CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director

Mayor Timothy M. Keller

October 28, 2019

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

RE: **Mountain Townhomes**
1406 Mountain Rd NW
Revised Grading Plan Stamp Date: 10/22/19
Drainage Report Stamp Date: 2/26/19
Drainage File: J13D209

Dear Mr. Soule:

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Based on the submittal received on 10/23/19, the grading plan and drainage report are re-approved for Grading, Building, and SO-19 Permit.

Prior to Certificate of Occupancy (For Information):

1. Engineer's Certification, per the DPM Chapter 22.7: *Engineer's Certification Checklist For Subdivision* is required.
2. The sidewalk culverts must be inspected and approved by storm drain maintenance (Augie Armijo at (505) 857-8607).

If you have any questions, please contact me at 924-3695 or dpeterson@cabq.gov.

Sincerely,

Dana Peterson, P.E.
Senior Engineer, Planning Dept.
Development Review Services

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: MOUNTAIN TOWNHOME Building Permit #:_____ Hydrology File #: J13D209

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

Legal Description: LOT B,C,C,E BLCOK 44 PEREA ADDITION

City Address: 1406 MOUNTAIN ROAD NWS

Applicant: LITTLE BUBBAS 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?: X Yes ___ 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:_____

RIO GRANDE ENGINEERING OF NEW MEXICO, LLC
October 22, 2019

Mr. Dana Peterson, PE
Bohannan Huston
7500 Jefferson NE
Albuquerque, NM 87109

RE: Grading and Drainage Plan
Mountain Road Townhomes
J13D209

Dear Mr. Peterson:

The purpose of this letter is to accompany the enclosed grading plan for the referenced project. The subject site has an approved grading plan dated 7/26/19. The client was required to reconfigure its parking lot and house layout base upon required front yard landscape requirement. The pad elevations and concept remains the same. The original plan had two existing basins. The north basin discharges 0.21 cfs to mountain, and the remainder of the site discharges 0.75 cfs to 14th street via the adjacent lot. The approved plan proposed to discharge .18 cfs to mountain and .58 cfs to 14th. The revise plan will utilize the same detention ponds and orifice to discharge .34 cfs to 14ths Street, while retaining 165 cf of the 107 CF required for first flush. The front basin generates .83 cfs and .0363 ac-ft (1581 CF). This basin will retain the entire flow in the new landscape area (1799CF), discharging to mountain only as an emergency outfall. The revision allows for the site to conform to the IDO and reduces the site discharge, while maintaining the approved drainage concept. The enclosed AHYMO shows the modeling of this site.

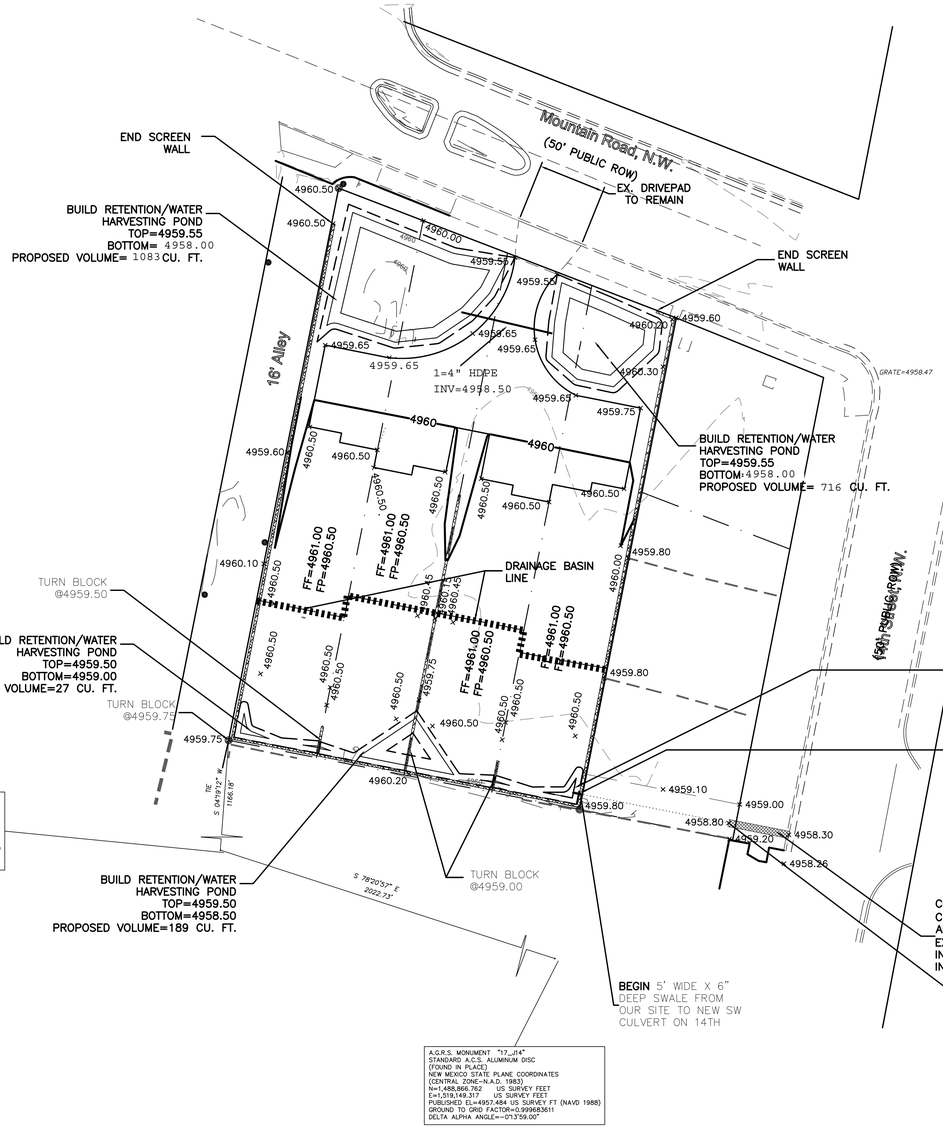
Should you have any questions regarding this resubmittal, please do not hesitate to call me.

Sincerely,

David Soule, PE
Rio Grande Engineering

Private Drainage Facilities within City Right-of-Way
Notice to Contractor
(Special Order 19 ~ "SO-19")

1. An excavation permit will be required before beginning any work within City Right-Of-Way.
2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
3. Two working days prior to any excavation, the contractor must contact **New Mexico One Call, dial "811"** [or (505) 260-1990] for the location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to traffic/street use.
6. Maintenance of the facility shall be the responsibility of the owner of the property being served.
7. Work on arterial streets may be required on a 24-hour basis.
8. Contractor must contact Augie Armijo at (505) 857-8607 and Construction Coordination at 924-3416 to schedule an inspection.



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:

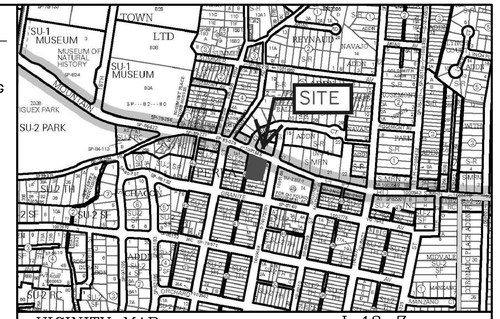
CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE ERMIT PRIOR TO BEGINNING WORK.

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

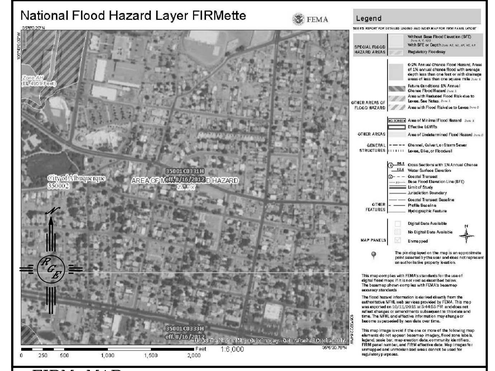
CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS TO EXISTING RIGHT-OF-WAY.

REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT CCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE ESPONSIBILITY OF THE CONTRACTOR.

ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND ATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



VICINITY MAP: J-13-Z



FIRM MAP:

LEGAL DESCRIPTION:

Lots B, C, D and E of Block 44, Perea Addition

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL CURB AND GUTTER TO 6" HEADER UNLESS OTHERWISE NOTED.
3. ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
4. ANY CURBS OR PAVEMENT NEGATIVELY IMPACTED BY CONSTRUCTION ACTIVITY SHALL BE REPLACED TO MATCH EXISTING CONDITIONS.
5. ALL SITE WORK SHALL CONFORM TO CITY OF ALBUQUERQUE STANDARDS FOR PUBLIC WORKS CONSTRUCTION EDITION 9

LEGEND

- EXISTING CONTOUR (5414)
- EXISTING INDEX CONTOUR (5415)
- PROPOSED CONTOUR (5414)
- PROPOSED INDEX CONTOUR (5415)
- SLOPE TIE
- EXISTING SPOT ELEVATION (× 4048.25)
- PROPOSED SPOT ELEVATION (× 4048.25)
- BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY
- PROPOSED CURB
- EXISTING CURB AND GUTTER
- EXISTING SIDEWALK
- PROPOSED SCREEN WALL 18" MAX. RETAINAGE

N

GRAPHIC SCALE
20 10 0 10 20
SCALE: 1"=20'

ENGINEER'S SEAL
DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER
10/22/19
DAVID SOULE P.E. #14522

MOUNTAIN ROAD TOWNHOMES

GRADING AND DRAINAGE PLAN

Rio Grande Engineering
1606 CENTRAL AVENUE SE
SUITE 201
ALBUQUERQUE, NM 87106
(505) 872-0999

DRAWN BY WCWJ
DATE 10-22-19
218151-LAYOUT-10-25-18
SHEET #
JOB # 218151

```
        AHYMO PROGRAM (AHYMO-S4)                    - Version: S4.01a - Rel: 01a
             RUN DATE (MON/DAY/YR) = 10/22/2019
             START TIME (HR:MIN:SEC) = 15:06:11     USER NO.=
RioGrandeSingleA41963517
             INPUT FILE =  and Settings\Owner\Desktop\2018 JOBS\18226-mountain
fourplex\pondrout022619.txt


    *S     AHYMO -  DETENTION-MOUNTAIN
    *S              POND ROUTING

    START                TIME=0.0  PUNCH CODE=0


    RAINFALL             TYPE=2
                         QUARTER=0.0    ONE= 1.77 IN
                         SIX=2.23 IN   DAY= 2.55 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  0.0031  0.0062  0.0096  0.0133  0.0171  0.0213
                      0.0274  0.0369  0.0471  0.0577  0.0692  0.0809  0.0929
                      0.1054  0.1180  0.1321  0.1467  0.1626  0.1849  0.2105
                      0.2448  0.2837  0.3317  0.3957  0.4678  0.5922  0.7856
                      1.1170  1.3499  1.5336  1.6259  1.7068  1.7649  1.8112
                      1.8515  1.8810  1.9081  1.9304  1.9478  1.9627  1.9760
                      1.9886  1.9996  2.0101  2.0203  2.0301  2.0382  2.0428
                      2.0473  2.0517  2.0559  2.0600  2.0640  2.0680  2.0719
                      2.0755  2.0792  2.0828  2.0863  2.0897  2.0930  2.0963
                      2.0995  2.1027  2.1058  2.1088  2.1118  2.1147  2.1176
                      2.1205  2.1233  2.1260  2.1288  2.1315  2.1342  2.1368
                      2.1394  2.1420  2.1446  2.1471  2.1496  2.1520  2.1545
                      2.1569  2.1593  2.1616  2.1640  2.1663  2.1686  2.1708
                      2.1731  2.1753  2.1775  2.1797  2.1818  2.1840  2.1861
                      2.1882  2.1903  2.1923  2.1944  2.1964  2.1984  2.2004
                      2.2023  2.2043  2.2062  2.2081  2.2100  2.2119  2.2138
                      2.2157  2.2175  2.2193  2.2211  2.2229  2.2247  2.2265
                      2.2283  2.2300  2.2317  2.2335  2.2352  2.2369  2.2387
                      2.2404  2.2421  2.2438  2.2455  2.2472  2.2489  2.2506
                      2.2523  2.2540  2.2557  2.2573  2.2590  2.2607  2.2623
                      2.2640  2.2656  2.2673  2.2689  2.2705  2.2722  2.2738
                      2.2754  2.2770  2.2787  2.2803  2.2819  2.2835  2.2851
                      2.2867  2.2882  2.2898  2.2914  2.2930  2.2945  2.2961
                      2.2977  2.2992  2.3008  2.3023  2.3038  2.3054  2.3069
                      2.3084  2.3099  2.3115  2.3130  2.3145  2.3160  2.3175
                      2.3190  2.3204  2.3219  2.3234  2.3249  2.3263  2.3278
                      2.3293  2.3307  2.3322  2.3336  2.3350  2.3365  2.3379
                      2.3393  2.3407  2.3422  2.3436  2.3450  2.3464  2.3478
                      2.3492  2.3505  2.3519  2.3533  2.3547  2.3560  2.3574
                      2.3588  2.3601  2.3615  2.3628  2.3641  2.3655  2.3668
                      2.3681  2.3695  2.3708  2.3721  2.3734  2.3747  2.3760
                      2.3773  2.3786  2.3798  2.3811  2.3824  2.3837  2.3849
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                      2.3949  2.3961  2.3973  2.3985  2.3997  2.4009  2.4021
                      2.4033  2.4045  2.4057  2.4068  2.4080  2.4092  2.4103
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                      2.4195  2.4206  2.4217  2.4228  2.4239  2.4250  2.4261
                      2.4272  2.4283  2.4294  2.4304  2.4315  2.4326  2.4336
                      2.4347  2.4358  2.4368  2.4378  2.4389  2.4399  2.4409
                      2.4420  2.4430  2.4440  2.4450  2.4460  2.4470  2.4480
                      2.4490  2.4500  2.4510  2.4519  2.4529  2.4539  2.4548
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                    2.4558  2.4567  2.4577  2.4586  2.4596  2.4605  2.4614
                    2.4623  2.4633  2.4642  2.4651  2.4660  2.4669  2.4678
                    2.4687  2.4696  2.4704  2.4713  2.4722  2.4730  2.4739
                    2.4748  2.4756  2.4765  2.4773  2.4781  2.4790  2.4798
                    2.4806  2.4814  2.4822  2.4830  2.4838  2.4846  2.4854
                    2.4862  2.4870  2.4878  2.4886  2.4893  2.4901  2.4909
                    2.4916  2.4924  2.4931  2.4938  2.4946  2.4953  2.4960
                    2.4968  2.4975  2.4982  2.4989  2.4996  2.5003  2.5010
                    2.5017  2.5023  2.5030  2.5037  2.5044  2.5050  2.5057
                    2.5063  2.5070  2.5076  2.5083  2.5089  2.5095  2.5101
                    2.5108  2.5114  2.5120  2.5126  2.5132  2.5138  2.5144
                    2.5150  2.5155  2.5161  2.5167  2.5173  2.5178  2.5184
                    2.5189  2.5195  2.5200  2.5206  2.5211  2.5216  2.5221
                    2.5227  2.5232  2.5237  2.5242  2.5247  2.5252  2.5257
                    2.5261  2.5266  2.5271  2.5276  2.5280  2.5285  2.5289
                    2.5294  2.5298  2.5303  2.5307  2.5311  2.5316  2.5320
                    2.5324  2.5328  2.5332  2.5336  2.5340  2.5344  2.5348
                    2.5352  2.5356  2.5359  2.5363  2.5367  2.5370  2.5374
                    2.5377  2.5381  2.5384  2.5387  2.5391  2.5394  2.5397
                    2.5400  2.5403  2.5406  2.5409  2.5412  2.5415  2.5418
                    2.5421  2.5424  2.5426  2.5429  2.5432  2.5434  2.5437
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                    2.5480  2.5481  2.5482  2.5484  2.5485  2.5486  2.5487
                    2.5488  2.5489  2.5490  2.5491  2.5492  2.5493  2.5494
                    2.5495  2.5495  2.5496  2.5497  2.5497  2.5498  2.5498
                    2.5499  2.5499  2.5499  2.5500  2.5500

    *EXISTING MOUTAIN BASIN
    COMPUTE NM HYD      ID=1  HYD NO=101  DA= .0001204 SQ MI
                        PER A=0  PER B=20 PER C=70  PER D=10
                        TP=-.170  MASSRAIN=-1


         K =  0.092650HR    TP =  0.170000HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =  0.37273E-01CFS   UNIT VOLUME =   0.8988       B =   526.28
 P60 = 1.7700
         AREA =     0.000012 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.050000


         K =  0.141514HR    TP =  0.170000HR    K/TP RATIO =  0.832437     SHAPE
CONSTANT, N =  4.284698
         UNIT PEAK =  0.23822    CFS   UNIT VOLUME =   0.9450       B =   373.73
 P60 = 1.7700
         AREA =     0.000108 SQ MI    IA =   0.38333 INCHES    INF =   0.92333
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
          HRS       CFS             HRS       CFS            HRS       CFS
HRS       CFS             HRS       CFS
         0.000       0.0          0.600       0.0          1.200       0.0
1.800       0.1          2.400       0.0
         0.150       0.0          0.750       0.0          1.350       0.0
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1.950       0.0
        0.300       0.0          0.900       0.0          1.500       0.2
2.100       0.0
        0.450       0.0          1.050       0.0          1.650       0.2
2.250       0.0

        RUNOFF VOLUME =     1.09153 INCHES     =       0.0070 ACRE-FEET
        PEAK DISCHARGE RATE =       0.21 CFS  AT   1.550 HOURS   BASIN AREA =
0.0001 SQ. MI.



    *EXISTING 14TH STREET BASIN
    COMPUTE NM HYD      ID=2  HYD NO=102  DA= .0004115 SQ MI
                        PER A=0  PER B=20 PER C=57  PER D=23
                        TP=-.170  MASSRAIN=-1


         K =  0.092650HR    TP =  0.170000HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =  0.29300    CFS   UNIT VOLUME =   0.9587       B =   526.28
 P60 = 1.7700
         AREA =     0.000095 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.050000


         K =  0.142855HR    TP =  0.170000HR    K/TP RATIO =  0.840321     SHAPE
CONSTANT, N =  4.240570
         UNIT PEAK =  0.69131    CFS   UNIT VOLUME =   0.9827       B =   370.90
 P60 = 1.7700
         AREA =     0.000317 SQ MI    IA =   0.38896 INCHES    INF =   0.93909
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.050000

    PRINT HYD           ID=2  CODE=3

                                      PARTIAL HYDROGRAPH   102.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS             HRS       CFS            HRS       CFS
HRS       CFS             HRS       CFS
        0.000       0.0          3.300       0.0          6.600       0.0
9.900       0.0         13.200       0.0
        0.150       0.0          3.450       0.0          6.750       0.0
10.050      0.0          13.350      0.0
        0.300       0.0          3.600       0.0          6.900       0.0
10.200      0.0          13.500      0.0
        0.450       0.0          3.750       0.0          7.050       0.0
10.350      0.0          13.650      0.0
        0.600       0.0          3.900       0.0          7.200       0.0
10.500      0.0          13.800      0.0
        0.750       0.0          4.050       0.0          7.350       0.0
10.650      0.0          13.950      0.0
        0.900       0.0          4.200       0.0          7.500       0.0
10.800      0.0          14.100      0.0
        1.050       0.0          4.350       0.0          7.650       0.0
10.950      0.0          14.250      0.0
        1.200       0.0          4.500       0.0          7.800       0.0
11.100      0.0          14.400      0.0
        1.350       0.1          4.650       0.0          7.950       0.0
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11.250       0.0         14.550       0.0
        1.500       0.7          4.800       0.0          8.100       0.0
11.400       0.0         14.700       0.0
        1.650       0.6          4.950       0.0          8.250       0.0
11.550       0.0         14.850       0.0
        1.800       0.3          5.100       0.0          8.400       0.0
11.700       0.0         15.000       0.0
        1.950       0.1          5.250       0.0          8.550       0.0
11.850       0.0         15.150       0.0
        2.100       0.1          5.400       0.0          8.700       0.0
12.000       0.0         15.300       0.0
        2.250       0.0          5.550       0.0          8.850       0.0
12.150       0.0         15.450       0.0
        2.400       0.0          5.700       0.0          9.000       0.0
12.300       0.0         15.600       0.0
        2.550       0.0          5.850       0.0          9.150       0.0
12.450       0.0         15.750       0.0
        2.700       0.0          6.000       0.0          9.300       0.0
12.600       0.0
        2.850       0.0          6.150       0.0          9.450       0.0
12.750       0.0
        3.000       0.0          6.300       0.0          9.600       0.0
12.900       0.0
        3.150       0.0          6.450       0.0          9.750       0.0
13.050       0.0

        RUNOFF VOLUME =     1.25922 INCHES     =       0.0276 ACRE-FEET
        PEAK DISCHARGE RATE =       0.75 CFS  AT   1.550 HOURS   BASIN AREA =
0.0004 SQ. MI.



    *PROPOSED MOUNTAIN BASIN
    COMPUTE NM HYD      ID=3  HYD NO=103  DA= .00037974 SQ MI
                        PER A=0  PER B=8 PER C=30  PER D=62
                        TP=-.170  MASSRAIN=-1


        K =  0.092650HR    TP =  0.170000HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
        UNIT PEAK =  0.72886    CFS   UNIT VOLUME =   0.9858       B =   526.28
 P60 = 1.7700
        AREA =     0.000235 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
        RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.050000


        K =  0.141096HR    TP =  0.170000HR    K/TP RATIO =  0.829979     SHAPE
CONSTANT, N =  4.298671
        UNIT PEAK =  0.31798    CFS   UNIT VOLUME =   0.9618       B =   374.61
 P60 = 1.7700
        AREA =     0.000144 SQ MI    IA =   0.38158 INCHES    INF =   0.91842
INCHES PER HOUR
        RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.050000

    PRINT HYD           ID=3  CODE=3

                                      PARTIAL HYDROGRAPH   103.00

        TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
         HRS       CFS            HRS       CFS            HRS       CFS
```

