

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

November 18, 2020

David Soule, P.E.
Rio Grande Engineering
P.O. Box 93924
Albuquerque, NM 87199

RE: 5015 Midnight Vista NW
Grading and Drainage Plan
Engineer's Stamp Date: 11/04/20
Hydrology File: B11D002

Dear Mr. Soule:

Based upon the information provided in your submittal received 11/05/20, the Grading and Drainage Plan is approved for Grading Permit.

Once the grading is complete, a pad certification will be required prior to release of Building Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter and the pad certification approval letter.

Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 5015 Midnight Vista NW **Building Permit #:** _____ **Hydrology File #:** _____

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: LOT 34P1 LOT A PARADISE BLUFF

City Address: 5015 Midnight Vista NW

Applicant: STEVE CHAVEZ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: RIO GRANDE ENGINEERING **Contact:** DAVID SOULE

Address: PO BOX 93924 ALB NM 87199

Phone#: 505.321.9099 **Fax#:** 505.872.0999 **E-mail:** david@riograndeengineering.com

TYPE OF DEVELOPMENT: _____ PLAT ☒ RESIDENCE _____ DRB SITE _____ ADMIN SITE

Check all that Apply:

DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION

TYPE OF SUBMITTAL:

☐ ENGINEER/ARCHITECT CERTIFICATION
☐ PAD CERTIFICATION
☐ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
☐ DRAINAGE REPORT
☐ DRAINAGE MASTER PLAN
☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
☐ ELEVATION CERTIFICATE
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ STREET LIGHT LAYOUT
☐ OTHER (SPECIFY) _____
☐ PRE-DESIGN MEETING?

IS THIS A RESUBMITTAL?: _____ Yes ☒ No

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY

☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL

☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☐ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR
☐ FLOODPLAIN DEVELOPMENT PERMIT
☐ OTHER (SPECIFY) _____

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

COMPUTATION OF BASIN SURFACE TREATMENTS

Add 3850 SF of "D" area for the house area on these lots: 1-16, block A; 88-98, block A; 1-6, block B; 1-13, block C.

Add 4250 SF of "D" area for all other houses.

Add 400 SF of "D" area in each backyard (for patio/storage).

Add 730 SF of "D" area in each front yard (18'x35' driveway, and 4'x25' front walk).

Streets will be computed as "D" area, and will be the face-face street width + 9' (4' sidewalk + 6" curb on both sides) times the length.

Non-"D" areas within the subdivision will be taken as

1/2 "b" (turf) + 1/2 "C" (rocks).

Open tract areas will be taken as "A", "B", or "C", depending on the slope.

