Weighted E Method

Basin	Area (sf)	Area (acres)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	100-Year, 6-Hr. Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
UPLAND	0.00	0.000	0%	0	10%	0.000	40%	0	50%	0.000	0.000	0.000	0.00
NATIVE	16402.00	0.377	80%	0.3012	10%	0.038	10%	0.03765	0%	0.000	0.518	0.016	0.57
ALLOWED	16402.00	0.377	0%	0	10%	0.038	40%	0.15062	50%	0.188	1.448	0.045	1.33
PROPOSED	22593.00	0.519	0%	0	31%	0.161	39%	0.20228	30%	0.156	1.185	0.051	1.59
INCREASE												0.035	
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	Qa= 1.29
Eb= 0.67	Qb= 2.03
Ec= 0.99	Qc= 2.87
Ed= 1.97	Qd= 4.37

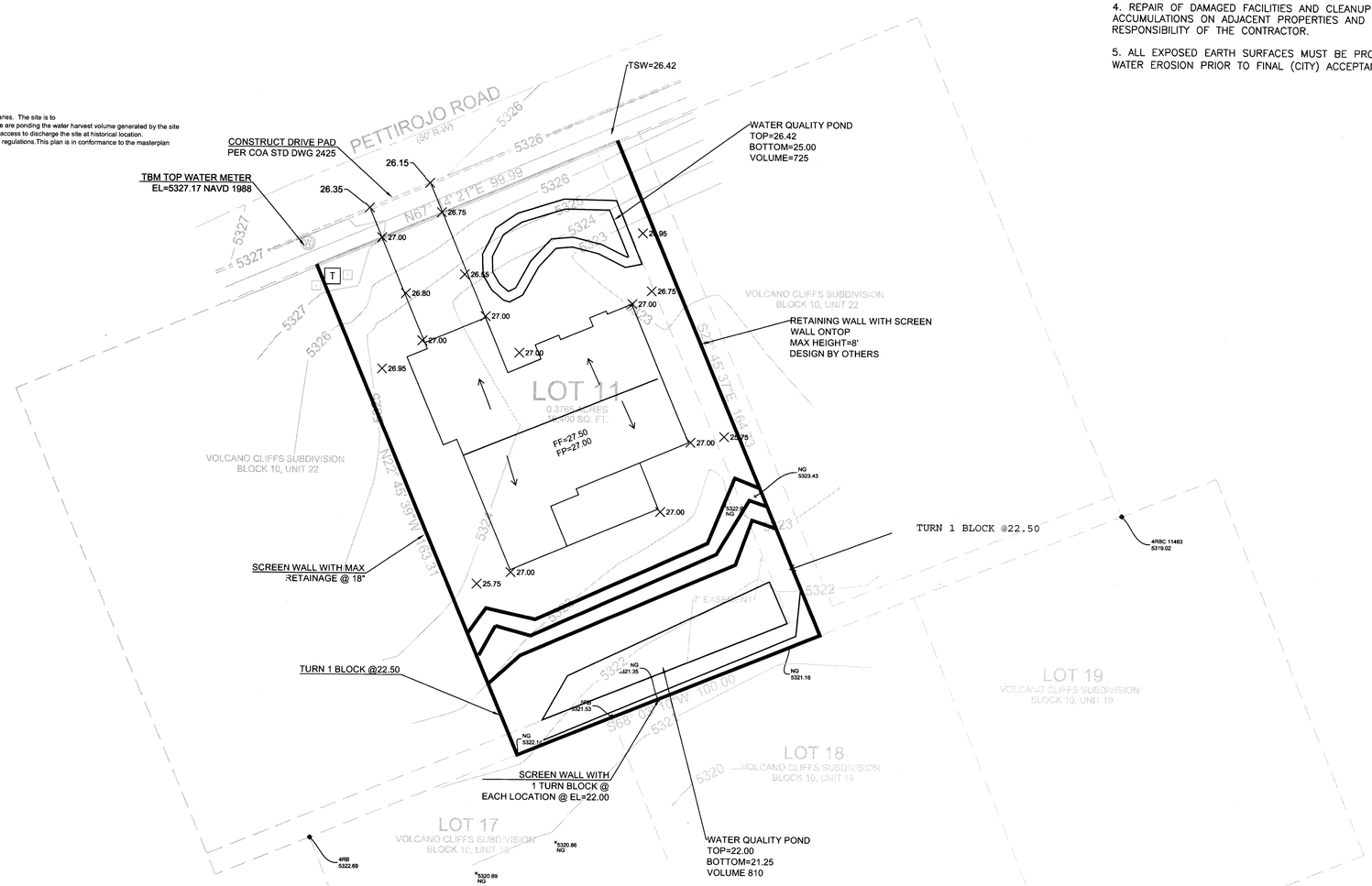
ONSITE Conditions

FIRST FLUSH WATER QUALITY VOLUME

	REQUIRED (CF)	PROVIDED (CF)
WATER QUALITY	192	772
INCREASE FROM NATIVE	1523	1535

Narrative

This site is within the SAD 228 Master Drainage plan boundaries. The site is to drain to the the adjacent lot per the master drainage plan. We are ponding the water harvest volume generated by the site we are ponding the increased volume and flow and allowing access to discharge the site at historical location. This plan has a shallow water harvest pond per the drainage regulations.This plan is in conformance to the masterplan



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.

