

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

September 8, 2023

Fred C. Arfman, P.E.
Isaacson & Arfman, P.A.
128 Monroe St. N.E
Albuquerque, NM 87108

**RE: 6705 Saltbrush Court NE
Grading Plan & Drainage Report
Engineer's Stamp Date: 08/30/23
Hydrology File: E23D033**

Dear Mr. Arfman:

Based upon the information provided in your submittal received 08/30/2023, the Grading Plan & Drainage Report are approved for Building Permit and Grading Permit. **Since this site has storm walls, a pad certification is not needed for this project.** Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PRIOR TO CERTIFICATE OF OCCUPANCY:

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

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

Sincerely,

Renée C. Brissette

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



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

Lot 68, Mountain Highlands

Project Title: @ High Desert Unit 2 **Building Permit #** _____ **Hydrology File #** E23

DRB# _____ **EPC#** _____

Legal Description: Lot 68 Mountain Highlands @ _____ **City Address OR Parcel** 6705 Saltbush Ct NE
High Desert, Unit 2

Applicant/Agent: Isaacson & Arfman, Inc. **Contact:** Fred C. Arfman / Bryan J. Bobrick

Address: 128 Monroe Street NE **Phone:** (505) 268-8828

Email: freda@iacivil.com or bryanb@iacivil.com

Applicant/Owner: _____ **Contact:** _____

Address: _____ **Phone:** _____

Email: _____

TYPE OF DEVELOPMENT: _____ PLAT (#of lots) ☒ RESIDENCE ☐ DRB SITE _____ ADMIN SITE: _____

RE-SUBMITTAL: _____ YES ☒ NO

DEPARTMENT: _____ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G&D PLAN
- ☒ GRADING PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ FLOOD PLAN DEVELOPMENT PERMIT APP.
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
ADMINISTRATIVE
- ☐ TRAFFIC CIRCULATION LAYOUT FOR DRB
APPROVAL
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☒ OTHER (SPECIFY) Supplemental Information
- ☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☐ CONCEPTUAL TCL DRB APPROVAL
- ☐ 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
- ☐ FLOOD PLAN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____

DATE SUBMITTED: August 30, 2023

AUGUST 30, 2023

Supplemental Information

for

Lot 68, Mountain Highlands
at High Desert, Unit 2

6705 Saltbush Ct., NE
Albuquerque, NM

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED

DATE: 09/08/23
BY: Renee C. Briassette
HydroTrans # E23D033

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

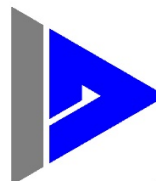
Grading and
Drainage Plan Submittal

by



08-30-2023

Isaacson &
Arfman, Inc.
Civil Engineering Consultants



128 Monroe Street NE
Albuquerque, NM 87108
505-268-8828 | www.iacivil.com

I&A Project No. 2560

Project Information

PROPERTY: THE SITE IS AN UNDEVELOPED RESIDENTIAL LOT BOUND ON THE NORTH AND EAST BY PAVED ROADS, ON THE WEST BY A DEVELOPED RESIDENTIAL LOT, AND ON THE SOUTH BY AN UNDEVELOPED RESIDENTIAL LOT.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE A NEW PRIVATE RESIDENCE WITH ASSOCIATED PAVED ACCESS DRIVE AND SITE AMENITIES.

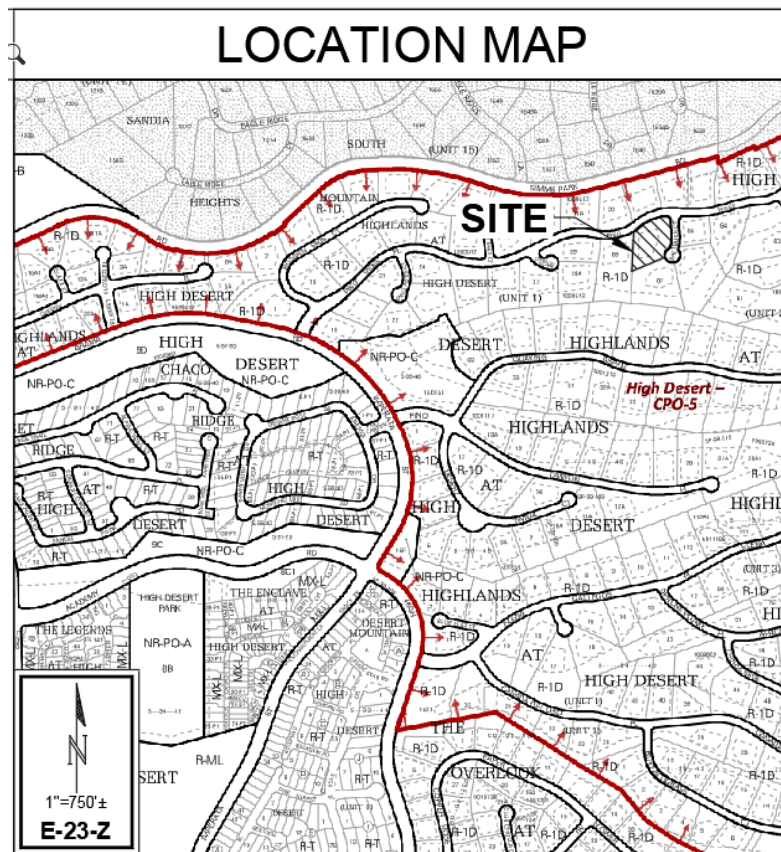
LEGAL: LOT 68, OF MOUNTAIN HIGHLANDS UNIT 2, ALBUQUERQUE, NEW MEXICO.

BENCHMARK: ACS BRASS CAP STAMPED "1-D24 RESET 1973/1995".

LOT SIZE: 1.0101 ACRES ±

OFF-SITE: APPROXIMATELY 15.0 CFS OF OFF-SITE FLOWS WILL BE ROUTED AROUND THE PROPOSED DEVELOPMENT.

FLOOD HAZARD: PER SANDOVAL COUNTY FIRM MAP #35001C0161G, EFF. 9/26/2008, THE SITE IS LOCATED WITHIN FLOODZONE 'X' DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.



EXISTING CONDITIONS:

The site is undeveloped and is bound to the north and east by paved roads with estate curbs; to the west by a developed lot; and to the south by an undeveloped lot. Offsite flows of approximately 15 cfs enter the lot at the northeast corner and combines with the onsite flows of 2.2 cfs and discharges at the southwest corner at a rate of 17.2 cfs.

PROPOSED CONDITIONS:

The lot will be developed with a new residential home with associated paved driveway, walks and site amenities. The grading and drainage plan shall conform to the Sustainability Guidelines for Estate Lots in addition to the *Drainage Report for Unit 2 Mountain Highlands at High Desert* (DMP), by Bohannon Huston, Inc., dated August 23, 2002

The developed site shall follow the historical drainage paths and limit disturbance of the land outside of the building envelope to the greatest extent feasible.

Two culverts shall be installed under the walkway from the residence to Saltbush Ct. to convey the offsite flows to the south. A storm drain system will convey the roof discharge to two ponds that will provide water harvesting and desiltation.

HYDROLOGY & DRAINAGE IMPROVEMENTS:

See Appendix A for the following:

- Basin exhibit;
- Land treatment calculations;
- Drainage calculations for existing and developed conditions based on City of Albuquerque DPM Article 6-2 Hydrology;
- Culvert calculations;
- Weir calculations;
- Excerpts from *Drainage Report for Unit 2 Mountain Highlands at High Desert*, by Bohannon Huston, Inc., (DMP) dated August 23, 2002.

HYDROLOGY:

EXISTING: The site is located in Basin SPT-7A-R1 as shown in the DMP. This basin is 6.98 ac. and generates 22.64 cfs in the 100-yr, 6-hr storm which equates to 3.24 cfs per acre. Approximately two thirds of this basin, 15 cfs, enters this site at the northeast corner of the lot.

There is an existing cross-lot drainage easement that allows offsite flows to pass across the lots (See Appendix A).

In the existing conditions, the site generates 2.2 cfs; 0.1 cfs discharges to Pino Ridge Pl. and the remaining flow combined with the offsite flow discharges 17.1 cfs to the southwest corner of the lot.

DEVELOPED: The developed site generates 2.9 cfs (2.87 cfs per acre) and will drain per the historical drainage paths. The site has been divided into 6 basins as shown on the basin exhibit in Appendix A.

Basin 1: 0.3 cfs combines with the offsite flow of 15 cfs for a total of 15.3 cfs at the two 18" culverts that crosses the sidewalk from the residence to Saltbush Ct.

Basin 2: 0.2 cfs combines with the 15.3 cfs from the culverts for a total of 15.5 cfs entering Pond #2.

Basins 3 & 4: 1.5 cfs discharges to Pond # 1.

Basin 5: 0.1 cfs discharges to Pino Ridge Pl.

Basin 6: 0.8 cfs combines with flows from Ponds #1 & #2 for a total discharge at the southwest corner of the lot of 17.8 cfs.

DRAINAGE IMPROVEMENTS: See Appendix B for grading and drainage plan.

