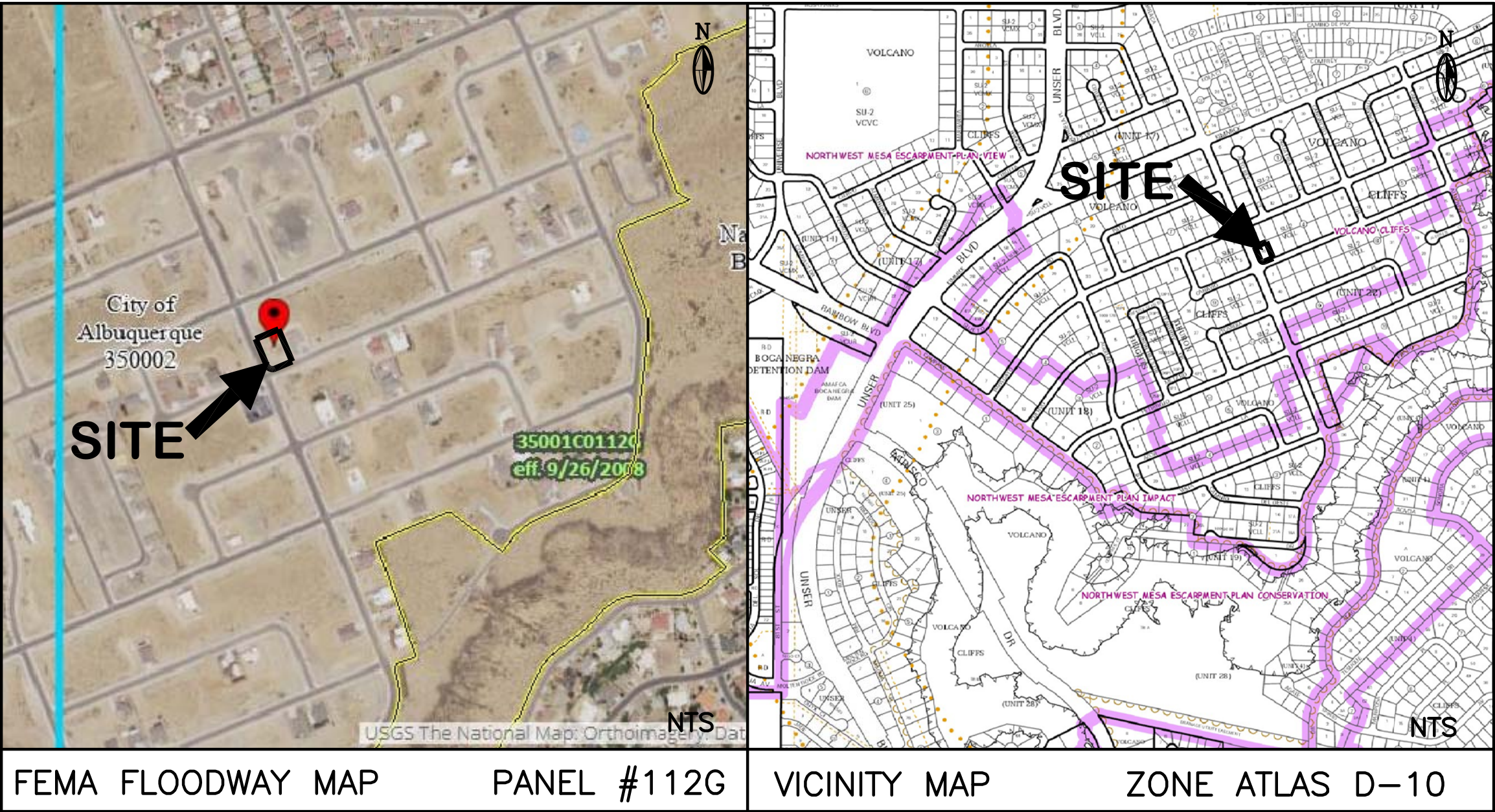
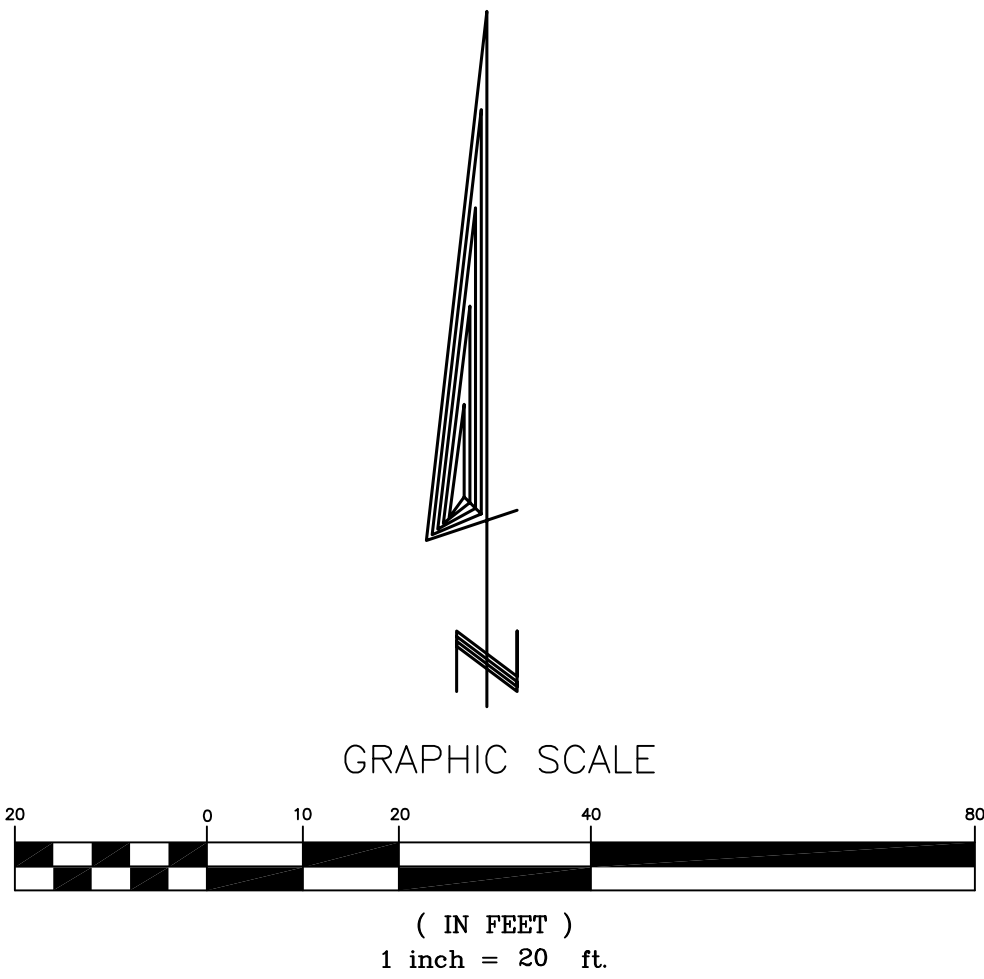
Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.012	0.035	0.002	0.019	0.000	0.009
Volume (cubic feet) =	511	1,509	93	822	0	396

