CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director

Mayor Timothy M. Keller

September 28, 2018

Diane Hoelzer, P.E.
Mark Goodwin & Associates
PO Box 90606
Albuquerque, NM, 87199

RE: Valle de Atrisco Apartment Development
Grading and Drainage Plans and Drainage Management Plan
Engineer's Stamp Date: 09/27/18
Hydrology File: P09D002D

Dear Ms. Hoelzer:

Based upon the information provided in your resubmittal received 09/27/2018, the Grading and Drainage Plan and Drainage Management Plan are approved for Building Permit and Grading Permit.

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter and the pad certification approval letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

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

Sincerely,

Renée C. Brissette

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

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

Valle De Atrisco Apartment Development

Drainage Management Plan

Prepared by
Mark Goodwin & Associates, P.A.

September 2018

Valle De Atrisco Apartment Development

Based on our meeting yesterday, in order to release the Building permit for this project the COA Hydrology reviewer requested the following:

1. *Storm drain analysis and summary of the private storm drainage system,*
2. *Revised sheets C101, 103, 104, 105, 107,*
3. *Several cross sections of the retaining wall along the west property line.*
4. *Rim and grate elevations, as shown on the revised Storm drain sheet,*

Attached are the revised analysis, summary table and sheets.

September 26, 2018

SEE SHEET 104

3.4% CHANNEL SLOPE

3.40% Channel Slope

EXISTING TEMPORARY RETENTION POND #1 (SEE DRAINAGE CALCS BELOW)

FOR RETAINING WALLS SEE NOTE #10 OF PHASING CONSTRUCTION NOTES ON SHEET 105

OFFSITE WEST Q =25cfs

SDMH 2

ATRISCO HERITAGE ACADEMY HIGH SCHOOL (analysis by others) SUB BASIN 507 Q(100)= 25 cfs VOL(100)= 33,820 cu ft.= 0.7764 Ac.Ft

SUB BASIN 507 Q=25.0 cfs

SDMH 3

EXIST. PRIVATE ACCESS ESMT (03-15-11, 2011C-20)

SUB BASIN 100 Q=1.85 cfs FUT

SUB BASIN 500 Q=2.55 cfs FUT

SUB BASIN 501 Q=6.20 cfs FUT

SUB BASIN 502 Q=6.96 cfs FUT

SUB BASIN 503 Q=3.76 cfs FUT

FOR RETAINING WALLS SEE NOTE #10 OF PHASING CONSTRUCTION NOTES ON SHEET 105

SUB BASIN 101 Q=4.33 cfs

SUB BASIN 102 Q=2.47 cfs

SUB BASIN 103 Q=3.57 cfs

SUB BASIN 200 Q=1.37 cfs

SUB BASIN 201 Q=4.01 cfs

SUB BASIN 202 Q=1.91 cfs

SUB BASIN 203 Q=1.80 cfs

SUB BASIN 204 Q=1.16 cfs

SUB BASIN 205 Q=0.66 cfs

SUB BASIN 400 Q=1.32 cfs

SUB BASIN 401 Q=1.28 cfs

SUB BASIN 300 Q=1.41 cfs

SUB BASIN 301 Q=2.06 cfs

SUB BASIN 302 Q=2.82 cfs

SUB BASIN 303 Q=1.13 cfs

SUB BASIN 504 Q=47.69 cfs

INLET A (6.18 cfs)

INLET B (3.34 cfs)

INLET C (4.21 cfs)

INLET D (1.37 cfs)

INLET E (4.94 cfs)

INLET F (2.78 cfs)

INLET G (9.09 cfs)

INLET H (3.67 cfs)

INLET I (0.65 cfs)

INLET J (3.07 cfs)

INLET K (4.63 cfs)

Inlet=2.42 cfs

Inlet=2.83 cfs

FOR RETAINING WALLS SEE NOTE #10 OF PHASING CONSTRUCTION NOTES ON SHEET 105

CEJA VISTA ROAD

VALLE DE ATRISCO PROJECT

SCALE: 1" = 50'

F:\A17.085\A17005 - Ceja Vista Sub Family\ENGR@TS\A17005_GBG_R1_Dtn_9-25.dwg, Last saved by Blake, 9/14/18

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AS BUILT INFORMATION

CONTRACTOR

STAMP

INSPECTOR'S FIELD NOTES

DATE

BENCH MARKS

AGRS BRASS CAP STAMPED "ACS BM 4-P9"

FROM THE INTERSECTION OF DENNIS CHAVEZ BOULEVARD AND COORS BOULEVARD SW, TRAVEL WEST ON DENNIS CHAVEZ BOULEVARD 1.80 MILES TO THE BENCHMARK ON THE RIGHT. THE CAP IS ON THE SOUTH TOP OF A CONCRETE CHANNEL.

GEOGRAPHIC POSITION IN FEET (NAD83)

N.M. STATE PLANE COORDINATES (CENTRAL ZONE)

ELEVATION IN FEET (NAVD88) = 5129.396

MICRO-FILM INFORMATION

RECORDED BY

DATE

NO.

SURVEY INFORMATION

FIELD NOTES

NO	BY	DATE

ENGINEER'S SEAL

KLEE HOLTZER NEW MEXICO 14981 LICENSED PROFESSIONAL ENGINEER

NO.	REMARKS	BY	DATE
	REVISIONS		
	DESIGN	DLH	10/17
	DRAWN BY	ACH	10/17
	CHECKED BY	DMG	10/17

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
OFFICE (505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PLANNING DEPARTMENT

TITLE: *Valle De Atrisco Development*
ONSITE SUB-BASIN BOUNDARIES

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR	MO./DAY/YR

CITY PROJECT NO. -

ZONE MAP NO. P-9-Z

SHEET

FIGURE 4

TABLE 2

Summary of Private Storm Drain

Valle De Atrisco Apartment Development Project

Inlet / MH ID upstr station	Q(inlet) (cfs) dnstr station	Pipe length feet (C-C)	Pipe size inches	Design Q(cfs)	Rim / Grate elevation	HGL Elev	Invert Elev
Left (west) lateral							
Inlet A	6.18				113.10	109.78	107.4
	1701.6	158.3	24"	6.18			
Inlet B	3.34				112.10	109.66	106.27
1543.3	1539.3	72.9	24"	9.52			
Manhole G					111.12	109.36	105.76
1466.4	1462.4	108.9	30"	13.73			
Manhole H					111.10	108.5	105.00
1353.5	1349.5	n/a	30"				
Inlet C to Manhole G							
Inlet C	4.21				110.70	109.61	106.75
	1016	16.0	18"	4.2			
Manhole G					111.12	109.36	106.27
	1000	n/a					
Right (east) lateral							
Inlet D	1.37				111.15	109.8	108.59
	1876.4	103.6		1.37			
Inlet E	4.94		12"		111.30	109.7	107.86
1772.8	1768.8	272.5		6.31			
Inlet F	2.78		24"		110.79	109.2	105.95
1496.3	1492.3	49.3		9.09			
Manhole I			24"		111.50	109.0	105.60
1443	1439	85.5		9.09			
Manhole H			24"		111.10	108.8	105.00
1353.5	1349.5	n/a					
South (east) lateral							
Inlet K	0.66				109.00	107.5	106.00
1132.2		132.2		0.66			
Inlet L	3.07				109.70	107.2	103.64
1000		n/a					
Central main storm to public storm							
Manhole H					111.10	108.8	105.00
1353.5	1349.5	27.7	30"	22.82			
Inlet J	3.67				110.35	108.1	104.80
1321.8	1317.8	151.5	30"	26.49			
Inlet L	3.07				109.70	107.2	103.64
1166.3	1162.3	162.3	30"	30.22			
Manhole 5					10.20	106.0	102.50
111		n/a					
Inlet M to public storm							
Inlet M	4.63				12.3	108.66	107.0
		31.5	18"	4.63			
Manhole 4A					13.31	108.1	105.78
		n/a					

```
T1 VALLE DE ATRISCO DEVELOPEMENT                                                0
T2 PRIVATE STORM DRAIN
T3 CENTRAL TO WEST LATERAL
SO    1000.000 102.500  1                          106.000
R     1162.300 103.640  1       .013                          .000    .000 1
JX    1166.300 103.740  3  2    .013    3.730          103.740  90.0          .000
R     1317.800 104.800  3       .013                          .000    .000 1
JX    1321.800 104.900  5  4    .013    3.670          104.900  90.0          .000
R     1349.500 105.000  5       .013                          .000    .000 1
JX    1353.500 105.100  7  6    .013    9.090          105.100  -90.0         .000
R     1462.240 105.760  7       .013                          .000  45.000 1
JX    1466.400 105.860  9  8    .013    4.210          105.860  90.0          .000
R     1539.300 106.270  9       .013                          .000    .000 1
JX    1543.300 106.370  9 10    .013    3.340          106.370  90.0          .000
R     1701.600 107.400  9       .013                          .000    .000 1
SH    1701.600 107.400  9                          108.000
CD    1  4    1     .000    2.500      .000  .000  .000   .00
CD    2  4    1     .000    2.500      .000  .000  .000   .00
CD    3  4    1     .000    2.500      .000  .000  .000   .00
CD    4  4    1     .000    2.500      .000  .000  .000   .00
CD    5  4    1     .000    2.500      .000  .000  .000   .00
CD    6  4    1     .000    2.000      .000  .000  .000   .00
CD    7  4    1     .000    2.000      .000  .000  .000   .00
CD    8  4    1     .000    2.500      .000  .000  .000   .00
CD    9  4    1     .000    2.000      .000  .000  .000   .00
CD   10  4    1     .000    2.500      .000  .000  .000   .00
CD   11  4    1     .000    1.000      .000  .000  .000   .00
Q              6.180    .0
```

```
T1 VALLE DE ATRISCO DEVELOPMENT                                          0
T2 PRIVATE STORM DRAIN
T3 INLET C TO MH G
SO    1000.000 106.270  1                          109.360
R     1016.000 106.750  1       .013                              .000    .000 1
SH    1016.000 106.750  1                          107.250
CD    1  4   1     .000      1.50      .000  .000  .000    .00
Q               4.210    .0
```


