CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

August 25, 2022

Reza Afaghpour, PE
SBS Construction and Engineering, LLC
10209 Snowflake Ct NW
Albuquerque, NM 87114

RE: **Lot 4 Block 3 Volcano Cliffs Unit 18 SAD 228**
6604 Cuervo Pl. NW.
Grading and Drainage Plan
Engineers Stamp Date 8/18/2022 (D10D003S4)

Mr. Afaghpour,

Based upon the information provided in your submittal received 8/24/2022, this plan is approved for grading plan.

PO Box 1293

Please inform the builder/owner to attach a copy of this approved plan and this letter to the construction sets in the permitting process prior to sign-off by Hydrology.

Albuquerque

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained, with the approved G&D plan and Pad Certification. **Advise the owner & Contractor that dirt is not allowed in the public right of way to climb the curb. Crusher fines or lumber is allowed. If dirt is used this will delay going forward with the construction of the home.**

NM 87103

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist of this plan will be required.

www.cabq.gov

If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

Renée C. Brissette

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

RR/SB
File D10D003S4

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 6604 CUERVO PLACE, NW Building Permit #: _____ Hydrology File #: _____

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

Legal Description: LOT 3, BLOCK 4, VOLCANO CLIFFS UNIT 18

City Address: 6604 CUERVO PLACE, NW

Applicant: SBS CONSTRUCTION AND ENGINEEING, LLC Contact: SHAWN BIAZAR

Address: 10209 SNOWFLAKE CT., NW, ALBUQUERQUE, NM 87114

Phone#: (505) 804-5013 Fax#: (505) 897-4996 E-mail: AECLLC@AOL.COM

Other Contact: _____ Contact: _____

Address: _____

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

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) __X__ RESIDENCE _____ DRB SITE ___ ADMIN SITE

IS THIS A RESUBMITTAL? _____ Yes ___X___ No

DEPARTMENT _____ TRANSPORTATION __X__ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
__X__ GRADING PLAN
__X__ DRAINAGE REPORT
____ DRAINAGE MASTER PLAN
____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
____ ELEVATION CERTIFICATE
____ CLOMR/LOMR
____ TRAFFIC CIRCULATION LAYOUT (TCL)
____ TRAFFIC IMPACT STUDY (TIS)
____ STREET LIGHT LAYOUT
____ OTHER (SPECIFY) _____
____ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

__X__ 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
__X__ GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: 8-22-2022 By: SHAWN BIAZAR

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

Location

This project is located at 6604 Cuevrvo Pl. NW and contains 0.57 acre. See attached portion of Vicinity Map D-10-Z for exact location.

Purpose

The purpose of this drainage report is to present a grading and drainage solution for the new residential building on this lot.

Existing Drainage Conditions

This project falls within SAD 228 master drainge plan. This site specifically falls within drainage Basin 201. This lot drains from north to south. No offsite runoff enters this site.

Proposed Conditions and On-Site Drainage Management Plan

The drainage patterns will remain the same. The entire runoff from the site will be retain on site along the south property line. The allowable discharge volume based on the 100-year/24-hour volume is 3,203.89 cf and 100-year/24-hour volume under the proposed conditins is 3,375.73 cfs. Therefore, the required ponding volume is 171.84 cf. But the first flush volume ponding requirement is 399.82 cf which exceeds the 171.84 cf. The actual ponding provided is 795.58 cf.

