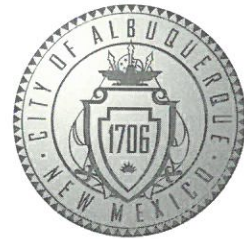


CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

April 22, 2019

Jesse J Luehring, P.E.
Critical View Engineering
11501 Modesto Ave NE
Albuquerque, New Mexico 87122

RE: **S.A.D. 227 Lot 1, Block 2, Unit 19**
7835 Aguila St. NW
Grading and Drainage Plan
Engineers Stamp Date 4/7/19 (D10D003G1)

Dear Mr. Luehring,

Based upon the information provided in your submittal received 4/19/19, this plan is approved for Grading Permit.

A pad certification is required before concrete is poured, either by a letter from you stating that the pad is built according to the plan submitted or by an as-built with elevations plotted.

Please attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology. Also, please advise the owner/contractor that a separate wall permit must be obtained and this approved grading plan dated 4/7/19 must be provided with the wall permit application. Also, please advise the contractor/owner that the ponds must stay in place or CO will not be granted.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist 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: File D10D003G1



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

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:** _____

Surveyor: _____ **Contact:** _____

Address: _____

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

Contractor : _____ **Contact:** _____

Address: _____

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

Check all that Apply:

DEPARTMENT:

- ☐ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ ARCHITECT CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ OTHER (SPECIFY) _____

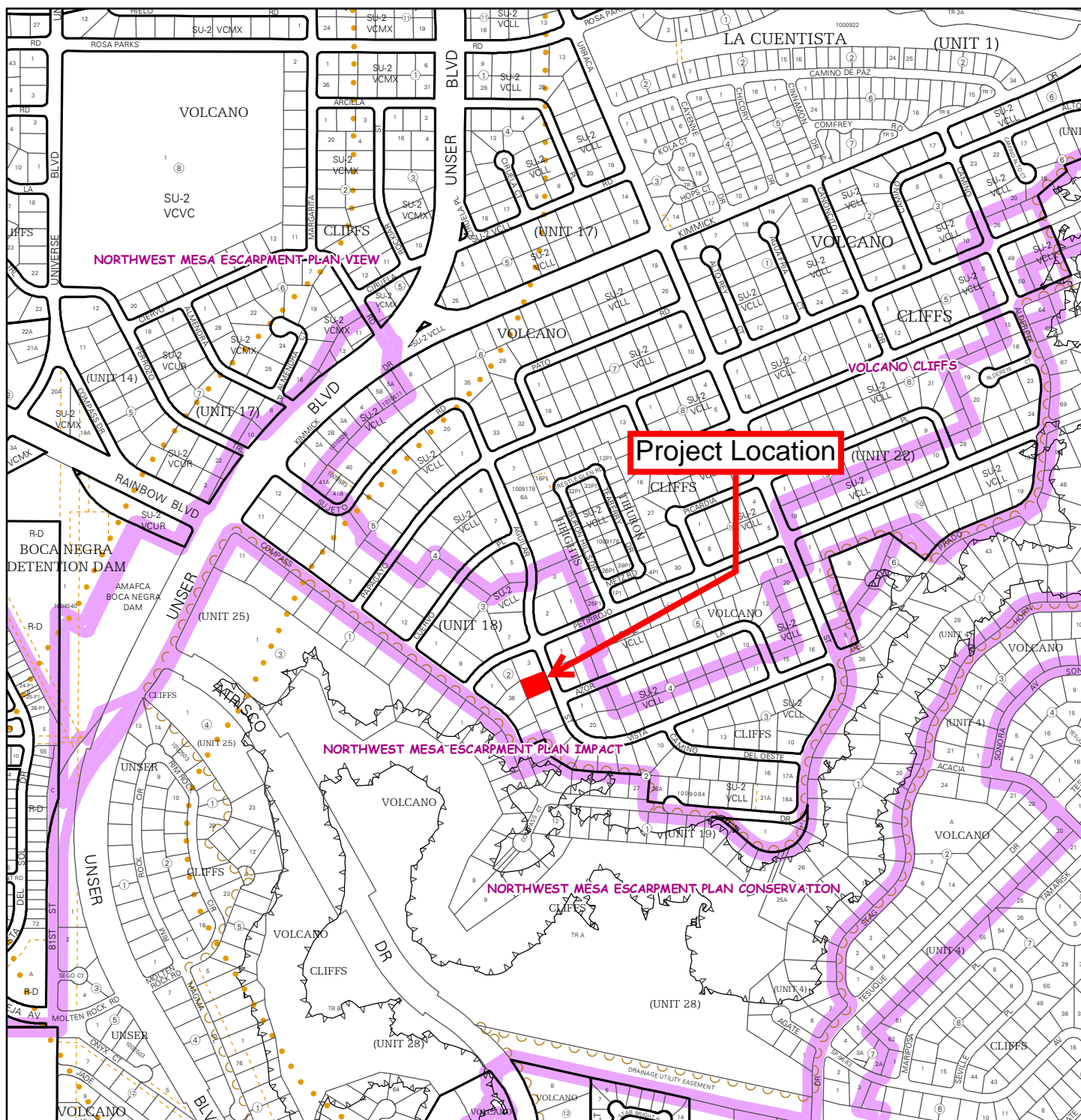
CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ 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
- ☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

