

CITY OF ALBUQUERQUE



Richard J. Berry, Mayor

August 7, 2017

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

RE: 13704 Ellena Gallegos NE
Grading Plan
Stamp Date: 7/18/17
Hydrology File: E24D002A

Dear Mr. Soule:

Based upon the information provided in your submittal received 8/2/2017, the Grading Plan **is not** approved for Building Permit. The following comments need to be addressed for approval of the above referenced project:

1. Please provide both the beginning and ending flowlines for all the cobble swales.
2. Please add the weir calculations for the emergency overflows.
3. There is enough room on the sheet, so please enlarge the Site Hydrology calculations and notes.

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

Sincerely,

Reneé C. Brissette

Reneé C. Brissette, P.E.
Senior Engineer, Hydrology
Planning Department



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: 13704 Ellena Gallegos **Building Permit #:** _____ **City Drainage #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: lot 93 unit 3 the highlands at high desert
City Address: 13704 Ellena Gallegos

Engineering Firm: RIO GRANDE ENGINEERING **Contact:** DAVID SOULE
Address: PO BOX 93924, ALBUQUERQUE, NM 87199
Phone#: 505.321.9099 **Fax#:** 505.872.0999 **E-mail:** DAVID@RIOGRANDEENGINEERING.COM

Owner: las ventanas homes **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Architect: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Check all that Apply:

DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

☐ ENGINEER/ ARCHITECT CERTIFICATION
☐ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY
☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☐ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR
☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☒ No

DATE SUBMITTED: 8/1/17 **By:** _____

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____



HIGH DESERT
NEW CONSTRUCTION COMMITTEE

Brett Rayman
10555 Montgomery NE
Building 1 Suite 100
Albuquerque, NM 87111
(505) 314-5862

August 1, 2017

Meredith and Francisco Barroso
2717 La Luz Circle NE,
Rio Rancho, New Mexico 87144.

Re: 13704 Elena Gallegos – Construction Plan Approval

Dear Mr. and Mrs. Barroso:

In accordance with the requirements contained in the High Desert Guidelines for Sustainability for Premier and Estate Homes (Guidelines), the members of the New Construction Committee (NCC) completed its review of your construction plans.

We are pleased to inform you that your plans for construction of a home at 13704 Elena Gallegos are approved. Further, Bohannon Huston has approved the Grading and Drainage Plan (See Attachment). You may pick up your *stamped* copy of the plans at the HOAMCO. They are with the administrative assistant at the front desk.

NEXT STEPS

Any changes to the plans approved by the NCC, either before start of construction, or during construction must be submitted and re-approved by the NCC before construction of any proposed changes begin.

In addition to construction plan drawings, the Guidelines reference several other house elements that must be submitted, reviewed, and approved by the NCC. Please refer to NCC Form – 8 Specification Sheet Requirements. This form provides a checklist of addition approvals necessary to be prepared for the final inspection. It is important that you provide manufacturer

Meredith and Francisco Barroso

August 1, 2017

2 | Page

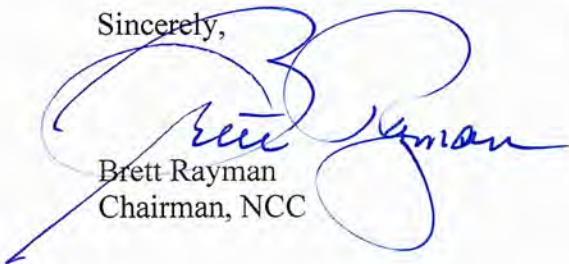
specification sheets and/or samples or pictures to the committee for its consideration. Samples will be returned, upon request, once a decision has been made.

In addition, please submit a Landscape Plan showing the landscape treatment of all Natural, Transition and Private Areas. These plans should be the same scale as the site plan. Indicate areas (if any) to be irrigated, names, quantities, locations and sizes of all existing and proposed plants any decorative features such as pools, imported rocks or sculptures. Also show any plans for transplanting native materials. All disturbed areas in the Transition and Natural Areas must be re-vegetated within thirty days after completion of the home. *Please ensure that your landscape architect uses the current Approved Plant list found on the High Desert website.*

Finally, you are required to have your engineer, upon completion of the home, certify that the grading and drainage construction was completed in substantial compliance with the Grading and Drainage Plan approved by the NCC before the final inspection can be conducted.

