CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



October 11, 2018

Richard Dourte, P.E. RHD Engineering LLC 4305 Purple Sage Ave. NW Albuquerque, New Mexico 87120

RE: Lot 7A1 & 6A1 Block 9 Unit 18 SAD 228

6536 Papagayo Rd. NW Volcano Cliffs Subdivision Grading and Drainage Plan

Engineers Stamp Date; 7/25/18 (D10D003I7)

Pad Certification Date; 10/4/18

Dear Mr. Dourte,

Based upon the information provided in your submittal received 10/10/18, this plan is approved for Building Permit.

PO Box 1293

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained, with the approved G&D plan.

Albuquerque

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist of this plan will be required.

NM 87103

If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

www.cabq.gov

Sincerely,

James D. Hughes, P.F.

Principal Engineer, Hydrology

Planning Department

RR/JDH

C: File D10D00I7



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

| | Hydrology File #: D10D00317 Work Order# | | | |
|--|---|--|--|--|
| | o Cliffs Sub'd (SAD 228) | | | |
| | | | | |
| | Contact: _Richard Dourte | | | |
| | | | | |
| _Fax#: | E-mail: rhdengineering@outlook.com | | | |
| | Contact: Diego Candelaria | | | |
| | | | | |
| _ Fax#: | E-mail:diego.candelariahomes@gmail.com | | | |
| | DRB SITE ADMIN SITE | | | |
| No | | | | |
| X HYDROLOGY/DRAINA | AGE | | | |
| X BUILDING CERTIFIC PRELIMIN SITE PLAN SITE PLAN FINAL PL SIA/ RELE FOUNDAT GRADING SO-19 API PAVING F GRADING GRADING WORK OR CLOMR/L | PERMIT APPROVAL G/PAD CERTIFICATION DER APPROVAL | | | |
| | EPC#: Block 9, Unit 18, Volcan Fax#: Fax#: # of lots) X RESIDENCE No X HYDROLOGY/DRAINA TYPE OF APP X BUILDING CERTIFIC PRELIMIN SITE PLA SITE PLA FINAL PL POUNDA' GRADING SO-19 AP PAVING 1 GRADING WORK OR | | | |

FEE PAID:_____

RHD Engineering, LLC

Richard H. Dourte 4305 Purple Sage Ave. NW Albuquerque, NM 87120 (505)288-1621 rhdengineering@outlook.com

October 10, 2018

Ms. Renee Brissette, PE Senior Engineer, Planning Department Development Review Services 600 Second Street City of Albuquerque, NM 87102

RE: 6536 Papagayo NW, (D12D00317)

Dear Ms. Brissette,

Thank you for your comments dated October 5, 2018 (copy enclosed) regarding the project referenced above. Your issues have been addressed as follows:

1. The dirt ramp in the street and the dirt on the sidewalk has been removed. Please see attached picture.

If you have any questions, please feel free to call me at 288-1621.

Sincerely,

Richard Dourte, PE RHD Engineering, LLC

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



October 5, 2018

Richard Dourte, P.E. RHD Engineering LLC 4305 Purple Sage Ave. NW Albuquerque, New Mexico 87120

RE: Lot 3 Block 3 Unit 22 SAD 228

6536 Papagayo NW Volcano Cliffs Subdivision Grading and Drainage Plan

Engineers Stamp Date; 7/25/18 (D10D003I17)

Pad Certification Date: 10/4/18

Dear Mr. Dourte,

Based upon the information provided in your submittal received 10/4/18, this plan cannot be approved for Building Permit until the following comment is addressed.

PO Box 1293

Remove the dirt from the street and the public sidewalk. Explain to the contractor
that dirt curb ramps are not allowed in the street. Use lumber, gravel or a pavement
base for this ramping.

Albuquerque

If you have any questions, please contact me at 924-3995 or Rudy Rael at 924-3977.

