CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

August 4, 2023

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

RE: 2 Alikhani, Naser – Home
1200 Hideaway Lane SE
Permanent C.O. – Accepted
Engineer's Certification Date: 07/31/23
Engineer's Stamp Date: 09/21/21
Hydrology File: M23D017A

Dear Ms. McDowell:

PO Box 1293

Based on the Certification received 08/03/2023 and site visit on 08/04/2023, this letter serves as a "green tag" from Hydrology Section for a Permanent Certificate of Occupancy to be issued by the Building and Safety Division.

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

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: Alikhani, Naser - Home Building Permit #: _____ Hydrology File #: M23D017A

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: LOT 6, PLAT OF LOTS 1-6, FOUR HILLS VILLAGE 21ST INSTALLMENT

City Address: 1200 HIDEAWAY LN. SE, ALBUQUERQUE, NM 87123

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: Naser Alikhani Contact: Naser Alikhani

Address: 13816 Winterwood Way SE, Albuquerque, NM 87123

Phone#: 505-681-9181 Fax#: _____ E-mail: khanicompany@aol.com

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

IS THIS A RESUBMITTAL?: _____ Yes X No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION X HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

X 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
X 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) _____

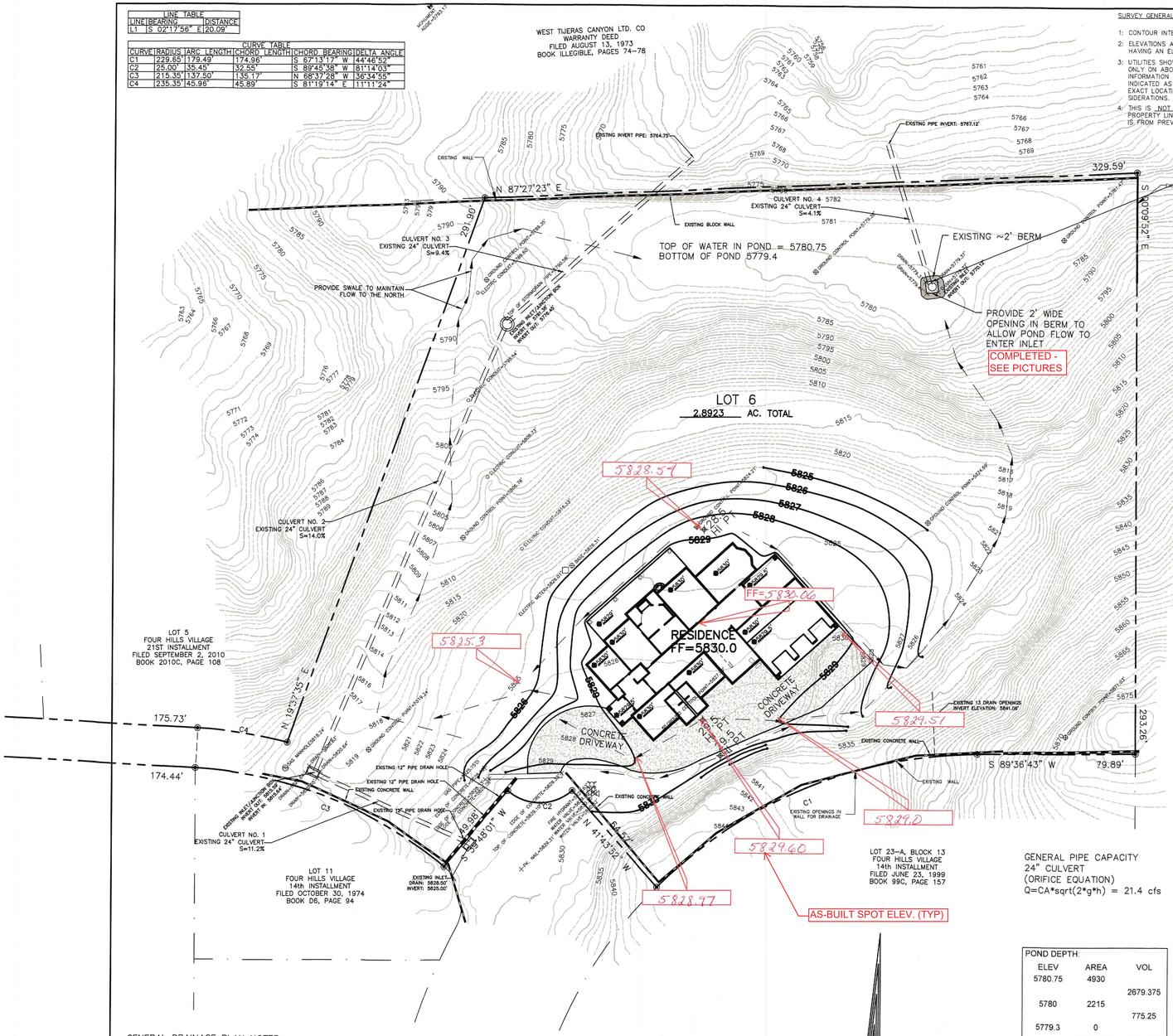
DATE SUBMITTED: 7-31-23 By: JACKIE MCDOWELL

