CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

October 18, 2023

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

RE: 13400 Pino Ridge Place NE
Grading and Drainage Plans
Engineer's Stamp Date: 10/06/23
Hydrology File: E23D039

Dear Mr. Soule:

Based upon the information provided in your submittal received 10/10/2023, the Grading and Drainage Plans are approved for Building Permit and Grading Permit. **Since this site is an addition to an existing house, a pad certification is not needed for this project.** Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): Engineer's Certification Checklist For Non-Subdivision is required.

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

Sincerely,

Renée C. Brissette

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

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 13400 PINO RIDGE PL Building Permit #:_____ Hydrology File #: _____

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

Legal Description: LOT 26 MOUNTAIN HIGHLANDS

City Address: 13400 PINO RIDGE PL

Applicant: _____ 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 X RESIDENCE ___ DRB SITE ___ ADMIN SITE

Check all that Apply:

DEPARTMENT:

X HYDROLOGY/ DRAINAGE

___ TRAFFIC/ TRANSPORTATION

TYPE OF SUBMITTAL:

___ ENGINEER/ARCHITECT CERTIFICATION

___ PAD CERTIFICATION

___ CONCEPTUAL G & D PLAN

X 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 X No

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

X 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:_____

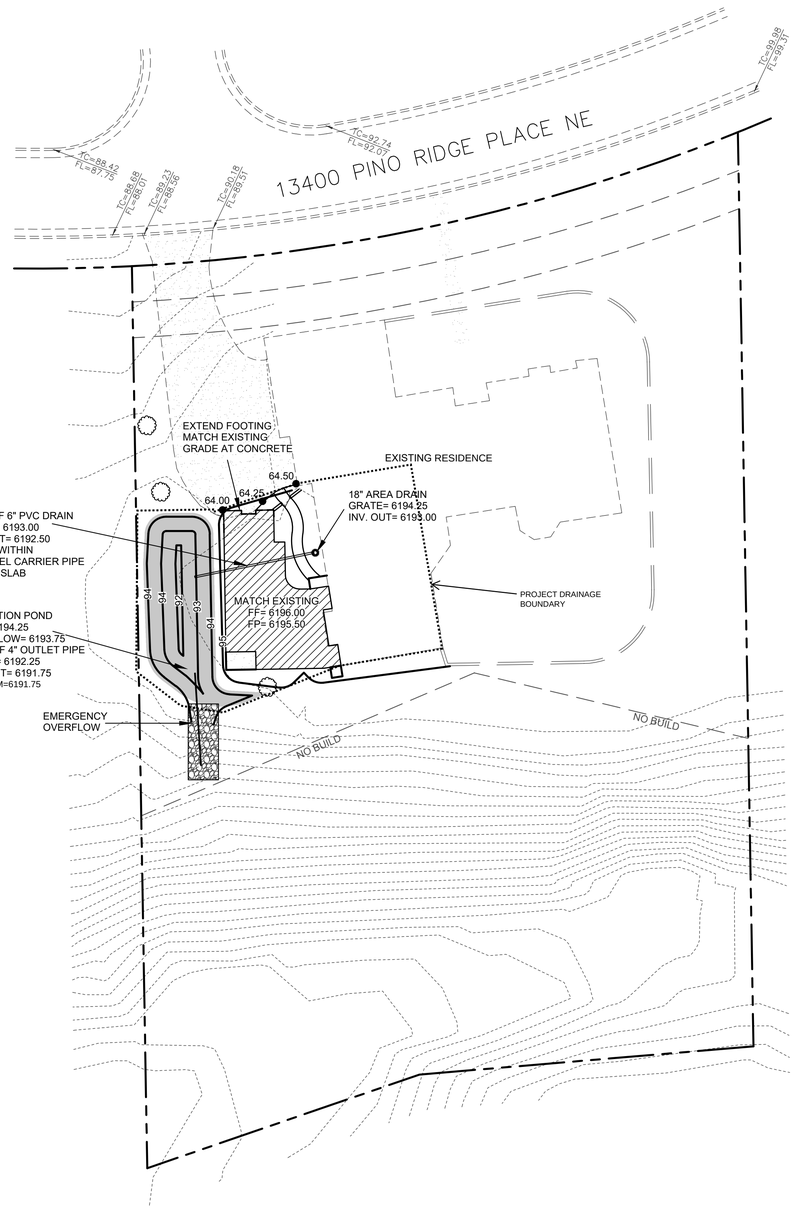
FEE PAID:_____

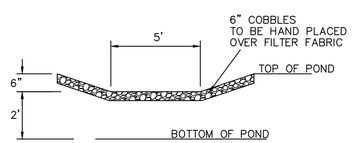
SEE SHEET 2 FOR
DRAINAGE CALCULATIONS
AND AHYMO MODEL

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 10/18/23
BY: Renée C. Brissette
HydroTrans # E23D039