Erosion protection shall be installed at slope transitions >3:1 side slopes; at pipe inlets and outlets; at roof canals and wall openings per grading plan.

Two 18" culverts shall be installed under the sidewalk connecting to Saltbush Ct.

Storm drains shall be installed to convey the roof flows to the ponds;

Two desiltation/water harvesting ponds shall be installed with weir outflow per plan.

SUMMARY:

The 1.01-acre lot will be developed with a new residential home with associated paved driveway, walks and site amenities. The developed site shall follow the historical drainage paths and limit disturbance of the land outside of the building envelope to the greatest extent feasible.

Drainage improvements, including culverts, storm drain, water harvesting/desiltation ponds and erosion protection, shall be installed as shown in the grading and drainage plan.

APPENDIX A

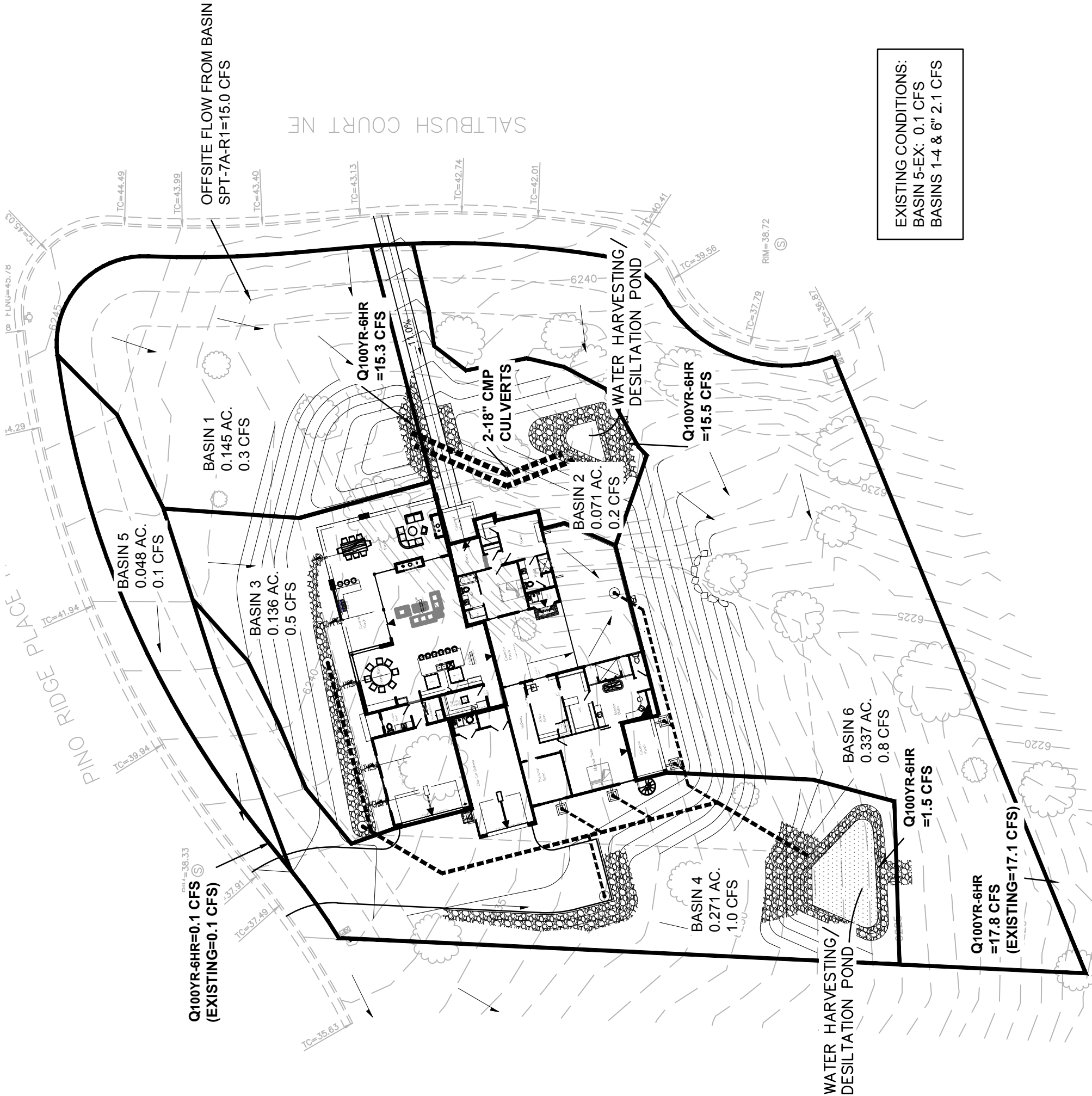
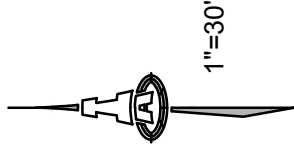
- Basin exhibit;
- Land treatment calculations;
- Drainage calculations for existing and developed conditions based on City of Albuquerque DPM Article 6-2 Hydrology;
- Culvert calculations;
- Weir calculations;
- Excerpts from *Drainage Report for Unit 2 Mountain Highlands at High Desert*, by Bohannon Huston, Inc., dated August 23, 2002.

DRAINAGE BASIN EXHIBIT

LOT 68, OF MOUNTAIN HIGHLANDS
UNIT 2 SUBDIVISON
ALBUQUERQUE, NEW MEXICO

3/28/2023

SALT BUSH COURT NE



EXISTING CONDITIONS:
BASIN 5-EX: 0.1 CFS
BASINS 1-4 & 6" 2.1 CFS



PROJECT NAME:

JOB NUMBER:

2560

**Lot 68, Mountain Highlands
at High Desert, Unit 2**

Onsite Total Area

44,002 sf
1.010 ac.

Basin	Area (sf)	Area (ac.)	Impervious Area (sf)	%D	Graded Area* (sf)	%C	%B	%A
1	6,337	0.15	-	0	1,531	12	12	76
2	3,111	0.07	624	20	2,487	40	40	0
3	5,929	0.14	2,924	49	2,507	21	21	9
4	11,818	0.27	4,891	41	5,467	23	23	12
5	2,109	0.05	-	0	-	0	10	90
6	14,698	0.34	156	1	2,623	9	9	81
	44,002	1.01	8,595		14,615			

*Outside building envelope

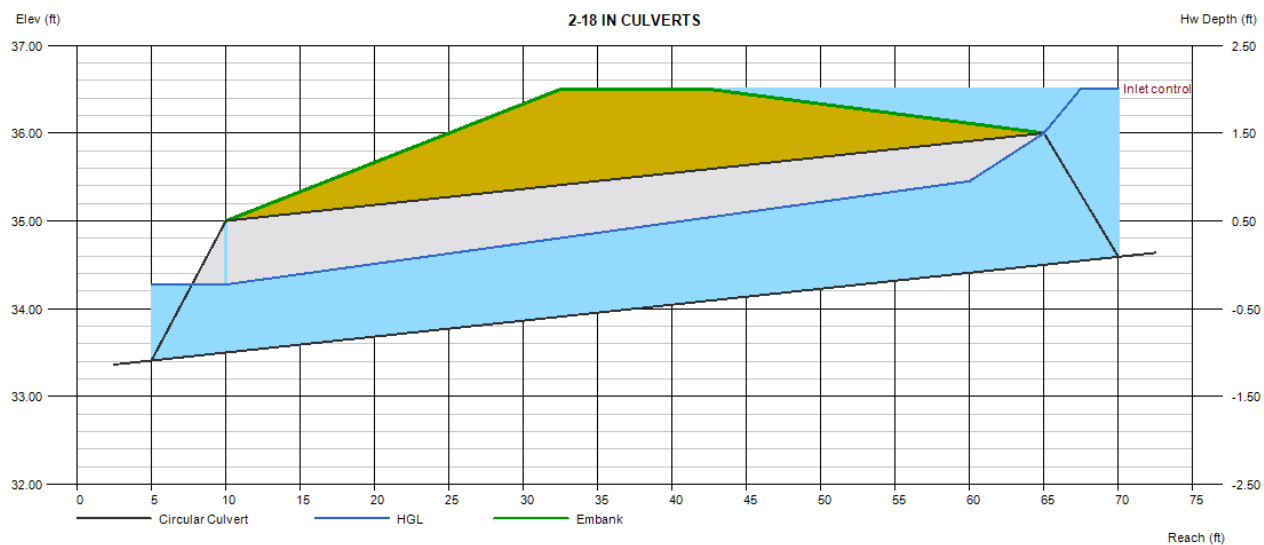
DO NOT ENTER ANY JOB INFORMATION HERE - ONLY ON PAGE 1

Job Name:	Lot 68, Mountain Highlands at High Desert, Unit 2	
Client:	Las Ventanas NM, Inc.	
Date Prepared:	3/28/2023	Stormwater Quality Multiplier:
Date Modified:	0	0.42
Precipitation Zone:	4	ENTER MULTIPLIER HERE

For Zone 4			
EA =	0.76	QpA =	2.09
EB =	0.95	QpB =	2.73
EC =	1.20	QpC =	3.41
ED =	3.34	QpD =	4.78