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S 02°17'56" E	20.09'

CURVE TABLE					
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	229.65'	179.49'	174.96'	S 67°13'17" W	44°46'52"
C2	25.00'	35.45'	32.55'	S 89°45'38" W	81°14'03"
C3	215.35'	137.50'	135.17'	N 68°37'38" W	36°34'55"
C4	235.35'	45.96'	45.89'	S 81°19'14" E	11°11'24"



SURVEY GENERAL NOTES:

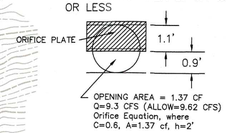
1: CONTOUR INTERVAL IS ONE (1) FOOT.

2: ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE STATION No. "AGGIE", HAVING AN ELEVATION OF 5793.17 , NAVD 1988

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.

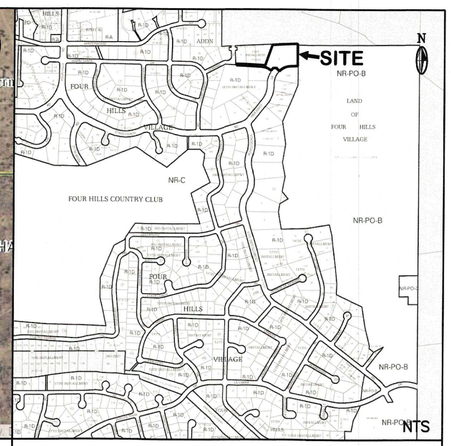
4: THIS IS NOT A BOUNDARY SURVEY. APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA SHOWN IS FROM PREVIOUS SURVEY REFERENCE HEREON

PROVIDE 2.5' X 1.5' ORIFICE PLATE AT EXISTING 24" CULVERT, OAE TO ACHIEVE AN OPENING AREA OF 1.4 SF OR LESS



COMPLETED - SEE PICTURES

FEMA FLOODWAY MAP PANEL #386G



VICINITY MAP ZONE ATLAS: M-23

DRAINAGE PLAN

SCOPE:

The Drainage Plan shown hereon outlines the drainage management criteria for controlling developed runoff on and exiting the project site. One single family home is proposed on the subject property, with associated access, landscaping, and utility improvements.

EXISTING CONDITIONS:

Presently, the 2.89 acre site is undeveloped. The site is bounded on the west and south by private residential property, on the north and east by city property and on south by Hideaway Ln. SE. The site is vegetated with native grasses and shrubs and rock. Site topography slopes from the center of the lot to the north to an existing depression/pond. As shown on FEMA Panel #386G, the site is not located in a flood plain.

PROPOSED CONDITIONS:

As shown by the plan, the proposed structure is located within the center portion of the lot. Flows from the south, and east will continue to cross the site as currently flowing as shown on the plan. On site flows will drain around the structures via swales, and flow to the north to the existing pond along the northerly of the lot. All roof drainage will discharge from the roof to the lot and be directed around the structures to existing drainage paths and new ponding area. The amount of runoff due to development will be retained on site in the existing pond as shown.

CALCULATIONS:

The calculations shown hereon define the 100 year–6 hour design storm falling within the project area under existing and developed conditions

PROPERTY ADDRESS:

1200 Hideaway Ln SE, Albuquerque, NM 87123

TOPOGRAPHY:

Topographic information provided by Anthon Harris, dated October 2020.

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 9-21-21. The record information edited onto the original design document has been obtained by the surveyor. I further certify that I have personally visited the project site on July 31, 2023 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.