THE APPROVAL OF THESE PLANS/DOES NOT RELIEVE THE APPLICANT OF RESPONSIBILITY FOR COMPLYING ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

APPROVAL OF GRADING & DRAINAGE PLAN(S) SHALL EXPIRE TWO (2) YEARS AFTER THE APPROAL DATE BY THE CITY IF NO BUILDING PERMIT HAS BEEN PULLED ON THE DEVELOPMENT.





EMERGENCY OVERFLOW DETAIL
NTS

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:

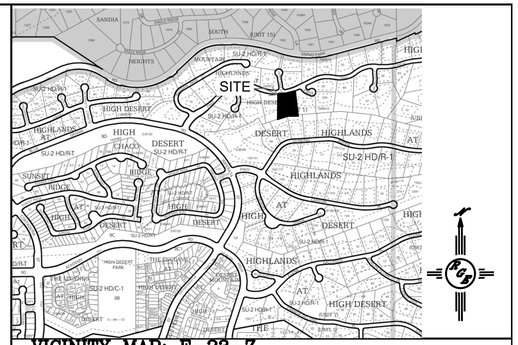
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.

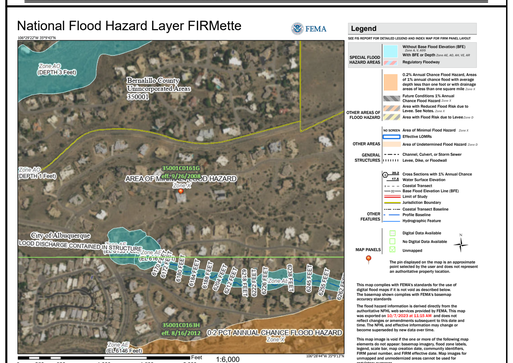
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

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: E-23-Z



FIRM MAP:

LEGAL DESCRIPTION:

LOT 26, UNIT 1,MOUNTAIN HIGHLANDS AT HIGH DESERT
CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

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.

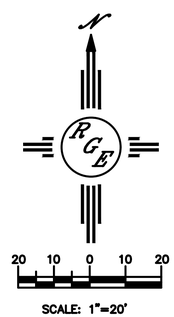
3. ANY PERIMETER WALLS MUST BE PERMITED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.

4. SURVEY INFORMATION PROVIDED BY COMMUNITY SCIENCES CORPORATION USING NAVD DATUM 1988.

5. A PAD ELEVATION CERTIFICATION SHALL BE REQUIRED PRIOR TO RELEASE OF BUILDING PERMIT.

LEGEND

xxxx	EXISTING CONTOUR
xxxx	EXISTING INDEX CONTOUR
xxxx	PROPOSED CONTOUR
xxxx	PROPOSED INDEX CONTOUR
xxxx	EXISTING SPOT ELEVATION
xxxx	PROPOSED SPOT ELEVATION
	BOUNDARY
	ADJACENT BOUNDARY
	EXISTING CURB AND GUTTER
	PROPOSED PONDING
	PROPOSED EMERGENCY OVERFLOIW



ENGINEER'S SEAL
DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER
10/6/23
DAVID SOULE
P.E. #14522

LOT 26 U 1,MNT HIGHLANDS
13400 PINO RIDGE PL

DRAINAGE CALCULATION SHEET

Rio Grande Engineering
PO BOX 93924
ALBUQUERQUE, NM 87199
(505) 321-9099

DRAWN BY DEM
DATE 10-6-23
13400 Pino Ridge Place.dwg
SHEET # C2
JOB #

BASIN DATA

Basin	Area	Area	Treatment A		Treatment B		Treatment C		Treatment D		Q100	V100	Q100
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	GENERATED	GENERATED	DISCHARGED
EXISTING	4330	0.099	0%	0.0156	8.0%	0.0747	55.0%	0.0762	37%	0.0527	0.36	666	0.36
PROPOSED	4330	0.099	0%	0.0156	0.0%	0.0747	33.0%	0.0762	67%	0.0527	0.42	884	0.31
											HISTORICAL		0.36
											PROPOSED		0.31