BASIN NO.	1	DESCRIPTION	TO CULVERTS & POND 2
Area of basin flows =	6337 SF	=	0.145 Ac.
The following calculations are based on Treatment %'s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:		LAND TREATMENT	
Weighted E =		A = 76%	
Sub-basin Volume of Runoff:		B = 12%	
V ₃₆₀ =		C = 12%	
Sub-basin Peak Discharge Rate:		D = 0%	
Q _p =		Stormwater Quality Volume	
		0 CF	
BASIN NO.	2	DESCRIPTION	TO POND 2
Area of basin flows =	3111 SF	=	0.071 Ac.
The following calculations are based on Treatment %'s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:		LAND TREATMENT	
Weighted E =		A = 0%	
Sub-basin Volume of Runoff:		B = 40%	
V ₃₆₀ =		C = 40%	
Sub-basin Peak Discharge Rate:		D = 20%	
Q _p =		Stormwater Quality Volume	
		22 CF	
BASIN NO.	3	DESCRIPTION	TO POND 1
Area of basin flows =	5929 SF	=	0.136 Ac.
The following calculations are based on Treatment %'s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:		LAND TREATMENT	
Weighted E =		A = 9%	
Sub-basin Volume of Runoff:		B = 21%	
V ₃₆₀ =		C = 21%	
Sub-basin Peak Discharge Rate:		D = 49%	
Q _p =		Stormwater Quality Volume	
		102 CF	
BASIN NO.	4	DESCRIPTION	TO POND 1
Area of basin flows =	11818 SF	=	0.271 Ac.
The following calculations are based on Treatment %'s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:		LAND TREATMENT	
Weighted E =		A = 12%	
Sub-basin Volume of Runoff:		B = 23%	
V ₃₆₀ =		C = 23%	
Sub-basin Peak Discharge Rate:		D = 41%	
Q _p =		Stormwater Quality Volume	
		170 CF	
BASIN NO.	5	DESCRIPTION	TO PINO RIDGE
Area of basin flows =	2109 SF	=	0.048 Ac.
The following calculations are based on Treatment %'s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:		LAND TREATMENT	
Weighted E =		A = 90%	
Sub-basin Volume of Runoff:		B = 10%	
V ₃₆₀ =		C = 0%	
Sub-basin Peak Discharge Rate:		D = 0%	
Q _p =		Stormwater Quality Volume	
		0 CF	
BASIN NO.	6	DESCRIPTION	TO SW CORNER OF LOT
Area of basin flows =	14698 SF	=	0.337 Ac.
The following calculations are based on Treatment %'s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:		LAND TREATMENT	
Weighted E =		A = 81%	
Sub-basin Volume of Runoff:		B = 9%	
V ₃₆₀ =		C = 9%	
Sub-basin Peak Discharge Rate:		D = 1%	
Q _p =		Stormwater Quality Volume	
		5 CF	
BASIN NO.	5-EXST	DESCRIPTION	EXISTING FLOW TO PINO RIDGE
Area of basin flows =	2109 SF	=	0.0 Ac.
The following calculations are based on Treatment %'s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:		LAND TREATMENT	
Weighted E =		A = 90%	
Sub-basin Volume of Runoff:		B = 10%	
V ₃₆₀ =		C = 0%	
Sub-basin Peak Discharge Rate:		D = 0%	
Q _p =		Stormwater Quality Volume	
		0 CF	
BASIN NO.	1-4 & 6 EXST	DESCRIPTION	EXISTING FLOW TO SW CORNER OF LOT
Area of basin flows =	41893 SF	=	1.0 Ac.
The following calculations are based on Treatment %'s as shown in table to the right			
Sub-basin Weighted Excess Precipitation:		LAND TREATMENT	
Weighted E =		A = 90%	
Sub-basin Volume of Runoff:		B = 10%	
V ₃₆₀ =		C = 0%	
Sub-basin Peak Discharge Rate:		D = 0%	
Q _p =		Stormwater Quality Volume	
		0 CF	

Thursday, Mar 30 2023



Weir Report

5-FT WEIR AT POND 1

Trapezoidal Weir

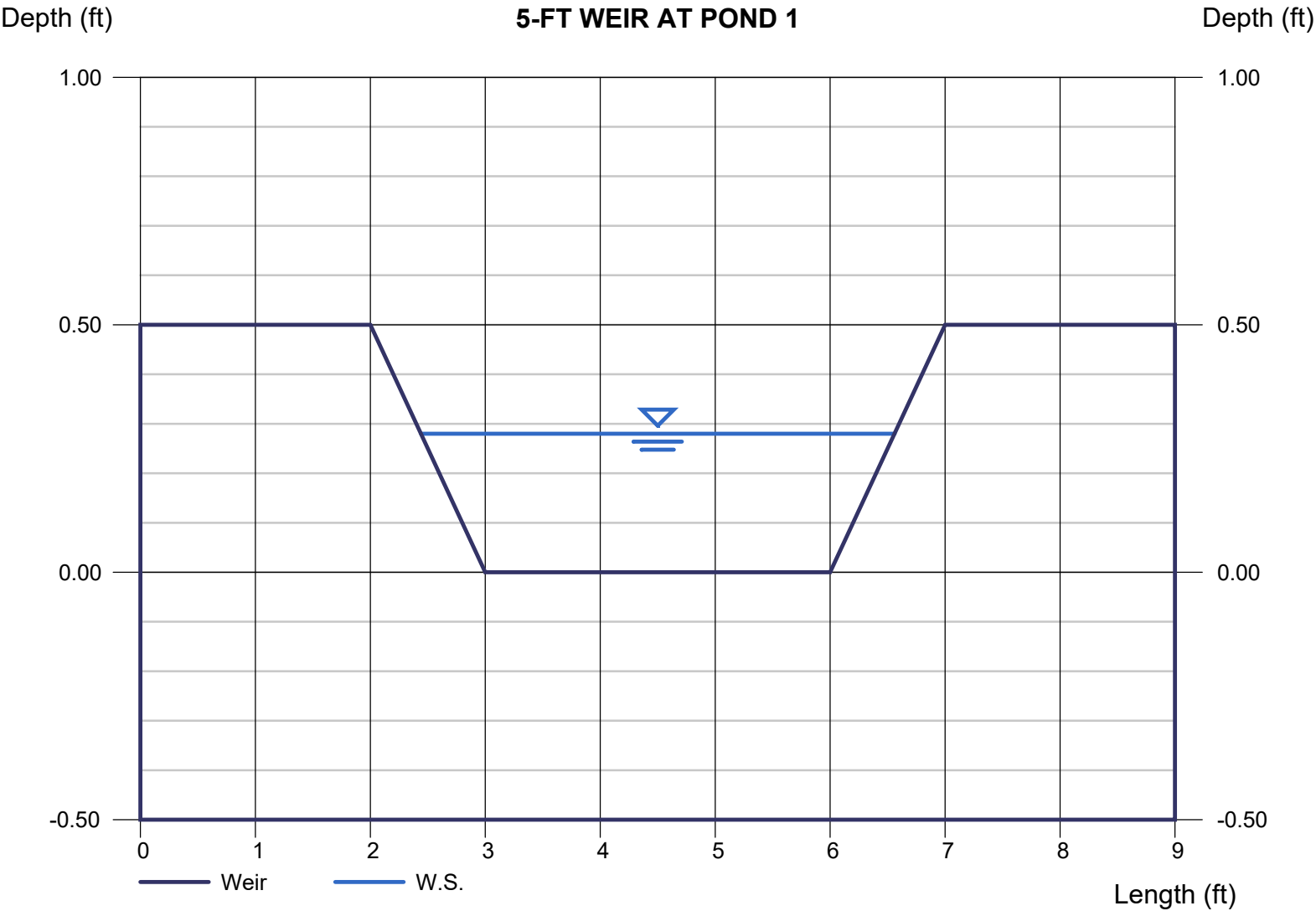
Crest = Sharp
Bottom Length (ft) = 3.00
Total Depth (ft) = 0.50
Side Slope (z:1) = 2.00

Highlighted

Depth (ft) = 0.28
Q (cfs) = 1.500
Area (sqft) = 1.00
Velocity (ft/s) = 1.50
Top Width (ft) = 4.12

