

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

February 27, 2019

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

RE: **Matthew Townhomes**
2145 Matthew NW
Grading and Drainage Plan
Engineer's Stamp Date: 2/5/19
Hydrology File: G12D036

Dear Mr. Soule,

Based on the submittal received on 2/6/19, the Grading and Drainage Plan is approved for Final Plat and Building Permit. On the Plat, provide a drainage easement over the pond and annotate using the [Plat Drainage Easement Note](#). This note replaces the need for a separate drainage covenant.

Prior to Certificate of Occupancy (For Information):

1. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Non-Subdivision* is required.
2. The Plat will need to be recorded and a copy included with the Engineer's Certification.

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services

Weighted E Method											
Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)
			%	(acres)	%	(acres)	%	(acres)	%	(acres)	
EXISTING	9919.00	0.228	0%	0	28%	0.064	46%	0.105	28%	0.059	1.289
PROPOSED	9919.00	0.228	0%	0	16%	0.036	10%	0.023	74%	0.169	1.807
											Volume (ac-ft)
											Flow cfs
											Volume (ac-ft)
											0.75
											0.028
											0.040

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(zone2)

Ea= 0.53
Eb= 0.78
Ec= 1.13
Ed= 2.12

Qa= 1.56
Qb= 2.28
Qc= 3.14
Qd= 4.7

Developed Conditions

HISTORICAL DISCHARGE 1151.76

PROPOSED DISCHARGE 1737.97

PROVIDED 1754

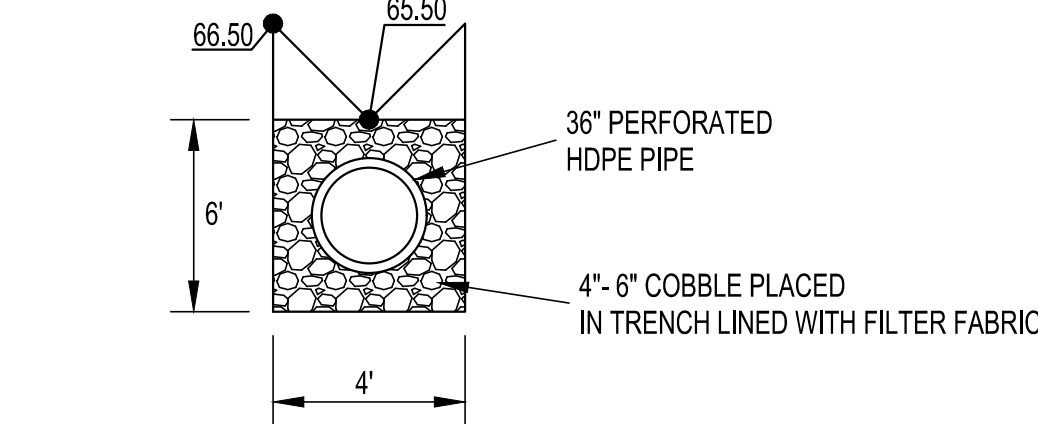
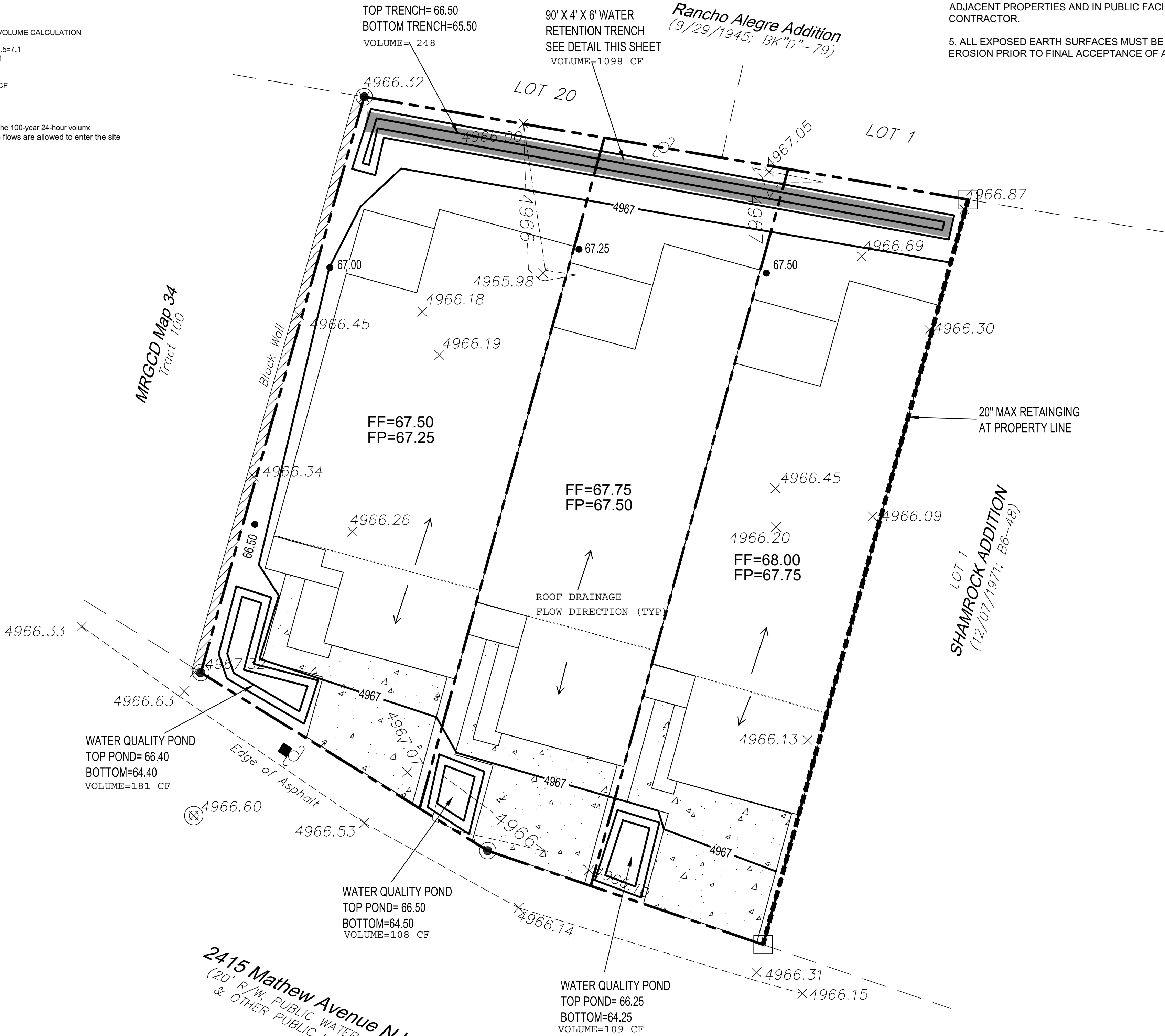
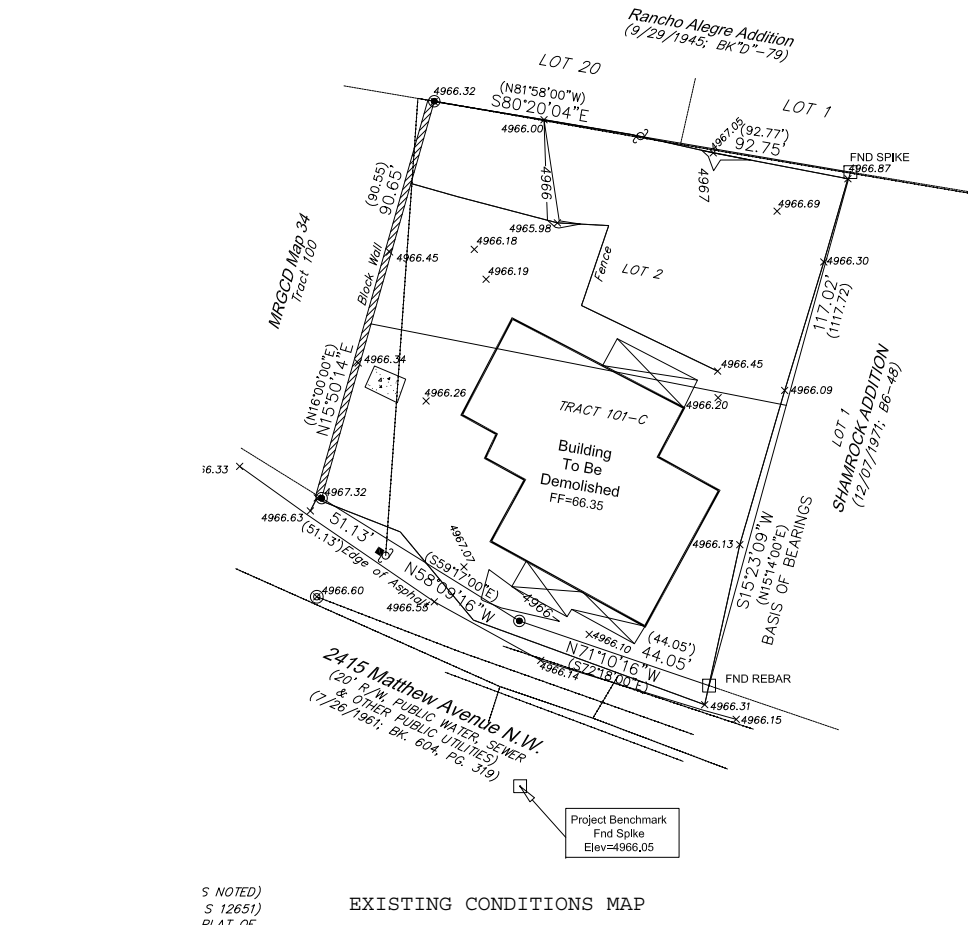
TOTAL VOLUME