NM 87103

Sincerely,

www.cabq.gov

Renee Brissette, P.E. Senior Engineer, Hydrology Planning Department

Renée Bressett

RR/RB

C: File D10D003I17



DRAINAGE NARRATIVE:

- . THIS SITE IS LOCATED WITHIN THE SAD 228 DRAINAGE MASTER PLAN AREA.
- 2. THIS SITE IS TO DRAIN IN A WESTERLY DIRECTION, PER THE SAD 228 DRAINAGE MASTER PLAN. 3. THE ALLOWABLE 100YR, 6HR FLOWS FROM THIS SITE IS 3.84CFS, THE FLOWS GENERATED BY
- THIS SITE IS 3.45CFS. THE VOLUME OF THE FIRST FLUSH POND IS 690CF, THIS IS
- GREATER THAN THE REQUIRED PONDING OF 479CF. I. WEIR EQUATION FOR EACH CELL OF A 8" CMU BLOCK:
- Q=CL(H)1.5 C=3.21

L= 5"

THUS Q=0.36CFS, OR .72CFS PER BLOCK.

THUS 2 BLOCKS (1.44CSF) NEED TO BE TURNED.

5. THE OFFSITE FLOWS THAT THIS SITE IS REQUIRED TO ACCEPT IS FROM LOT 9, 0.36 AC AND THE PERMISSIBLE DEVELOPED FLOWS ARE 1.27 CFS, PER THE SAD 228 DRAINAGE PLAN. THE NUMBER OF CELLS NEEDED TO ALLOW THESE FLOWS TO PASS ARE 1.27/.72=1.76 BLOCKS

