Location

This project is located at 6704 Rim Rock Cir. Albuquerque, NM 87120 and contains 0.3076 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 house.

Existing Drainage Conditions

This project falls within SAD 227 master drainage plan and drain to Rim Rock Cir.

Proposed Conditions and On-Site Drainage Management Plan

The drainage patterns will remain the same. The site will drain to ponds A & B and then to Rim Rock Cir. Ponds A & B are designed to hold a total volume of 537.21 cf. The required first flush volume is ~~248.58~~ cf 261.18 CF.

RUNOFF CALCULATIONS

BASIN	AREA (SF)	AREA (AC)	AREA (MI^2)
ON-SITE	13,400.47	0.30763	0.000481

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

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

AA = 0.00%
AB = ~~27.00~~% 25%
AC = 20.00%
AD = ~~53.00~~% 55%

E = 1.46 IN
V-360 = 0.0435 AC-FT
V-360 = 1,895.31

A =1.54 CFS/AC
B = 2.16 CFS/AC
C = 2.87 CFS/AC
D = 4.12 CFS/AC

TOTAL QP = Q_{PA}*AA+Q_{PB}*AB+Q_{PC}*AC+Q_{PD}*AD
= ~~1.23~~ CFS (PROPOSED)
1.26 CFS

DRAINAGE CERTIFICATION

I, REZA AFAGHPOUR, NMPE11814 OF SBS CONSTRUCTION AND ENGINEERING, LLC., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 04-25-2023. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY NMPS 9801 LEONARD MARTINEZ OF SBS CONSTRUCTION AND ENGINEERING. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR FINAL CERTIFICATE OF OCCUPANCE.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

REZA AFAGHPOUR, NMPE 11814 — 10/25/2023 DATE

REZA AFAGHPOUR NEW MEXICO 11814 REGISTERED PROFESSIONAL ENGINEER

FIRST FLUSH PONDING REQUIREMENT

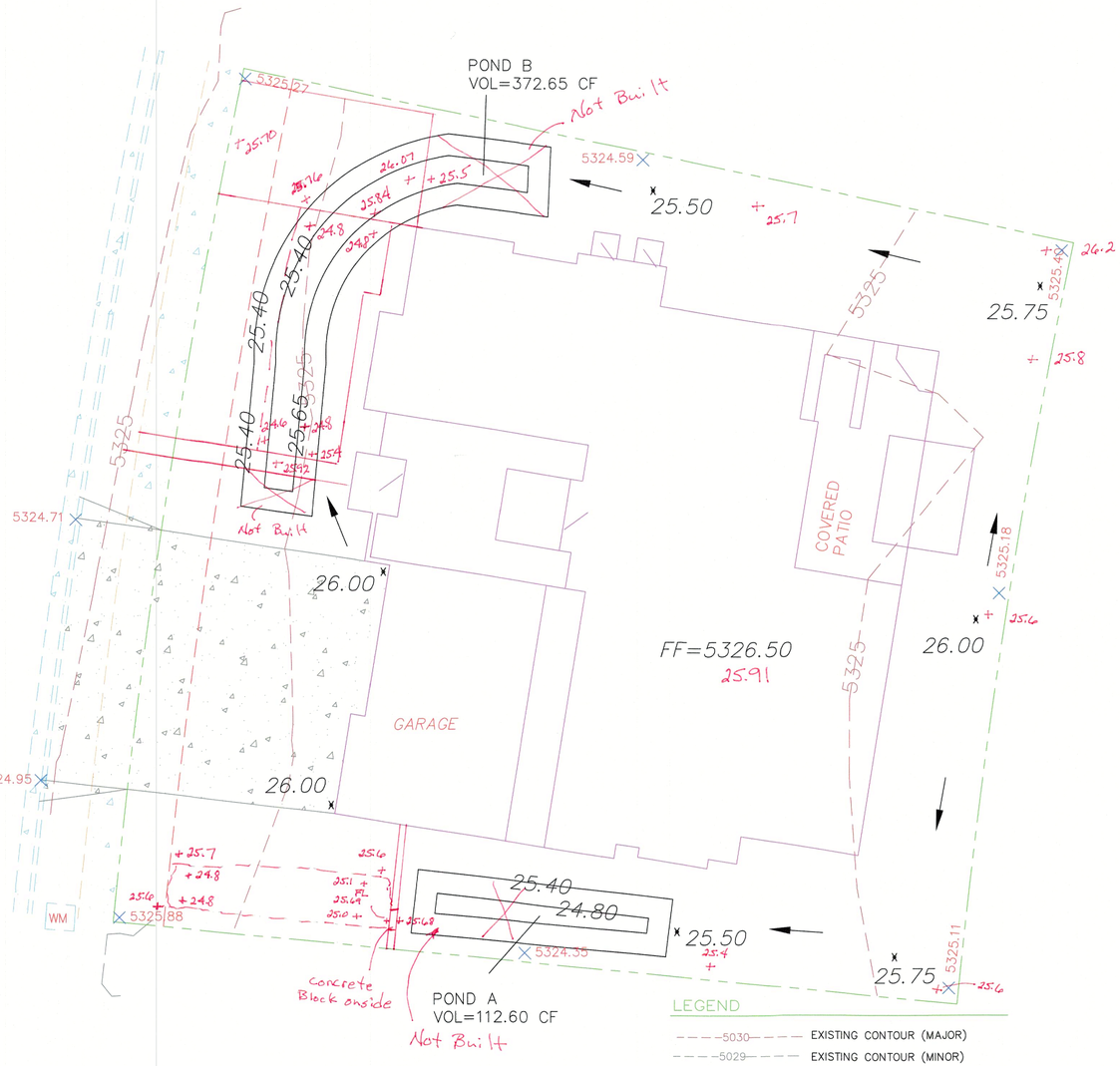
IMPERVIOUS AREA ~~=7,102.55~~ SF 7462.55 7462.55
FIRST FLUSH VOL. REQUIRED. = 0.42" x ~~7,102.55~~ / 12 = ~~248.58~~ CF 261.19 CF

