

AZOR

Weighted E Method

Basin	Area		Treatment A		Treatment B		Treatment C		Treatment D		Weighted		100-Year, 6-hr.	
	(sf)	(acres)	(sf)	(acres)	(sf)	(acres)	(sf)	(acres)	(sf)	(acres)	(sf)	(acres)	(ac-ft)	(ac-ft)
NATIVE	14000.00	0.321	80%	0.257	10%	0.032	10%	0.032	0%	0.000	0.518	0.014	0.49	
ALLOWED	14000.00	0.321	0%	0	10%	0.032	40%	0.129	50%	0.161	1.448	0.039	1.14	
PROPOSED	14000.00	0.321	0%	0	28%	0.090	40%	0.129	32%	0.103	1.214	0.033	1.00	
UPLAND	50133.00	1.151	0%	0	10%	0.115	40%	0.460	50%	0.575	1.448	0.139	4.07	
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 VOL

REQUIRED

(CF)

WATER QUALITY

PROVIDED

(CF)

321

Narrative

This site is within the SAD 228 Master Drainage plan boundaries. The site is to maintain existing patterns and drain to the the adjacent property per the master drainage plan. We are ponding the water harvest volume generated by the site we are allowing the upland flow to pass thru the site. This plan has a shallow water harvest pond in excess of the drainage regulation. The upland flow is such that the pad was raised and additional turn-blocks provided to allow flow to pass thru site. This plan is in conformance to the master drainage plan

BLOCK 11 UNIT 18  
VOLCANO CLIFFS SUBDIVISION

SITE TBM  
PROVIDED BY CSTI  
#5 REBAR  
EL=5325.03  
NAVD 1988

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 (CITY) ACCEPTANCE OF ANY PROJECT.

LOT 6  
BLOCK 5 UNIT 19  
VOLCANO CLIFFS SUBDIVISION

LOT 5  
BLOCK 5 UNIT 19  
VOLCANO CLIFFS SUBDIVISION

LOT 4  
BLOCK 5 UNIT 19  
VOLCANO CLIFFS SUBDIVISION

SCREEN WALL WITH 18"  
MAX RETAINAGE  
TURN BLOCK EVERY 24'  
FOR LOT CROSS DRAINAGE  
Within 20' of road. 3" above grade. 9/13/16

SCREEN WALL  
TURN BLOCK  
EVERY 24' FOR  
CROSS LOT DRAINAGE, within 20' of road  
3" above grade. 9/13/16