Program Package Serial Number: 1454

WATER SURFACE PROFILE LISTING Date: 9-28-2018 Time:11:27: 2

VALLE DE ATRISCO DEVELOPMENT
PRIVATE STORM DRAIN
INLET C TO MH G

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt or I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
1000.000	106.270	3.090	109.360	4.21	5.36	.45	109.81	.00	.87	.00	1.000	.000	.00	1 .0
16.000	.0300					.0140	.22	3.09	.00	.61	.013	.00	.00	PIPE
1016.000	106.750	2.856	109.606	4.21	5.36	.45	110.05	.00	.87	.00	1.000	.000	.00	1 .0

CARD CODE	SECT NO	CHN TYPE	NO OF PIER/PIP	AVE PIER WIDTH	HEIGHT 1 DIAMETER	BASE WIDTH	ZL	ZR	INV DROP	Y(1)	Y(2)	Y(3)	Y(4)	Y(5)	Y(6)	Y(7)	Y(8)	Y(9)	Y(10)
CD	1	4	1		2.500														
CD	2	4	1		2.500														
CD	3	4	1		2.500														
CD	4	4	1		2.500														
CD	5	4	1		2.500														
CD	6	4	1		2.000														
CD	7	4	1		2.000														
CD	8	4	1		2.500														
CD	9	4	1		2.000														
CD	10	4	1		2.500														
CD	11	4	1		1.000														

WATER SURFACE PROFILE - TITLE CARD LISTING

HEADING LINE NO 1 IS -

VALLE DE ATRISCO DEVELOPEMENT

HEADING LINE NO 2 IS -

PRIVATE STORM DRAIN

HEADING LINE NO 3 IS -

CENTRAL TO WEST LATERAL

WATER SURFACE PROFILE - ELEMENT CARD LISTING

ELEMENT NO 1 IS A SYSTEM OUTLET * * *

U/S DATA	STATION	INVERT	SECT	W S ELEV
	1000.000	102.500	1	106.000

ELEMENT NO 2 IS A REACH * * *

U/S DATA	STATION	INVERT	SECT	N	RADIUS	ANGLE	ANG PT	MAN H
	1162.300	103.640	1	.013	.000	.000	.000	1

ELEMENT NO 3 IS A JUNCTION * * * * * * *

U/S DATA	STATION	INVERT	SECT	LAT-1	LAT-2	N	Q3	Q4	INVERT-3	INVERT-4	PHI 3	PHI 4
	1166.300	103.740	3	2	0	.013	3.730	.000	103.740	.000	90.000	.000

RADIUS	ANGLE
.000	.000

ELEMENT NO 4 IS A REACH * * *

U/S DATA	STATION	INVERT	SECT	N	RADIUS	ANGLE	ANG PT	MAN H
	1317.800	104.800	3	.013	.000	.000	.000	1

ELEMENT NO 5 IS A JUNCTION * * * * * * *

U/S DATA	STATION	INVERT	SECT	LAT-1	LAT-2	N	Q3	Q4	INVERT-3	INVERT-4	PHI 3	PHI 4
	1321.800	104.900	5	4	0	.013	3.670	.000	104.900	.000	90.000	.000

RADIUS	ANGLE
.000	.000

ELEMENT NO 6 IS A REACH * * *

U/S DATA	STATION	INVERT	SECT	N	RADIUS	ANGLE	ANG PT	MAN H
	1349.500	105.000	5	.013	.000	.000	.000	1

ELEMENT NO 7 IS A JUNCTION * * * * * * *

U/S DATA	STATION	INVERT	SECT	LAT-1	LAT-2	N	Q3	Q4	INVERT-3	INVERT-4	PHI 3	PHI 4

```
                          1353.500  105.100    7     6     0   .013     9.090       .000   105.100       .000 -90.000      .000
                                                                                            RADIUS     ANGLE
                                                                                              .000      .000
ELEMENT NO    8 IS A REACH              *         *     *
                  U/S DATA    STATION     INVERT  SECT                 N                      RADIUS     ANGLE      ANG PT  MAN H
                              1462.240  105.760    7                 .013                       .000      .000    45.000      1
                                                                W S P G W                                                PAGE NO   3
                        WATER SURFACE PROFILE - ELEMENT CARD LISTING
ELEMENT NO    9 IS A JUNCTION           *         *     *     *             *                 *                 *
                  U/S DATA    STATION     INVERT  SECT LAT-1 LAT-2    N       Q3        Q4      INVERT-3 INVERT-4  PHI 3  PHI 4
                              1466.400  105.860    9     8     0   .013     4.210       .000   105.860       .000  90.000      .000
                                                                                            RADIUS     ANGLE
                                                                                              .000      .000
ELEMENT NO   10 IS A REACH              *         *     *
                  U/S DATA    STATION     INVERT  SECT                 N                      RADIUS     ANGLE      ANG PT  MAN H
                              1539.300  106.270    9                 .013                       .000      .000      .000      1
ELEMENT NO   11 IS A JUNCTION           *         *     *     *             *                 *                 *
                  U/S DATA    STATION     INVERT  SECT LAT-1 LAT-2    N       Q3        Q4      INVERT-3 INVERT-4  PHI 3  PHI 4
                              1543.300  106.370    9    10     0   .013     3.340       .000   106.370       .000  90.000      .000
                                                                                            RADIUS     ANGLE
                                                                                              .000      .000
ELEMENT NO   12 IS A REACH              *         *     *
                  U/S DATA    STATION     INVERT  SECT                 N                      RADIUS     ANGLE      ANG PT  MAN H
                              1701.600  107.400    9                 .013                       .000      .000      .000      1
ELEMENT NO   13 IS A SYSTEM HEADWORKS                 *                       *
                  U/S DATA    STATION     INVERT  SECT                                    W S ELEV
                              1701.600  107.400    9                                      108.000
```

Program Package Serial Number: 1454

WATER SURFACE PROFILE LISTING Date: 9-27-2018 Time: 1:52:42

VALLE DE ATRISCO DEVELOPEMENT
PRIVATE STORM DRAIN
CENTRAL TO WEST LATERAL

Station / L/Elem	Invert Elev / Ch Slope	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head / SF Ave	Energy Grd.El. / HF	Super Elev / SE Dpth	Critical Depth / Froude N	Flow Top Width / Norm Dp	Height/Dia.-FT / "N"	Base Wt or I.D. / X-Fall	ZL / ZR	No Wth Prs/Pip / Type Ch
1000.000	102.500	3.500	106.000	30.22	6.16	.59	106.59	.00	1.87	.00	2.500	.000	.00	1 .0
162.300	.0070					.0054	.88	3.50	.00	1.82	.013	.00	.00	PIPE
1162.300	103.640	3.270	106.910	30.22	6.16	.59	107.50	.00	1.87	.00	2.500	.000	.00	1 .0
JUNCT STR	.0250					.0048	.02	3.27	.00		.013	.00	.00	PIPE
1166.300	103.740	3.462	107.202	26.49	5.40	.45	107.65	.00	1.75	.00	2.500	.000	.00	1 .0
151.500	.0070					.0042	.63	3.46	.00	1.65	.013	.00	.00	PIPE
1317.800	104.800	3.057	107.857	26.49	5.40	.45	108.31	.00	1.75	.00	2.500	.000	.00	1 .0
JUNCT STR	.0250					.0036	.01	3.06	.00		.013	.00	.00	PIPE
1321.800	104.900	3.205	108.105	22.82	4.65	.34	108.44	.00	1.63	.00	2.500	.000	.00	1 .0
27.700	.0036					.0031	.09	3.20	.00	1.90	.013	.00	.00	PIPE
1349.500	105.000	3.207	108.207	22.82	4.65	.34	108.54	.00	1.63	.00	2.500	.000	.00	1 .0
JUNCT STR	.0250					.0034	.01	3.21	.00		.013	.00	.00	PIPE
1353.500	105.100	3.476	108.576	13.73	4.37	.30	108.87	.00	1.33	.00	2.000	.000	.00	1 .0
108.740	.0061					.0037	.40	3.48	.00	1.33	.013	.00	.00	PIPE
1462.240	105.760	3.276	109.036	13.73	4.37	.30	109.33	.00	1.33	.00	2.000	.000	.00	1 .0
JUNCT STR	.0240					.0027	.01	3.28	.00		.013	.00	.00	PIPE
1466.400	105.860	3.495	109.355	9.52	3.03	.14	109.50	.00	1.10	.00	2.000	.000	.00	1 .0
72.900	.0056					.0018	.13	3.49	.00	1.07	.013	.00	.00	PIPE

