CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director

Mayor Timothy M. Keller

November 20, 2018

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

RE: 5046 Valle Del Sol Rd. NW
Grading and Drainage Plan
Engineer's Stamp Date: 11/06/18
Hydrology File: J11D038

Dear Ms. McDowell:

Based upon the information provided in your resubmittal received 11/19/18, the Grading and Drainage Plan is approved for Building Permit.

Once the grading is complete, a pad certification will be required prior to release of Building Permit. Once I issue an approval letter for pad certification, please attach a copy of this letter and the pad certification approval letter in the construction sets for Building Permit process.

Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required and a formal Elevation Certificate needs to be submitted to Hydrology.

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

PO Box1293

Albuquerque

NM 87103

www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: MCDONALD, JIMMIE & DEBORAH Building Permit #: 2018-25223 Hydrology File #: J11D038

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

Legal Description: LOT 2, PLAT OF LOTS 1-2, LANDS OF MCDONALD

City Address: 5046 VALLE DEL SOL RD. NW, ALBUQUERQUE, NM 87105

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

Other Contact: MCDONALD, JIMMIE & DEBORAH Contact: JIMMIE MCDONALD

Address: 506 REGINA RD. NW

Phone#: 505-563-2981 Fax#: _____ E-mail: mcdonald.jimmie@gmail.com

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) X RESIDENCE _____ DRB SITE ___ ADMIN SITE

IS THIS A RESUBMITTAL? X Yes _____ No

DEPARTMENT _____ TRANSPORTATION X HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

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

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

X 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: 11-19-18 By: JACKIE MCDOWELL

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director

Mayor Timothy M. Keller

September 25, 2018

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

RE: 5046 Valle Del Sol Rd. NW
Grading and Drainage Plan
Engineer's Stamp Date: 09/07/18
Hydrology File: J11D038

Dear Ms. McDowell:

PO Box1293

Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 09/10/2018, the Grading Plan **is not** approved for Building Permit. The following comments need to be addressed for approval of the above referenced project:

1. Currently the design does not follow the Flat Grading Scheme outlined in the DPM. Please follow Chapter 22 Section 5.G (Flat Grading Scheme). The following conditions must be applied to the site:
    a. The maximum percent impervious of the lot and the contributing area may not be greater than 45%. The site meets this requirement.
    b. Pad elevation shall be a minimum of one (1) foot above the 100 year 10-day storm water surface elevation. The finished floor of the main level is 6 feet above existing grade and the basement is 10' below main level.
    c. The flow between the front yard and back yard cannot be obstructed. The storm water must be allowed to equalize to the same level between the front yard and back yard. Note has been added.
    d. A permanent perimeter wall or barrier around the development is required to contain the 100 year 24 hour storm developed runoff. Note has been added.
    e. The high point of the street should be four inches above the 100 year 10-day storm water surface elevation. Note has been added.

2. Also a retention pond is required. The required volume = (3.67 in. X impervious area / (12in/ft)). The location with elevation of pond and the calculation of both the required and actual volume needs to be shown on the Grading Plan. Note has been added.

3. Please place gravel and slope the hammer head on this project's property at least. Transportation may want the entire hammer head built. This is for the Fire Department. The area of this graveled hammer head needs to be included in the Type C soil in the calculations. Note has been added.

