

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

December 7, 2022

Jackie McDowell, P.E.
McDowell Engineering, Inc.
7820 Beverly Hills Ave. NE
Albuquerque, NM 87122

**RE: 5501 Barranca Oso Ct.
Permanent C.O. - Accepted
Engineer's Certification Date: 12/02/22
Engineer's Stamp Date: 07/10/21
Hydrology File: F23D015**

Dear Ms. McDowell:

PO Box 1293

Based on the Certification received 12/05/2022 and site visit on 12/06/22, 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.

Sincerely,

NM 87103

Renée C. Brissette

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 11/2018)

Project Title: Raissy - 5501 BARRANCA OSO CT , High Desert **Building Permit #:** BP2021- 24657 **Hydrology File #:** F23D015
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: LT 27-A PLAT OF LOTS 1-A THRU 27-A WILDERNESS ESTATESAT HIGH DESERT
City Address: 5501 BARRANCA OSO CT NE ALBUQUERQUE NM 87111

Applicant: MCDOWELL ENGINEERING, INC. **Contact:** JACKIE MCDOWELL
Address: 7820 BEVERLY HILLS AVE. NE, ALBUQUERQUE, NM 87122
Phone#: 505-828-2430 **Fax#:** 505-821-4857 **E-mail:** jackmcdowell@comcast.net
Owner: RAISSY-DEHKORDI MOHSEN & HEIDARIAN-RAISSY HENGAMEH **Contact:** MOHSEN RAISSY
Address: 8100 WYOMING BLVD NE #M4-127 ALBUQUERQUE NM 87113-1947
Phone#: 505-620-7219 **Fax#:** _____ **E-mail:** mohsenraissy@yahoo.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:

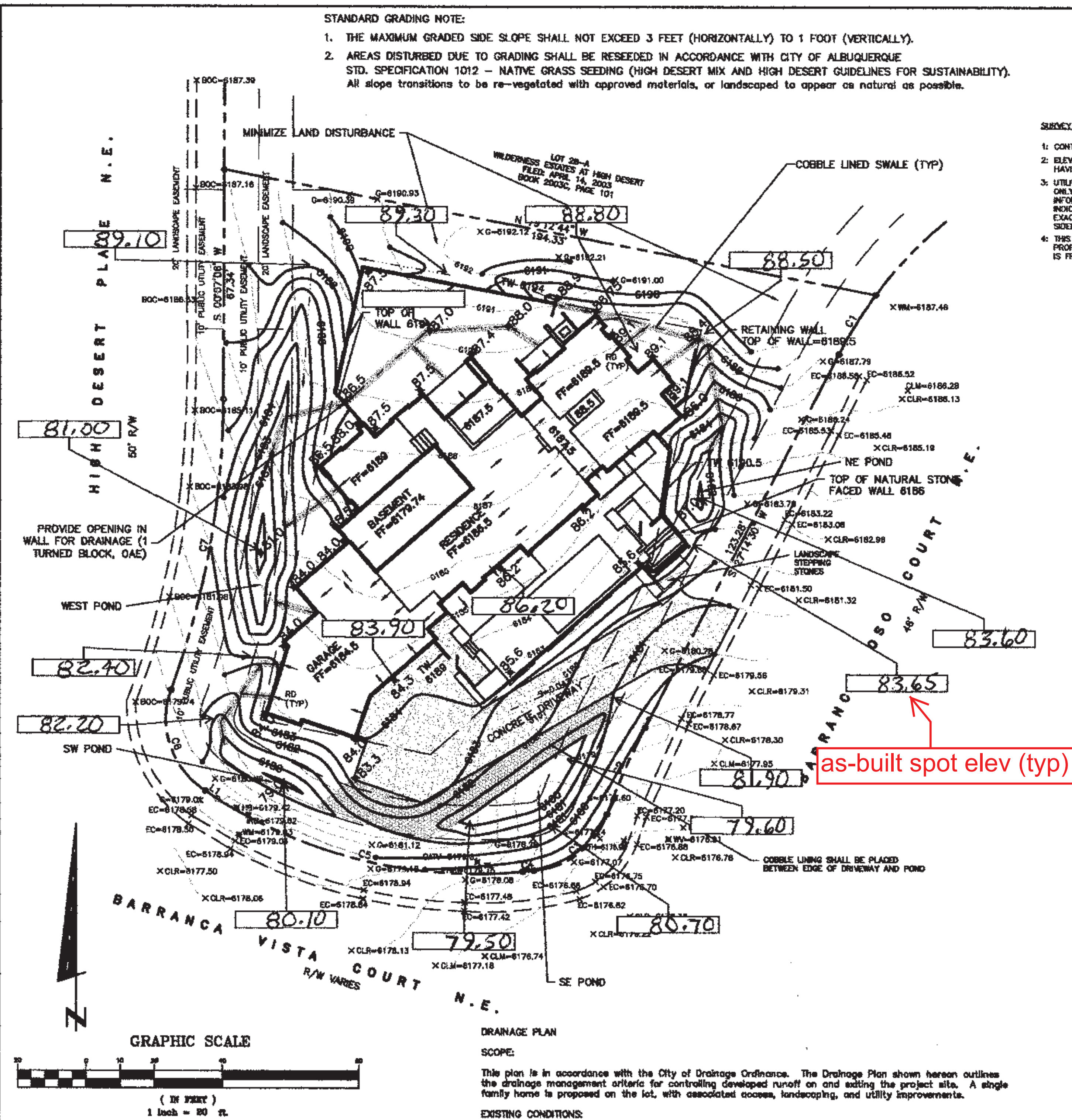
____ BUILDING PERMIT APPROVAL
☒ CERTIFICATE OF OCCUPANCY
____ PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
____ SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL
____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
____ GRADING PERMIT APPROVAL
____ SO-19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