WATER HARVEST TRENCH VOLUME CALCULATION

UNIT VOLUME
PIPE =3.14159X1.5X1.5=7.1
GRAVEL =(6X4)-7)-3=5.1

LENGTH=90LF
VOLUME=(7.1+5.1)*90=1098 CF

This site is a redevelopment of a previously developed lot. The site will conform to the valley flat area drainage scheme. The site will retain the 100-year 24-hour volume. The ponds will overflow to the street in the event of a storm exceeding the 100-year event. The surrounding is flat, minor offsite flows are allowed to enter the site and pass thru to the right of way. The first flush volume is retained on site

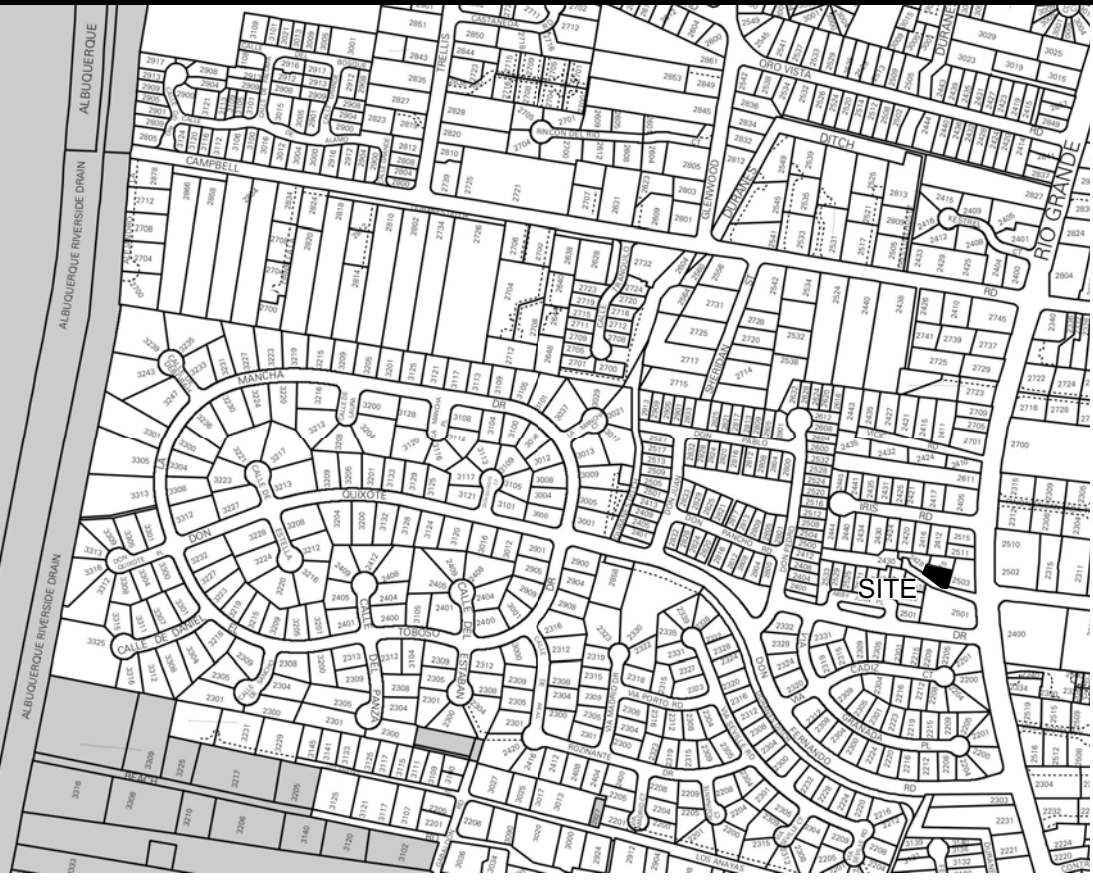


WATER RETENTION TRENCH DETAIL
NTS

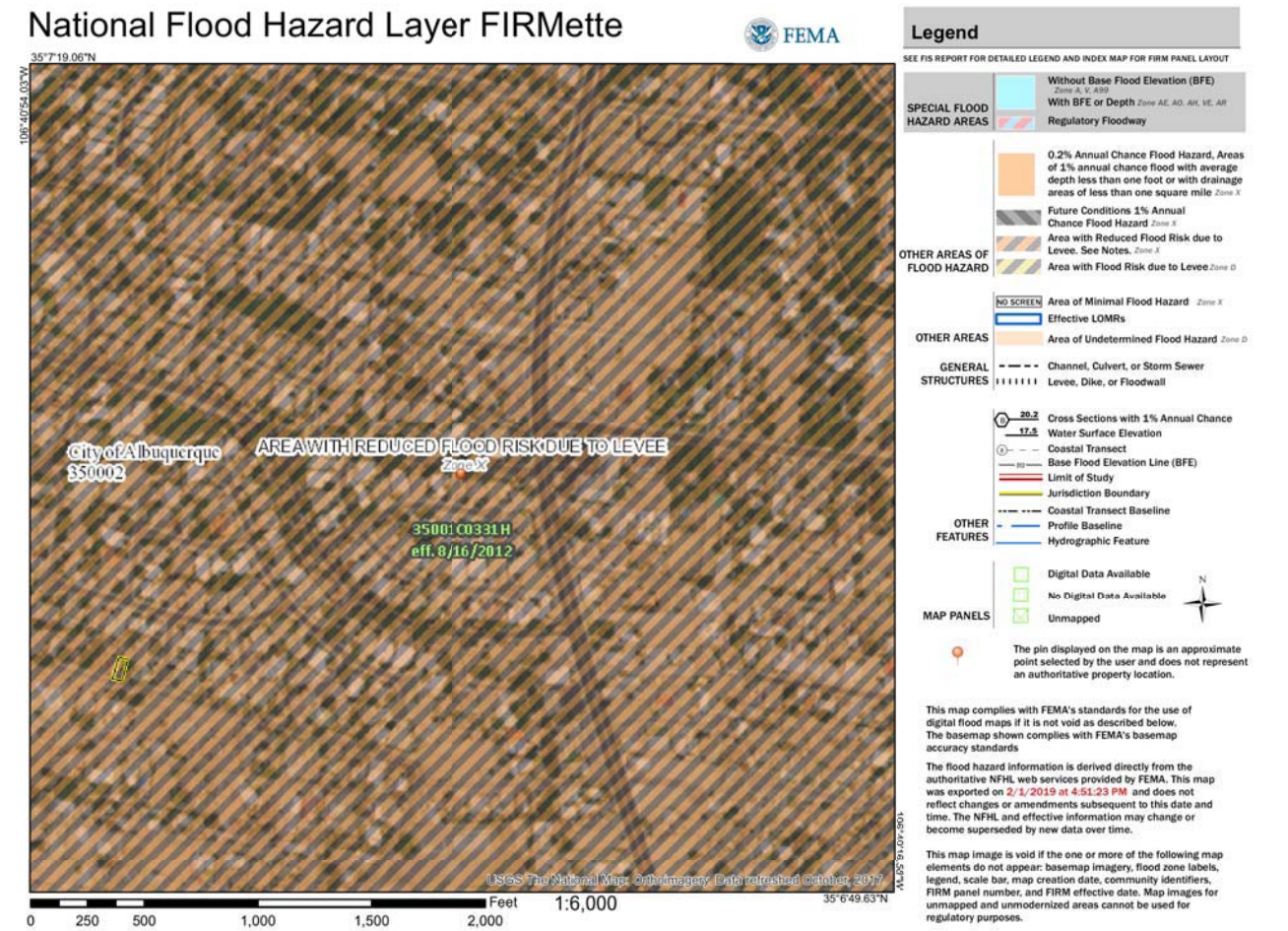
CAUTION:
EXISTING UTILITIES ARE NOT SHOWN.
IT SHALL BE THE SOLE RESPONSIBILITY
OF THE CONTRACTOR TO CONDUCT ALL
NECESSARY FIELD INVESTIGATIONS PRIOR
TO ANY EXCAVATION TO DETERMINE THE
ACTUAL LOCATION OF UTILITIES & OTHER
IMPROVEMENTS.