Narrative

The subject property is located within a drainage master plan for desert hightlands. The private development guidelines require the existing site discharge to be matched. This project is an addition to an existing building. The scope of analysis is the affected drainage basin. The project limit discharges .36 cfs The proposed improvements include the construction of a detention pond with water quality volume. The routed flow of .31 cfs is less than existing

VOLUME CALCULATIONS

OUTFALL

ACTUAL ELEV.	DEPTH (FT)	AREA SF	VOLUME PER UNIT	VOLUME CUMULATIVI	VOLUME AC-FT	Q (CFS)
91.75	0.00	18.00	0	0	0.000	0.00
92.25	0.00	119.00	34.25	34.25	0.001	0.00
93.00	0.58	346.00	174.38	208.63	0.005	0.32
93.75	1.33	807.00	432.38	641.00	0.015	0.48

Orifice Equation

Q = CA SQRT(2gH)

C =	0.6
Diameter (in)	4
Area (ft^2)=	0.087266463
g =	32.2
H (Ft) =	Depth of water above center of orifice
Q (CFS)=	Flow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      AHYMO PROGRAM (AHYMO-S4)                    - Version: S4.01a - Rel: 01a
           RUN DATE (MON/DAY/YR) = 10/10/2023
           START TIME (HR:MIN:SEC) = 12:59:03      USER NO.= RioGrandeSingleA41963517
            INPUT FILE = and Settings\Owner\Desktop\2023 JOBS\2023220-13400 PINO
RIDGE\pondrout101023.txt

     *S     AHYMO -  DETENTION-PINO RIDGE
     *S              POND ROUTING

     START              TIME=0.0  PUNCH CODE=0


     RAINFALL           TYPE=2
                        QUARTER=0.0    ONE= 1.91 IN
                        SIX=2.60 IN    DAY= 3.34 IN    DT = 0.05 HR