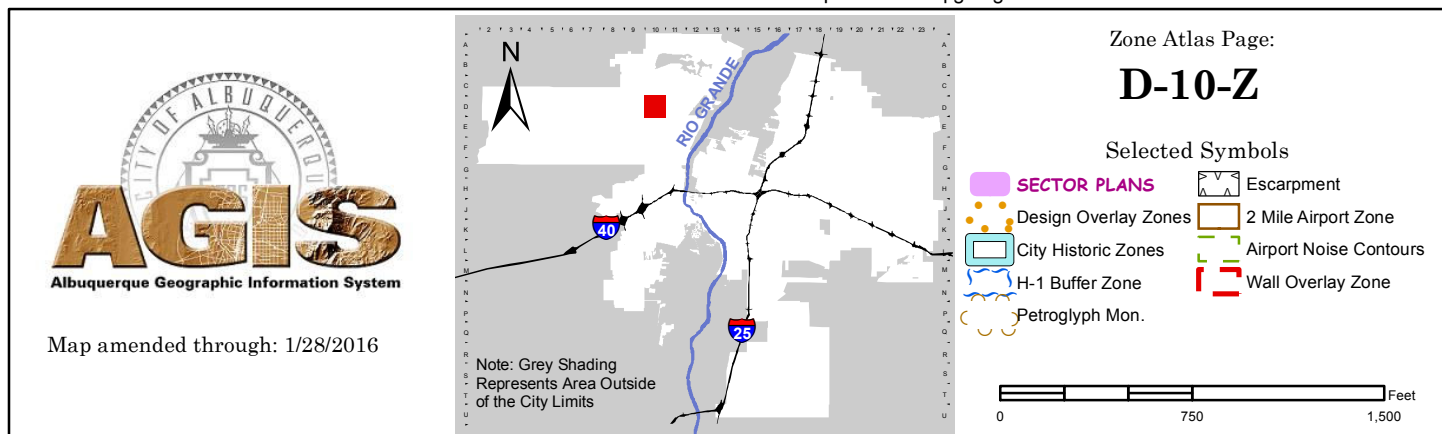
IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