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

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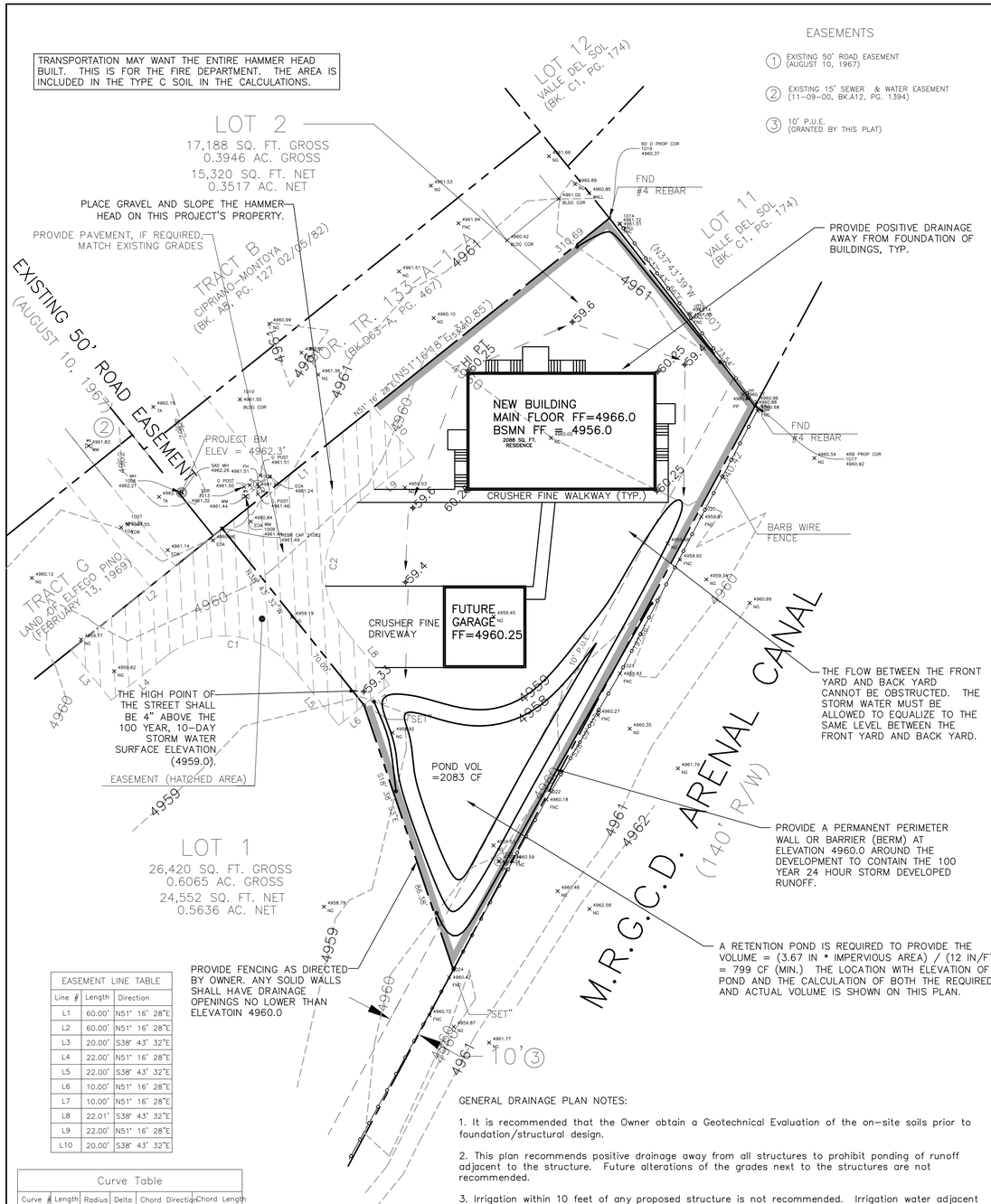
TRANSPORTATION MAY WANT THE ENTIRE HAMMER HEAD BUILT. THIS IS FOR THE FIRE DEPARTMENT. THE AREA IS INCLUDED IN THE TYPE C SOIL IN THE CALCULATIONS.



EASEMENTS

1. EXISTING 50' ROAD EASEMENT (AUGUST 10, 1967)
2. EXISTING 15' SEWER & WATER EASEMENT (11-09-00, BK.A12, PG. 1394)
3. 10' P.U.E. (GRANTED BY THIS PLAT)

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

EASEMENT LINE TABLE		
Line #	Length	Direction
L1	60.00'	N51° 16' 28"E
L2	60.00'	N51° 16' 28"E
L3	20.00'	S38° 43' 32"E
L4	22.00'	N51° 16' 28"E
L5	22.00'	S38° 43' 32"E
L6	10.00'	N51° 16' 28"E
L7	10.00'	N51° 16' 28"E
L8	22.01'	S38° 43' 32"E
L9	22.00'	N51° 16' 28"E
L10	20.00'	S38° 43' 32"E

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	43.98'	28.00'	90.00	N83° 43' 32"W	39.60'
C2	43.98'	28.00'	90.00	S6° 16' 28"W	39.60'

FLOOD ZONE NOTE:
THIS PROPERTY IS LOCATED WITHIN FLOOD ZONE X (SHADED) AREAS OF .2% CHANCE ANNUAL FLOOD;
AREAS OF 1% CHANCE ANNUAL FLOOD WITH AVERAGE DEPTHS OF LESS THAN ONE FOOT OR WITH DRAINAGE AREAS LESSS THAN ONE SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% CHANCE ANNUAL FLOOD.

STANDARD GRADING NOTE:
THE MAXIMUM GRADED SIDE SLOPE SHALL NOT EXCEED 3 FEET (HORIZONTALLY) TO 1 FOOT (VERTICALLY). AREAS DISTURBED BY GRADING WHICH WILL NOT BE TREATED WITH LANDSCAPING SHALL BE SEEDED.

STANDARD WALL AND PAD CERTIFICATION NOTES:

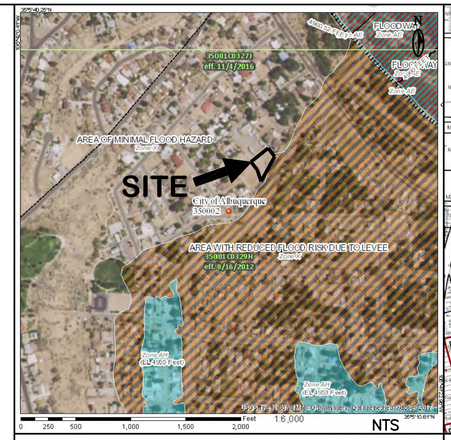
ALL PERMITER GARDEN WALLS SHALL BE PERMITTED SEPARATELY.