If you have questions or need further guidance, please call me at 850 766-4084.

Sincerely,



Brett Rayman
Chairman, NCC

Attachment:

Bohannon Huston letter dated July 20, 2017

July 20, 2017

Mr. Brett Rayman
NCC High Desert Homeowners Association
Albuquerque, NM

Re: Lot 95 – Unit 3 The Highlands (13704 Elena Gallegos)
Review of the Lot Specific Grading and Drainage

Dear Brett:

The above mentioned plan was reviewed per the City of Albuquerque requirement. The plan was review to verify it conforms to the High Desert Guideline for Sustainability for Estate and Premier Homes as well the approved grading and drainage report.

We have the following concerns or comments on the above referenced Grading and Drainage Plan within West Highlands Subdivision; said plan was prepared by Rio Grande Engineering; engineer's stamped dated 6-20-2017.

1. Please provide bench mark datum, horizontal and vertical, on the plan. **corrected**
2. Please refer to the High Desert Guidelines for Sustainability for Estate and Premier Lots for Gentle slope grading for all tieback slope within and outside the building envelope. **Site condition appear to control.**
3. The proposed flow for Basin A and B appear to be incorrect. Please review the calculations. **corrected**
4. The calculated volumes Existing and Proposed for Basins A and B appear to be incorrect. Please review calculation. This will affect the required pond volume.
5. The provided pond volume for Pond A is 3 times what is required. Why is it so larger? This is providing unnecessary disturbance. Please reduce to approximately required to reduce disturbance. **Ponds only need to detain not retain the developed flow. Consider reducing the pond sizes further to reduce disturbance and impact. However, there is more than enough volume and will have no impact to the drainage downstream**
6. On the east courtyard wall, there is an indication of a swale coming from the wall. Please provide an elevation and indication of a turned block or weep hole for drainage. **noted**
7. On the swale and pond cobble, the thickness is a minimum of 2 times the cobble size so thickness shall be 2 x 6" which is 12" not the 8" indicated. Please revise accordingly. **corrected**
8. The north pond top elevation appears to be at 73.00 not 74.00 as indicated in the note. Please correct contours, note and volume accordingly. Clearly label contours. **corrected**
9. How is the south swale tie to slope at the bridge? It appears you are tying to the abutment\wingwall. This could cause erosion at the structure. The natural lowpoint appears to be to the east. Consider moving spillway and swale to that location to stay away for the bridge abutment. **corrected**

Engineering ▲

Spatial Data ▲

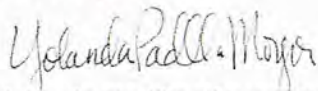
Advanced Technologies ▲

Mr. Brett Rayman
July 20, 2017
Page 2

10. Please label the lowest natural grade on the building footprint for reference.
corrected

Based on the revised grading and drainage plan for the above referenced Lot stamped dated 7/18/17 by Rio Grande Engineering. It appears that all the comments have been substantially addressed in regards to the grading and drainage.

Sincerely,



Yolanda Padilla Moyer, P.E.
Senior Project Manager
Community Development and Planning

YPM

cc: Scott Ashcraft, Las Ventanas

Existing Developed Basins									
Basin	Area (sq ft)	Area (acres)	Treatment A % (acres)	Treatment B % (acres)	Treatment C % (acres)	Treatment D % (acres)	Weighted E % (ac-ft)	Volume (ac-ft)	Flow (cfs)
BASIN A (native)	6257.00	0.144	75%	0.10775023	25%	0.0361	0%	0.000	0.010
BASIN B (proposed)	6257.00	0.144	0%	30%	0.043	26%	0.03730	44%	0.063
BASIN C (native)	8740.00	0.201	75%	0.15045000	25%	0.050	0%	0.000	0.010
BASIN D (proposed)	8740.00	0.201	0%	43.0%	0.086	36.0%	0.07223	21%	0.042
REMAINING SITE (proposed)	19953.00	0.458	75%	0.34354339	25%	0.113	0%	0.000	0.010
REMAINING SITE (proposed)	19953.00	0.458	75%	0.34354339	25%	0.113	100%	0.04881	8%
NATIVE	34950.00	0.802	75%	0.6017962	25.0%	0.201	0.0%	0.000	0.020