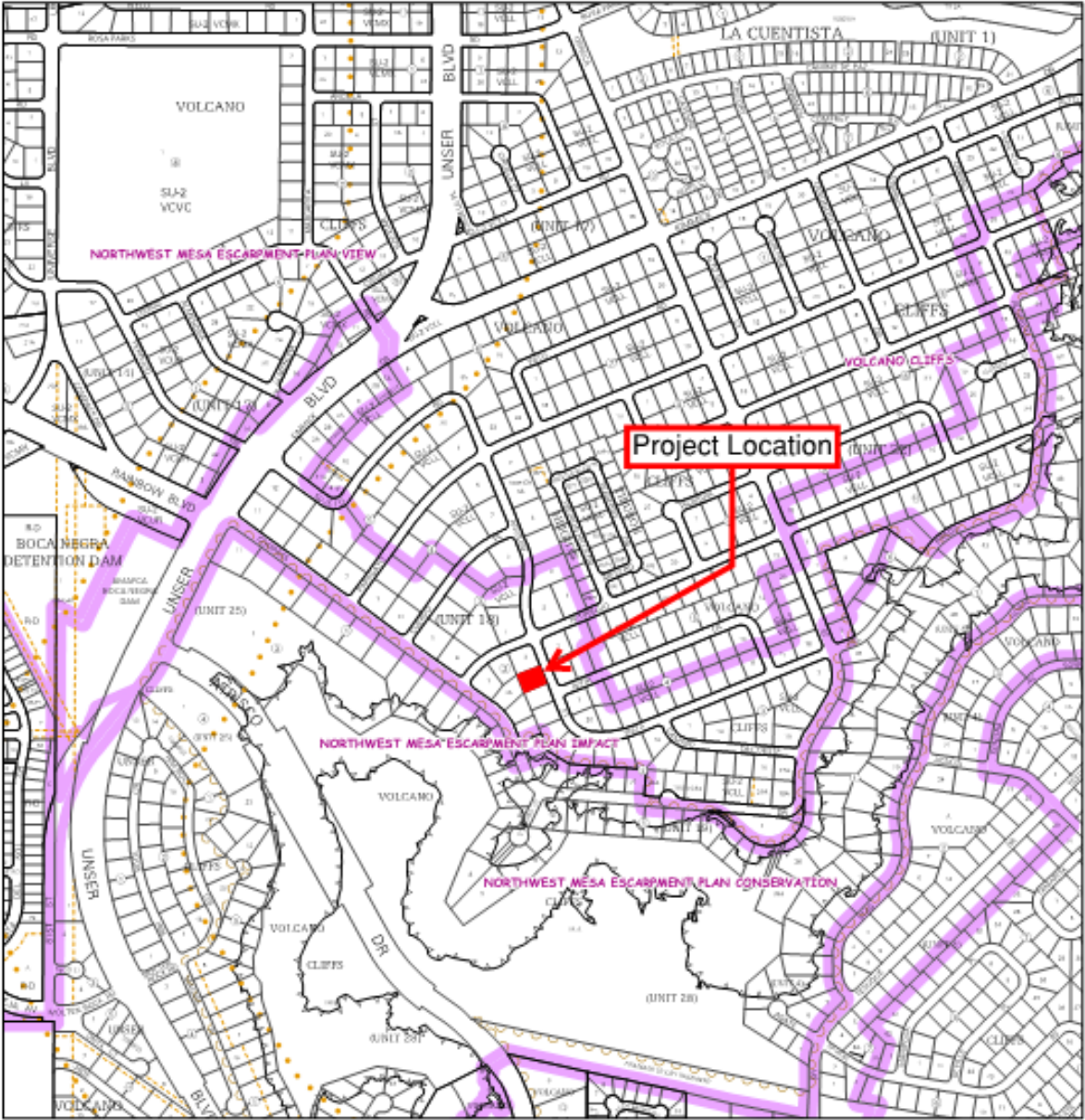
DATE SUBMITTED: _____ **By:** _____

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____

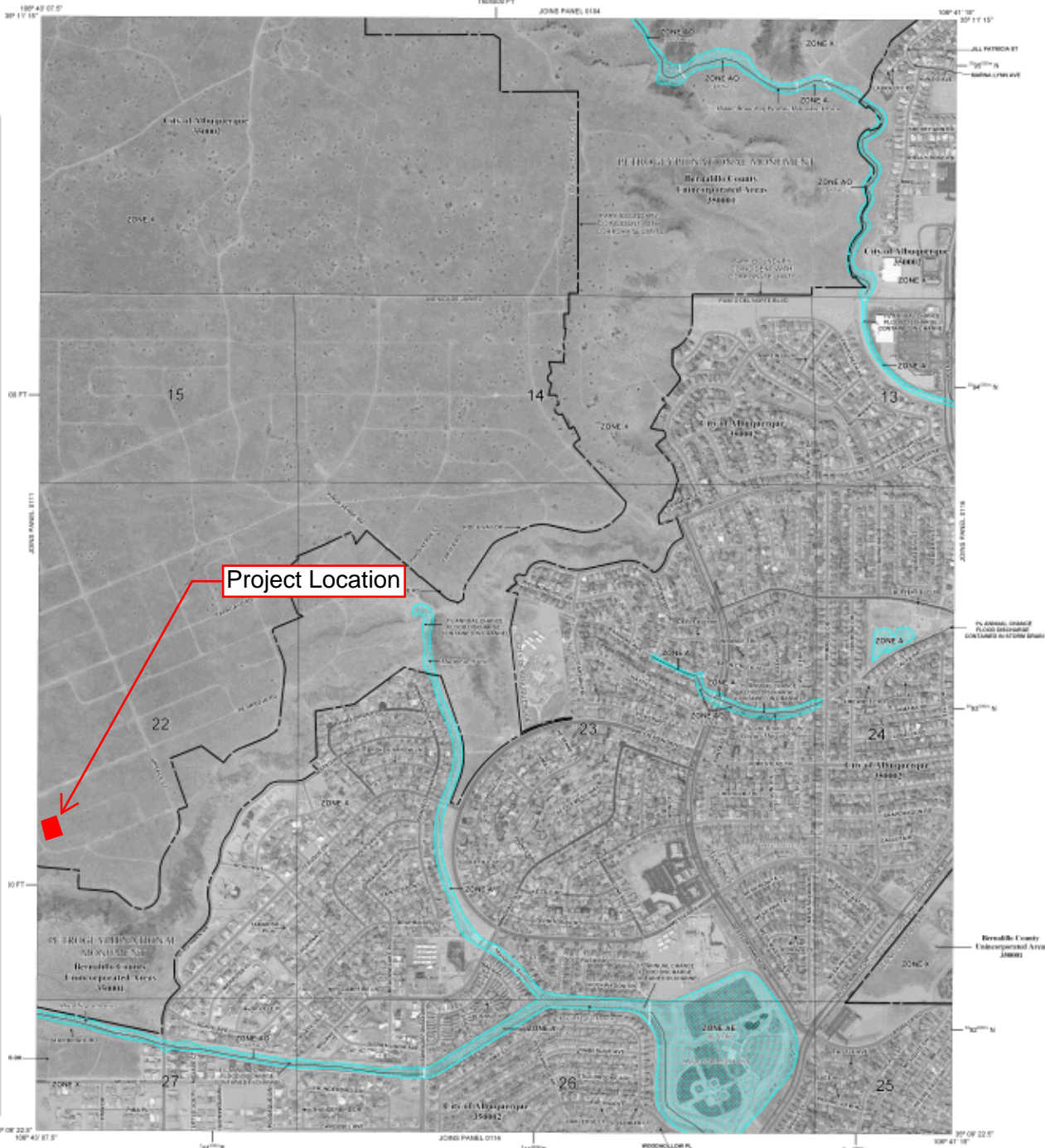


For more current information and details visit: <http://www.cabq.gov/gis>





Vicinity Map



FEMA Flood Map

Narrative

This is a grading and drainage Plan for the construction of the building pad for the Lot at address 7835 Aguila St. NW (Lot #1, Block #2, Volcano Cliffs Subdivision Unit 19, a part of Special Assessment District 228)

The purpose of this plan is to establish the first floor elevation, house layout, and lot drainage including offsite flows. This drainage report has been prepared in accordance with the latest revision to the City of Albuquerque Development Process Manual. The development of the lot must comply with the SAD 228 Drainage Report dated January 2012

First Flush

The initial 'First Flush' to be managed on this lot is 0.44" less 0.10" initial abstraction, resulting in a net of 0.34" rainfall, or 181 cubic feet. The initial storage on site will be collected and held in the two landscape ponds near the street as shown on the Plan.

