

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

August 10, 2022

Thomas D. Johnston, PE
George T Rodriguez-Development Consultant
12800 San Juan Rd. SE
Albuquerque, NM 87123

RE: 13500 Trail Vista Court NE
Permanent C.O. – Accepted
Engineer's Certification Date: 08/09/22
Engineer's Stamp Date: 05/26/22
Hydrology File: F23D010D

Dear Mr. Johnston:

PO Box 1293

Based on the Certification received 08/09/2022 and site photos sent on 08/10/2022, this certification is approved in support of Permanent Release of Occupancy by Hydrology.

Albuquerque

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

NM 87103

Sincerely,

www.cabq.gov

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 (REV 11/2015)

Project Title: 13500 TRAIL VISTA COURT N.E. Building Permit #: _____ Hydrology File #: F23D010D
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: LOT 12-A, PLAT OF LOTS 1-A THRU 27-A, WILDERNESS ESTATES @ HIGH DESERT
City Address: 13500 TRAIL VISTA COURT N.E.

Applicant: THOMAS D. JOHNSTON, P.E. GEORGE T. RODRIGUEZ - DEVELOPMENT CONSULTANT Contact: THOMAS JOHNSTON
Address: 12800 SAN JUAN N.E., ALBUQUERQUE, NEW MEXICO 87123

Phone#: 505-610-0593 Fax#: _____ E-mail: paurod@hotmail.com
Contractor: OWNER: PWKI, LLC Contact: PAUL KINDERDINE
Address: 7 BOSQUE ROAD, ALGODONES, NEW MEXICO 87001
Phone#: 505-867-1765 #: _____ E-mail: paulkinderdine-inc.com

TYPE OF SUBMITTAL: _____ PLAT (____ # OF LOTS) ☒ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL?: ☒ Yes _____ No

DEPARTMENT: _____ TRAFFIC/TRANSPORTATION ☒ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ☒ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
- ☐ GRADING PLAN
- ☐ DRAINAGE MASTER PLAN
- ☐ DRAINAGE REPORT
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ OTHER (SPECIFY) _____
- ☐ PRE-DESIGN MEETING?

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
- ☐ FLOODPLAIN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____

DATE SUBMITTED: 08-09-2021 By: GEORGE T. RODRIGUEZ

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



Courtyard I
7500 Jefferson St. NE
Albuquerque, NM
87109-4335

www.bhinc.com

voice: 505.823.1000
facsimile: 505.798.7988
toll free: 800.877.5332

August 8, 2022

Mr. Rob Montoya
NCC High Desert Homeowners Association
Albuquerque, NM

Re: Lot 12A Wilderness Estates (13500 Trail Vista Court N.E.)
Review of the Lot Specific Grading and Drainage

Dear Rob:

The enclosed plan prepared by Thomas D. Johnston with a stamp date of 08/05/2022 has been reviewed and is approved. The referenced plan is enclosed.

Please let me know if you have any questions or comments concerning our review.