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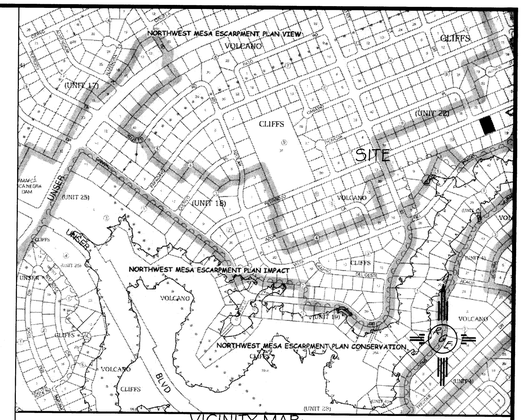
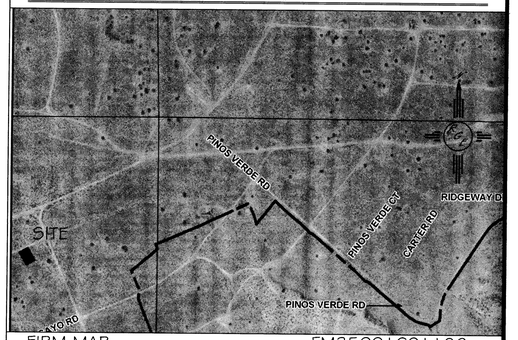


VICINITY MAP:



FIRM MAP: FM35001C0112G

LEGAL DESCRIPTION:

LOT 11, BLOCK 10, UNIT 22, VOLCANO CLIFFS

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THIS PLAN WAS OBTAINED BY CONSTRUCTION SURVEY TECHNOLOGIES, DAVID ACOSTA PLS 20811, DATED DECEMBER 2015

LEGEND

- 5411 — EXISTING CONTOUR
- 5410 — EXISTING INDEX CONTOUR
- 5411 — PROPOSED CONTOUR
- 5410 — PROPOSED INDEX CONTOUR
- FLOW DIRECTION—SWALE
- PROPOSED SPOT (FLOW—LINE)

N

GRAPHIC SCALE

20 10 0 10 20

SCALE: 1"=10'

RECEIVED
DEC 15 2015
LAND DEVELOPMENT SECTION

ENGINEER'S SEAL	LOT 11, BLOCK 10, UNIT 22 VOLCANO CLIFFS SUBDIVISION	DRAWN BY JDG
DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER 12/14/15 DAVID SOULE P.E. #14522	GRADING AND DRAINAGE PLAN	DATE 12-14-2015
	Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	SHEET # 1 OF 1
		JOB #

I David Soule, NMPE 14522 , of the firm Rio Grande Engineering, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intend of the approved plan dated12/23/15The record information edited on the original design document has performed by me or under my direct supervision and is true and correct to the best of my knowledge and belief. The as-built survey was provided DAVID ACOSTA NMPS 21082. The certification is submitted in support of a request for PERMANENT CERTIFICATE OF OCCUPANCY. The record information presented heron is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on this record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

