

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

April 15, 2024

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

RE: 2514 Carson Rd NW
Grading and Drainage Plan
Engineer's Stamp Date: 04/07/24
Hydrology File: J13D105

Dear Mr. Soule:

Based upon the information provided in your submittal received 04/09/2024, the Grading & Drainage Plan is **not** approved for Building Permit and Grading Permit. The following comments need to be addressed for approval of the above referenced project:

1. Please follow Article 6-5 Valley Drainage Criteria of the DPM. The following conditions must be applied to the site:
 - The maximum percent impervious of the lot and the contributing area may not be greater than 45%.
 - Pad elevation shall be a minimum of one (1) foot above the 100 year 10-day stormwater surface elevation.
 - The flow between the front yard and back yard cannot be obstructed. The stormwater must be allowed to equalize to the same level between the front yard and back yard.
 - A permanent perimeter wall or barrier around the development is required to contain the 100 year 24 hour storm developed runoff.
 - The high point of the street should be four inches above the 100 year 10-day stormwater surface elevation.

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

Weighted E Method

Basin	Area (sf)	Area (acres)	100-Year, 6-hr.					Flow cfs	Volume (ac-ft)
			Treatment A %	Treatment B %	Treatment C %	Treatment D %	Weighted E (ac-ft)		
HISTORICAL	4630.00	0.106	0%	30%	0.032	60%	0.064	10%	0.011
PROPOSED	4630.00	0.106	0%	15%	0.016	24%	0.026	61%	0.065

Equations:

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

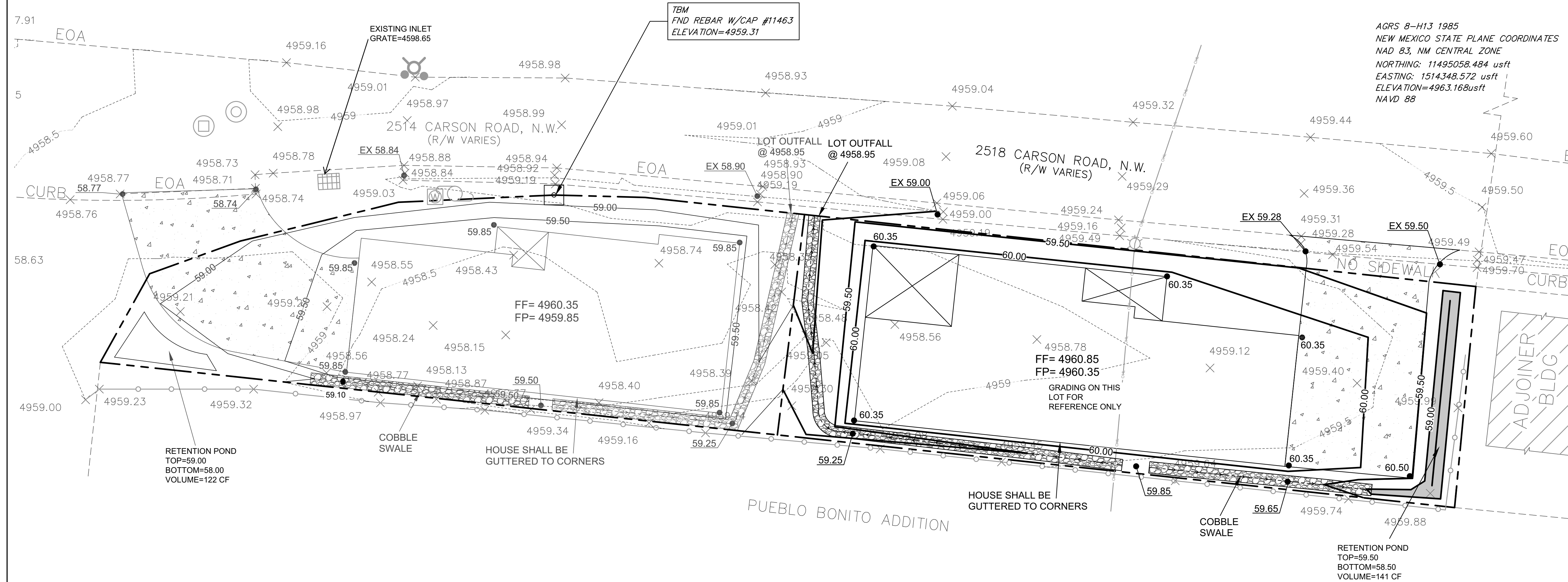
Volume = Weighted D * Total Area

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

Where for 100-year, 6-hour storm(zone1)
Ea= 1.54
Eb= 0.55
Ec= 0.73
Ed= 2.87
Qa= 1.24
Qb= 0.16
Qc= 2.87
Qd= 4.12

