

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

April 22, 2021

David Soule, P.E.
Rio Grande Engineering
P.O. Box 93924
Albuquerque, NM 87199

RE: 9401 Black Farms Lane
Revised Grading and Drainage Plan for Swimming Pool
Engineer's Stamp Date: 04/14/21
Hydrology File: C13D027C

Dear Mr. Soule:

Based upon the information provided in your submittal received 04/14/2021, the Revised Grading and Drainage Plan for Swimming Pool is approved for Grading Permit, Building Permit, and Pool Permit.

Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

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

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Weighted E Method
BLACK FARMS

Existing Developed Basins

Basin	Area (sf)	Area (acres)	Treatment A			Treatment B			Treatment C			Treatment D			100-Year, 6-hr.		10-day
			%	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
PROPOSED	33155	0.761	0%	0	36.0%	0.274	45.18%	0.36534	19.148%	0.122	1.032	0.065	2.14	0.082			
HISTORICAL	33155	0.761	0%	0	100.0%	0.761	0.0%	0	0%	0.000	0.670	0.042	1.55	0.042			

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted D * Total Area

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

Where for 100-year, 6-hour storm (zone 1)

Ea= 0.44	Qa= 1.29
Eb= 0.67	Qb= 2.03
Ec= 0.99	Qc= 2.87
Ed= 1.97	Qd= 4.37

EXISTING 24-HOUR VOLUME	1851.15
PROPOSED 24-HOUR VOLUME	3772 3557.592 CF
WATER QUALITY REQUIREMENT	179 150.300 CF
PONDING REQUIRED	3772 3557.592 CF
PONDING PROVIDED	4347 3005.000 CF

SITE IS LOCATED WITHIN A FULLY DEVELOPED SUBDIVISION. THE ADJACENT ROADWAY DOES NOT HAVE CURB AND GUTTER. THE DRAINAGE MANAGEMENT PLAN (C13D027) FOR THIS LOT CALLS FOR THE ONSITE RETENTION OF THE TOTAL FLOW GENERATED BY THIS DEVELOPMENT USING THE 10-DAY EVENT DUE TO THE EXISTING GRADES THE PONDING WILL BE AT THE FRONT OF THE LOT RATHER THAN THE REAR.

CALCULATIONS HAVE BEEN UPDATED TO ACCOUNT FOR A NEW POOL, SPA AND POOL DECK

EROSION CONTROL NOTES:

