

Weighted E Method														
100-Year, 6-hr.														
Basin	Area (sf)	Area (acres)	Treatment A (%)	Treatment B (%)	Treatment C (%)	Treatment D (%)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	24-hour Volume (ac-ft)				
NATIVE	15031.00	0.345	80%	0.2761	10%	0.035	10%	0.03451	0%	0.000	0.518	0.015	0.53	0.015
ALLOWED	15031.00	0.345	0%	0	10%	0.035	40%	0.13803	50%	0.173	1.448	0.042	1.22	0.053
PROPOSED	15031.00	0.345	0%	0	28%	0.097	23%	0.07936	49%	0.169	1.381	0.040	1.16	0.051
INCREASE											0.025			
total														

Equations:

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

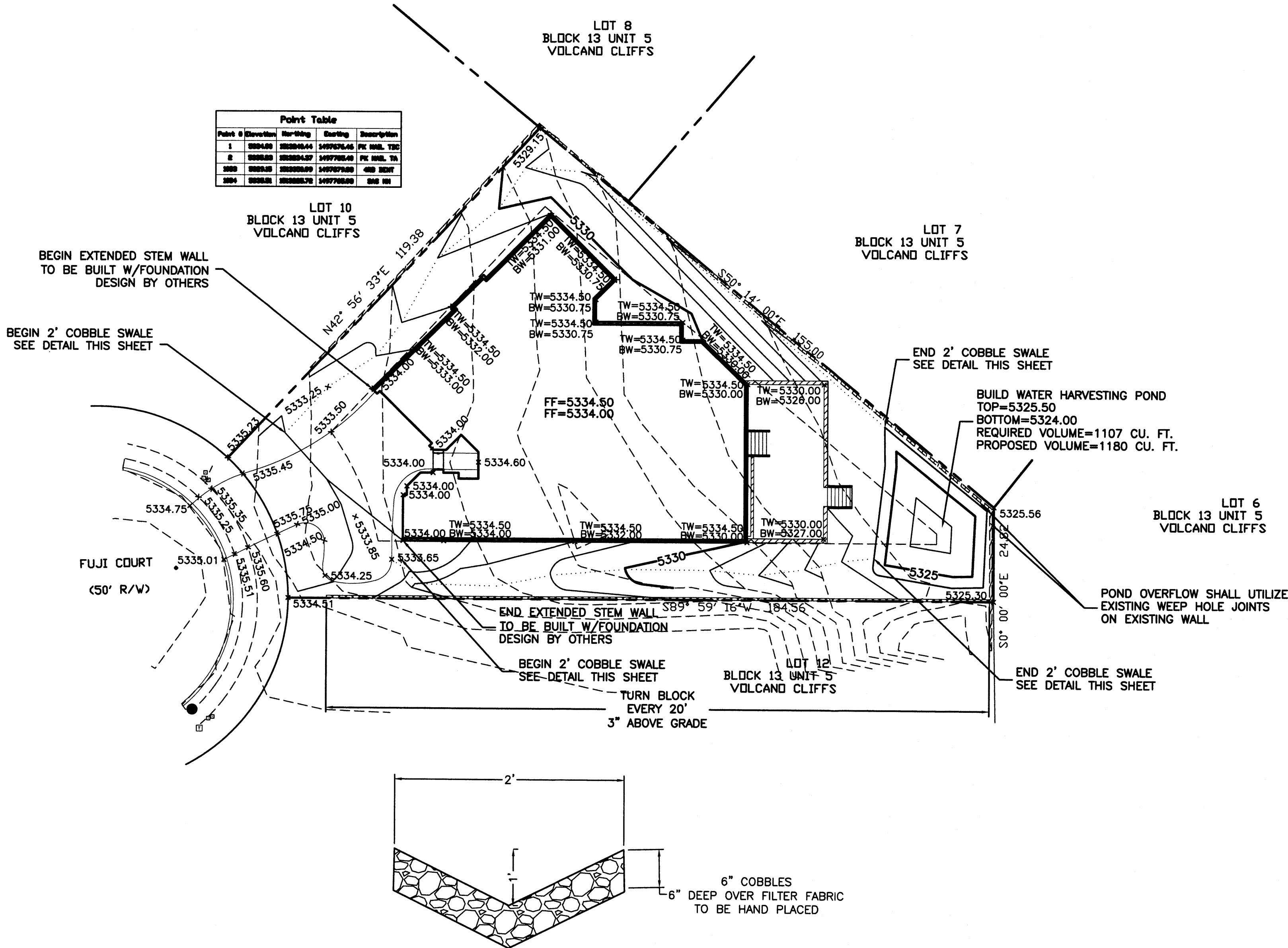
Volume = Weighted D * Total Area

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)	209	PROVIDED (CF) 633
WATER QUALITY		
50% of the 100year-10day	1107	1120

