

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

May 21, 2018

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

RE: **Lot 3 Block 10 Unit 22, S.A.D. 228**
Volcano Cliffs Subdivision
6424 Petirrojo Rd. NW
Grading and Drainage Plan
Engineers Stamp Date 5/17/18 (D10D003F3)

Dear Ms. McDowell,

Based upon the information provided in your submittal received 5/18/18, this plan is approved for Grading Permit.

PO Box 1293

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

Albuquerque

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.

NM 87103

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained, with the approved G&D plan dated 5/17/18.

www.cabq.gov

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,

James D. Hughes, P.E.
Principal Engineer, Hydrology
Planning Department

RR/JDH
C: eFile D10S003F3



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: _____ Building Permit #: _____ City Drainage #: D10D003F3

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: _____

City Address: _____

Engineering Firm: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Owner: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Architect: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Surveyor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Contractor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL G & D PLAN
- ☐ GRADING PLAN
- ☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ ENGINEER'S CERT (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEER'S CERT (TCL)
- ☐ ENGINEER'S CERT (DRB SITE PLAN)
- ☐ ENGINEER'S CERT (ESC)
- ☐ SO-19
- ☐ OTHER (SPECIFY) **PAD CERTIFICATION**

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ SIA/FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D APPROVAL
- ☐ S. DEV. FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY (PERM)
- ☐ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ GRADING CERTIFICATION
- ☐ SO-19 APPROVAL
- ☐ ESC PERMIT APPROVAL
- ☐ ESC CERT. ACCEPTANCE
- ☐ OTHER (SPECIFY) **PAD CERTIFICATION**

WAS A PRE-DESIGN CONFERENCE ATTENDED: _____ Yes _____ No _____ Copy Provided

DATE SUBMITTED: _____ By: JACKIE MCDOWELL

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than are part of a larger common plan of development

SURVEY NOTES:

PROJECT LOCATION

6424 PETIRROJO ROAD N.W., ALBUQUERQUE, NEW MEXICO

SURVEY INFORMATION

TOPOGRAPHIC SURVEY PERFORMED AND COMPILED BY TERRA LAND SURVEYS, LLC. CORRALES, NEW MEXICO MARCH 2018.

PROJECT BENCHMARK

PROJECT BENCHMARK IS A CITY OF ALBUQUERQUE CONTROL STATION "S21, S22, S28, S27, T11N R2E, 1911" BEING A USGLO SECTION CORNER ELEVATION = 5,330.151 FEET (NAVD 1988 VERTICAL DATUM).

TEMPORARY PROJECT BENCHMARK

PROJECT BENCHMARK CP 104 IS A TERRA LAND SURVEY 1/2" REBAR WITH PLASTIC CAP STAMPED "TERRA CONTROL" ELEVATION = 5,340.37 FEET (NAVD 1988 VERTICAL DATUM).

NOTES

1. FIELD SURVEY PERFORMED IN MARCH 2018.
2. TOPOGRAPHIC SURVEY WAS COMPILED UTILIZING GRID COORDINATES REFERENCED TO NAD 1983 CENTRAL ZONE. PRIMARY HORIZONTAL AND VERTICAL CONTROL WAS ESTABLISHED UTILIZING GPS RTK METHODS. COMBINED GROUND TO GRID FACTOR IS 0.999669939/1.000330170 SCALED AROUND 0.0.
3. ELEVATIONS SHOWN FOR PIPES ARE INVERT ELEVATIONS UNLESS OTHERWISE SPECIFIED.
4. CONTOURS SHOWN HEREON ARE AT A ONE FOOT INTERVAL REFERENCED TO THE NAVD 88 VERTICAL DATUM.

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 SEEDED.

STANDARD WALL AND PAD CERTIFICATION NOTES:

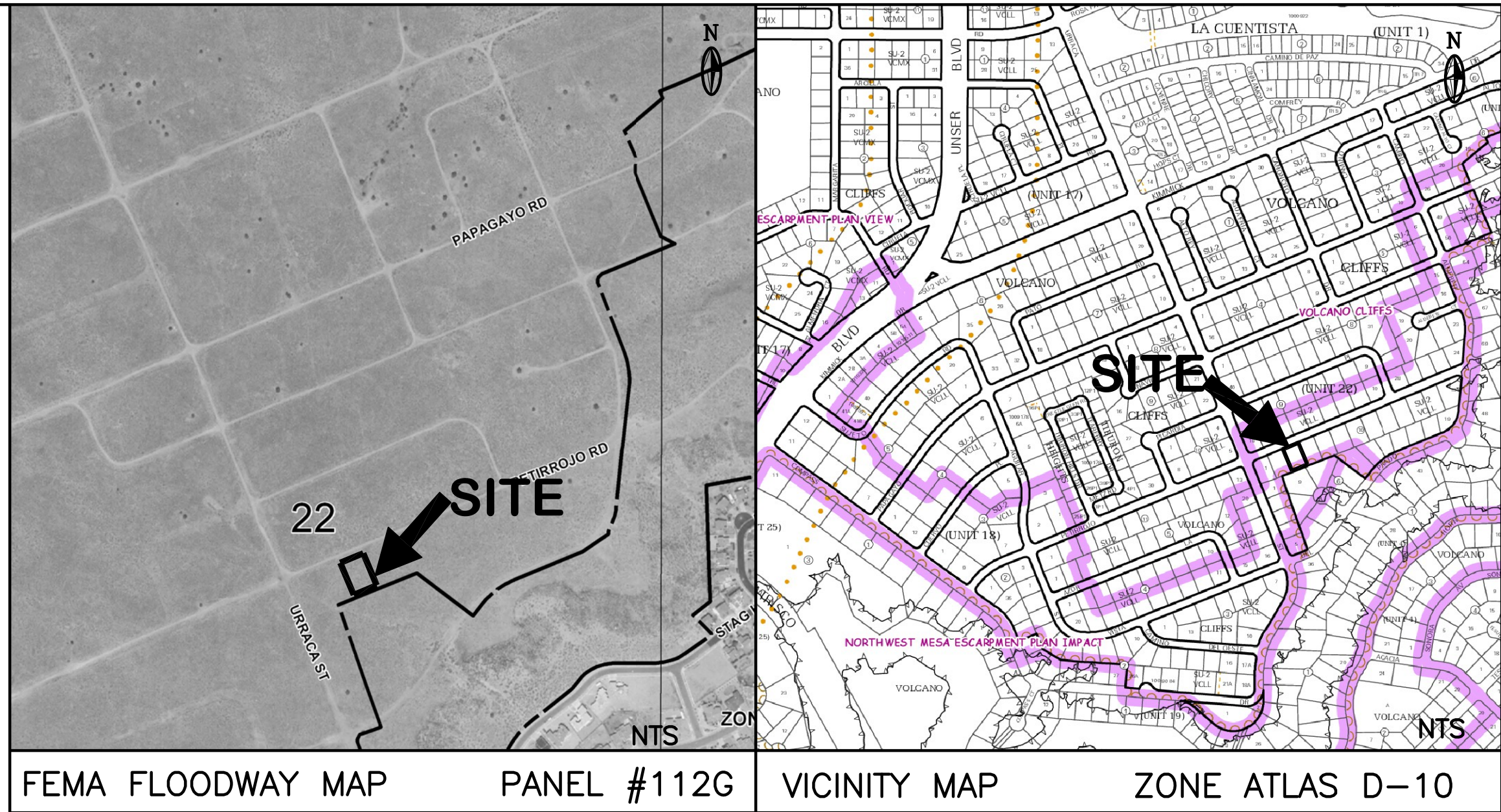
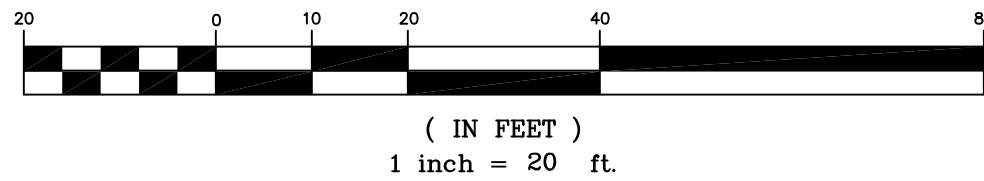
ALL PERMITER GARDEN WALLS SHALL BE PERMITTED SEPARATELY.

A PAD CERTIFICATION IS REQUIRED BEFORE THE BUILDING PERMIT IS RELEASED.

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.

GRAPHIC SCALE



GENERAL DRAINAGE PLAN NOTES:

1. It is recommended that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
2. 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.
3. Irrigation within 10 feet of any proposed structure is not recommended. Irrigation water adjacent to the structures could cause settlement.
4. This plan establishes on-site drainage and assumes no responsibility for subsurface analysis, foundation or structural design, or utility design.
5. 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.
6. It is recommended that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
7. 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.
8. All work shall be constructed in accordance with the City of Albuquerque Standard Specifications for Public Works Construction with updates.
9. 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.
10. Contactor shall ensure that no site soils/sediment or silt enters the right-of-ways during construction.
11. Areas disturbed due to construction shall be restored per City of Albuquerque Spec. 1012 native seed mix.

ZONE 1

Areas: (acres)	Existing	Proposed
Treatment A	0.35	0.00
Treatment B	0.00	0.21
Treatment C	0.00	0.00
Treatment D	0.00	0.14
Total (acres) =	0.35	0.35

POND VOLUME PROVIDED:		
ELEV.	AREA	VOL. (CF)
5332.5	622	441.5
5331.5	261	

TOTAL POND VOL PROVIDED = 441.5

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.013	0.035	0.002	0.018	0.000	0.009
Volume (cubic feet) =	559	1,512	102	798	0	374

FIRST FLUSH REQUIRED POND VOL = 0.34"/(12"/FT)*(0.35 AC * 43660 SF/AC) = 432 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	0.45	0.00	0.08	0.00	0.00	0.00
Treatment B	0.00	0.43	0.00	0.16	0.00	0.01
Treatment C	0.00	0.00	0.00	0.00	0.00	0.00
Treatment D	0.00	0.61	0.00	0.40	0.00	0.24
Total Q (cfs) =	0.45	1.04	0.08	0.56	0.00	0.24

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 0.35 acre site is undeveloped. The site is bounded on the south, east and west by private property, and on the north by Petirrojo Road NW. The site slopes from the northwest to the southeast. As shown on FEMA Panel #112G, the site is not located in a 100 year flood plain.

PROPOSED CONDITIONS:

Per the SAD 228 Drainage Report by Wilson & Company, drainage from the lot has been master planned to be intercepted by drainage features downstream of the properties. Current COA Drainage Ordinance requires that ponds must be provided to handle the First Flush volume which has been calculated and is included on this plan. 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 on adjacent lots and will be allowed to continue. On site flows will drain around the structure via swales, and flow to the southeast to the first flush retention pond located along the southeasterly side of the home. All roof drainage will discharge from the roof to the lot and be directed around the structure to the drainage paths and pond.

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:

6424 Petirrojo Rd. NW

TOPOGRAPHY:

Topographic information provided by Christopher Medina, Terra Land Surveys, LLC. dated March 26, 2018.