Calculations

Weir Coeff. Cw = 3.10
Compute by: Known Q
Known Q (cfs) = 1.50



Weir Report

17-FT WEIR AT POND 2

Trapezoidal Weir

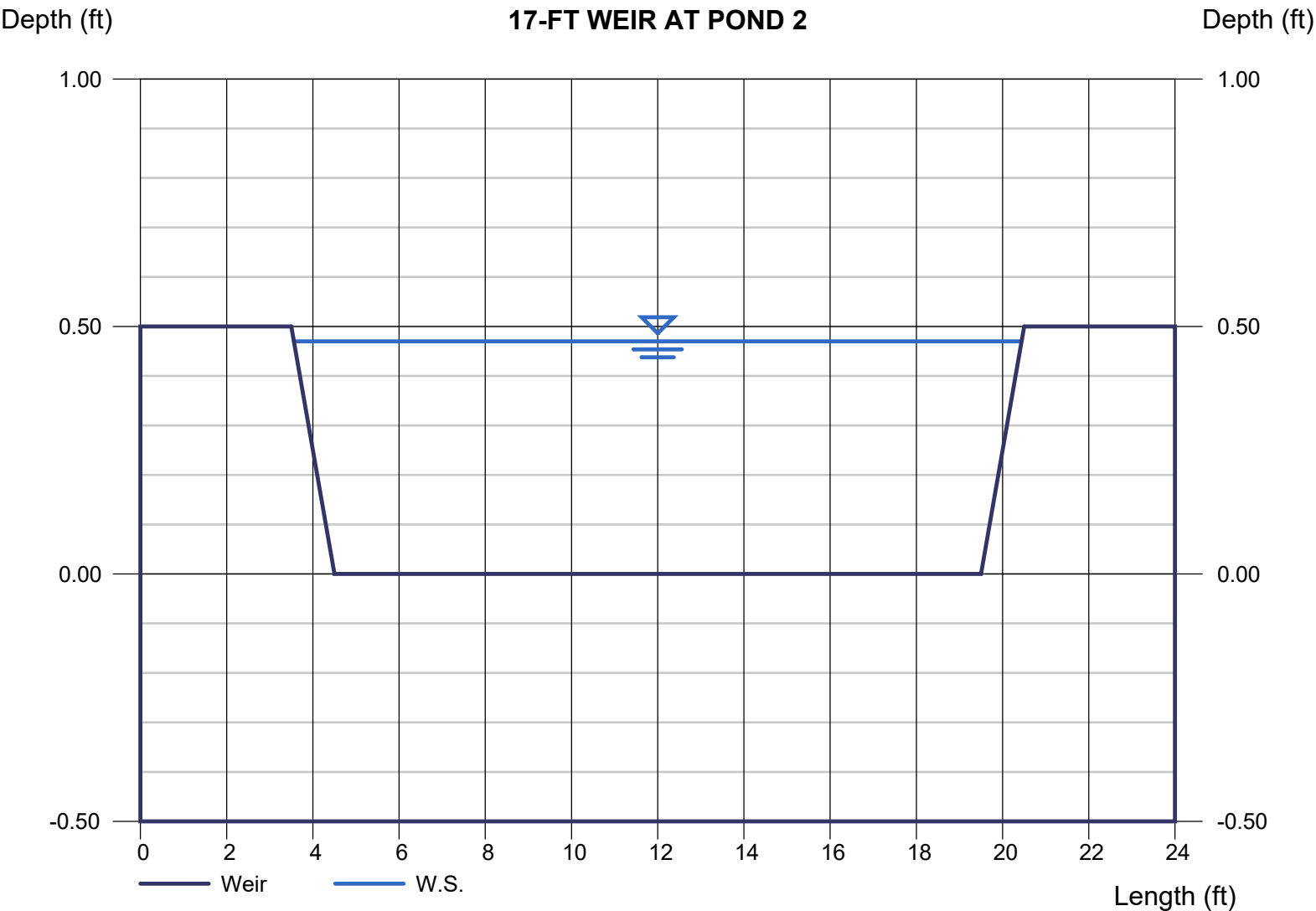
Crest = Sharp
Bottom Length (ft) = 15.00
Total Depth (ft) = 0.50
Side Slope (z:1) = 2.00

Highlighted

Depth (ft) = 0.47
Q (cfs) = 15.30
Area (sqft) = 7.49
Velocity (ft/s) = 2.04
Top Width (ft) = 16.88

Calculations

Weir Coeff. Cw = 3.10
Compute by: Known Q
Known Q (cfs) = 15.30



APPENDIX B

- **Grading & Drainage Plan**

**DRAINAGE REPORT
FOR
UNIT 2 OF MOUNTAIN HIGHLANDS AT HIGH DESERT
(HIGH DESERT - TRACT 15D-1B-1C)**

August 23, 2002


PREPARED BY:

**BOHANNAN HUSTON, INC.
COURTYARD I
7500 JEFFERSON STREET NE
ALBUQUERQUE, NM 87109**

PREPARED FOR:

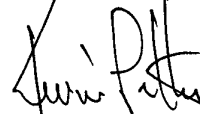
**HIGH DESERT INVESTMENT CORPORATION
13000 ACADEMY ROAD NE
ALBUQUERQUE, NM. 87111**

PREPARED BY:


Yolanda Padilla, E.I.

8/27/02
Date

UNDER THE SUPERVISION OF:


Kevin Patton, P.E.



Bohannon  Huston Inc.

E23/D012

EASEMENT AGREEMENT
(Tract 15D-1B-1C/Unit 2 Mountain Highlands)

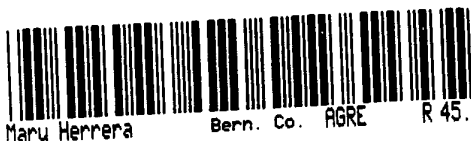
11/14/03

This Easement Agreement, between High Desert Investment Corporation, a New Mexico corporation ("Grantor"), whose address is 13000 Academy Road, N.E., Albuquerque, New Mexico 87111, the City of Albuquerque, a New Mexico municipal corporation ("City"), whose address is P. O. Box 1293, Albuquerque, New Mexico 87103 and High Desert Residential Owners Association, Inc., a New Mexico non-profit corporation, whose address is 13000 Academy Road, N.E., Albuquerque, New Mexico 87111 ("Owners Association").

1. Grant of Easement. Grantor grants to City an easement for the conveyance of surface storm water (the "Easement") on, over, across and through the following described property (the "Property"):

Those portions of Unit 2 Mountain Highlands at High Desert on the Plat of Unit 2 Mountain Highlands at High Desert (a Replat of Tract 15D-1B-1C High Desert) filed October 2, 2003 Book 2003C, Page 298, as document number 2003182214, records of Bernalillo County, New Mexico (the "Plat") which are (i) outside of the building envelopes for the lots indicated on the Plat (the "Building Envelopes"), and (ii) outside the AMAFCA drainage easement in Unit 1 Mountain Highlands at High Desert filed July 1, 1996 as document no. 96073621, in Book 96-18, Pages 3732-3779, records of Bernalillo County, New Mexico.

and grants to Owners Association and the City (to the extent necessary to exercise its rights under this Easement Agreement) the right to maintain and repair the Property and the Easement and the right to remove trees, bushes, undergrowth and any other