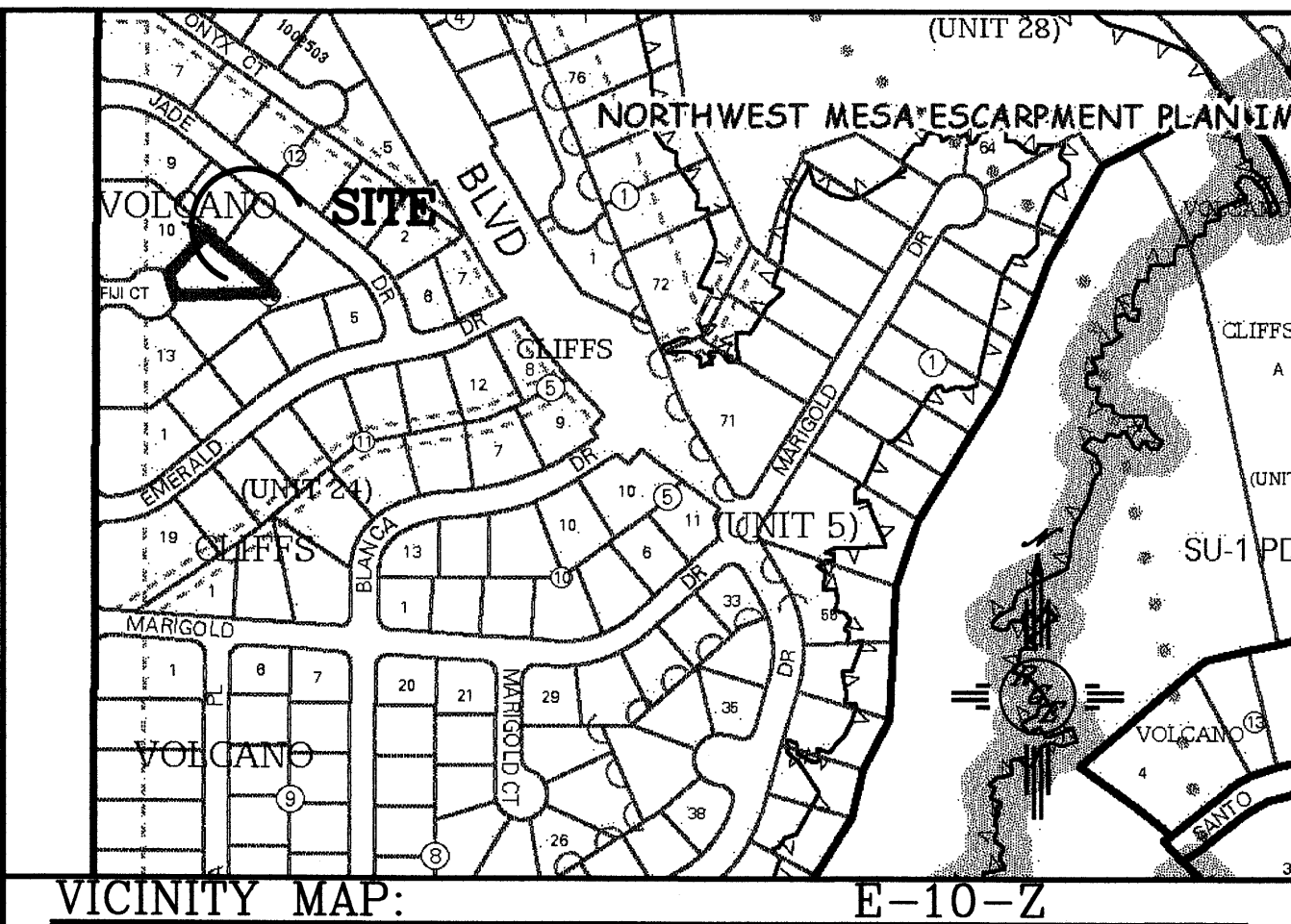
Narrative
This site is within the SAD 227 Master Drainage plan boundaries. The site is to maintain existing drainage patterns. Since the lot can not drain to the the adjacent street we are to retain 50% of the 100-year, 24-hour storm volume generated. We are ponding the water harvest volume generated by the site. Since the downstream walls have been constructed the weep holes on the bottom course will serve as overflow. The first flush volume is retained on site. This plan is in conformance to the masterplan