| DEVELOPED BASIN | NO. HOUSES | | | TREATMENT "D" AREA | | | TREATMENT AREA (SF) | | | TREATMENT AREA (PERCENT) | | | | | |
|-----------------|------------|----------------------|-------------------------|--------------------------|--------|---------|---------------------|---------|--------|--------------------------|-----------------|-----|-----|-----|-----|
| | (2200 SF) | NO. HOUSES (3850 SF) | NO. BACK YARDS (400 SF) | NO. FRONT YARDS (730 SF) | STREET | TOTAL | "A" | "B" | "C" | TOTAL AREA (SF) | TOTAL AREA (SM) | "A" | "B" | "C" | "D" |
| A | | | 5 | | | 2,000 | 7,500 | 137,748 | 33,800 | 181,048 | 0.0064942 | 4% | 76% | 19% | 1% |
| A-1 | | | | | | 59,400 | | 3,300 | 3,300 | 66,000 | 0.0023674 | 0% | 5% | 5% | 90% |
| B | | 18.0 | 18.0 | 18.0 | | 89,640 | | 47,929 | 47,929 | 185,497 | 0.0066538 | 0% | 26% | 26% | 48% |
| C | | 6.0 | 10.0 | 6.0 | | 31,480 | | 18,238 | 18,238 | 67,956 | 0.0024376 | 0% | 27% | 27% | 46% |
| D | | | | | | 20,520 | | 1,140 | 1,140 | 22,800 | 0.0008178 | 0% | 5% | 5% | 90% |
| E-1 | | 8.5 | | 9.0 | 24,960 | 64,255 | | 8,698 | 8,698 | 81,650 | 0.0029288 | 0% | 11% | 11% | 79% |
| E-2 | | 12.0 | 4.0 | 11.0 | 26,240 | 82,070 | | 26,340 | 26,340 | 134,750 | 0.0048335 | 0% | 20% | 20% | 61% |
| E-2a | | 9.5 | 8.0 | 10.0 | 35,670 | 82,745 | | 18,703 | 18,703 | 120,150 | 0.0043098 | 0% | 16% | 16% | 69% |
| E-2b | | 6.0 | 5.0 | 7.0 | 9,700 | 39,910 | | 13,045 | 13,045 | 66,000 | 0.0023674 | 0% | 20% | 20% | 60% |
| E-3 | | 8.0 | 4.0 | 7.0 | 18,450 | 55,960 | | 1,920 | 1,920 | 59,800 | 0.0021450 | 0% | 3% | 3% | 94% |
| E-3a | | 15.5 | 9.0 | 16.0 | 23,560 | 98,515 | 10,800 | 12,968 | 12,968 | 135,250 | 0.0048514 | 8% | 10% | 10% | 73% |
| E-3a1 | | 3.0 | 3.0 | 2.0 | | 14,210 | 43,500 | 745 | 745 | 59,200 | 0.0021235 | 73% | 1% | 1% | 24% |
| E-4 | 23.0 | 3.0 | 18.0 | 22.0 | 54,600 | 140,010 | | 26,220 | 26,220 | 192,450 | 0.0069032 | 0% | 14% | 14% | 73% |
| E-4a | 5.5 | 3.5 | 8.0 | 11.0 | 13,300 | 50,105 | | 13,835 | 13,835 | 77,775 | 0.0027898 | 0% | 18% | 18% | 64% |
| E-4b | 17.5 | 2.0 | 9.0 | 22.0 | 36,260 | 102,120 | | 24,715 | 24,715 | 151,550 | 0.0054361 | 0% | 16% | 16% | 67% |
| E-5 | | | 2.0 | | 17,670 | 18,470 | | 7,165 | 7,165 | 32,800 | 0.0011765 | 0% | 22% | 22% | 56% |
| F | | | 3.0 | | | 1,200 | | 4,450 | 4,450 | 10,100 | 0.0003623 | 0% | 44% | 44% | 12% |
| G-1 | | | 21.0 | | | 8,400 | | 24,100 | 24,100 | 56,600 | 0.0020302 | 0% | 43% | 43% | 15% |
| G-2 | | | | | | 0 | | 3,675 | 3,675 | 7,350 | 0.0002636 | 0% | 50% | 50% | 0% |
| G-3 | | | 2.0 | | | 800 | | 4,075 | 4,075 | 8,950 | 0.0003210 | 0% | 46% | 46% | 9% |
| G-4 | | | 1.0 | | | 400 | | 3,400 | 3,400 | 7,200 | 0.0002583 | 0% | 47% | 47% | 6% |
| G-5 | | | 2.0 | | | 800 | | 1,700 | 1,700 | 4,200 | 0.0001507 | 0% | 40% | 40% | 19% |
| G-6 | | | 7.0 | | | 2,800 | | 15,075 | 15,075 | 32,950 | 0.0011819 | 0% | 46% | 46% | 8% |
| G-7 | | | 2.0 | | | 800 | | 2,100 | 2,100 | 5,000 | 0.0001794 | 0% | 42% | 42% | 16% |