DATE SUBMITTED: 12-2-22 **By:** JACKIE MCDOWELL

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



- GENERAL GRADING NOTES:
1. THE CONTRACTOR SHALL OBTAIN A TOP SOIL DISTURBANCE PERMIT FROM THE CITY OF ALBUQUERQUE, ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
 2. THE CONTRACTOR IS TO REFER TO THE EARTHWORK SPECIFICATIONS NOTED IN THE GEOTECHNICAL INVESTIGATION REPORT PREPARED FOR THIS LOT AND CAN BE OBTAINED BY THE OWNER.
 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, PERMITS AND APPROVALS.
 4. PVC DRAINAGE PIPES MAY REQUIRE FIELD ADJUSTMENT DUE TO SUBSURFACE ROCK. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE TO INLET/STREET.
 5. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY CONDITIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
 6. TWO WORKING DAYS PRIOR TO EXCAVATION THE CONTRACTOR SHALL CONTACT NEW MEXICO ONE CALL SYSTEM (811) FOR LOCATION OF EXISTING UTILITIES.
 7. CONTRACTOR SHALL PROVIDE DOUBLE CLEAN-OUTS AT ALL BENDS IN DRAINAGE PIPE.
 8. THE TOPSOIL SHOULD BE SAVED AND PUT ASIDE FOR RE-USE IN FILLING DISTURBED AREAS AWAY FROM THE STRUCTURE.
 9. ALL DISTURBED AREAS ON THE LOT SHALL BE RESEDED WITH NATIVE SEEDING MATERIAL (HIGH DESERT MIX).
 10. COBBLE SPLASH MATERIAL UNDER CANALES. OAE

DRAINAGE PLAN
SCOPE:
This plan is in accordance with the City of Albuquerque Ordinance. The Drainage Plan shown hereon outlines the drainage management criteria for controlling developed runoff on and exiting the project site. A single family home is proposed on the lot, with associated access, landscaping, and utility improvements.