COBBLE SWALE DETAIL
NTS

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: FM35001C0111G

LEGAL DESCRIPTION:

LOT 11, BLOCK 13, VOLCANO CLIFFS, UNIT - 5

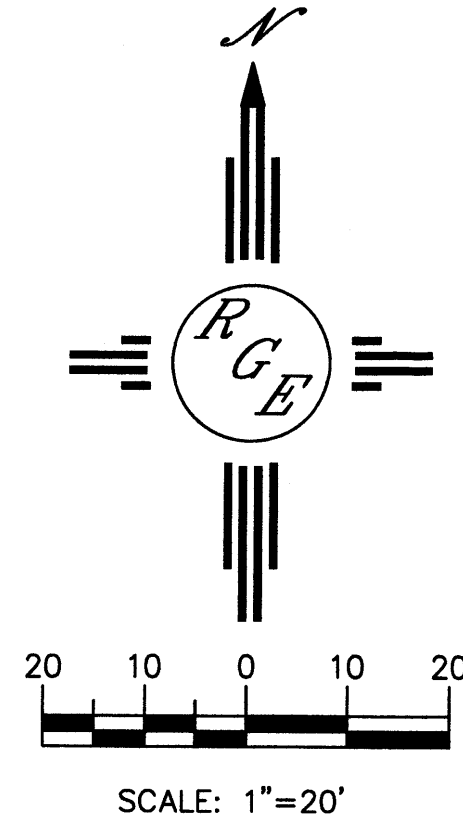
NOTES:

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.

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
----	XXXX	BOUNDARY
----	XXXX	CENTERLINE
----	XXXX	RIGHT-OF-WAY
----	XXXX	EXISTING CURB AND GUTTER
----	XXXX	PROPOSED CMU SCREEN WALL

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.



ENGINEER'S SEAL	8001 FIJI COURT BRUNO RESIDENCE	DRAWN BY WCWJ
DAVID SOULE NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 2/1/17	GRADING AND DRAINAGE PLAN	DATE 2-01-17
DAVID SOULE P.E. #14522	Rio Grande Engineering 1806 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0899	21701-LAYOUT-1-10-17
		SHEET #
		JOB # 21701

Weighted E Method													
Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year 6-hr.		
			%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
NATIVE ALLOWED - 127	15031.00	0.345	80%	0.2761	10%	0.035	10%	0.03451	0%	0.000	0.518	0.015	0.53
PROPOSED INCREASE	15031.00	0.345	0%	0	28%	0.097	23%	0.07936	49%	0.169	1.381	0.040	1.22
total												0.025	

Equations:

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

Volume = Weighted D * Total Area

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

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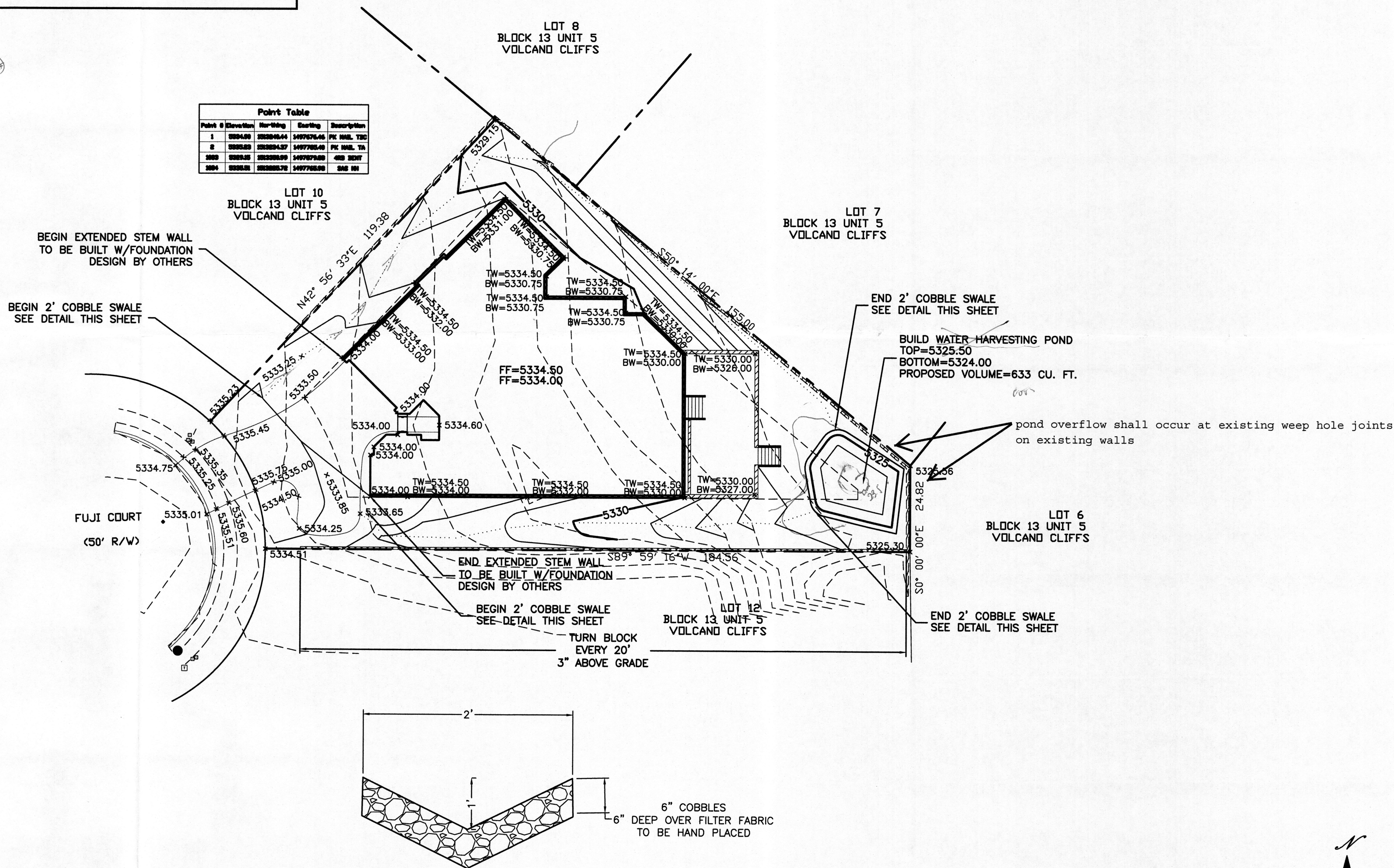
ONSITE Conditions FIRST FLUSH WATER QUALITY VOLUME REQUIRED (CF) 209 PROVIDED (CF) 633

WATER QUALITY 209 633

Narrative

This site is within the SAD 228 Master Drainage plan boundaries. The site is to drain to the adjacent street per the master drainage plan. We are ponding the water harvest volume generated by the site we are allowing the minor upland flow to pass thru the site. This plan has a shallow water harvest pond per the drainage regulation. This plan is in conformance to the masterplan