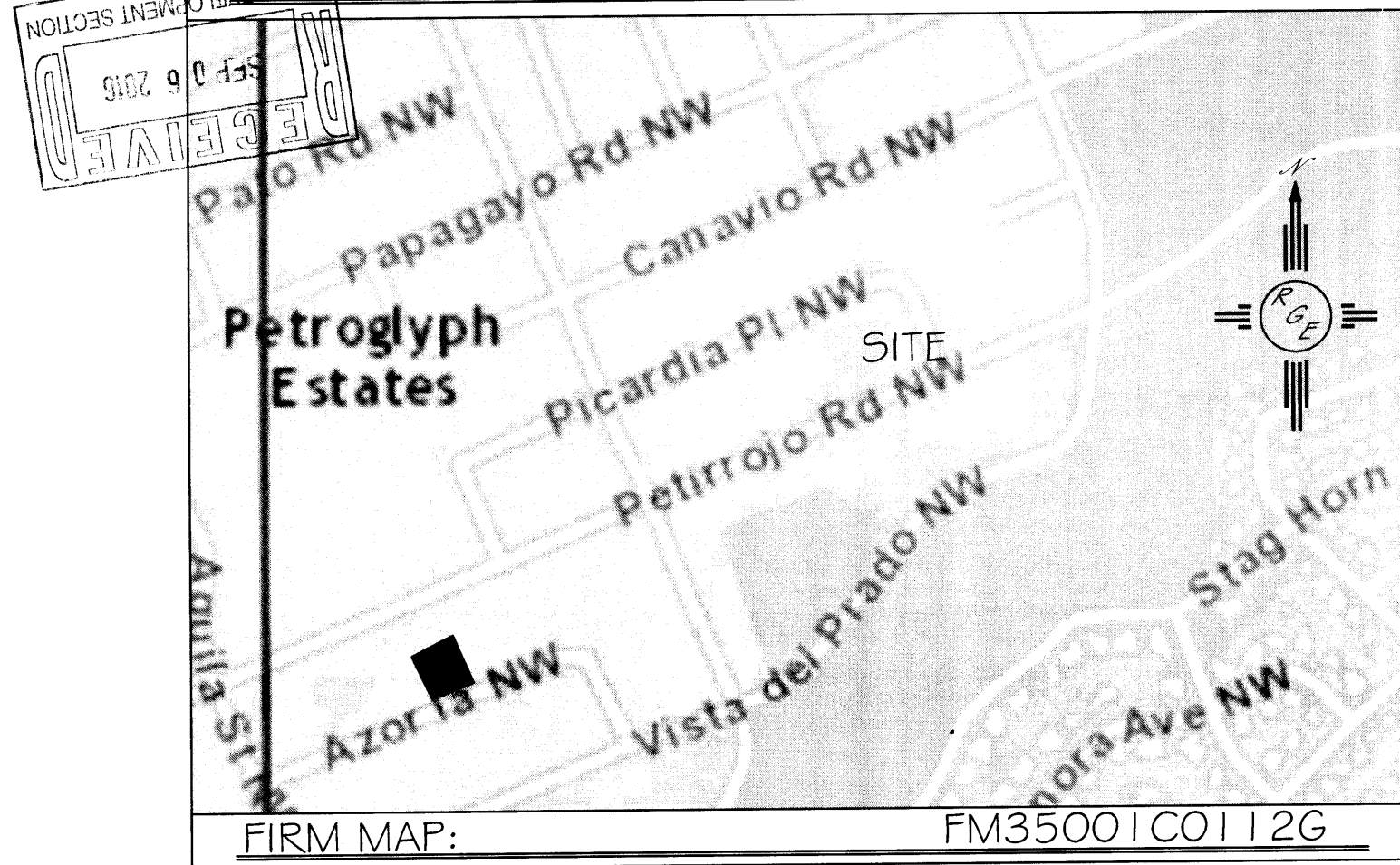
WATER QUALITY POND  
TOP=22.36  
BOTTOM=21.50  
VOLUME=321 CF

SITE DISCHARGE POINT  
OVER SIDEWALK  
EL=5322.36

Point Table				
Point #	Elevation	Northing	Easting	Description
1163	5325.03	1515903.82	1500704.49	4RB
1214	5322.79	1515866.36	1500611.77	4RB
1232	5321.56	1515723.06	1500697.61	SA MH
1235	5328.30	1515835.72	1500976.75	SAS MH

AZOR LANE  
(50' R/W)

VICINITY MAP:



LEGAL DESCRIPTION:

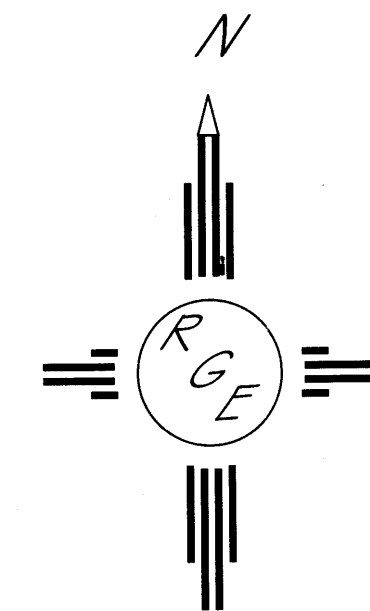
LOT 5, BLOCK 5, UNIT 19, VOLCANO CLIFFS SUBDIVISION

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 21061, APRIL 2016


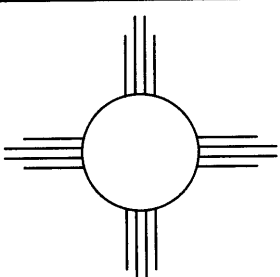
LEGEND

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



GRAPHIC SCALE

0 5 10  
FEET

ENGINEER'S SEAL	LOT 5, BLOCK 5, UNIT 19 VOLCANO CLIFFS SUBDIVISION	DRAWN BY JDG
		DATE 09-04-2016
9/6/16	 <i>Rio Grande</i> <i>E</i> ngineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	SHEET #  1 OF 1
DAVID SOULE P.E. #14522		JOB #