HRS	CFS	HRS	CFS	HRS	CFS	HRS	CFS
0.000	0.0	4.350	0.0	8.700	0.0	13.050	0.0
13.050	0.0	17.400	0.0				
0.150	0.0	4.500	0.0	8.850	0.0	13.200	0.0
13.200	0.0	17.550	0.0				
0.300	0.0	4.650	0.0	9.000	0.0	13.350	0.0
13.350	0.0	17.700	0.0				
0.450	0.0	4.800	0.0	9.150	0.0	13.500	0.0
13.500	0.0	17.850	0.0				
0.600	0.0	4.950	0.0	9.300	0.0	13.650	0.0
13.650	0.0	18.000	0.0				
0.750	0.0	5.100	0.0	9.450	0.0	13.800	0.0
13.800	0.0	18.150	0.0				
0.900	0.0	5.250	0.0	9.600	0.0	13.950	0.0
13.950	0.0	18.300	0.0				
1.050	0.0	5.400	0.0	9.750	0.0	14.100	0.0
14.100	0.0	18.450	0.0				
1.200	0.1	5.550	0.0	9.900	0.0	14.250	0.0
14.250	0.0	18.600	0.0				
1.350	0.2	5.700	0.0	10.050	0.0	14.400	0.0
14.400	0.0	18.750	0.0				
1.500	0.8	5.850	0.0	10.200	0.0	14.550	0.0
14.550	0.0	18.900	0.0				
1.650	0.6	6.000	0.0	10.350	0.0	14.700	0.0
14.700	0.0	19.050	0.0				
1.800	0.3	6.150	0.0	10.500	0.0	14.850	0.0
14.850	0.0	19.200	0.0				
1.950	0.2	6.300	0.0	10.650	0.0	15.000	0.0
15.000	0.0	19.350	0.0				
2.100	0.1	6.450	0.0	10.800	0.0	15.150	0.0
15.150	0.0	19.500	0.0				
2.250	0.1	6.600	0.0	10.950	0.0	15.300	0.0
15.300	0.0	19.650	0.0				
2.400	0.0	6.750	0.0	11.100	0.0	15.450	0.0
15.450	0.0	19.800	0.0				
2.550	0.0	6.900	0.0	11.250	0.0	15.600	0.0
15.600	0.0	19.950	0.0				
2.700	0.0	7.050	0.0	11.400	0.0	15.750	0.0
15.750	0.0	20.100	0.0				
2.850	0.0	7.200	0.0	11.550	0.0	15.900	0.0
15.900	0.0	20.250	0.0				
3.000	0.0	7.350	0.0	11.700	0.0	16.050	0.0
16.050	0.0	20.400	0.0				
3.150	0.0	7.500	0.0	11.850	0.0	16.200	0.0
16.200	0.0	20.550	0.0				
3.300	0.0	7.650	0.0	12.000	0.0	16.350	0.0
16.350	0.0	20.700	0.0				
3.450	0.0	7.800	0.0	12.150	0.0	16.500	0.0
16.500	0.0	20.850	0.0				
3.600	0.0	7.950	0.0	12.300	0.0	16.650	0.0
16.650	0.0	21.000	0.0				
3.750	0.0	8.100	0.0	12.450	0.0	16.800	0.0
16.800	0.0						
3.900	0.0	8.250	0.0	12.600	0.0	16.950	0.0
16.950	0.0						
4.050	0.0	8.400	0.0	12.750	0.0	17.100	0.0
17.100	0.0						
4.200	0.0	8.550	0.0	12.900	0.0	17.250	0.0
17.250	0.0						

RUNOFF VOLUME = 1.79077 INCHES = 0.0363 ACRE-FEET
PEAK DISCHARGE RATE = 0.83 CFS AT 1.550 HOURS BASIN AREA = 0.0004 SQ. MI.

```
    *PROPOSED 14TH STREET BASIN
    COMPUTE NM HYD      ID=4  HYD NO=104  DA= .00015216 SQ MI
                        PER A=0  PER B=5 PER C=6 PER D=89
                        TP=-.170  MASSRAIN=-1


         K =  0.092650HR    TP =  0.170000HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
         UNIT PEAK =  0.41923    CFS   UNIT VOLUME =   0.9711       B =   526.28
 P60 = 1.7700
         AREA =     0.000135 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.050000


         K =  0.149814HR    TP =  0.170000HR    K/TP RATIO =  0.881259     SHAPE
CONSTANT, N =  4.027348
         UNIT PEAK =  0.35148E-01CFS   UNIT VOLUME =   0.8800       B =   356.99
 P60 = 1.7700
         AREA =     0.000017 SQ MI    IA =   0.41818 INCHES    INF =   1.02091
INCHES PER HOUR
         RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.050000

    PRINT HYD           ID=4  CODE=3

                                        PARTIAL HYDROGRAPH   104.00

         TIME      FLOW           TIME      FLOW           TIME      FLOW
TIME      FLOW           TIME      FLOW
          HRS       CFS             HRS       CFS            HRS       CFS
HRS       CFS             HRS       CFS
         0.000       0.0          3.750       0.0          7.500       0.0
11.250       0.0          15.000       0.0
         0.150       0.0          3.900       0.0          7.650       0.0
11.400       0.0          15.150       0.0
         0.300       0.0          4.050       0.0          7.800       0.0
11.550       0.0          15.300       0.0
         0.450       0.0          4.200       0.0          7.950       0.0
11.700       0.0          15.450       0.0
         0.600       0.0          4.350       0.0          8.100       0.0
11.850       0.0          15.600       0.0
         0.750       0.0          4.500       0.0          8.250       0.0
12.000       0.0          15.750       0.0
         0.900       0.0          4.650       0.0          8.400       0.0
12.150       0.0          15.900       0.0
         1.050       0.0          4.800       0.0          8.550       0.0
12.300       0.0          16.050       0.0
         1.200       0.1          4.950       0.0          8.700       0.0
12.450       0.0          16.200       0.0
         1.350       0.1          5.100       0.0          8.850       0.0
12.600       0.0          16.350       0.0
         1.500       0.3          5.250       0.0          9.000       0.0
12.750       0.0          16.500       0.0
         1.650       0.3          5.400       0.0          9.150       0.0
12.900       0.0          16.650       0.0
         1.800       0.1          5.550       0.0          9.300       0.0
13.050       0.0          16.800       0.0
         1.950       0.1          5.700       0.0          9.450       0.0
13.200       0.0          16.950       0.0
         2.100       0.0          5.850       0.0          9.600       0.0
13.350       0.0          17.100       0.0
```

2.250	0.0	6.000	0.0	9.750	0.0	13.500	0.0
17.250	0.0						
2.400	0.0	6.150	0.0	9.900	0.0	13.650	0.0
17.400	0.0						
2.550	0.0	6.300	0.0	10.050	0.0	13.800	0.0
17.550	0.0						
2.700	0.0	6.450	0.0	10.200	0.0	13.950	0.0
17.700	0.0						
2.850	0.0	6.600	0.0	10.350	0.0	14.100	0.0
17.850	0.0						
3.000	0.0	6.750	0.0	10.500	0.0	14.250	0.0
18.000	0.0						
3.150	0.0	6.900	0.0	10.650	0.0	14.400	0.0
18.150	0.0						
3.300	0.0	7.050	0.0	10.800	0.0	14.550	0.0
18.300	0.0						
3.450	0.0	7.200	0.0	10.950	0.0	14.700	0.0
18.450	0.0						
3.600	0.0	7.350	0.0	11.100	0.0	14.850	0.0

RUNOFF VOLUME = 2.14616 INCHES = 0.0174 ACRE-FEET
PEAK DISCHARGE RATE = 0.38 CFS AT 1.550 HOURS BASIN AREA = 0.0002 SQ. MI.

* ROUTE THE TOTAL FLOW THROUGH THE PROPOSED RESERVOIR
ROUTE RESERVOIR ID=5 HYD NO=105 INFLOW=4 CODE=3

OUTFLOW(CFS)	STORAGE(AC-FT)	ELEV(FT)
0.00	0.002	59.00
0.37	0.004	59.25
0.76	0.020	60.00

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

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
0.00	0.00	59.00	0.002	0.00
0.15	0.00	59.00	0.002	0.00
0.30	0.00	59.00	0.002	0.00
0.45	0.00	59.00	0.002	0.00
0.60	0.00	59.00	0.002	0.00
0.75	0.00	59.00	0.002	0.00
0.90	0.01	59.01	0.002	0.01
1.05	0.03	59.01	0.002	0.02
1.20	0.05	59.03	0.002	0.04
1.35	0.11	59.05	0.002	0.08
1.50	0.34	59.16	0.003	0.24
1.65	0.29	59.22	0.004	0.33
1.80	0.14	59.13	0.003	0.20
1.95	0.08	59.07	0.003	0.11
2.10	0.05	59.04	0.002	0.06
2.25	0.03	59.02	0.002	0.03
2.40	0.02	59.01	0.002	0.02
2.55	0.01	59.01	0.002	0.01
2.70	0.01	59.00	0.002	0.01

```
     2.85       0.00     59.00       0.002      0.00
 PEAK DISCHARGE =         0.336 CFS - PEAK OCCURS AT HOUR    1.60
 MAXIMUM WATER SURFACE ELEVATION =       59.227
 MAXIMUM STORAGE =         0.0038 AC-FT      INCREMENTAL TIME=    0.050000HRS

FINISH

    NORMAL PROGRAM FINISH          END TIME (HR:MIN:SEC) = 15:06:11
```

City of Albuquerque Treasury
J-24 Deposit
Date: 3/12/2019 Office: ANNEX
Station ID Cashier: E39083
Batch: 10131 Trans: 25
Fund: 305 Activity ID7547210
Account: 461615 Project ID24_MS4
Dept ID: Bus.Unit: PCDMD
Alloc Amt: $531.00
Trans Amt: $531.00
Check Tendered : $531.00

TREASURY DIVISION DAILY DEPOSIT

Transmittals for:
PROJECTS Only

Payment In-Lieu for Storm Water Quality Volume Requirement

CASH COUNT	AMOUNT	ACCOUNT NUMBER	FUND NUMBER	BUSINESS UNIT	PROJECT ID	ACTIVITY ID	AMOUNT
TOTAL CHECKS	$ 531.00	461615	305	PCDMD	24_MS4	7547210	$ 531.00
TOTAL AMOUNT						TOTAL DEPOSIT	**$531.00**

Hydrology#: J13D209 Name: Mountian Townhomes, 3063sf imp.
Payment In-Lieu For Storm Water Quality Volume Requirement

Address/Legal Description: 1406 Mountain NW
Lots A, B, C, D, E, Block 44, Perea Addt'n

DEPARTMENT NAME: Planning Department/Development Review Services, Hydrology

PREPARED BY Dana Peterson PHONE 924-3695

BUSINESS DATE 3/7/19

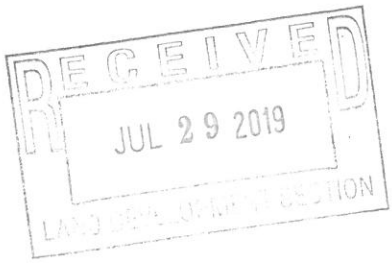
DUAL VERIFICATION OF DEPOSIT _____
EMPLOYEE SIGNATURE

AND BY _____
EMPLOYEE SIGNATURE

REMITTER: _____
AMOUNT: _____
BANK: _____
CHECK #: _____ DATE ON CHECK: _____

The Payment-in-Lieu can be paid at the Plaza del Sol Treasury, 600 2nd St. NW. **Bring two copies of this invoice to the Treasury** and provide a copy of the receipt to Hydrology, Suite 201, 600 2nd St. NW, or e-mail with the Hydrology submittal to PLNDRS@cabq.gov.

**** DUPLICATE ****



Date: 3/12/2019
Office: ANNEX Cashier:E39083
Batch: 10131 Tran #: 25

Journal 24 (Misc)
12:25 PM **Receipt #**00556260
Account#:
J-24 Deposit

Date: 3/12/2019 Office: ANNEX
Station ID Cashier: E39083
Batch: 10131 Trans: 25
Fund: 305 Activity ID7547210
Account: 461615 Project ID24_MS4
Dept ID: Bus.Unit: PCDMD
Alloc Amt: $531.00
Trans Amt: $531.00

Payment Total: $531.00

Transaction Total: $531.00
Check Tendered : $531.00

Checks presented:

191
DATE 3/12/19
PAY TO THE ORDER OF City of Albuquerque $ 531.00
Five hundred thirty one dollars
BANK OF ALBUQUERQUE
MEMO 1406 Mandala

Thank you for your payment.
Have a nice day!

**** DUPLICATE ****

Doc# 2019018639
03/12/2019 12:39 PM Page: 1 of 3
EASE R:$25.00 Linda Stover, Bernalillo County

DRAINAGE EASEMENT

Grant of Permanent Drainage Easement, by New Mexico Gas Company, Inc., a Delaware corporation ("Grantor"), whose address is 7120 Wyoming Blvd, NE, Suite 20, Albuquerque, NM 87109, for the benefit of Lots B-1, C-1, D-1 and E-1, Block 44, of the Perea Addition ("Grantee"), situate in Section 18, Township 10 North, Range 3 East, N.M.P.M., City of Albuquerque, Bernalillo County, New Mexico.

Grantor grants to the Grantee a non-exclusive, perpetual drainage easement ("Easement"), said Easement being more particularly described on Exhibit "A," for the construction, installation, maintenance, repair, modification, replacement and operation of a private drainage facility ("Facility"), together with the right to remove trees, shrubs, undergrowth and any other obstacles within the Easement if the Grantee determines they interfere with the appropriate use of this Easement. The maintenance of the Facility shall be the responsibility of the Grantee and shall be in accordance with the approved Drainage Report and Plans. Grantee agrees that all installation, maintenance, repair, modification, replacement, operation and any other activities within the Easement will be coordinated with Grantor so as to minimize any disruption to Grantor's property.

In no event shall Grantee's use of the Easement interfere with the Grantor's use of the Grantor's property. Grantee shall not enter into Grantor's property other than as explicitly authorized by this grant of Easement, and in no event shall Grantee enter upon or perform any work upon any of Grantor's improvements on Grantor's property. Grantor shall coordinate with Grantee prior to constructing any improvements or encroachment ("Improvements") within the easement, and Grantee shall have the right to object to any Improvements which would unreasonably interfere with Grantee's use of the Easement.

To the fullest extent permitted by applicable law. Grantee shall indemnify, defend and hold harmless Grantor, Grantor's affiliates and their respective directors, officers, employees, representatives, and agents from and against any and all damages, losses, claims, obligations, demands, assessments, penalties, liabilities, costs, and expenses (including attorney fees and expenses), arising out of or resulting from Grantee or Grantee's members, officers, employees, representatives, and agents use of the Easement, including but not limited to the existence of the Facility thereon. Grantee shall not cause or permit to be caused by any of its employees or agents any hazardous substances, pollutants or contaminants, as defined by applicable law, to be dumped, spilled, released, stored or deposited on, over or beneath the Easement or any other property owned by Grantor.

Grantor covenants and warrants that Grantor is the owner in fee simple of the real property comprising the Easement, and that Grantor has a good lawful right to convey the Easement.

The grant and other provisions of this Easement constitute covenants running

with the Easement for the benefit of the Grantee and its successors and assigns until terminated.

GRANTOR

New Mexico Gas Company, Inc.

By: Tom Bullard
Tom Bullard

Date: 3/5/19

[corporate acknowledgment]

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

This instrument was acknowledged before me on this 5TH day of MARCH, by Tom Bullard, Vice President of Engineering, Gas Management & Technical Services of New Mexico Gas Company, Inc., a Delaware corporation, on behalf of said company.

