

CITY OF ALBUQUERQUE

Planning Department
Suzanne Lubar, Acting Director



Mayor Timothy M. Keller

December 15, 2017

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

RE: **Lot 17 Block 9 Unit 22, S.A.D. 228**
6427 Petirrojo NW
Grading and Drainage Plan
Engineers Stamp Date 12-6-17 (D10D003Q17)

Dear Ms. McDowell,

Based upon the information provided in your submittal received 12/17/17, this plan cannot be approved for Grading Permit until the following comments are addressed

- Provide how the flows will enter and exit the rear yard from west to east. It appears the retaining walls will stop these flows.
- Provide the amount of flow entering and exiting the rear yard.
- 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: PDF



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

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

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

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.

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:

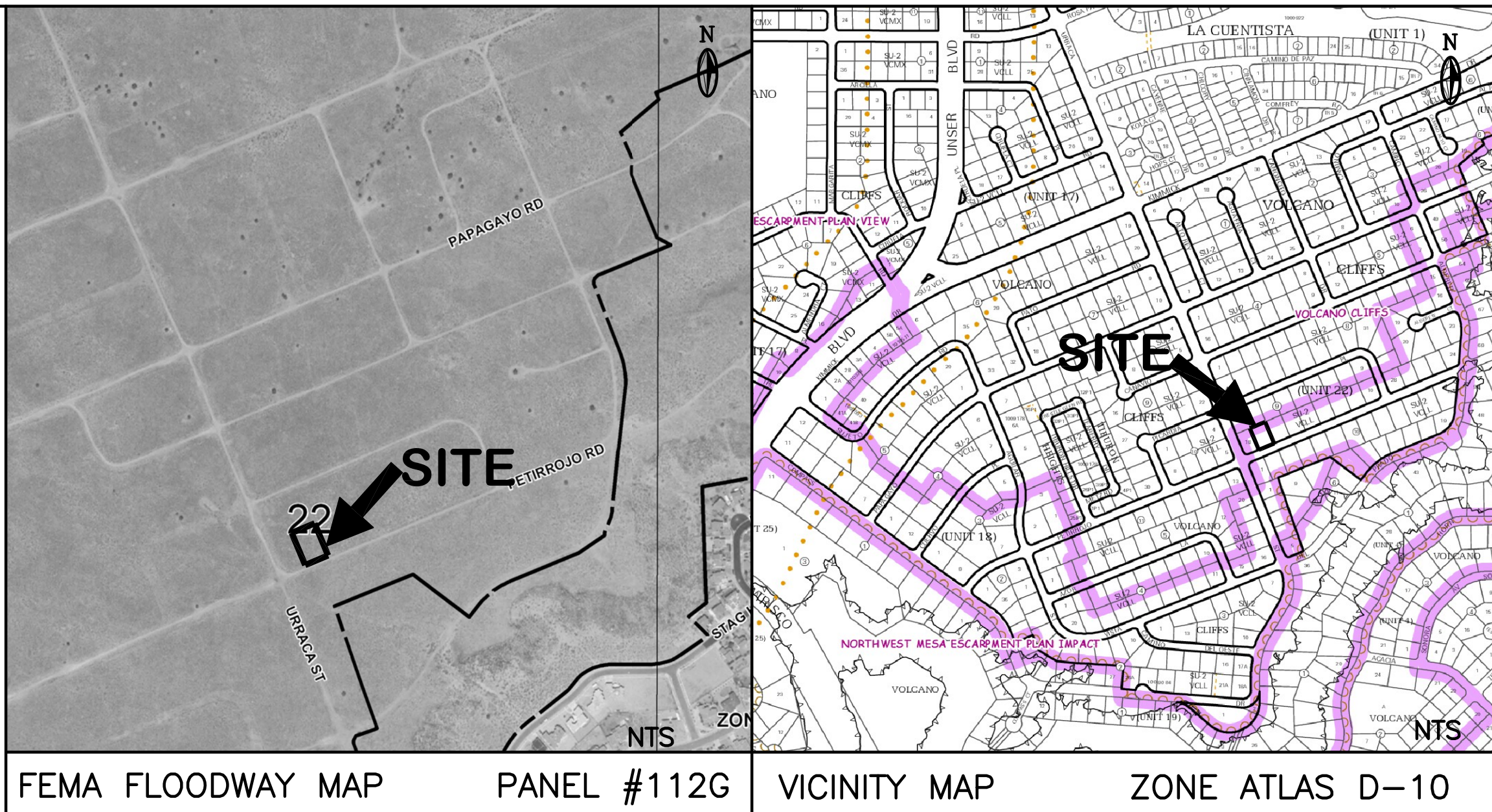
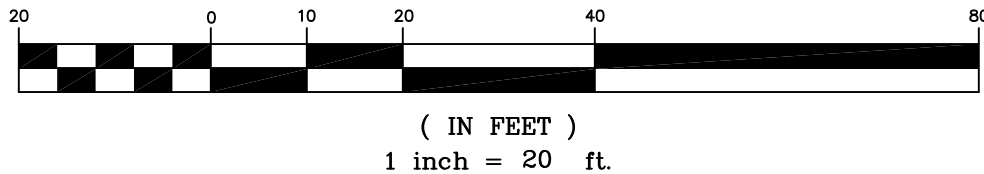
ALL PERMITER GARDEN WALLS SHALL BE PERMITTED SEPARATELY.

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

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.