Sincerely,

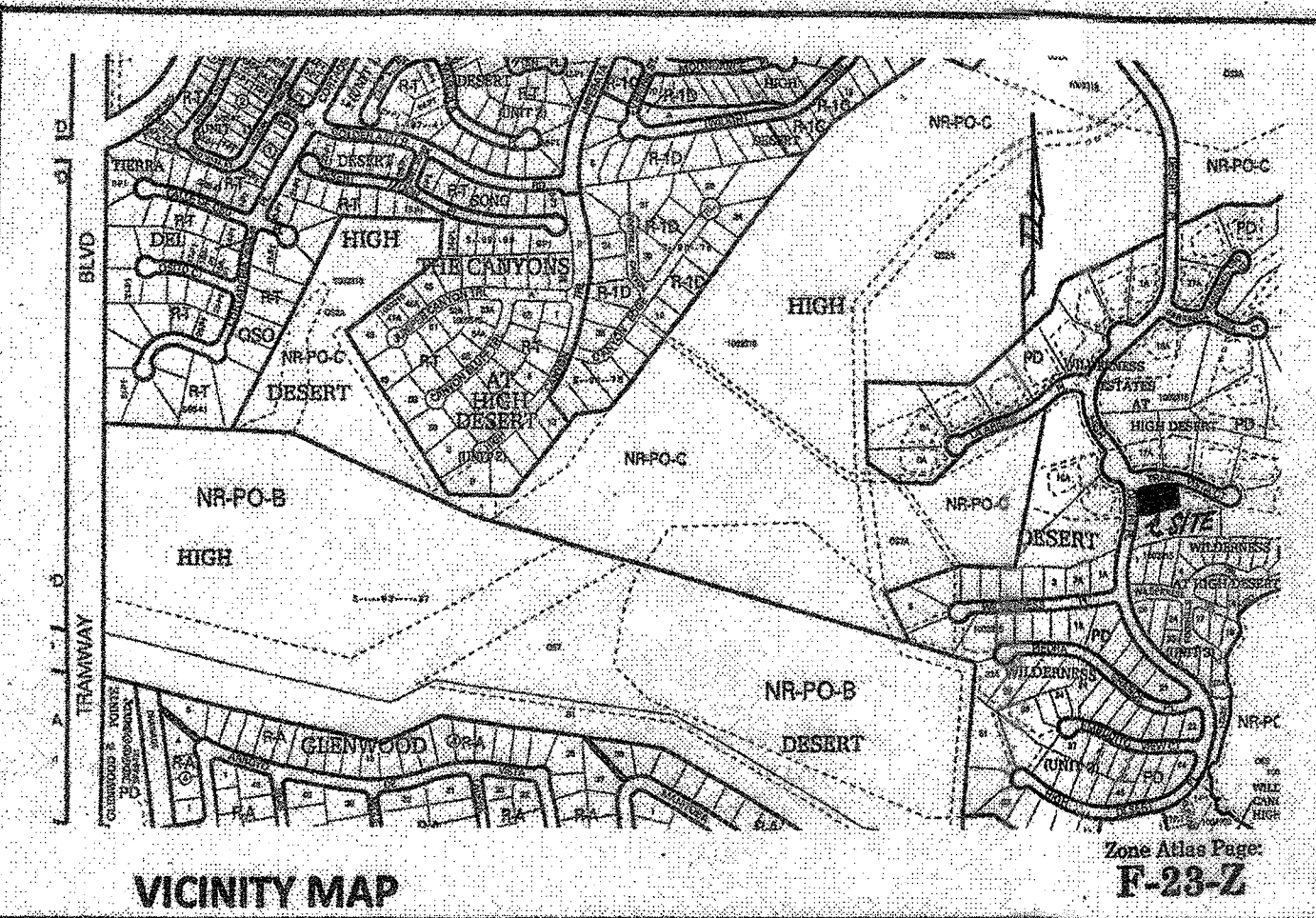
A handwritten signature in blue ink that reads "Kelly M. Klein".

Kelly Klein, P.E.
Project Manager
Community Development and Planning

Engineering ▲

Spatial Data ▲

Advanced Technologies ▲



VICINITY MAP

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION OF HIGH DESERT PLACE N.E. AND TRAIL VISTA COURT N.E. (WILDERNESS ESTATES AT HIGH DESERT), IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, (ZONE ATLAS "F-23-Z").