A PAD CERTIFICATION MAY BE REQUIRED BEFORE THE BUILDING PERMIT IS RELEASED.

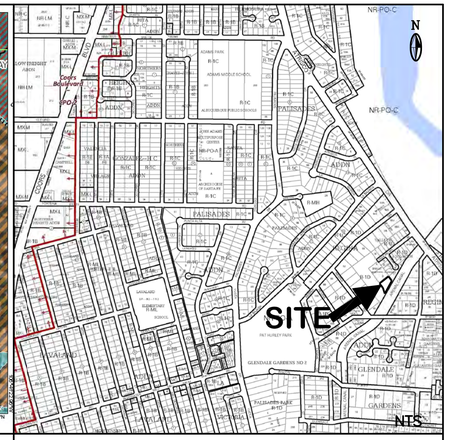
GRADING
8-2-18
1=20
MCD0118L

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



FEMA FLOODWAY MAP PANEL #329H



VICINITY MAP ZONE ATLAS J-11

DRAINAGE PLAN

SCOPE:

Pursuant to the latest City of Albuquerque and Bernalillo County Ordinances, 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 for the site with associated parking, access, landscaping, and utility improvements.

EXISTING CONDITIONS:

Presently, the 0.39 acre site is undeveloped. The site is bounded on the northwest, northeast, and southwest by private property, and on the southeast by MRGCD Arenal Canal. The site is relatively level. As shown on FEMA Panel #329H, dated August 16, 2012, the site is not located in a 100 year flood plain.

PROPOSED CONDITIONS:

Current COA Drainage Ordinance requires a "Flat Grading Scheme" for this area in the City. A pond has been provided to store the runoff from this site. As shown by the plan, the building is located in the center of the lot. Off-site flows enter the site from the west. On site flows will drain around the structures via swales, and flow to the southeast to the retention pond. All roof drainage will discharge from the roof to the lot and be directed around the structures to the drainage paths and pond.

Supplemental calculations are shown as part of this Grading and Drainage plan.

CALCULATIONS:

The calculations shown hereon define the 100 year-6 hour design storm falling within the project area under existing and developed conditions. The Hydrology is per "Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque, New Mexico in cooperation with Bernalillo County, New Mexico and the Albuquerque Metropolitan Arroyo Flood Control Authority.

PROPERTY ADDRESS:

5046 Valle del Sol Rd. NW, Albuquerque, NM 87105

TOPOGRAPHY:

Topographic information provided by David Acosta, PS, CTSI (Construction Survey Technologies, Inc.) August, 2018.

Precipitation Zone = 1
Depth at 100-year, 6-hour storm: (Table A-2) P(360) = 2.20 inches
P(10 day) = 3.67 inches

Land Treatments:
From Table 5 - Percent Treatment D
Single Family Residential =
7*SQR((N*N) +(5*N))
where N = units/acre
N = ---------- = -----, ok < 6

ZONE 1

Areas: (acres)	Existing	Proposed
Treatment A	0.39	0.00
Treatment B	0.00	0.10
Treatment C	0.00	0.23
Treatment D	0.00	0.06
Total (acres) =	0.39	0.39

POND VOLUME PROVIDED:

ELEV.	AREA	VOL. (CF)
4959	2835	
		2083
4958	1331	
	TOTAL	2083

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.014	0.034	0.003	0.016	0.000	0.006
Volume (cubic feet) =	623	1,499	113	717	0	261

FIRST FLUSH REQUIRED POND VOL = 3.67"/(12"/FT)*(0..06 AC * 43560 SF/AC) = 799 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	0.50	0.00	0.09	0.00	0.00	0.00
Treatment B	0.00	0.20	0.00	0.08	0.00	0.00
Treatment C	0.00	0.66	0.00	0.34	0.00	0.11
Treatment D	0.00	0.26	0.00	0.17	0.00	0.10
Total Q (cfs) =	0.50	1.13	0.09	0.59	0.00	0.21

POND VOLUME REQUIRED:
V (10 day) = V (360) + A (D) * (P10day-P360)/12 in/ft = 0.0418 ac-ft
= 1819 cu-ft

LEGEND

	EXISTING	PROPOSED
CONTOUR	6045	6045
PROPERTY LINE		
ROAD		
SETBACK		
WALL		
SPOT ELEVATION	4959.45 NG	XX.X

JACKIE S. McDOWELL NEW MEXICO 14969 REGISTERED PROFESSIONAL ENGINEER
9-7-18
REV 11-6-18

ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on August 21, 2018 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.

5046 Valle del Sol Rd. NW, Albuquerque, NM 87105

CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

LOT 2, PLAT OF LOTS 1-2
LANDS OF MCDONALD

MCDONALD - GRADING & DRAINAGE PLAN

McDowell Engineering, Inc.
7820 BEVERLY HILLS AVE. NE • ALBUQUERQUE, NM 87122
TELE: 505-828-2430 • FAX: 505-821-4857

Designed	Drawn	Checked	Sheet	of
JSM	STAFF	JSM	1	1

File MCD0118L Date AUGUST,2018