FIRST FLUSH REQUIRED POND VOL = 0.34"/(12"/FT)*(0.32 AC * 43560 SF/AC) = 395 CF

Total Q(p), cfs:	100 year Existing Q(p)*A	100 year Proposed Q(p)*A	10 year Existing Q(p)*A	10 year Proposed Q(p)*A	2 year Existing Q(p)*A	2 year Proposed Q(p)*A
Treatment A	0.41	0.00	0.08	0.00	0.00	0.00
Treatment B	0.00	0.24	0.00	0.09	0.00	0.00
Treatment C	0.00	0.17	0.00	0.09	0.00	0.03
Treatment D	0.00	0.61	0.00	0.40	0.00	0.24
Total Q (cfs) =	0.41	1.03	0.08	0.59	0.00	0.27

GENERAL DRAINAGE PLAN NOTES:

- It is recommended that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- This plan recommends positive drainage away from all structures to prohibit ponding of runoff adjacent to the structure. Future alterations of the grades next to the structures are not recommended.
- Irrigation within 10 feet of any proposed structure is not recommended. Irrigation water adjacent to the structures could cause settlement.
- This plan establishes on-site drainage and assumes no responsibility for subsurface analysis, foundation or structural design, or utility design.
- Local codes may require all footings to be placed in natural undisturbed soil. If the contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer is recommended.
- It is recommended that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- The property boundary shown on this plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey.
- All work shall be constructed in accordance with the City of Albuquerque Standard Specifications for Public Works Construction with updates.
- 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.
- Contractor shall ensure that no site soils/sediment or silt enters the high-of-ways during construction.
- Areas disturbed due to construction shall be restored per City of Albuquerque Spec. 1012 native seed mix.



SURVEY LEGEND
CB = CURB
EC = EDGE OF CONCRETE
FL = FLOWLINE
G = GROUND
TC = TOP OF CONCRETE

SURVEY GENERAL NOTES:

- CONTOUR INTERVAL IS ONE (1) FOOT.
- ELEVATIONS ARE BASED ON READINGS TAKEN WITH A GPS UNIT STONEX SIBA ELEVATIONS SHOWN ARE NAVD 1988
- UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/OR DEPTH PRIOR TO EXCAVATION OR DESIGN CON-SIDERATIONS.
- THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA SHOWN IS FROM PREVIOUS SURVEY REFERENCE HEREON

	LEGEND	
	EXISTING	PROPOSED
CONTOUR	--- 6045 ---	--- 6045 ---
PROPERTY LINE	---	---
ROAD	---	---
SETBACK	---	---
RETAINING WALL/WALL		--- XXX ---
SPOT ELEVATION	56.58436	56.58436

Jackie S. McDowell
Professional Engineer
12-2-21

ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on November 22, 2021 and as of that date it appeared that no filling, grading, or excavation had occurred thereon since completion of the topographic survey used to prepare this plan.

6427 CANAVIO RD NW ALBUQUERQUE NM 87120		NEW MEXICO	
CITY OF ALBUQUERQUE, BERNALILLO COUNTY			
LOT 16, BLOCK 4, UNIT 22 VOLCANO CLIFFS SUBDIVISION			
HASLAM, VINCENT (CANDELARIA HOMES) – G & D PLAN			
McDowell Engineering, Inc.			
7820 BEVERLY HILLS AVE. NE		ALBUQUERQUE, NM 87122	
TELE: 505-828-2430		FAX: 505-821-4857	
Designed JSM	Drawn STAFF	Checked JSM	Sheet of
File HAS0121L	Date NOVEMBER, 2021	1	1