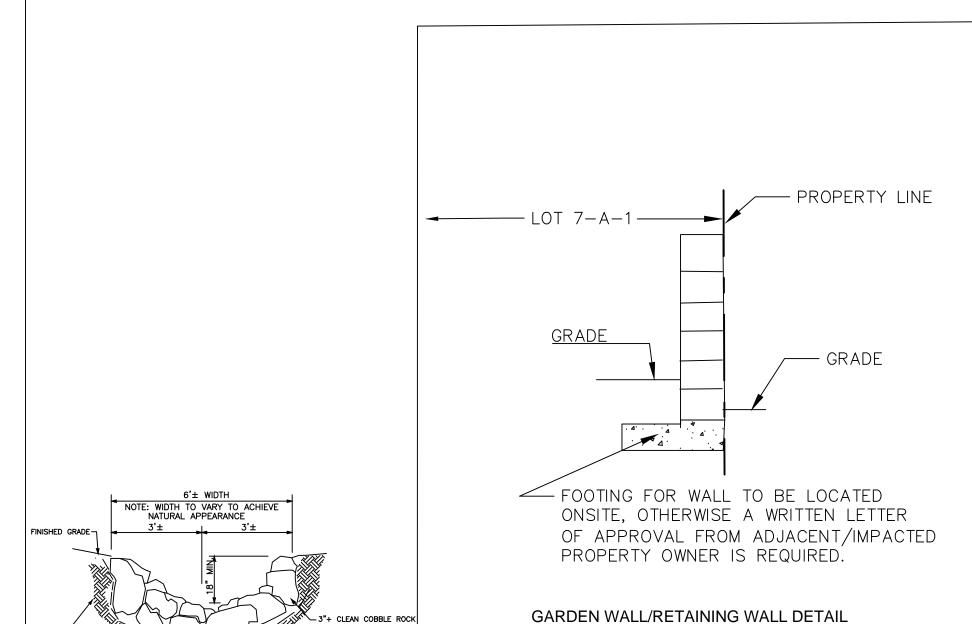
| Г | :- | | | Project: 65 | 36 Papag | ayo | | | | | | |
|---|--|---|---|------------------------|--------------|--|---------------------------------------|--|--|---|----------|--|
| | | | Dra | ainage Calc | ulations - I | Zone 1 | | | | | | |
| | : | | Total Lot | Area (ac) = | 1.0854 | | | | | | l | |
| | | Total Of | fsite Flow Ar | rea (ac)= | 0.36 | | | | | | | |
| | Denth | (inches) a | t 100vr Sto | rm | | | Exces | s Preci | piation, | E(inches) | - 6 HR | |
| | Depth (inches) at 100yr Storm | | | | | Treatment | | | | | | |
| Zone | P60 | P360 | P1440 | P _{4days} | P10days | | Zone | Α | В | С | D | |
| 1 | 1.87 | 2.20 | 2.66 | 3.12 | 3.67 | | 1 | 0.44 | 0.67 | 0.99 | 1.97 | |
| | //E . A . \ . /E | | \ \ \ /E \ A \\ | // | | 1 | | D: 1 | /05 | C / A CD E \ A | 100 1/0 | |
| Veighted E= | | | Ac)+(ED*AD)), | /(AA+AB+AC | +A D) | | Peak Discharge (CFS/ACRE) 100 YR | | | | | |
| /360=(Weight | - | | | | | | Zono | Λ Ι | B I re | atment C | D | |
| 1440= V360+A 4days=V360+A | | • | | | | | Zone 1 | A 1.29 | 2.03 | 2.87 | 4.37 | |
| 10days= V 360+A | | | | | | | 1 | 1.29 | 2.03 | 2.07 | 4.37 | |
| 10days – v 360 – 7 | AD (Fludays- | F 360 J/ 12111 | /11 | | | | | | | | | |
| | | | | | | 1 | | | | | | |
| UPST | TREAM FLO | NS= (10%E | 3+40%C+509 | %D)x area= | 1.27CFS | | | | | | | |
| | | | | | | | | | | | | |
| **** | ****** | ***** | ***SAD 228 | Permittab | le Design (| Condition | ons**** | ***** | ***** | ****** | ** | |
| | | | | i | | | | | | | | |
| Area | SQ. F | -T | Acres | | | | | | Flows (| | | |
| (0%)A= | 0 | | 0.000 | | | Area | | Acres | Peak D | ischarge | (100 YR) | |
| (10%)B= | 472 | | 0.109 | | | A= | | 0.000 | | 0.00 | | |
| (40%)C= | 1891 | | 0.434 | | | B= | | 0.109 | | 0.22 | | |
| (50%)D= | 2364 | | 0.543 | | | C= | 18912 | | | 1.25 | | |
| · · · | | Ω. | 1.085 | | | D= | 23640 | 0.543 | | 2.37 | | |
| Total | 4728 | | | | | | | | | | | |
| · · · | | | 148 | | | Т | otal (CFS |) | | 3.84 | | |
| Total | ed E= | 1.4 | | | | | otal (CFS |) | | | | |
| Total Weighte | ed E= V366 | 1.4 | 148 V1 | | | V4days | otal (CFS |) | V10day | s | | |
| Total Weighte | ed E= V360 5705 | 1.4 0 .1 | V ₁ , 661 | .1.3 | | V4days 7517.5 | otal (CFS |) | 8601.0 | s | | |
| Total Weighte | ed E= V366 | 1.4 0 .1 | 148 V1 | .1.3 | | V4days | otal (CFS |) | | s | | |
| Total Weighte | V366 5705 0.13 | 1.4 0 .1 3 | 148 V ₁ 661 0.: | .1.3 15 | • | V _{4days} 7517.5 0.17 | | | 8601.0 0.20 | s) | | |
| Total Weighte | V366 5705 0.13 | 1.4 0 .1 3 | V ₁ , 661 | .1.3 15 | • | V _{4days} 7517.5 0.17 | | | 8601.0 0.20 | s) | | |
| Total Weighte | V366 5705 0.13 | 1.4 0 .1 3 | 148 V ₁ 661 0.: | .1.3 15 | • | V _{4days} 7517.5 0.17 | | | 8601.0 0.20 | s) | | |
| Total Weighte | V366 5705 0.13 | 1.4 0 .1 3 ****** | 148 V ₁ 661 0.: | .1.3 15 | • | V _{4days} 7517.5 0.17 | ***** | **** | 8601.0 0.20 | s) ** | | |
| Total Weighte | V366 5705 0.13 | 1.4 0 .1 3 ****** | V1. 661 0.: | .1.3 15 | • | V4days 7517.5 0.17 NS**** | ****** SQ. FT | ****** Design Acres | 8601.0 0.20 ****** | s) ** | (100 YR) | |