THE SUBJECT SITE, 1.1 HAS A DESIGNATED 0.28 ACRE BUILDING ENVELOPE THAT IS WITHIN ZONE "X" (AREAS PROTECTED FROM THE 1% ANNUAL CHANCE FLOOD, REFERENCE F.E.M.A. PANEL # 35001C0163H, EFFECTIVE 08-16-2012). 2.) DOES ACCEPT MINIMAL HISTORIC OFFSITE FLOWS FROM THE PROPERTY EAST OF AND ADJACENT TO THIS SUBJECT SITE, THESE FLOWS WILL CONTINUE TO BE ACCEPTED AND PASSED THROUGH, 3.) DOES CONTRIBUTE HISTORIC FLOWS TO THE PROPERTY TO THE WEST OF AND ACROSS HIGH DESERT PLACE N.E. (THESE FLOWS ARE ROUTED THROUGH TWO STORM DRAINAGE CULVERTS UNDER HIGH DESERT PLACE N.E. AND ARE GENERATED WITHIN A DRAINAGE EASEMENT FOR THE BEAR ARROYO WITHIN SAID SUBJECT SITE). 4.) PROPOSED PLAN IS TO DETAINE THE VOLUME DIFFERENCE BETWEEN THE HISTORIC AND PROPOSED IN THE 100-YR/5 HR. STORM EVENT.

PER THE DEVELOPMENT CHAPTER MANUAL FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, HYDROLOGY, CHAPTER 6, ARTICLE 6-2(a), EFFECTIVE DATE: JUNE 8, 2020.

SITE AREA = 1.60 ACRE (TOTAL)

DESIGNATED BUILDING ENVELOPE = 0.28 ACRE PLUS DRIVEWAY AREA OF 0.04 AC. = 0.32 AC. PROPOSED DETENTION PONDING IS CALCULATED FOR THE 0.32 ACRE AREA ONLY, THE REMAINING LOT AREA WILL REMAIN IN ITS EXISTING CONDITION AND CONTINUE FLOWS IN THE "HISTORICAL PATH" AND TO THE AFOREMENTIONED STORM DRAINAGE CULVERTS.

PRECIPITATION ZONE: FOUR (4)
"LAND TREATMENT METHOD" FOR CALCULATION OF "Q"
PRECIPITATION: 100-YR/5 HR. = 2.64 IN.

EXCESS PRECIPITATION: TREATMENT A: 0.76 IN. TREATMENT B: 0.35 IN. TREATMENT C: 1.20 IN. TREATMENT D: 3.34 IN.

EXISTING CONDITIONS: AREA TREATMENT A: 0.17 AC. TREATMENT B: 0.35 AC. TREATMENT C: 0.00 AC. TREATMENT D: 0.00 AC.

PROPOSED CONDITIONS: AREA TREATMENT A: 0.00 AC. TREATMENT B: 0.00 AC. TREATMENT C: 0.15 AC. TREATMENT D: 0.37 AC.

EXISTING EXCESS PRECIPITATION: WEIGHTED "Q" = (0.76 X 0.17) + (0.35 X 0.35) + (1.20 X 0.00) + (3.34 X 0.00) / 0.32 = 0.85 IN. V100-360 = (0.85 X 0.32) / 12 = 0.002267 AC. FT. = 988.0 CU. FT.