GRADING AND DRAINAGE PLAN
 7835 AGUILA ST NW
 LOT #1, BLOCK #2, VOLCANO CLIFFS UNIT #19

Critical View
Engineering, LLC
 11501 Modesto Ave NE
 Albuquerque NM, 87122
 505-321-5917



Drainage Calculations

Lot 1, Block 2, Volcano Cliffs Unit 19									
Land Type	Area Lot (SF)	Property Area %	SAD 228 DMP %	100-Yr Storm Inch Depth (6 hr)	Excess Precip (In)	Peak Discharge CFS/AC	Peak Rate of Discharge (CFS)	100-Yr Storm Volume (Ac-Ft)	First Flush Volume (Ac-Ft)
Type D	5887	47%	50%	2.20	1.97	4.37	0.59	0.022	0.003829
Type C	4614	37%	40%	2.20	0.99	2.87	0.30	0.009	0.000794
Type B	2000	16%	10%	2.20	0.67	2.03	0.09	0.003	-
12501		100%	100%				0.99	0.033	0.004624
Total Drainage Basin Area:		12501 SF 0.287 AC		Peak Discharge:		0.988 CFS			
				First Flush Volume:		201.403 Cubic Ft			
				100-Yr Storm Volume		1458.771 Cubic Ft			

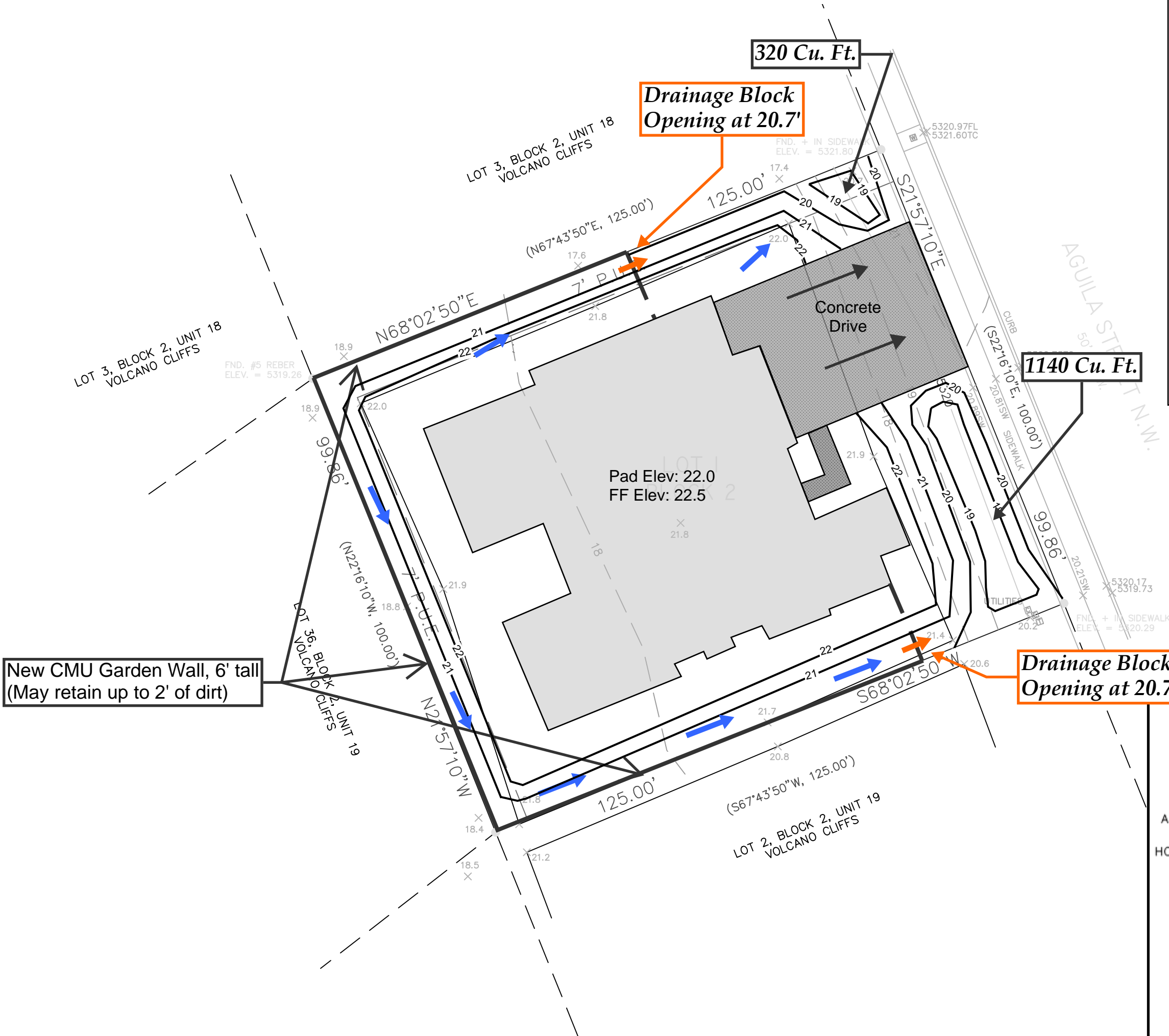
Drainage Intent:

Existing Conditions: This lot is an 0.287 Acre property, that is bound to the North, West and South by undeveloped residential lots, with frontage to Aguila St. to the East. The lot generally drains to the Southwest, with minimal offsite flows. Street drainage flows south, eventually contained in the large retention pond at the SE end of the development (Pond 6 near the intersection of Urracca St. and and Compass Ct).

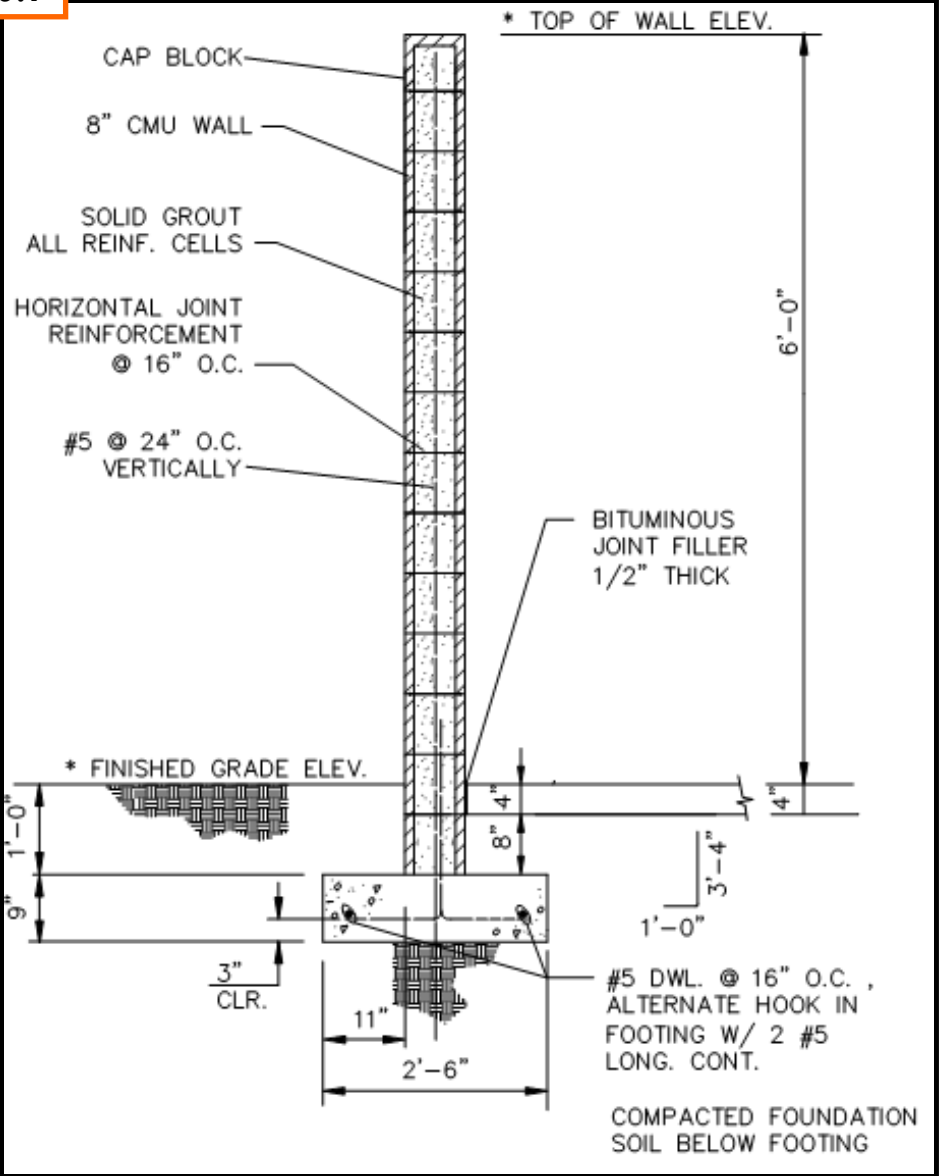
Proposed Conditions: Improvements to the lot include a new residence and concrete driveway that will add approximately 5887 SF of impervious area, or 47% of the property area (SAD 228 DMP allows up to 50%).

Two water quality retention ponds with a combined volume of 1460 Cu. Ft. are designed to capture not only the 'first flush' of approximately 202 CF, but also retain the excess precipitation from a 100 yr, 6 hr storm. The existing sandy loam soils at the site are well drained (hydrologic soil group 'B') which will ensure a short retention time.