| Total Weighte ubic feet .cre-ft Area | V360 5705 0.13 ******* | 1.4 0 .1 3 ****** | V1. 661 0.: ********* Acres | .1.3 15 | • | V4days 7517.5 0.17 NS**** | ****** SQ. FT | ****** Design | 8601.0 0.20 ****** | s) ** | (100 YR) | |
| Total Weighte ubic feet .cre-ft Area A= | V366 5705 0.13 ******* SQ. F 0 500 2978 | 1.4 0 1 3 ********************************* | 148 V1. 661 0.: *********************************** | .1.3 15 | • | V4days 7517.5 0.17 NS**** | ****** SQ. FT 0 5000 | ****** Design Acres 0.000 0.115 | 8601.0 0.20 ****** | ** CFS) Discharge 0.00 0.23 | (100 YR) | |
| Total Weighte ubic feet .cre-ft Area A= B= | V360 5705 0.13 ******** SQ. F | 1.4 0 1 3 ********************************* | V1. 661 0.: ********* Acres 0.000 0.115 | .1.3 15 | • | V4days 7517.5 0.17 VS**** Area A= | ****** SQ. FT 0 5000 29780 | ****** Design Acres 0.000 0.115 0.684 | 8601.0 0.20 ****** | ** CFS) Discharge 0.00 0.23 1.96 | (100 YR) | |
| Total Weighte ubic feet cre-ft Area A= B= C= | V366 5705 0.13 ******* SQ. F 0 500 2978 | 1.4 0 .1 3 ******** -T 0 80 | 148 V1. 661 0.: *********************************** | .1.3 15 | • | V4days 7517.5 0.17 VS**** Area A= B= | ****** SQ. FT 0 5000 | ****** Design Acres 0.000 0.115 0.684 | 8601.0 0.20 ****** | ** CFS) Discharge 0.00 0.23 | (100 YR) | |
| Total Weighte ubic feet .cre-ft Area A= B= C= D= | ed E= V366 5705 0.13 ******* SQ. F 0 5000 2978 1250 4728 | 1.4 0 1 3 ********* 0 80 00 80 | Acres 0.000 0.115 0.684 0.287 | .1.3 15 | • | V4days 7517.5 0.17 VS**** Area A= B= C= D= | ****** SQ. FT 0 5000 29780 | ****** Design Acres 0.000 0.115 0.684 0.287 | 8601.0 0.20 ****** | ** CFS) Discharge 0.00 0.23 1.96 | (100 YR) | |
| Total Weighte ubic feet .cre-ft Area A= B= C= D= Total | ed E= V366 5705 0.13 ******* SQ. F 0 5000 2978 1250 4728 | 1.4 0 1 3 ********* 0 80 00 80 | Acres 0.000 0.115 0.684 0.287 1.085 | .1.3 15 | • | V4days 7517.5 0.17 VS**** Area A= B= C= D= | ****** SQ. FT 0 5000 29780 12500 | ****** Design Acres 0.000 0.115 0.684 0.287 | 8601.0 0.20 ****** | ** CFS) Discharge 0.00 0.23 1.96 1.25 | (100 YR) | |
| Total Weighte ubic feet .cre-ft Area A= B= C= D= Total | ed E= V366 5705 0.13 ******* SQ. F 0 5000 2978 1250 4728 | 1.4 01 3 ******* 0 80 00 80 1.2 | Acres 0.000 0.115 0.684 0.287 1.085 | 1.3 15 ROPOSED C | CONDITION | V4days 7517.5 0.17 VS**** Area A= B= C= D= | ****** SQ. FT 0 5000 29780 12500 | ****** Design Acres 0.000 0.115 0.684 0.287 | 8601.0 0.20 ****** | ** CFS) Discharge 0.00 0.23 1.96 1.25 3.45 | (100 YR) | |
| Total Weighte ubic feet .cre-ft Area A= B= C= D= Total | V366 5705 0.13 ******* SQ. F 0 5000 2978 1250 4728 ed E= | 1.4 0 .1 3 ******* 0 30 00 30 1.2 | Acres 0.000 0.115 0.684 0.287 1.085 | 1.3 15 ROPOSED C | CONDITION | V4days 7517.5 0.17 VS**** Area A= B= C= D= | ****** SQ. FT 0 5000 29780 12500 | ****** Design Acres 0.000 0.115 0.684 0.287 | 8601.0 0.20 ****** Flows (0 Peak D | ** CFS) Discharge 0.00 0.23 1.96 1.25 3.45 | (100 YR) | |

