

# CITY OF ALBUQUERQUE

Planning Department  
Suzanne Lubar, Director



Mayor Richard J. Berry

June 12, 2017

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

RE: **Lot 10 Block 9 Unit 22, S.A.D. 228**  
**6401 Petirrojo NW**  
**Grading and Drainage Plan**  
**Engineers Stamp Date Revised 5-17-17 (D10D003Q10)**  
**Pad Certification Dated 5/21/17**

Dear Ms. McDowell,

Based upon the information provided in your submittal received 6/09/17, this plan is approved for Building Permit.

Please have the owner/builder 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 revise date 5/17/17.

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 924-3695 or Rudy Rael at 924-3977.

Sincerely,

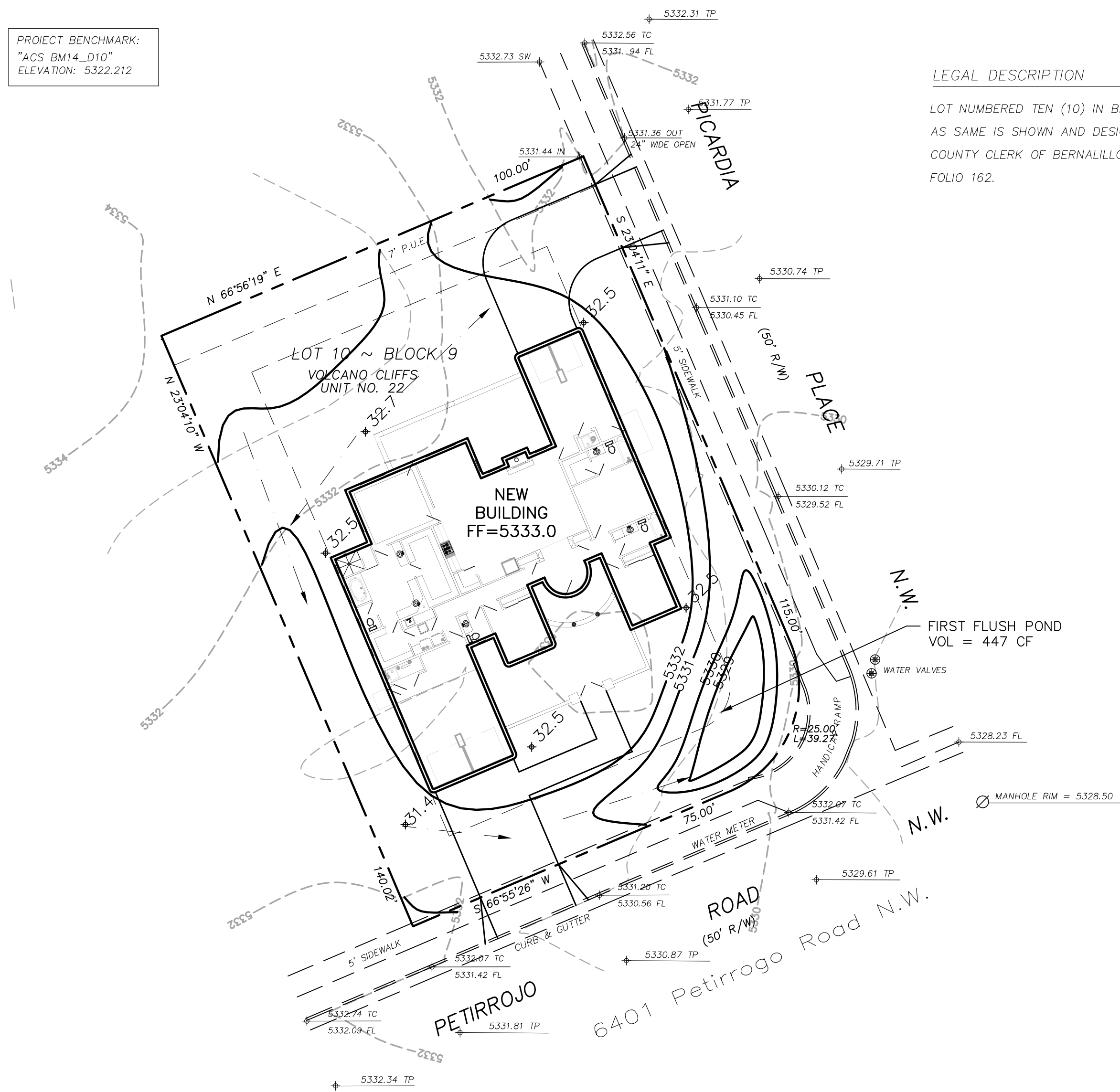
James D. Hughes, P.E.  
Principal Engineer, Hydrology  
Planning Department

RR/JDH  
C: File



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.