Equations:

Weighted E = Ea*As + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

Volume = Weighted D * Total Area

Flow = Qa * As + Qb * Ab + Qc * Ac + Qd * Ad

Where for 100-year, 6-hour storm

Qa= 0.8
Eb= 1.08
Ed= 1.48
Ed= 2.64

Qb= 2.2
Qc= 2.92
Qd= 1.73
Qd= 5.25

rain increased flow from basin a and

HARVESTING POND A 0.012 AC-FT 518.91
HARVESTING POND B 0.011 AC-FT 491.19
ADD HARVEST FOR SITE 0.006 AC-FT 270.70

REQUIRED 542
PROVIDED 542

DRAINAGE NARRATIVE
BASIN B COMPRISES OF THE SOUTHERN PORTION OF THE HOME AND THE AREA DRAINING SOUTH CAPTURED BY SOUTH POND
Site discharge is 2.35 cfs in developed condition and 1.0 cfs in native. Master drainage study accounted for discharge of impervious areas within building envelope
THE MASTER DRAINAGE PLAN ALLOWS FOR FREE DISCHARGE TO THE EXISTING OPEN SPACE AND DOWN STREAM DRAINAGE FACILITIES AT THIS PEAK RATE
THE LAND TREATMENT OF THIS LOT GENERATES 4.0 CFS GREATER THAN NATIVE, THEREFORE THE INCREASE IN FLOW WILL BE RETAINED BY WATER QUALITY PONDS
DUE TO THIS SITE BEING GOVERNED BY THE GUIDELINES FOR SUSTAINABILITY, THE INCREASE IN THE DEVELOPED FLOW MUST BE RETAINED ON SITE AS CALCULATED FOR THE 100-
YEAR 6-HOUR EVENT. THE REQUIRED RETENTION IS 1010 CUBIC FEET. THE WATER QUALITY PONDS RETAIN 10% OF AND PASS THE HISTORIC FLOW, WHICH WILL BE LESS DUE TO
PONDS. UPLAND FLOW IS ALLOWED TO ENTER THE SITE AND PASS TO THE EXISTING DRAINAGE CONDUIT WITHIN THE RIGHT-OF-WAY. THE POND'S DISCHARGE TO HISTORICAL PATTERNS
DUE TO THE EXISTING TOPOGRAPHY. PERIODIC MAINTENANCE OF DRAINAGE FACILITIES WILL BE REQUIRED. THIS SITE CONFORMS TO THE MASTER DRAINAGE PLAN

END 2' COBBLE
SWALE-SEE DETAIL
THIS SHEET

LOWEST EXISTING
NATURAL GRADE=6274.65

BUILDING
ENVELOPE

Gambel Oak Court

BEGIN 2' COBBLE
SWALE-SEE DETAIL
THIS SHEET
EMERGENCY OVERFLOW-SEE DETAIL
THIS SHEET

BUILD WATER HARVEST POND
3:1 SLOPE MAX.
POND SIDES SHALL BE 4-6" COBBLES PLACED
12" DEEP OVER FILTER FABRIC, BOTTOM SHALL BE RESEEDED
TOP=6273.00
BOTTOM=6270.75
PROPOSED VOLUME ● EMERGENCY OVERFLOW 6272.50=542 CU. FT.

END 2' COBBLE
SWALE-SEE DETAIL
THIS SHEET

Elena Gallegos Place

L=178.55'
R=780.00

ROOF DRAIN
W/SPLASH PAD

ROOF DRAIN
W/SPLASH PAD

FF=6275.00
FP=6274.50

BEGIN EXTENDED STEM WALL
SEE ACH PLANS

BASIN A LIMITS

26' LF
OF 1'-2' LANDSCAPE WALL
DESIGN BY OTHERS

BEGIN 2' COBBLE
SWALE-SEE DETAIL
THIS SHEET

BASIN B LIMITS

BUILDING
ENVELOPE

ROOF DRAIN
W/SPLASH PAD

END 2' COBBLE
SWALE-SEE DETAIL
THIS SHEET

END EXTENDED STEM WALL
SEE ACH PLANS

ROOF DRAIN
W/SPLASH PAD

BUILD WATER HARVEST POND
3:1 SLOPE MAX.
POND SIDES SHALL BE 4-6" COBBLES PLACED
12" DEEP OVER FILTER FABRIC, BOTTOM SHALL BE RESEEDED
TOP=6273.00
BOTTOM=6271.00
PROPOSED VOLUME ● EMERGENCY OVERFLOW 6272.50=498 CU. FT.