Program Package Serial Number: 1454

WATER SURFACE PROFILE LISTING Date: 9-27-2018 Time: 1:52:42

VALLE DE ATRISCO DEVELOPEMENT
PRIVATE STORM DRAIN
CENTRAL TO WEST LATERAL

Station / L/Elem	Invert Elev / Ch Slope	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head / SF Ave	Energy Grd.El. / HF	Super Elev / SE Dpth	Critical Depth / Froude N	Flow Top Width / Norm Dp	Height/ Dia.-FT / "N"	Base Wt or I.D. / X-Fall	ZL / ZR	No Wth Prs/Pip / Type Ch
1539.300	106.270	3.221	109.491	9.52	3.03	.14	109.63	.00	1.10	.00	2.000	.000	.00	1 .0
JUNCT STR	.0250					.0013	.01	3.22	.00		.013	.00	.00	PIPE
1543.300	106.370	3.291	109.661	6.18	1.97	.06	109.72	.00	.88	.00	2.000	.000	.00	1 .0
158.300	.0065					.0007	.12	3.29	.00	.80	.013	.00	.00	PIPE
1701.600	107.400	2.382	109.782	6.18	1.97	.06	109.84	.00	.88	.00	2.000	.000	.00	1 .0

```
T1 VALLE DE ATRISCO DEVELOPEMENT                                                0
T2 PRIVATE STORM DRAIN
T3 CENTRAL TO EAST LATERAL
SO   1000.000 102.500  1                          106.000
R    1162.300 103.640  1       .013                          .000    .000 1
JX   1166.300 103.740  3  2    .013    3.730          103.740        90.0         .000
R    1317.800 104.800  3       .013                          .000    .000 1
JX   1321.800 104.900  5  4    .013    3.670          104.900        90.0         .000
R    1349.500 105.000  5       .013                          .000    .000 1
JX   1353.500 105.100  7  6    .013   13.730          105.100       -90.0         .000
R    1439.000 105.600  7       .013                          .000  45.000 1
R    1492.300 105.950  7       .013                          .000  45.000 1
JX   1496.300 106.000  9  8    .013    2.780          106.000        90.0         .000
R    1768.800 107.860  9       .013                          .000    .000 1
JX   1772.800 107.860 11 10    .013    4.940          107.860        90.0         .000
R    1876.400 108.590 11       .013                          .000    .000 1
SH   1876.400 108.590 11                          109.000
CD   1  4   1    .000   2.500     .000  .000  .000   .00
CD   2  4   1    .000   2.500     .000  .000  .000   .00
CD   3  4   1    .000   2.500     .000  .000  .000   .00
CD   4  4   1    .000   2.500     .000  .000  .000   .00
CD   5  4   1    .000   2.500     .000  .000  .000   .00
CD   6  4   1    .000   2.000     .000  .000  .000   .00
CD   7  4   1    .000   2.000     .000  .000  .000   .00
CD   8  4   1    .000   2.500     .000  .000  .000   .00
CD   9  4   1    .000   2.000     .000  .000  .000   .00
CD  10  4   1    .000   2.500     .000  .000  .000   .00
CD  11  4   1    .000   1.000     .000  .000  .000   .00
Q             1.370   .0
```

CARD CODE	SECT NO	CHN TYPE	NO OF PIER/PIP	AVE PIER WIDTH	HEIGHT 1 DIAMETER	BASE WIDTH	ZL	ZR	INV DROP	Y(1)	Y(2)	Y(3)	Y(4)	Y(5)	Y(6)	Y(7)	Y(8)	Y(9)	Y(10)
CD	1	4	1		2.500														
CD	2	4	1		2.500														
CD	3	4	1		2.500														
CD	4	4	1		2.500														
CD	5	4	1		2.500														
CD	6	4	1		2.000														
CD	7	4	1		2.000														
CD	8	4	1		2.500														
CD	9	4	1		2.000														
CD	10	4	1		2.500														
CD	11	4	1		1.000														

WATER SURFACE PROFILE - TITLE CARD LISTING

HEADING LINE NO 1 IS -

VALLE DE ATRISCO DEVELOPEMENT

HEADING LINE NO 2 IS -

PRIVATE STORM DRAIN

HEADING LINE NO 3 IS -

CENTRAL TO EAST LATERAL

WATER SURFACE PROFILE - ELEMENT CARD LISTING

ELEMENT NO 1 IS A SYSTEM OUTLET * * *

U/S DATA	STATION	INVERT	SECT	W S ELEV
	1000.000	102.500	1	106.000

ELEMENT NO 2 IS A REACH * * *

U/S DATA	STATION	INVERT	SECT	N	RADIUS	ANGLE	ANG PT	MAN H
	1162.300	103.640	1	.013	.000	.000	.000	1

ELEMENT NO 3 IS A JUNCTION * * * * * * *

U/S DATA	STATION	INVERT	SECT	LAT-1	LAT-2	N	Q3	Q4	INVERT-3	INVERT-4	PHI 3	PHI 4
	1166.300	103.740	3	2	0	.013	3.730	.000	103.740	.000	90.000	.000

RADIUS	ANGLE
.000	.000

ELEMENT NO 4 IS A REACH * * *

U/S DATA	STATION	INVERT	SECT	N	RADIUS	ANGLE	ANG PT	MAN H
	1317.800	104.800	3	.013	.000	.000	.000	1

ELEMENT NO 5 IS A JUNCTION * * * * * * *

U/S DATA	STATION	INVERT	SECT	LAT-1	LAT-2	N	Q3	Q4	INVERT-3	INVERT-4	PHI 3	PHI 4
	1321.800	104.900	5	4	0	.013	3.670	.000	104.900	.000	90.000	.000

RADIUS	ANGLE
.000	.000

ELEMENT NO 6 IS A REACH * * *

U/S DATA	STATION	INVERT	SECT	N	RADIUS	ANGLE	ANG PT	MAN H
	1349.500	105.000	5	.013	.000	.000	.000	1

ELEMENT NO 7 IS A JUNCTION * * * * * * *

U/S DATA	STATION	INVERT	SECT	LAT-1	LAT-2	N	Q3	Q4	INVERT-3	INVERT-4	PHI 3	PHI 4

```
                          1353.500  105.100    7     6     0   .013    13.730      .000   105.100      .000 -90.000      .000
                                                                                           RADIUS     ANGLE
                                                                                             .000      .000
 ELEMENT NO    8 IS A REACH              *         *     *
                    U/S DATA   STATION    INVERT  SECT               N                      RADIUS     ANGLE     ANG PT  MAN H
                               1439.000  105.600    7                .013                     .000      .000     45.000      1
                                                                 W S P G W                                                PAGE NO   3
                          WATER SURFACE PROFILE - ELEMENT CARD LISTING
 ELEMENT NO    9 IS A REACH              *         *     *
                    U/S DATA   STATION    INVERT  SECT               N                      RADIUS     ANGLE     ANG PT  MAN H
                               1492.300  105.950    7                .013                     .000      .000     45.000      1
 ELEMENT NO   10 IS A JUNCTION           *         *     *     *               *                *                  *
                    U/S DATA   STATION    INVERT  SECT LAT-1 LAT-2   N      Q3        Q4     INVERT-3 INVERT-4  PHI 3   PHI 4
                               1496.300  106.000    9     8     0   .013     2.780     .000   106.000      .000  90.000     .000
                                                                                           RADIUS     ANGLE
                                                                                             .000      .000
 ELEMENT NO   11 IS A REACH              *         *     *
                    U/S DATA   STATION    INVERT  SECT               N                      RADIUS     ANGLE     ANG PT  MAN H
                               1768.800  107.860    9                .013                     .000      .000      .000      1
 ELEMENT NO   12 IS A JUNCTION           *         *     *     *               *                *                  *
                    U/S DATA   STATION    INVERT  SECT LAT-1 LAT-2   N      Q3        Q4     INVERT-3 INVERT-4  PHI 3   PHI 4
                               1772.800  107.860   11    10     0   .013     4.940     .000   107.860      .000  90.000     .000
                                                                                           RADIUS     ANGLE
                                                                                             .000      .000
THE ABOVE ELEMENT CONTAINED AN INVERT ELEV WHICH WAS NOT GREATER THAN THE PREVIOUS INVERT ELEV -WARNING
THE ABOVE ELEMENT CONTAINED AN INVERT ELEV WHICH WAS NOT GREATER THAN THE PREVIOUS INVERT ELEV -WARNING
 ELEMENT NO   13 IS A REACH              *         *     *
                    U/S DATA   STATION    INVERT  SECT               N                      RADIUS     ANGLE     ANG PT  MAN H
                               1876.400  108.590   11                .013                     .000      .000      .000      1
 ELEMENT NO   14 IS A SYSTEM HEADWORKS                 *                      *
                    U/S DATA   STATION    INVERT  SECT                                W S ELEV
                               1876.400  108.590   11                                 109.000
```

