CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director

Mayor Timothy M. Keller

May 14, 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**
6424 Petirrojo NW
Grading and Drainage Plan
Engineers Stamp Date 5-10-18 (D10D003F3)

Dear Ms. McDowell,

Based upon the information provided in your submittal received 5/11/18, this plan cannot be approved for Grading Permit until the following comments are addressed

- Provide a cross section of the block walls/fence showing the location of the footing. If the footing is encroaching onto the abutting properties a letter of acceptance will be needed from the property owners for the placement of the footing.
- Provide the size of the openings and calculations for the turn blocks, to show that the openings are sufficient for the passage of the flows required.

Prior to Building permit approval a Pad Certification will be required, provided by the Engineer signed and dated or a registered Land Surveyor with as-build elevations.

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
File: efile D10D003F3

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: ERIC ALTENBURG - LOT 3 G&D Building Permit #: _____ City Drainage #: XXXX

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

Legal Description: LOT 3, BLOCK 10, UNIT 22 VOLCANO CLIFFS SUB'D

City Address: 6424 PETIRROJO RD. NW, ALB., NM 87120

Engineering Firm: MCDOWELL ENGINEERING, INC. Contact: JACKIE MCDOWELL

Address: 7820 BEVERLY HILLS AVE. NE

Phone#: 505-828-2430 Fax#: 505-821-4857 E-mail: jackmcdowell@comcast.net

Owner: ERIC ALTENBURG Contact: ERIC ALTENBURG

Address: 5020 MIRADOR DR. NW

Phone#: 505-681-5461 Fax#: _____ E-mail: ealatenburg@comcast.net

Architect: _____ Contact: _____

Address: _____

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

Surveyor: _____ Contact: _____

Address: _____

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

Contractor: BUILDER: RICHARD AYALA Contact: RICHARD AYALA

Address: 1509 CONEJOS DR. SE,RIO RANCHO, NM 87124

Phone#: 505-220-4004 Fax#: _____ E-mail: ayalauno@aol.com

TYPE OF SUBMITTAL:

- ____ DRAINAGE REPORT
- X DRAINAGE PLAN 1st SUBMITTAL
- ____ DRAINAGE PLAN RESUBMITTAL
- ____ CONCEPTUAL G & D PLAN
- X 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 CERTIFCATION

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
- X BUILDING PERMIT APPROVAL
- X GRADING PERMIT APPROVAL
- ____ PAVING PERMIT APPROVAL
- ____ WORK ORDER APPROVAL
- ____ GRADING CERTIFICATION
- ____ SO-19 APPROVAL
- ____ ESC PERMIT APPROVAL
- ____ ESC CERT. ACCEPTANCE
- ____ OTHER (SPECIFY) PAD CERTIFCATION

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

DATE SUBMITTED: May 11, 2018 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 followin

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.

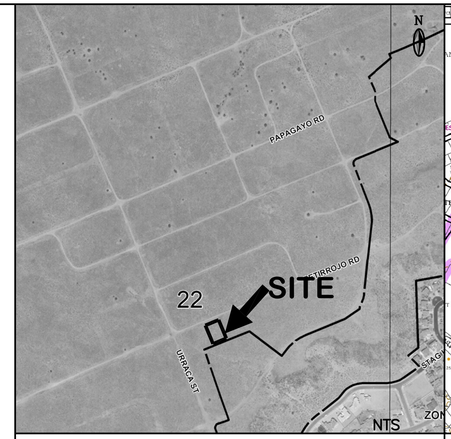
This is the plan to be used for any garden walls and any openings in the walls shall be placed 3" above final grade in the rear yard to allow for cross lot drainage from west to east (upstream to downstream).

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.

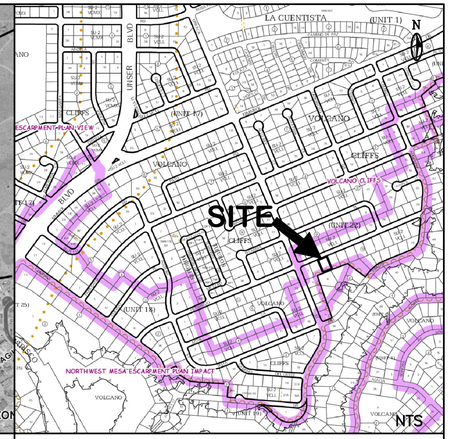
GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.