END 2' COBBLE
SWALE-SEE DETAIL
THIS SHEET

Project Benchmark:
Top of #5 Rebar
X=1572528.09 Y=1511541.15
Elev=6282.39

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.

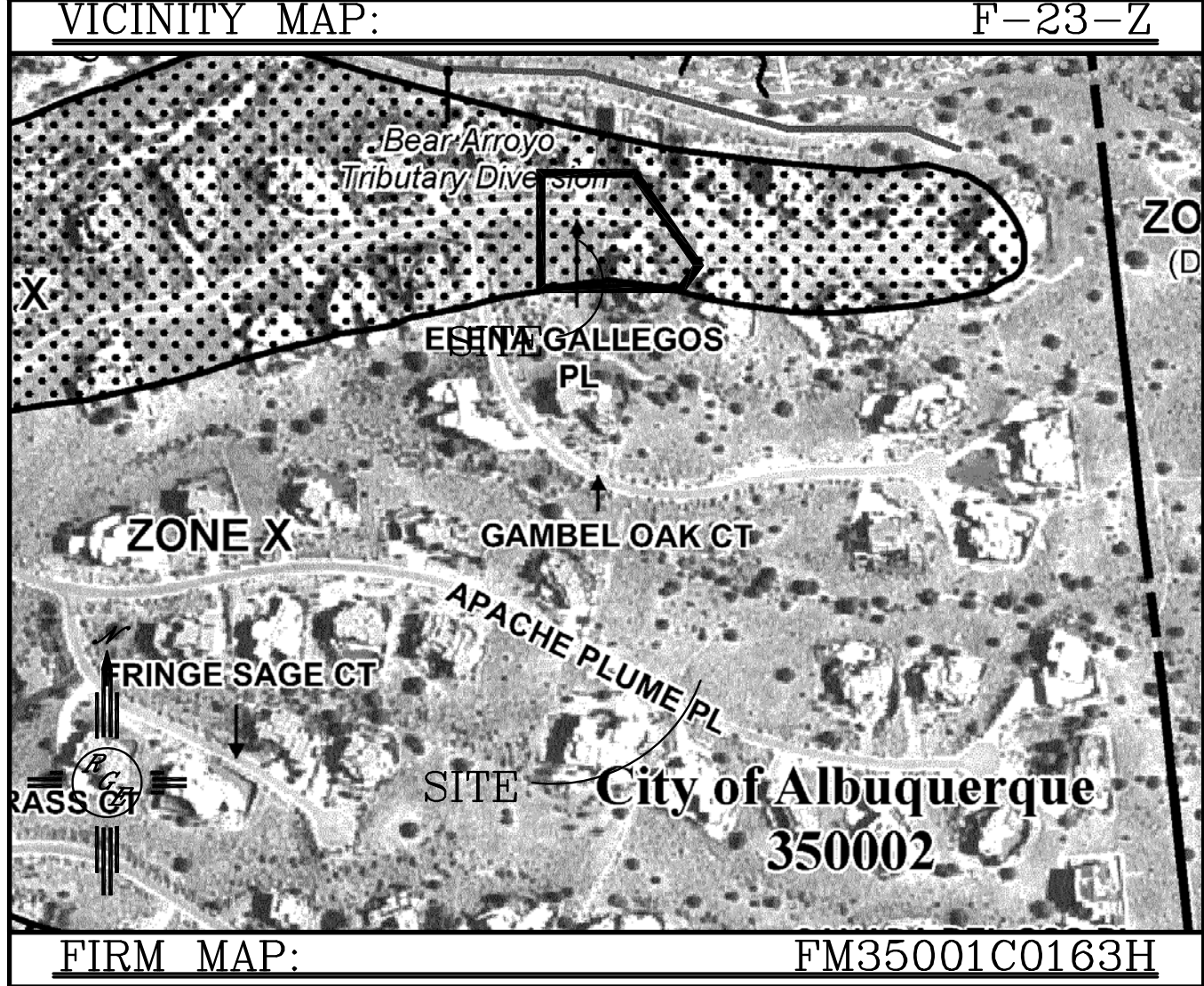
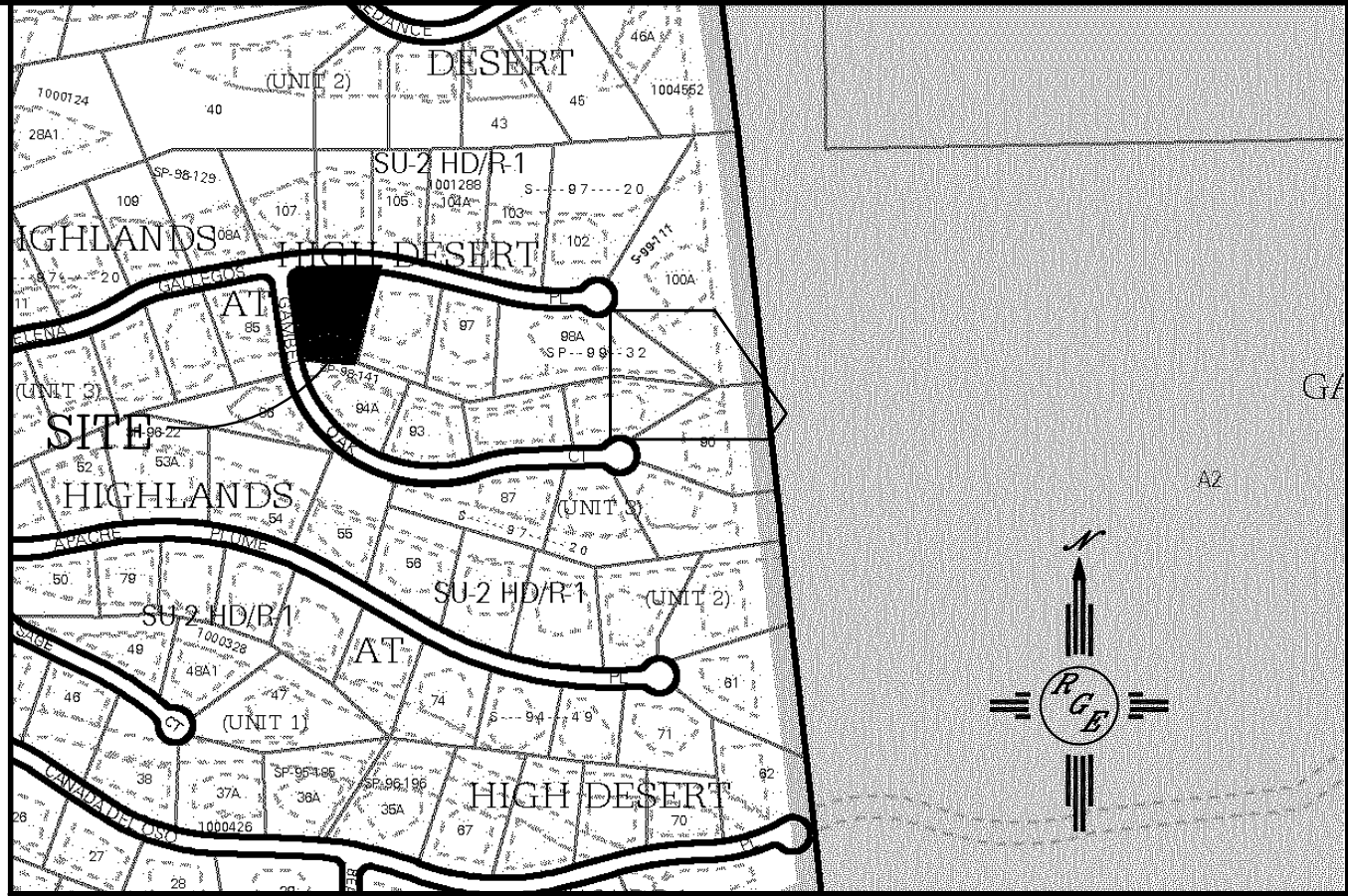
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

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.