PONDING VOLUME CALCULATION

POND A:
AREA @ ELEV. 25.40 = 302.04 SF
AREA @ ELEV. 24.80 = 73.295 SF
POND VOLUME=(302.04+73.29)/2*0.60=112.60 CF

POND B:
AREA @ ELEV. 25.40 = 724.55 SF
AREA @ ELEV. 24.65 = 269.19 SF
POND VOLUME=(724.55+269.19)/2*75=372.65 CF

TOTAL PONDING VOLUME PROVIDED = 112.60+372.65 = 485.25 CF



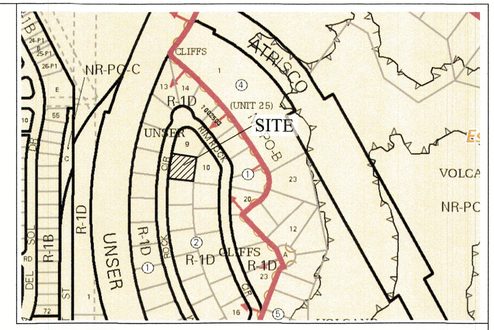
LEGEND

5030	EXISTING CONTOUR (MAJOR)
5029	EXISTING CONTOUR (MINOR)
	BOUNDARY LINE
X 28.50	PROPOSED SPOT ELEVATION
X 5029.16	EXISTING GRADE
X 5075.65 FL	EXISTING FLOWLINE ELEVATION
	PROPOSED RETAINING WALL
BC=89.08	BOTTOM OF CHANEL
TF=28.50	TOP OF FOOTING
TRW=28.00	TOP OF RETAINING WALL
HP	HIGH POINT
86.65 ~~85.47~~	AS-BUILT GRADES
X 5325.64 ~~FF=5326.60~~ FP=5325.90	AS-BUILT SPOT ELEVATIONS

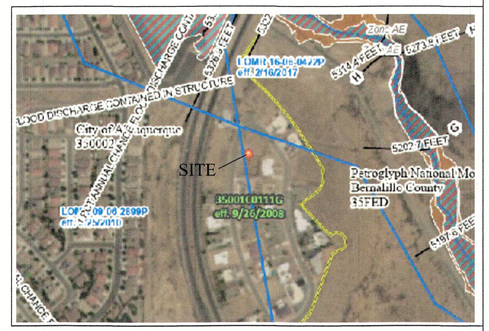
Elevations shown hereon are based on field information taken of October 21, 2023

Anthony L. M. 10-25-23

ANTHONY L MARTINEZ NEW MEXICO 11483 REGISTERED PROFESSIONAL SURVEYOR



VICINITY MAP: D-10-Z



FIRM MAP: 35001C0111G

LEGAL DESCRIPTION:
LOT 8, BLOCK 2, UNSER CLIFFS SUBDIVISION
ADDRESS: 6704 RIM ROCK CIR NW ALBUQUERQUE NM 87120

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

EROSION CONTROL PLAN AND POLLUTION PREVENTION NOTES

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT OUT OF EXISTING RIGHT-OF-WAY.
3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORM RUNOFF ON SITE.
4. REPAIR OF DAMAGED FACILITIES AND CLEAN-UP OF SEDIMENT ACCUMULATION ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

GENERAL NOTES:
1: CONTOUR INTERVAL IS HALF (1.00) FOOT.
2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE CONTROL STATION 17_D10, HAVING AN ELEVATION OF 5325.068 FEET ABOVE SEA LEVEL.
3: UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/ OR DEPTH PRIOR TO EXCAVATION OR DESIGN CONSIDERATIONS.
4: THIS IS NOT A BOUNDARY SURVEY, BEARINGS ARE ASSUMED, DISTANCES AND FOUND PROPERTY CORNERS ARE FOR INFORMATIONAL PURPOSES ONLY.
5: SLOPES ARE AT 3:1 MAXIMUM.
6: ADD 5300 TO ALL PROPOSED SPOT ELEVATIONS.

REZA AFAGHPOUR NEW MEXICO 11814 LICENSED PROFESSIONAL ENGINEER 5/25/2023

REZA AFAGHPOUR
P.E. #11814

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

SBS CONSTRUCTION AND ENGINEERING, LLC
7632 WILLIAM MOYERS AVE., NE
ALBUQUERQUE, NEW MEXICO 87122
(505)804-5013

6704 RIM ROCK CIR NW GRADING PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
RIM ROCK GD.dwg	SH-B	5/25/2023	1

LAST REVISION: 5/25/2023