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.



VICINITY MAP: G-12-Z



FIRM MAP:

LEGAL DESCRIPTION:

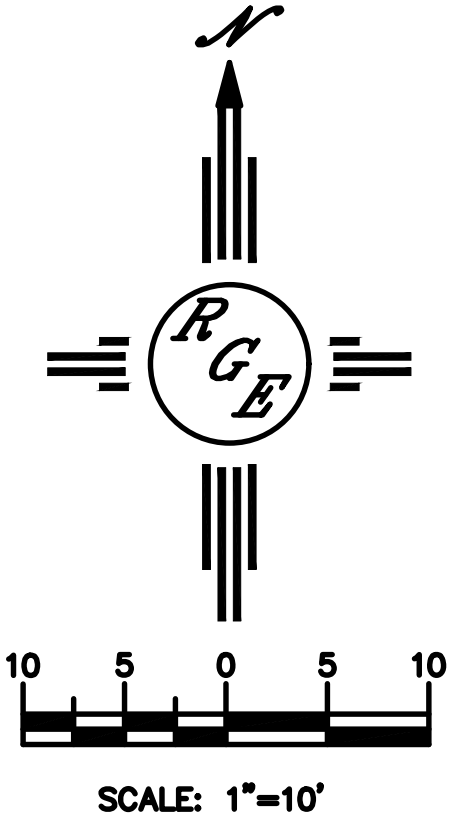
Lot 2 Shamrock Addition Tract 101-C, MRGCD Map 34
BERNALILLO COUNTY ALBUQUERQUE, NEW MEXICO

NOTES:

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

LEGEND

- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- PROPOSED INDEX CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- BOUNDARY
- PROPOSED RETAINING WALL
- ADJACENT BOUNDARY
- EXISTING CURB AND GUTTER
- PROPOSED CONCRETE DRIVEWAY



ENGINEER'S SEAL	Lot2 Shamrock Add. Trct 101-C, MRGCD Map 34 2415 MATHEW AVENUE NE	DRAWN BY DEM
DAVID SOULE REGISTERED PROFESSIONAL ENGINEER 14522	GRADING AND DRAINAGE PLAN	DATE 2-2-19
2/5/19	Rio Grande Engineering 1608 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 972-0899	LOT 2 & 101C.DWG
DAVID SOULE P.E. #14522		SHEET # C1
		JOB #