The 100 year peak flows for this developed site is 3.45 CFS and the SAD 228 permissible design flows are

3.84 CFS for an increase of -0.39 CFS.

First Flush Ponding Requirement = AD *0.46 in/12in/ft = 479 CF

COBBLE SWALE



. ANY GARDEN WALL/RETAINING WALL IS TO BE BUILT ON-SITE (DESIGN OF

2. A PERMIT IS REQUIRED FOR THE CONSTRUCTION OF THE RETAINING WALL

AND ANY FUTURE GARDEN WALL. THIS IS THE PLAN TO FOLLOW WHEN

THE GARDEN WALL/RETAINING WALL IS BY OTHERS).

APPLYING FOR A PERIMETER BLOCK 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.

S.O.19 : NOTICE TO CONTRACTORS

- AN EXCAVATION / CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF -WAY.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDICTION AS REVISED THRU UPDATE #8.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (CALL 811) FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIBY THE ENGINEER SO THAT THE CONFLICT CAN BE RESLOVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL SOMPACTION SHALL BE ACCORDING TO TRAFFIC / STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE TE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
- THE WORK IN THE CITY ROW MUST BE INSPECTED AND ACCEPTED. THE CONTRACTOR MUST CONTACT JASON RODRIQUEZ AT 235-8016 AND CONSTRUCTION COORDINATION AT 924-3416 TO SCHEDULE INSPECTIONS.

 $SW = 30.70 \, \text{W}$

ELEV = 5329.8

SW = 30.78

FL = 29.91

FL=30.11 CRB=30.72

SW = 30.83

FIRST FLUSH POND TOP EL=28.4 BOTTOM EL=27.5

CONSTRUCT 1- 24" WIDE SIDEWALK CULVERT(S0-19)

Richard Dourte certify this pad has been constructed in

7-25-18. The pad has been to an elevation of $5332.0\pm$

(survey information obtained from David Acosta, Construction

elevation. Minor adjustments to the grades in the proximity

to the building may be needed. The drainage concept has

substantial conformance with the approved plan dated

constructed approximately 0.3ft lower than the design

Survey Technologies, NMPS 21082). The pad was

PER STD DWG 2236 INV. IN=28.40

10-04-18.

not changed.