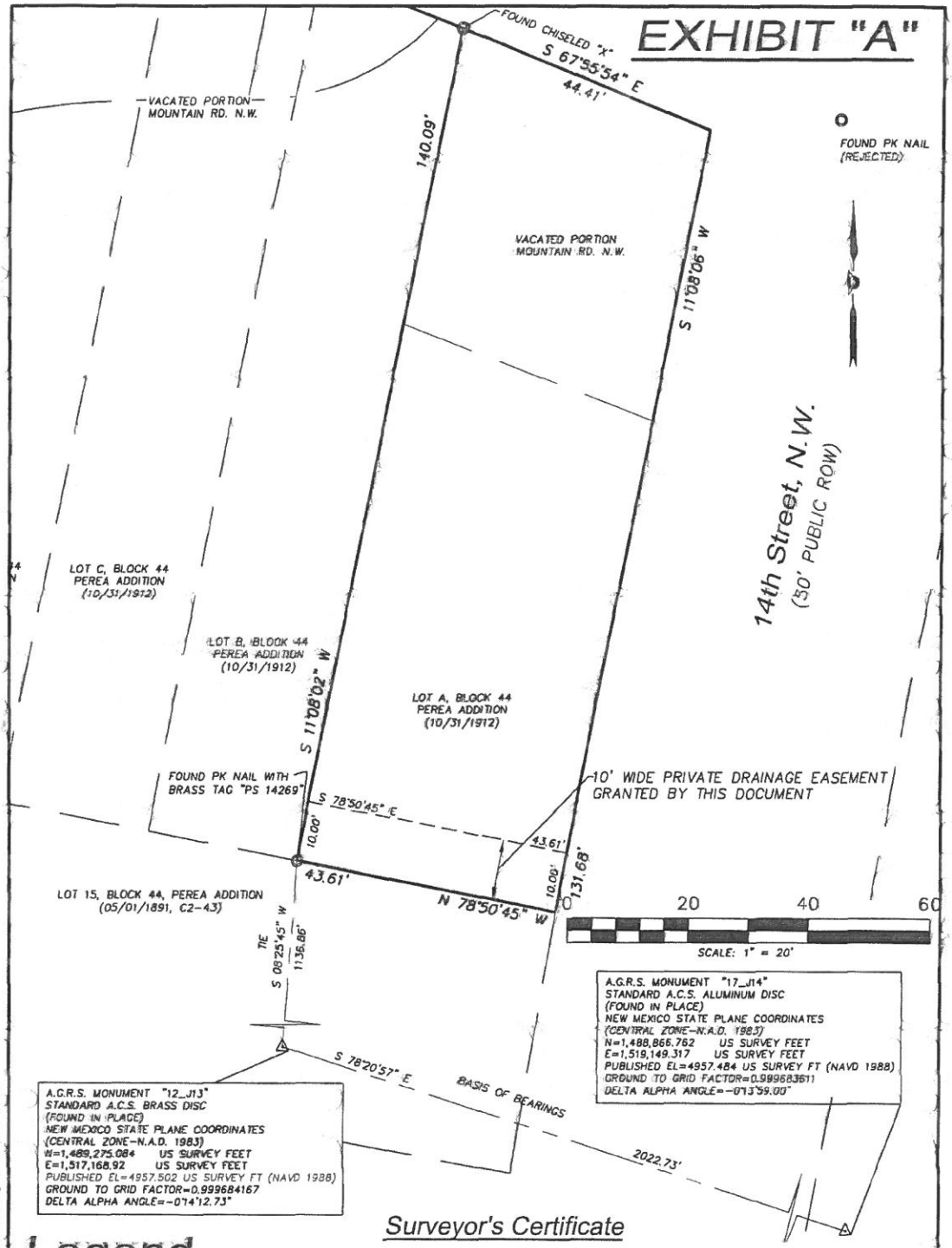
Notary Public

My Commission Expires:

November 1, 2021

OFFICIAL SEAL
Jeffery Estvanko
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires: 11/1/21

EXHIBIT "A"



A.G.R.S. MONUMENT "17_J14"
STANDARD A.C.S. ALUMINUM DISC
(FOUND IN PLACE)
NEW MEXICO STATE PLANE COORDINATES
(CENTRAL ZONE-N.A.D. 1983)
N=1,488,866.762 US SURVEY FEET
E=1,519,149.317 US SURVEY FEET
PUBLISHED EL=4957.484 US SURVEY FT (NAVD 1988)
GROUND TO GRID FACTOR=0.999683611
DELTA ALPHA ANGLE=-0°13'59.00"

A.G.R.S. MONUMENT "12_J13"
STANDARD A.C.S. BRASS DISC
(FOUND IN PLACE)
NEW MEXICO STATE PLANE COORDINATES
(CENTRAL ZONE-N.A.D. 1983)
N=1,489,275.084 US SURVEY FEET
E=1,517,168.92 US SURVEY FEET
PUBLISHED EL=4957.502 US SURVEY FT (NAVD 1988)
GROUND TO GRID FACTOR=0.999684167
DELTA ALPHA ANGLE=-0°14'12.73"

Legend

N 90°00'00" E — MEASURED BEARING AND DISTANCES

○ FOUND AND USED MONUMENT AS DESIGNATED

△ FOUND ALUMINUM AGRS MONUMENT AS DESIGNATED

Surveyor's Certificate

I, LARRY W. MEDRANO, A REGISTERED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, HEREBY CERTIFY THAT THIS EXHIBIT (UN-CLASSIFIED SURVEYING SURVEY WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY MEETING THE MINIMUM REQUIREMENTS FOR THIS CLASSIFICATION OF SURVEY AS PER THE MINIMUM STANDARDS FOR LAND SURVEYING IN NEW MEXICO AS ADOPTED BY THE N.M. BOARD OF LICENSURE FOR ENGINEERS AND SURVEYORS, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

LARRY W. MEDRANO DATE
N.M.P.S. No. 11993
DIGITAL SIGNATURE IS INVALID WITHOUT DIGITAL CERTIFICATION
WET SIGNATURE IS INVALID IF NOT IN BLUE INK
WITH BLUE STAMP OR EMBOSSED STAMP

LARRY W. MEDRANO NEW MEXICO 11993 REGISTERED PROFESSIONAL SURVEYOR

PRECISION SURVEYS, INC.

COORDINATE AND DIMENSION INFORMATION				PLSS INFORMATION				PROJECT INFORMATION	
STATE PLANE ZONE: NM-C	GRID AROUND COORDINATES: GRID	TYPE: STANDARD		LAND GRANT: TOWN OF ALBUQUERQUE GRANT				CREW/TECH: MT	DATE OF SURVEY: 06/27/2016
HORIZONTAL DATUM: NAD83	VERTICAL DATUM: NAVD88	ROTATION ANGLE: 0° 00' 00.00"		SECTION: 16	TOWNSHIP: 10 NORTH	RANGE: 3 EAST	MERIDIAN: NMPM	DRAWN BY: JK	CHECKED BY: LM
CONTROL USED: ALBUQUERQUE GEODETIC REFERENCE SYSTEM		BASE POINT: N = 0, E = 0		CITY: ALBUQUERQUE		COUNTY: BERNALILLO	STATE: NM	PSI JOB NO.: 16-1098EX	SHEET NUMBER: 2 OF 2
COMBINED SCALE FACTOR: GRID TO GROUND: 1.000331.928, GROUND TO GRID: 0.99966 807		DISTANCE DISPLAYED AS: GROUND, BEARING ANNOTATION: GRID							

Plat of
Lots B-1, C-1, D-1 and E-1, Block 44

Perea Addition

Town of Albuqureque Grant, Projected
Section 18, Township 10 N., Range 3 E., N.M.P.M.
Albuquerque, Bernalillo County, New Mexico
July 2018

Project No. 2018-001403

Application No. 18DRB- PS 2018-00012

DOC# 2019023885
03/28/2019 11:43 AM Page: 1 of 2
PLAT R:$25.00 B: 2019C P: 0024 Linda Stover, Bernalillo County

Location Map

Zone Atlas Map No.J-13-Z

N.T.S.

Subdivision Data:

ZONING:
GROSS SUBDIVISION ACREAGE: 0.3409 ACRES±
ZONE ATLAS INDEX NO: J-13-Z
NO. OF TRACTS CREATED: 0
NO. OF LOTS CREATED: 4
MILES OF FULL-WIDTH STREETS CREATED: 0
DATE OF SURVEY: JUNE 27, 2018

Legal Description

LOTS LETTERED "B" AND "C" OF THE DOLORES OTERO DE BURG'S AMENDED PLAT OF LOTS 11-12- 13 AND 14 IN BLOCK FORTY-FOUR (44) OF THE PEREA ADDITION TO THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE SAID AMENDED AND SUPPLEMENTAL PLAT FILED IN THE OFFICE OF THE PROBATE CLERK AND EX-OFFICIO RECORDER OF BERNALILLO COUNTY, NEW MEXICO, OCTOBER 31ST., 1912, IN PLAT BOOK A1, FOLIO 81; ALSO ALL THAT PORTION OR TRACT OF LAND IN THE CITY OF ALBUQUERQUE, NEW MEXICO, WHICH LIES NORTH OF THE NORTH LINE OF LOTS LETTERED "B" AND "C" OF DOLORES OTERO DE BURG'S AMENDED AND SUPPLEMENTAL PLAT OF LOTS 11-12-13 AND 14 IN BLOCK (44) OF THE PEREA ADDITION TO THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE SAID AMENDED AND SUPPLEMENTAL PLAT FILED IN THE OFFICE OF THE PROBATE CLERK AND EX-OFFICIO RECORDER OF BERNALILLO COUNTY, NEW MEXICO, OCTOBER 31ST., 1912, AND SAID TRACT LIES SOUTH OF THE SOUTH LINE OF MOUNTAIN ROAD, AND BEING BOUNDED AS FOLLOWS, TO-WIT: ON THE NORTH BY MOUNTAIN ROAD; ON THE EAST BY LANDS OF ALBUQUERQUE GAS & ELECTRIC COMPANY; ON THE SOUTH BY SAID LOT LETTERED "B" AND "C" ABOVE DESCRIBED; ON THE WEST BY LOT LETTERED "D" OF THE DOLORES OTERO DE BURG'S AMENDED & SUPPLEMENTAL PLAT OF LOTS 11-12-13 AND 14 IN BLOCK FORTY-FOUR (44) OF THE PEREA ADDITION TO THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON THE SAID AMENDED AND SUPPLEMENTAL PLAT FILED IN THE OFFICE OF THE PROBATE CLERK AND EX-OFFICIO RECORDER OF BERNALILLO COUNTY, NEW MEXICO, OCTOBER 31ST., 1912; SAID LOT "D" BELONGING NOW OR FORMERLY TO A. J. RICH. AND: LOTS LETTERED "D" AND "E" OF THE AMENDED PLAT OF LOTS NUMBERED ELEVEN (11) TWELVE (12) THIRTEEN (13) AND FOURTEEN (14) IN BLOCK FORTY-FOUR (44) OF THE PEREA ADDITION TO THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME ARE SHOWN AND DESIGNATED ON SAID MAP FILED IN THE OFFICE OF THE PROBATE CLERK AND EX-OFFICIO RECORDER OF BERNALILLO COUNTY, NEW MEXICO, ON THE 31ST DAY OF OCTOBER, 1912, IN PLAT BOOK A1, FOLIO 81. ALSO ALL THAT PORTION OF THE TRACT OF LAND WHICH WAS FORMERLY A PART OF MOUNTAIN ROAD IN THE CITY OF ALBUQUERQUE, AND WHICH WAS VACATED BY RESOLUTION OF THE CITY COMMISSION OF THE CITY OF ALBUQUERQUE ADOPTED AT ITS MEETING OF AUGUST 18TH, 1931, WHICH IS DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHEAST CORNER OF LOT "D" IN BLOCK 44 OF THE PEREA ADDITION TO THE CITY OF ALBUQUERQUE, AS THE SAME IS SHOWN AND DESIGNATED ON THE MAP OF DOLORES OTERO DE BURG'S AMENDED AND SUPPLEMENTAL PLAT OF LOTS 11 TO 14 IN SAID BLOCK 44 FILED IN THE OFFICE OF THE PROBATE CLERK AND EX-OFFICIO RECORDER OF BERNALILLO COUNTY, NEW MEXICO, ON OCTOBER 31ST, 1912 AND RUNNING THENCE IN WESTERLY DIRECTION ALONG THE NORTH LINE OF SAID LOT "D" AND LOT "E" IN SAID BLOCK 44, TO THE NORTHWEST CORNER OF SAID LOT "E"; THENCE IN A NORTHERLY DIRECTION ALONG AN EXTENSION OF THE EAST LINE OF THE ALLEY RUNNING NORTH AND SOUTH IN SAID BLOCK TO THE SOUTH LINE OF MOUNTAIN ROAD IN SAID CITY OF ALBUQUERQUE, AS THE SAME NOW EXISTS; THENCE IN AN EASTERLY DIRECTION ALONG THE SOUTH LINE OF SAID MOUNTAIN ROAD TO A POINT WHICH IS THE INTERSECTION OF THE EASTERLY LINE OF SAID MOUNTAIN ROAD TO A POINT WHICH IS THE INTERSECTION OF THE EASTERLY LINE OF SAID LOT "D" BLOCK 44, OF THE PEREA ADDITION EXTENDED NORTHERLY WITH THE SAID SOUTH LINE OF MOUNTAIN ROAD; THENCE IN A SOUTHERLY DIRECTION ALONG THE SAID EXTENSION OF THE EAST LINE OF SAID LOT "D" IN BLOCK 44, TO THE NORTHEAST CORNER OF SAID LOT "D", THE PLACE OF BEGINNING, SAID LOTS BEING MORE PARTICULARLY DESCRIBED BY NEW MEXICO STATE PLANE COORDINATE SYSTEM GRID BEARINGS (NAD 83, CENTRAL ZONE) AND GROUND DISTANCE (US SURVEY FOOT) AS FOLLOWS;

BEGINNING AT THE SOUTHWEST CORNER OF DESCRIBED TRACT LYING ON THE EAST LINE OF A 16 FOOT ALLEY, MARKED BY A FOUND NO. 4 REBAR WITH RED PLASTIC CAP "PS 14269 WAYJOHN", FROM WHENCE A TIE TO A.R.G.S. MONUMENT "12_J13" BEARS S 04°19'12" W, A DISTANCE OF 1,166.18;

THENCE FROM SAID POINT OF BEGINNING, ALONG SAID EAST LINE, N 11°16'01" E, A DISTANCE OF 157.43 FEET TO THE NORTHWEST CORNER OF DESCRIBED TRACT, LYING ON THE INTERSECTION OF SAID EAST LINE AND THE SOUTH RIGHT OF WAY LINE OF MOUNTAIN ROAD, N.W., MARKED BY A FOUND NO. 4 REBAR WITH ALUMINUM TAG "PS 14269";

THENCE ALONG SAID SOUTH RIGHT OF WAY LINE, S 68°58'16" E, A DISTANCE OF 101.12 FEET TO THE NORTHEAST CORNER OF DESCRIBED TRACT, MARKED BY A FOUND CHISELED "X";

THENCE LEAVING SAID SOUTH RIGHT OF WAY LINE S 11°08'06" W, A DISTANCE OF 140.09 FEET TO THE SOUTHEAST CORNER OF DESCRIBED TRACT, MARKED BY A FOUND PK NAIL WITH BRASS TAG "PS 14269";

THENCE N 78°50'45" W, A DISTANCE OF 99.98 FEET TO THE POINT OF BEGINNING, CONTAINING 0.3409 ACRES (14,848 SQUARE FEET), MORE OR LESS, NOW COMPRISING OF LOTS B-1, C-1, D-1 AND E-1, BLOCK 44, PEREA ADDITION.

Utility Approvals

PNM — DATE 12-12-18

NEW MEXICO GAS COMPANY — DATE 12/12/18

QWEST CORPORATION D/B/A CENTURYLINK QC — DATE 12/12/2018

COMCAST — DATE 12/12/18

City Approvals

Loren N. Risenhoover P.S. 7/31/18
CITY SURVEYOR — DATE

3/20/19
TRAFFIC ENGINEERING, TRANSPORTATION DEPARTMENT — DATE

03-20-19
A.B.C.W.U.A. — DATE

N/A
PARKS AND RECREATION DEPARTMENT — DATE

12/13/18
AMAFCA — DATE

3/20/19
CITY ENGINEER — DATE

3/20/19
CODE ENFORCEMENT — DATE

3-28-2019
DRB CHAIRPERSON, PLANNING DEPARTMENT — DATE

THIS IS TO CERTIFY THAT TAXES ARE CURRENT AND
PAID ON UPC #: 101305839331810906 101305838931910907
PROPERTY OWNER OF RECORD: PHEN MAU + Liem Ann Nguyen & Libutti
BERNALILLO COUNTY TREASURER'S OFFICE:

Purpose of Plat

THE PURPOSE OF THIS PLAT IS TO REPLAT THE EXISTING FOUR LOTS AND VACATED RIGHT OF WAY INTO FOUR NEW LOTS

Notes:

1. ~~THE PROPERTY ON THIS PLAT IS SUBJECT TO A PRE-DEVELOPMENT FACILITIES FEE AGREEMENT WITH THE ALBUQUERQUE PUBLIC SCHOOLS RECORDED AT / /2018.~~

2. PLAT SHOWS ALL EASEMENTS OF RECORD.

Public Utility Easements

PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT ARE GRANTED FOR THE COMMON JOINT USE OF:

A. PUBLIC SERVICE COMPANY OF NEW MEXICO ("PNM"), A NEW MEXICO CORPORATION, (PNM ELECTRIC) FOR INSTALLATION, MAINTENANCE AND SERVICE OF OVERHEAD AND UNDERGROUND ELECTRICAL LINES, TRANSFORMERS, AND OTHER EQUIPMENT AND RELATED FACILITIES REASONABLY NECESSARY TO PROVIDE ELECTRICAL SERVICES.

B. NEW MEXICO GAS COMPANY FOR INSTALLATION, MAINTENANCE, AND SERVICE OF NATURAL GAS LINES, VALVES AND OTHER EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE NATURAL GAS SERVICES.

C. QWEST CORPORATION D/B/A CENTURYLINK QC FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF SUCH LINES, CABLE, AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE COMMUNICATION SERVICES.

D. CABLE TV FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF SUCH LINES, CABLE, AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE CABLE SERVICES.

INCLUDED IS THE RIGHT TO BUILD, REBUILD, CONSTRUCT, RECONSTRUCT, LOCATE, RELOCATE WITHIN THE EASEMENT CHANGE, REMOVE, REPLACE, MODIFY, RENEW, OPERATE AND MAINTAIN FACILITIES FOR PURPOSES DESCRIBED ABOVE, TOGETHER WITH FREE ACCESS TO, FROM AND OVER SAID EASEMENTS, WITH THE RIGHT AND PRIVILEGE OF GOING UPON, OVER AND ACROSS ADJOINING LANDS OF GRANTOR FOR THE PURPOSES SET FORTH HEREIN AND WITH THE RIGHT TO UTILIZE THE RIGHT OF WAY AND EASEMENT TO EXTEND SERVICES TO CUSTOMERS OF GRANTEE, INCLUDING SUFFICIENT WORKING AREA SPACE FOR ELECTRIC TRANSFORMERS, WITH THE RIGHT AND PRIVILEGE TO TRIM AND REMOVE TREES, SHRUBS OR BUSHES WHICH INTERFERE WITH THE PURPOSES SET FORTH HEREIN. NO BUILDING, SIGN, POOL (ABOVEGROUND OR SUBSURFACE), HOT TUB, CONCRETE OR WOOD POOL DECKING, OR OTHER STRUCTURE SHALL BE ERECTED OR CONSTRUCTED ON SAID EASEMENTS, NOR SHALL WELL BE DRILLED OR OPERATED THEREON. PROPERTY OWNERS SHALL BE SOLELY RESPONSIBLE FOR CORRECTING ANY VIOLATIONS OF NATIONAL ELECTRICAL SAFETY CODE BY CONSTRUCTION OF POOLS, DECKING, OR ANY STRUCTURES ADJACENT TO OR NEAR EASEMENTS SHOWN ON PLAT.

EASEMENTS FOR ELECTRIC TRANSFORMER/SWITCHGEARS, AS INSTALLED, SHALL EXTEND TEN (10) FEET IN FRONT OF TRANSFORMER/SWITCHGEAR DOORS AND FIVE (5) FEET ON EACH SIDE.

Disclaimer

IN APPROVING THIS PLAT, PUBLIC SERVICE COMPANY OF NEW MEXICO (PNM), QWEST CORPORATION D/B/A CENTURYLINK QC AND NEW MEXICO GAS COMPANY (NMGC) DID NOT CONDUCT A TITLE SEARCH OF THE PROPERTIES SHOWN HEREON. CONSEQUENTLY, PNM, QWEST CORPORATION D/B/A CENTURYLINK QC AND NMGC DO NOT WAIVE OR RELEASE ANY EASEMENT OR EASEMENT RIGHTS WHICH HAVE BEEN GRANTED BY PRIOR PLAT, REPLAT OR OTHER DOCUMENT AND WHICH ARE NOT SHOWN SPECIFICALLY DESCRIBED AND ON THIS PLAT.

Solar Note:

NO PROPERTY WITHIN THE AREA OF REQUESTED FINAL ACTION SHALL AT ANY TIME BE SUBJECT TO A DEED RESTRICTION, COVENANT, OR BINDING AGREEMENT PROHIBITING SOLAR COLLECTORS FROM BEING INSTALLED ON BUILDINGS OR ERECTED ON THE LOTS OF PARCELS WITHIN THE AREA OF THIS PLAT.

Free Consent

THE REPLAT SHOWN HEREON IS WITH THE FREE CONSENT AND IN ACCORDANCE WITH THE DESIRES OF THE UNDERSIGNED OWNER. EXISTING PUBLIC UTILITY EASEMENTS SHOWN HEREON FOR THE COMMON AND JOINT USE OF GAS, ELECTRICAL POWER AND COMMUNICATION SERVICES FOR BURIED AND/OR OVERHEAD DISTRIBUTION LINES, CONDUITS, AND PIPES FOR UNDERGROUND UTILITIES WHERE SHOWN OR INDICATED, AND INCLUDING THE RIGHT OF INGRESS AND EGRESS FOR CONSTRUCTION AND MAINTENANCE, AND THE RIGHT TO TRIM INTERFERING TREES AND SHRUBS. SAID OWNER DOES HEREBY CERTIFY THAT THIS SUBDIVISION IS THEIR FREE ACT AND DEED. SAID OWNERS WARRANT THAT THEY HOLD AMONG THEM COMPLETE AND INDEFEASIBLE TITLE IN FEE SIMPLE TO THE LAND SUBDIVIDED.