                        24-HOUR RAINFALL DIST. - BASED ON NOAA ATLAS 14 FOR CONVECTIVE AREAS (NM &
AZ) - D1
                   DT =   0.050000 HOURS       END TIME =    24.000002 HOURS
                     0.0000  0.0046  0.0093  0.0144  0.0198  0.0254  0.0318
                     0.0409  0.0554  0.0709  0.0870  0.1044  0.1220  0.1401
                     0.1588  0.1777  0.1985  0.2202  0.2435  0.2697  0.2973
                     0.3343  0.3762  0.4280  0.4971  0.5749  0.7091  0.9178
                     1.2754  1.5267  1.7250  1.8246  1.9119  1.9746  2.0245
                     2.0680  2.0999  2.1291  2.1532  2.1759  2.1979  2.2177
                     2.2365  2.2532  2.2691  2.2847  2.2997  2.3119  2.3187
                     2.3254  2.3320  2.3381  2.3442  2.3502  2.3561  2.3618
                     2.3673  2.3727  2.3780  2.3833  2.3885  2.3934  2.3983
                     2.4031  2.4078  2.4125  2.4170  2.4214  2.4258  2.4301
                     2.4344  2.4386  2.4428  2.4469  2.4510  2.4550  2.4590
                     2.4629  2.4668  2.4706  2.4744  2.4782  2.4819  2.4856
                     2.4892  2.4928  2.4964  2.4999  2.5034  2.5068  2.5103
                     2.5136  2.5170  2.5203  2.5236  2.5269  2.5301  2.5333
                     2.5365  2.5396  2.5428  2.5458  2.5489  2.5519  2.5550
                     2.5580  2.5609  2.5638  2.5668  2.5696  2.5725  2.5754
                     2.5782  2.5810  2.5838  2.5865  2.5893  2.5920  2.5947
                     2.5973  2.6000  2.6027  2.6053  2.6080  2.6106  2.6133
                     2.6159  2.6185  2.6212  2.6238  2.6264  2.6291  2.6317
                     2.6343  2.6369  2.6395  2.6421  2.6447  2.6474  2.6499
                     2.6525  2.6551  2.6577  2.6603  2.6629  2.6655  2.6681
                     2.6706  2.6732  2.6758  2.6783  2.6809  2.6834  2.6860
                     2.6885  2.6911  2.6936  2.6962  2.6987  2.7013  2.7038
                     2.7063  2.7088  2.7114  2.7139  2.7164  2.7189  2.7214
                     2.7239  2.7264  2.7289  2.7314  2.7339  2.7364  2.7389
                     2.7413  2.7438  2.7463  2.7488  2.7512  2.7537  2.7561
                     2.7586  2.7611  2.7635  2.7660  2.7684  2.7708  2.7733
                     2.7757  2.7781  2.7806  2.7830  2.7854  2.7878  2.7902
                     2.7927  2.7951  2.7975  2.7999  2.8023  2.8047  2.8070
                     2.8094  2.8118  2.8142  2.8166  2.8189  2.8213  2.8237
                     2.8260  2.8284  2.8308  2.8331  2.8355  2.8378  2.8401
                     2.8425  2.8448  2.8472  2.8495  2.8518  2.8541  2.8565
                     2.8588  2.8611  2.8634  2.8657  2.8680  2.8703  2.8726
                     2.8749  2.8772  2.8795  2.8817  2.8840  2.8863  2.8886
                     2.8908  2.8931  2.8954  2.8976  2.8999  2.9021  2.9044
                     2.9066  2.9089  2.9111  2.9133  2.9156  2.9178  2.9200
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                     2.9377  2.9399  2.9421  2.9443  2.9465  2.9486  2.9508
                     2.9530  2.9552  2.9573  2.9595  2.9617  2.9638  2.9660
                     2.9681  2.9703  2.9724  2.9746  2.9767  2.9788  2.9810
                     2.9831  2.9852  2.9873  2.9894  2.9916  2.9937  2.9958
                     2.9979  3.0000  3.0021  3.0042  3.0063  3.0083  3.0104
                     3.0125  3.0146  3.0167  3.0187  3.0208  3.0229  3.0249
                     3.0270  3.0290  3.0311  3.0331  3.0352  3.0372  3.0392
                     3.0413  3.0433  3.0453  3.0473  3.0494  3.0514  3.0534
                     3.0554  3.0574  3.0594  3.0614  3.0634  3.0654  3.0674
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                     3.0831  3.0851  3.0871  3.0890  3.0910  3.0929  3.0948
                     3.0968  3.0987  3.1006  3.1026  3.1045  3.1064  3.1083
                     3.1102  3.1121  3.1140  3.1159  3.1178  3.1197  3.1216
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                     3.1235  3.1254  3.1273  3.1292  3.1310  3.1329  3.1348
                     3.1367  3.1385  3.1404  3.1422  3.1441  3.1459  3.1478
                     3.1496  3.1515  3.1533  3.1551  3.1569  3.1588  3.1606
                     3.1624  3.1642  3.1660  3.1678  3.1696  3.1714  3.1732
                     3.1750  3.1768  3.1786  3.1804  3.1822  3.1839  3.1857
                     3.1875  3.1893  3.1910  3.1928  3.1945  3.1963  3.1980
                     3.1998  3.2015  3.2033  3.2050  3.2067  3.2085  3.2102
                     3.2119  3.2136  3.2153  3.2170  3.2188  3.2205  3.2222
                     3.2239  3.2256  3.2272  3.2289  3.2306  3.2323  3.2340
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                     3.2473  3.2489  3.2506  3.2522  3.2538  3.2555  3.2571
                     3.2587  3.2603  3.2620  3.2636  3.2652  3.2668  3.2684
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                     3.3029  3.3044  3.3059  3.3074  3.3089  3.3105  3.3120
                     3.3135  3.3150  3.3165  3.3180  3.3195  3.3210  3.3224
                     3.3239  3.3254  3.3269  3.3283  3.3298  3.3313  3.3327
                     3.3342  3.3357  3.3371  3.3386  3.3400


     *Basin  EXISTING
     COMPUTE NM HYD       ID=1  HYD NO=101  DA= .000155317 SQ MI
                          PER A=0  PER B=8 PER C=55 PER D=37
                          TP=-.138 MASSRAIN=-1