EXISTING PEAK DISCHARGE: Q100 = (2.09 X 0.17) + (2.75 X 0.35) + (4.41 X 0.00) + (4.78 X 0.00) = 0.77 CFS

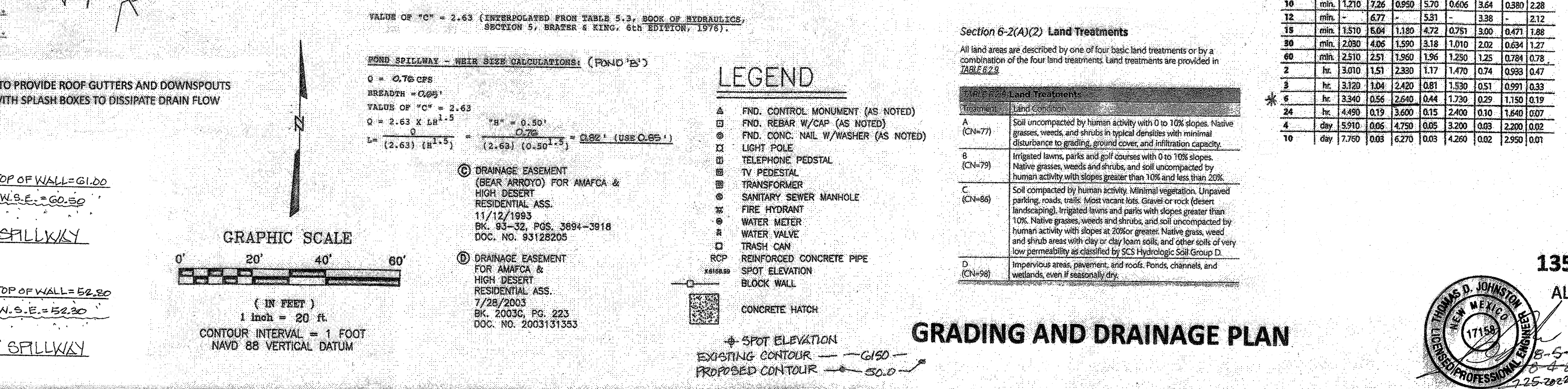
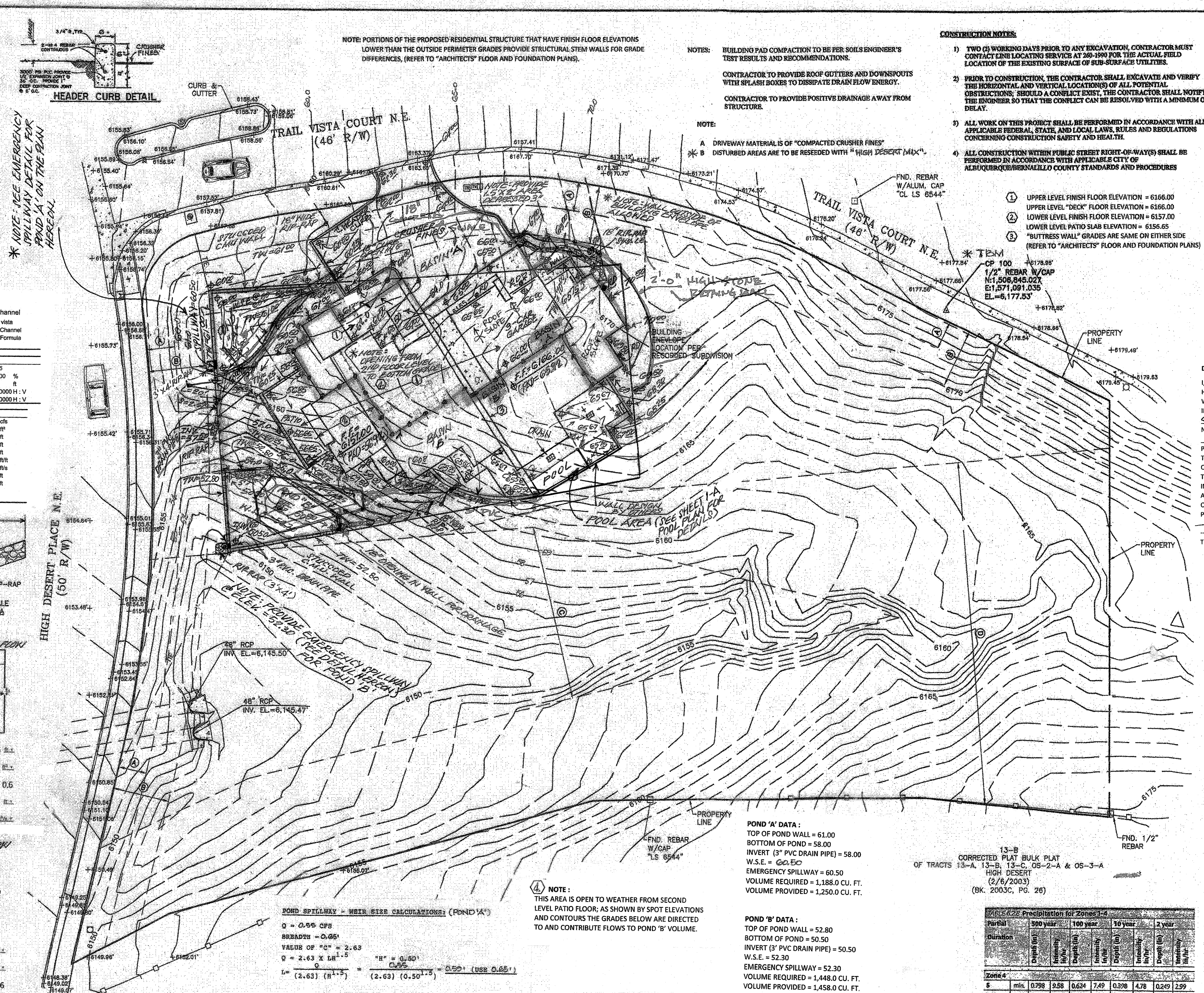
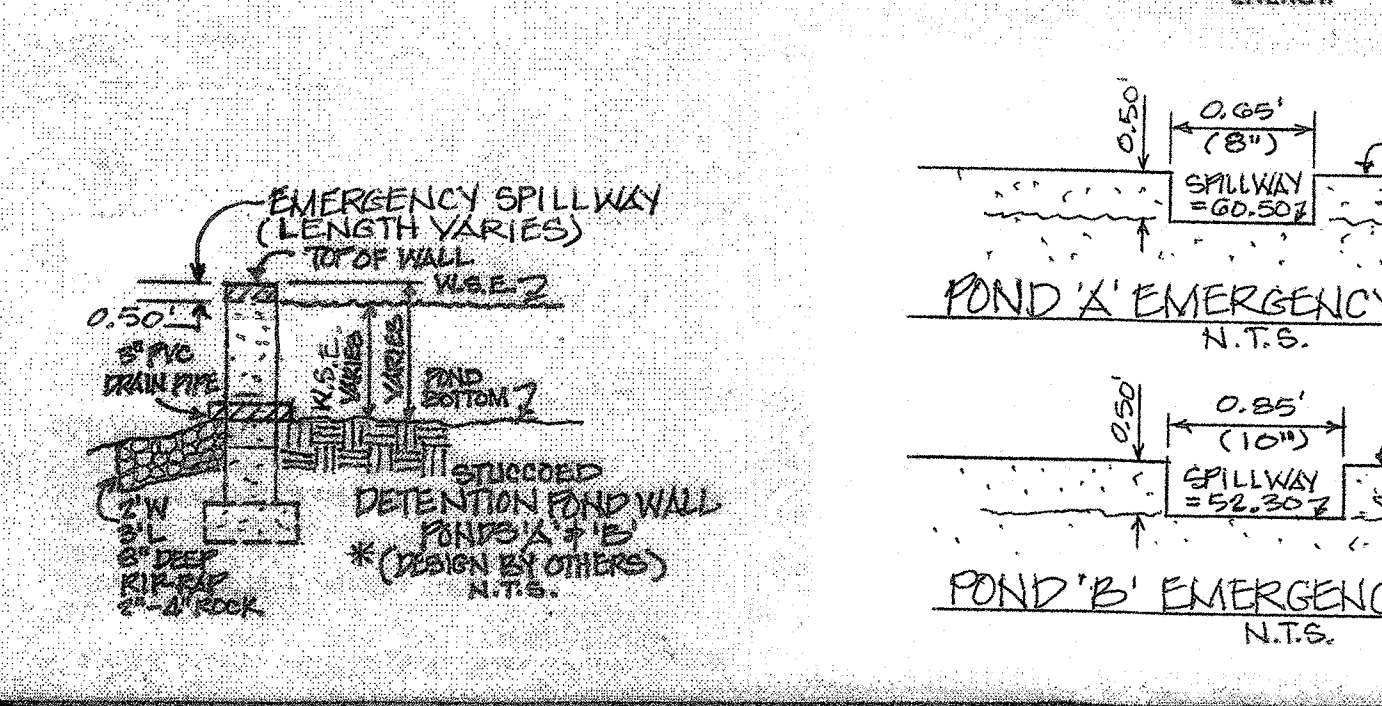
PROPOSED EXCESS PRECIPITATION: WEIGHTED "Q" = (0.76 X 0.00) + (0.35 X 0.00) + (1.20 X 0.15) + (3.34 X 0.37) / 0.32 = 2.34 IN. V100-360 = (2.34 X 0.32) / 12 = 0.00824 AC. FT. = 2,714.7 CU. FT. REQUIRED VOLUME TO BE DETAINE: 2,714.7 CU. FT. - 988.0 CU. FT. = 1,726.7 CU. FT. 1" CUL.