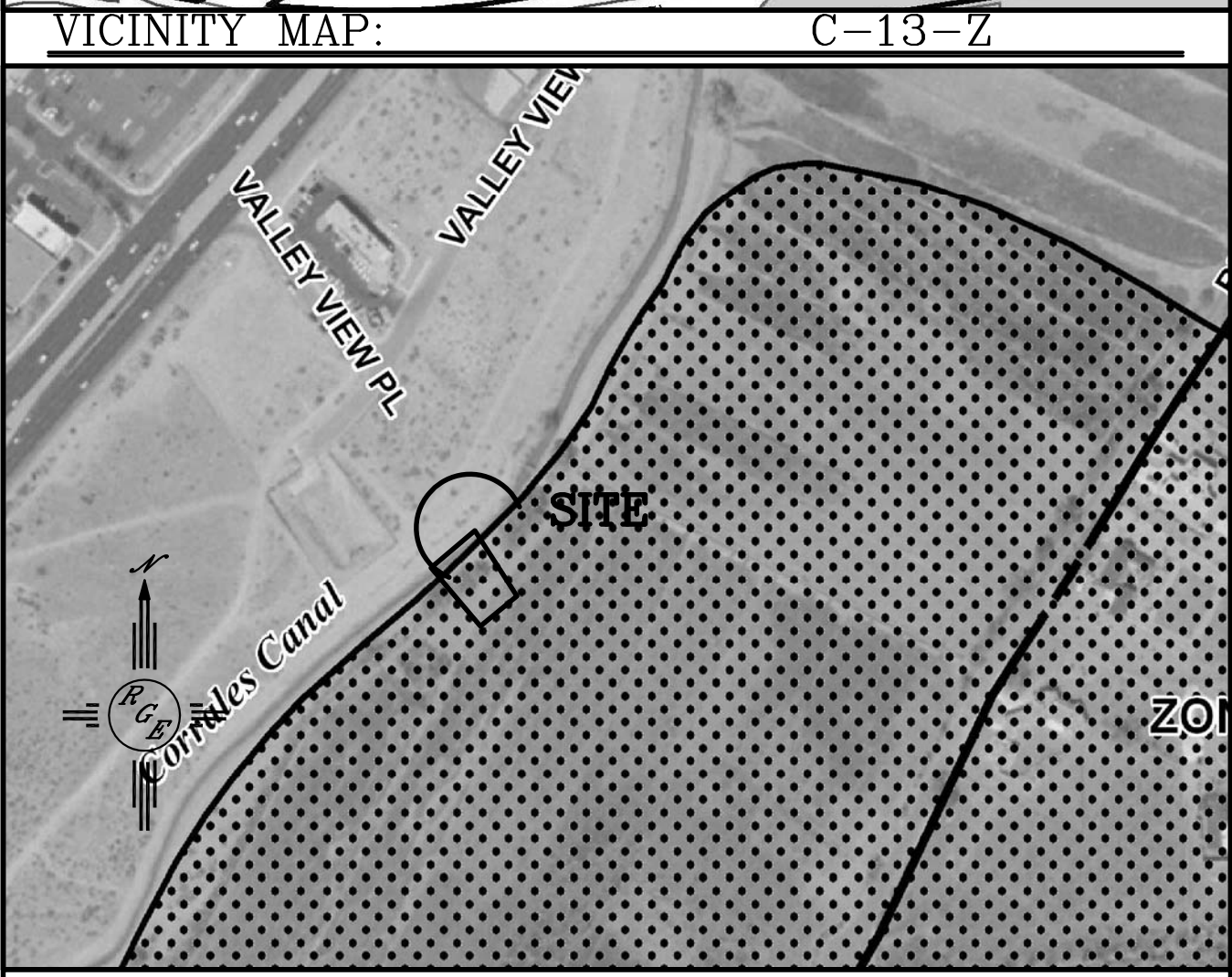
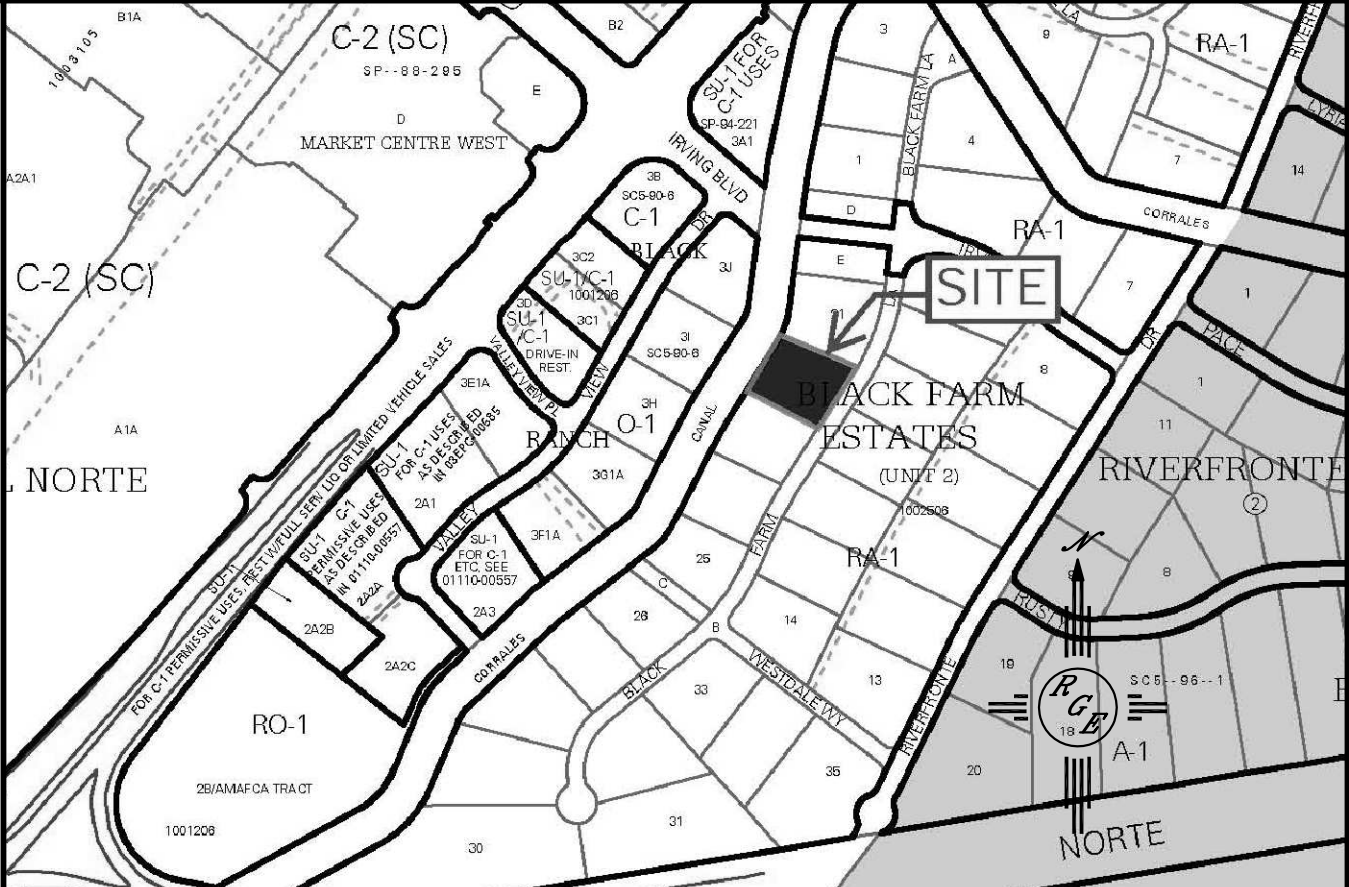
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.

