

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

September 30, 2024

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

RE: 5000 Cresta Del Sur Ct NE
Grading and Drainage Plan
Engineer's Stamp Date: 9/3/24
Hydrology File: F23D016

Dear Mr. Soule:

Based upon the information provided in your submittal received 09/03/2024, the Grading and Drainage Plans are approved for Building Permit and Grading Permit. **Since this site has retaining walls, a pad certification is not needed for this project.** Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): Engineer's Certification Checklist For Non-Subdivision is required.

If you have any questions, please contact me at 505-924-3314 or amontoya@cabq.gov.

Sincerely,

Anthony Montoya, Jr., P.E.
Senior Engineer, Hydrology
Planning Department, Development Review Services

Weighted E Method
per city of Albuquerque Development Process Manual- chapter 22

Existing Developed Basins											100-Year, 6-hr.			10-day
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)				
EXISTING	14664.00	0.337	50%	0.1683	50%	0.168	0%	0	0%	0.000	0.855	0.024	0.81	0.024
ALLOWED	14664.00	0.337	0%	0.0000	26.0%	0.088	26.0%	0.08753	48%	0.162	2.162	0.061	1.31	0.082
PROPOSED	14664.00	0.337	0%	0.0000	27.0%	0.091	26.0%	0.08753	47%	0.158	2.138	0.060	1.30	0.081

Equations:

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

Volume = Weighted D * Total Area

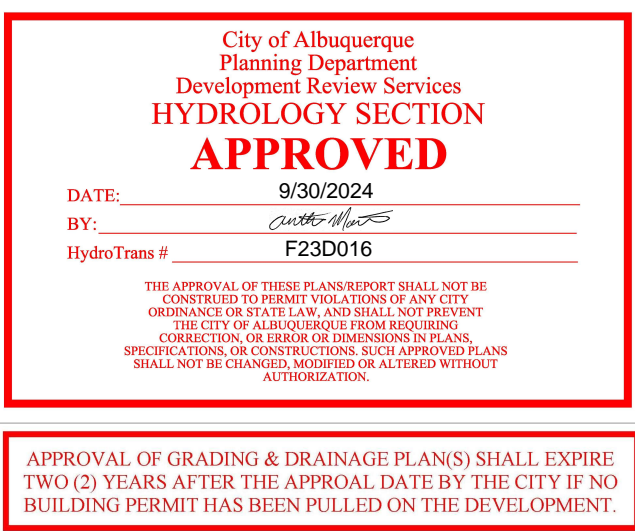
Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

Where for 100-year, 6-hour storm(ZONE 4)

Ea= 0.76
Eb= 0.95
Ec= 1.2
Ed= 3.34
Qa= 2.09
Qb= 2.73
Qc= 3.41
Qd= 4.78

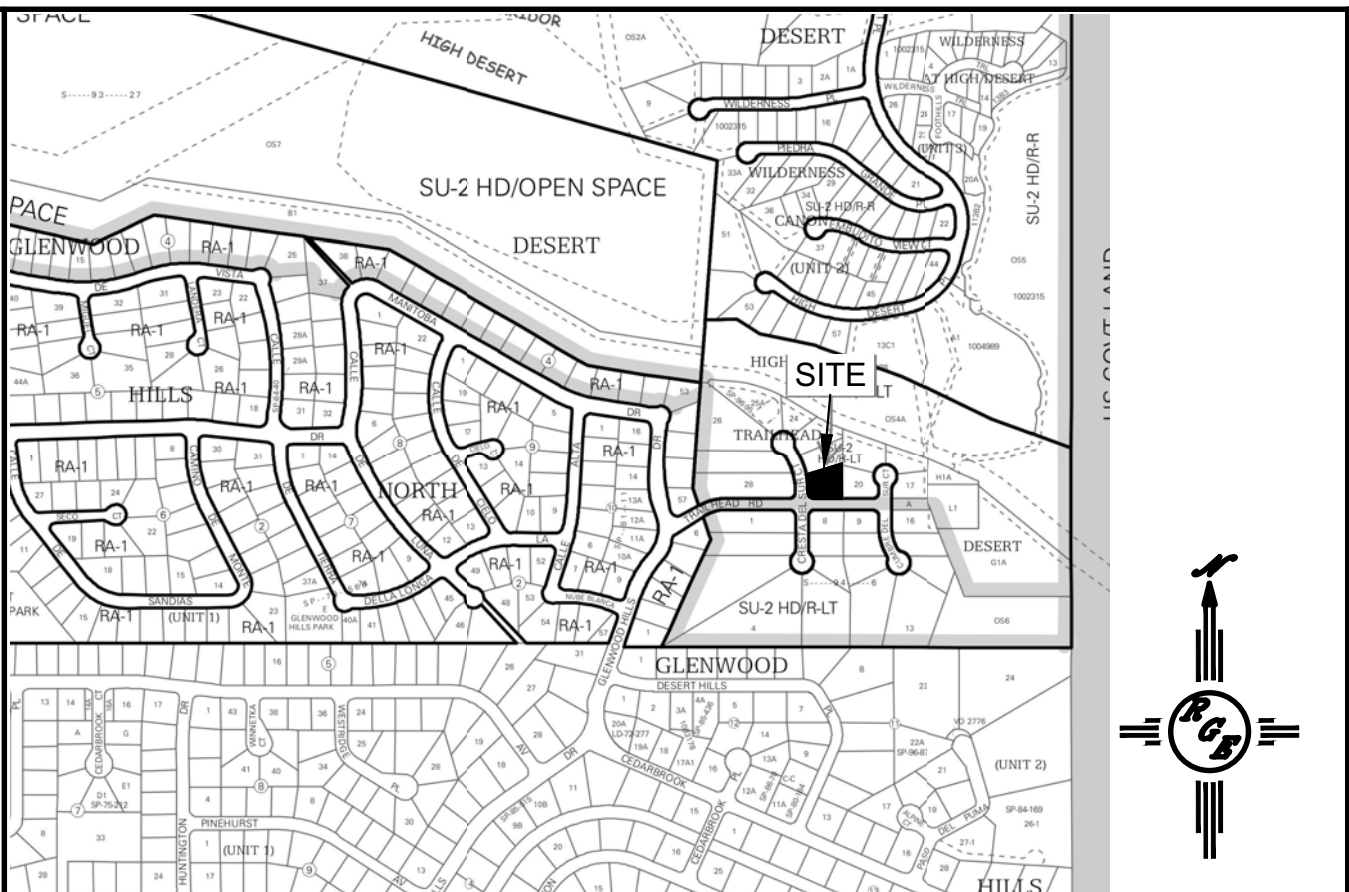
ALLOWED DISCHARGE 0.082 CFS
PROPOSED DISCHARGE 0.081 CFS