Ann N. Liem — 7/30/2018
ANN N. LIEM — DATE
MANAGER
PLL ENTERPRISES, LCC

OFFICIAL SEAL
LARRY W. MEDRANO
NOTARY PUBLIC - STATE OF NEW MEXICO
My commission expires: 11/13/20

Acknowledgment

STATE OF NEW MEXICO) SS
COUNTY OF BERNALILLO)

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME THIS 30TH DAY OF JULY, 2018 BY ANN N. LIEM, MANAGER, PLL ENTERPRISES, LCC

BY ______ NOTARY PUBLIC — MY COMMISSION EXPIRES: 11/13/2020

Surveyor's Certificate

I, LARRY W. MEDRANO, A REGISTERED NEW MEXICO PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY MEETING THE MINIMUM REQUIREMENTS FOR MONUMENTATION AND SURVEYS OF THE CITY OF ALBUQUERQUE SUBDIVISION ORDINANCE AND OF THE MINIMUM STANDARDS FOR LAND SURVEYS AS ADOPTED BY THE N.M. BOARD OF LICENSURE FOR ENGINEERS AND SURVEYORS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT NO ENCROACHMENTS EXIST EXCEPT AS NOTED ABOVE AND THAT ALL IMPROVEMENTS ARE SHOWN IN THEIR CORRECT LOCATION RELATIVE TO RECORD BOUNDARIES AS LOCATED BY THIS SURVEY.

7/30/18
LARRY W. MEDRANO — DATE
N.M.P.S. No. 11993

LARRY W. MEDRANO
NEW MEXICO
11993
REGISTERED PROFESSIONAL SURVEYOR

COORDINATE AND DIMENSION INFORMATION			
STATE PLANE ZONE: NM-C	GRID/GROUND COORDINATES: GRID	TYPE: STANDARD	
HORIZONTAL DATUM: NAD83	VERTICAL DATUM: NAVD88	ROTATION ANGLE: 0° 00' 00.00"	MATCHES DRAWING UNITS: YES
CONTROL USED: ALBUQUERQUE GEODETIC REFERENCE SYSTEM		BASE POINT FOR SCALING AND/OR ROTATION: N = 0 E = 0	
COMBINED SCALE FACTOR: GRID TO GROUND: 1.00031928 GROUND TO GRID: 0.99966807739	DISTANCE ANNOTATION: GROUND; BEARING ANNOTATION: GRID	ELEVATION TRANSLATION: ±0.00'	ELEVATIONS VALID: NO

PLSS INFORMATION			
LAND GRANT: TOWN OF ALBUQUERQUE GRANT			
SECTION: 18	TOWNSHIP: 10 NORTH	RANGE: 3 EAST	MERIDIAN: NMPM
CITY: ALBUQUERQUE		COUNTY: BERNALILLO	STATE: NM

INDEXING INFORMATION FOR COUNTY CLERK
PROPERTY OWNER: PLL ENTERPRISES, LLC
SUBDIVISION NAME: PEREA ADDITION
UPC: 101305839331810906

PRECISION SURVEYS, INC.
OFFICE LOCATION:
9200 San Mateo Boulevard, NE
Albuquerque, NM 87113
505.856.5700 PHONE
505.856.7900 FAX

PROJECT INFORMATION.	
CREW/TECH: MC	DATE OF SURVEY: 06/27/2018
DRAWN BY: JK	CHECKED BY: LM
PSI JOB NO. 18-1098P	SHEET NUMBER: 1 OF 2

Easement Notes:

Ⓐ DRAINAGE FACILITIES AND/OR DETENTION AREAS MAINTAINED BY LOT OWNER

AREAS DESIGNATED ON THE ACCOMPANYING PLAT AS "DRAINAGE EASEMENTS" ["DETENTION AREAS"] ARE HEREBY DEDICATED BY THE OWNER AS A PERPETUAL EASEMENT FOR THE COMMON USE AND BENEFIT OF THE VARIOUS LOTS WITHIN THE SUBDIVISIONS FOR THE PURPOSE OF PERMITTING THE CONVEYANCE OF STORM WATER RUNOFF AND THE CONSTRUCTING* AND MAINTAINING OF DRAINAGE FACILITIES [STORM WATER DETENTION FACILITIES] IN ACCORDANCE WITH STANDARDS PRESCRIBED BY THE CITY OF ALBUQUERQUE.** NO FENCE, WALL, PLANTING, BUILDING OR OTHER OBSTRUCTION MAY BE PLACED OR MAINTAINED IN EASEMENT AREA WITHOUT APPROVAL OF THE CITY ENGINEER OF THE CITY OF ALBUQUERQUE. THERE ALSO SHALL BE NO ALTERATION OF THE GRADES OR CONTOURS IN SAID EASEMENT AREA WITHOUT THE APPROVAL OF THE CITY ENGINEER. IT SHALL BE THE DUTY OF THE LOT OWNERS OF THIS SUBDIVISION TO MAINTAIN SAID DRAINAGE EASEMENT [DETENTION AREA] AND FACILITIES AT THEIR COST IN ACCORDANCE WITH STANDARDS PRESCRIBED BY THE CITY OF ALBUQUERQUE. THE CITY SHALL HAVE THE RIGHT TO ENTER PERIODICALLY TO INSPECT THE FACILITIES. IN THE EVENT SAID LOT OWNERS FAIL TO ADEQUATELY AND PROPERLY MAINTAIN DRAINAGE EASEMENT [DETENTION AREA] AND FACILITIES, AT ANY TIME FOLLOWING FIFTEEN (15) DAYS WRITTEN NOTICE TO SAID LOT OWNERS, THE CITY MAY ENTER UPON SAID AREA, PERFORM SAID MAINTENANCE, AND THE COST OF PERFORMING SAID MAINTENANCE SHALL BE PAID BY APPLICABLE LOT OWNERS PROPORTIONATELY ON THE BASIS OF LOT OWNERSHIP. IN THE EVENT LOT OWNERS FAIL TO PAY THE COST OF MAINTENANCE WITHIN THIRTY (30) DAYS AFTER DEMAND FOR PAYMENT MADE BY THE CITY, THE CITY MAY FILE A LIEN AGAINST ALL LOTS IN THE SUBDIVISION FOR WHICH PROPORTIONATE PAYMENT HAS NOT BEEN MADE. THE OBLIGATIONS IMPOSED HEREIN SHALL BE BINDING UPON THE OWNER, HIS HEIRS, AND ASSIGNS AND SHALL RUN WITH ALL LOTS WITHIN THIS SUBDIVISION.

THE GRANTOR AGREES TO DEFEND, INDEMNIFY, AND HOLD HARMLESS, THE CITY, ITS OFFICIALS, AGENTS AND EMPLOYEES FROM AND AGAINST ANY AND ALL CLAIMS, ACTIONS, SUITS, OR PROCEEDINGS OF ANY KIND BROUGHT AGAINST SAID PARTIES FOR OR ONACCOUNT OF ANY MATTER ARISING FROM THE DRAINAGE FACILITY PROVIDED FOR HEREIN OR THE GRANTOR'S FAILURE TO CONSTRUCT, MAINTAIN, OR MODIFY SAID DRAINAGE FACILITY.

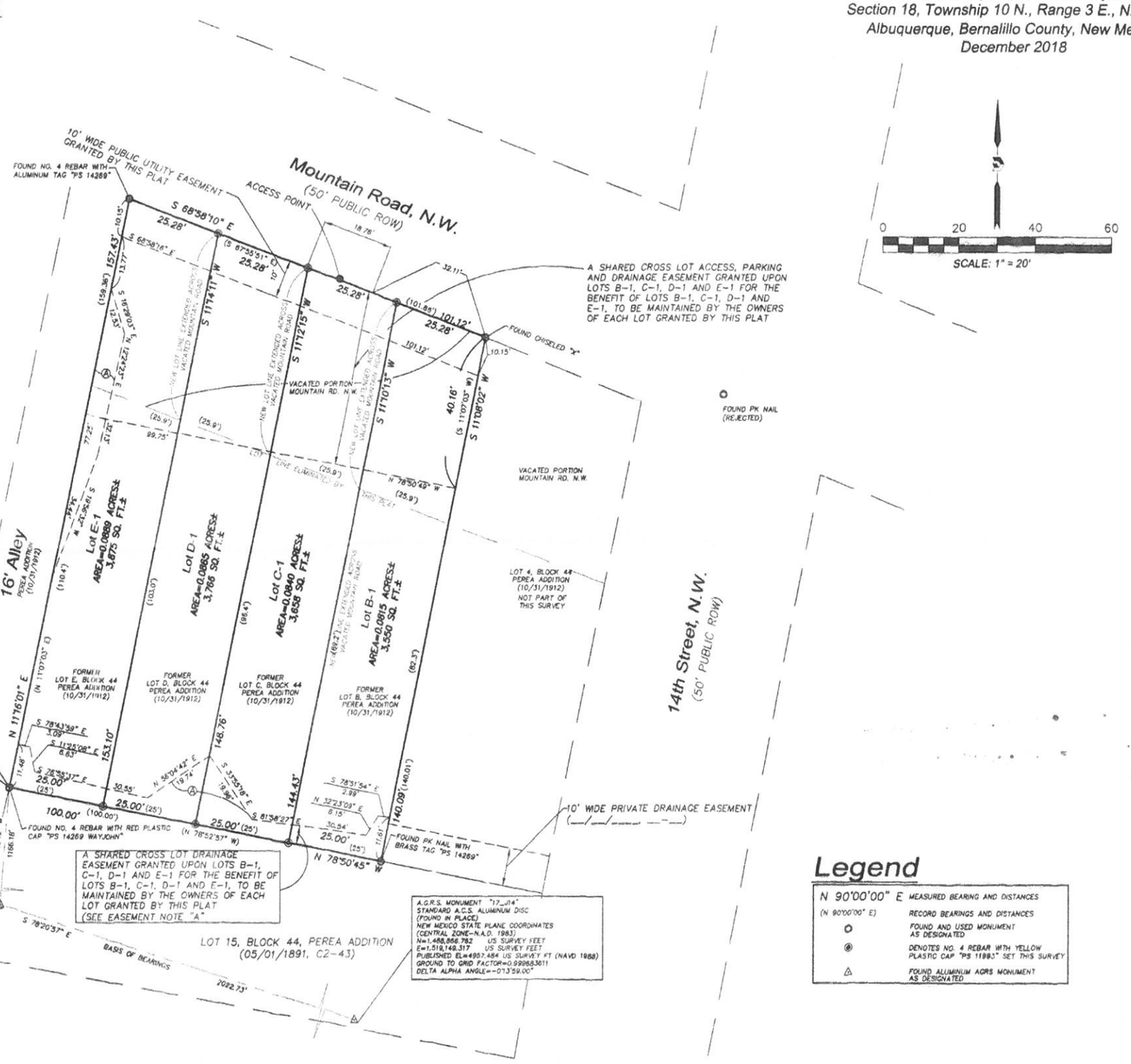
RECORDING STAMP
DOC# 2019023885
03/29/2019 11:43 AM Page 2 of 2
PLAT 9 $25.00 B 2019C P 0024 Linda Stover, Bernalillo County

Re-Plat of

Lots B-1, C-1, D-1 and E-1, Block 44

Perea Addition

Town of Albuquerque Grant, Projected
Section 18, Township 10 N., Range 3 E., N.M.P.M.
Albuquerque, Bernalillo County, New Mexico
December 2018



Legend

N 90°00'00" E	MEASURED BEARING AND DISTANCES
(N 90°00'00" E)	RECORD BEARINGS AND DISTANCES
○	FOUND AND USED MONUMENT AS DESIGNATED
◉	DENOTES NO. 4 REBAR WITH YELLOW PLASTIC CAP "PS 11985" SET THIS SURVEY
△	FOUND ALUMINUM AGRS MONUMENT AS DESIGNATED

COORDINATE AND DIMENSION INFORMATION						PLSS INFORMATION				INDEXING INFORMATION FOR COUNTY CLERK
STATE PLANE ZONE: NM-C	GRID/GROUND COORDINATES: GRID	TYPE: STANDARD				LAND GRANT: TOWN OF ALBUQUERQUE GRANT				PROPERTY OWNER: MICHAEL P. TAPIA
HORIZONTAL DATUM: NAD83	VERTICAL DATUM: NAVD88	ROTATION ANGLE: 0° 00' 00.00"	MATCHES DRAWING UNITS: YES			SECTION: 18	TOWNSHIP: 10 NORTH	RANGE: 3 EAST	MERIDIAN: NMPM	SUBDIVISION NAME: PEREA ADDITION
CONTROL USED: ALBUQUERQUE GEODETIC REFERENCE SYSTEM		BASE POINT FOR SCALING AND/OR ROTATION: N = 0 E = 0				CITY: ALBUQUERQUE		COUNTY: BERNALILLO	STATE: NM	UPC: 101305839331810906
COMBINED SCALE FACTOR: GRID TO GROUND: 1.00031928 GROUND TO GRID: 0.99966807739		DISTANCE ANNOTATION: GROUND	BEARING ANNOTATION: GRID	ELEVATION TRANSLATION: ±0.00'	ELEVATIONS VALID: NO					

PRECISION SURVEYS, INC.

OFFICE LOCATION:
9200 San Mateo Boulevard, NE
Albuquerque, NM 87113

505.856.5700 PHONE
505.856.7900 FAX

PROJECT INFORMATION	
CREW/TECH: MC	DATE OF SURVEY: 06/27/2018
DRAWN BY: JK	CHECKED BY: LM
PSI JOB NO.: 18-1098P	SHEET NUMBER: 2 OF 2

DRAINAGE REPORT

For

14TH AND MOUNTAIN TOWNHOMES

Albuquerque, New Mexico

Prepared by

Rio Grande Engineering
PO Box 93924
Albuquerque, New Mexico 87194

December 2018

David Soule P.E. No. 14522

TABLE OF CONTENTS

Appendix

Map Pocket
Site Grading and Drainage Plan

PURPOSE

The purpose of this report is to provide the Drainage Management Plan for the redevelopment of an existing lot located on the southwest corner of 14th and Mountain NW. This plan was prepared in accordance with the City of Albuquerque design regulations, utilizing the City of Albuquerque's Development Process Manual drainage guidelines. This report will demonstrate that the proposed development does not adversely affect the surrounding properties, nor the upstream or downstream facilities.

INTRODUCTION

The subject of this report, as shown on the Exhibit A, is a 0.33-acre parcel of land located on the southwest quadrant of 14th and Mountain in the near north valley of Albuquerque. The lot is currently being combined into one lot; the existing legal description of this site is lots B, C, D, and E Block 44 Perea Addition. As shown on FIRM map3501C0331HF, the entire property is located within Flood Zone X. This site is an existing site developed as a single family residence with large parking area. Based on the site location and the adjacent drainage infrastructure this development must drain to Mountain and the adjacent property at less than existing conditions.

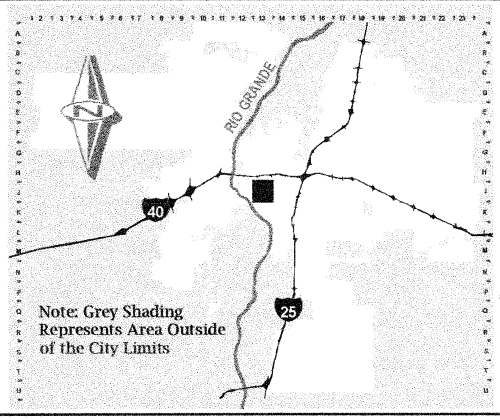
EXISTING CONDITIONS

The site is currently developed. The site is not impacted by any offsite flows, and is surrounded by developed properties. The site discharges to the adjacent lot to the east, were the flow enters 14th street and drains to an inlet at the corner of 14th and mountain. As shown in Appendix A, the existing site discharges at a peak rate of 0.93cfs in a 100-year, 6-hour event. The discharge leaves the site as sheet flow upon the lot to the east were it enters 14th street and captured by an inlet at 14th and Mountain.

For more current information and more details visit: http://www.cabq.gov/gis

AGIS
Albuquerque Geographic Information System

Map amended through: 2/4/2010



Zone Atlas Page:

J-13-Z

Selected Symbols

- SECTOR PLANS
- Design Overlay Zones
- City Historic Zones
- H-1 Buffer Zone
- Petroglyph Mon.
- Escarpment
- 2 Mile Airport Zone
- Airport Noise Contours
- Wall Overlay Zone

0 750 1,500 Feet

PROPOSED CONDITIONS

The proposed improvements consist of a 4 town homes on the combined lot. The site will be graded to create 2 basins. Basin A contains the front half of the buildings and the shared parking areas. This basin generates 0.91 cfs that will drain to a water harvest pond located at the North West corner. The outfall is restricted by a 6" pipe. The parking lot functions as a detention basin and the routed flow is decreased to 0.53 cfs. The maximum water surface elevation will be 4959.77. The parking lot will discharge to the street at 5960 in the event of clogging. This basin will retain a water quality volume of 275 cf, which exceeds the required of 256 cf. Basin B contains the rear of the buildings and back yard. This basin will generate a peak flow rate of .38 cfs draining to the adjacent lot. This basin is throttled by the addition of a 4" pipe with the rear yards acting as a detention basin, the routed discharge rate will be 0.20 cfs. This basin will retain a water quality volume of 286, which exceeds the 84 cf required. In the event of clogging, the basin will discharge to basin A and leave the site via the driveway. The combined flow leaving the site will be 0.73, which is less than existing rate of 0.93 cfs. The drainage patterns are modified to direct more flow to the street. The downstream collection point remains the inlet at 14th and Mountain

SUMMARY AND RECOMMENDATIONS

This project is an infill project within a completely developed area of the near north Valley Albuquerque. The project is a redevelopment of an existing site. The site currently discharges .93 cfs to 14th street over an adjacent vacant lot. The proposed drainage plan drains the majority of the lot to mountain. The rear portion of the lot will continue to drain upon the adjacent lot, which is a natural gas pipeline valve station. The total flow leaving the site is reduced to 0.73 cfs by utilizing detention ponds with orifice restrictions. The first flush volume is retained onsite. The proposed decrease of 0.2 cfs shall have no negative impact on existing drainage patterns.

APPENDIX A

SITE HYDROLOGY

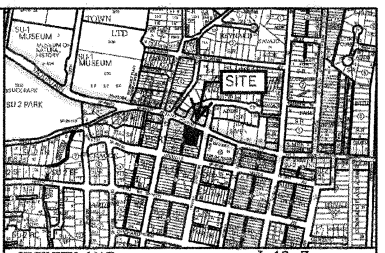
NOTICE TO CONTRACTORS

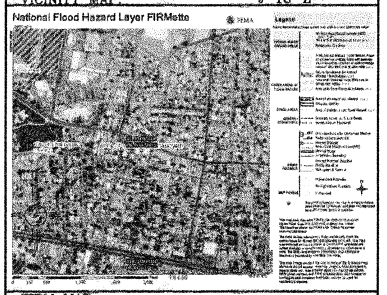
1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

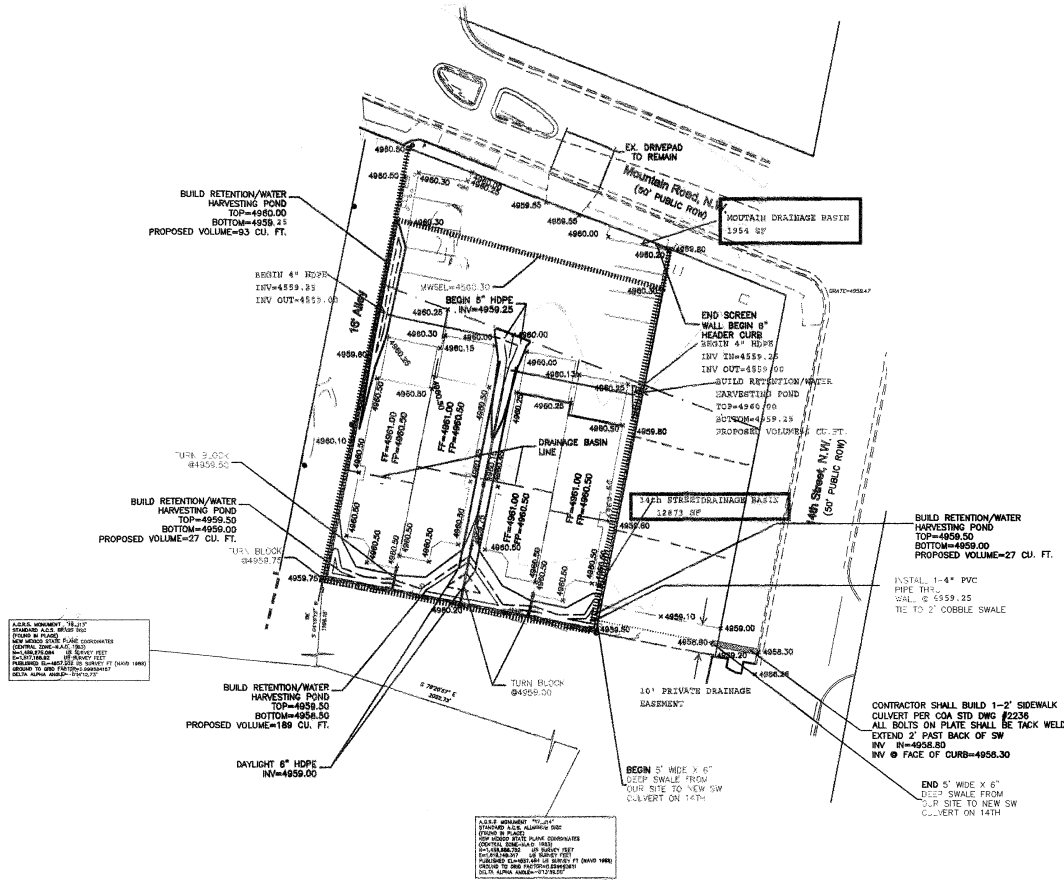
APPROVAL	NAME	DATE
INSPECTOR		

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:

Lots B, C, D and E of Block 44, Perea Addition

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL CURB AND GUTTER TO 6" HEADER UNLESS OTHERWISE NOTED.
3. ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
4. ANY CURBS OR PAVEMENT NEGATIVELY IMPACTED BY CONSTRUCTION ACTIVITY SHALL BE REPLACED TO MATCH EXISTING CONDITIONS.
5. ALL SITE WORK SHALL CONFORM TO CITY OF ALBUQUERQUE STANDARDS FOR PUBLIC WORKS CONSTRUCTION EDITION 9

LEGEND

- EXISTING CONTOUR
- 5415 EXISTING INDEX CONTOUR
- 5414 PROPOSED CONTOUR
- 5410 PROPOSED INDEX CONTOUR
- SLOPE TIE
- x 4948.25 EXISTING SPOT ELEVATION
- + 4948.25 PROPOSED SPOT ELEVATION
- BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY
- PROPOSED CURB
- EXISTING CURB AND GUTTER
- EXISTING SIDEWALK
- PROPOSED SCREEN WALL 18" MAX. RETAINAGE

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.

