CITY OF ALBUQUERQUE

Hydrology Section Planning Department
David S. Campbell, Director

Timothy M. Keller, Mayor

November 14, 2018

Jackie McDowell, PE
McDowell Engineering, Inc.
7820 Beverly Hills Ave NE
Albuquerque, NM 87121

RE: 2704 Corte Mirabal Rd
Grading Plan & Drainage Plan
Engineer's Stamp Date: 11/08/2018
Hydrology File: J12D029

Based upon the information provided in your submittal received 11/13/2018, the Grading and Drainage Plan is approved for Building Permit and Grading Permit. Include a copy of this letter and the approved plan in the Building Permit plan sets.

Prior to Certificate of Occupancy an Engineer's Certification must be submitted to and approved by the Hydrology Section. Standard resubmittal fees apply.

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Curtis Cherne, PE, ccherne@cabq.gov, 924-3420) 14 days prior to any earth disturbance, Building Permit, or Work Order.

If you have any questions, please contact me at 924-3986 or e-mail jhughes@cabq.gov.

James D. Hughes, P.E.

Principal Engineer, Planning Dept.
Development and Review Services

CC Bob Norman, Owner

PO Box 1293

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: NORMAN HOME Building Permit #: _____ Hydrology File #: _____

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

Legal Description: LOT 3-P1, VILLA PLAZA VIEJA SUBDIVISION

City Address: 2704 CORTE MIRABAL RD. NW

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: BOB NORMAN, OWNER Contact: BOB NORMAN

Address: 830 NEWTON WAY, CHINO VALLEY, AZ 86323-6397

Phone#: 928-237-6610 Fax#: _____ E-mail: rnorman@sunpinehomes.com

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

IS THIS A RESUBMITTAL? _____ Yes X 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

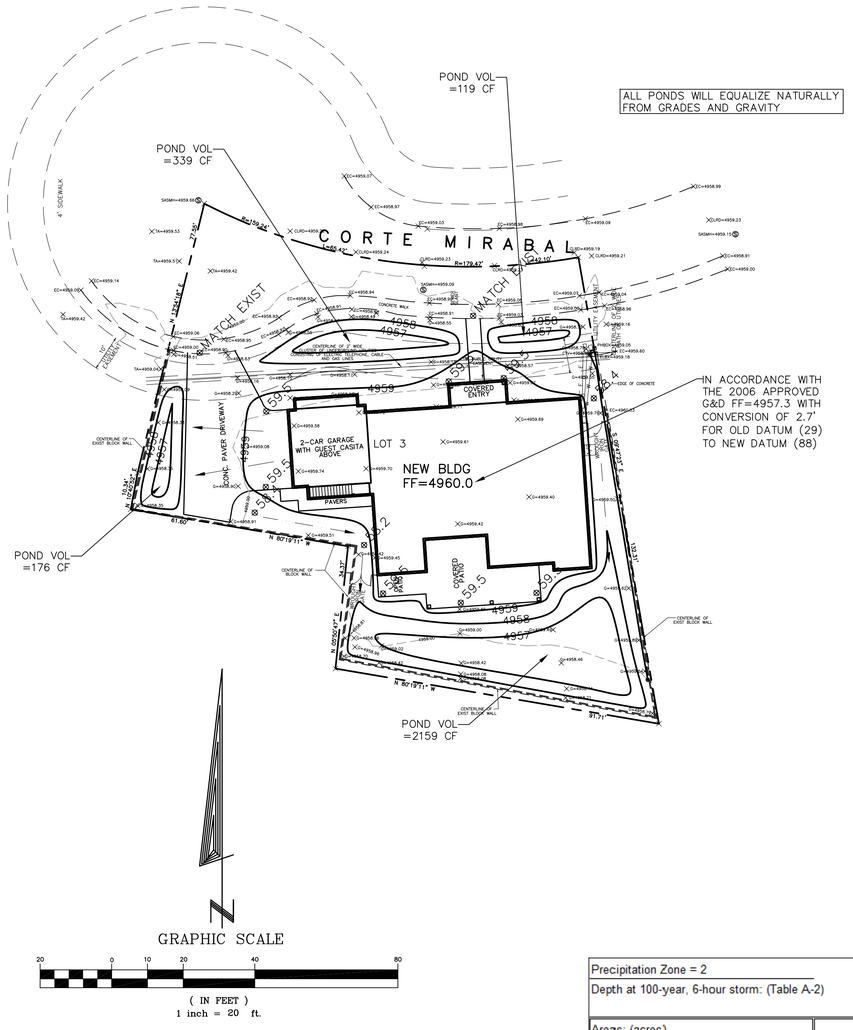
____ PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
____ SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL

____ 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: 11-12-18 By: JACKIE MCDOWELL

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

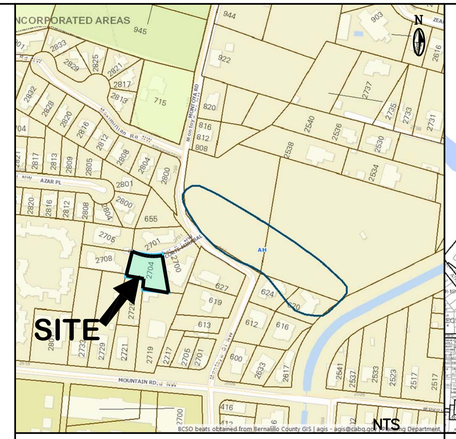


STANDARD GRADING NOTE:
THE MAXIMUM GRADED SIDE SLOPE SHALL NOT EXCEED 3 FEET (HORIZONTALLY) TO 1 FOOT (VERTICALLY). AREAS DISTURBED BY GRADING WHICH WILL NOT BE TREATED WITH LANDSCAPING SHALL BE SEEDED.

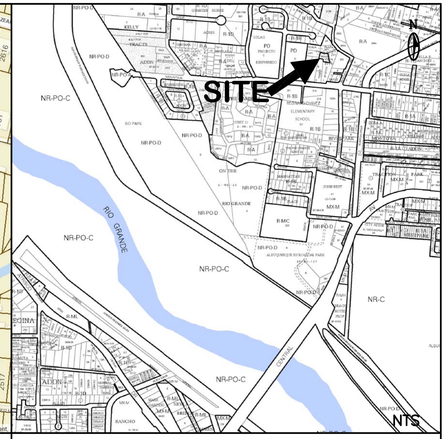
STANDARD WALL AND PAD CERTIFICATION NOTES:

ALL PERMITER GARDEN WALLS SHALL BE PERMITTED SEPARATELY.

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



FEMA FLOODWAY MAP PANEL #331H



VICINITY MAP ZONE ATLAS J-12

DRAINAGE PLAN

SCOPE:

Pursuant to the latest City of Albuquerque 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 0.31 acre site is undeveloped. The site is bounded on the west, south and east by private property, and on the north by Corte Mirabal street. The site is relatively level. As shown on FEMA Panel #331H, 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 all around. On site flows will drain around the building via swales and gravity overflow, and flow to the west and south to retention ponds. All roof drainage will discharge from the roof to the lot and into site retention ponds.

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:

2704 Corte Mirabal Rd. NW, Albuquerque, NM 87104

TOPOGRAPHY:

Topographic information provided by Anthony Harris, NMPS, Harris Surveying, Inc. dated October, 2018.

LEGEND

	EXISTING	PROPOSED
CONTOUR	6045	6045
PROPERTY LINE		
ROAD		
SETBACK		
WALL		
SPOT ELEVATION	×G=4959.69	⊗59.5

Precipitation Zone = 2

Depth at 100-year, 6-hour storm: (Table A-2) P(360) = 2.35 inches
P(10 day) = 3.95 inches

Areas: (acres)	Existing	Proposed
Treatment A	0.31	0.00
Treatment B	0.00	0.07
Treatment C	0.00	0.07
Treatment D	0.00	0.17
Total (acres) =	0.31	0.31

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.014	0.041	0.003	0.024	0.000	0.012
Volume (cubic feet) =	596	1,794	146	1,030	0	531

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	0.48	0.00	0.12	0.00	0.00	0.00
Treatment B	0.00	0.16	0.00	0.07	0.00	0.01
Treatment C	0.00	0.22	0.00	0.12	0.00	0.04
Treatment D	0.00	0.80	0.00	0.53	0.00	0.32
Total Q (cfs) =	0.48	1.18	0.12	0.72	0.00	0.36

V (10 day) = V (360) + A (D) * (P10day-P360)/12 in/ft = 0.0638 ac-ft
= 2781 cu-ft

NW POND VOL. PROVIDED:		
ELEV	AREA	VOL
4958	497	
		339
4957	180	
	TOT. VOL =	339

WEST POND VOL. PROVIDED:		
ELEV	AREA	VOL
4958	284	
		176
4957	67	
	TOT. VOL =	176

NE POND VOL. PROVIDED:		
ELEV	AREA	VOL
4958	195	
		119
4957	43	
	TOT. VOL =	119

SOUTH POND VOL. PROVIDED:		
ELEV	AREA	VOL
4958.5	2100	
		929
4958	1616	
		1230
4957	844	
	TOT. VOL =	2159
	TOTAL POND VOL =	2792

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.

GRADING
10-25-18
1=20
NOR0118T

JACKIE S. McDOWELL NEW MEXICO 12363 REGISTERED PROFESSIONAL ENGINEER
11-8-18

ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on November 2, 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.

2704 CORTE MIRABAL RD. NW, ALBUQUERQUE, NM 87104

CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

LOT 3-P1
VILLA PLAZA VIEJA SUBDIVISION

NORMAN, BOB - 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 NOR0118T Date OCTOBER,2018