               K =  0.075210HR    TP =  0.138000HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =
7.106428
               UNIT PEAK =  0.21916    CFS   UNIT VOLUME =   0.9550       B =   526.28       P60 =
1.9100
               AREA =      0.000057 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
               RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.050000


               K =  0.113296HR    TP =  0.138000HR    K/TP RATIO =  0.820984     SHAPE CONSTANT, N =
4.350718
               UNIT PEAK =  0.26796    CFS   UNIT VOLUME =   0.9580       B =   377.91       P60 =
1.9100
               AREA =      0.000098 SQ MI    IA =   0.36905 INCHES    INF =   0.88333 INCHES PER HOUR
               RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.050000

     PRINT HYD            ID=1  CODE=3

                                        PARTIAL HYDROGRAPH   101.00

     TIME      FLOW      TIME      FLOW      TIME      FLOW      TIME      FLOW      TIME
FLOW      TIME      FLOW
      HRS      CFS        HRS      CFS        HRS      CFS        HRS      CFS        HRS
CFS        HRS      CFS
     0.000      0.0      4.950      0.0      9.900      0.0     14.850
0.0     19.800      0.0
     0.150      0.0      5.100      0.0     10.050      0.0     15.000
0.0     19.950      0.0
     0.300      0.0      5.250      0.0     10.200      0.0     15.150
0.0     20.100      0.0
     0.450      0.0      5.400      0.0     10.350      0.0     15.300
0.0     20.250      0.0
     0.600      0.0      5.550      0.0     10.500      0.0     15.450
0.0     20.400      0.0
     0.750      0.0      5.700      0.0     10.650      0.0     15.600
0.0     20.550      0.0
     0.900      0.0      5.850      0.0     10.800      0.0     15.750
0.0     20.700      0.0
     1.050      0.0      6.000      0.0     10.950      0.0     15.900
0.0     20.850      0.0
     1.200      0.1      6.150      0.0     11.100      0.0     16.050
0.0     21.000      0.0
     1.350      0.1      6.300      0.0     11.250      0.0     16.200
0.0     21.150      0.0
     1.500      0.4      6.450      0.0     11.400      0.0     16.350
0.0     21.300      0.0
     1.650      0.2      6.600      0.0     11.550      0.0     16.500
0.0     21.450      0.0
```



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     1.800      0.1      6.750      0.0     11.700      0.0     16.650
0.0     21.600      0.0
     1.950      0.0      6.900      0.0     11.850      0.0     16.800
0.0     21.750      0.0
     2.100      0.0      7.050      0.0     12.000      0.0     16.950
0.0     21.900      0.0
     2.250      0.0      7.200      0.0     12.150      0.0     17.100
0.0     22.050      0.0
     2.400      0.0      7.350      0.0     12.300      0.0     17.250
0.0     22.200      0.0
     2.550      0.0      7.500      0.0     12.450      0.0     17.400
0.0     22.350      0.0
     2.700      0.0      7.650      0.0     12.600      0.0     17.550
0.0     22.500      0.0
     2.850      0.0      7.800      0.0     12.750      0.0     17.700
0.0     22.650      0.0
     3.000      0.0      7.950      0.0     12.900      0.0     17.850
0.0     22.800      0.0
     3.150      0.0      8.100      0.0     13.050      0.0     18.000
0.0     22.950      0.0
     3.300      0.0      8.250      0.0     13.200      0.0     18.150
0.0     23.100      0.0
     3.450      0.0      8.400      0.0     13.350      0.0     18.300
0.0     23.250      0.0
     3.600      0.0      8.550      0.0     13.500      0.0     18.450
0.0     23.400      0.0
     3.750      0.0      8.700      0.0     13.650      0.0     18.600
0.0     23.550      0.0
     3.900      0.0      8.850      0.0     13.800      0.0     18.750
0.0     23.700      0.0
     4.050      0.0      9.000      0.0     13.950      0.0     18.900
0.0     23.850      0.0
     4.200      0.0      9.150      0.0     14.100      0.0     19.050
0.0     24.000      0.0