VOLUME CALCULATIONS FOR 10 DAY STORM

BASIN	AREA (SF)	AREA (AC)	AREA (MI²)
ON-SITE	24,833.71	0.57010	0.000891

$$E = \frac{EA(AA) + EB(AB) + EC(AC) + ED(AD)}{AA + AB + AC + AD}$$

V-360 = E (AA + AB + AC + AD)/12

V-24 HOUR = V-360 + AD (P-10 Day - P-360) / 12

EA = 0.55
EB = 0.73
EC = 0.95
ED = 2.24

P-60 = 1.69
P-360 = 2.17
P-1440 = 2.49
P-10 Day = 3.90

ALLOWABLE CONDITIONS	PROPOSED CONDITIONS
From SAD 228, Basin 201 M	AA = 0.00%
Q = 10.17 CFS / 5.17 AC = 1.97 CFS/AC	AB =27.00%
Q = 1.97 * 0.5701 = 1.12 cfs	AC = 27.00%
	AD = 46.00%
V-24 HOUR = 0.667/5.17 = 0.129 AC-FT/AC	
V-24 HOUR = 0.129 * .5701 = 0.07355 AC-FT	**E = 1.48 IN**
V-24 HOUR = 3,203.89 CF	**V-360 = 3,07.10 CF**
	AD = 0.28043 AC
	V-24 HOUR = **3,375.73 CF**