POND VOLUME=690CF

REQ'D VOLUME=479CF

INV. OUT=28.10±

FL = 29.30

CRB=29.95+

SW = 30.07

FL=28.52 — CRB=28.57—

SW = 29.18

TG=29.5

CRB = 28.70

FL = 27.84CRB=28.48

FL=28.04

GENERAL NOTES:

- 1. THIS SITE IS NOT LOCATED IN A FEMA FLOOD HAZARD ZONE (REFER TO THE FIRM MAP 35001C0111G, EXCERPT ATTACHED).
- 2. RHD ENGINEERING, LLC RECOMMENDS THAT THE OWNER OBTAIN A GEOTECHNICAL REPORT PRIOR TO DESIGN OF BUILDING FOOTING/FOUNDATION.
- 3. SLOPE STABILAZATION SHALL BE USED ON SLOPES GREATER THAN A 3:1 SLOPE, PER MANUFACTURER RECOMMENDATIONS.
- 4. MODIFICATIONS OR ADJUSTMENTS TO EXISTING DRAINAGE STRUCTURES/EROSION MITIGIATION IMPROVEMENTS SHALL BE DONE IN THE SAME MANNER AS THE ORIGINAL IMPROVEMENT.
- 5. ALL SWPPP REQUIREMENTS SHALL BE ADHERED TO.

OR RETAINING WALLS, WITH RESPECT TO THIS SITE.

- 6. ALL WORK ON THIS PLAN SHALL BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS. ALL APPLICABLE PERMITS SHALL BE OBTAINED PRIOR TO WORK COMMENCING.
- 7. ALL WORK IN THE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS.
- 8. THIS GRADING PLAN IS TO BE UTILIZED AND A COPY PROVIDED TO THE CITY WHEN APPLYING FOR THE CONSTRUCTION OF ANY GARDEN
- 9. THE SURVEY INFORMATION WAS PROVIDED BYCONSTRUCTION SURVEYS TECHNOLOGIES, INC.
- 10. FOR SITE DIMENSIONS, BUILDING AND INFRASTRUCTURE LOCATION REFER TO THE SITE PLAN.

CONSTRUCT 25'± DRIVEWAY AND SDWK

CONSTRUCT 20'± DRIVEWAY AND SDWK

CRB=31.23

FL = 30.61 -

AND SDWK PER STD DWGS

2405,2525&2430

FL = 30.28CRB=30.97PER STD DWGS 2405,2525&2430

TURN 2 BLOCK

AT INV EL=32.0

TG = 32.3

TURN 2 BLOCK

AT INV EL=32.Q

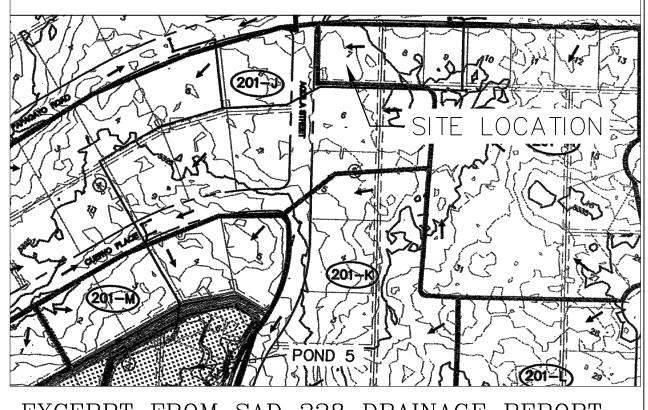
10' PUE ---

PER STD DWGS 2405,2525&2430

TG = 32.3

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.



EXCERPT FROM SAD 228 DRAINAGE REPORT

LOT 9, BLOCK 9 VOLCANO CLIFFS SUBD

UNIT 19

— NEW BLOCK WALL

TURN 2 BLOCKS, 3" ABOVE

GRADE (MIN). $EL=29.7\pm$

- GRADE SWALE

20' STORM DRAIN

EASEMENT

20' STORM DRAIN

EASEMENT

7' CROSS LOT

DRAINAGE EASEMENT

EXISTING WALL

−7' P.U.E.