PROPOSED PEAK DISCHARGE: Q100 = (2.09 X 0.00) + (2.75 X 0.00) + (4.41 X 0.15) + (4.78 X 0.37) = 1.32 CFS *** 1.31 CFS - 0.77 CFS = 0.54 CFS

DETENTION PONDING: BASIN "A": (0.13 ACRE) "C" = 0.05 AC. "D" = 0.08 AC. WEIGHTED "Q" = (1.20 X 0.05) + (3.34 X 0.08) / 0.13 = 2.52 IN. V100-360 = (2.52 X 0.13) / 12 = 0.002727 AC. FT. = 1,188.0 CU. FT. (REQUIRED POND VOLUME) Q100 = (3.41 X 0.05) + (4.78 X 0.08) = 0.58 CFS POND "A" REQUIRED VOLUME = 1,188.0 CU. FT. PROVIDED VOLUME = 500.0 SQ. FT. X 2.55' DEPTH = 1,250.0 CU. FT. > 1,188.0 CU. FT.

BASIN "B": (0.19 ACRE) "C" = 0.11 AC. "D" = 0.08 AC. WEIGHTED "Q" = (1.20 X 0.11) + (3.34 X 0.08) / 0.19 = 2.10 IN. V100-360 = (2.10 X 0.19) / 12 = 0.00325 AC. FT. = 1,448.0 CU. FT. (REQUIRED POND VOLUME) Q100 = (3.41 X 0.11) + (4.78 X 0.08) = 0.76 CFS POND "B" REQUIRED VOLUME = 1,448.0 CU. FT. PROVIDED VOLUME = 910.0 SQ. FT. X 1.80' DEPTH = 1,458.0 CU. FT. > 1,448.0 CU. FT.

1,290.0 CU. FT. + 1,458.0 CU. FT. = 2,748.0 CU. FT. > 1,726.7 CU. FT.



PROPERTY DESCRIPTION
LOT 12-A, PLAT OF LOTS 1-A THRU 27-A, WILDERNESS ESTATES AT HIGH DESERT FILED JULY 28, 2003 IN BOOK 2003C, PAGE 229 WITH THE BERNALILLO COUNTY CLERK'S OFFICE.

PROJECT LOCATION
13500 TRAIL VISTA COURT N.E., ALBUQUERQUE, NEW MEXICO

SURVEY INFORMATION
TOPOGRAPHIC SURVEY PERFORMED AND COMPILED BY TERRA LAND SURVEYS, L.L.C. CORRALES, NEW MEXICO FEBRUARY 2021.

PROJECT BENCHMARK
PROJECT BENCHMARK IS CITY OF ALBUQUERQUE CONTROL MONUMENT "26-F23" A 1 3/4" ALUMINUM DISK SET ON THE TOP OF A GRANITE BOULDER. ELEVATION = 6,205.53 FEET (NAVD 1988 VERTICAL DATUM).