V-24 HOUR (REQUIRED) = **3,375.73 - 3,208.89 CF = 171.74 CF**

FIRST FLIUSH PONDING REQUIREMENT

IMPERVIOUS AREA =11,423.51 SF

FIRST FLUSH VOL. REQI. = 0.42" x 11,423.51 / 12 = 399.82 CF

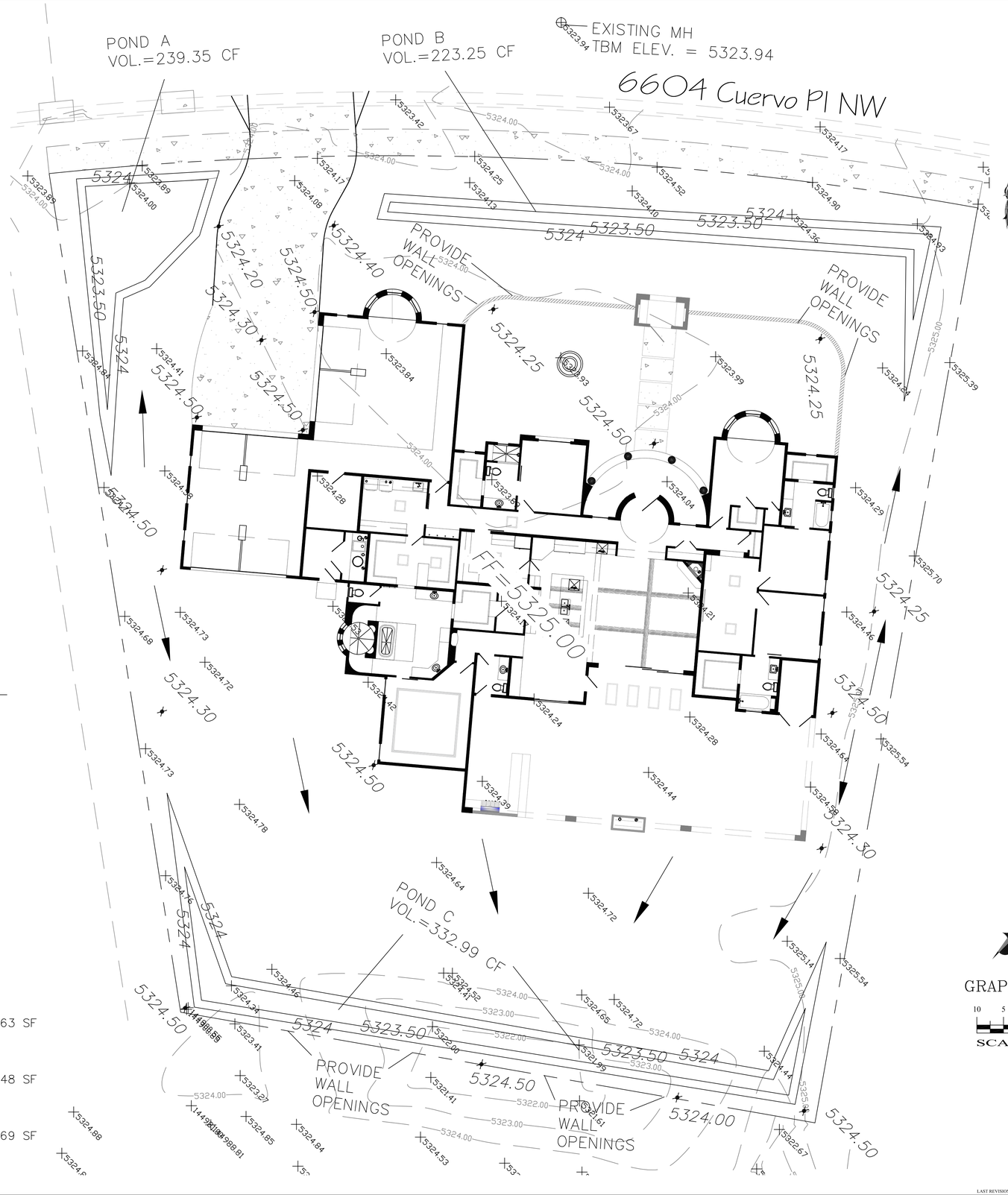
PONDING VOLUME CALCULATION

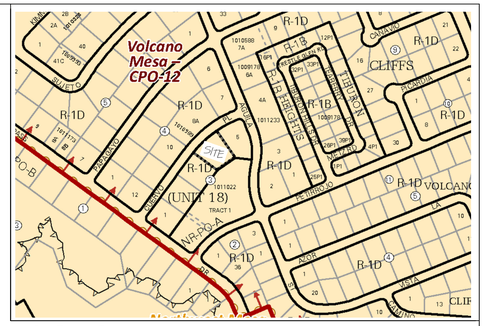
POND A:
BOTTOM AREA(@ 5324)=577.75 SF, TOP AREA(@ 5323.50)=379.63 SF
POND VOLUME=(577.75+379.63)/2*0.50 = 239.35 CF

POND B:
BOTTOM AREA(@ 5324)=634.49 SF, TOP AREA(@ 5323.50)=258.48 SF
POND VOLUME=(634.49+258.48)/2*0.50 = 223.24 CF

POND C:
BOTTOM AREA(@ 5324)=908.26 SF, TOP AREA(@ 5323.50)=423.69 SF
POND VOLUME=(908.26+423.69)/2*0.50 = 332.99 CF

TOTAL PONDING PROVIDED = 239.35+223.24+332.99 795.58 CF





VICINITY MAP: D-10-Z

FIRM MAP: 35001C0111G

LEGAL DESCRIPTION:
LOT 4, BLOCK 3, VOLCANO CLIFFS UNIT 18

BENCHMARK
CITY BNCHMARK 17_D10, ELEEVATION OF 5325.068 FEET ABOVE SEA LEVEL.

LEGEND

5030	EXISTING CONTOUR (MAJOR)
5029	EXISTING CONTOUR (MINOR)
	BOUNDARY LINE
42.70	PROPOSED SPOT ELEVATION
5029.16	EXISTING GRADE
5075.65 FL	EXISTING FLOWLINE ELEVATION
	PROPOSED RETAINING WALL
BC=41.30	BOTTOM OF CHANEL
TF=42.00	TOP OF FOOTING
TRW=45.12	TOP OF RETAINING WALL
HP	HIGH POINT
42.40 / ~~42.45~~	AS-BUILT GRADES
69.77	AS-BUILT SPOT ELEVATIONS

GRAPHIC SCALE
10 5 0 10
SCALE: 1"=10'

REZA AFAGHPOUR
NEW MEXICO
11814
LICENSED PROFESSIONAL ENGINEER
8/18/2022

REZA AFAGHPOUR
P.E. #11814

SBS CONSTRUCTION AND ENGINEERING, LLC
10209 SNOWFLAKE CT., NW
ALBUQUERQUE, NEW MEXICO 87114
(505)899-5570

6604 CUERVO PL NW
GRADING PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
6604 Cuervo.DWG	SH-B	8-18-2022	1

LAST REVISION: 8/18/2022