Program Package Serial Number: 1454

WATER SURFACE PROFILE LISTING Date: 9-27-2018 Time: 1:49: 4

VALLE DE ATRISCO DEVELOPEMENT
PRIVATE STORM DRAIN
CENTRAL TO EAST LATERAL

Station / L/Elem	Invert Elev / Ch Slope	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head / SF Ave	Energy Grd.El. / HF	Super Elev / SE Dpth	Critical Depth / Froude N	Flow Top Width / Norm Dp	Height/ Dia.-FT / "N"	Base Wt or I.D. / X-Fall	ZL / ZR	No Wth Prs/Pip / Type Ch
1000.000	102.500	3.500	106.000	30.22	6.16	.59	106.59	.00	1.87	.00	2.500	.000	.00	1 .0
162.300	.0070					.0054	.88	3.50	.00	1.82	.013	.00	.00	PIPE
1162.300	103.640	3.270	106.910	30.22	6.16	.59	107.50	.00	1.87	.00	2.500	.000	.00	1 .0
JUNCT STR	.0250					.0048	.02	3.27	.00		.013	.00	.00	PIPE
1166.300	103.740	3.462	107.202	26.49	5.40	.45	107.65	.00	1.75	.00	2.500	.000	.00	1 .0
151.500	.0070					.0042	.63	3.46	.00	1.65	.013	.00	.00	PIPE
1317.800	104.800	3.057	107.857	26.49	5.40	.45	108.31	.00	1.75	.00	2.500	.000	.00	1 .0
JUNCT STR	.0250					.0036	.01	3.06	.00		.013	.00	.00	PIPE
1321.800	104.900	3.205	108.105	22.82	4.65	.34	108.44	.00	1.63	.00	2.500	.000	.00	1 .0
27.700	.0036					.0031	.09	3.20	.00	1.90	.013	.00	.00	PIPE
1349.500	105.000	3.207	108.207	22.82	4.65	.34	108.54	.00	1.63	.00	2.500	.000	.00	1 .0
JUNCT STR	.0250					.0024	.01	3.21	.00		.013	.00	.00	PIPE
1353.500	105.100	3.732	108.832	9.09	2.89	.13	108.96	.00	1.08	.00	2.000	.000	.00	1 .0
85.500	.0058					.0016	.14	3.73	.00	1.03	.013	.00	.00	PIPE
1439.000	105.600	3.396	108.996	9.09	2.89	.13	109.13	.00	1.08	.00	2.000	.000	.00	1 .0
53.300	.0066					.0016	.09	3.40	.00	1.00	.013	.00	.00	PIPE
1492.300	105.950	3.158	109.108	9.09	2.89	.13	109.24	.00	1.08	.00	2.000	.000	.00	1 .0
JUNCT STR	.0125					.0012	.00	3.16	.00		.013	.00	.00	PIPE

Program Package Serial Number: 1454

WATER SURFACE PROFILE LISTING Date: 9-27-2018 Time: 1:49: 4

VALLE DE ATRISCO DEVELOPEMENT
PRIVATE STORM DRAIN
CENTRAL TO EAST LATERAL

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt or I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
1496.300	106.000	3.247	109.247	6.31	2.01	.06	109.31	.00	.89	.00	2.000	.000	.00	1 .0
206.630	.0068					.0008	.16	3.25	.00	.80	.013	.00	.00	PIPE
1702.931	107.410	2.000	109.410	6.31	2.01	.06	109.47	.00	.89	.00	2.000	.000	.00	1 .0
29.266	.0068					.0007	.02	2.00	.00	.80	.013	.00	.00	PIPE
1732.197	107.610	1.814	109.424	6.31	2.11	.07	109.49	.00	.89	1.16	2.000	.000	.00	1 .0
16.517	.0068					.0007	.01	1.81	.23	.80	.013	.00	.00	PIPE
1748.714	107.723	1.706	109.429	6.31	2.21	.08	109.50	.00	.89	1.42	2.000	.000	.00	1 .0
13.263	.0068					.0008	.01	1.71	.27	.80	.013	.00	.00	PIPE
1761.977	107.813	1.618	109.432	6.31	2.32	.08	109.51	.00	.89	1.57	2.000	.000	.00	1 .0
6.823	.0068					.0008	.01	1.62	.31	.80	.013	.00	.00	PIPE
1768.800	107.860	1.573	109.433	6.31	2.38	.09	109.52	.00	.89	1.64	2.000	.000	.00	1 .0
JUNCT STR	.0000					.0012	.00	1.57	.33		.013	.00	.00	PIPE
1772.800	107.860	1.806	109.666	1.37	1.74	.05	109.71	.00	.50	.00	1.000	.000	.00	1 .0
103.600	.0070					.0015	.15	1.81	.00	.48	.013	.00	.00	PIPE
1876.400	108.590	1.231	109.821	1.37	1.74	.05	109.87	.00	.50	.00	1.000	.000	.00	1 .0

Program Package Serial Number: 1454

WATER SURFACE PROFILE LISTING Date: 9-27-2018 Time: 2:37:16

VALLE DE ATRISCO DEVELOPMENT
PRIVATE STORM DRAIN
INLET M TO MH 4A

Station	Invert Elev	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head	Energy Grd.El.	Super Elev	Critical Depth	Flow Top Width	Height/ Dia.-FT	Base Wt or I.D.	ZL	No Wth Prs/Pip
L/Elem	Ch Slope					SF Ave	HF	SE Dpth	Froude N	Norm Dp	"N"	X-Fall	ZR	Type Ch
1000.000	105.780	2.320	108.100	4.63	5.90	.54	108.64	.00	.90	.00	1.000	.000	.00	1 .0
31.500	.0387					.0169	.53	2.32	.00	.59	.013	.00	.00	PIPE
1031.500	107.000	1.659	108.659	4.63	5.90	.54	109.20	.00	.90	.00	1.000	.000	.00	1 .0

WATER SURFACE PROFILE - CHANNEL DEFINITION LISTING

CARD CODE	SECT NO	CHN TYPE	NO OF PIER/PIP	AVE PIER WIDTH	HEIGHT 1 DIAMETER	BASE WIDTH	ZL	ZR	INV DROP	Y(1)	Y(2)	Y(3)	Y(4)	Y(5)	Y(6)	Y(7)	Y(8)	Y(9)	Y(10)
CD	1	4	1		1.000														

WATER SURFACE PROFILE - TITLE CARD LISTING

HEADING LINE NO 1 IS -
VALLE DE ATRISCO DEVELOPMENT

HEADING LINE NO 2 IS -
PRIVATE STORM DRAIN

HEADING LINE NO 3 IS -
INLET M TO MH 4A

WATER SURFACE PROFILE - ELEMENT CARD LISTING

ELEMENT NO 1 IS A SYSTEM OUTLET * * *

U/S DATA	STATION	INVERT	SECT	W S ELEV
	1000.000	105.780	1	108.100

ELEMENT NO 2 IS A REACH * * *

U/S DATA	STATION	INVERT	SECT	N	RADIUS	ANGLE	ANG PT	MAN H
	1031.500	107.000	1	.013	.000	.000	.000	1

ELEMENT NO 3 IS A SYSTEM HEADWORKS * *

U/S DATA	STATION	INVERT	SECT	W S ELEV
	1031.500	107.000	1	107.000

VALLE DE ATRISCO DEVELOPMENT
PRIVATE STORM DRAIN
INLET K TO INLET L

Station / L/Elem	Invert Elev / Ch Slope	Depth (FT)	Water Elev	Q (CFS)	Vel (FPS)	Vel Head / SF Ave	Energy Grd.El. / HF	Super Elev / SE Dpth	Critical Depth / Froude N	Flow Top Width / Norm Dp	Height/ Dia.-FT / "N"	Base Wt or I.D. / X-Fall	ZL / ZR	No Wth Prs/Pip / Type Ch
1000.000	103.640	3.560	107.200	.66	1.71	.05	107.25	.00	.38	.00	.700	.000	.00	1 .0
132.200	.0179					.0023	.30	3.56	.00	.29	.013	.00	.00	PIPE
1132.200	106.000	1.506	107.506	.66	1.71	.05	107.55	.00	.38	.00	.700	.000	.00	1 .0

WATER SURFACE PROFILE - CHANNEL DEFINITION LISTING

CARD CODE	SECT NO	CHN TYPE	NO OF PIER/PIP	AVE PIER WIDTH	HEIGHT 1 DIAMETER	BASE WIDTH	ZL	ZR	INV DROP	Y(1)	Y(2)	Y(3)	Y(4)	Y(5)	Y(6)	Y(7)	Y(8)	Y(9)	Y(10)
CD	1	4	1		.700														

W S P G W

WATER SURFACE PROFILE - TITLE CARD LISTING

HEADING LINE NO 1 IS -
VALLE DE ATRISCO DEVELOPMENT
HEADING LINE NO 2 IS -
PRIVATE STORM DRAIN
HEADING LINE NO 3 IS -
INLET K TO INLET L

W S P G W

WATER SURFACE PROFILE - ELEMENT CARD LISTING

ELEMENT NO 1 IS A SYSTEM OUTLET * * *

U/S DATA	STATION	INVERT	SECT	W S ELEV
	1000.000	103.640	1	107.200

ELEMENT NO 2 IS A REACH * * *

U/S DATA	STATION	INVERT	SECT	N	RADIUS	ANGLE	ANG PT	MAN H
	1132.200	106.000	1	.013	.000	.000	.000	1

ELEMENT NO 3 IS A SYSTEM HEADWORKS * *

U/S DATA	STATION	INVERT	SECT	W S ELEV
	1132.200	106.000	1	106.000

CALCULATIONS FOR TYPE D INLET
in a sump condition

Capacity is measured by the weir equation at the lip of the gutter assuming an allowable ponding elevation equal to the lowest adjacent right of way elevation. The length of the double grate facing the street is 6.4' and the maximum depth is 0.67' at the lip of the gutter,(6 inch curb + 2 inch depression over inlet). The sides are each 2' long and the average depth is 0.892'. These depths assume an 8" curb with right of way 9' behind the curb for an additional depth of 0.18' above the top of curb. From the weir equation:

FOR SINGLE 'D' INLET IN A SUMP CONDITION (*)

Q = C x L x (H)^(3/2)

*Front Q cap = (3.0) x (3.0') x (0.67) **1.5 = 4.93 cfs*

*Sides Q cap = (3.0) x (2.0') x (0.67) **1.5 = 3.29 cfs*

Total Q cap = 4.93 cfs + 3.29 cfs = 8.22 cfs

FOR DOUBLE 'D' INLET IN A SUMP CONDITION(*)

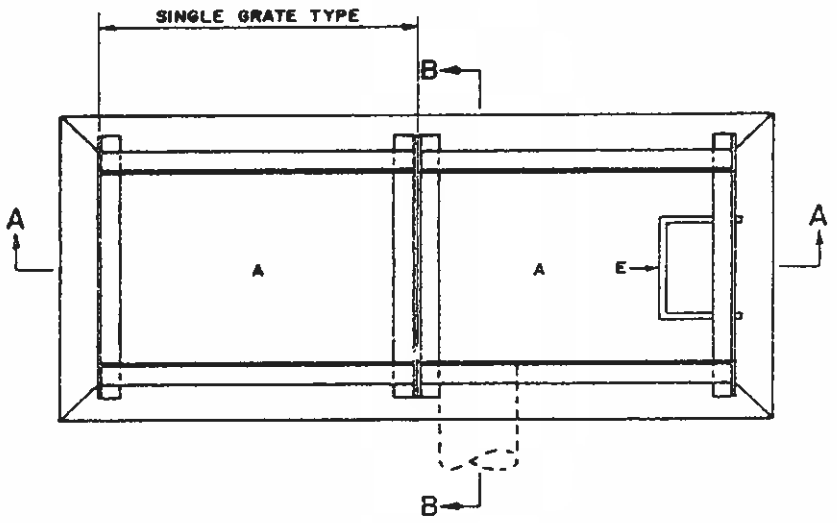
Q = C x L x (H)^(3/2)

*Front Q cap = (3.0) x (6.4') x (0.67) **1.5 = 10.53 cfs*

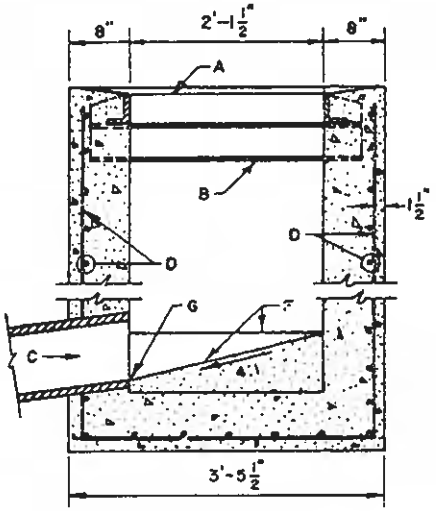
*Sides Q cap = (3.0) x (2.0') x (0.67) **1.5 = 3.29 cfs*

Total Q cap = 10.53 cfs + 3.29 cfs = 13.82 cfs

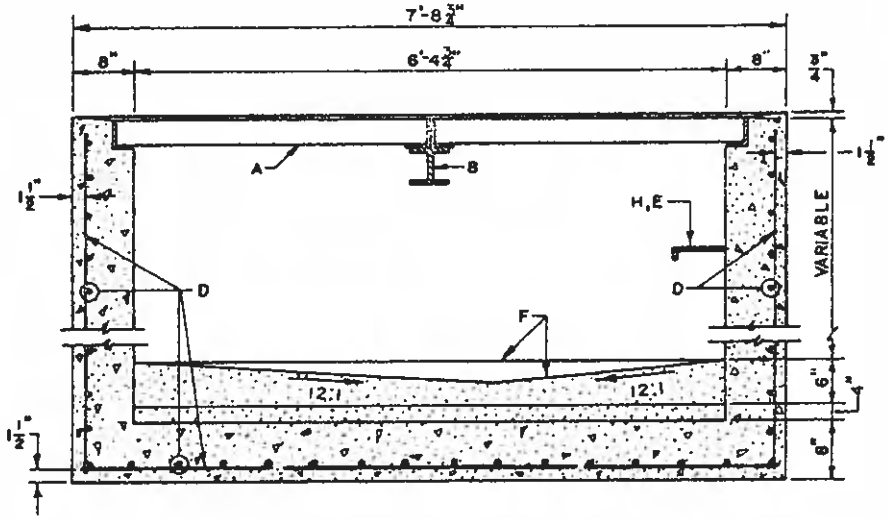
(*) These calculations are assuming only one side and one front are functioning as a weir.



PLAN



SECTION B-B



SECTION A-A

GENERAL NOTES:

1. FOR SINGLE GRATE TYPE STORM INLET, DELETE CENTER SUPPORT AND MOVE ONE END WALL TO FORM NEW SINGLE GRATE INLET.
2. STORM INLET GUTTER TRANSITION WILL BE SHOWN ON THE CONSTRUCTION PLANS.
3. OUTLET PIPE SIZE, PER DESIGN REQUIREMENT.
4. FOR FRAME & GRATING, SEE DWG 2216, 2220 & 2221.
5. FOR CENTER SUPPORT ASSEMBLY, SEE DWG 2215.

CONSTRUCTION NOTES:

A. FRAME & GRATE

B. CENTER SUPPORT ASSEMBLY

C. CUT ONE HORIZONTAL AND ONE VERTICAL BAR MAX. AT PIPE OPENING.

D. NO. 4 BARS A 6" O.C. EACH WAY.

E. USE STANDARD STEPS, SEE DWG 2229.

F. CONC. FILL, SEE NOTE C DWG 2201.

G. INVERT PER DESIGN.

H. INSTALL STEPS ON DOWNSTREAM FACE

CITY OF ALBUQUERQUE

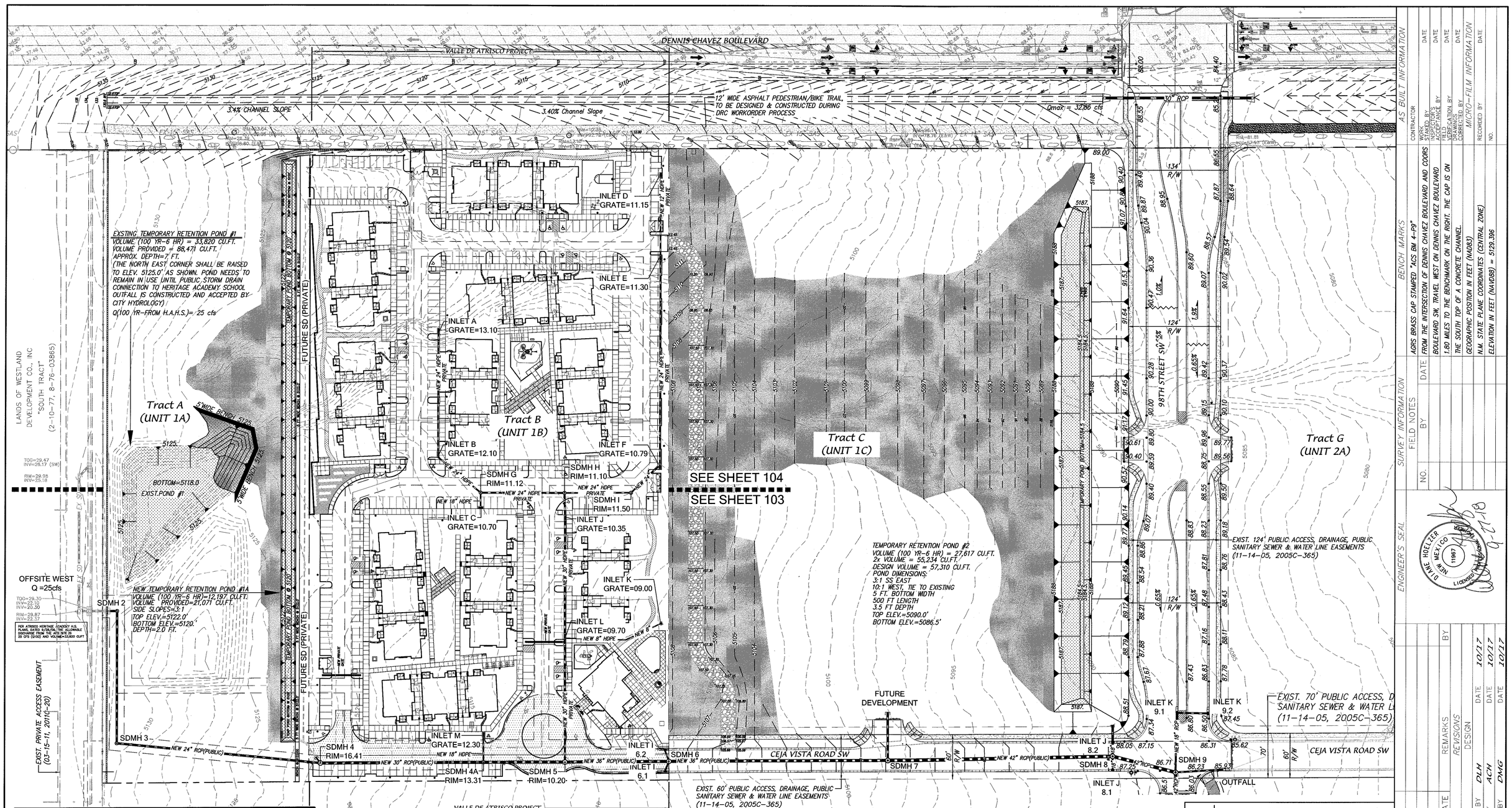
REVISIONS
12-21-92

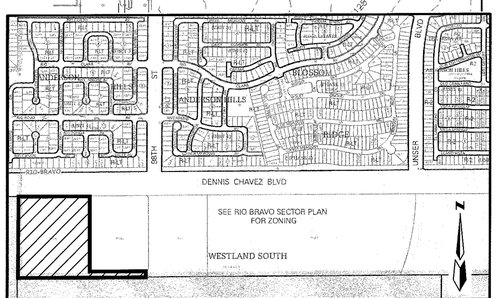
DRAINAGE

STORM INLET DOUBLE "D"