PROJECT BENCHMARK:  
"ACS BM14\_D10"  
ELEVATION: 5322.212



LEGAL DESCRIPTION

LOT NUMBERED TEN (10) IN BLOCK NUMBERED NINE (9) OF VOLCANO CLIFFS, UNIT NO. 22 AS SAME IS SHOWN AND DESIGNATED ON SAID PLAT, AS FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON JULY 9, 1975 IN VOLUME D6, FOLIO 162.

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 northeast by Picardia Pl. on the southeast by Petirrojo Road NW, and on the northwest and southeast by private property. The site is relatively level in the center and has a gentle slope from the northwest to the southeast. Site topography slopes 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 have 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. No off-site flows enter the site due to existing grades on adjacent lots which transport offsite runoff to public streets around the site. On site flows will drain around the structure via swales, and flow to the southeast to the first flush retention pond. 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:

6401 Petirrojo Road NW

TOPOGRAPHY:

Topographic information provided by Mike Shook dated May, 2017.

ZONE 1

Areas: (acres)	Existing	Proposed
Treatment A	0.32	0.00
Treatment B	0.00	0.18
Treatment C	0.00	0.00
Treatment D	0.00	0.14
Total (acres) =	0.32	0.32

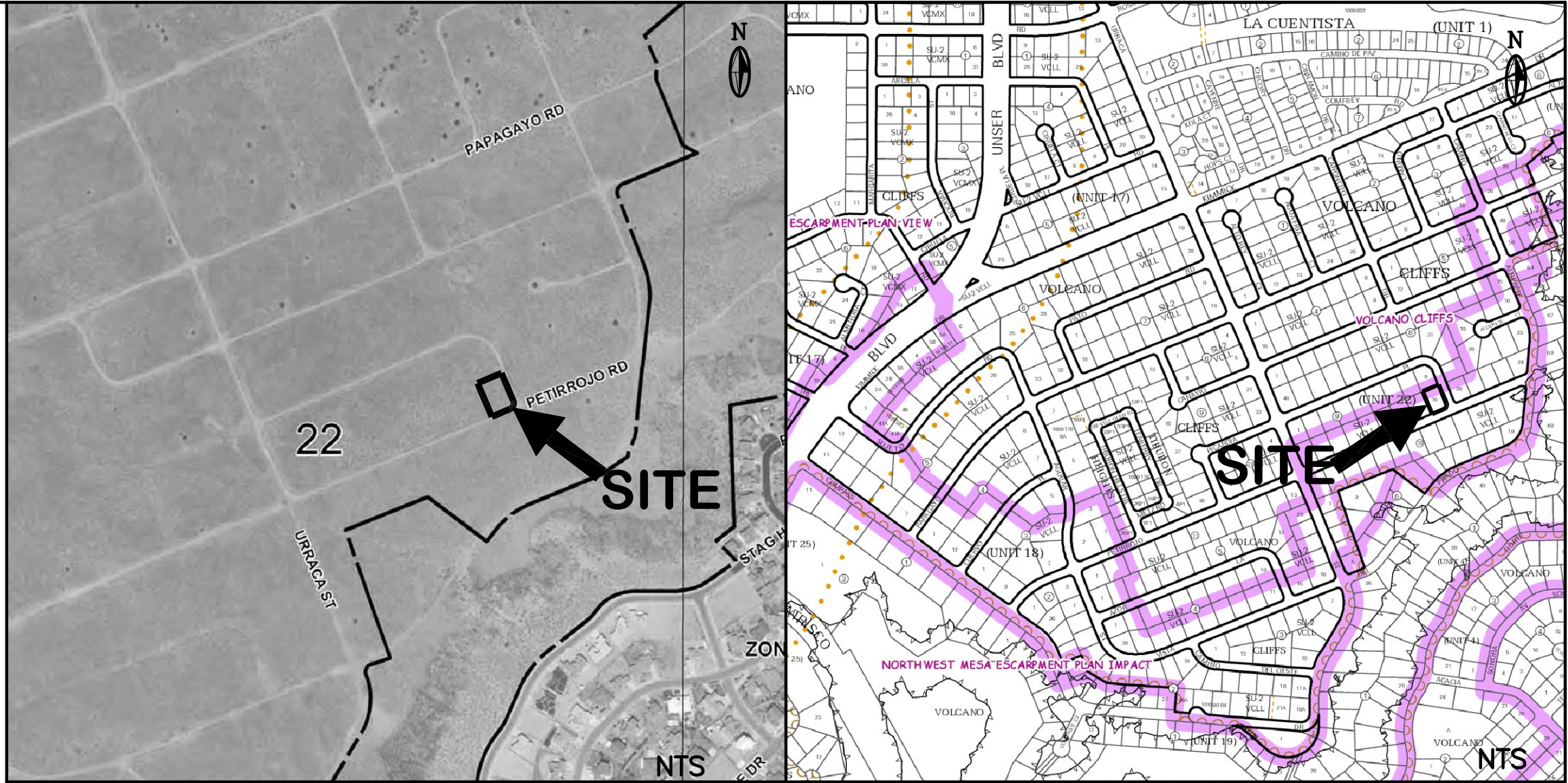
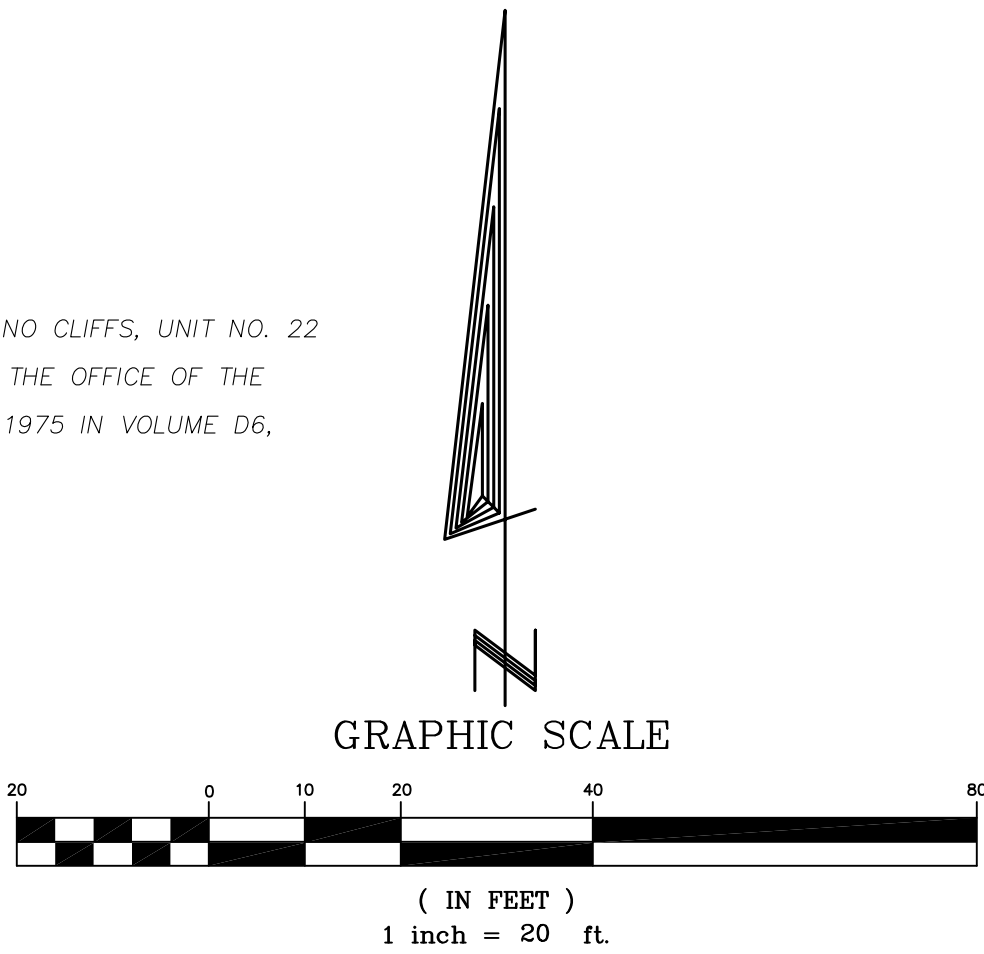
POND VOLUME PROVIDED:

ELEV.	AREA	VOL. (CF)
5330	610	447
5329	284	

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.012	0.033	0.002	0.018	0.000	0.009
Volume (cubic feet) =	511	1,439	93	774	0	372