Weighted E Method

| | | | | | | | | | | 100-Year, 6-hr. | | | |
|------------|--------------|-----------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------------|-------------------|-------------|-----------------|-------|--------|------|
| Basin | Area (sf) | Area (acres) | Treatment A % (acres) | Treatment B % (acres) | Treatment C % (acres) | Treatment D % (acres) | Weighted E (ac-ft) | Volume (ac-ft) | Flow cfs | | | | |
| ALLOWED | 7886.00 | 0.181 | 0% | 0 | 11% | 0.020 | 11% | 0.0199 | 79% | 0.143 | 1.954 | 0.029 | 0.69 |
| PROPOSED | 7886.00 | 0.181 | 0% | 0 | 15% | 0.027 | 23% | 0.0416 | 62% | 0.112 | 1.717 | 0.026 | 0.64 |
| COMPARISON | | | | | | | | | | | | -0.004 | |

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

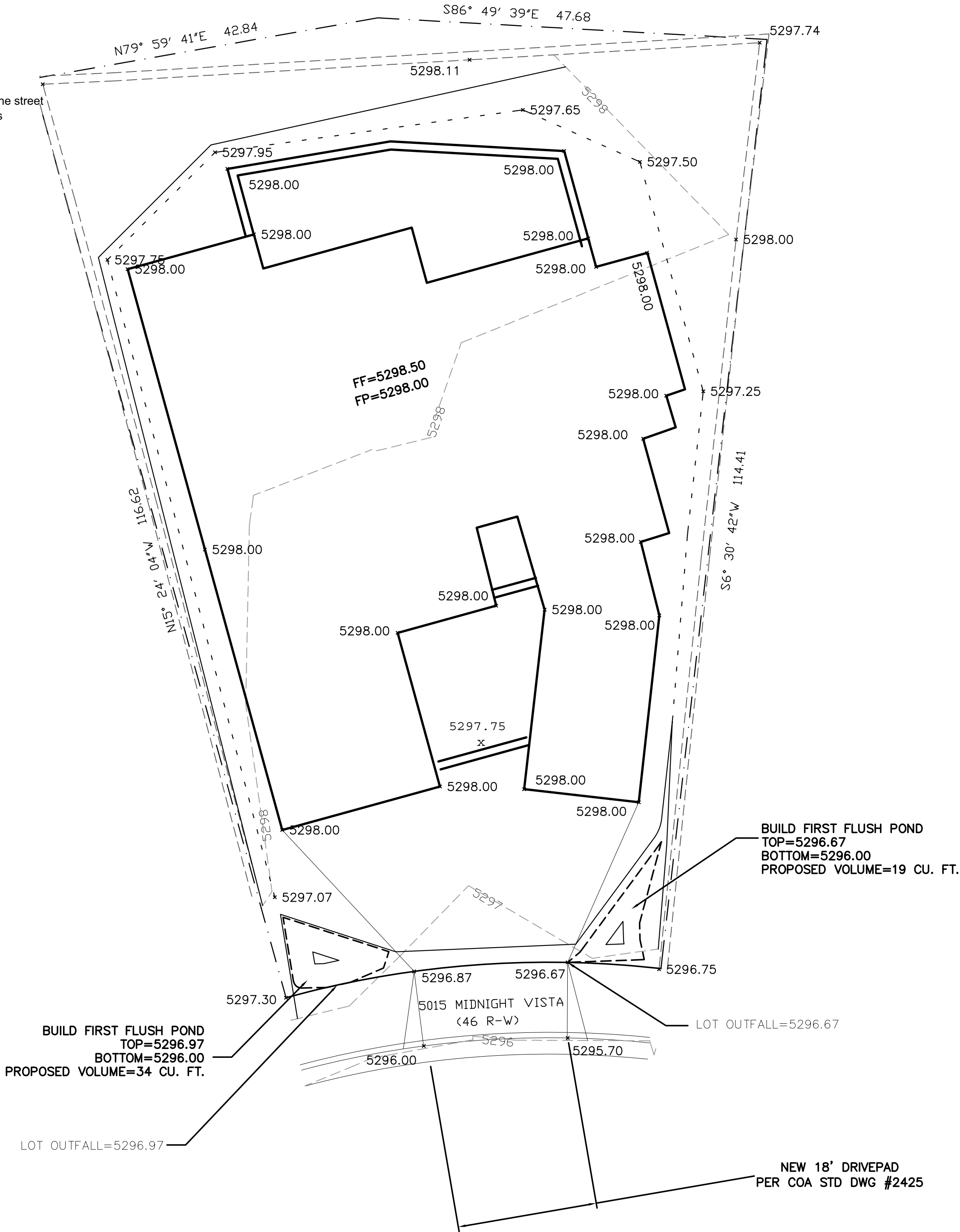
| | |
|----------|----------|
| Ea= 0.55 | Qa= 1.54 |
| Eb= 0.73 | Qb= 2.16 |
| Ec= 0.95 | Qc= 2.87 |
| Ed= 2.24 | Qd= 4.12 |