ENGINEER'S SEAL
DAVID SOULE NEW MEXICO 14632 REGISTERED PROFESSIONAL ENGINEER
DAVID SOULE P.E. #14632

MOUTAIN TOWNHOMES
PROPOSED BASIN MAP

DRAWN BY WCWJ
DATE 2-26-19
218151-LAYOUT-10-30-18
SHEET #

Rio Grande Engineering
1808 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999

JOB # 218151

THIS IS NOT A BOUNDARY SURVEY
APPARENT LOT LINES AND PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY

Topographic Survey of
Lots B, C, D and E of Block 44

Perea Addition

And the Vacated Portion of

Mountain Road, N.W.

Town of Albuquerque Grant, Projected
Section 18, Township 10 N., Range 3 E., N.M.P.M.
Albuquerque, Bernalillo County, New Mexico
February 2019

0 20 40 60
SCALE: 1" = 20'

Legend

N 90°00'00" E	MEASURED BEARING AND DISTANCES
○	FOUND AND USED MONUMENT AS DESIGNATED
△	FOUND ALUMINUM AGRS MONUMENT AS DESIGNATED
⊕	SERVICE/DROP POLE AS DESIGNATED
●	UTILITY POLE
⊢	GUY WIRE
⊠	ELECTRIC METER
⊛	WATER METER
⊗	GAS VALVE
⊡	GAS METER
SIGN	SIGN
	CURB AND GUTTER
	OVERHEAD UTILITY LINE
	CHAIN LINK FENCE
	WOOD FENCE

Notes

1. PLAT REFERENCES:
   A. PLAT OF LOTS B, C, D, AND E, BLOCK 44, PEREA ADDITION AND VACATED MOUNTAIN ROAD, N.W. (10/31/1912)
2. ELEVATION DATUM IS BASED ON NAVD 1988 FROM AGRS MONUMENT "12_J13", PUBLISHED ELEVATION (FEET) = 4957.502 (DATE OF RETRIVAL: JULY 2007 FOR NON AGRS MONUMENTS)
3. THIS MAP HAS BEEN PRODUCED ACCORDING TO PROCEDURES THAT HAVE BEEN DEMONSTRATED TO PRODUCE DATA THAT MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR A TOPOGRAPHIC MAP COMPILED AT A SCALE OF 1"=20' WITH A CONTOUR INTERVAL OF ONE FOOT.
4. GPS CALIBRATION BASED ON ACS MONUMENTS "12_J13" AND "17_J14", AVERAGE PROJECT GROUND TO GRID SCALE FACTOR= 0.9996587739

Surveyor's Certificate

I, LARRY W. MEDRANO, A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NEW MEXICO, LICENSE NUMBER 11993, DO HEREBY CERTIFY THAT THIS TOPOGRAPHIC SURVEY WAS PREPARED BY ME BY FIELD SURVEYS USING GPS RTK MEASUREMENTS BASED ON SITE HORIZONTAL/VERTICAL CALIBRATION UTILIZING AGRS MONUMENTS. ELEVATIONS BASED ON AGRS MONUMENT "12_J13" (NAVD 1988). THIS SURVEY MEETS THE MINIMUM STANDARDS FOR TOPOGRAPHIC SURVEYING IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND SURVEYORS. THIS IS NOT A BOUNDARY SURVEY.

LARRY W. MEDRANO
N.M.P.S. No. 11993

DATE

DIGITAL SIGNATURE IS INVALID WITHOUT DIGITAL CERTIFICATION
WET SIGNATURE IS INVALID IF "NOT" IN BLUE INK WITH BLUE STAMP OR EMBOSSED SEAL

LARRY W. MEDRANO NEW MEXICO 11993 REGISTERED PROFESSIONAL SURVEYOR

COORDINATE AND DIMENSION INFORMATION			PLSS INFORMATION				INDEXING INFORMATION FOR COUNTY CLERK
NM-C	GRID	STANDARD	LAND GRANT: TOWN OF ALBUQUERQUE GRANT				PROPERTY OWNER: MICHAEL P. TAPIA
NAD83	NAVD88		SECTION: 18	TOWNSHIP: 10 NORTH	RANGE: 3 EAST	MERIDIAN: NMPM	SUBDIVISION NAME: PEREA ADDITION
ALBUQUERQUE GEODETIC REFERENCE SYSTEM			CITY: ALBUQUERQUE		COUNTY: BERNALILLO	STATE: NM	UPC: 101305939331810906
GRID TO GROUND: 1.00031928	GROUND						
GROUND TO GRID: 0.99965907739	GRID	±0.00'	YES				

PRECISION SURVEYS, INC.
OFFICE LOCATION: 3880 San Mateo Boulevard, NE, Albuquerque, NM 87113
505.856.5700 PHONE
505.856.7900 FAX

PROJECT INFORMATION	
CREW/TECH: MT	DATE OF SURVEY: 02/14/2019
DRAWN BY: JK	CHECKED BY: LM
PSI JOB NO. 18-10987	SHEET NUMBER 1 OF 1

THIS IS NOT A BOUNDARY SURVEY
APPARENT LOT LINES AND PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY

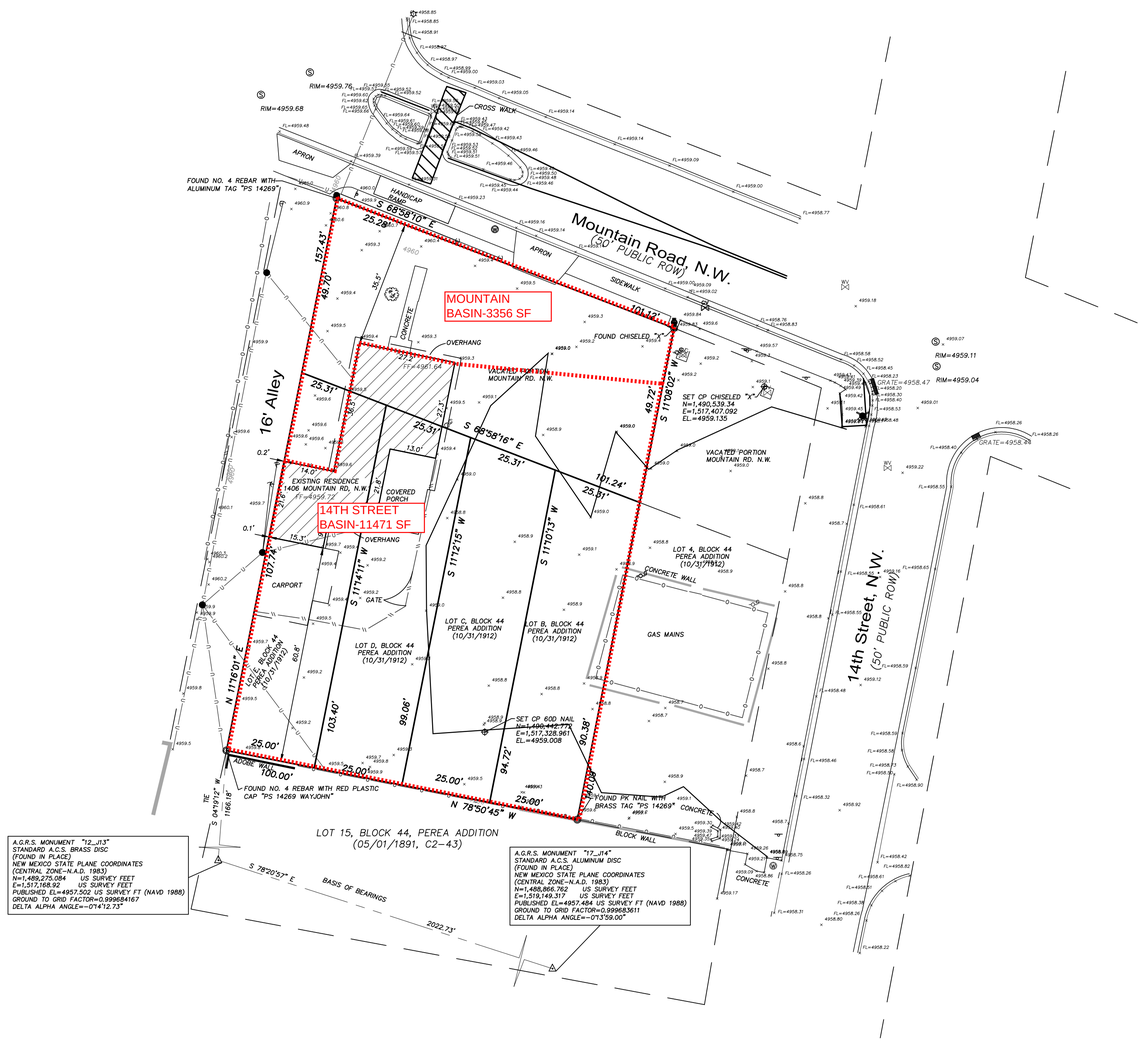
Topographic Survey of
Lots B, C, D and E of Block 44

Perea Addition

And the Vacated Portion of

Mountain Road, N.W.

Town of Albuquerque Grant, Projected
Section 18, Township 10 N., Range 3 E., N.M.P.M.
Albuquerque, Bernalillo County, New Mexico
February 2019



Legend

N 90°00'00" E	MEASURED BEARING AND DISTANCES
○	FOUND AND USED MONUMENT AS DESIGNATED
△	FOUND ALUMINUM AGRS MONUMENT AS DESIGNATED
◒	SERVICE/DROP POLE AS DESIGNATED
●	UTILITY POLE
⊢	GUY WIRE
EM	ELECTRIC METER
Ⓦ	WATER METER
⋈	GAS VALVE
G	GAS METER
SIGN	SIGN
	CURB AND GUTTER
OHU	OVERHEAD UTILITY LINE
	CHAIN LINK FENCE
	WOOD FENCE

Notes

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8. GPS CALIBRATION BASED ON ACS MONUMENTS "12_J13" AND "17_J14", AVERAGE PROJECT GROUND TO GRID SCALE FACTOR= 0.99966807739

Surveyor's Certificate

I, LARRY W. MEDRANO, A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NEW MEXICO, LICENSE NUMBER 11993, DO HEREBY CERTIFY THAT THIS TOPOGRAPHIC SURVEY WAS PREPARED BY ME BY FIELD SURVEYS USING GPS RTK MEASUREMENTS BASED ON SITE HORIZONTAL/VERTICAL CALIBRATION UTILIZING AGRS MONUMENTS. ELEVATIONS BASED ON AGRS MONUMENT "12_J13" (NAVD 1988). THIS SURVEY MEETS THE MINIMUM STANDARDS FOR TOPOGRAPHIC SURVEYING IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND SURVEYORS. THIS IS NOT A BOUNDARY SURVEY.

LARRY W. MEDRANO
N.M.P.S. No. 11993

DATE

DIGITAL SIGNATURE IS INVALID WITHOUT DIGITAL CERTIFICATION
WET SIGNATURE IS INVALID IF NOT IN BLUE INK WITH BLUE STAMP OR EMBOSSED STAMP

LARRY W. MEDRANO
NEW MEXICO
11993
REGISTERED PROFESSIONAL SURVEYOR

COORDINATE AND DIMENSION INFORMATION					PLSS INFORMATION				INDEXING INFORMATION FOR COUNTY CLERK
STATE PLANE ZONE: NM-C	GRID/GROUND COORDINATES: GRID	TYPE: STANDARD			LAND GRANT: TOWN OF ALBUQUERQUE GRANT				PROPERTY OWNER: MICHAEL P. TAPIA
HORIZONTAL DATUM: NAD83	VERTICAL DATUM: NAVD88		ROTATION ANGLE: 0° 00' 00.00"	MATCHES DRAWING UNITS: YES	SECTION: 18	TOWNSHIP: 10 NORTH	RANGE: 3 EAST	MERIDIAN: NMPM	SUBDIVISION NAME: PEREA ADDITION
CONTROL USED: ALBUQUERQUE GEODETIC REFERENCE SYSTEM			BASE POINT FOR SCALING AND/OR ROTATION: N = 0, E = 0		CITY: ALBUQUERQUE		COUNTY: BERNALILLO	STATE: NM	UPC: 101305839331810906
COMBINED SCALE FACTOR: GRID TO GROUND: 1.00031928, GROUND TO GRID: 0.999668077 39		DISTANCE ANNOTATION: GROUND	ELEVATION TRANSLATION: ±0.00'	ELEVATIONS VALID: YES					
		BEARING ANNOTATION: GRID							

PRECISION SURVEYS, INC.
OFFICE LOCATION:
9200 San Mateo Boulevard, NE
Albuquerque, NM 87113
505.856.5700 PHONE
505.856.7900 FAX

PROJECT INFORMATION	
CREW/TECH: MT	DATE OF SURVEY: 02/14/2019
DRAWN BY: JK	CHECKED BY: LM
PSI JOB NO.: 18-1098T	SHEET NUMBER: 1 OF 1

General Information
Homepage
Progress Reports
FAQ
Glossary

Precipitation Frequency
Data Server
GIS Grids
Maps
Time Series
Temporals
Documents

Probable Maximum Precipitation
Documents

Miscellaneous
Publications
Storm Analysis
Record Precipitation

Contact Us
Inquiries

NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATES: NM

Data description

Data type: Precipitation depth ▼ **Units:** English ▼ **Time series type:** Partial duration ▼

Select location

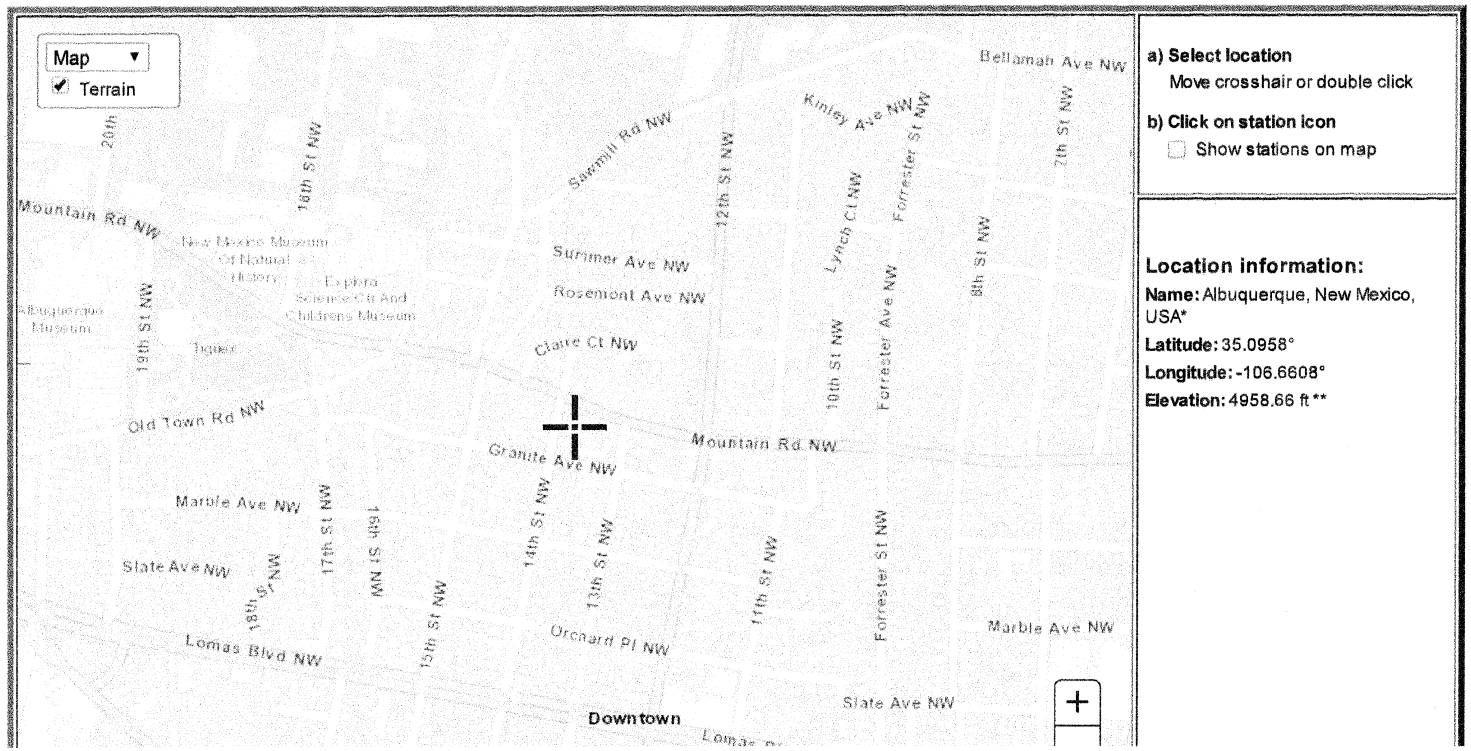
1) Manually:

a) By location (decimal degrees, use "-" for S and W): Latitude: Longitude: Submit

b) By station (list of NM stations): Select station ▼

c) By address Search

2) Use map (if ESRI interactive map is not loading, try adding the host: **https://js.arcgis.com/** to the firewall, or contact us at hdsc.questions@noaa.gov):



* Source: ESRI Maps
** Source: USGS

POINT PRECIPITATION FREQUENCY (PF) ESTIMATES

WITH 90% CONFIDENCE INTERVALS AND SUPPLEMENTARY INFORMATION
NOAA Atlas 14, Volume 1, Version 5