Maru Herrera

Bern. Co. AGRE

R 45.00

2003207493

5890527

Page: 1 of 19

11/17/2003 02:19P

Bk-A68 Pg-7056

**UNIT 2 OF MOUNTAIN HIGHLANDS @ HIGH DESERT
HYDROLOGICAL VOLUMETRIC & DISCHARGE DATA (EXISTING)**

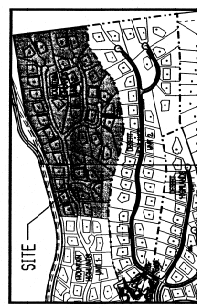
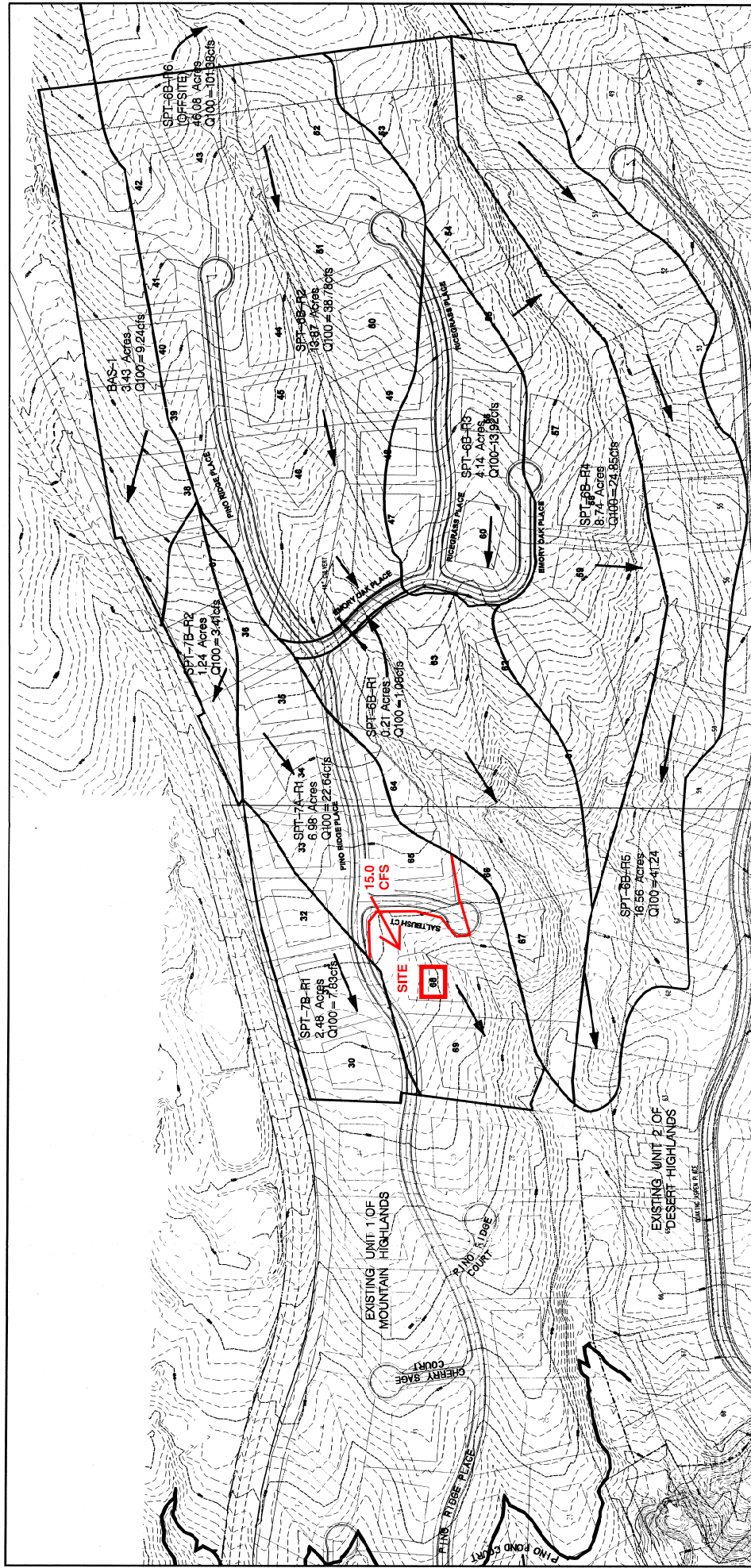
Basin	AREA (ACRES)	% LAND TREATMENT*				PEAK DISCHARGE - (CFS/ACRE)*				DEVELOPED (CFS)
		A	B	C	D	A	B	C	D	
EX-SPT-6B	89.60	90.00	10.00	0.00	0.00	2.20	2.92	3.73	5.25	203.57
EX-SPT-7A-R1	7.26	90.00	10.00	0.00	0.00	2.20	2.92	3.73	5.25	16.49
EX-SPT-7B-R1	2.68	90.00	10.00	0.00	0.00	2.20	2.92	3.73	5.25	6.09
EX-SPT-7B-R2	2.40	90.00	10.00	0.00	0.00	2.20	2.92	3.73	5.25	5.45
EX-BAS-1	4.03	90.00	10.00	0.00	0.00	2.20	2.92	3.73	5.25	9.16
TOTAL	105.97									240.76

**UNIT 2 OF MOUNTAIN HIGHLANDS @ HIGH DESERT
HYDROLOGICAL VOLUMETRIC & DISCHARGE DATA (DEVELOPED)
(HIGH DESERT DRAINAGE MANAGEMENT MASTER PLAN -12/93)**

Basin	AREA (ACRES)	% LAND TREATMENT*				PEAK DISCHARGE - (CFS/ACRE)*				DEVELOPED (CFS)
		A	B	C	D	A	B	C	D	
SPT-6B	89.60	64.93	18.86	8.00	8.21					235.00
SPT-7A-R1	7.26	74.85	0.00	8.00	17.15					23.00
SPT-7B-R1	2.68	74.85	0.00	8.00	17.15					8.40
SPT-7B-R2	2.40	74.85	0.00	8.00	17.15					2.40
BAS-1	4.03					NOT INCLUDED				
TOTAL	105.97									268.80

**UNIT 2 OF MOUNTAIN HIGHLANDS @ HIGH DESERT
HYDROLOGICAL VOLUMETRIC & DISCHARGE DATA (DEVELOPED)
(CALCULATED)**

Basin	AREA (ACRES)	% LAND TREATMENT*				PEAK DISCHARGE - (CFS/ACRE)*				DEVELOPED (CFS)
		A	B	C	D	A	B	C	D	
SPT-6B-R1	0.21	0.00	5.00	0.00	95.00	2.20	2.92	3.73	5.25	1.08
SPT-6B-R2	13.87	76.71	4.91	0.00	18.38	2.20	2.92	3.73	5.25	38.78
SPT-6B-R3	4.14	56.28	7.30	0.00	36.42	2.20	2.92	3.73	5.25	13.92
SPT-6B-R4	8.74	74.60	5.62	0.00	19.78	2.20	2.92	3.73	5.25	24.85
SPT-6B-R5	16.56	89.25	1.60	0.00	9.15	2.20	2.92	3.73	5.25	41.24
SPT-6B-R6(offsite)	46.08	100.00	0.00	0.00	0.00	2.20	2.92	3.73	5.25	101.38
SPT-7A-R1	6.98	58.74	9.21	0.00	32.05	2.20	2.92	3.73	5.25	22.64
SPT-7B-R1	2.48	61.89	9.15	0.00	29.16	2.20	2.92	3.73	5.25	7.83
SPT-7B-R2	1.24	77.42	6.10	0.00	16.48	2.20	2.92	3.73	5.25	3.41
BAS-1	3.43	79.59	5.51	0.00	14.90	2.20	2.92	3.73	5.25	9.24
TOTAL	103.73									264.37



LOCATION MAP
 ZONE FILE MAP NO. E-3
 NOT TO SCALE



SCALE: 1" = 100'
 (HORIZONTAL)

ULTIMATE PROPOSED CONDITIONS

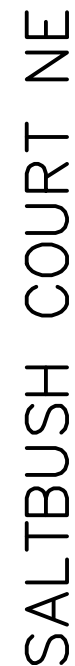
UNIT 2 OF MOUNTAIN HIGHLANDS AT HIGH DESERT



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 Civil Engineers
 7500 Jefferson St. NE Albuquerque, NM 87109-4385
 (505) 261-1111

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10.1.10.101\share1\PROJECTS\500-2500\2500.DWG-BUILDING PERMIT PLAN\52560 CG-101.dwg Brynn 6/19/2023 11:45 AM



SCALE: N.T.S.



SCALE: N T S



SCALE: N T S

- ## LEGEND



SCALE: N.T.S.



SCALE: N T S



GENERAL NOTES

- ## POND WEIR

SCALE: N T S

[illegible]