ONSITE Conditions

| FIRST FLUSH WATER QUALITY VOLUME | | |
|----------------------------------|------|----------|
| REQUIRED | (CF) | PROVIDED |
| WATER QUALITY | 0 | 246 |
| FLOOD CONTROL | -156 | 246 |

Narrative

This site is within the boundaries of Paradise Bluff (B11-D002). The site is part of Basin E-1 and is programed to drain to the street there is no upland flow. This plan conforms to the allowed impervious area of 5830 sf utlized in basin E-1 runoff calculations This plan is in conformance to the master drainage plan



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:

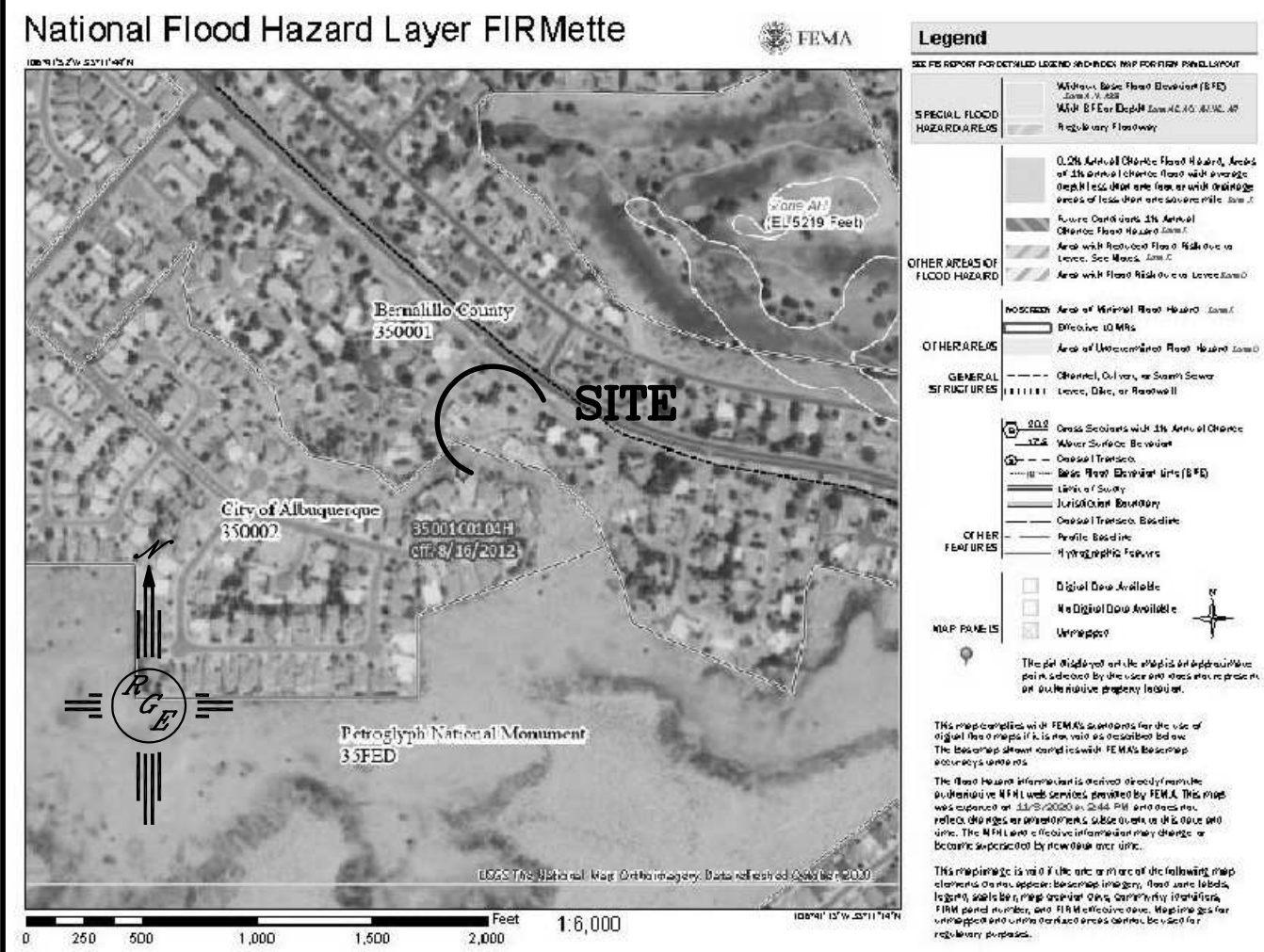
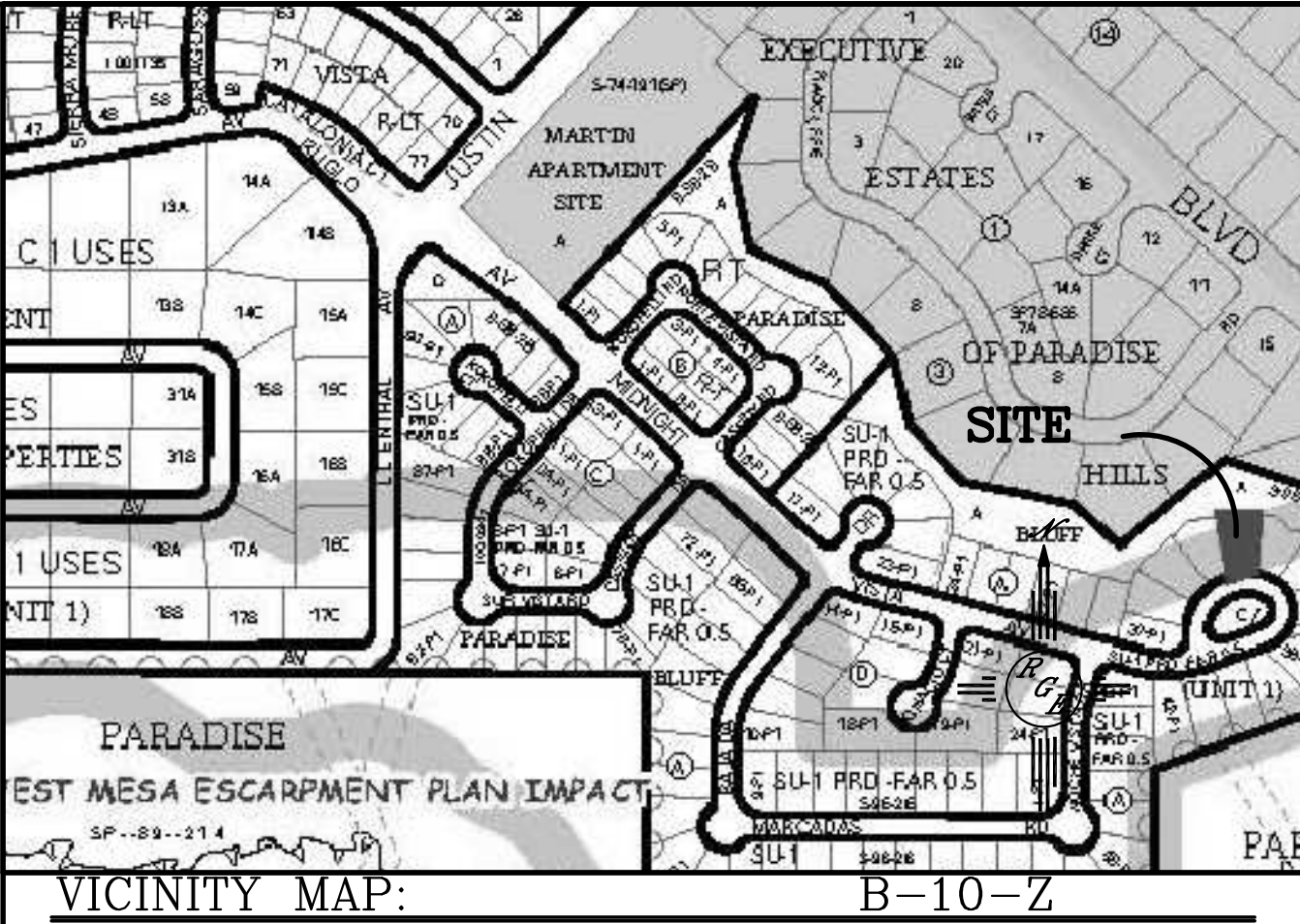
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