DRAINAGE NARRATIVE
THIS SITE IS GOVERNED BY THE TRAIL HEAD SUBDIVISION(F23-D7) THE DOWN STREAM IMPROVEMENTS ARE IN PLACE. THE PROPOSED PROJECT WILL BE A SINGLE FAMILY RESIDENTIAL HOUSE. PER THE APPROVED MASTER PLAN, THE SITE MUST MATCH THE PROPOSED100-YEAR, 6-HOUR PEAK DISCHARGE RATE ASSIGNED IN THE MASTER PLAN

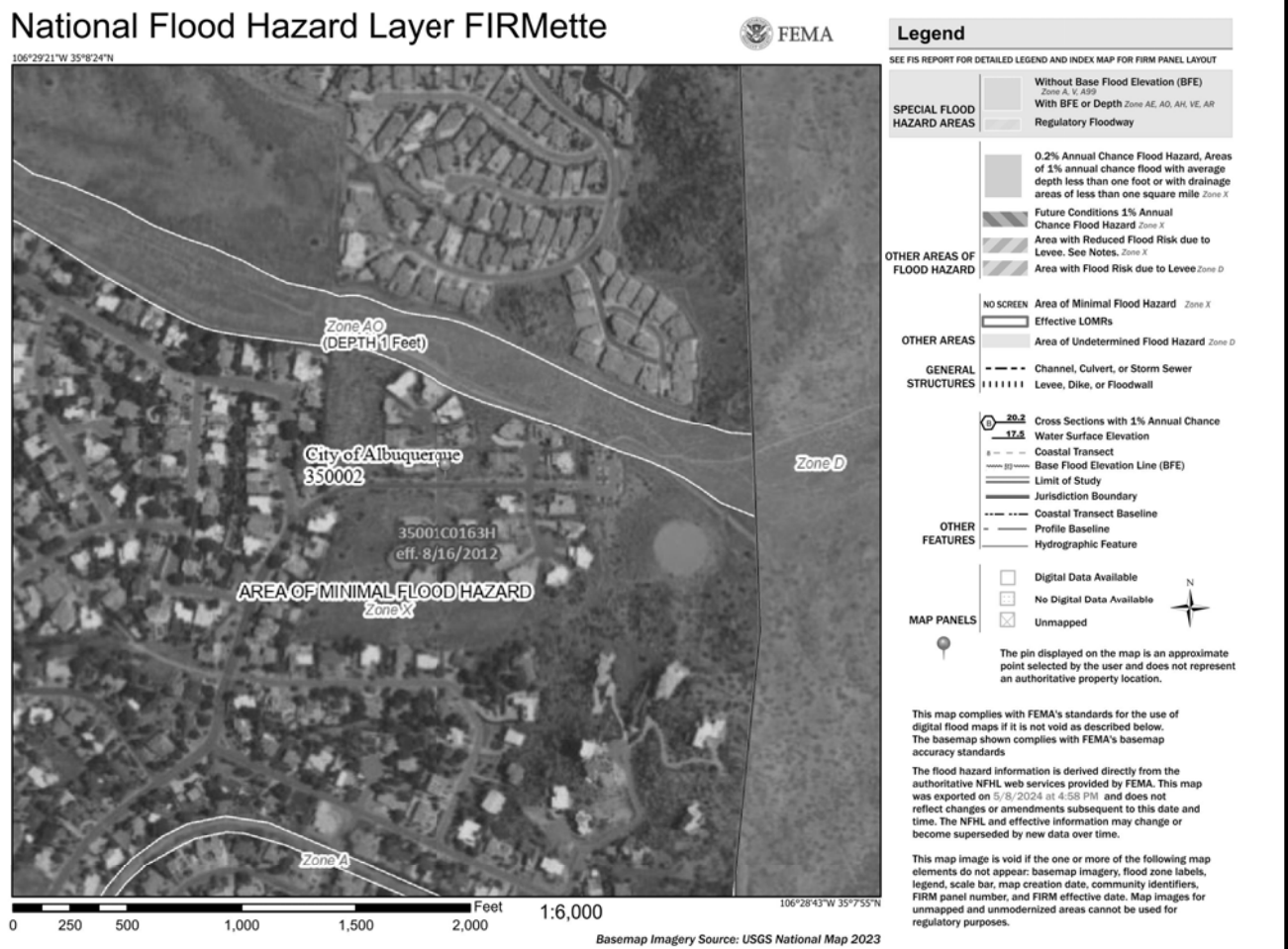


EROSION CONTROL NOTES:

- 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: F-23-Z



FIRM MAP:

LEGAL DESCRIPTION:

LOT 21 TRAILHEAD SUBDIVISION
CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

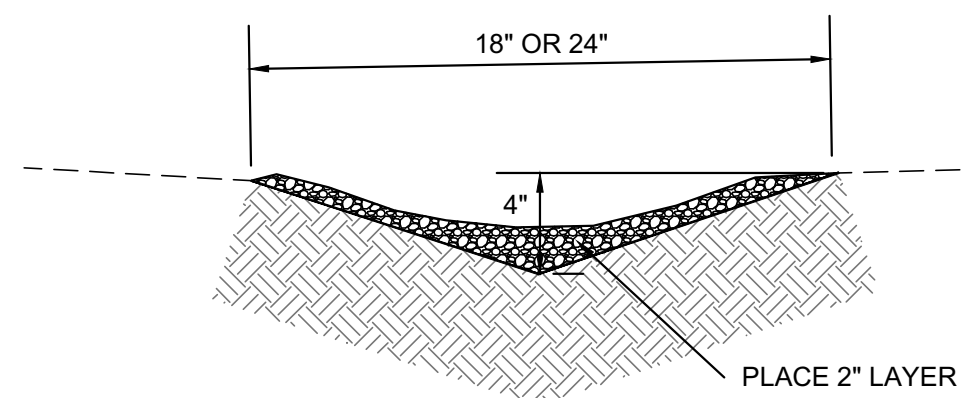
NOTES:

- ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO. ALL AREAS DISTURBED DURING CONSTRUCTION OUTSIDE OF THE BUILDING AREA MUST BE REVEGETATED USING THE HIGH DESERT RECLATION SEED MIX
- ANY PERIMETER WALLS MUST BE PERMITTED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
