

Weighted E Method

							100-Year, 6-hr.			24 hour				
Basin	Area (sf)	Area (acres)	Treatment A	Treatment B	Treatment C	Treatment D	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)				
			% (acres)	% (acres)	% (acres)	% (acres)								
ALLOWED TO STREET REAR YARD OVERAGE	15530.00	0.357	0%	0	20%	0.071	46%	0.164	34%	0.121	1.259	0.037	1.15	0.042
	11348.00	0.261	0%	0	20%	0.052	58%	0.1511	22%	0.057	1.142	0.025	0.79	0.027
	4182.00	0.096	0%	0	30%	0.029	39%	0.0374	31%	0.030	1.198	0.010	0.30	0.011
												0.053		-0.031

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  
Eb= 0.67  
Ec= 0.99  
Ed= 1.97

Qa= 1.29  
Qb= 2.03  
Qc= 2.87  
Qd= 4.37

ONSITE Conditions

FIRST FLUSH WATER QUALITY VOLUME  
REQUIRED (CF)

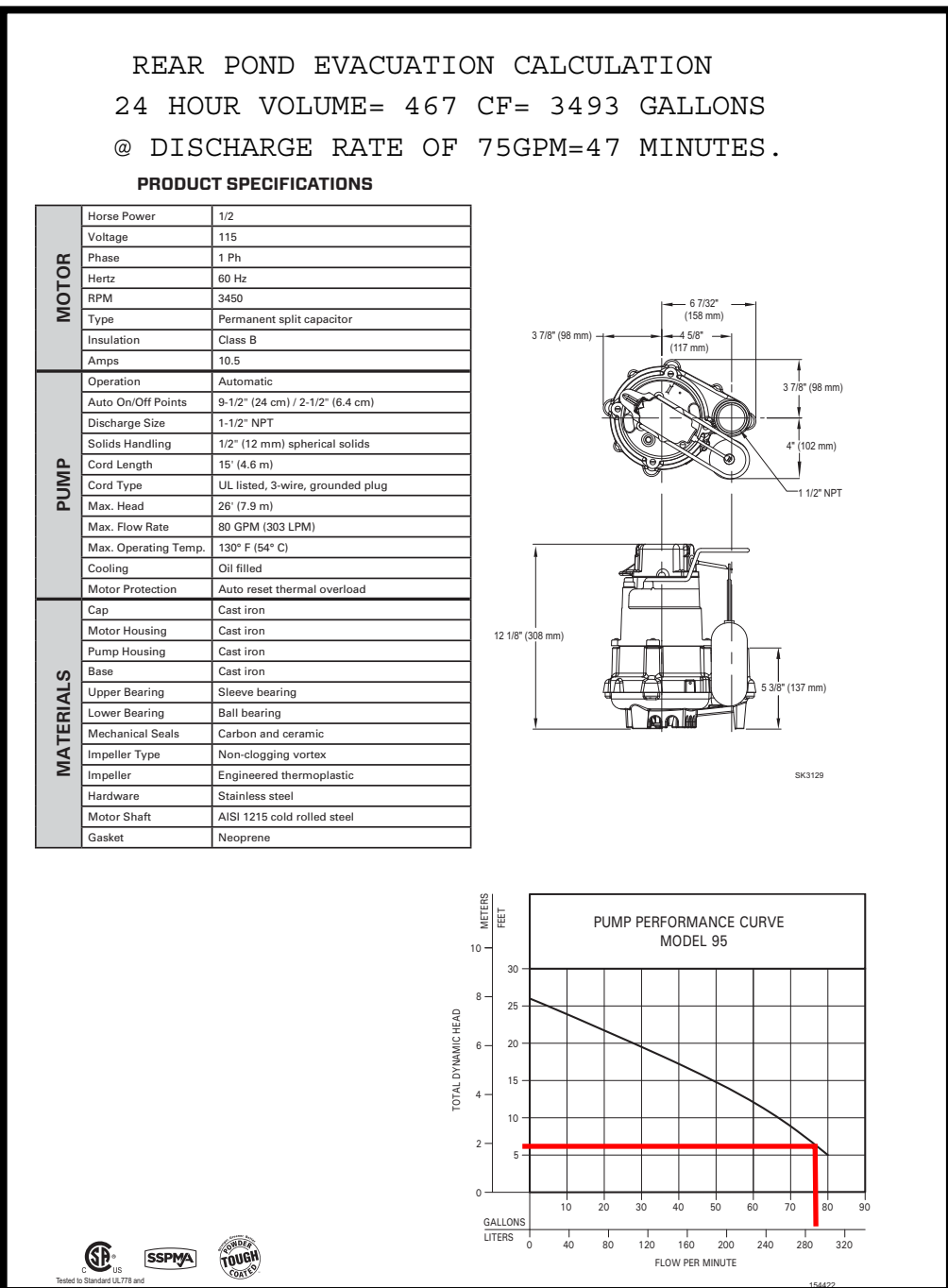
PROVIDED (CF)  
1424

WATER QUALITY  
FLOOD CONTROL

0  
467

Narrative

This site is within the SAD 228 Master Drainage plan boundaries. The site is supposed to drain to the adjacent roadway to the west per the master drainage plan. The site is impacted by height restrictions that will not allow the pad to raise significantly without causing significant restraints on any home construction. We are therefore draining as much as possible to the front and ther remainder to the rear where it is retained. The site does exceed the SAD 228 developed conditions assumptions, therefore ponding of 467 cf is required. Minor upland flow may enter the site from the rear yard of the lot to the north. This flow will fill and pass through to the south. This plan is in conformance to the master drainage plan and attempts to address heigh restrictions



Private Drainage Facilities within City Right-of-Way  
Notice to Contractor  
(Special Order 19 ~ "SO-19")

- Build sidewalk culvert per COA STD DWG 2236.
- Contact Storm Drain Maintenance at (505) 857-8033 to schedule a meeting prior to forming.
- An excavation permit will be required before beginning any work within City Right-Of-Way.
- 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.
- Two working days prior to any excavation, the contractor must contact **New Mexico One Call**, dial "811" [or (505) 260-1990] for the location of existing utilities.
- Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
- Backfill compaction shall be according to traffic/street use.
- Maintenance of the facility shall be the responsibility of the owner of the property being served.
- Work on arterial streets may be required on a 24-hour basis.
- Contractor must contact Storm Drain Maintenance at (505) 857-8033 to schedule a construction inspection. For excavating and barricading inspections, contact Construction Coordination at (505) 924-3416.