LOT 17 BLOCK 9
UNIT NO. 22
VOLCANO CLIFFS SUBDIVISION
GRAPHIC SCALE



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, east and west by private property, and on the south 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 lots 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 south to the first flush retention pond located along the southerly side of the home, east of the driveway. 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:

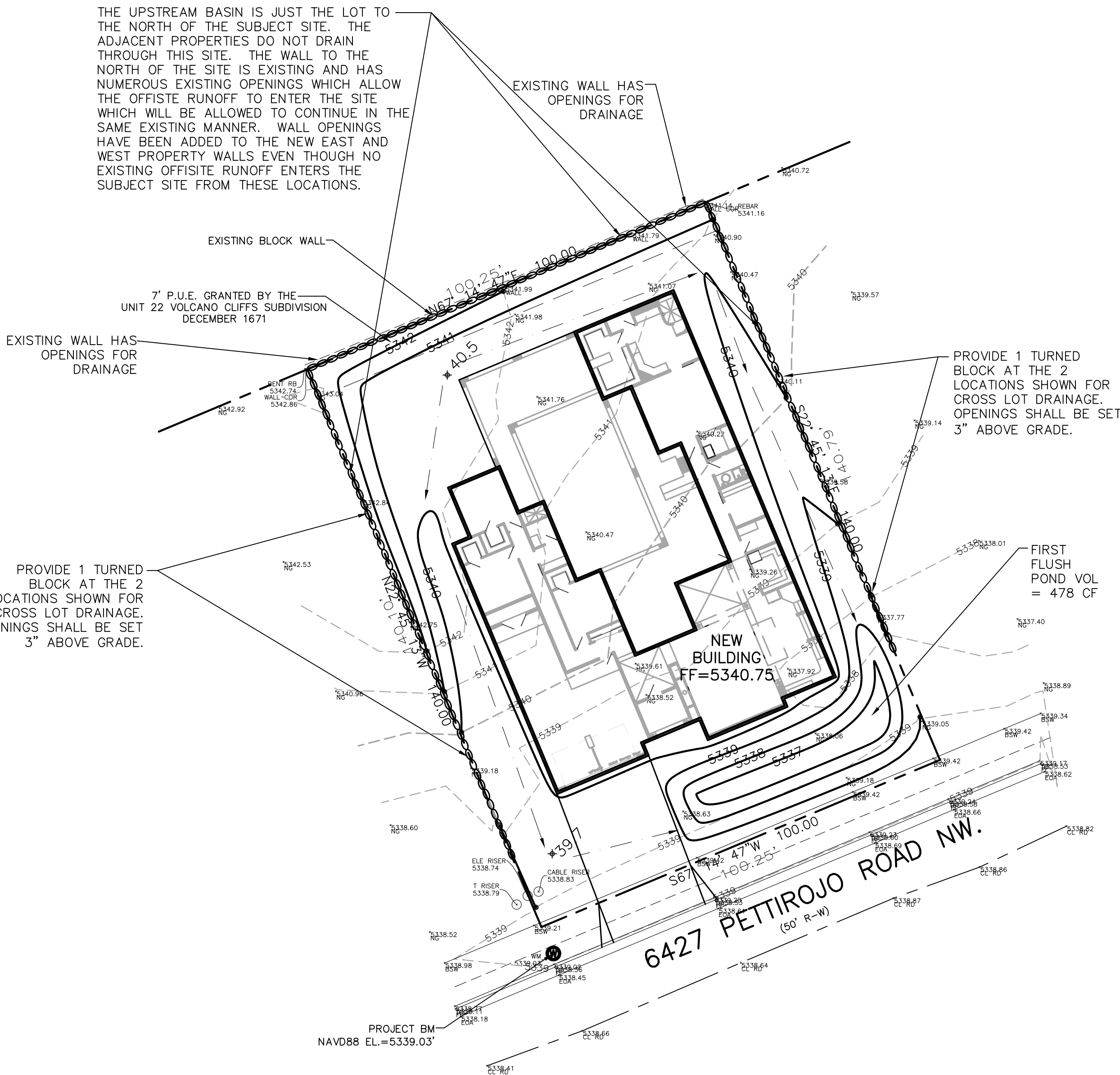
6427 Petirrojo Rd. NW

TOPOGRAPHY:

Topographic information provided by Construction Survey Technologies, Inc. dated November, 2017.

ZONE 1

Areas: (acres)	Existing	Proposed	POND VOLUME PROVIDED:			
Treatment A	0.32	0.00	ELEV.	AREA	VOL. (CF)	
Treatment B	0.00	0.16	5338	689	477.5	
Treatment C	0.00	0.00				
Treatment D	0.00	0.16	5337	266		
Total (acres) =	0.32	0.32	TOTAL POIND VOL PROVIDED = 477.5			
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	0.010
Volume (cubic feet) =	511	1,533	93	848	0	424
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	0.32	0.00	0.12	0.00	0.00
Treatment C	0.00	0.00	0.00	0.00	0.00	0.00
Treatment D	0.00	0.70	0.00	0.46	0.00	0.27
Total Q (cfs) =	0.41	1.02	0.08	0.58	0.00	0.28



CITY OF ALBUQUERQUE

Planning Department
Suzanne Lubar, Acting Director



Mayor Timothy M. Keller

December 15, 2017

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

RE: **Lot 17 Block 9 Unit 22, S.A.D. 228**
6427 Petirrojo NW
Grading and Drainage Plan
Engineers Stamp Date 12-6-17 (D10D003Q17)

Dear Ms. McDowell,

Based upon the information provided in your submittal received 12/17/17, this plan cannot be approved for Grading Permit until the following comments are addressed

- Provide how the flows will enter and exit the rear yard from west to east. It appears the retaining walls will stop these flows. **provided on plan**
- Provide the amount of flow entering and exiting the rear yard. **provided on plan**
- 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. **provided on plan**

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: PDF