Developed Conditions		TOTAL VOLUME GENERATED
DISCHARGE PROPOSED	0.37 CFS	848 CF
EXISTING DISCHARGE	0.30 CFS	422 CF
DIFFERENCE	0.08 CFS	423.99 CF
RETAINED		141 CF

This site is an redevelopment of a previously developed lot. The existing house was demolished at some point in the past (GIS shows). There is no master drainage plan for this area, all lots currently free discharge. The site is adjacent to a public storm drain. The draiage solution is to retain a portion of increase in flow generated by the redevelopment based upon the 24-hr volumes. The ponds will overflow to the street and all the excess generated flow we be captured by the existing inlet

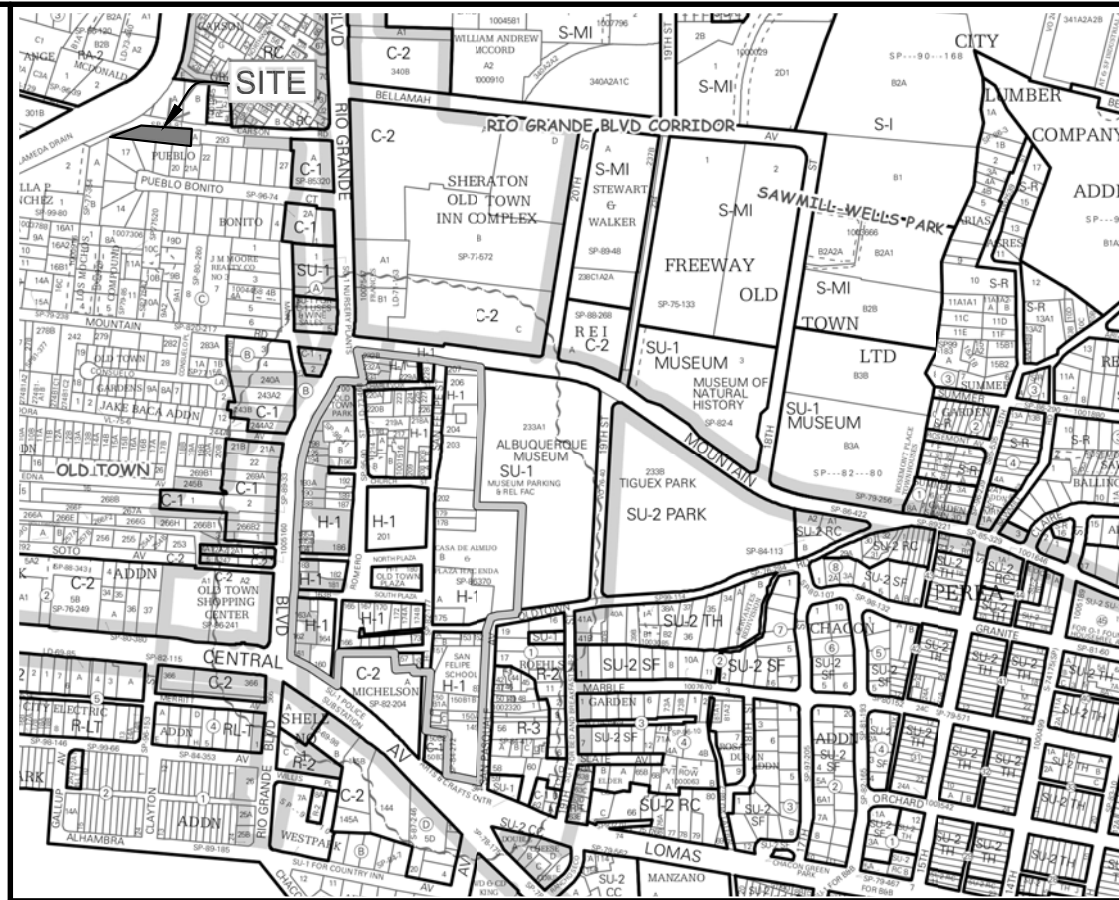


CAUTION:

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.