FEMA FLOODWAY MAP PANEL #112G



VICINITY MAP ZONE ATLAS D-10

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 righ-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:

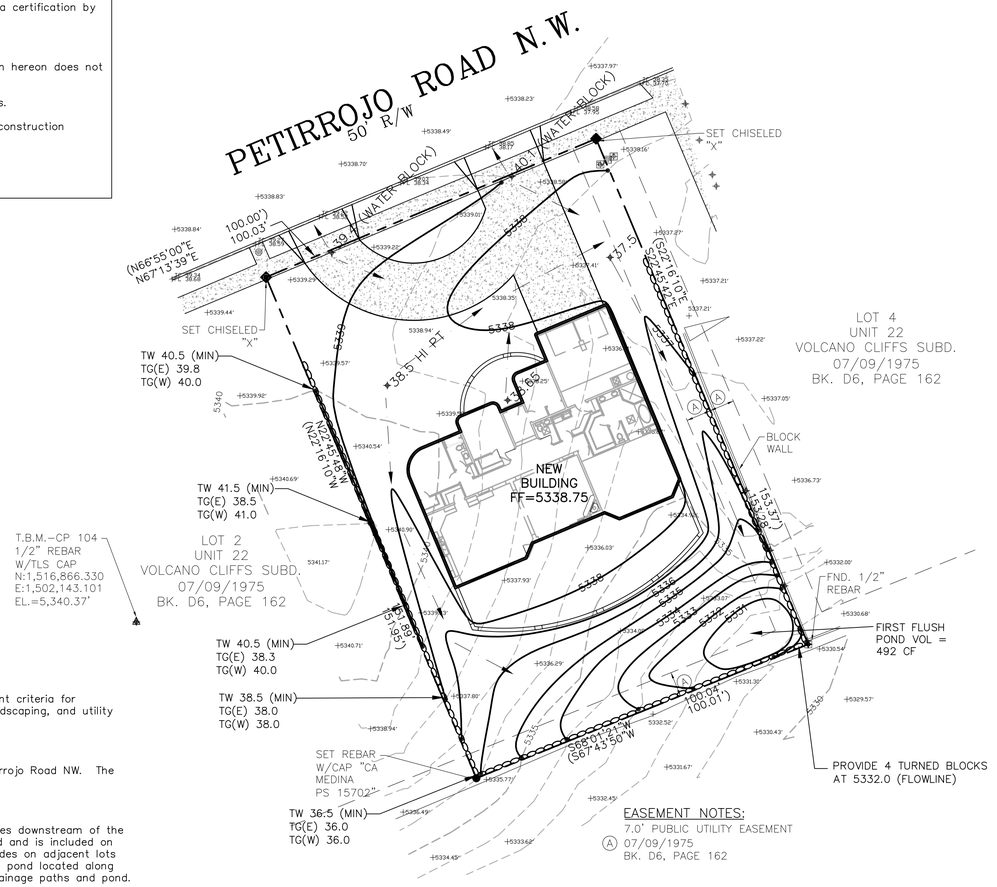
ELEV.	AREA	VOL. (CF)
5332	657	
		492.5
5331	328	

TOTAL POIND VOL PROVIDED = 492.5

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 * 43560 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



EASEMENT NOTES:
7.0' PUBLIC UTILITY EASEMENT
(A) 07/09/1975
BK. D6, PAGE 162

LEGEND

	EXISTING	PROPOSED
CONTOUR	6045	6045
PROPERTY LINE		
ROAD		
SETBACK		
RETAINING WALL/WALL		
SPOT ELEVATION	5338.23	XX.X

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 southeat 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.

6424 PETIRROJO
ROAD N.W.
0.3504 ACRES
(15,262.50 SQ. FT.)

JACKIE S. McDOWELL NEW MEXICO 14891 REGISTERED PROFESSIONAL ENGINEER
5-10-18

ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on March 28, 2018 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.

CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

LOT 3, BLOCK 10, UNIT 22
VOLCANO CLIFFS SUBDIVISION

AYALA - ALTERNBURG - 6424 PETIRROJO - GRADING & DRAINAGE PLAN

McDowell Engineering, Inc.
7820 BEVERLY HILLS AVE. NE • ALBUQUERQUE, NM 87122
TELE: 505-828-2430 • FAX: 505-821-4857

Designed	Drawn	Checked	Sheet	of
JSM	STAFF	JSM	1	1

File ALT0118L Date APRIL,2018

GRADING
4-28-18
1=20
ALT0118L