EXISTING CONDITIONS:
Presently, the site contains approximately 0.85 acres of undeveloped property. The site is bounded on the north by a residential lot, on the west by High Desert Place, on the south by Barranca Vista Court, and on the east by Barranca Oso Court NE. The site is well vegetated with desert grasses and shrubs. Site topography slopes from the north to the south.

PROPOSED CONDITIONS:
As shown by the Plan, the building is located within the designated building envelope. Storm water will continue to sheet flow in the same existing manner. Storm water flow inside the building envelope will flow away from the building to the west, east, and south existing flow paths and new water harvesting ponds. Access will be taken Barranca Oso Court.

Supplemental calculations are shown.

CALCULATIONS:
The calculations shown hereon define the 100 year 1 hour design storm falling within the project area under existing and developed conditions. The Hydrology is for the Development Project located in the City of Albuquerque, New Mexico.

Existing Treatment Types:
Treatment A = 0.85 acres

Proposed Treatment Types:
Treatment A = 0.11 acres
Treatment B = 0.17 acres
Treatment C = 0.12 acres
Treatment D = 0.25 acres

PROPERTY ADDRESS:
5501 BARRANCA OSO CT. NE.

LEGAL DESCRIPTION:
Lot 27-A, Wilderness Estates at High Desert.

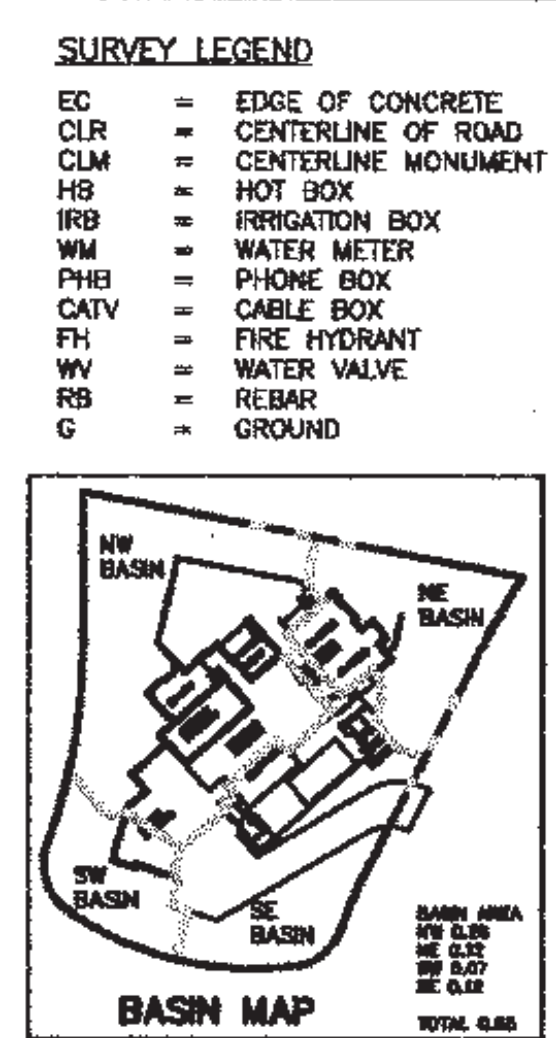
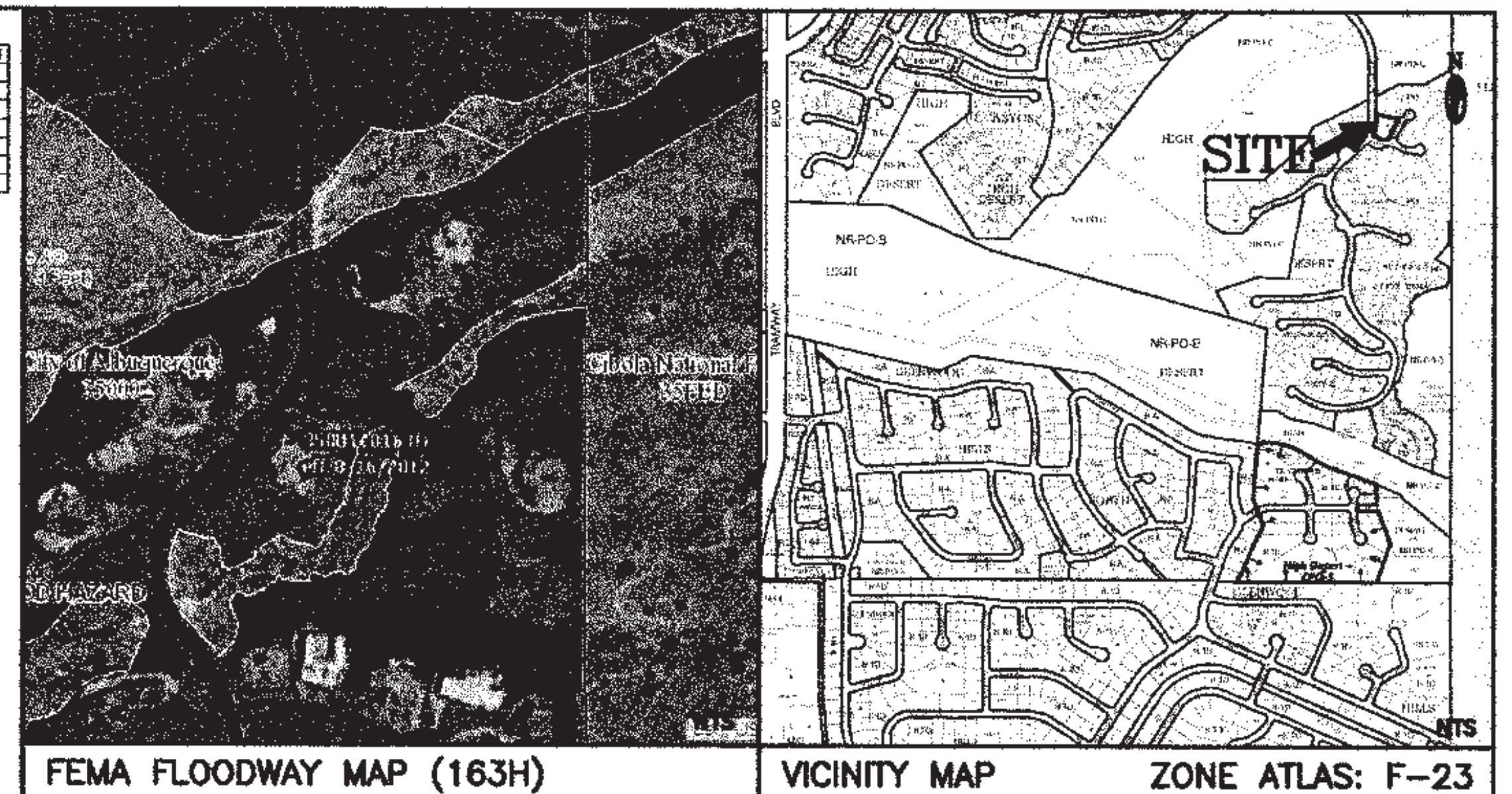
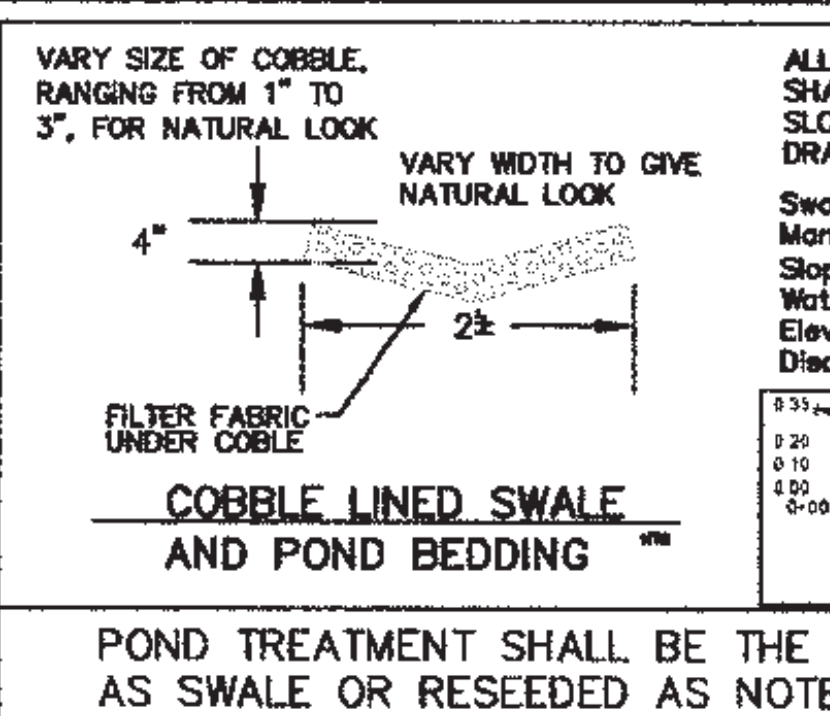
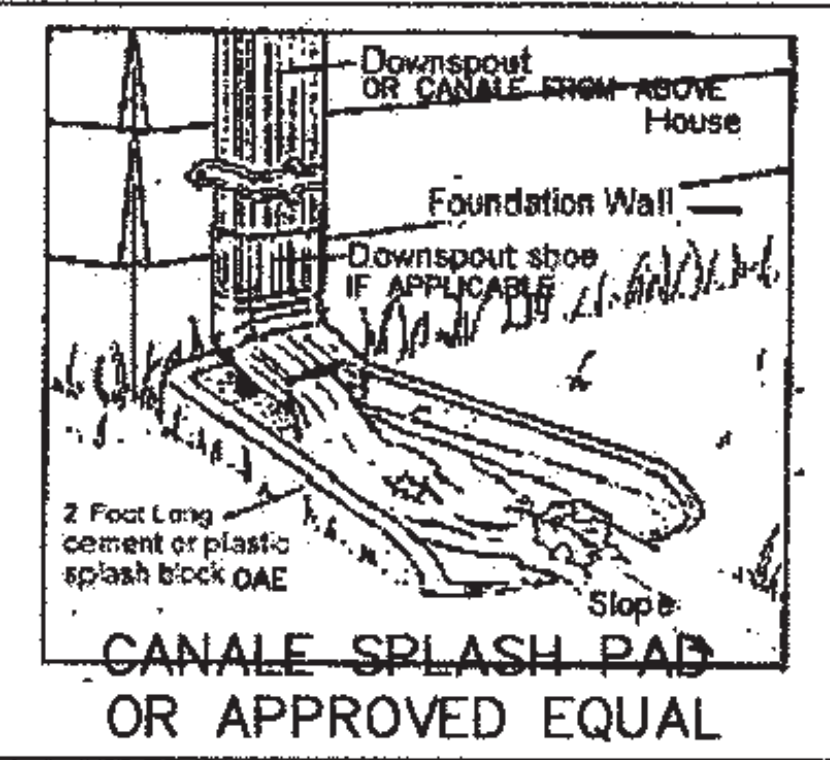
SURVEY:
Topographic Information provided by Anthony Harris dated 11-18-14.