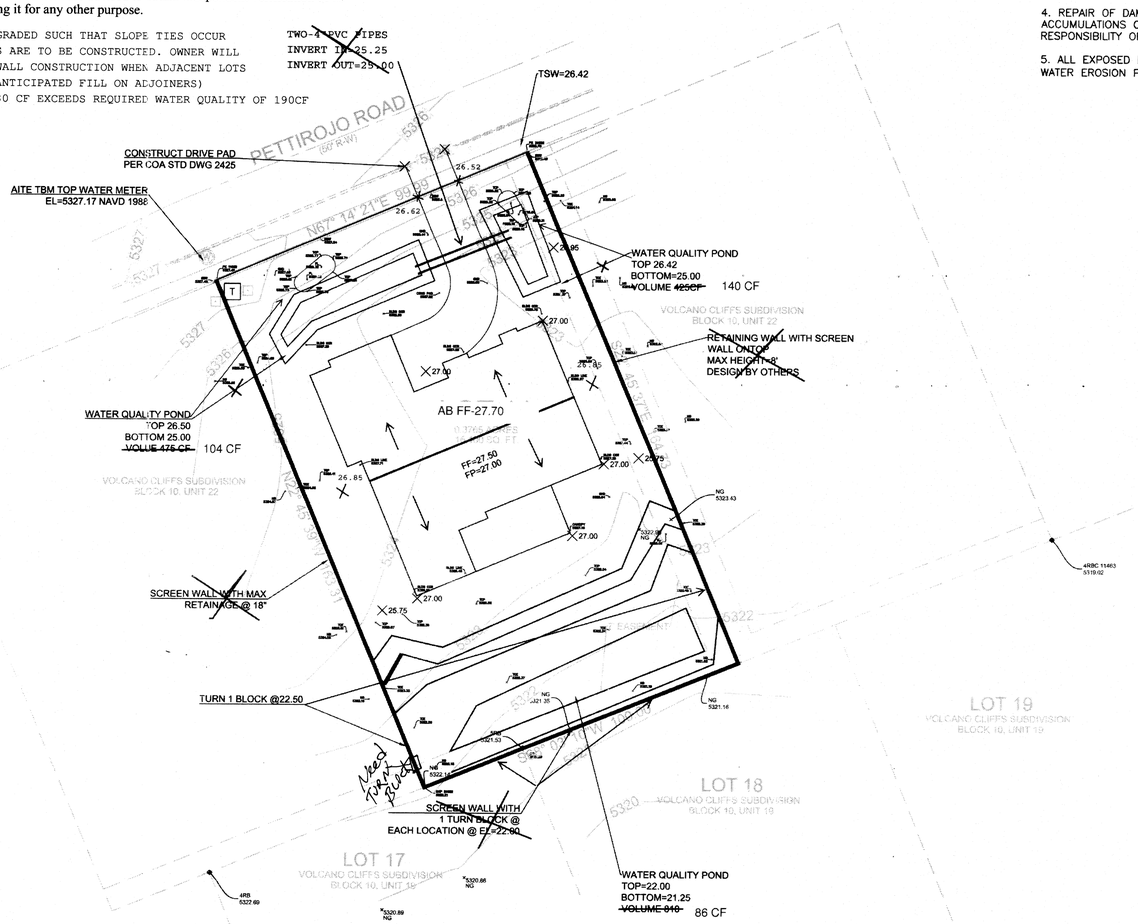
EXCEPTIONS

1.THE SITE WAS GRADED SUCH THAT SLOPE TIES OCCUR ONSITE, NO WALLS ARE TO BE CONSTRUCTED. OWNER WILL PARTICIPATE IN WALL CONSTRUCTION WHEN ADJACENT LOTS DEVELOP(DUE TO ANTICIPATED FILL ON ADJOINERS)

2. PONDING OF 330 CF EXCEEDS REQUIRED WATER QUALITY OF 190CF

DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER

6/29/16



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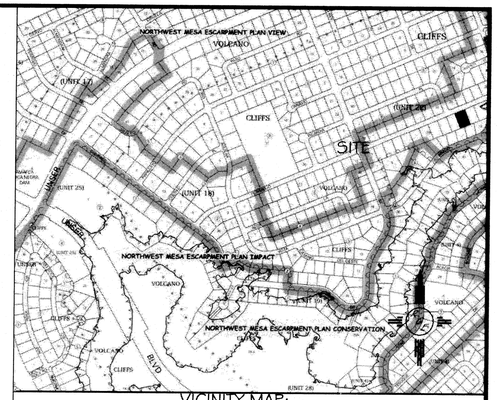

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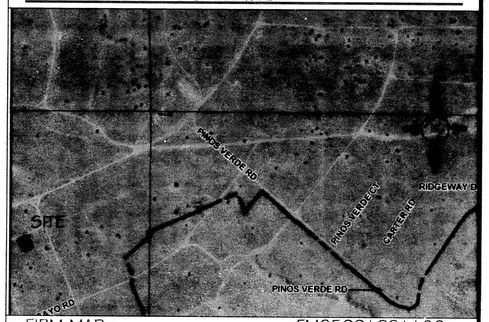

FIRM MAP: FM35001C0112G

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LEGEND

- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- PROPOSED INDEX CONTOUR
- FLOW DIRECTION-SWALE
- PROPOSED SPOT (FLOW-LINE)