     4.350      0.0      9.300      0.0     14.250      0.0     19.200
0.0
     4.500      0.0      9.450      0.0     14.400      0.0     19.350
0.0
     4.650      0.0      9.600      0.0     14.550      0.0     19.500
0.0
     4.800      0.0      9.750      0.0     14.700      0.0     19.650
0.0

     RUNOFF VOLUME =      1.84566 INCHES     =       0.0153 ACRE-FEET
     PEAK DISCHARGE RATE =        0.37 CFS  AT   1.500 HOURS   BASIN AREA =  0.0002 SQ. MI.


     *Basin PROPOSED
     COMPUTE NM HYD       ID=2  HYD NO=102  DA= .000155317 SQ MI
                          PER A=0  PER B=0 PER C=33 PER D=67
                          TP=-.138 MASSRAIN=-1


               K =  0.075210HR    TP =  0.138000HR    K/TP RATIO =  0.545000     SHAPE CONSTANT, N =
7.106428
               UNIT PEAK =  0.39685    CFS   UNIT VOLUME =   0.9706       B =   526.28       P60 =
1.9100
               AREA =      0.000104 SQ MI    IA =   0.10000 INCHES    INF =   0.04000 INCHES PER HOUR
               RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.050000


               K =  0.110067HR    TP =  0.138000HR    K/TP RATIO =  0.797584     SHAPE CONSTANT, N =
4.493111
               UNIT PEAK =  0.14366    CFS   UNIT VOLUME =   0.9149       B =   386.81       P60 =
1.9100
               AREA =      0.000051 SQ MI    IA =   0.35000 INCHES    INF =   0.83000 INCHES PER HOUR
               RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =  0.050000

     PRINT HYD            ID=2  CODE=3

                                        PARTIAL HYDROGRAPH   102.00
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     TIME      FLOW      TIME      FLOW      TIME      FLOW      TIME      FLOW      TIME
FLOW      TIME      FLOW
      HRS      CFS        HRS      CFS        HRS      CFS        HRS      CFS        HRS
CFS        HRS      CFS
     0.000      0.0      4.950      0.0      9.900      0.0     14.850
0.0     19.800      0.0
     0.150      0.0      5.100      0.0     10.050      0.0     15.000
0.0     19.950      0.0
     0.300      0.0      5.250      0.0     10.200      0.0     15.150
0.0     20.100      0.0
     0.450      0.0      5.400      0.0     10.350      0.0     15.300
0.0     20.250      0.0
     0.600      0.0      5.550      0.0     10.500      0.0     15.450
0.0     20.400      0.0
     0.750      0.0      5.700      0.0     10.650      0.0     15.600
0.0     20.550      0.0
     0.900      0.0      5.850      0.0     10.800      0.0     15.750
0.0     20.700      0.0
     1.050      0.0      6.000      0.0     10.950      0.0     15.900
0.0     20.850      0.0
     1.200      0.1      6.150      0.0     11.100      0.0     16.050
0.0     21.000      0.0
     1.350      0.1      6.300      0.0     11.250      0.0     16.200
0.0     21.150      0.0
     1.500      0.4      6.450      0.0     11.400      0.0     16.350
0.0     21.300      0.0
     1.650      0.3      6.600      0.0     11.550      0.0     16.500
0.0     21.450      0.0
     1.800      0.1      6.750      0.0     11.700      0.0     16.650
0.0     21.600      0.0
     1.950      0.1      6.900      0.0     11.850      0.0     16.800
0.0     21.750      0.0
     2.100      0.0      7.050      0.0     12.000      0.0     16.950
0.0     21.900      0.0
     2.250      0.0      7.200      0.0     12.150      0.0     17.100
0.0     22.050      0.0
     2.400      0.0      7.350      0.0     12.300      0.0     17.250
0.0     22.200      0.0
     2.550      0.0      7.500      0.0     12.450      0.0     17.400
0.0     22.350      0.0
     2.700      0.0      7.650      0.0     12.600      0.0     17.550
0.0     22.500      0.0
     2.850      0.0      7.800      0.0     12.750      0.0     17.700
0.0     22.650      0.0
     3.000      0.0      7.950      0.0     12.900      0.0     17.850
0.0     22.800      0.0
     3.150      0.0      8.100      0.0     13.050      0.0     18.000
0.0     22.950      0.0