DWG. 2206

AUG 1986





VICINITY MAP (NTS)

ZONE ATLAS MAP P-9-Z

NOTES

1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
2. CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION SHALL GOVERN ALL WORK.
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
5. THE EARTHWORK CONTRACTOR SHALL STOCKPILE ENOUGH MATERIAL ADJACENT TO RETAINING WALL LOCATIONS TO BE UTILIZED FOR WALL BACKFILL.
6. SITE DOES NOT LIE IN A 100 YEAR FLOOD ZONE.
7. ALL SITE WALLS SHALL CONFORM TO THE GENERAL HEIGHT AND DESIGN REGULATIONS CONTAINED IN SECTION 14-16-3-19 OF THE CITY ZONING CODE.
8. COMBINATION GARDEN WALL/RETAINING WALL CANNOT EXCEED 8 FEET. IF THE RETAINING WALL IS GREATER THAN 4 FEET, THE DEVELOPER CAN ADD 3:1 SLOPES IN BACKYARD OR A SECOND RETAINING WALL OFFSET FROM THE FIRST ONE.

LEGAL DESCRIPTION

TRACT RR-3-A, TRACT RR-3-B AND TRACT RR-3-C, WESTLAND SOUTH WITHIN THE TOWN OF ATRISCO GRANT, PROJECTED SECTION 9, TOWNSHIP 9 NORTH, RANGE 2 EAST, N.M.P.M., CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

NEW EASEMENTS

1. NEW PUBLIC WATER LINE EASEMENT GRANTED TO A.B.C.W.U.A. WITH THIS PLAT.
2. NEW PUBLIC DRAINAGE EASEMENT GRANTED TO THE CITY OF ALBUQUERQUE WITH THIS PLAT.
3. NEW PRIVATE ACCESS EASEMENT GRANTED TO TRACT RR-3-A-1 WITH THIS PLAT.

N

60' 30' 0 60' 120'

SCALE: 1" = 60'

F:\A17JOBS\A17005 - Ceja Vista Multi Family\GRADE & DRAIN\A17005_ G&D-R1.dwg, Last saved by: Chris, 9/26/18

AS BUILT INFORMATION

BENCH MARKS

AGRS BRASS CAP STAMPED "ACS BM 4-P9"
FROM THE INTERSECTION OF DENNIS CHAVEZ BOULEVARD AND COORS BOULEVARD SW, TRAVEL WEST ON DENNIS CHAVEZ BOULEVARD 1.80 MILES TO THE BENCHMARK ON THE RIGHT. THE CAP IS ON THE SOUTH TOP OF A CONCRETE CHANNEL.
GEOGRAPHIC POSITION IN FEET (NAD83)
N.M. STATE PLANE COORDINATES (CENTRAL ZONE)
ELEVATION IN FEET (NAVD88) = 5129.396

CONTRACTOR

		DATE
WORK STAKED BY:		
WORK STAKES ACCEPTANCE BY:		DATE
FIELD VERIFICATION BY:		DATE
DRAWINGS CORRECTED BY:		DATE
MICRO-FILM INFORMATION		
RECORDED BY:		DATE
NO.		

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

DIANE HOELZER NEW MEXICO 11967 LICENSED PROFESSIONAL ENGINEER

9.27.18

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	DLH 10/17
		DRAWN BY	ACH 10/17
		CHECKED BY	DMG 10/17

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
OFFICE (505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PLANNING DEPARTMENT

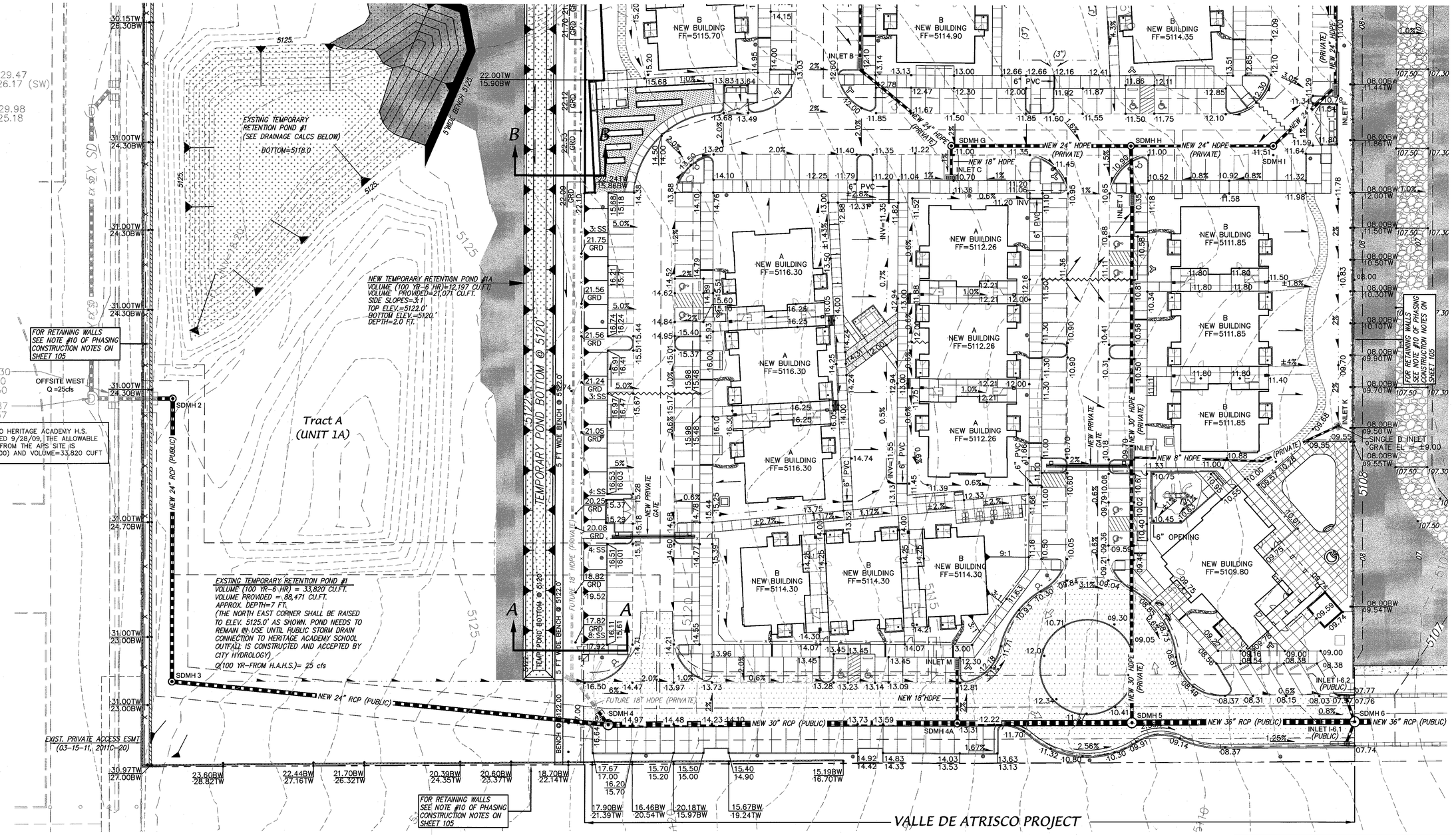
TITLE: *Valle De Atrisco Development*
GRADING & DRAINAGE - OVERALL PLAN

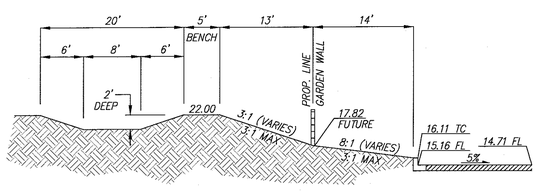
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
·	P-9-Z	101	

F:\A17JOBS\A17005 - Ceja Vista Multi Family\GRADE & DRAIN\A17005_ G&D-R1.dwg, 9/28/2018 11:35:52 AM, L OCE ARCH D BOND.pc3, CHRIS

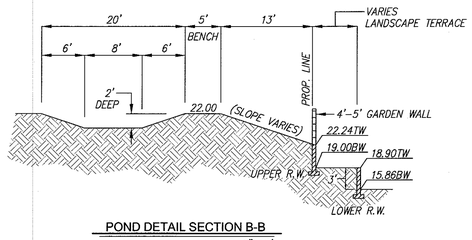
SEE SHEET 104





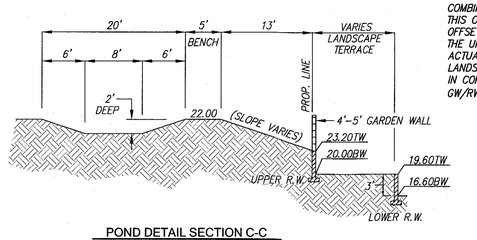
POND DETAIL SECTION A-A

SCALE: 1"=10'



POND DETAIL SECTION B-B

SCALE: 1"=10'



POND DETAIL SECTION C-C

SCALE: 1"=10'

NOTE:
GARDEN WALL SHALL BE 4'-5', BUT AT NO TIME SHALL THE GARDEN WALL AND RETAINING WALL COMBINATION BE GREATER THAN 8.0 FEET. IF THIS OCCURS, THE GARDEN WALL WILL BE OFFSET AND SEPARATE FROM RETAINING WALL. THE UPPER AND LOWER RETAINING WALL ACTUAL HEIGHTS MAY VARY, DEPENDING ON LANDSCAPE PLAN, BUT AT ALL TIME SHALL BE IN COMPLIANCE WITH RESTRICTION OF COMBINED GW/RW HEIGHT.