N

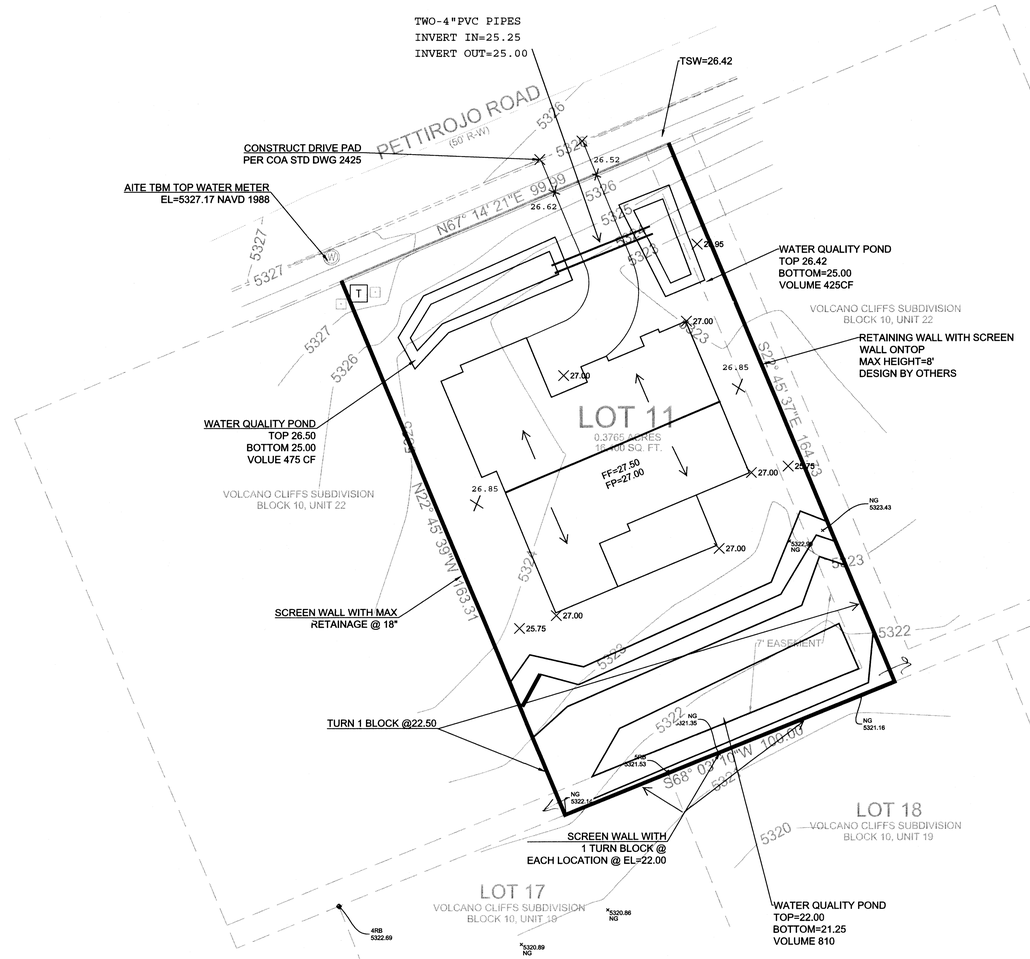
GRAPHIC SCALE

20 10 0 10 20

SCALE: 1"=20'

RECEIVED
JUN 29 2016
LAND DEVELOPMENT SECTION

ENGINEER'S SEAL DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER 12/23/15 DAVID SOULE P.E. #14522	LOT 11, BLOCK 10, UNIT 22 VOLCANO CLIFFS SUBDIVISION GRADING AND DRAINAGE PLAN Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	DRAWN BY JDG DATE 12-23-2015 SHEET # 1 OF 1 JOB #



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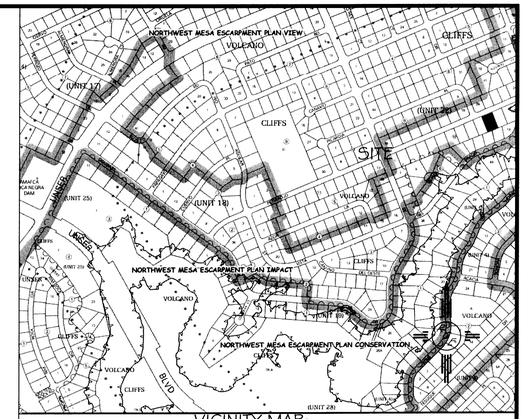

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LEGEND

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- EXISTING INDEX CONTOUR (5410)
- PROPOSED CONTOUR (5411)
- PROPOSED INDEX CONTOUR (5410)
- FLOW DIRECTION–SWALE
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SCALE: 1"=20'

RECEIVED
DEC 24 2015
LAND DEVELOPMENT SECTION

ENGINEER'S SEAL

DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER

12/23/15

DAVID SOULE
P.E. #14522

LOT 11, BLOCK 10, UNIT 22
VOLCANO CLIFFS SUBDIVISION

GRADING AND
DRAINAGE PLAN

Rio Grande Engineering
1606 CENTRAL AVENUE SE
SUITE 201
ALBUQUERQUE, NM 87106
(505) 872–0999

DRAWN BY JDG

DATE 12–23–2015

SHEET # 1 OF 1

JOB #