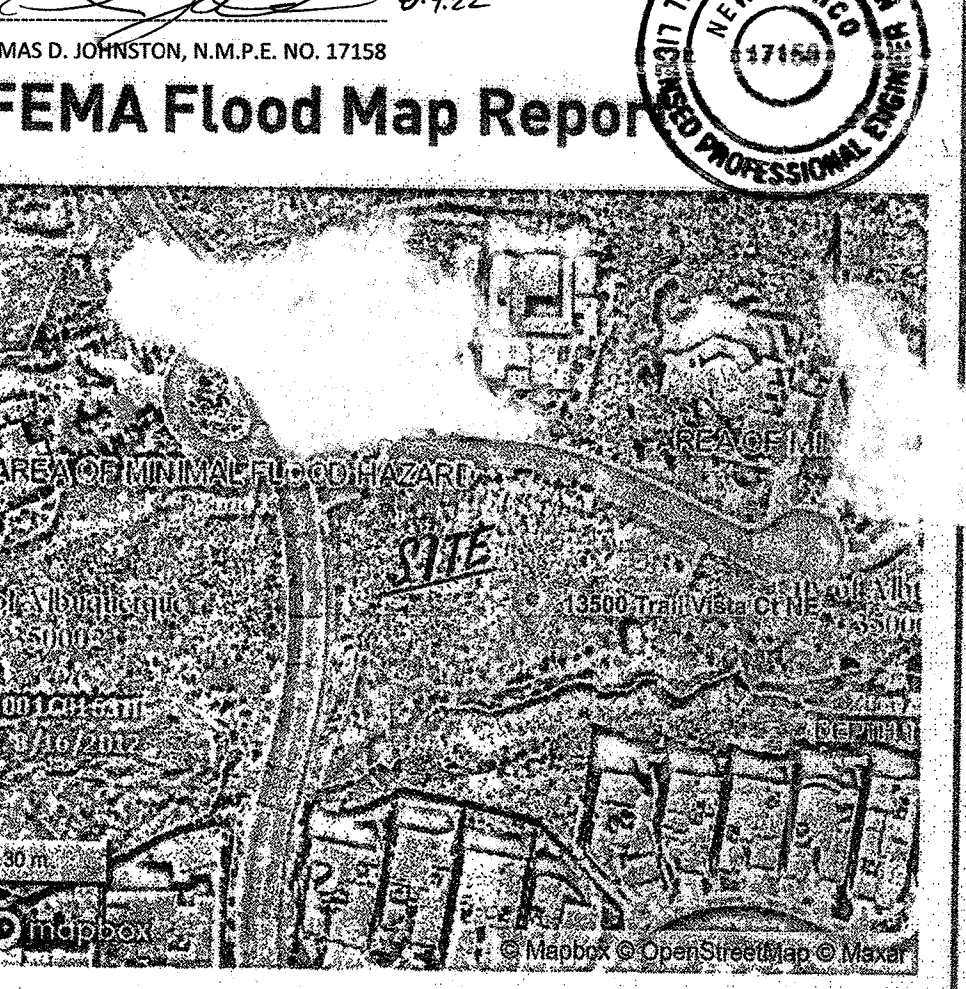
TEMPORARY BENCHMARK
PROJECT BENCHMARK IS CP 100 BEING A TERRA LAND SURVEY 1/2" REBAR WITH PLASTIC CAP STAMPED "TERRA CONTROL" ELEVATION = 6,177.53 FEET (NAVD 1988 VERTICAL DATUM).