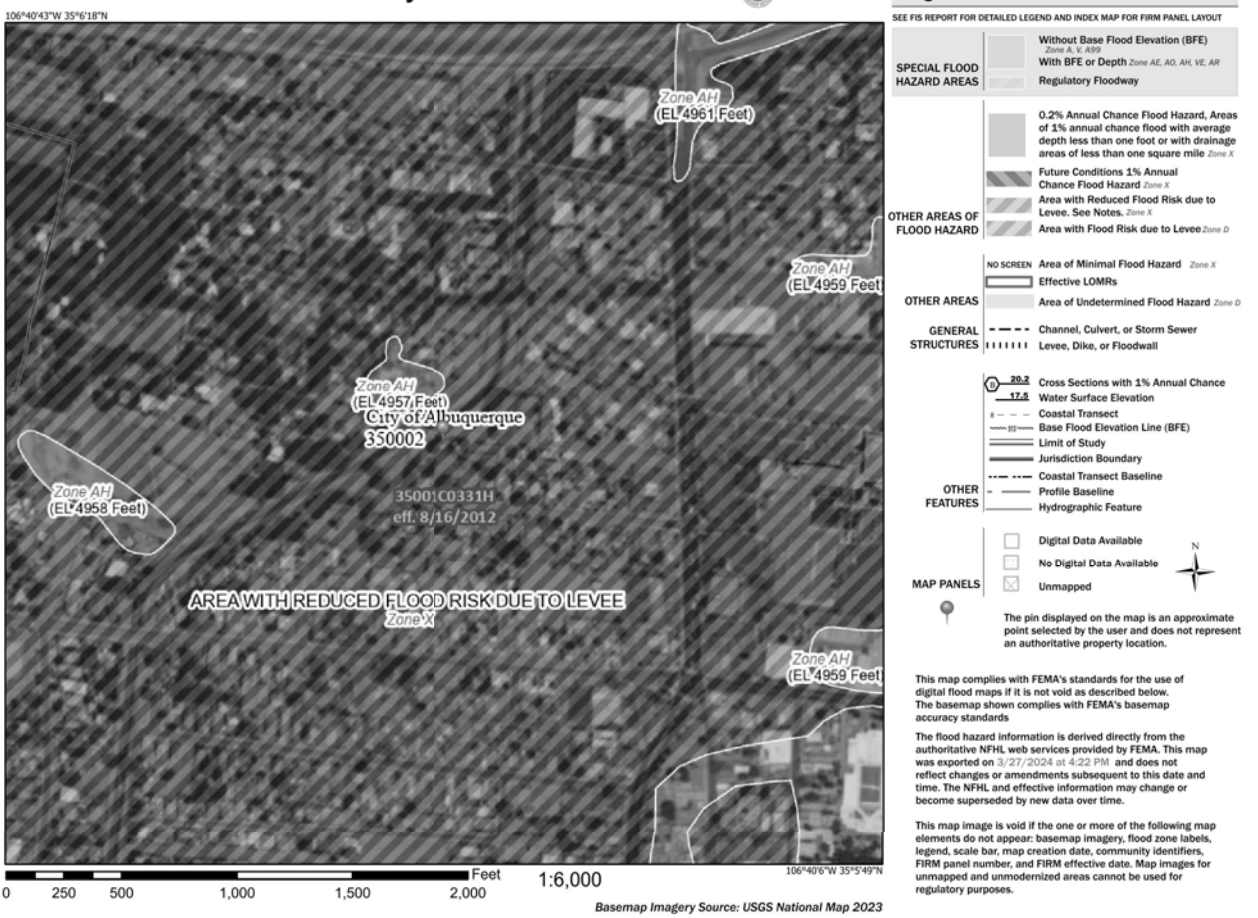
EROSION CONTROL NOTES:

- 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.



