Weighted E Method

PETIRROJO

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 (ac-ft)	Volume (ac-ft)	Flow cfs
NATIVE	21052.00	0.483	80%	0.387	10%	0.048	10%	0.0483	0%	0.000	0.518	0.021	0.74
ALLOWED	21052.00	0.483	0%	0	10%	0.048	40%	0.1933	50%	0.242	1.448	0.058	1.71
PROPOSED	21052.00	0.483	0%	0	28%	0.135	30%	0.145	42%	0.203	1.312	0.053	1.58
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 Conditons
FIRST FLUSH WATER QUALITY VOLUME

	REQUIRED (CF)	PROVIDED (CF)
WATER QUALITY	251	523

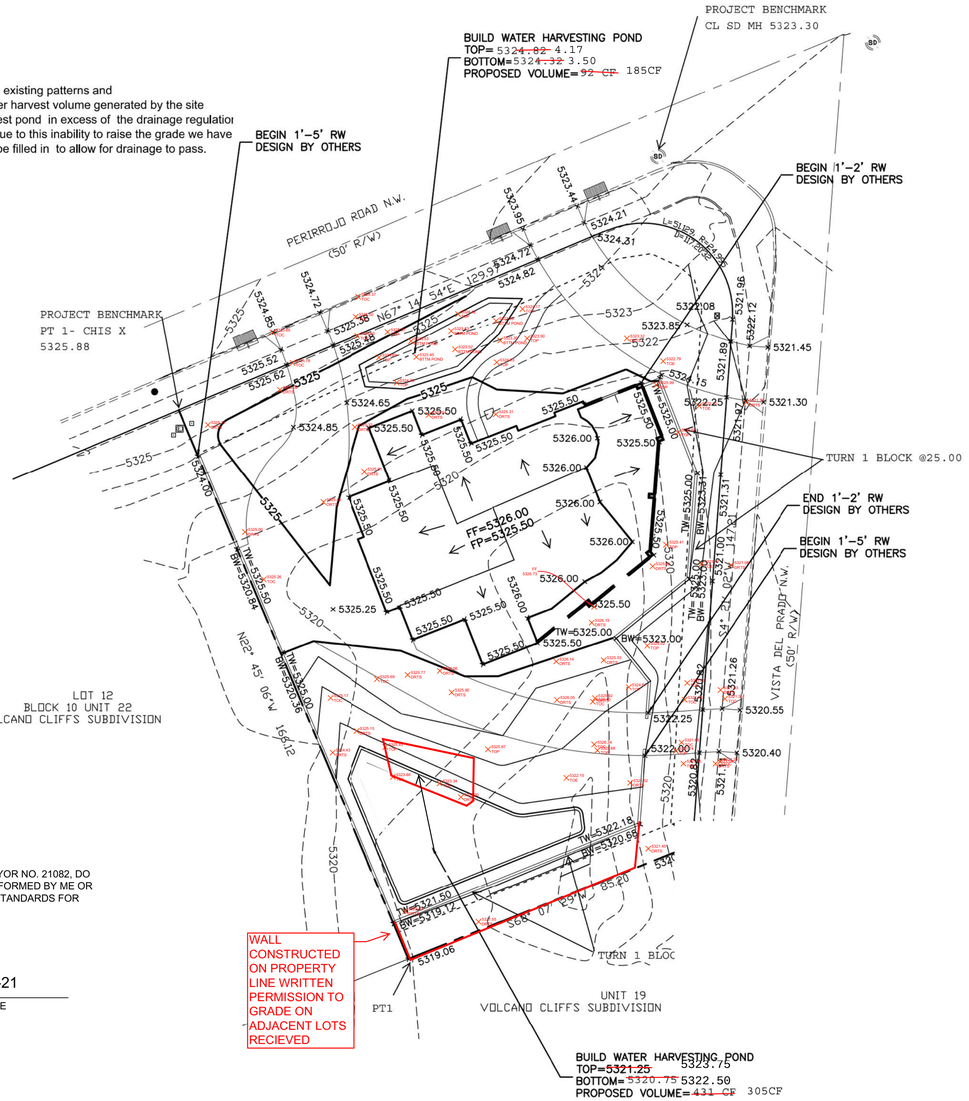
Narrative

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 regulatio The upland flow is such that rear will not drain without grading on adjacent properties. Due to this inability to raise the grade we have placed wall to allow for upland flow to enter the site. In ultimate conditions this area can be filled in to allow for drainage to pass.
This plan is in conformance to the master drainage plan

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 3/22/17 . 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 by DAVID ACOSTA NMPLS # 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

DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER

5/11/21



Point Table				
Point #	Elevation	Northing	Easting	Description
1	5325.88	1516849.03	1502605.42	CHIS X
2	5320.90	1516727.58	1502748.74	4RBC 11463
3	5319.06	1516695.83	1502669.67	4RBC 11463
4	5321.96	1516874.36	1502759.90	4RBC 11463
5	5324.21	1516899.29	1502725.27	CHIS X
1101	5323.63	1516881.63	1502726.10	4RBC 11463

SURVEYOR'S CERTIFICATE:

I, DAVID P ACOSTA, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21082, DO HEREBY CERTIFY THAT THIS AS-BUILT SURVEY WAS PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO

DAVID P. ACOSTA NEW MEXICO 21082 PROFESSIONAL SURVEYOR

05-10-21

DAVID P. ACOSTA, NMPLS NO. 21082 — DATE

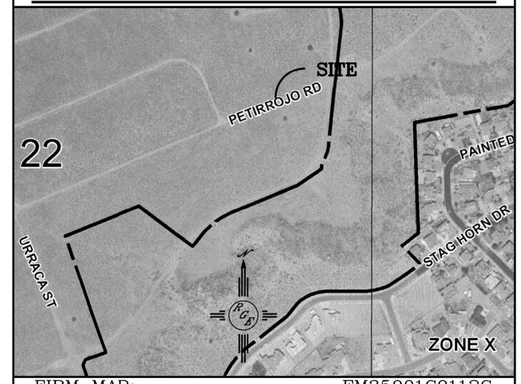
CAUTION:

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: D-10-Z



FIRM MAP: FM35001C0112G

LEGAL DESCRIPTION:

LOT 13, BLOCK 10 UNIT 22

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. ALL WALLS SHALL BE CONSTRUCTED UNDER SEPARATE PERMIT. WALLS MUST CONFORM TO THIS PLAN AND PLAN SHALL BE SUBMITTED FOR WALL PERMIT.
4. **AFTER GRADING IS COMPLETE A PAD CERTIFICATION IS REQURIED PRIOR TO RELEASE OF BUILDING PERMIT.**
5. SURVEY OBTAINED BY CONSRUCTION SURVEY TECHNOLOGIES. THE DATUM FOR SURVEY IS NAVD 1988

LEGEND

- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- PROPOSED INDEX CONTOUR
- SLOPE TIE
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY
- EXISTING CURB AND GUTTER
- PROPOSED CMU SCREEN WALL

N

RGE

20 10 0 10 20

SCALE: 1"=20'

ENGINEER'S SEAL	6300 PERIRROJO	DRAWN BY WCWJ
DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER 3/22/17		DATE 3-20-17
	GRADING AND DRAINAGE PLAN	21721-LAYOUT-3-20-17
	Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	SHEET # —
DAVID SOULE P.E. #14522		JOB # 21721