SHEET TITLE

GRADING & DRAINAGE PLAN

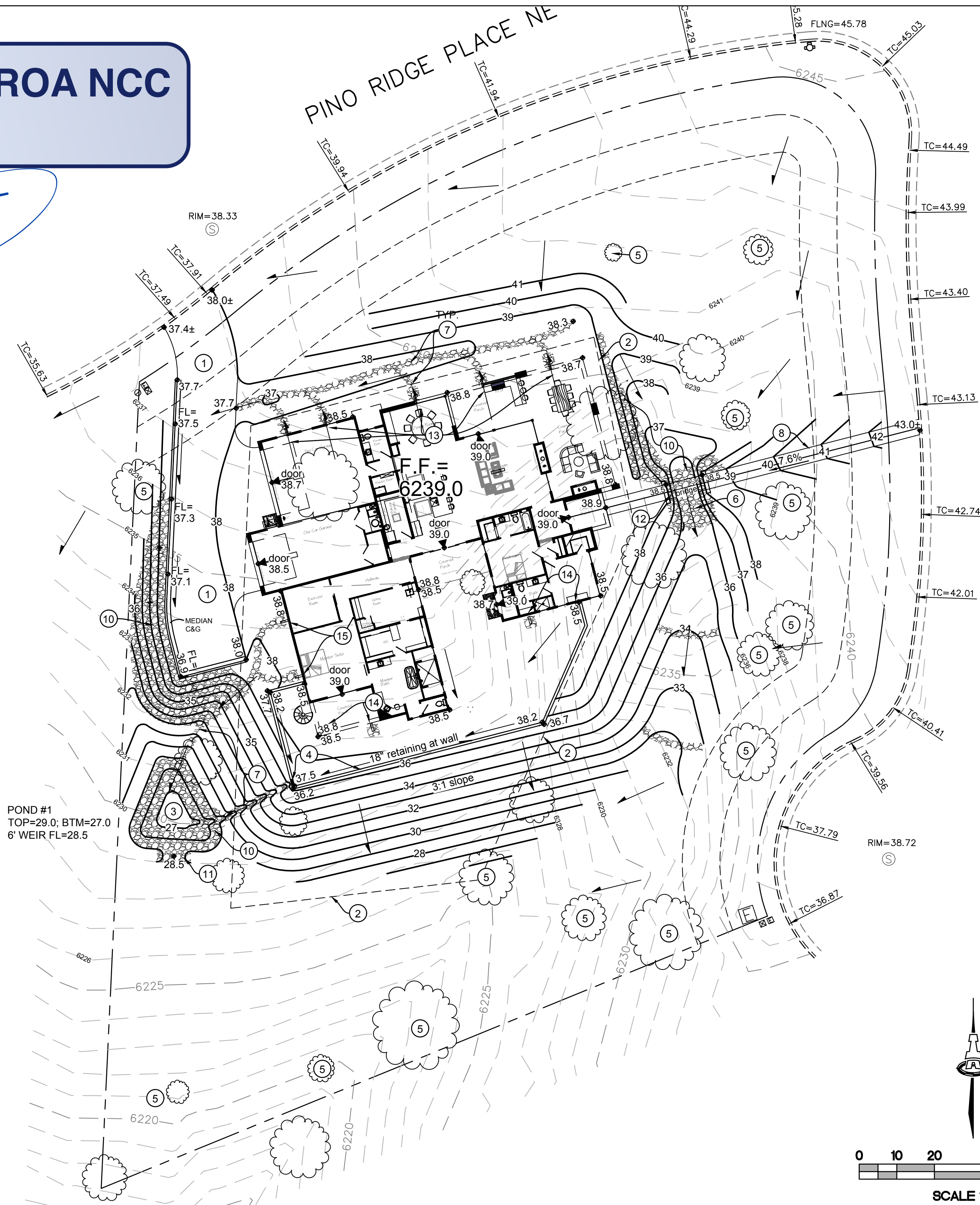
SHEET NUMBER

CG-101

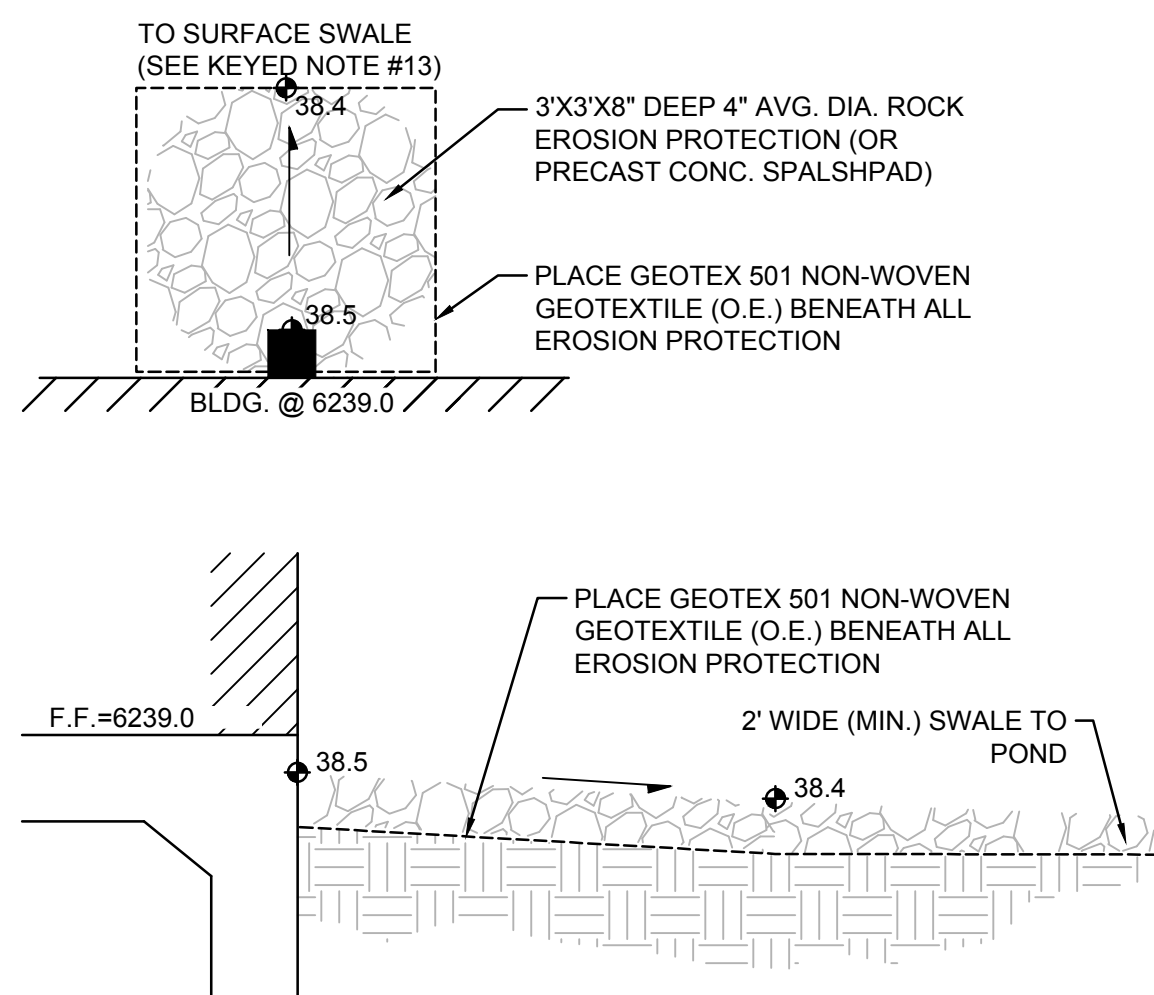
Approved HDROA NCC

5:56 AM, Aug 30, 2023

[Handwritten Signature]

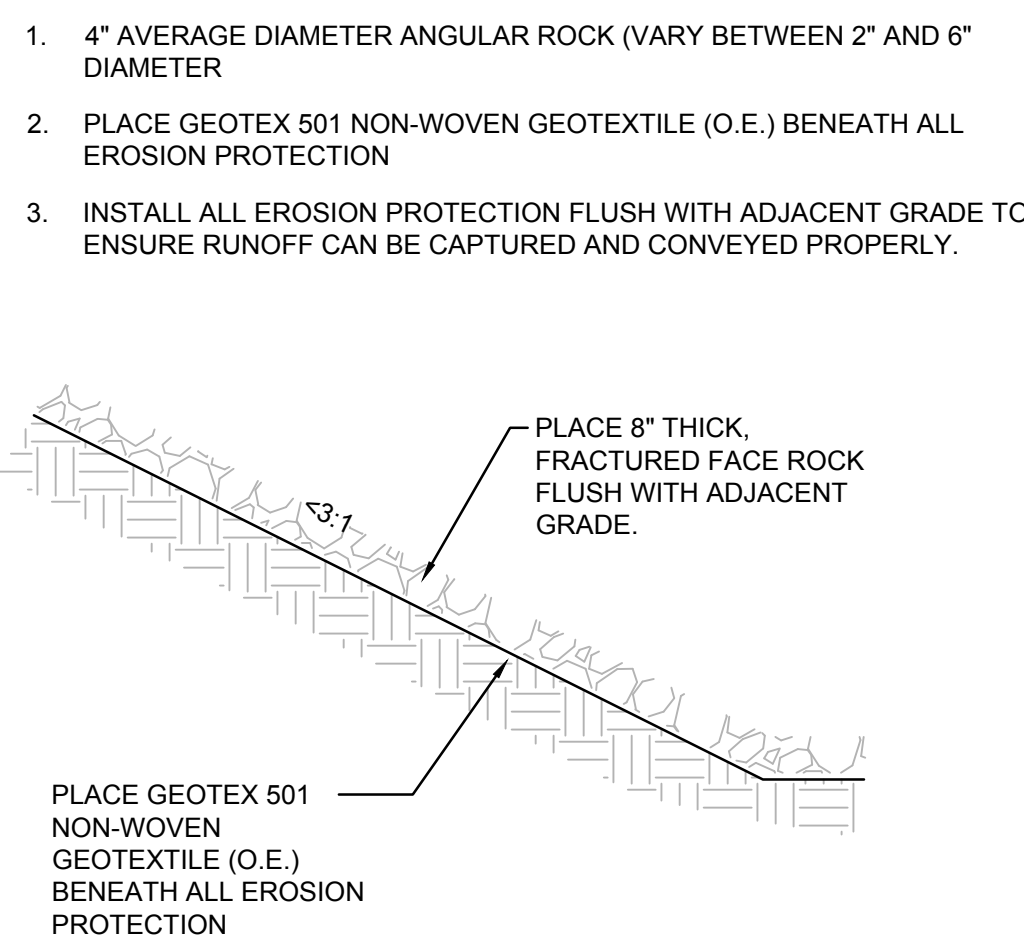


SALT BUSH COURT NE



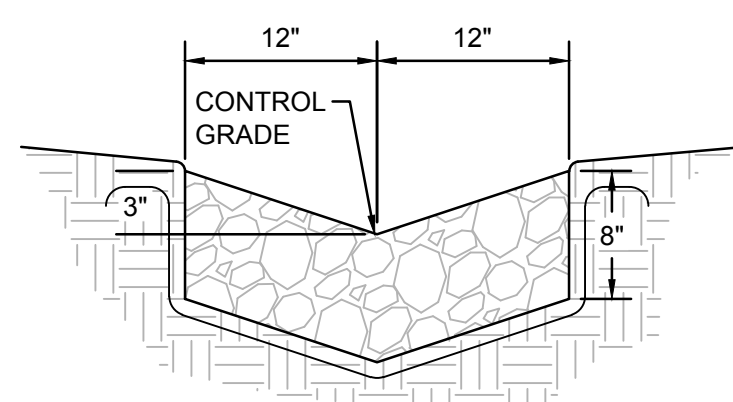
SPLASH PAD AT CANALES

SCALE: N.T.S.