PF tabular PF graphical Supplementary information Print page

PDS-based precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.169** (0.145-0.197)	**0.219** (0.188-0.255)	**0.294** (0.251-0.343)	**0.353** (0.300-0.410)	**0.433** (0.366-0.503)	**0.495** (0.417-0.575)	**0.561** (0.469-0.651)	**0.631** (0.524-0.732)	**0.726** (0.596-0.843)	**0.801** (0.654-0.930)
10-min	**0.257** (0.221-0.300)	**0.333** (0.286-0.389)	**0.447** (0.382-0.522)	**0.536** (0.457-0.624)	**0.658** (0.557-0.765)	**0.753** (0.635-0.875)	**0.854** (0.714-0.991)	**0.961** (0.798-1.11)	**1.11** (0.908-1.28)	**1.22** (0.996-1.42)
15-min	**0.319** (0.274-0.372)	**0.413** (0.354-0.482)	**0.554** (0.473-0.647)	**0.665** (0.566-0.773)	**0.816** (0.690-0.948)	**0.934** (0.788-1.09)	**1.06** (0.885-1.23)	**1.19** (0.989-1.38)	**1.37** (1.13-1.59)	**1.51** (1.23-1.75)
30-min	**0.430** (0.369-0.501)	**0.556** (0.476-0.649)	**0.746** (0.637-0.872)	**0.895** (0.762-1.04)	**1.10** (0.930-1.28)	**1.26** (1.06-1.46)	**1.43** (1.19-1.66)	**1.60** (1.33-1.86)	**1.85** (1.52-2.14)	**2.04** (1.66-2.36)
60-min	**0.532** (0.456-0.620)	**0.688** (0.589-0.803)	**0.924** (0.789-1.08)	**1.11** (0.943-1.29)	**1.36** (1.15-1.58)	**1.56** (1.31-1.81)	**1.77** (1.48-2.05)	**1.99** (1.65-2.30)	**2.28** (1.88-2.65)	**2.52** (2.06-2.92)
2-hr	**0.610** (0.520-0.725)	**0.780** (0.664-0.930)	**1.03** (0.878-1.23)	**1.24** (1.05-1.46)	**1.52** (1.28-1.79)	**1.75** (1.46-2.06)	**1.99** (1.65-2.34)	**2.25** (1.84-2.64)	**2.61** (2.11-3.06)	**2.89** (2.33-3.40)
3-hr	**0.651** (0.561-0.771)	**0.828** (0.710-0.982)	**1.09** (0.934-1.28)	**1.29** (1.10-1.52)	**1.58** (1.34-1.86)	**1.81** (1.53-2.12)	**2.06** (1.72-2.41)	**2.32** (1.92-2.72)	**2.68** (2.20-3.14)	**2.98** (2.42-3.50)
6-hr	**0.758** (0.656-0.890)	**0.956** (0.829-1.12)	**1.23** (1.07-1.44)	**1.45** (1.25-1.70)	**1.75** (1.50-2.04)	**1.98** (1.69-2.31)	**2.23** (1.89-2.60)	**2.49** (2.10-2.90)	**2.85** (2.38-3.32)	**3.14** (2.60-3.66)
12-hr	**0.836** (0.732-0.959)	**1.06** (0.924-1.21)	**1.34** (1.17-1.53)	**1.56** (1.36-1.78)	**1.86** (1.61-2.12)	**2.09** (1.80-2.38)	**2.33** (2.00-2.66)	**2.58** (2.20-2.94)	**2.92** (2.46-3.34)	**3.20** (2.67-3.69)
24-hr	**0.953** (0.840-1.09)	**1.20** (1.05-1.36)	**1.49** (1.31-1.70)	**1.73** (1.52-1.96)	**2.05** (1.79-2.33)	**2.29** (2.00-2.60)	**2.55** (2.22-2.89)	**2.81** (2.43-3.17)	**3.15** (2.71-3.57)	**3.42** (2.93-3.87)
2-day	**0.990** (0.878-1.12)	**1.24** (1.10-1.40)	**1.54** (1.37-1.73)	**1.78** (1.58-2.00)	**2.10** (1.85-2.35)	**2.34** (2.06-2.63)	**2.59** (2.27-2.91)	**2.85** (2.48-3.20)	**3.18** (2.77-3.58)	**3.44** (2.97-3.91)
3-day	**1.08** (0.972-1.20)	**1.35** (1.21-1.50)	**1.66** (1.49-1.84)	**1.91** (1.71-2.11)	**2.24** (2.00-2.47)	**2.49** (2.22-2.75)	**2.74** (2.44-3.03)	**3.00** (2.66-3.32)	**3.33** (2.94-3.70)	**3.59** (3.16-4.01)
4-day	**1.17** (1.07-1.29)	**1.45** (1.32-1.59)	**1.78** (1.61-1.95)	**2.03** (1.84-2.22)	**2.37** (2.15-2.60)	**2.63** (2.38-2.88)	**2.89** (2.60-3.16)	**3.15** (2.83-3.44)	**3.49** (3.12-3.82)	**3.74** (3.34-4.10)
7-day	**1.33** (1.21-1.45)	**1.65** (1.50-1.79)	**2.00** (1.82-2.17)	**2.27** (2.07-2.46)	**2.62** (2.39-2.84)	**2.88** (2.62-3.12)	**3.14** (2.85-3.41)	**3.38** (3.08-3.67)	**3.70** (3.36-4.02)	**3.93** (3.56-4.28)
10-day	**1.46** (1.34-1.60)	**1.81** (1.66-1.97)	**2.21** (2.03-2.40)	**2.52** (2.31-2.73)	**2.93** (2.68-3.17)	**3.23** (2.95-3.50)	**3.54** (3.22-3.83)	**3.83** (3.48-4.15)	**4.21** (3.81-4.56)	**4.48** (4.05-4.87)
20-day	**1.81** (1.65-1.98)	**2.24** (2.05-2.45)	**2.71** (2.48-2.96)	**3.07** (2.80-3.34)	**3.51** (3.21-3.83)	**3.84** (3.50-4.17)	**4.14** (3.78-4.50)	**4.43** (4.03-4.81)	**4.79** (4.35-5.20)	**5.03** (4.56-5.47)
30-day	**2.16** (1.97-2.34)	**2.67** (2.44-2.90)	**3.20** (2.93-3.47)	**3.59** (3.29-3.89)	**4.08** (3.73-4.40)	**4.42** (4.04-4.76)	**4.74** (4.33-5.11)	**5.04** (4.59-5.43)	**5.38** (4.90-5.80)	**5.61** (5.11-6.06)
45-day	**2.64** (2.43-2.87)	**3.27** (3.01-3.55)	**3.88** (3.57-4.20)	**4.31** (3.96-4.67)	**4.83** (4.45-5.22)	**5.18** (4.77-5.60)	**5.49** (5.05-5.92)	**5.75** (5.30-6.20)	**6.02** (5.56-6.50)	**6.17** (5.72-6.65)

60-day	**3.03** (2.79-3.30)	**3.74** (3.45-4.07)	**4.45** (4.10-4.82)	**4.95** (4.57-5.36)	**5.55** (5.12-6.00)	**5.95** (5.49-6.43)	**6.31** (5.83-6.83)	**6.62** (6.13-7.17)	**6.96** (6.45-7.54)	**7.15** (6.66-7.74)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Estimates from the table in CSV format: Precipitation frequency estimates ▾ Submit

US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
Office of Water Prediction (OWP)
1325 East West Highway
Silver Spring, MD 20910
Page Author: HDSC webmaster
Page last modified: April 21, 2017

```
*S      AHYMO -  DETENTION-LOMAS
*S             POND ROUTING

START                TIME=0.0  PUNCH CODE=0


RAINFALL             TYPE=2
                     QUARTER=0.0    ONE= 1.77 IN
                     SIX=2.23 IN   DAY= 2.55 IN   DT = 0.05 HR



*Basin a
COMPUTE NM HYD       ID=1  HYD NO=101  DA= .000377 SQ MI
                     PER A=0  PER B=5 PER C=9  PER D=86
                     TP=-.170  MASSRAIN=-1


PRINT HYD            ID=1  CODE=3


* ROUTE THE TOTAL FLOW THROUGH THE PROPOSED RESERVOIR
ROUTE RESERVOIR      ID=2   HYD NO=102   INFLOW=1   CODE=3
                     OUTFLOW(CFS)    STORAGE(AC-FT)    ELEV(FT)
                        0.00             0.001          59.35
                        0.37             0.002          59.50
                        0.76             0.018          60.00



*Basin b
COMPUTE NM HYD       ID=3  HYD NO=103  DA= .000154 SQ MI
                     PER A=0  PER B=5 PER C=9  PER D=86
                     TP=-.170  MASSRAIN=-1


PRINT HYD            ID=3  CODE=3


* ROUTE THE TOTAL FLOW THROUGH THE PROPOSED RESERVOIR
ROUTE RESERVOIR      ID=4   HYD NO=104   INFLOW=3   CODE=3
                     OUTFLOW(CFS)    STORAGE(AC-FT)    ELEV(FT)
                        0.0              0.006          59.50
                        0.21             0.012          59.75

* existing
COMPUTE NM HYD       ID=5  HYD NO=105  DA= .000531 SQ MI
                     PER A=0  PER B=20PER C=64  PER D=16
                     TP=-.170  MASSRAIN=-1


PRINT HYD            ID=5  CODE=3

FINISH
```

```
       AHYMO PROGRAM (AHYMO-S4)                    - Version: S4.01a - Rel: 01a
            RUN DATE (MON/DAY/YR) = 02/26/2019
            START TIME (HR:MIN:SEC) = 15:54:56     USER NO.=
RioGrandeSingleA41963517
            INPUT FILE =  and Settings\Owner\Desktop\2018 JOBS\18226-mountain
fourplex\pondrout022619.txt


    *S      AHYMO -  DETENTION-MOUNTAIN
    *S              POND ROUTING

    START               TIME=0.0  PUNCH CODE=0


    RAINFALL            TYPE=2
                        QUARTER=0.0    ONE= 1.77 IN
                        SIX=2.23 IN   DAY= 2.55 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  0.0031  0.0062  0.0096  0.0133  0.0171  0.0213
                      0.0274  0.0369  0.0471  0.0577  0.0692  0.0809  0.0929
                      0.1054  0.1180  0.1321  0.1467  0.1626  0.1849  0.2105
                      0.2448  0.2837  0.3317  0.3957  0.4678  0.5922  0.7856
                      1.1170  1.3499  1.5336  1.6259  1.7068  1.7649  1.8112
                      1.8515  1.8810  1.9081  1.9304  1.9478  1.9627  1.9760
                      1.9886  1.9996  2.0101  2.0203  2.0301  2.0382  2.0428
                      2.0473  2.0517  2.0559  2.0600  2.0640  2.0680  2.0719
                      2.0755  2.0792  2.0828  2.0863  2.0897  2.0930  2.0963
                      2.0995  2.1027  2.1058  2.1088  2.1118  2.1147  2.1176
                      2.1205  2.1233  2.1260  2.1288  2.1315  2.1342  2.1368
                      2.1394  2.1420  2.1446  2.1471  2.1496  2.1520  2.1545
                      2.1569  2.1593  2.1616  2.1640  2.1663  2.1686  2.1708
                      2.1731  2.1753  2.1775  2.1797  2.1818  2.1840  2.1861
                      2.1882  2.1903  2.1923  2.1944  2.1964  2.1984  2.2004
                      2.2023  2.2043  2.2062  2.2081  2.2100  2.2119  2.2138
                      2.2157  2.2175  2.2193  2.2211  2.2229  2.2247  2.2265
                      2.2283  2.2300  2.2317  2.2335  2.2352  2.2369  2.2387
                      2.2404  2.2421  2.2438  2.2455  2.2472  2.2489  2.2506
                      2.2523  2.2540  2.2557  2.2573  2.2590  2.2607  2.2623
                      2.2640  2.2656  2.2673  2.2689  2.2705  2.2722  2.2738
                      2.2754  2.2770  2.2787  2.2803  2.2819  2.2835  2.2851
                      2.2867  2.2882  2.2898  2.2914  2.2930  2.2945  2.2961
                      2.2977  2.2992  2.3008  2.3023  2.3038  2.3054  2.3069
                      2.3084  2.3099  2.3115  2.3130  2.3145  2.3160  2.3175
                      2.3190  2.3204  2.3219  2.3234  2.3249  2.3263  2.3278
                      2.3293  2.3307  2.3322  2.3336  2.3350  2.3365  2.3379
                      2.3393  2.3407  2.3422  2.3436  2.3450  2.3464  2.3478
                      2.3492  2.3505  2.3519  2.3533  2.3547  2.3560  2.3574
                      2.3588  2.3601  2.3615  2.3628  2.3641  2.3655  2.3668
                      2.3681  2.3695  2.3708  2.3721  2.3734  2.3747  2.3760
                      2.3773  2.3786  2.3798  2.3811  2.3824  2.3837  2.3849
                      2.3862  2.3874  2.3887  2.3899  2.3912  2.3924  2.3936
                      2.3949  2.3961  2.3973  2.3985  2.3997  2.4009  2.4021
                      2.4033  2.4045  2.4057  2.4068  2.4080  2.4092  2.4103
                      2.4115  2.4126  2.4138  2.4149  2.4161  2.4172  2.4183
                      2.4195  2.4206  2.4217  2.4228  2.4239  2.4250  2.4261
                      2.4272  2.4283  2.4294  2.4304  2.4315  2.4326  2.4336
                      2.4347  2.4358  2.4368  2.4378  2.4389  2.4399  2.4409
                      2.4420  2.4430  2.4440  2.4450  2.4460  2.4470  2.4480
                      2.4490  2.4500  2.4510  2.4519  2.4529  2.4539  2.4548
```

2.4558 2.4567 2.4577 2.4586 2.4596 2.4605 2.4614
2.4623 2.4633 2.4642 2.4651 2.4660 2.4669 2.4678
2.4687 2.4696 2.4704 2.4713 2.4722 2.4730 2.4739
2.4748 2.4756 2.4765 2.4773 2.4781 2.4790 2.4798
2.4806 2.4814 2.4822 2.4830 2.4838 2.4846 2.4854
2.4862 2.4870 2.4878 2.4886 2.4893 2.4901 2.4909
2.4916 2.4924 2.4931 2.4938 2.4946 2.4953 2.4960
2.4968 2.4975 2.4982 2.4989 2.4996 2.5003 2.5010
2.5017 2.5023 2.5030 2.5037 2.5044 2.5050 2.5057
2.5063 2.5070 2.5076 2.5083 2.5089 2.5095 2.5101
2.5108 2.5114 2.5120 2.5126 2.5132 2.5138 2.5144
2.5150 2.5155 2.5161 2.5167 2.5173 2.5178 2.5184
2.5189 2.5195 2.5200 2.5206 2.5211 2.5216 2.5221
2.5227 2.5232 2.5237 2.5242 2.5247 2.5252 2.5257
2.5261 2.5266 2.5271 2.5276 2.5280 2.5285 2.5289
2.5294 2.5298 2.5303 2.5307 2.5311 2.5316 2.5320
2.5324 2.5328 2.5332 2.5336 2.5340 2.5344 2.5348
2.5352 2.5356 2.5359 2.5363 2.5367 2.5370 2.5374
2.5377 2.5381 2.5384 2.5387 2.5391 2.5394 2.5397
2.5400 2.5403 2.5406 2.5409 2.5412 2.5415 2.5418
2.5421 2.5424 2.5426 2.5429 2.5432 2.5434 2.5437
2.5439 2.5442 2.5444 2.5446 2.5448 2.5451 2.5453
2.5455 2.5457 2.5459 2.5461 2.5463 2.5465 2.5467
2.5468 2.5470 2.5472 2.5474 2.5475 2.5477 2.5478
2.5480 2.5481 2.5482 2.5484 2.5485 2.5486 2.5487
2.5488 2.5489 2.5490 2.5491 2.5492 2.5493 2.5494
2.5495 2.5495 2.5496 2.5497 2.5497 2.5498 2.5498
2.5499 2.5499 2.5499 2.5500 2.5500

```
*EXISTING MOUTAIN BASIN
COMPUTE NM HYD      ID=1  HYD NO=101  DA= .0001204 SQ MI
                    PER A=0  PER B=20 PER C=70  PER D=10
                    TP=-.170  MASSRAIN=-1


        K =  0.092650HR    TP =  0.170000HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
        UNIT PEAK =  0.37273E-01CFS   UNIT VOLUME =   0.8988       B =   526.28
 P60 = 1.7700
        AREA =     0.000012 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
        RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.050000


        K =  0.141514HR    TP =  0.170000HR    K/TP RATIO =  0.832437     SHAPE
CONSTANT, N =  4.284698
        UNIT PEAK =  0.23822    CFS   UNIT VOLUME =   0.9450       B =   373.73
 P60 = 1.7700
        AREA =     0.000108 SQ MI    IA =   0.38333 INCHES    INF =   0.92333
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 HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	0.600	0.0	1.200	0.0
1.800	0.1	2.400	0.0		
0.150	0.0	0.750	0.0	1.350	0.0

```
1.950       0.0
        0.300       0.0          0.900       0.0          1.500       0.2
2.100       0.0
        0.450       0.0          1.050       0.0          1.650       0.2
2.250       0.0

        RUNOFF VOLUME =     1.09153 INCHES     =       0.0070 ACRE-FEET
        PEAK DISCHARGE RATE =       0.21 CFS  AT   1.550 HOURS   BASIN AREA =
0.0001 SQ. MI.



    *EXISTING 14TH STREET BASIN
    COMPUTE NM HYD      ID=2  HYD NO=102  DA= .0004115 SQ MI
                        PER A=0  PER B=20 PER C=57  PER D=23
                        TP=-.170  MASSRAIN=-1


        K =  0.092650HR    TP =  0.170000HR    K/TP RATIO =  0.545000     SHAPE
CONSTANT, N =  7.106428
        UNIT PEAK =  0.29300    CFS   UNIT VOLUME =   0.9587       B =   526.28
 P60 = 1.7700
        AREA =     0.000095 SQ MI    IA =   0.10000 INCHES    INF =   0.04000
INCHES PER HOUR
        RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.050000


        K =  0.142855HR    TP =  0.170000HR    K/TP RATIO =  0.840321     SHAPE
CONSTANT, N =  4.240570
        UNIT PEAK =  0.69131    CFS   UNIT VOLUME =   0.9827       B =   370.90
 P60 = 1.7700
        AREA =     0.000317 SQ MI    IA =   0.38896 INCHES    INF =   0.93909
INCHES PER HOUR
        RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT =
0.050000