     3.300      0.0      8.250      0.0     13.200      0.0     18.150
0.0     23.100      0.0
     3.450      0.0      8.400      0.0     13.350      0.0     18.300
0.0     23.250      0.0
     3.600      0.0      8.550      0.0     13.500      0.0     18.450
0.0     23.400      0.0
     3.750      0.0      8.700      0.0     13.650      0.0     18.600
0.0     23.550      0.0
     3.900      0.0      8.850      0.0     13.800      0.0     18.750
0.0     23.700      0.0
     4.050      0.0      9.000      0.0     13.950      0.0     18.900
0.0     23.850      0.0
     4.200      0.0      9.150      0.0     14.100      0.0     19.050
0.0     24.000      0.0
     4.350      0.0      9.300      0.0     14.250      0.0     19.200
0.0
     4.500      0.0      9.450      0.0     14.400      0.0     19.350
0.0
     4.650      0.0      9.600      0.0     14.550      0.0     19.500
0.0
     4.800      0.0      9.750      0.0     14.700      0.0     19.650
0.0

     RUNOFF VOLUME =      2.44671 INCHES     =       0.0203 ACRE-FEET
     PEAK DISCHARGE RATE =        0.42 CFS  AT   1.500 HOURS   BASIN AREA =  0.0002 SQ. MI.
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*  ROUTED PROPOSED THROUGH POND

* ROUTE THE TOTAL FLOW THROUGH THE PROPOSED RESERVOIR
ROUTE RESERVOIR      ID=3   HYD NO=103   INFLOW=2   CODE=3
                     OUTFLOW(CFS)     STORAGE(AC-FT)     ELEV(FT)
                          0.00              0.001          92.25
                          0.32              0.005          93.00
                          0.48              0.015          93.75



  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *  *

    TIME     INFLOW     ELEV      VOLUME     OUTFLOW
    (HRS)     (CFS)     (FEET)    (AC-FT)    (CFS)

     0.00      0.00      92.25      0.001      0.00
     0.15      0.00      92.25      0.001      0.00
     0.30      0.00      92.25      0.001      0.00
     0.45      0.00      92.25      0.001      0.00
     0.60      0.00      92.25      0.001      0.00
     0.75      0.02      92.27      0.001      0.01
     0.90      0.02      92.29      0.001      0.02
     1.05      0.03      92.30      0.001      0.02
     1.20      0.05      92.33      0.001      0.03
     1.35      0.14      92.42      0.002      0.07
     1.50      0.42      92.76      0.004      0.22
     1.65      0.26      92.96      0.005      0.30
     1.80      0.12      92.77      0.004      0.22
     1.95      0.06      92.57      0.003      0.14
     2.10      0.03      92.43      0.002      0.08
     2.25      0.02      92.36      0.002      0.05
     2.40      0.02      92.32      0.001      0.03
     2.55      0.01      92.29      0.001      0.02
     2.70      0.01      92.28      0.001      0.01
     2.85      0.01      92.27      0.001      0.01
     3.00      0.00      92.26      0.001      0.01
     3.15      0.00      92.26      0.001      0.01
     3.30      0.00      92.26      0.001      0.00
 PEAK DISCHARGE =          0.304 CFS - PEAK OCCURS AT HOUR    1.60
 MAXIMUM WATER SURFACE ELEVATION =       92.962
 MAXIMUM STORAGE =          0.0048 AC-FT      INCREMENTAL TIME=    0.050000HRS

 FINISH

     NORMAL PROGRAM FINISH          END TIME (HR:MIN:SEC) = 12:59:03
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City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
DATE: 10/18/23
BY: Renée C. Brissette
HydroTrans # E23D039

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

APPROVAL OF GRADING & DRAINAGE PLAN(S) SHALL EXPIRE TWO (2) YEARS AFTER THE APPROAL DATE BY THE CITY IF NO BUILDING PERMIT HAS BEEN PULLED ON THE DEVELOPMENT.

ENGINEER'S SEAL

DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER

10/6/23

DAVID SOULE
P.E. #14522

LOT 26 U 1,MNT HIGHLANDS
13400 PINO RIDGE PL

DRAINAGE CALCULATION SHEET

Rio Grande Engineering
PO BOX 93924
ALBUQUERQUE, NM 87199
(505) 321-9099

DRAWN BY DEM

DATE 10-6-23

13400 Pino Ridge Place.dwg

SHEET # C2

JOB #