NOTES
1. FIELD SURVEY PERFORMED IN FEBRUARY 2021.
2. TOPOGRAPHIC SURVEY WAS COMPILED UTILIZING GROUND COORDINATES REFERENCED TO NAD 1983 NEW MEXICO CENTRAL ZONE. PRIMARY HORIZONTAL AND VERTICAL CONTROL WAS ESTABLISHED UTILIZING GPS RTK METHODS. COMBINED GROUND TO GRID FACTOR IS 1.000358918/0.999813231 SCALED AROUND CP 100 N1,506,845.027, E1,571,091.035, ELEV=6,177.53'.
3. ELEVATIONS SHOWN FOR PIPES ARE INVERT ELEVATIONS UNLESS OTHERWISE SPECIFIED.

DRAINAGE CERTIFICATION:
I, THOMAS D. JOHNSTON, N.M.P.E. NO. 17158, DO HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 7/2/2022. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY SPECIAL MEANS OF THE FIRM TERRA LAND SURVEYS, L.L.C. ALBUQUERQUE, NEW MEXICO. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 8/18/2022 AND HAVE DETERMINED BY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF THE ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY PURPOSE.

THOMAS D. JOHNSTON, N.M.P.E. NO. 17158



PROPERTY LOCATED AT: 13500 Trail Vista Ct NE, Albuquerque, NM 87111
FEMA FLOOD ZONE: X, AREA OF MINIMAL FLOOD HAZARD

F.E.M.A. FLOOD MAP NO. 35001C0163H
EFFECTIVE DATE: 08/16/2012

Table 6-2.2: Precipitation for Zones 1-4

Zone	Duration	500 year	100 year	10 year	2 year
Zone 1	1 hr	0.798	0.958	0.624	0.478
	2 hr	1.210	1.726	0.950	0.720
	6 hr	1.510	2.040	1.180	0.970
	12 hr	1.677	2.330	1.310	1.070
	24 hr	1.810	2.510	1.420	1.170
Zone 2	1 hr	0.798	0.958	0.624	0.478
	2 hr	1.210	1.726	0.950	0.720
	6 hr	1.510	2.040	1.180	0.970
	12 hr	1.677	2.330	1.310	1.070
	24 hr	1.810	2.510	1.420	1.170
Zone 3	1 hr	0.798	0.958	0.624	0.478
	2 hr	1.210	1.726	0.950	0.720
	6 hr	1.510	2.040	1.180	0.970
	12 hr	1.677	2.330	1.310	1.070
	24 hr	1.810	2.510	1.420	1.170
Zone 4	1 hr	0.798	0.958	0.624	0.478
	2 hr	1.210	1.726	0.950	0.720
	6 hr	1.510	2.040	1.180	0.970
	12 hr	1.677	2.330	1.310	1.070
	24 hr	1.810	2.510	1.420	1.170

Table 6-2.3: Peak Discharge

Zone	Duration	500 year	100 year	10 year	2 year
Zone 1	1 hr	0.798	0.958	0.624	0.478
	2 hr	1.210	1.726	0.950	0.720
	6 hr	1.510	2.040	1.180	0.970
	12 hr	1.677	2.330	1.310	1.070
	24 hr	1.810	2.510	1.420	1.170
Zone 2	1 hr	0.798	0.958	0.624	0.478
	2 hr	1.210	1.726	0.950	0.720
	6 hr	1.510	2.040	1.180	0.970
	12 hr	1.677	2.330	1.310	1.070
	24 hr	1.810	2.510	1.420	1.170
Zone 3	1 hr	0.798	0.958	0.624	0.478
	2 hr	1.210	1.726	0.950	0.720
	6 hr	1.510	2.040	1.180	0.970
	12 hr	1.677	2.330	1.310	1.070
	24 hr	1.810	2.510	1.420	1.170
Zone 4	1 hr	0.798	0.958	0.624	0.478
	2 hr	1.210	1.726	0.950	0.720
	6 hr	1.510	2.040	1.180	0.970
	12 hr	1.677	2.330	1.310	1.070
	24 hr	1.810	2.510	1.420	1.170

A PROPOSED PLAN FOR 13500 TRAIL VISTA COURT N.E. ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

APRIL, 2021
(SHEET 1)