- SURVEY INFORMATION PROVIDED BY DYNAMIC CONSTRUCTION AND TECHNOLOGY LLC USING NAVD DATUM 1988.
- LONG TERM MAINTAINANCE OF ALL PONDS, SWALES AND OVERFLOWS IS REQUIRED
- 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 LOW POINT TO ALLOW FLOW
- PROPOSED RETAINING WALL
- PROPOSED CONCRETE

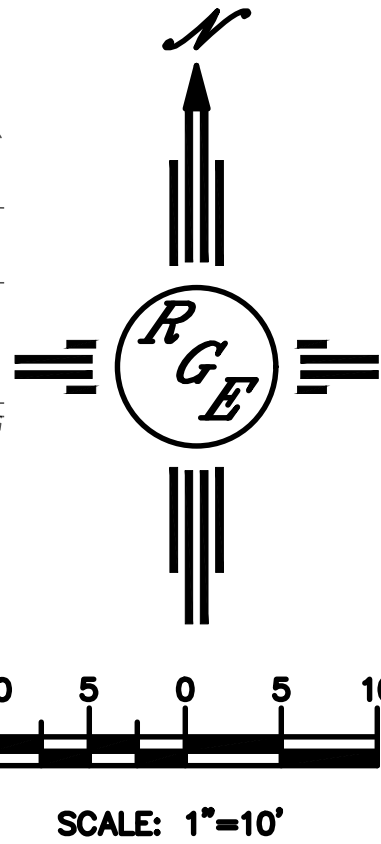
CONSTRUCT ALL SWALES AND EROSION PROTECTION (SHOWN HATCHED) BELOW ADJACENT GRADE TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY.



EARTHEN SWALE
NTS

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.



<div>ENGINEER'S SEAL</div> <div>DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER</div> <div>DAVID SOULE P.E. #14522</div>	LOT 21 TRAILHEAD SUB. 5000 CRESTA DEL SUR CT	DRAWN BY DEM DATE 8-31-24 500 Cresta Del Sur Ct.DWG
	GRADING AND DRAINAGE PLAN	SHEET # C1
	<div>Rio Grande Engineering</div> <div>P.O. BOX 53924 ALBUQUERQUE, NM 87199 (505) 321-9099</div>	JOB #