AZOR

Weighted E Method

Basin	Area (sf)	Area (acres)	Treatment A % (acres)	Treatment B % (acres)	Treatment C % (acres)	Treatment D % (acres)	Weighted (ac-ft)	Volume (ac-ft)	Flow cfs
NATIVE	14000.00	0.321	80%	0.257	10%	0.032	10%	0.032	0.49
ALLOWED	14000.00	0.321	0%	0%	10%	0.032	40%	0.1286	1.14
PROPOSED	14000.00	0.321	0%	0%	28%	0.090	40%	0.1286	1.00
UPLAND	50133.00	1.151	0%	0%	10%	0.115	40%	0.4634	4.37
total								0.375	1.448

EQUATIONS:

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

Volume = Weighted D \* Total Area

Flow = Qa \* As + 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= 2.97  
Qd= 4.37

ONSITE Conditions

FIRST FLUSH WATER QUALITY VOL

WATER QUALITY

REQUIRED  
(CF)  
127

PROVIDED  
(CF)  
321

Narrative

This site is within the SAD 228 Master Drainage plan boundaries. The site is to maintain existing patterns and drain to the adjacent property per the master drainage plan. We are ponding the water harvest volume generated by the site we are allowing the upland flow to pass thru the site. This plan has a shallow water harvest pond in excess of the drainage regulation. The upland flow is such that the pad was raised and additional turned-blocks provided to allow flow to pass thru site. This plan is in conformance to the master drainage plan

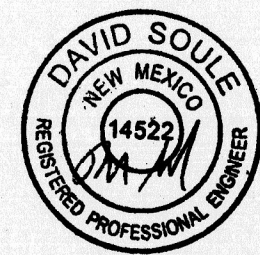
BLOCK 11 UNIT 18  
VOLCANO CLIFFS SUBDIVISION

SITE TBM  
PROVIDED BY CSTI  
#5 REBAR  
EL=5325.03  
NAVD 1988

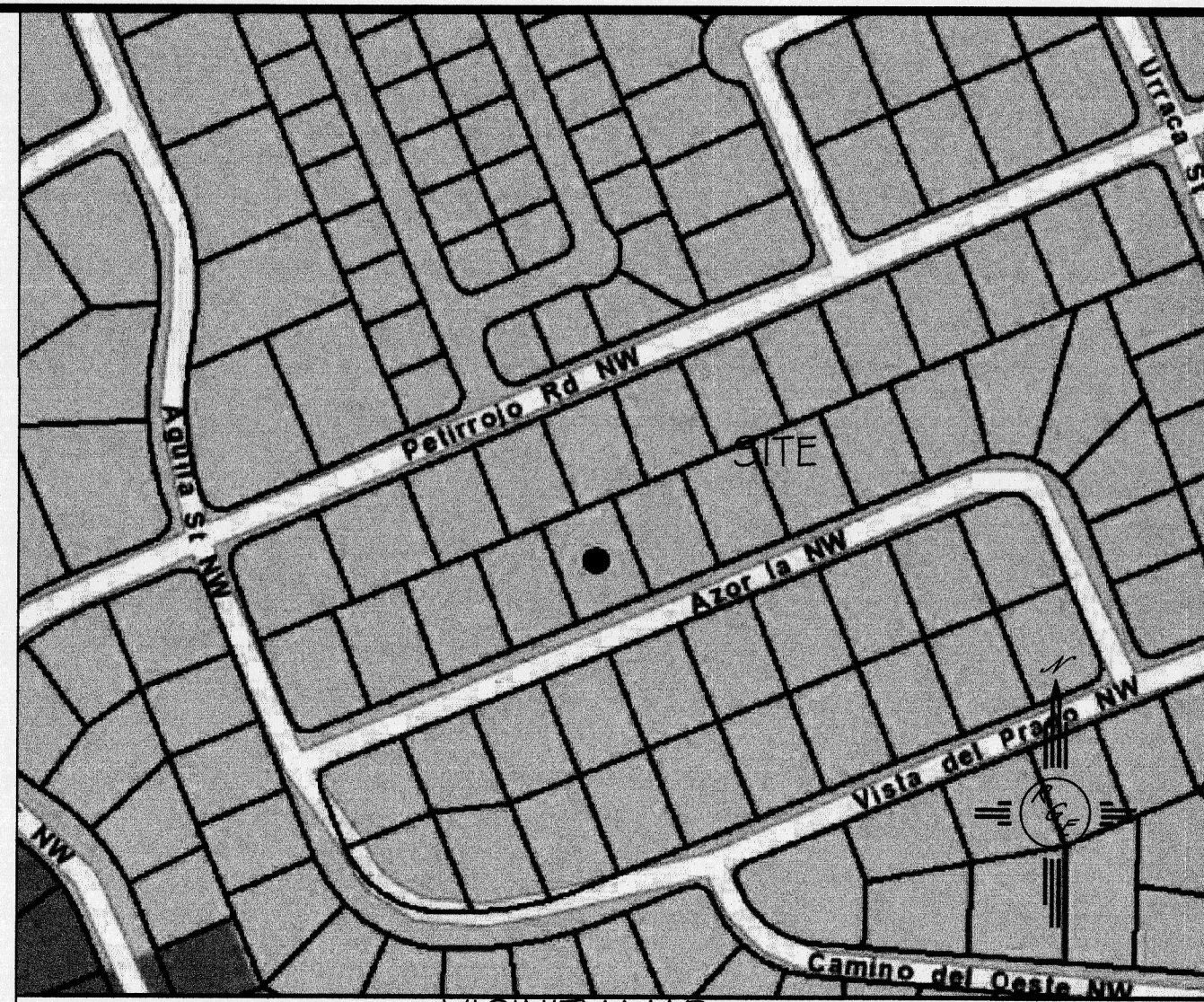
EROSION CONTROL NOTES:

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 (CITY) ACCEPTANCE OF ANY PROJECT.

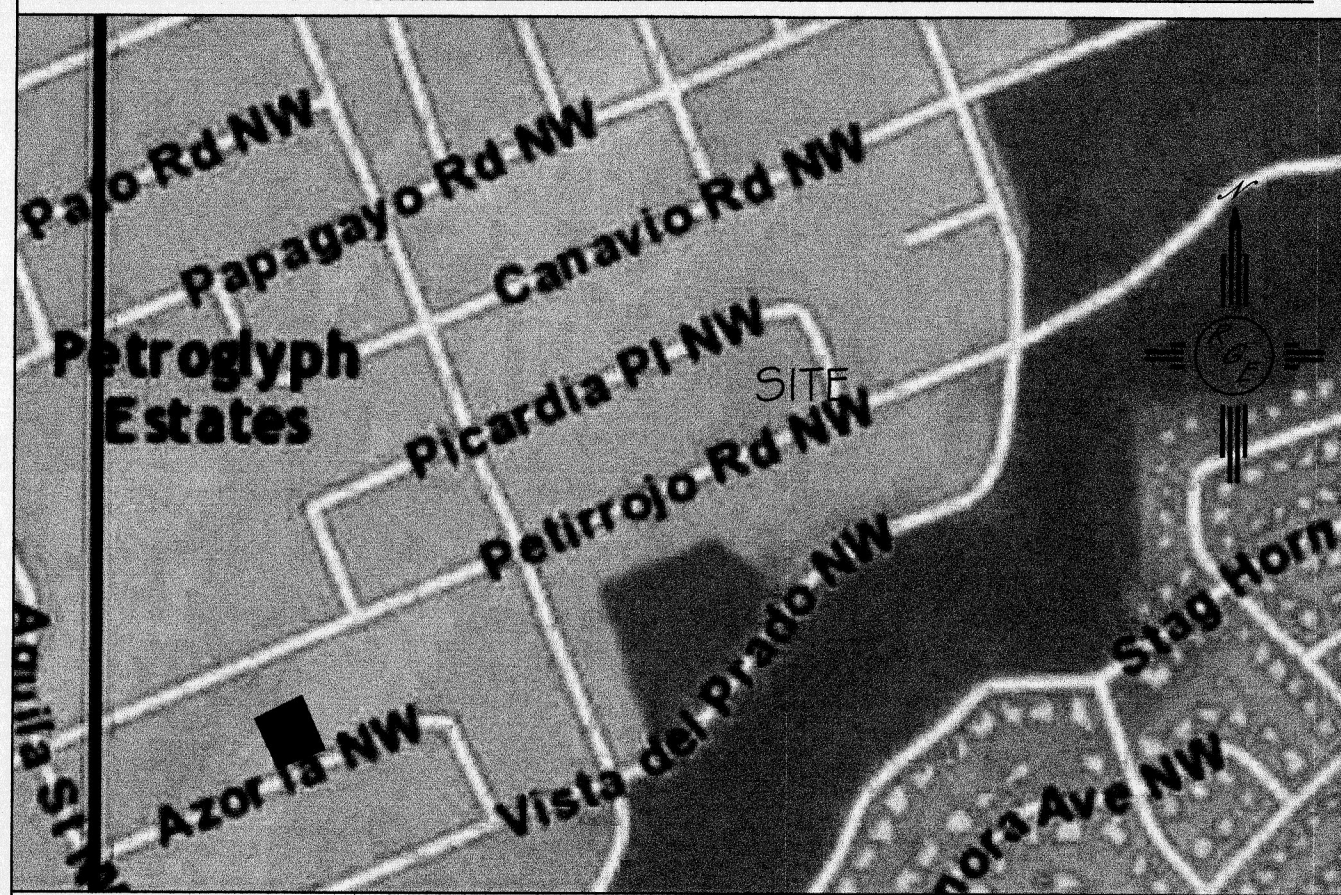
I David Soule, NMPE 14522, of the firm Rio Grande Engineering, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intend of the approved plan dated 9/6/16. The record information edited on the original design document has performed 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.