SLOPE EROSION PROTECTION

SCALE: N.T.S.



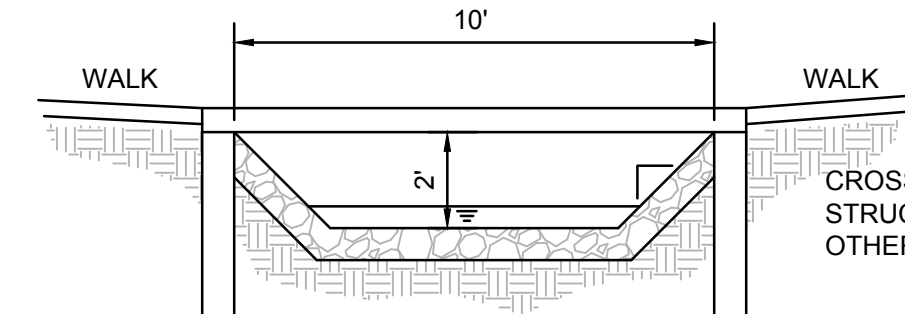
ANGULAR ROCK SWALE

SCALE: N.T.S.

- ### KEYED NOTES
- CONSTRUCT IMPERVIOUS DRIVE (ASPHALT OR CONCRETE) AT ELEVATIONS SHOWN.
 - LIMITS OF BUILDING ENVELOPE
 - CONSTRUCT 18" DEEP WATER HARVESTING POND TO CAPTURE CONCENTRATED STORM WATER AND RELEASE OVER WEIR TO SPREAD FLOW. PROVIDE ROCK EROSION PROTECTION WHERE SHOWN ON PLAN TO DEFINE AND PROTECT EDGE, SLOPE, AND OVERFLOW. DO NOT COMPACT POND BOTTOM. SEE PLAN FOR POND INFORMATION.
 - CONSTRUCT COURTYARD PERIMETER WALL. TURN TWO CMU BLOCKS TO DRAIN @ LOW POINT LOCATION SHOWN.
 - PROTECT EXISTING TREE WHERE CONDITIONS ALLOW.
 - CONSTRUCT CHANNEL FOR HISTORIC FLOW THIS AREA. GENERAL CRITERIA:
 - CHANNEL TO BE 10' WIDE; 6' BOTTOM WIDTH WITH 1:1 SIDESLOPES.
 - 2' CLEAR FROM BOTTOM OF CROSSING STRUCTURE TO TOP OF FLOWLINE EROSION PROTECTION;
 - CONSTRUCT ANGULAR SWALE PER DETAIL THIS SHEET.
 - CONSTRUCT 4' WIDE PATH (7.6% SLOPE).
 - BRIDGE OVER CHANNEL - DESIGN BY OTHERS.
 - INSTALL FRACTURED FACE ROCK EROSION PROTECTION OVER NON-WOVEN GEOTEXTILE FABRIC TO LIMITS SHOWN ON PLAN. (ALL SLOPES > 3:1). INTEGRATE WITH NATURAL LANDSCAPING. SEE GENERAL NOTES AND DETAIL THIS SHEET.
 - CONSTRUCT WEIR OVERFLOW IN POND PER DETAIL THIS SHEET.
 - BRIDGE OVER CHANNEL - DESIGN & STRUCTURAL BY OTHERS.
 - ROOF DISCHARGE - NORTH SIDE: INSTALL 3' DIA. FRACTURED FACE ROCK SPLASH PAD AND 2' WIDE SWALE AS SHOWN.
 - ROOF DISCHARGE - TO PRIVATE COURTYARD: GRADES AND DRAINAGE WITHIN THE PRIVATE COURTYARD ARE FOR GENERAL INFORMATION ONLY. PROVIDE EROSION PROTECTION AND POSITIVE DRAINAGE TO STORM DRAIN INLET. COORDINATE WITH LANDSCAPE DESIGN.
 - ROOF DISCHARGE - SOUTHWEST: INSTALL 3' X 3' X 8" DEEP SUMP BASIN WITH 6" DOMED INLET IN CENTER.

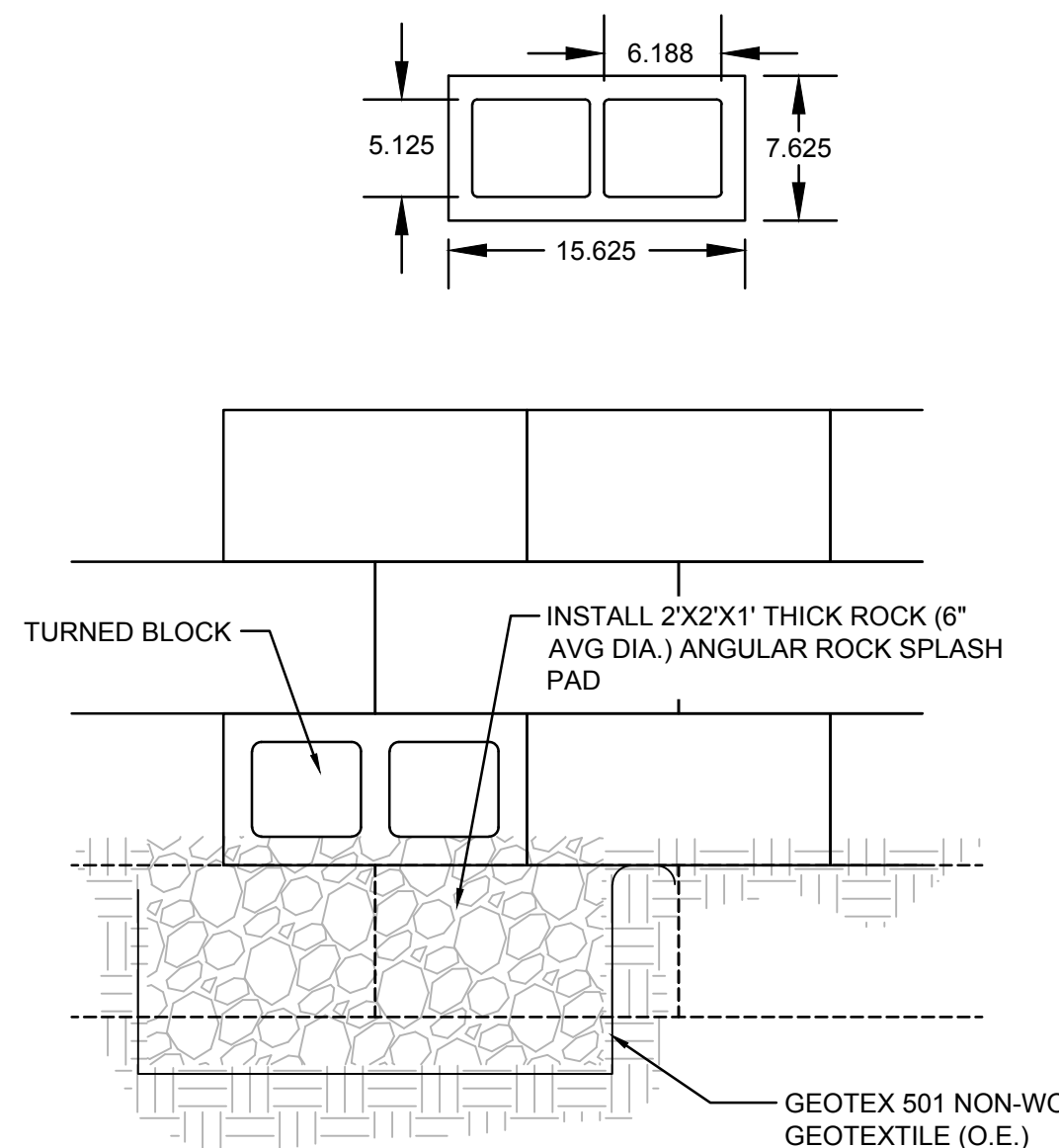
LEGEND

- 6237 EXISTING CONTOUR
- 37 PROPOSED 1.0' CONTOUR
- 38.5 PROPOSED SPOT ELEVATION
- FLOW DIRECTION
- F.F. = 6239.00 FINISH FLOOR ELEVATION
- ANGULAR ROCK EROSION PROTECTION