Additional improvements will include the construction of approximately 285 LF of CMU garden wall, 6'-0" above grade. These walls may retain up to 2'. The Backyard flows traversing through this wall will be conveyed through 2 separate CMU blocks turned sideways (one at each end of the property), which will allow 2.8 CFS of flow at 0.5 ft. of head.

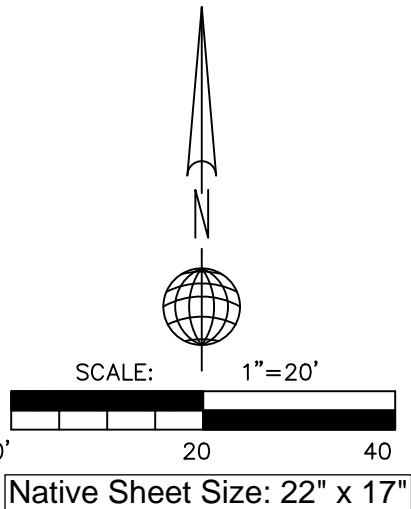


CMU Garden Wall Detail



Grading Notes

- 1. Grading activities on adjacent properties is not permitted.
- 2. Unprotected slopes shall be no steeper than 4H:1V. If there is sufficient slope protection (i.e. plantings or rock cover) slopes may be no steeper than 3H:1V.
- 3. Garden walls may retain up to 2' of dirt on one side



GRADING AND DRAINAGE PLAN

7835 AGUILA ST NW
LOT #1, BLOCK #2, VOLCANO
CLIFFS UNIT #19

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