Elevations shown are based on field elevations taken on July 30, 2023

7-31-23

ANTHONY L. HARRIS
STATE OF NEW MEXICO
11453
REGISTERED PROFESSIONAL LAND SURVEYOR

JACKIE S. McDOWELL
NEW MEXICO
10903
REGISTERED PROFESSIONAL ENGINEER

6-21-21
REV. 8-17-21
REV. 9-21-21

7-31-23 ENGR CERT FOR CO

GENERAL DRAINAGE PLAN NOTES:

1. It is recommended that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.

2. This plan recommends positive drainage away from all structures to prohibit ponding of runoff adjacent to the structure. Future alterations of the grades next to the structures are not recommended.

3. Irrigation within 10 feet of any proposed structure is not recommended. Irrigation water adjacent to the structures could cause settlement.

4. This plan establishes on-site drainage and assumes no responsibility for subsurface analysis, foundation or structural design, or utility design.

5. Local codes may require all footings to be placed in natural undisturbed soil. If the contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer is recommended.

6. It is recommended that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.

7. The property boundary shown on this plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey.

8. All work shall be constructed in accordance with the City of Albuquerque Standard Specifications for Public Works Construction with updates.

9. All work on this project shall be performed in accordance with applicable Federal, State, and Local laws, rules, and regulations concerning construction safety and health.

10. Contactor shall ensure that no site soils/sediment or silt enters the right-of-ways during construction.

11. Areas disturbed due to construction shall be restored per City of Albuquerque Spec. 1012 native seed mix.

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

GENERAL PIPE CAPACITY
24" CULVERT
(ORIFICE EQUATION)
Q=CA*sqrt(2*g*h) = 21.4 cfs

POND DEPTH:

ELEV	AREA	VOL
5780.75	4930	
		2679.375
5780	2215	
		775.25
5779.3	0	
	SUB-TOTAL	3454.625
		CF

POND (EXISTING) VOLUME PROVIDED

ELEV	AREA	VOL
5782	12570	
		10108
5781	7646	
		4930.5
5780	2215	
	SUB-TOTAL	15038.5
		CF

CULVERT TABLE

CULVERT NO.	LOCATION	SIZE (in)	MATERIAL TYPE	LENGTH (ft)	SLOPE (ft/ft)	FULL CAPACITY (cfs)
1	street to NW inlet	24	CMP	84	0.112	41.01
2	inlet to inlet	24	CMP	244	0.140	45.85
3	inlet to outfall	24	CONC.	124	0.094	69.36
4	berm inlet to outfall	24	CMP	74	0.041	24.81

Precipitation Zone = 4
Depth at 100-year, 6-hour storm:

Land Treatments:

Areas: (acres)	Existing	Proposed
Treatment A	2.89	1.90
Treatment B	0.00	0.44
Treatment C	0.00	0.25
Treatment D	0.00	0.30
Total (acres) =	2.89	2.89

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.19	0.26	0.07	0.12	0.00	0.04
Volume (cubic feet) =	8,393	11,442	2,937	5,169	210	1,659

POND VOLUME REQUIRED = (11442-8393) = 3049 CF
OR = 14764-11442 = 3322 CF
FIRST FLUSH POND VOL = 0.34/12*0.3*43560 = 370 CF

Total Q(p), cfs:	100 year Existing Q(p)*A	100 year Proposed Q(p)*A	10 year Existing Q(p)*A	10 year Proposed Q(p)*A	2 year Existing Q(p)*A	2 year Proposed Q(p)*A
Treatment A	6.36	4.18	2.51	1.65	0.14	0.10
Treatment B	0.00	1.28	0.00	0.64	0.00	0.17
Treatment C	0.00	0.93	0.00	0.57	0.00	0.25
Treatment D	0.00	1.58	0.00	1.07	0.00	0.65
Total Q (cfs) =	6.36	7.97	2.51	3.93	0.14	1.16

√ (10 day) = V (360) + A (D) * (P10day-P360)/12 in/ft = 0.3389 ac-ft
= 14764 cu-ft

ENGINEER'S CERTIFICATION:
I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on June 9, 2021, and as of that date it appeared that no filling, grading, or excavation had occurred thereon since completion of the topographic survey used to prepare this plan.

1200 Hideaway Ln SE, Albuquerque, NM 87123
CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

LOT 6
FOUR HILLS VILLAGE 21st INSTALLMENT

ALIKHANI, NASER – GRADING & DRAINAGE PLAN

McDowell Engineering, Inc.

Designed	Drawn	Checked	Sheet	of
JSM	STAFF	JSM	1	1
File ALI0121L	Date JUNE,2021			

GRADING
6-11-21
1=30
ALI0121L