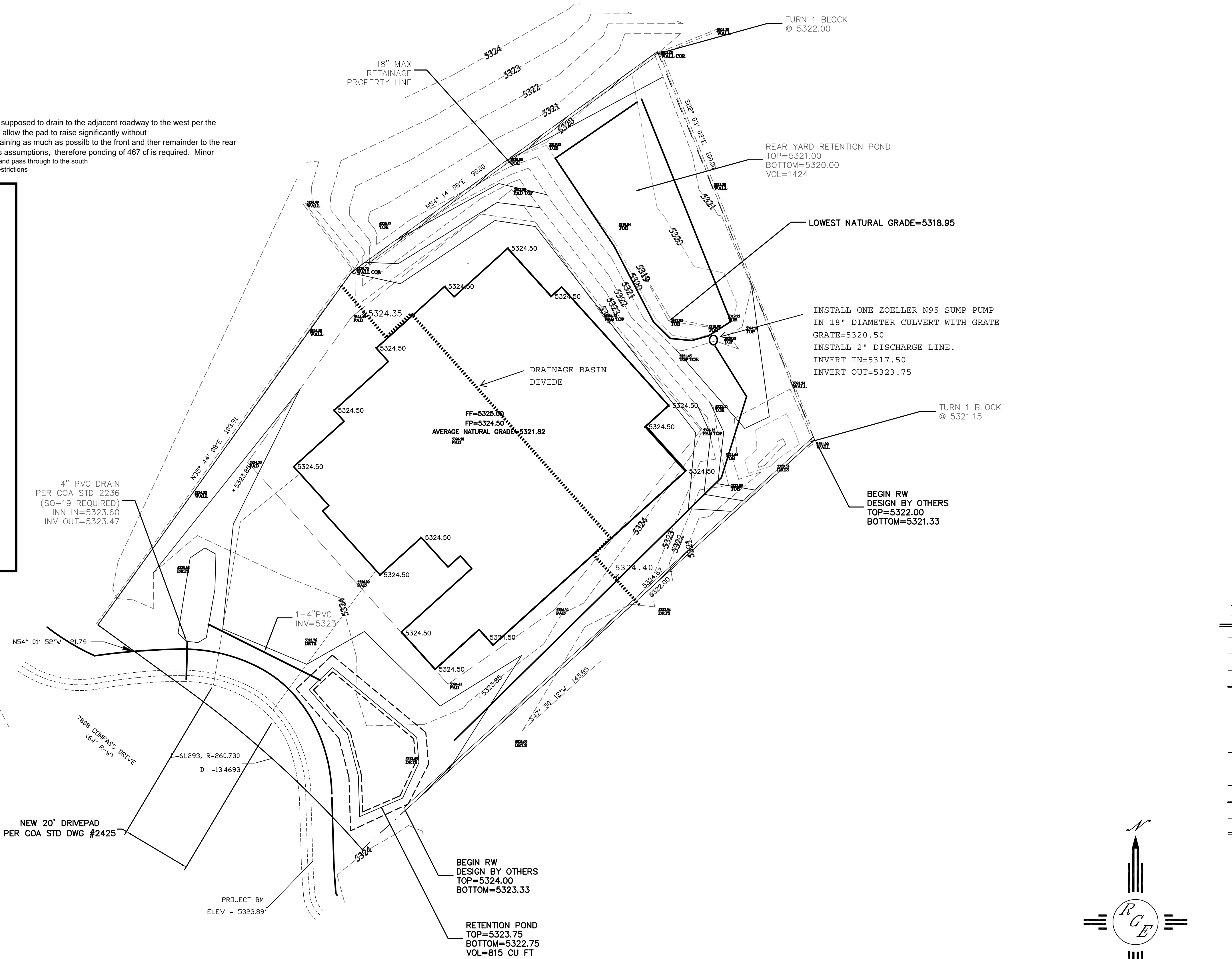
CAUTION:

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.

I, DAVID SOULE HAVE PERSONALLY INPECTED THE SITE. I HEREBY  
CERTIFY THE PAD HAS BEEN CONSTRUCTED SUCH THAT IT IS IN  
SUBSTANTIAL CONFORMANCE TO THE APPROVED GRADING PLAN DATED 5/24/21  
OWNER HAS PLACED ADDITIONAL FILL ON LOTS AFTER PAD INSPECTION