FIRST FLUSH REQUIRED POND VOL = 0.34"/(12"/FT)\*(0.32AC \* 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	0.37	0.00	0.14	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) =	0.41	0.98	0.08	0.54	0.00	0.24

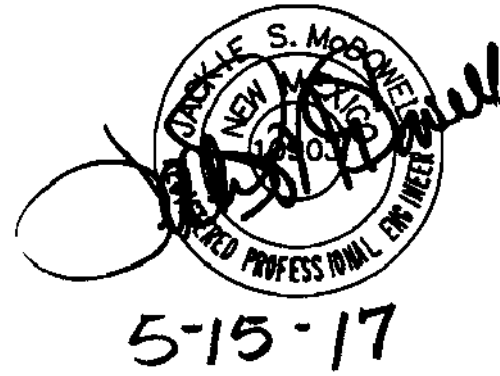


LEGEND

	EXISTING	PROPOSED
CONTOUR	6045	6045
PROPERTY LINE		
ROAD		
SETBACK		
WALL		
SPOT ELEVATION	5332.56 TC 5331.94 FL	XXX

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.
- Contacter shall ensure that no site soils/sediment or silt enters the right-of-ways during construction.
- Areas disturbed due to construction shall be restored per City of Albuquerque Spec. 1012 native seed mix.



ENGINEER'S CERTIFICATION:

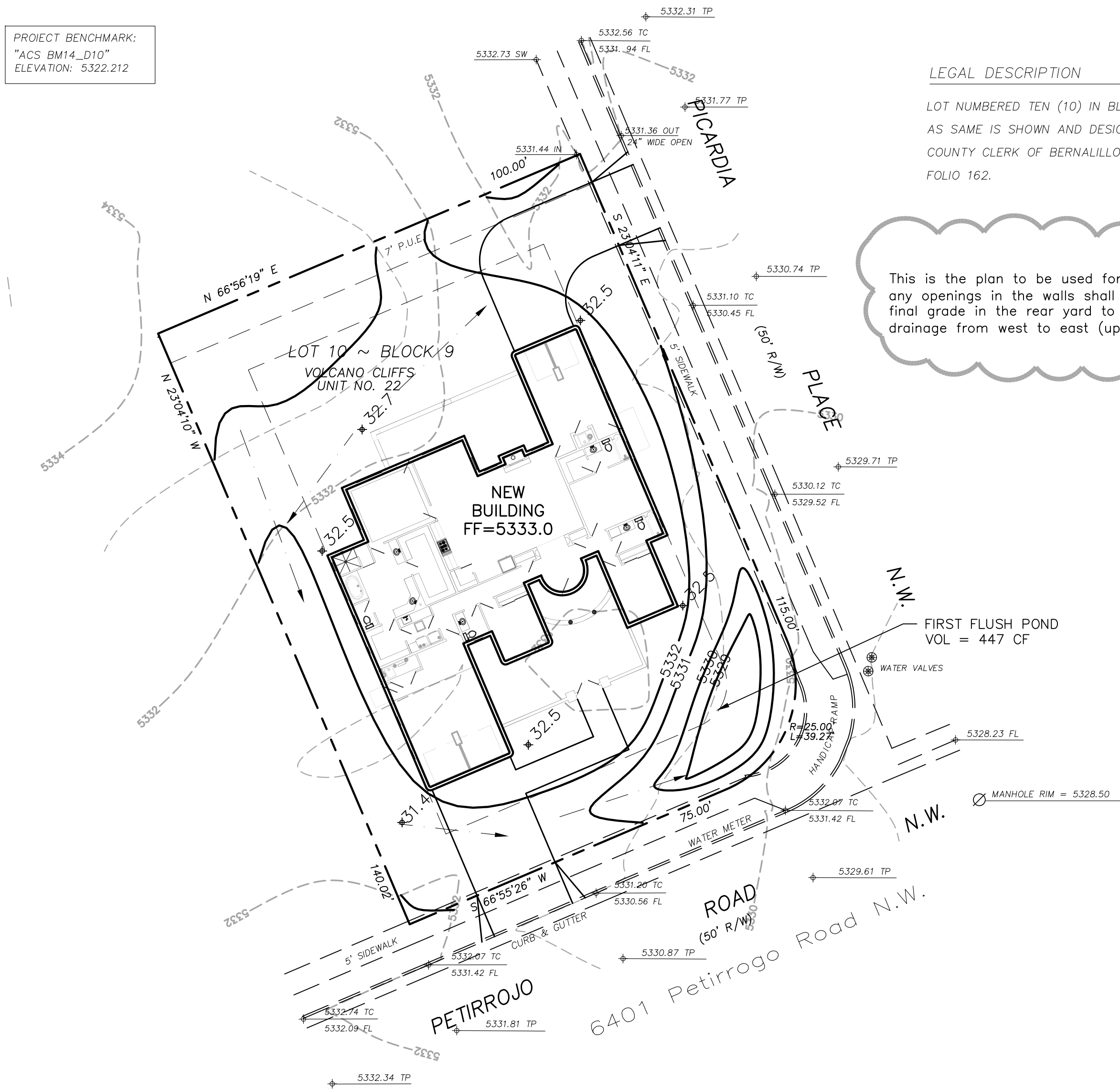
I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on May 11, 2017 and as of that date it appeared that no filling, grading, or excavation had occurred thereon since completion of the topographic survey used to prepare this plan.