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.



LEGAL DESCRIPTION:

NOTES:

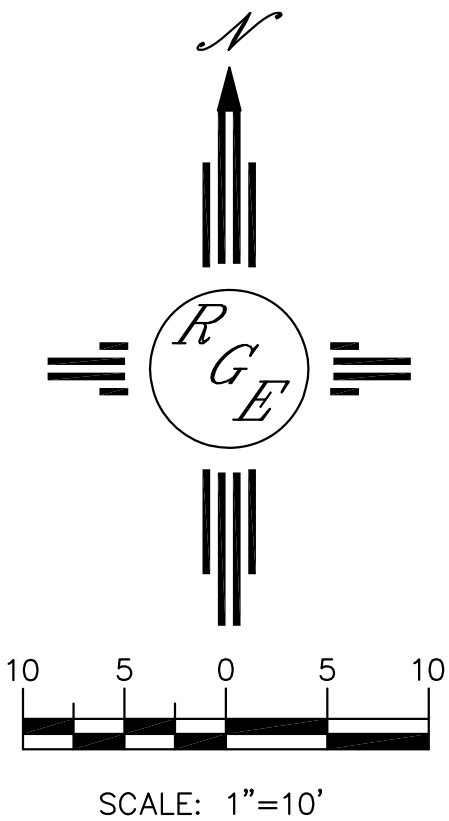
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.

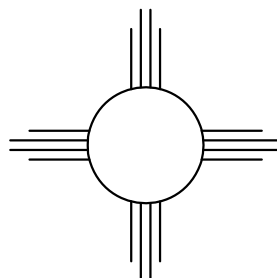
LEGEND

| | |
|----------------|--|
| -----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 |
| ----- | BOUNDARY |
| ----- | CENTERLINE |
| ----- | RIGHT-OF-WAY |
| ----- | 1' WIDE X 4" DEEP GRAEL SWALE |
| ===== | EXISTING CURB AND GUTTER |
| ===== | PROPOSED CMU SCREEN WALL--18" MAX. RETAINAGE |

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 11/18/20
BY: *Rene C. Brissette*
HydroTrans # B11D002

THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE
CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY
ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT
THE CITY OF ALBUQUERQUE FROM REQUIRING
CORRECTION, OR ERROR, OR DIMENSIONS IN PLANS,
SPECIFICATIONS, OR CONSTRUCTIONS, SUCH APPROVED PLANS
SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT
AUTHORIZATION.



| | | |
|--|------------------------------|-------------------------|
| ENGINEER'S SEAL DAVID SOULE 14522 REGISTERED PROFESSIONAL ENGINEER 11/5/20 | 5015 MIDNIGHT VISTA | DRAWN BY: WCVJ |
| | GRADING AND DRAINAGE PLAN | DATE 11-05-20 |
|  Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0998 | | 2102091-LAYOUT-11-05-20 |
| | | SHEET # — |
| | | JOB # 2102091 |