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.



LEGAL DESCRIPTION:

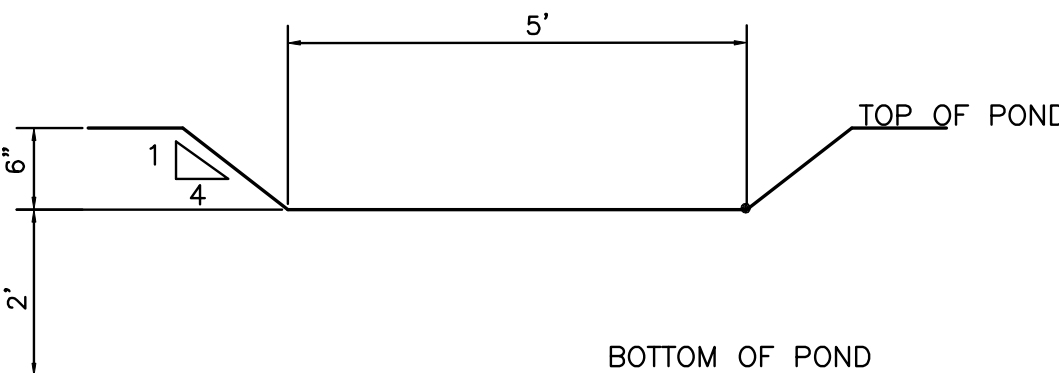
Lot 95 Unit 3 of the Highlands at High Desert

NOTES:

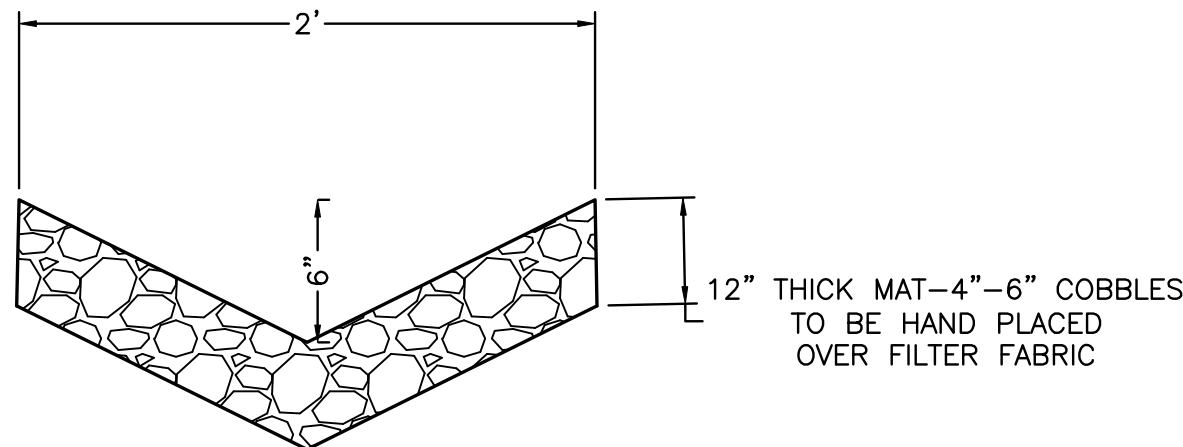
- ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- ALL ROOF DRAINS SHALL HAVE A SLASH PAD AND 2' COBBLE SWALE THAT SHALL TIE TO MAIN COBBLES SWALES AROUND THE HOUSE PER DETAIL THIS SHEET..
- ALL DISTURBED AREAS SHALL BE RESEEDED WITH APPROVED HIGH DESERT MIX WITHIN 30 DAYS OF DISTURBANCE.
- ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
- SURVEY PROVIDED BY RIO GRANDE SURVEY COMPANY, BASED UPON NAVD 1988 DATUM.