PRPC=29.00

NO TURNED BLOCK

- COBBLE SWALE

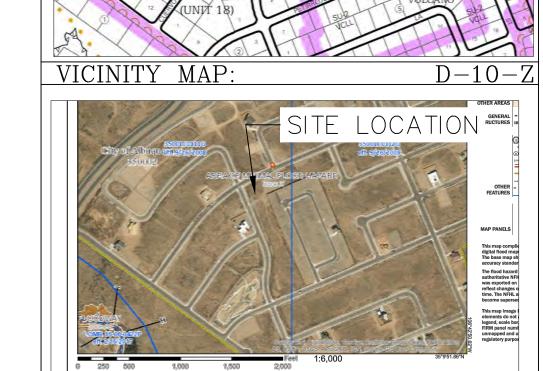
SEE DETAIL THIS SHEET

WATER LINE

EASEMENT

TC=32.10

TC=32.10



FIRM MAP:

35001C0111G

DRAWN

DATE

SHEET #

of î

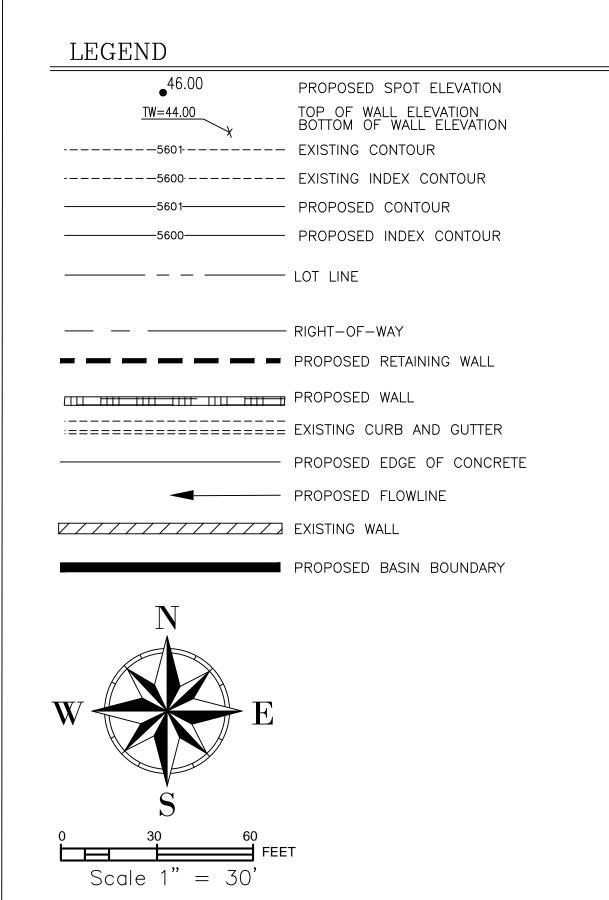
JOB #

LEGAL DESCRIPTION:

LOT 7-A-1, BLK 9, VOLCANO CLIFFS SUB D, UNIT 19 CITY OF ALBUQUERQUE

BERNALILLO COUNTY, NEW MEXICO

- 1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE
- 2. RETAIN THE FIRST .46" OF STORM RUNOFF FROM ENTIRE DEVELOPMENT TO CONFORM TO THE WATER QUALITY REQURIEMENTS



| ENGINEER'S SEAL | Title 6536 PAPAGA |
|--|-----------------------------|
| CHARD H. DOUR | 0000 PAPAGA |
| CHARD H. DOUR WEY CON MEY CON | GRADING AND DRAINAGE PLA |
| PROFESS IONAL | RHD Engi |
| 7/25/18 | 4305 Purple ALBUQUERQ |
| Richard Dourte P.E. #10854 | (505) 2 |

AYO NW ineering, LLC

Sage Ave. NW 2UE, NM 87120 288-1621

RICHARD DOURTE HAVE PERSONALLY INSPECTED THE PROPERTY ON

3" CLEAN STONE ON FILTER FABRIC

ON COMPACTED SUBGRADE

LOT 6-A-1, BLOCK 9

VOLCANO CLIFFS SUBD

UNIT 19