GARY E. GRITSKO
NEW MEXICO
LICENSED PROFESSIONAL SURVEYOR
8686
As-built elevations
Gary E. Gritsko
10/21/2022

CURVE TABLE

NUMBER	DELTA ANGLE	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
01	09°34'20"	S 31°52'17" W	123.00	20.55	20.53
02	07°51'02"	S 23°44'45" W	203.00	27.81	27.79
03	85°38'56"	N 22°17'44" E	25.00	28.63	27.09
04	01°07'03"	S 54°27'11" W	173.00	3.57	3.57
05	38°00'57"	S 78°39'19" E	141.00	33.55	31.55
06	77°18'49"	S 18°45'57" E	25.00	33.72	31.22
07	18°30'53"	N 10°05'32" E	250.00	67.04	66.60

- SURVEY GENERAL NOTES:
1. CONTOUR INTERVAL IS ONE (1) FOOT.
 2. ELEVATIONS ARE BASED ON CENTERLINE MONUMENT HAVING AN ELEVATION OF 6152.00, HANDS, PROVIDED BY THE HIGH DESERT ASSOCIATION.
 3. UTILITIES SHOWN HEREON ARE IN THEIR APPROXIMATE LOCATION BASED ONLY ON ABOVE GROUND EVIDENCE FOUND IN THE FIELD AND AS-BUILT INFORMATION PROVIDED BY THE CLIENT. UTILITIES SHOWN HEREON, WHETHER INDICATED AS ABANDONED OR NOT, SHALL BE VERIFIED BY OTHERS FOR EXACT LOCATION AND/OR DEPTH PRIOR TO EXCAVATION OR DESIGN CONSIDERATIONS.
 4. THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA SHOWN IS FROM PREVIOUS SURVEY REFERENCE HEREON.



CERTIFICATE OF OCCUPANCY
DRAINAGE CERTIFICATION WITH SURVEY WORK BY PROFESSIONAL SURVEYOR
I, Jackie McDowell, NMPE #10903, of the firm McDowell Engineering, Inc., hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 7-10-21. The record information edited onto the original design document has been obtained by Gary Gritsko, NMPS #8686. I further certify that I have personally visited the project site on December 1, 2022 and have determined by visual inspection that the survey data provided is representative of 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 the record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

5-5-21
REV. 5-27-21
REV. 6-24-21
REV. 7-10-21

12-22 ENGR CERT FOR CO

NO EXIST SLOPE CONSIDERATION

Areas (acres)	Existing	Proposed
Treatment A	0.85	0.11
Treatment B	0.00	0.17
Treatment C	0.00	0.12
Treatment D	0.00	0.25
Total (acres)	0.85	0.65

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet)	0.04	0.10	0.01	0.00	0.00	0.04
Volume (cubic feet)	1,793	2,443	560	2,561	0	1,813

FIRST FLUSH POND VOLUME REQUIRED = 0.0593 341243590 = 808 CF

Total Q ₁₀ (cfs)	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Treatment A	1.35	0.23	0.48	0.08	0.00	0.00
Treatment B	0.00	0.48	0.00	0.22	0.00	0.05
Treatment C	0.00	0.41	0.00	0.23	0.00	0.10
Treatment D	0.00	1.20	0.00	0.78	0.00	0.47
Total Q (cfs)	1.35	2.30	0.48	1.29	0.00	0.62

WEST POND VOLUME PROVIDED:

ELEV	AREA	VOL
6184	1187	903
6183	639	445
6182	251	140
6181	28	140
SUB TOTAL	1488	CF

NE POND VOLUME PROVIDED:

ELEV	AREA	VOL
6183	295	202
6182	109	85
6181	0	0
SUB TOTAL	257	CF

SW POND VOLUME PROVIDED:

ELEV	AREA	VOL
6180	200	104
6179	8	104
SUB TOTAL	104	CF

SE POND VOLUME PROVIDED:

ELEV	AREA	VOL
6181	627	457
6180	287	457
SUB TOTAL	457	CF

TOTAL ALL PONDS 2305 CF

5501 BARRANCA OSO CT NE, ALBUQUERQUE, NM 87111
CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

LOT #27-A
WILDERNESS ESTATES AT HIGH DESERT

RAISSY (MIKE CABBER, DESIGNER) - GRADING & DRAINAGE PLAN

McDowell Engineering, Inc.
7820 Beverly Hills Ave. NE, Albuquerque, NM 87122
Tel: 505-828-2430

Designed JSM Drawn STAFF Checked JSM Sheet 1 of 1
File RA10121L Date APRIL 2021



