VICINITY MAP: J-13-Z

National Flood Hazard Layer FIRMette



FIRM MAP:

LEGAL DESCRIPTION:

TRACTS 291-A & 291-B
CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

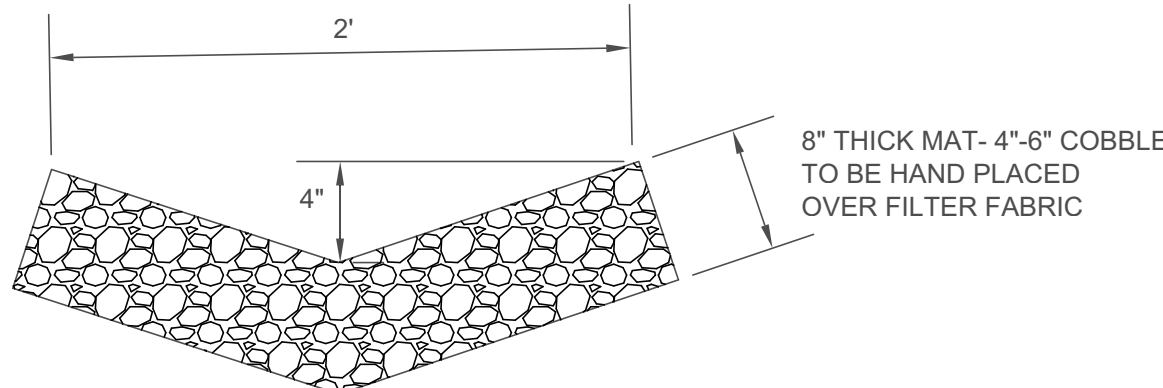
NOTES:

- ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
- ANY PERIMETER WALLS MUST BE PERMITTED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
- SURVEY INFORMATION PROVIDED BY COMMUNITY SCIENCES CORPORATION USING NAVD DATUM 1988.
- A PAD ELEVATION CERTIFICATION SHALL BE REQUIRED PRIOR TO RELEASE OF BUILDING PERMIT.

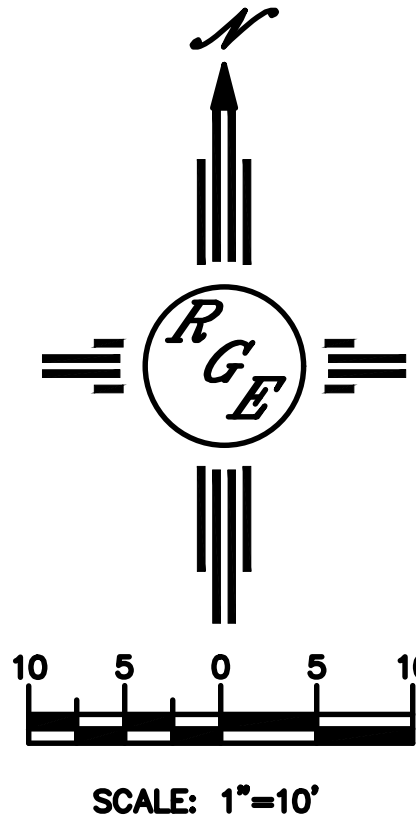
LEGEND

-----XXXX-----	EXISTING CONTOUR
-----XXXX-----	EXISTING INDEX CONTOUR
-----XXXX-----	PROPOSED CONTOUR
-----XXXX-----	PROPOSED INDEX CONTOUR
XXXX	EXISTING SPOT ELEVATION
●XXXX	PROPOSED SPOT ELEVATION
-----	BOUNDARY
-----	ADJACENT BOUNDARY
=====	EXISTING CURB AND GUTTER
-----	PROPOSED EARTHEN SWALE
-----	PROPOSED CONCRETE
=====	PROPOSED 2' WIDE COBBLE SWALE

CONSTRUCT ALL SWALES AND EROSION PROTECTION (SHOWN HATCHED) BELOW ADJACENT GRADE TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY.



COBBLE SWALE
NTS



ENGINEER'S SEAL	TRACTS 291-A & 291-B 2514 CARSON ROAD, N.W.	DRAWN BY DEM
DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER		DATE 3-29-24
4/7/24	GRADING AND DRAINAGE PLAN	2518 Carson Rd NW
DAVID SOULE P.E. #14522		SHEET # C1
		JOB #