3/10/17



VICINITY MAP:



FIRM MAP:

FM35001C0112G

LEGAL DESCRIPTION:

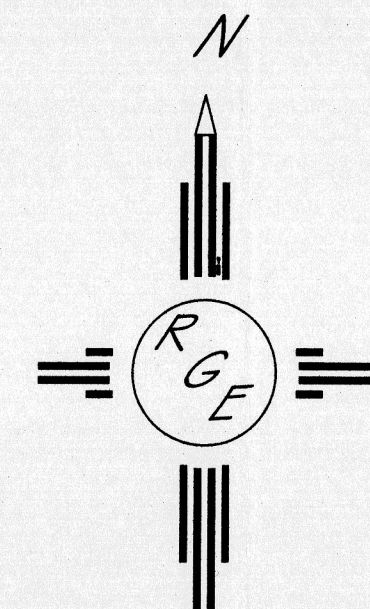
LOT 5, BLOCK 5, UNIT 19, VOLCANO CLIFFS SUBDIVISION

NOTES:

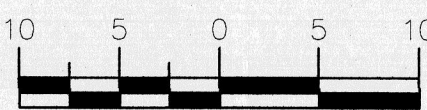
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THIS PLAN WAS OBTAINED BY CONSTRUCTION SURVEY TECHNOLOGIES, DAVID ACOSTA PLS 21081, APRIL 2016

LEGEND

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



GRAPHIC SCALE



SCALE: 1"=10'

SCREEN WALL WITH 18" MAX RETAINAGE TURN BLOCK EVERY 24' FOR LOT CROSS DRIANAGE

LOT 4  
BLOCK 5 UNIT 19  
VOLCANO CLIFFS SUBDIVISION

LOT 5  
BLOCK 5 UNIT 19  
VOLCANO CLIFFS SUBDIVISION

SCREEN WALL  
TURN BLOCK  
EVERY 24' FOR  
CROSS LOT DRAINAGE

WATER QUALITY POND  
TOP=22.36  
BOTTOM=21.50  
VOLUME=321 CF  
187 CF TOTAL ONSITE

CURB AND GUTTER

SITE DISCHARGE POINT  
OVER SIDEWALK  
EL=5322.36

AZOR LANE  
(50' RW)

Point Table				
Point #	Elevation	Northing	Easting	Description
1163	5325.03	1515903.82	1500704.49	4RB
1214	5322.79	1515866.36	1500611.77	4RB
1232	5321.56	1515723.06	1500697.61	SA MH
1235	5328.30	1515835.72	1500976.75	SAS MH

SITE TBM/  
RIM=5321.56  
NAVD 1988