30' 15' 0 30' 60'

SCALE: 1" = 30'

AS BUILT INFORMATION

CONTRACTOR

	BY	DATE
WORK STAKED BY:		
ACCEPTANCE BY:		
FIELD VERIFICATION BY:		
DRAWINGS CORRECTED BY:		

MICRO-FILM INFORMATION

RECORDED BY: DATE:

NO.:

SURVEY INFORMATION

BENCH MARKS

AGRS BRASS CAP STAMPED "ACS BM 4-PG"
FROM THE INTERSECTION OF DENNIS CHAVEZ BOULEVARD AND COORS BOULEVARD SW, TRAVEL WEST ON DENNIS CHAVEZ BOULEVARD 1.80 MILES TO THE BENCHMARK ON THE RIGHT. THE CAP IS ON THE SOUTH TOP OF A CONCRETE CHANNEL.
GEOGRAPHIC POSITION IN FEET (NAD83)
N.M. STATE PLANE COORDINATES (CENTRAL ZONE)
ELEVATION IN FEET (NAVD88) = 5129.396

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

DANIEL HOELZER NEW MEXICO 11967 REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY	DATE
		REVISIONS		
		DESIGN	DLH	10/17
		DESIGNED BY	DLH	10/17
		DRAWN BY	ACH	10/17
		CHECKED BY	DMG	10/17

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
OFFICE (505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PLANNING DEPARTMENT

TITLE:

Valle De Atrisco Development
GRADING & DRAINAGE PLAN (SOUTH)

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
-	P-9-Z	103	

F:\A17JOBS\A17005 – Ceja Vista Multi Family\GRADE & DRAIN\A17005_ G&D-R1.dwg, Last saved by: Chris, 9/27/18

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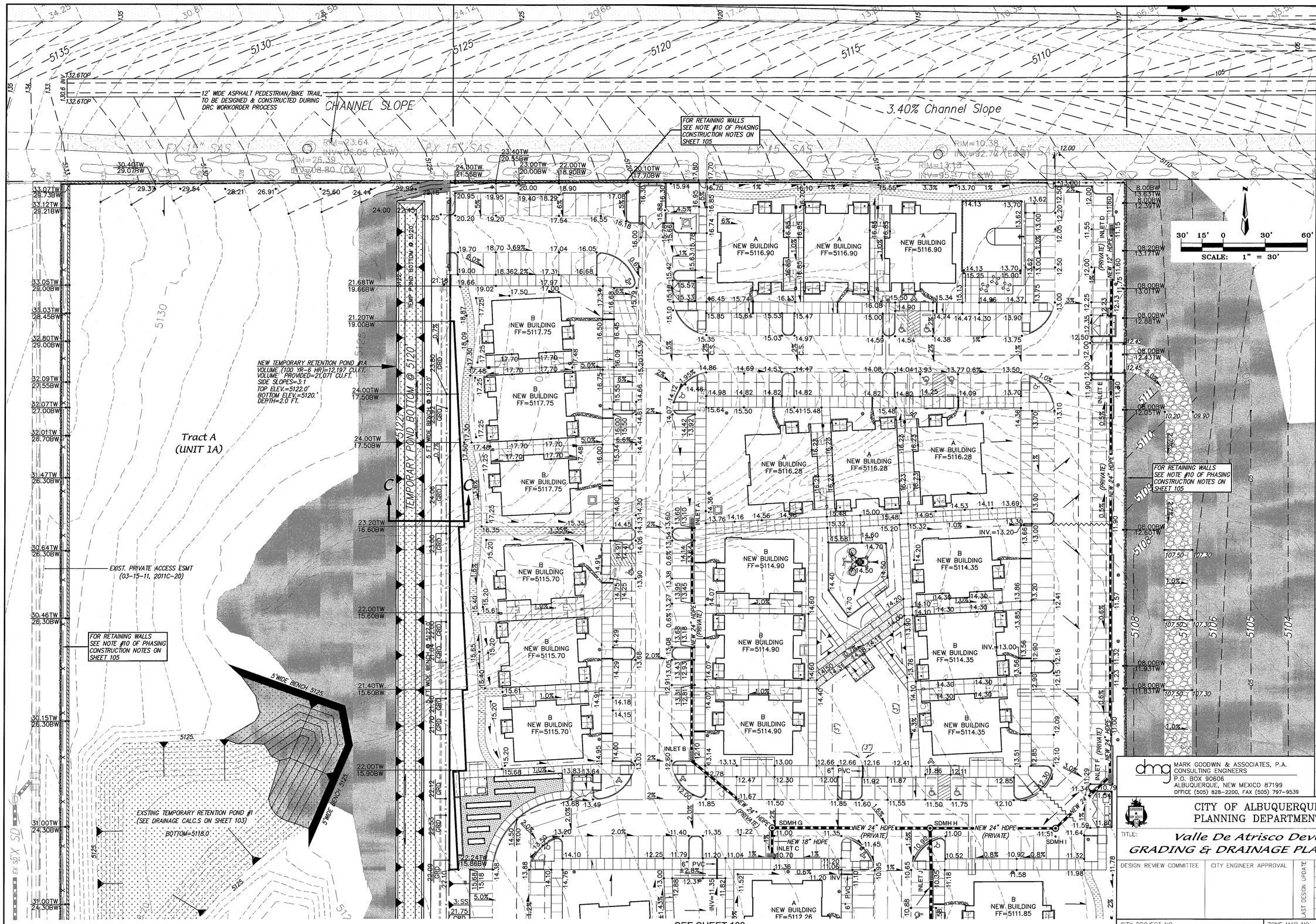

SCALE: 1" = 30'

AS BUILT INFORMATION

CONTRACTOR

WORK STARTED BY:		DATE
WORK ACCEPTANCE BY:		DATE
FIELD VERIFICATION BY:		DATE
DRAWINGS CORRECTED BY:		DATE

MICRO-FILM INFORMATION

RECORDED BY: DATE

NO.

BENCH MARKS

AGRS BRASS CAP STAMPED "ACS BM 4-P9"
FROM THE INTERSECTION OF DENNIS CHAVEZ BOULEVARD AND COORS BOULEVARD SW, TRAVEL WEST ON DENNIS CHAVEZ BOULEVARD 1.80 MILES TO THE BENCHMARK ON THE RIGHT. THE CAP IS ON THE SOUTH TOP OF A CONCRETE CHANNEL.
GEOGRAPHIC POSITION IN FEET (NAD83)
N.M. STATE PLANE COORDINATES (CENTRAL ZONE)
ELEVATION IN FEET (NAVD88) = 5129.396

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

DANIEL HOELZER NEW MEXICO 11967 REGISTERED PROFESSIONAL ENGINEER

NO.	BY	REMARKS	DATE
		REVISIONS	
	DLH	DESIGN	10/17
	ACH	DRAWN	10/17
	DMG	CHECKED	10/17

dmg
MARK GOODWIN & ASSOCIATES, P.A.
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ALBUQUERQUE, NEW MEXICO 87199
OFFICE (505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PLANNING DEPARTMENT

TITLE: *Valle De Atrisco Development*
GRADING & DRAINAGE PLAN (NORTH)

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
.	P-9-Z	104	

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SEE SHEET 104

3.4% CHANNEL SLOPE

3.40% Channel Slope

EXSTING TEMPORARY RETENTION POND #1 (SEE DRAINAGE CALCS BELOW)

FOR RETAINING WALLS SEE NOTE #10 OF PHASING CONSTRUCTION NOTES ON SHEET 105

OFFSITE WEST
Q =25cfs

SDMH 2

LANDS OF WESTLAND DEVELOPMENT CO., INC. ZONE MAP K-9-Z (2-10-77, 8-76-03865)

ATRISCO HERITAGE ACADEMY HIGH SCHOOL
(analysis by others)
SUB BASIN 507
Q(100)= 25 cfs
VOL(100)= 33,820 cu.ft.= 0.7764 Ac.Ft.