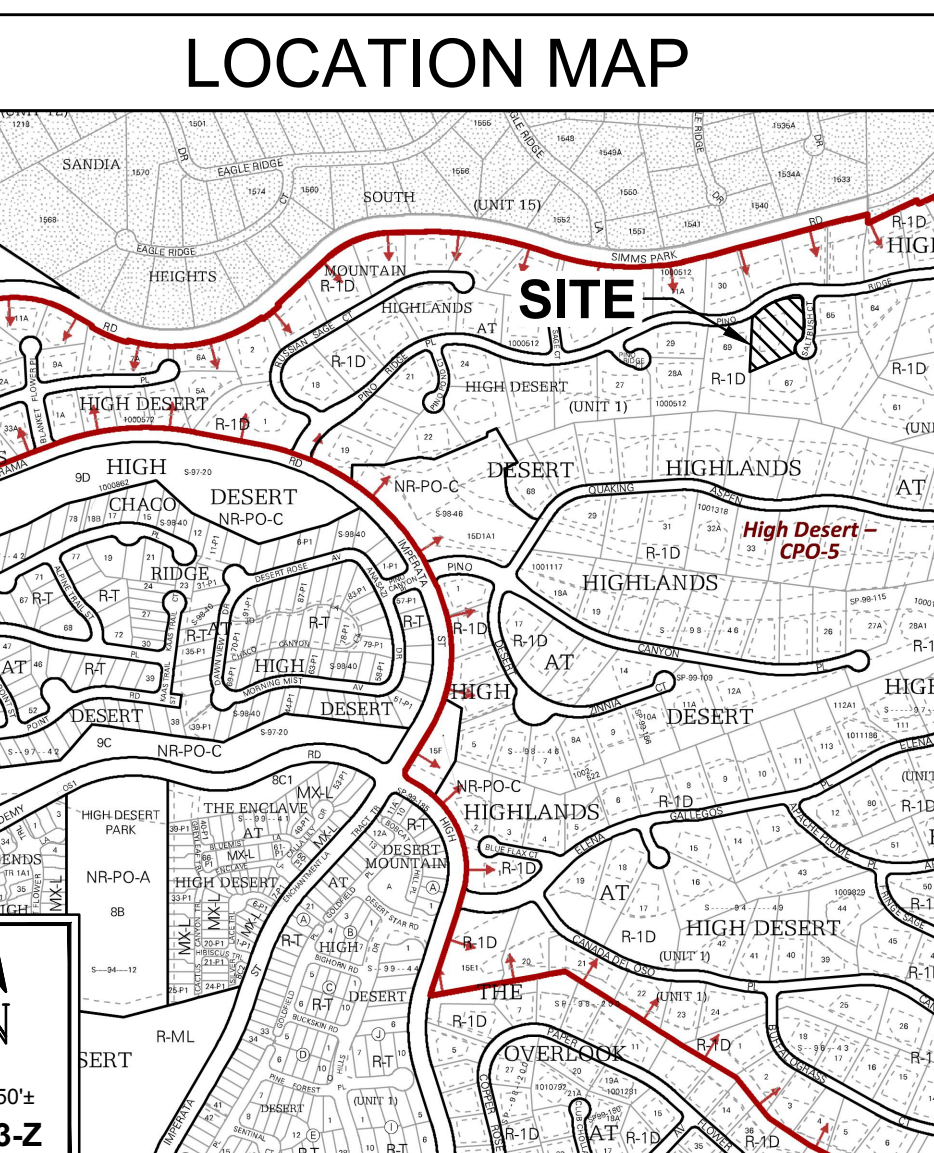
BRIDGE STRUCTURE

SCALE: N.T.S.



CMU WALL OPENING(S)

SCALE: N.T.S.



PROJECT INFORMATION

PROPERTY: THE SITE IS AN UNDEVELOPED RESIDENTIAL LOT BOUNDED ON THE NORTH AND EAST BY PAVED ROADS, ON THE WEST BY A DEVELOPED RESIDENTIAL LOT, AND ON THE SOUTH BY AN UNDEVELOPED RESIDENTIAL LOT.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE A NEW PRIVATE RESIDENCE WITH ASSOCIATED PAVED ACCESS DRIVE AND SITE AMENITIES.

LEGAL: LOT 68, OF MOUNTAIN HIGHLANDS AT HIGH DESERT UNIT 2, ALBUQUERQUE, NEW MEXICO.

BENCHMARK: ACS BRASS CAP STAMPED "1-D24 RESET 1973/1995".

LOT SIZE: 1.0101 ACRES ±

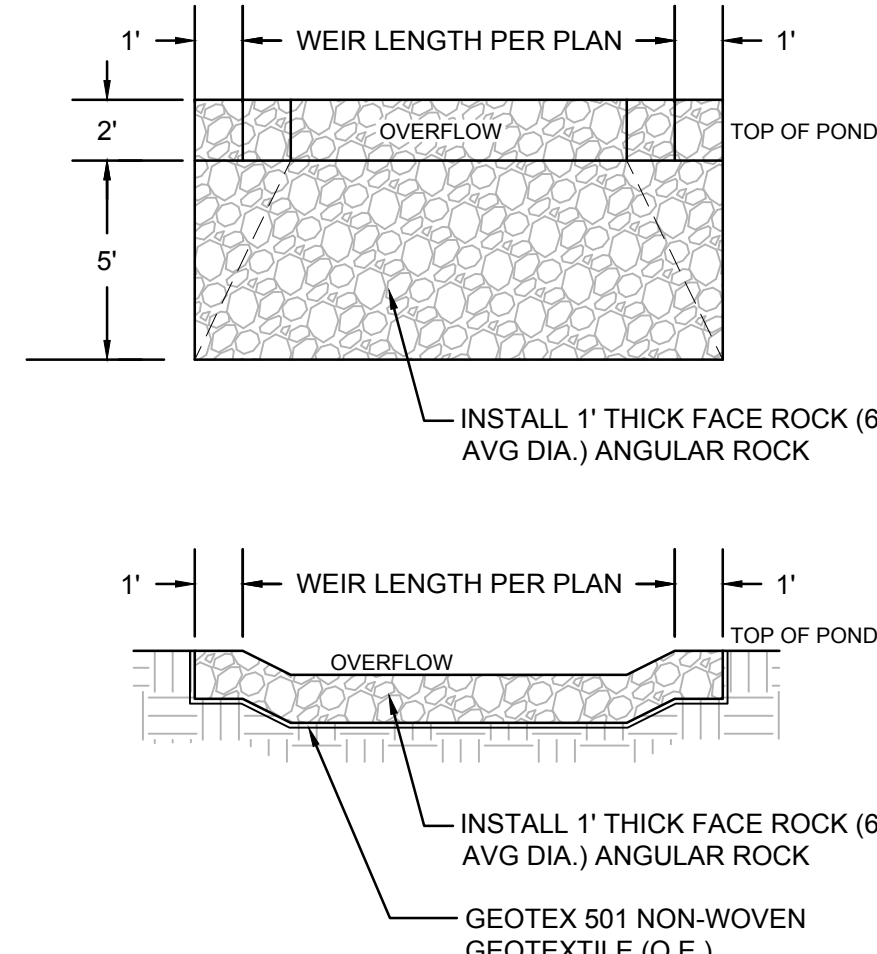
OFF-SITE: APPROXIMATELY 15.0 CFS OF OFF-SITE FLOWS WILL BE ROUTED AROUND THE PROPOSED DEVELOPMENT.

FLOOD HAZARD: PER SANDOVAL COUNTY FIRM MAP #35001C0161G, EFF. 9/26/2008, THE SITE IS LOCATED WITHIN FLOODZONE 'X' DESIGNATED AS AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.

DRAINAGE PLAN CONCEPT: SEE SUPPLEMENTAL INFORMATION FOR DRAINAGE BASINS, DRAINAGE CALCULATIONS AND OVERALL DRAINAGE CONCEPT.

GENERAL NOTES

- GRADES SHOWN ARE FINAL SURFACE GRADES (TOP OF CONCRETE, TOP OF LANDSCAPE MATERIAL, ETC.).
- ALL ANGULAR ROCK EROSION PROTECTION TO BE 2"-6" (4" AVG. DIA.) ANGULAR FACED ROCK @ 8" DEPTH OVER PERMANENT EROSION CONTROL MATERIAL UNLESS NOTED.
- RESEED ALL DISTURBED AREAS WITH APPROVED HIGH DESERT SEED MIX WITH C-JUTE EROSION CONTROL FABRIC.
- COLORS / TEXTURES / MATERIALS TO MEET HIGH DESERT REQUIREMENTS.
- ALL DRAINAGE IMPROVEMENTS SHOWN ON THE APPROVED GRADING AND DRAINAGE PLAN MUST BE COMPLETED BEFORE AN ENGINEER'S CERTIFICATION OF SUBSTANTIAL COMPLIANCE CAN BE ISSUED.
- PROVIDE TEMPORARY GRADING FEATURES (BERMS, SWALES, BASINS, ETC.) TO MANAGE INTERIM STORM WATER RUNOFF DURING CONSTRUCTION. STORMWATER RUNOFF LEAVING THE SITE SHALL MEET ALL FEDERAL, STATE AND LOCAL QUALITY REQUIREMENTS.



POND WEIR

SCALE: N.T.S.

Isaacson & Arfman, Inc.
Civil Engineering Consultants

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CONCEPTUAL
NOT FOR CONSTRUCTION

06/19/2023

Engineer

**LOT 68, MOUNTAIN HIGHLANDS
@ HIGH DESERT, UNIT 2
6705 SALT BUSH COURT NE**

DESIGN	ISSUE	DATE	Description
DEVELOPMENT	PROJECT NUMBER: IA 2560		
	FILE:		
	DRAWN BY: BJB		
	CHECKED BY: ANW		
	DATE: 03-28-2023		

GRADING & DRAINAGE PLAN

SHEET NUMBER

CG-101