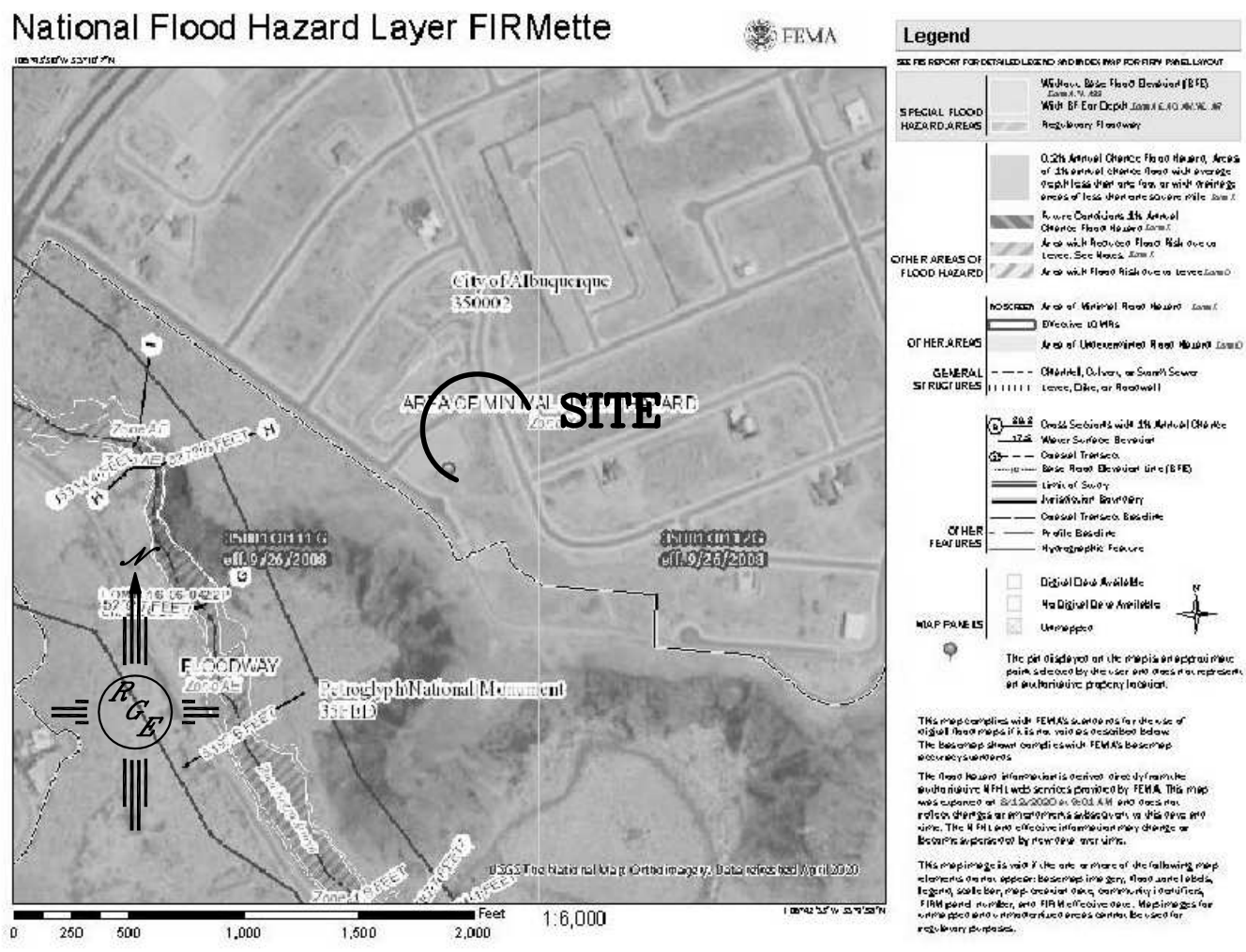
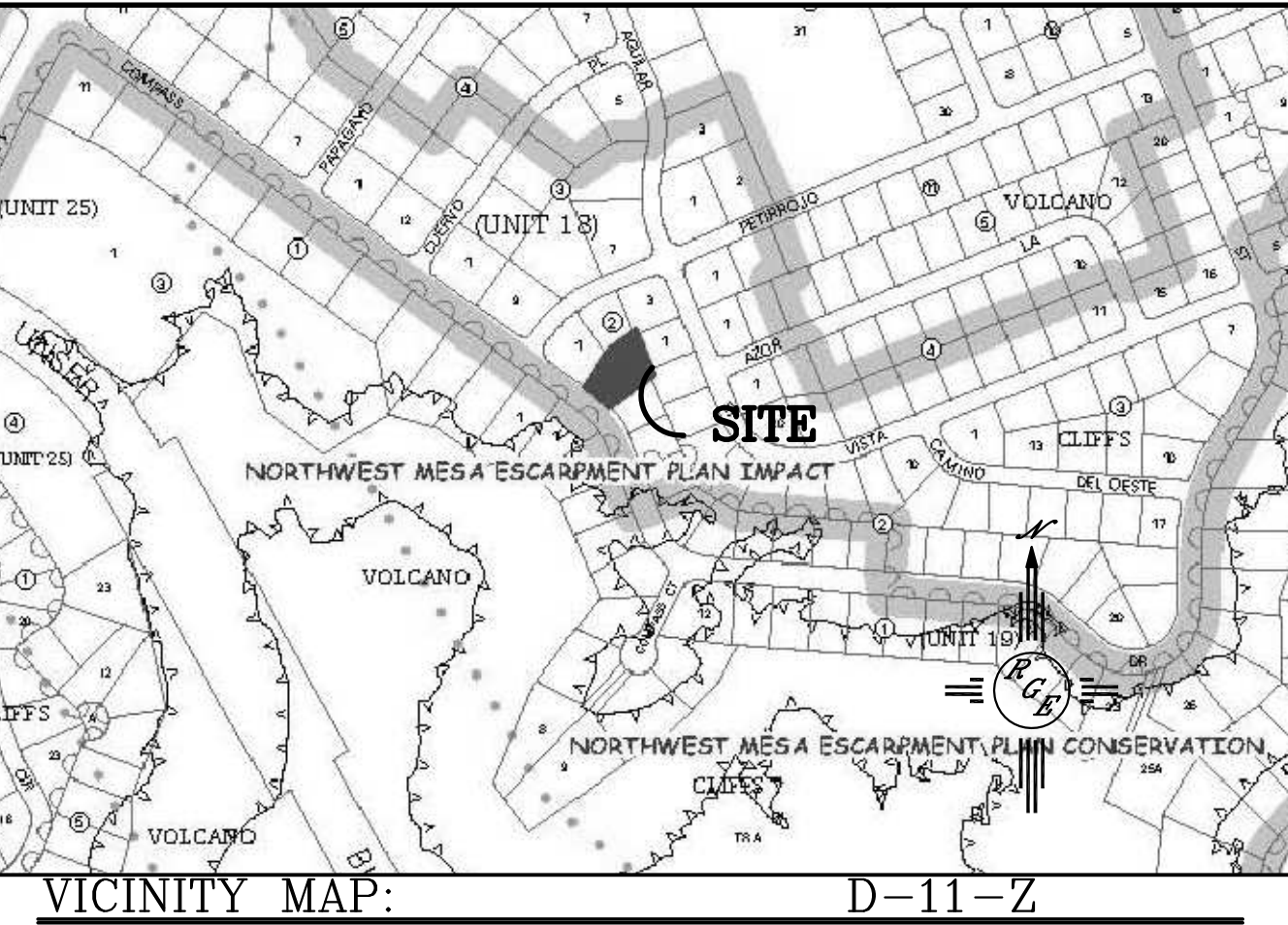


6/4/21



EROSION CONTROL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
- REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



FIRM MAP:

LEGAL DESCRIPTION:

LOT 36 BLOCK 2 VC UNIT 19

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

- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- PROPOSED INDEX CONTOUR
- SLOPE TIE
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- LOT LINE
- CENTERLINE
- RIGHT-OF-WAY
- PROPOSED 4" PVC SD
- GRAVEL LINED SWALE
- EXISTING CURB AND GUTTER

ENGINEER'S SEAL	7808 COMPASS	DRAWN BY: WCVJ
DAVID SOULE NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 14522	GRADING AND DRAINAGE PLAN	DATE 5-24-21
5/24/21	Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	210210056-LAYOUT-5-24-21
		SHEET # —
		JOB # 21021056