3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS 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.



FIRM MAP: FM35001C0116G

LEGAL DESCRIPTION:

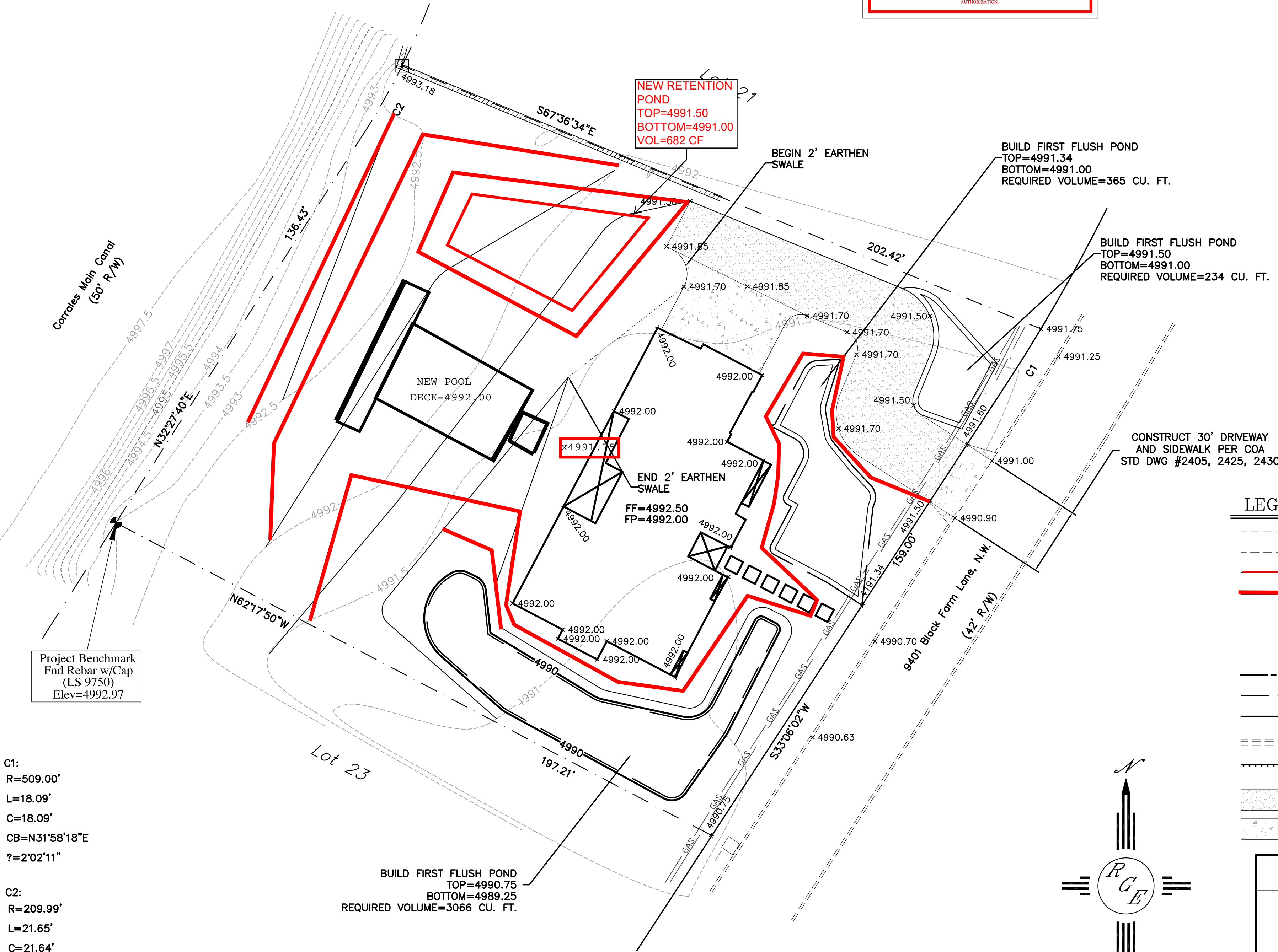
LOT 22, BLACK FARM ESTATES UNIT 2

NOTES:

- ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.

LEGEND

-----XXXX-----	EXISTING CONTOUR
-----XXXX-----	EXISTING INDEX CONTOUR
-----XXXX-----	PROPOSED CONTOUR
-----XXXX-----	PROPOSED INDEX CONTOUR
-----XXXX-----	SLOPE TIE
+ XXXX	EXISTING SPOT ELEVATION
+ XXXX	PROPOSED SPOT ELEVATION
-----	BOUNDARY
-----	CENTERLINE
-----	RIGHT-OF-WAY
=====	EXISTING CURB AND GUTTER
=====	PROPOSED CMU SCREEN WALL
=====	COMPACTED GRAVEL DRIVE
=====	CONCRETE DRIVEPAD



C1:
R=509.00'
L=18.09'
C=18.09'
CB=N31°58'18"E
? = 2'02'11"

C2:
R=209.99'
L=21.65'
C=21.64'
CB=N29°23'40"E
? = 5'54'27"

BUILD FIRST FLUSH POND
TOP=4990.75
BOTTOM=4989.25
REQUIRED VOLUME=3066 CU. FT.

NEW RETENTION POND
TOP=4991.50
BOTTOM=4991.00
VOL=682 CF

BEGIN 2' EARTHEN SWALE

BUILD FIRST FLUSH POND
TOP=4991.34
BOTTOM=4991.00
REQUIRED VOLUME=365 CU. FT.

BUILD FIRST FLUSH POND
TOP=4991.50
BOTTOM=4991.00
REQUIRED VOLUME=234 CU. FT.

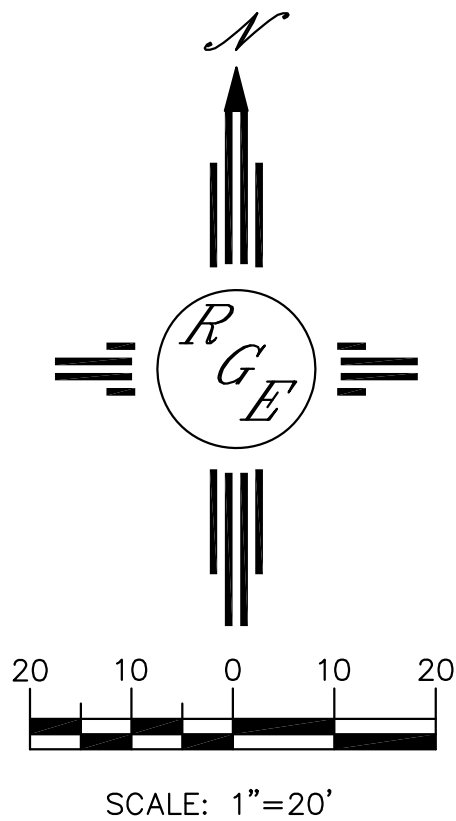
CONSTRUCT 30' DRIVEWAY AND SIDEWALK PER COA STD DWG #2405, 2425, 2430

Project Benchmark
Fnd Rebar w/Cap
(LS 9750)
Elev=4992.97

CAUTION:

EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.

ADDED POOL AND HOT TUB



ENGINEER'S SEAL 4/14/21 12/27/17 DAVID SOULE P.E. #14522	9401 BLACK FARM LN, N.W.	DRAWN BY WCVJ DATE 12-27-17 21811-LAYOUT-10-16-17
	GRADING AND DRAINAGE PLAN	SHEET #
	 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0998	JOB # 21808