CITY OF ALBUQUERQUE, BERNALILLO COUNTY		NEW MEXICO	
LOT 10, BLOCK 9, UNIT 22 VOLCANO CLIFFS SUBDIVISION			
CANDELARIA - COMPOS - GRADING & DRAINAGE PLAN			
<b>McDowell Engineering, Inc.</b>			
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 CAN0117L	Date MAY, 2017	1	1



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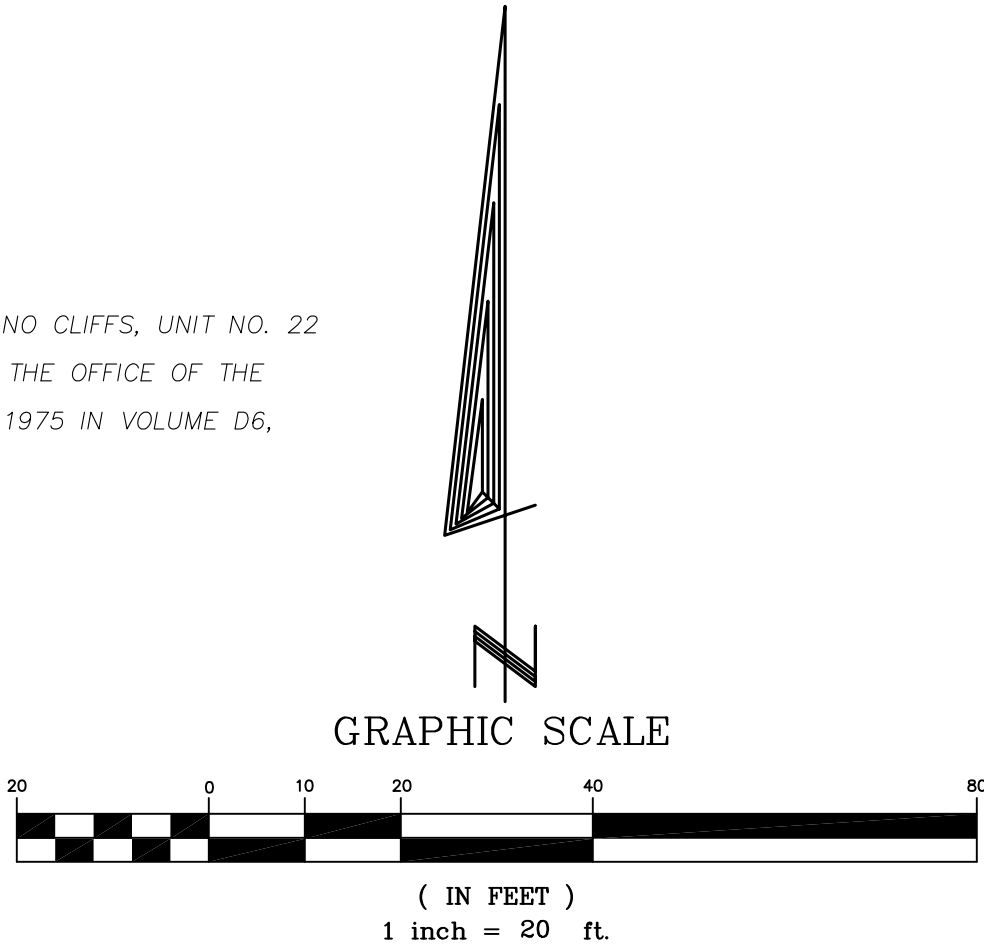
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This is the plan to be used for any garden walls and any openings in the walls shall be placed 3" above final grade in the rear yard to allow for cross lot drainage from west to east (upstream to downstream).