NON-PRESSURE WL CONNECTION #2

SUB BASIN 507
Q=25.0 cfs

SDMH 3
ATRISCO HERITAGE ACADEMY H.S. PLANS, DATED 5/25/09, THE ALLOWABLE DISCHARGE FROM THE APS SITE IS 25 CFS (Q100) AND VOLUME=33,820 CUFT

EXIST. PRIVATE ACCESS ESMT (03-15-11, 2011C-20)

SUB BASIN 100
Q=1.85 cfs FUT

SUB BASIN 500
Q=2.55 cfs FUT

SUB BASIN 501
Q=6.20 cfs FUT

SUB BASIN 502
Q=6.96 cfs FUT

SUB BASIN 503
Q=3.76 cfs FUT

TEMPORARY POND BOTTOM @ 5120 (2.55 cfs)

BENCH @ 5123.5

BENCH @ 5122.0

SUB BASIN 101
Q=4.33 cfs

SUB BASIN 102
Q=2.47 cfs

SUB BASIN 103
Q=3.57 cfs

SUB BASIN 200
Q=1.37 cfs

SUB BASIN 201
Q=4.01 cfs

SUB BASIN 202
Q=1.91 cfs

SUB BASIN 203
Q=1.80 cfs

SUB BASIN 204
Q=1.16 cfs

SUB BASIN 205
Q=0.66 cfs

SUB BASIN 400
Q=1.32 cfs

SUB BASIN 401
Q=1.28 cfs

SUB BASIN 300
Q=1.41 cfs

SUB BASIN 301
Q=2.06 cfs

SUB BASIN 302
Q=2.82 cfs

SUB BASIN 303
Q=1.13 cfs

INLET A (6.18 cfs)
INLET B (3.34 cfs)
INLET C (4.21 cfs)
INLET D (1.37 cfs)
INLET E (4.94 cfs)
INLET F (2.78 cfs)
INLET H (3.67 cfs)
INLET I (0.66 cfs)
INLET J (3.07 cfs)
INLET K (4.63 cfs)

SDMH G
SDMH 4

(6.75 cfs)
(6.18 cfs)
(6.31 cfs)
(9.52 cfs)
(13.73cfs)
(9.09 cfs)
(22.82 cfs)
(26.49 cfs)
(29.56 cfs)
(15.71 cfs)
(19.47 cfs)
(44.47 cfs)
(34.19 cfs)
Qinlet=2.62 cfs
Qinlet=2.63 cfs

NEW 24" RCP (25.00 cfs)
NEW 30" RCP
NEW 36" RCP (78.66 cfs)
NEW 36" RCP (83.91 cfs)
NEW 36" RCP STUB Q=47.69

FOR RETAINING WALLS SEE NOTE #10 OF PHASING CONSTRUCTION NOTES ON SHEET 105

CEJA VISTA ROAD

VALLE DE ATRISCO PROJECT

TOG=29.47 INV=26.17 (SW)
RIM=29.98 INV=25.18

TOG=29.30 INV=22.10 INV=20.30
RIM=29.87 INV=22.37

RIM=41.47 INV=27.28 (E&W) RIM=44.22 INV=24.03 (E&W)
RIM=26.39 INV=08.80 (E&W)
RIM=96.1 INV=78.76 (E&W)

EX 15" SAS
EX 12" WL
EX SD

50' 25' 0 50' 100'
SCALE: 1" = 50'

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY — DATE
FIELD CHANGES — DATE
ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

BENCH MARKS
AGRS BRASS CAP STAMPED "ACS BM 4-P9"
FROM THE INTERSECTION OF DENNIS CHAVEZ BOULEVARD AND COORS BOULEVARD SW, TRAVEL WEST ON DENNIS CHAVEZ BOULEVARD 1.80 MILES TO THE BENCHMARK ON THE RIGHT. THE CAP IS ON THE SOUTH TOP OF A CONCRETE CHANNEL.
GEOGRAPHIC POSITION IN FEET (NAD83)
N.M. STATE PLANE COORDINATES (CENTRAL ZONE)
ELEVATION IN FEET (NAVD88) = 5129.396

SURVEY INFORMATION
FIELD NOTES
NO. | BY | DATE

ENGINEER'S SEAL
DIANE HOELZER NEW MEXICO 11967 REGISTERED PROFESSIONAL ENGINEER
9-27-18

REVISIONS
NO. | DATE | REMARKS | BY
DESIGN
DESIGNED BY DLH DATE 10/17
DRAWN BY ACH DATE 10/17
CHECKED BY DMG DATE 10/17

MICRO-FILM INFORMATION
RECORDED BY — DATE
NO.

dmg MARK GOODWIN & ASSOCIATES, P.A.
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OFFICE (505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PLANNING DEPARTMENT

TITLE: Valle De Atrisco Development
ONSITE SUB-BASIN BOUNDARIES

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO. .
ZONE MAP NO. P-9-Z
SHEET OF 105

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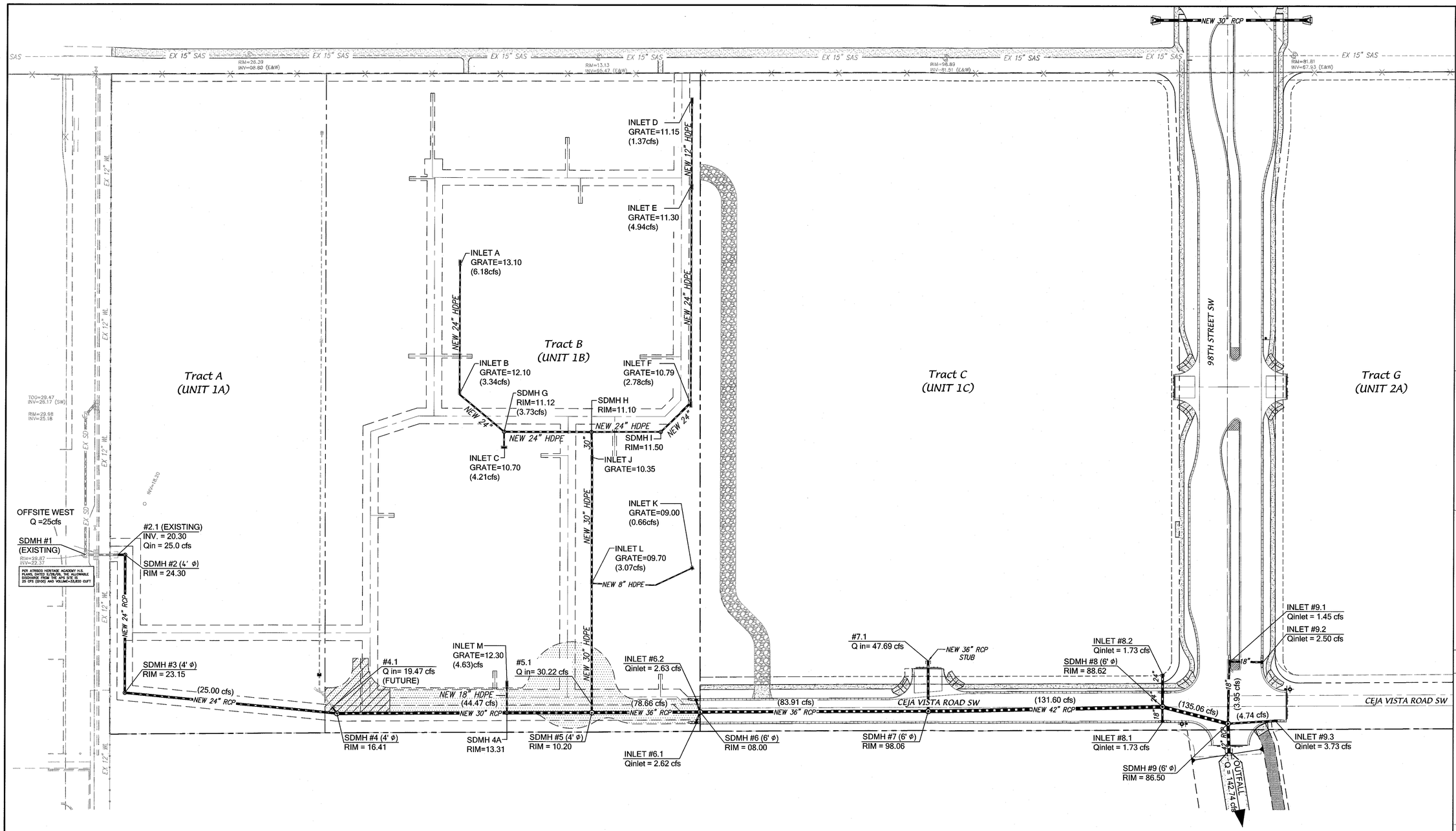

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

BENCH MARKS

AGRS BRASS CAP STAMPED "ACS BM 4-P9"
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GEOGRAPHIC POSITION IN FEET (NAD83)
N.M. STATE PLANE COORDINATES (CENTRAL ZONE)
ELEVATION IN FEET (NAVD88) = 5129.396

AS BUILT INFORMATION

CONTRACTOR	DATE
WORK STAKED BY	DATE
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

MICRO-FILM INFORMATION

RECORDED BY: DATE:

NO.

ENGINEER'S SEAL

DIANE HOELLER NEW MEXICO 11967 REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	DLH 10/17
		DESIGNED BY	DLH 10/17
		DRAWN BY	ACH 10/17
		CHECKED BY	DMG 10/17

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
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ALBUQUERQUE, NEW MEXICO 87199
OFFICE (505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PLANNING DEPARTMENT

TITLE

Valle De Atrisco Development
PRELIMINARY STORM DRAIN DESIGN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
-	P-9-Z	107	

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