    PRINT HYD           ID=2  CODE=3

                                        PARTIAL HYDROGRAPH   102.00

        TIME      FLOW          TIME      FLOW          TIME      FLOW
TIME     FLOW          TIME      FLOW
        HRS       CFS           HRS       CFS           HRS       CFS
HRS      CFS           HRS       CFS
        0.000       0.0         3.300       0.0         6.600       0.0
9.900       0.0        13.200       0.0
        0.150       0.0         3.450       0.0         6.750       0.0
10.050      0.0         13.350      0.0
        0.300       0.0         3.600       0.0         6.900       0.0
10.200      0.0         13.500      0.0
        0.450       0.0         3.750       0.0         7.050       0.0
10.350      0.0         13.650      0.0
        0.600       0.0         3.900       0.0         7.200       0.0
10.500      0.0         13.800      0.0
        0.750       0.0         4.050       0.0         7.350       0.0
10.650      0.0         13.950      0.0
        0.900       0.0         4.200       0.0         7.500       0.0
10.800      0.0         14.100      0.0
        1.050       0.0         4.350       0.0         7.650       0.0
10.950      0.0         14.250      0.0
        1.200       0.0         4.500       0.0         7.800       0.0
11.100      0.0         14.400      0.0
        1.350       0.1         4.650       0.0         7.950       0.0
```

11.250	0.0	14.550	0.0				
	1.500	0.7	4.800	0.0	8.100	0.0	
11.400	0.0	14.700	0.0				
	1.650	0.6	4.950	0.0	8.250	0.0	
11.550	0.0	14.850	0.0				
	1.800	0.3	5.100	0.0	8.400	0.0	
11.700	0.0	15.000	0.0				
	1.950	0.1	5.250	0.0	8.550	0.0	
11.850	0.0	15.150	0.0				
	2.100	0.1	5.400	0.0	8.700	0.0	
12.000	0.0	15.300	0.0				
	2.250	0.0	5.550	0.0	8.850	0.0	
12.150	0.0	15.450	0.0				
	2.400	0.0	5.700	0.0	9.000	0.0	
12.300	0.0	15.600	0.0				
	2.550	0.0	5.850	0.0	9.150	0.0	
12.450	0.0	15.750	0.0				
	2.700	0.0	6.000	0.0	9.300	0.0	
12.600	0.0						
	2.850	0.0	6.150	0.0	9.450	0.0	
12.750	0.0						
	3.000	0.0	6.300	0.0	9.600	0.0	
12.900	0.0						
	3.150	0.0	6.450	0.0	9.750	0.0	
13.050	0.0						

RUNOFF VOLUME = 1.25922 INCHES = 0.0276 ACRE-FEET
PEAK DISCHARGE RATE = 0.75 CFS AT 1.550 HOURS BASIN AREA = 0.0004 SQ. MI.

*PROPOSED MOUNTAIN BASIN
COMPUTE NM HYD ID=3 HYD NO=103 DA= .00007015 SQ MI
PER A=0 PER B=8 PER C=0 PER D=92
TP=-.170 MASSRAIN=-1

K = 0.092650HR TP = 0.170000HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 0.19979 CFS UNIT VOLUME = 0.9409 B = 526.28 P60 = 1.7700
AREA = 0.000065 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.050000

K = 0.169300HR TP = 0.170000HR K/TP RATIO = 0.995885 SHAPE CONSTANT, N = 3.544907
UNIT PEAK = 0.10683E-01CFS UNIT VOLUME = 0.8744 B = 323.60 P60 = 1.7700
AREA = 0.000006 SQ MI IA = 0.50000 INCHES INF = 1.25000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.050000

PRINT HYD ID=3 CODE=3

PARTIAL HYDROGRAPH 103.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS

HRS	CFS	HRS	CFS				
	0.000	0.0	2.550	0.0	5.100	0.0	
7.650	0.0	10.200	0.0				
	0.150	0.0	2.700	0.0	5.250	0.0	
7.800	0.0	10.350	0.0				
	0.300	0.0	2.850	0.0	5.400	0.0	
7.950	0.0	10.500	0.0				
	0.450	0.0	3.000	0.0	5.550	0.0	
8.100	0.0	10.650	0.0				
	0.600	0.0	3.150	0.0	5.700	0.0	
8.250	0.0	10.800	0.0				
	0.750	0.0	3.300	0.0	5.850	0.0	
8.400	0.0	10.950	0.0				
	0.900	0.0	3.450	0.0	6.000	0.0	
8.550	0.0	11.100	0.0				
	1.050	0.0	3.600	0.0	6.150	0.0	
8.700	0.0	11.250	0.0				
	1.200	0.0	3.750	0.0	6.300	0.0	
8.850	0.0	11.400	0.0				
	1.350	0.1	3.900	0.0	6.450	0.0	
9.000	0.0	11.550	0.0				
	1.500	0.2	4.050	0.0	6.600	0.0	
9.150	0.0	11.700	0.0				
	1.650	0.1	4.200	0.0	6.750	0.0	
9.300	0.0	11.850	0.0				
	1.800	0.1	4.350	0.0	6.900	0.0	
9.450	0.0	12.000	0.0				
	1.950	0.0	4.500	0.0	7.050	0.0	
9.600	0.0						
	2.100	0.0	4.650	0.0	7.200	0.0	
9.750	0.0						
	2.250	0.0	4.800	0.0	7.350	0.0	
9.900	0.0						
	2.400	0.0	4.950	0.0	7.500	0.0	
10.050	0.0						

RUNOFF VOLUME = 2.17864 INCHES = 0.0082 ACRE-FEET
PEAK DISCHARGE RATE = 0.18 CFS AT 1.550 HOURS BASIN AREA = 0.0001 SQ. MI.

*PROPOSED 14TH STREET BASIN
COMPUTE NM HYD ID=4 HYD NO=104 DA= .00046175 SQ MI
PER A=0 PER B=10 PER C=16 PER D=74
TP=-.170 MASSRAIN=-1

K = 0.092650HR TP = 0.170000HR K/TP RATIO = 0.545000 SHAPE CONSTANT, N = 7.106428
UNIT PEAK = 1.0578 CFS UNIT VOLUME = 0.9900 B = 526.28 P60 = 1.7700
AREA = 0.000342 SQ MI IA = 0.10000 INCHES INF = 0.04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.050000

K = 0.147316HR TP = 0.170000HR K/TP RATIO = 0.866563 SHAPE CONSTANT, N = 4.100964
UNIT PEAK = 0.25554 CFS UNIT VOLUME = 0.9471 B = 361.85 P60 = 1.7700
AREA = 0.000120 SQ MI IA = 0.40769 INCHES INF = 0.99154

INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = 0.050000

PRINT HYD ID=4 CODE=3

PARTIAL HYDROGRAPH 104.00

TIME HRS	FLOW CFS	TIME HRS	FLOW CFS	TIME HRS	FLOW CFS
0.000	0.0	4.500	0.0	9.000	0.0
0.150	0.0	4.650	0.0	9.150	0.0
0.300	0.0	4.800	0.0	9.300	0.0
0.450	0.0	4.950	0.0	9.450	0.0
0.600	0.0	5.100	0.0	9.600	0.0
0.750	0.0	5.250	0.0	9.750	0.0
0.900	0.0	5.400	0.0	9.900	0.0
1.050	0.1	5.550	0.0	10.050	0.0
1.200	0.1	5.700	0.0	10.200	0.0
1.350	0.3	5.850	0.0	10.350	0.0
1.500	1.0	6.000	0.0	10.500	0.0
1.650	0.8	6.150	0.0	10.650	0.0
1.800	0.4	6.300	0.0	10.800	0.0
1.950	0.2	6.450	0.0	10.950	0.0
2.100	0.1	6.600	0.0	11.100	0.0
2.250	0.1	6.750	0.0	11.250	0.0
2.400	0.1	6.900	0.0	11.400	0.0
2.550	0.0	7.050	0.0	11.550	0.0
2.700	0.0	7.200	0.0	11.700	0.0
2.850	0.0	7.350	0.0	11.850	0.0
3.000	0.0	7.500	0.0	12.000	0.0
3.150	0.0	7.650	0.0	12.150	0.0
3.300	0.0	7.800	0.0	12.300	0.0
3.450	0.0	7.950	0.0	12.450	0.0
3.600	0.0	8.100	0.0	12.600	0.0
3.750	0.0	8.250	0.0	12.750	0.0
3.900	0.0	8.400	0.0	12.900	0.0
13.500	0.0	18.000	0.0		
13.650	0.0	18.150	0.0		
13.800	0.0	18.300	0.0		
13.950	0.0	18.450	0.0		
14.100	0.0	18.600	0.0		
14.250	0.0	18.750	0.0		
14.400	0.0	18.900	0.0		
14.550	0.0	19.050	0.0		
14.700	0.0	19.200	0.0		
14.850	0.0	19.350	0.0		
15.000	0.0	19.500	0.0		
15.150	0.0	19.650	0.0		
15.300	0.0	19.800	0.0		
15.450	0.0	19.950	0.0		
15.600	0.0	20.100	0.0		
15.750	0.0	20.250	0.0		
15.900	0.0	20.400	0.0		
16.050	0.0	20.550	0.0		
16.200	0.0	20.700	0.0		
16.350	0.0	20.850	0.0		
16.500	0.0	21.000	0.0		
16.650	0.0	21.150	0.0		
16.800	0.0	21.300	0.0		
16.950	0.0	21.450	0.0		
17.100	0.0	21.600	0.0		
17.250	0.0	21.750	0.0		
17.400	0.0	21.900	0.0		

	4.050	0.0	8.550	0.0	13.050	0.0	
17.550	0.0	22.050	0.0				
	4.200	0.0	8.700	0.0	13.200	0.0	
17.700	0.0						
	4.350	0.0	8.850	0.0	13.350	0.0	
17.850	0.0						

RUNOFF VOLUME = 1.94084 INCHES = 0.0478 ACRE-FEET
PEAK DISCHARGE RATE = 1.05 CFS AT 1.550 HOURS BASIN AREA = 0.0005 SQ. MI.

* ROUTE THE TOTAL FLOW THROUGH THE PROPOSED RESERVOIR
ROUTE RESERVOIR ID=5 HYD NO=105 INFLOW=4 CODE=3

OUTFLOW(CFS)	STORAGE(AC-FT)	ELEV(FT)	
0.00	0.002	59.00	
0.37	0.004	59.25	
0.76	0.020	60.00	

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

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
0.00	0.00	59.00	0.002	0.00
0.15	0.00	59.00	0.002	0.00
0.30	0.00	59.00	0.002	0.00
0.45	0.00	59.00	0.002	0.00
0.60	0.00	59.00	0.002	0.00
0.75	0.00	59.00	0.002	0.00
0.90	0.03	59.01	0.002	0.02
1.05	0.06	59.03	0.002	0.05
1.20	0.13	59.07	0.003	0.10
1.35	0.29	59.14	0.003	0.21
1.50	0.96	59.36	0.006	0.43
1.65	0.81	59.63	0.012	0.57
1.80	0.40	59.64	0.012	0.57
1.95	0.23	59.50	0.009	0.50
2.10	0.14	59.34	0.006	0.42
2.25	0.09	59.13	0.003	0.20
2.40	0.06	59.05	0.002	0.08
2.55	0.03	59.03	0.002	0.04
2.70	0.02	59.01	0.002	0.02
2.85	0.01	59.01	0.002	0.01
3.00	0.01	59.01	0.002	0.01
3.15	0.01	59.01	0.002	0.01
3.30	0.01	59.00	0.002	0.01
3.45	0.01	59.00	0.002	0.01
3.60	0.01	59.00	0.002	0.01
3.75	0.01	59.00	0.002	0.01
3.90	0.01	59.00	0.002	0.01
4.05	0.01	59.00	0.002	0.01
4.20	0.01	59.00	0.002	0.01
4.35	0.01	59.00	0.002	0.01
4.50	0.01	59.00	0.002	0.01
4.65	0.01	59.00	0.002	0.01
4.80	0.01	59.00	0.002	0.01

4.95	0.01	59.00	0.002	0.01
5.10	0.01	59.00	0.002	0.01
5.25	0.01	59.00	0.002	0.01
5.40	0.01	59.00	0.002	0.01
5.55	0.01	59.00	0.002	0.01
5.70	0.01	59.00	0.002	0.01
5.85	0.01	59.00	0.002	0.01
6.00	0.01	59.00	0.002	0.01
6.15	0.01	59.01	0.002	0.01
6.30	0.01	59.01	0.002	0.01
6.45	0.01	59.01	0.002	0.01
6.60	0.01	59.01	0.002	0.01
6.75	0.01	59.01	0.002	0.01
6.90	0.01	59.01	0.002	0.01
7.05	0.01	59.00	0.002	0.01
7.20	0.01	59.00	0.002	0.01
7.35	0.01	59.00	0.002	0.01
7.50	0.01	59.00	0.002	0.01
7.65	0.01	59.00	0.002	0.01
7.80	0.01	59.00	0.002	0.01
7.95	0.01	59.00	0.002	0.01
8.10	0.01	59.00	0.002	0.01
8.25	0.01	59.00	0.002	0.01

TIME (HRS)	INFLOW (CFS)	ELEV (FEET)	VOLUME (AC-FT)	OUTFLOW (CFS)
8.40	0.01	59.00	0.002	0.01
8.55	0.01	59.00	0.002	0.01
8.70	0.01	59.00	0.002	0.01
8.85	0.01	59.00	0.002	0.01
9.00	0.01	59.00	0.002	0.01
9.15	0.01	59.00	0.002	0.01
9.30	0.01	59.00	0.002	0.01
9.45	0.01	59.00	0.002	0.01
9.60	0.01	59.00	0.002	0.01
9.75	0.01	59.00	0.002	0.01
9.90	0.01	59.00	0.002	0.01
10.05	0.01	59.00	0.002	0.01
10.20	0.01	59.00	0.002	0.01
10.35	0.01	59.00	0.002	0.01
10.50	0.01	59.00	0.002	0.01
10.65	0.01	59.00	0.002	0.01
10.80	0.01	59.00	0.002	0.01
10.95	0.01	59.00	0.002	0.01
11.10	0.01	59.00	0.002	0.01
11.25	0.01	59.00	0.002	0.01
11.40	0.01	59.00	0.002	0.01
11.55	0.01	59.00	0.002	0.01
11.70	0.01	59.00	0.002	0.01
11.85	0.01	59.00	0.002	0.01
12.00	0.01	59.00	0.002	0.01
12.15	0.01	59.00	0.002	0.01
12.30	0.01	59.00	0.002	0.01
12.45	0.01	59.00	0.002	0.01
12.60	0.01	59.00	0.002	0.01
12.75	0.01	59.00	0.002	0.01
12.90	0.00	59.00	0.002	0.00

PEAK DISCHARGE = 0.584 CFS - PEAK OCCURS AT HOUR 1.70
MAXIMUM WATER SURFACE ELEVATION = 59.661
MAXIMUM STORAGE = 0.0128 AC-FT INCREMENTAL TIME= 0.050000HRS

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 15:54:56

VOLUME CALCULATIONS

pond a

outfall

ACTUAL ELEV.	DEPTH (FT)	AREA SF	VOLUME PER UNIT	VOLUME CUMULATIVE	VOLUME AC-FT	Q (CFS)
58.50	0.00	42.00	0	0	0.000	0.00
59.00	0.00	280.00	80.50	80.5	0.002	0.00
59.25	0.15	508.00	98.50	179.00	0.004	0.37
60.00	0.65	1380.00	708.00	887	0.020	0.76

Orifice Equation

Q = CA SQRT(2gH)

C =	0.6
Diameter (in)	6
Area (ft^2)=	0.196349541
g =	32.2
H (Ft) =	Depth of water above center of orifice
Q (CFS)=	Flow

DRAINAGE EASEMENT