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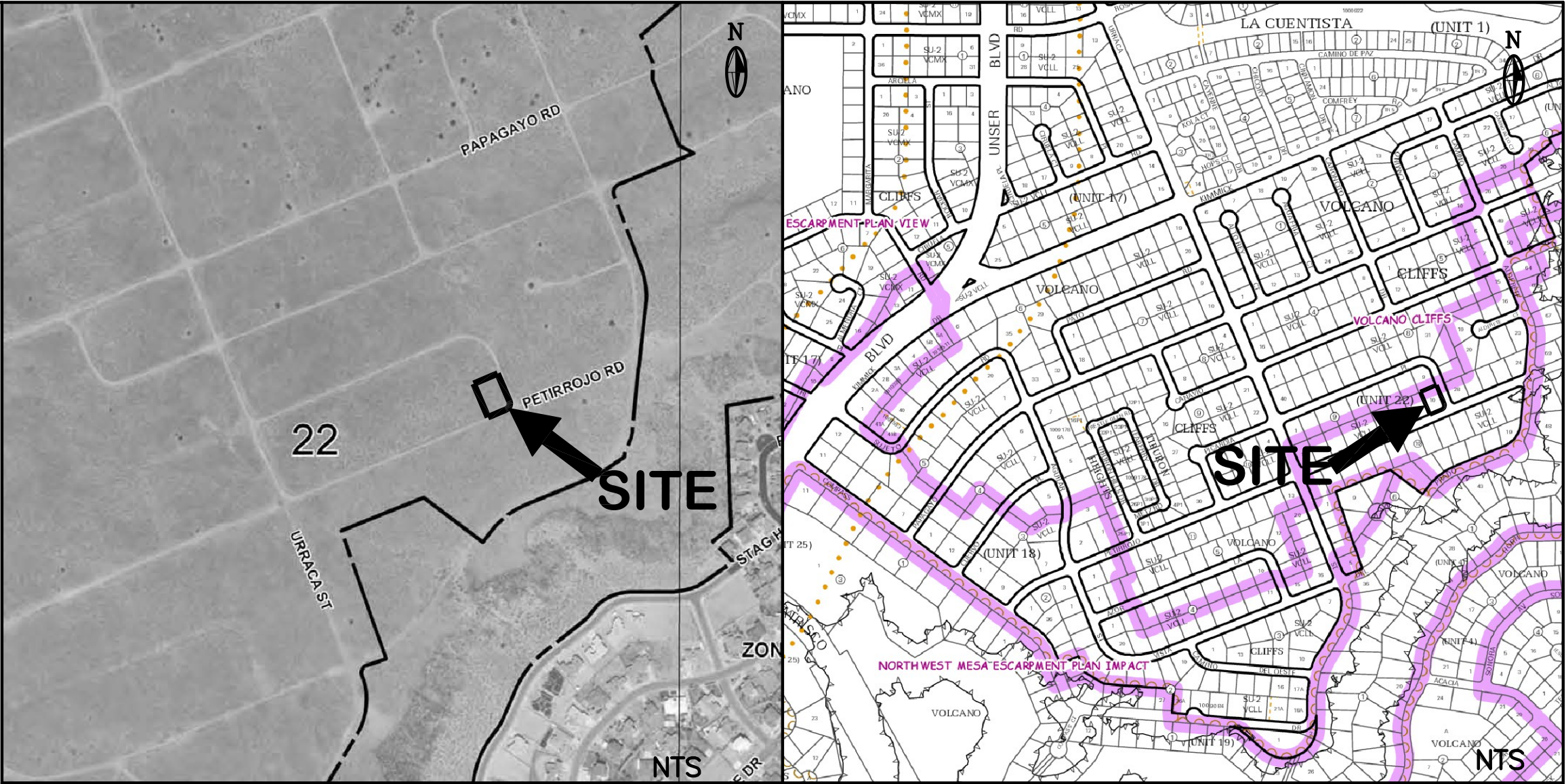
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FEMA FLOODWAY MAP

PANEL #112G

VICINITY MAP

ZONE ATLAS D-10

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5-15-17  
REV. 5-17-17

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