LEGEND

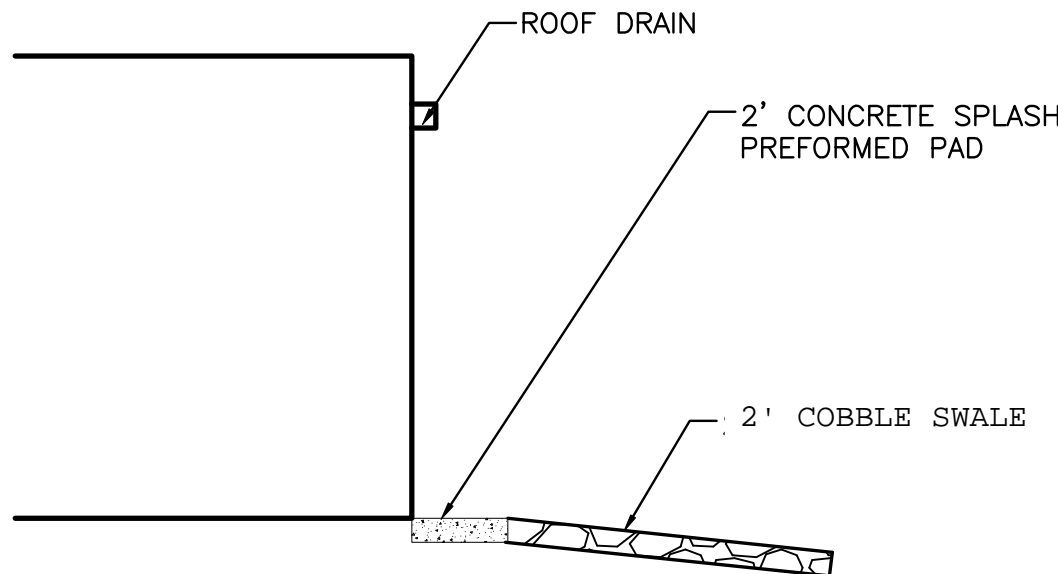
----	XXXX	EXISTING CONTOUR
----	XXXX	EXISTING INDEX CONTOUR
----	XXXX	PROPOSED CONTOUR
----	XXXX	PROPOSED INDEX CONTOUR
----	XXXX	SLOPE TIE
----	XXXX	EXISTING SPOT ELEVATION
----	XXXX	PROPOSED SPOT ELEVATION
----	XXXX	BOUNDARY
----	XXXX	CENTERLINE
----	XXXX	RIGHT-OF-WAY
----	XXXX	PROPOSED CURB AND GUTTER
----	XXXX	EXISTING EDGE OF ASPHALT
----	XXXX	PROPOSED 1'-2' LANDSCAPE WALL
----	XXXX	2' COBBEL SWALE-SEE DETAIL THIS SHEET
----	XXXX	BASIN LIMITS



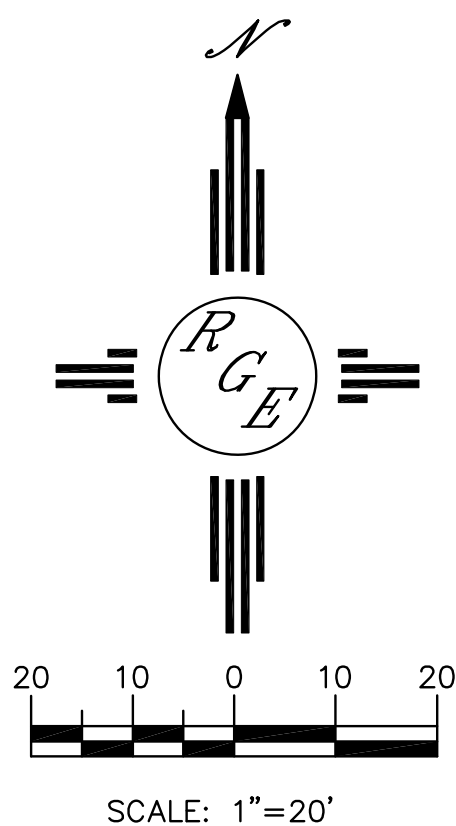
EMERGENCY OVERFLOW DETAIL
NTS



COBBLE SWALE DETAIL
NTS



ROOF DRAIN SPLASH PAD DETAIL
NTS



	13704 ELENA GALLEGOS	DRAWN BY WCMJ
	GRADING AND DRAINAGE PLAN	DATE 7-16-17
	 1806 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0898	21740-LAYOUT-5-28-17
7/18/17		SHEET #
DAVID SOULE P.E. #14522		JOB # 21740