Grant of Permanent Drainage Easement, by New Mexico Gas Company, Inc., a Delaware corporation ("Grantor"), whose address is 7120 Wyoming Blvd, NE, Suite 20, Albuquerque, NM 87109, for the benefit of Lots B-1, C-1, D-1 and E-1, Block 44, of the Perea Addition ("Grantee"), situate in Section 18, Township 10 North, Range 3 East, N.M.P.M., City of Albuquerque, Bernalillo County, New Mexico.

Grantor grants to the Grantee a non-exclusive, perpetual drainage easement ("Easement"), said Easement being more particularly described on Exhibit "A," for the construction, installation, maintenance, repair, modification, replacement and operation of a private drainage facility ("Facility"), together with the right to remove trees, shrubs, undergrowth and any other obstacles within the Easement if the Grantee determines they interfere with the appropriate use of this Easement. The maintenance of the Facility shall be the responsibility of the Grantee and shall be in accordance with the approved Drainage Report and Plans. Grantee agrees that all installation, maintenance, repair, modification, replacement, operation and any other activities within the Easement will be coordinated with Grantor so as to minimize any disruption to Grantor's property.

In no event shall Grantee's use of the Easement interfere with the Grantor's use of the Grantor's property. Grantee shall not enter into Grantor's property other than as explicitly authorized by this grant of Easement, and in no event shall Grantee enter upon or perform any work upon any of Grantor's improvements on Grantor's property. Grantor shall coordinate with Grantee prior to constructing any improvements or encroachment ("Improvements") within the easement, and Grantee shall have the right to object to any Improvements which would unreasonably interfere with Grantee's use of the Easement.

To the fullest extent permitted by applicable law. Grantee shall indemnify, defend and hold harmless Grantor, Grantor's affiliates and their respective directors, officers, employees, representatives, and agents from and against any and all damages, losses, claims, obligations, demands, assessments, penalties, liabilities, costs, and expenses (including attorney fees and expenses), arising out of or resulting from Grantee or Grantee's members, officers, employees, representatives, and agents use of the Easement, including but not limited to the existence of the Facility thereon. Grantee shall not cause or permit to be caused by any of its employees or agents any hazardous substances, pollutants or contaminants, as defined by applicable law, to be dumped, spilled, released, stored or deposited on, over or beneath the Easement or any other property owned by Grantor.

Grantor covenants and warrants that Grantor is the owner in fee simple of the real property comprising the Easement, and that Grantor has a good lawful right to convey the Easement.

The grant and other provisions of this Easement constitute covenants running

with the Easement for the benefit of the Grantee and its successors and assigns until terminated.

GRANTOR

New Mexico Gas Company, Inc.

By: _____
Tom Bullard

Date: _____

[corporate acknowledgment]

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

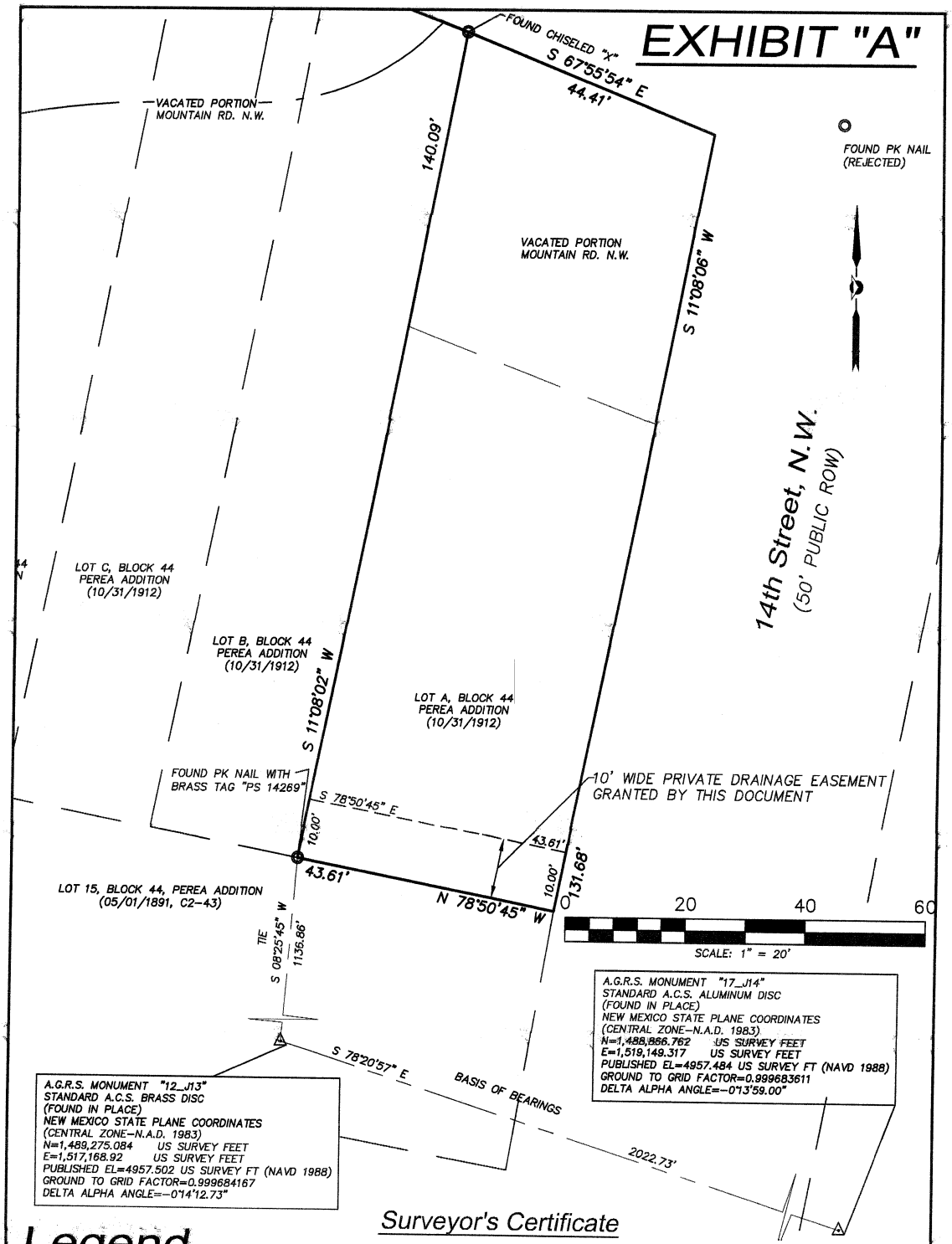
This instrument was acknowledged before me on this ____ day of _____, by Tom Bullard, Vice President of Engineering, Gas Management & Technical Services of New Mexico Gas Company, Inc., a Delaware corporation, on behalf of said company.

_____
Notary Public

My Commission Expires:

_____

EXHIBIT "A"



Legend

N 90°00'00" E	MEASURED BEARING AND DISTANCES
○	FOUND AND USED MONUMENT AS DESIGNATED
△	FOUND ALUMINUM AGRS MONUMENT AS DESIGNATED

Surveyor's Certificate

I, LARRY W. MEDRANO, A REGISTERED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF NEW MEXICO, HEREBY CERTIFY THAT THIS EXHIBIT (UN-CLASSIFIED SURVEYING SURVEY WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY MEETING THE MINIMUM REQUIREMENTS FOR THIS CLASSIFICATION OF SURVEY AS PER THE MINIMUM STANDARDS FOR LAND SURVEYING IN NEW MEXICO AS ADOPTED BY THE N.M. BOARD OF LICENSURE FOR ENGINEERS AND SURVEYORS, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

LARRY W. MEDRANO DATE
N.M.P.S. No. 11993
DIGITAL SIGNATURE IS INVALID WITHOUT DIGITAL CERTIFICATION
WET SIGNATURE IS INVALID IF NOT IN BLUE INK
WITH BLUE STAMP OR EMBOSSED STAMP

PRECISION SURVEYS, INC.
OFFICE LOCATION:
9200 San Mateo Boulevard, NE
Albuquerque, NM 87113
505.856.5700 PHONE
505.856.7900 FAX

LARRY W. MEDRANO NEW MEXICO 11993 REGISTERED PROFESSIONAL SURVEYOR

COORDINATE AND DIMENSION INFORMATION				PLSS INFORMATION				PROJECT INFORMATION	
STATE PLANE ZONE: NM-C	GRID/GROUND COORDINATES: GRID	TYPE: STANDARD		LAND GRANT: TOWN OF ALBUQUERQUE GRANT				CREW/TECH: MT	DATE OF SURVEY: 06/27/2018
HORIZONTAL DATUM: NAD83	VERTICAL DATUM: NAVD88	ROTATION ANGLE: 0° 00' 00.00"		SECTION: 18	TOWNSHIP: 10 NORTH	RANGE: 3 EAST	MERIDIAN: NMPM	DRAWN BY: JK	CHECKED BY: LM
CONTROL USED: ALBUQUERQUE GEODETIC REFERENCE SYSTEM		BASE POINT: N = 0, E = 0		CITY: ALBUQUERQUE		COUNTY: BERNALILLO	STATE: NM	PSI JOB NO.: 18-1098EX	SHEET NUMBER: 2 OF 2
COMBINED SCALE FACTOR: GRID TO GROUND: 1.00031928, GROUND TO GRID: 0.99966807	DISTANCE ANNOTATION: GROUND	BEARING ANNOTATION: GRID							

NOTICE TO CONTRACTORS

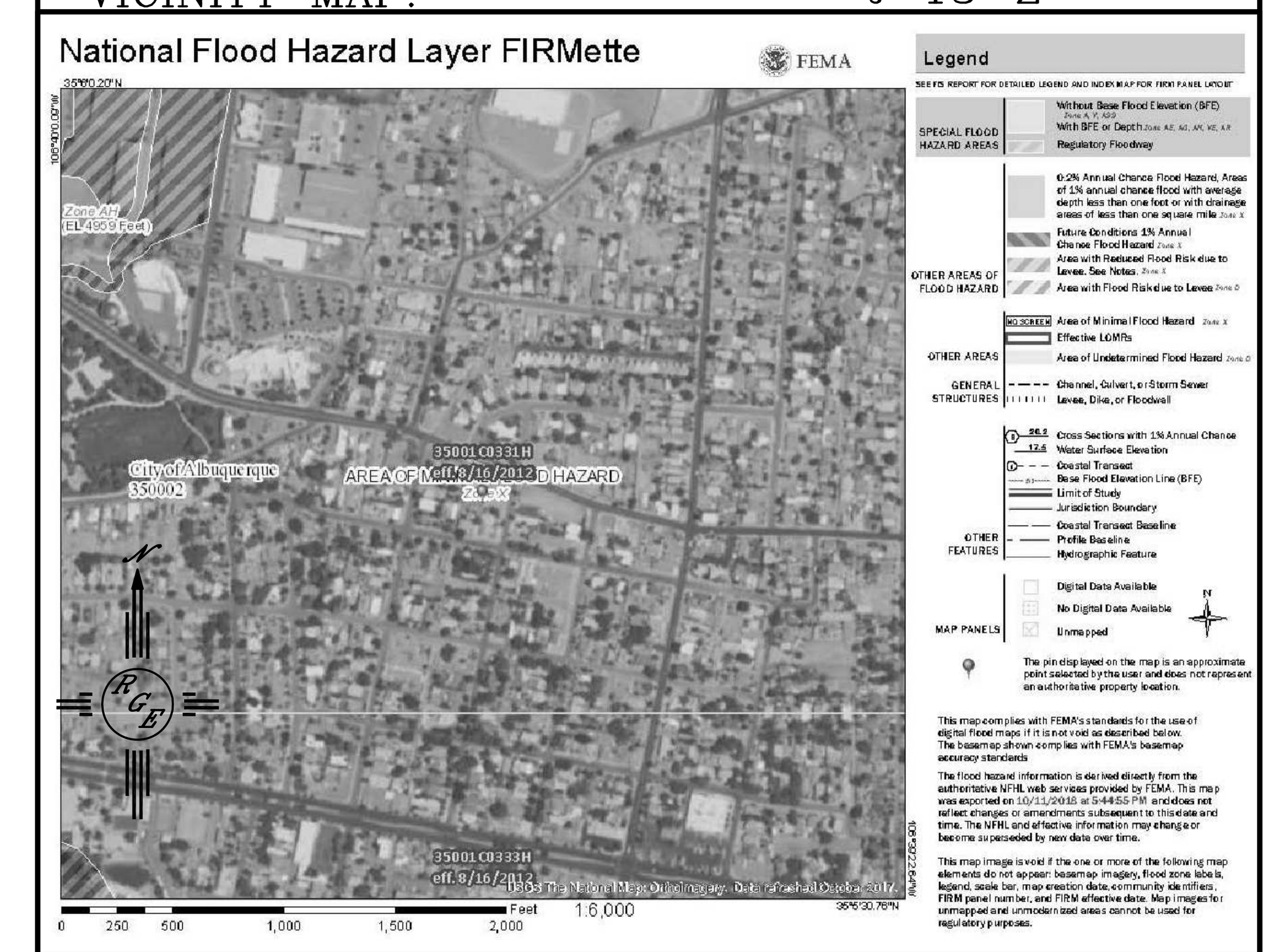
1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT–OF–WAY.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HERON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765–1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24–HOUR BASIS.

APPROVAL	NAME	DATE
INSPECTOR		

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: J–13–Z



FIRM MAP:

LEGAL DESCRIPTION:

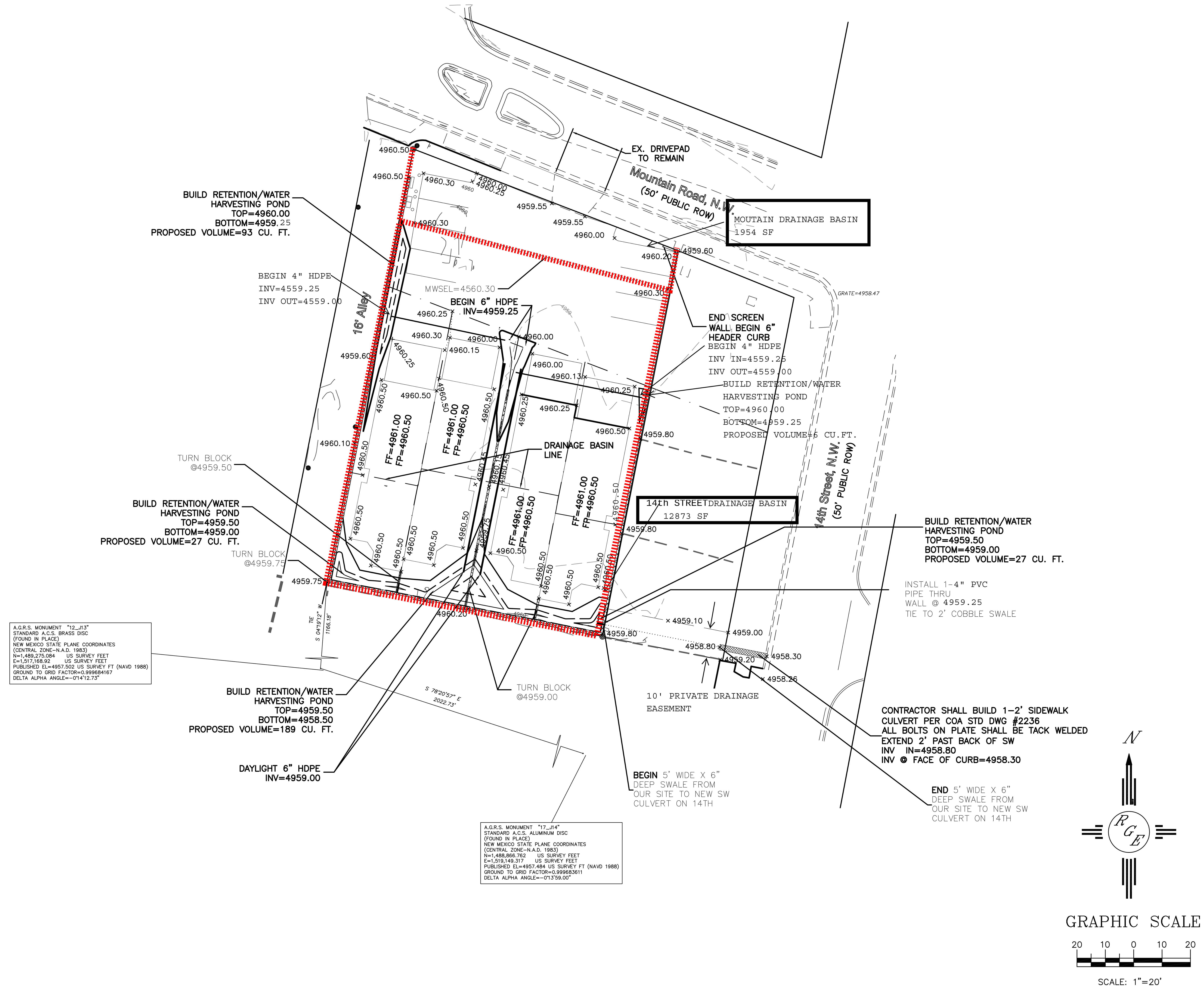
Lots B, C, D and E of Block 44, Perea Addition

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL CURB AND GUTTER TO 6" HEADER UNLESS OTHERWISE NOTED.
3. ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
4. ANY CURBS OR PAVEMENT NEGATIVELY IMPACTED BY CONSTRUCTION ACTIVITY SHALL BE REPLACED TO MATCH EXISTING CONDITIONS.
5. ALL SITE WORK SHALL CONFORM TO CITY OF ALBUQUERQUE STANDARDS FOR PUBLIC WORKS CONSTRUCTION EDITION 9

LEGEND

Symbol	Description
5414	EXISTING CONTOUR
5415	EXISTING INDEX CONTOUR
5414	PROPOSED CONTOUR
5415	PROPOSED INDEX CONTOUR
	SLOPE TIE
× 4048.25	EXISTING SPOT ELEVATION
× 4048.25	PROPOSED SPOT ELEVATION
	BOUNDARY
	CENTERLINE
	RIGHT–OF–WAY
	PROPOSED CURB
	EXISTING CURB AND GUTTER
	EXISTING SIDEWALK
	PROPOSED SCREEN WALL 18" MAX. RETAINAGE



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.

ENGINEER'S SEAL	MOUTAIN TOWNHOMES	DRAWN BY WCWJ
DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER	PROPOSED BASIN MAP	DATE 2–26–19
		218151–LAYOUT–10–25–18
DAVID SOULE P.E. #14522	Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872–0999	SHEET #
		JOB # 218151

THIS IS NOT A BOUNDARY SURVEY
APPARENT LOT LINES AND PROPERTY CORNERS ARE SHOWN FOR ORIENTATION ONLY

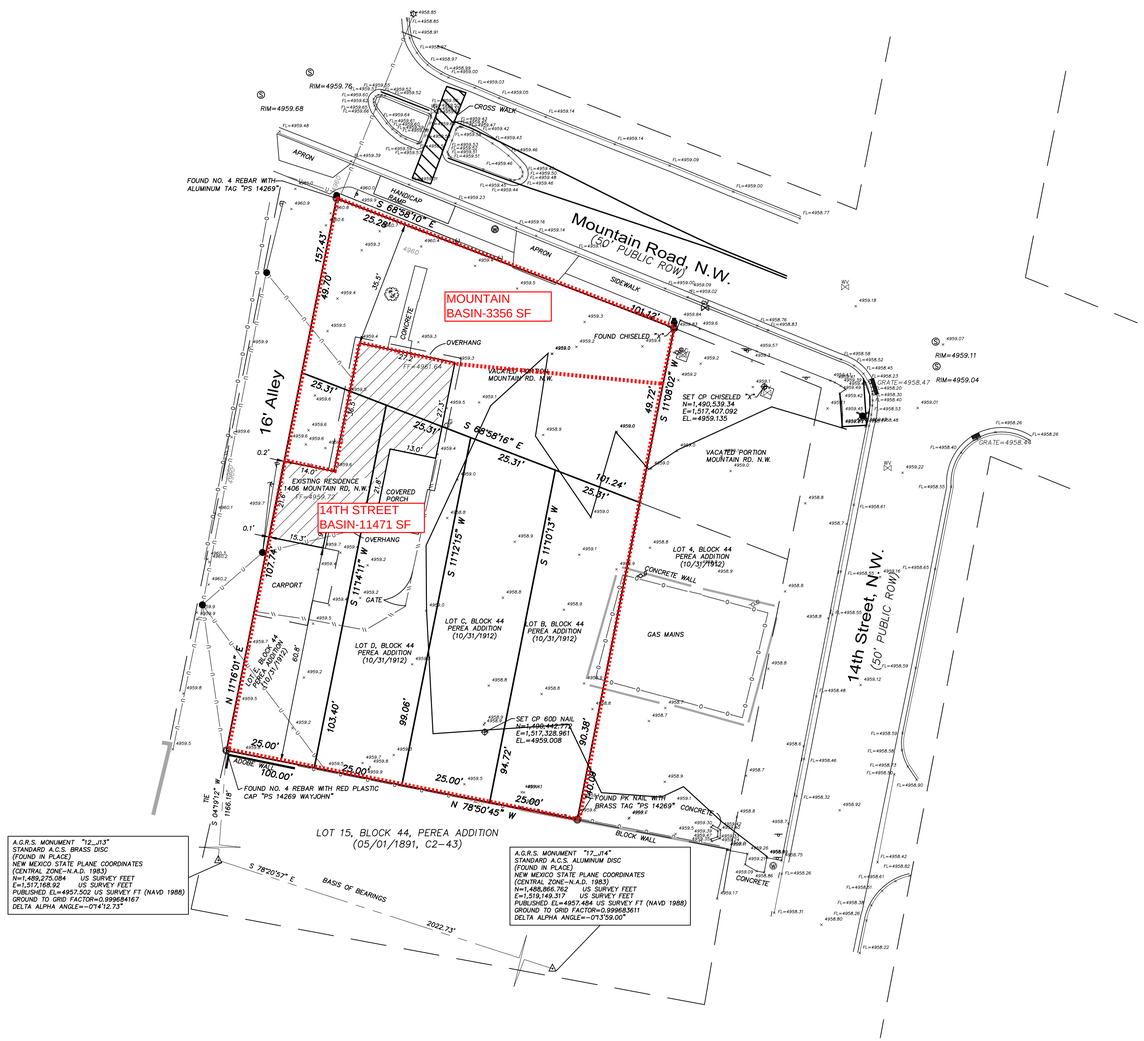
Topographic Survey of
Lots B, C, D and E of Block 44

Perea Addition

And the Vacated Portion of

Mountain Road, N.W.

Town of Albuquerque Grant, Projected
Section 18, Township 10 N., Range 3 E., N.M.P.M.
Albuquerque, Bernalillo County, New Mexico
February 2019



Legend

N 90°00'00" E	MEASURED BEARING AND DISTANCES
○	FOUND AND USED MONUMENT AS DESIGNATED
△	FOUND ALUMINUM AGRS MONUMENT AS DESIGNATED
◒	SERVICE/DROP POLE AS DESIGNATED
●	UTILITY POLE
⊢	GUY WIRE
EM	ELECTRIC METER
Ⓦ	WATER METER
⋈	GAS VALVE
G	GAS METER
SIGN	SIGN
	CURB AND GUTTER
OHU	OVERHEAD UTILITY LINE
	CHAIN LINK FENCE
	WOOD FENCE

Notes

1. PLAT REFERENCES:
   A. PLAT OF LOTS B, C, D, AND E, BLOCK 44, PEREA ADDITION AND VACATED MOUNTAIN ROAD, N.W. (10/31/1912)
2. ELEVATION DATUM IS BASED ON NAVD 1988 FROM AGRS MONUMENT "12_J13", PUBLISHED ELEVATION (FEET) = 4957.502 (DATE OF RETRIVAL: JULY 2007 FOR NON AGRS MONUMENTS)
3. THIS MAP HAS BEEN PRODUCED ACCORDING TO PROCEDURES THAT HAVE BEEN DEMONSTRATED TO PRODUCE DATA THAT MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR A TOPOGRAPHIC MAP COMPILED AT A SCALE OF 1"=20' WITH A CONTOUR INTERVAL OF ONE FOOT.
8. GPS CALIBRATION BASED ON ACS MONUMENTS "12_J13" AND "17_J14", AVERAGE PROJECT GROUND TO GRID SCALE FACTOR= 0.99966807739

Surveyor's Certificate

I, LARRY W. MEDRANO, A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NEW MEXICO, LICENSE NUMBER 11993, DO HEREBY CERTIFY THAT THIS TOPOGRAPHIC SURVEY WAS PREPARED BY ME BY FIELD SURVEYS USING GPS RTK MEASUREMENTS BASED ON SITE HORIZONTAL/VERTICAL CALIBRATION UTILIZING AGRS MONUMENTS. ELEVATIONS BASED ON AGRS MONUMENT "12_J13" (NAVD 1988). THIS SURVEY MEETS THE MINIMUM STANDARDS FOR TOPOGRAPHIC SURVEYING IN NEW MEXICO AS ADOPTED BY THE NEW MEXICO BOARD OF LICENSURE FOR PROFESSIONAL ENGINEERS AND SURVEYORS. THIS IS NOT A BOUNDARY SURVEY.

LARRY W. MEDRANO
N.M.P.S. No. 11993

DATE

DIGITAL SIGNATURE IS INVALID WITHOUT DIGITAL CERTIFICATION
WET SIGNATURE IS INVALID IF NOT IN BLUE INK WITH BLUE STAMP OR EMBOSSED STAMP

LARRY W. MEDRANO
NEW MEXICO
11993
REGISTERED PROFESSIONAL SURVEYOR

COORDINATE AND DIMENSION INFORMATION					PLSS INFORMATION				INDEXING INFORMATION FOR COUNTY CLERK
STATE PLANE ZONE: NM-C	GRID/GROUND COORDINATES: GRID	TYPE: STANDARD			LAND GRANT: TOWN OF ALBUQUERQUE GRANT				PROPERTY OWNER: MICHAEL P. TAPIA
HORIZONTAL DATUM: NAD83	VERTICAL DATUM: NAVD88		ROTATION ANGLE: 0° 00' 00.00"	MATCHES DRAWING UNITS: YES	SECTION: 18	TOWNSHIP: 10 NORTH	RANGE: 3 EAST	MERIDIAN: NMPM	SUBDIVISION NAME: PEREA ADDITION
CONTROL USED: ALBUQUERQUE GEODETIC REFERENCE SYSTEM			BASE POINT FOR SCALING AND/OR ROTATION: N = 0, E = 0		CITY: ALBUQUERQUE		COUNTY: BERNALILLO	STATE: NM	UPC: 101305839331810906
COMBINED SCALE FACTOR: GRID TO GROUND: 1.00031928, GROUND TO GRID: 0.999668077 39		DISTANCE ANNOTATION: GROUND	ELEVATION TRANSLATION: ±0.00'	ELEVATIONS VALID: YES					
		BEARING ANNOTATION: GRID							

PRECISION SURVEYS, INC.
OFFICE LOCATION:
9200 San Mateo Boulevard, NE
Albuquerque, NM 87113
505.856.5700 PHONE
505.856.7900 FAX

PROJECT INFORMATION	
CREW/TECH: MT	DATE OF SURVEY: 02/14/2019
DRAWN BY: JK	CHECKED BY: LM
PSI JOB NO.: 18-1098T	SHEET NUMBER: 1 OF 1