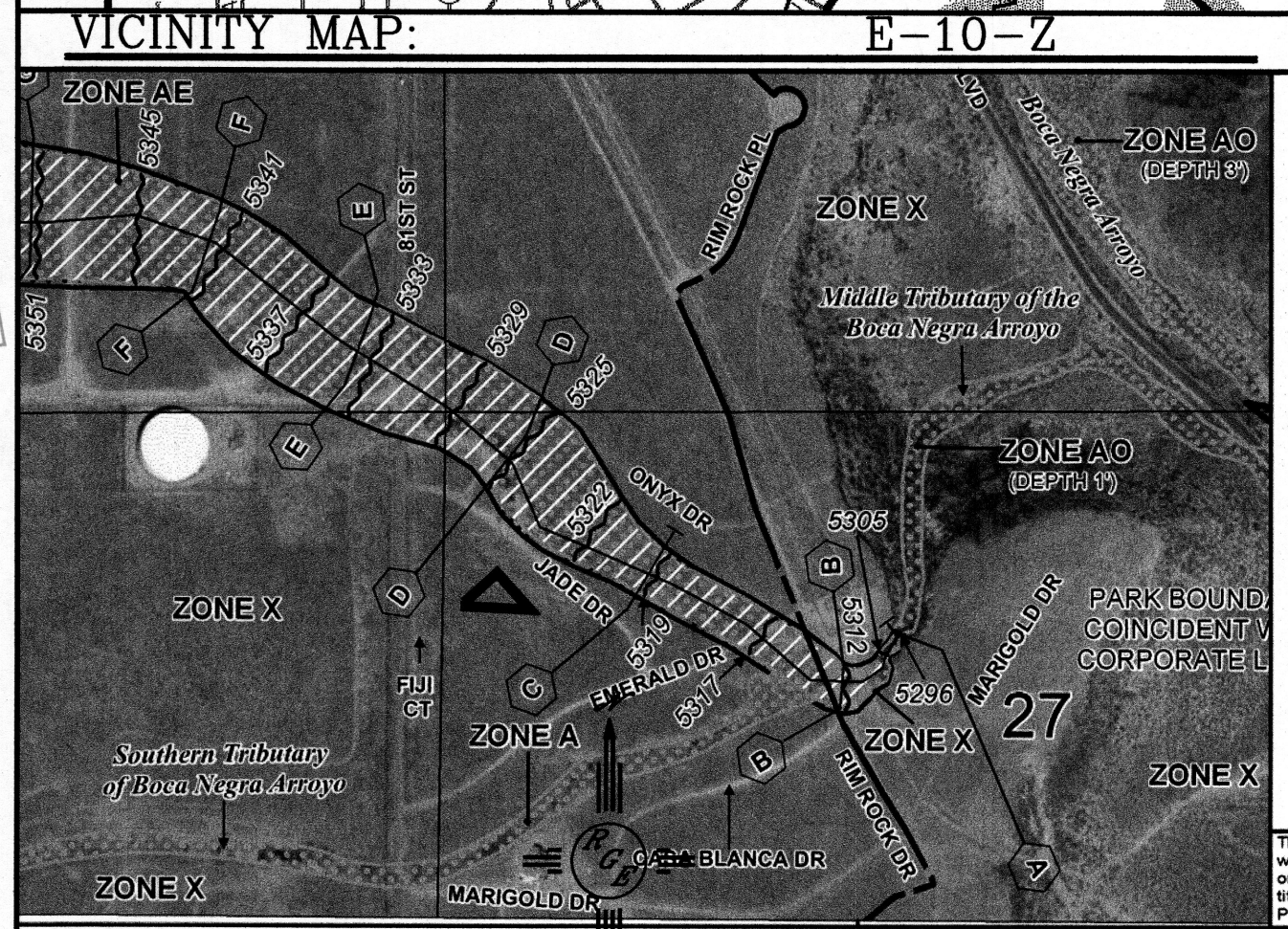
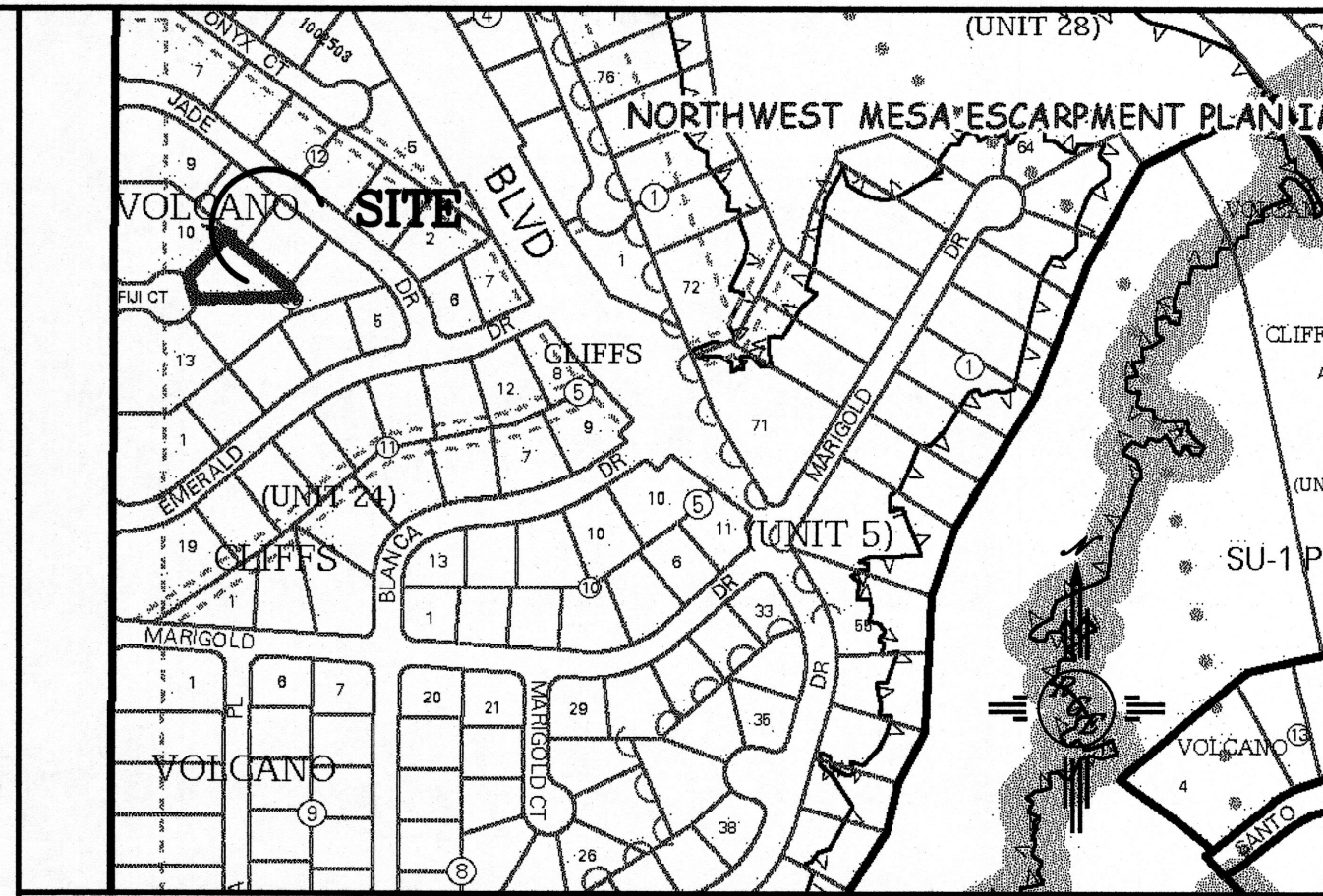
for historic flow path to adjoining lots
retain at least 50% of 100yr, 24hr vol. or increase (1089)
need DMP pages



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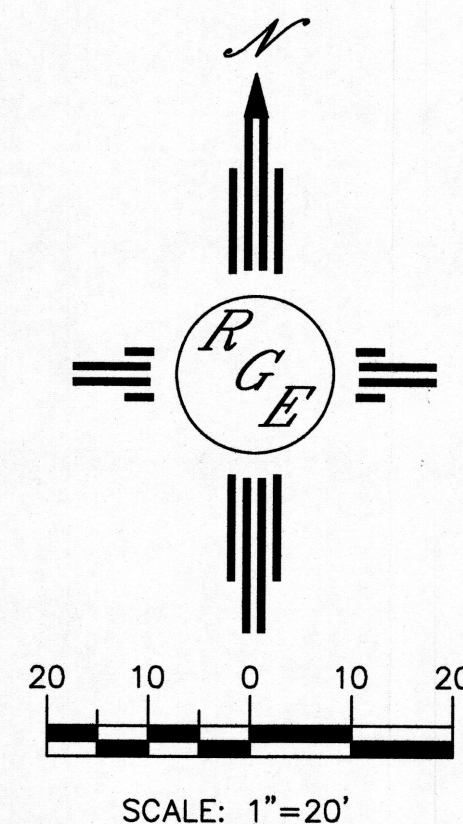


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	GRADING AND DRAINAGE PLAN	DATE 1-12-17
1/13/17	 Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	21701-LAYOUT-1-10-17
DAVID SOULE P.E. #14522		SHEET # —
		JOB # 21701