CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

March 29, 2023

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

RE: 501 Tres Lagunas Lane NE
Grading and Drainage Plan
Engineer's Stamp Date: 03/20/23
Hydrology File: E16D016A

Dear Ms. McDowell:

Based upon the information provided in your submittal received 03/21/2023, the Grading and Drainage Plan is approved for Building Permit and Grading Permit. **Since this project consists of stim walls, a pad certification is not needed for this project**. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): Engineer's Certification Checklist For Non-Subdivision is required.

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

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

Legal Description: LOT 1, TRES LAGUNAS SUBDIVISION

City Address: 501 TRES LAGUNAS LN NE ALBUQUERQUE NM 87113

Applicant: MCDOWELL ENGINEERING, INC. Contact: JACKIE MCDOWELL

Address: 7820 BEVERLY HILLS AVE. NE

Phone#: 505-828-2430 Fax#: 505-821-4857 E-mail: jackmcdowell@comcast.net

Other Contact: WILKIE STEVEN Contact: WILKIE STEVEN

Address: 7209 CIENEGA RD NW ALBUQUERQUE NM 87120

Phone#: 505-263-5375 Fax#: _____ E-mail: swilkie@souers-const.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

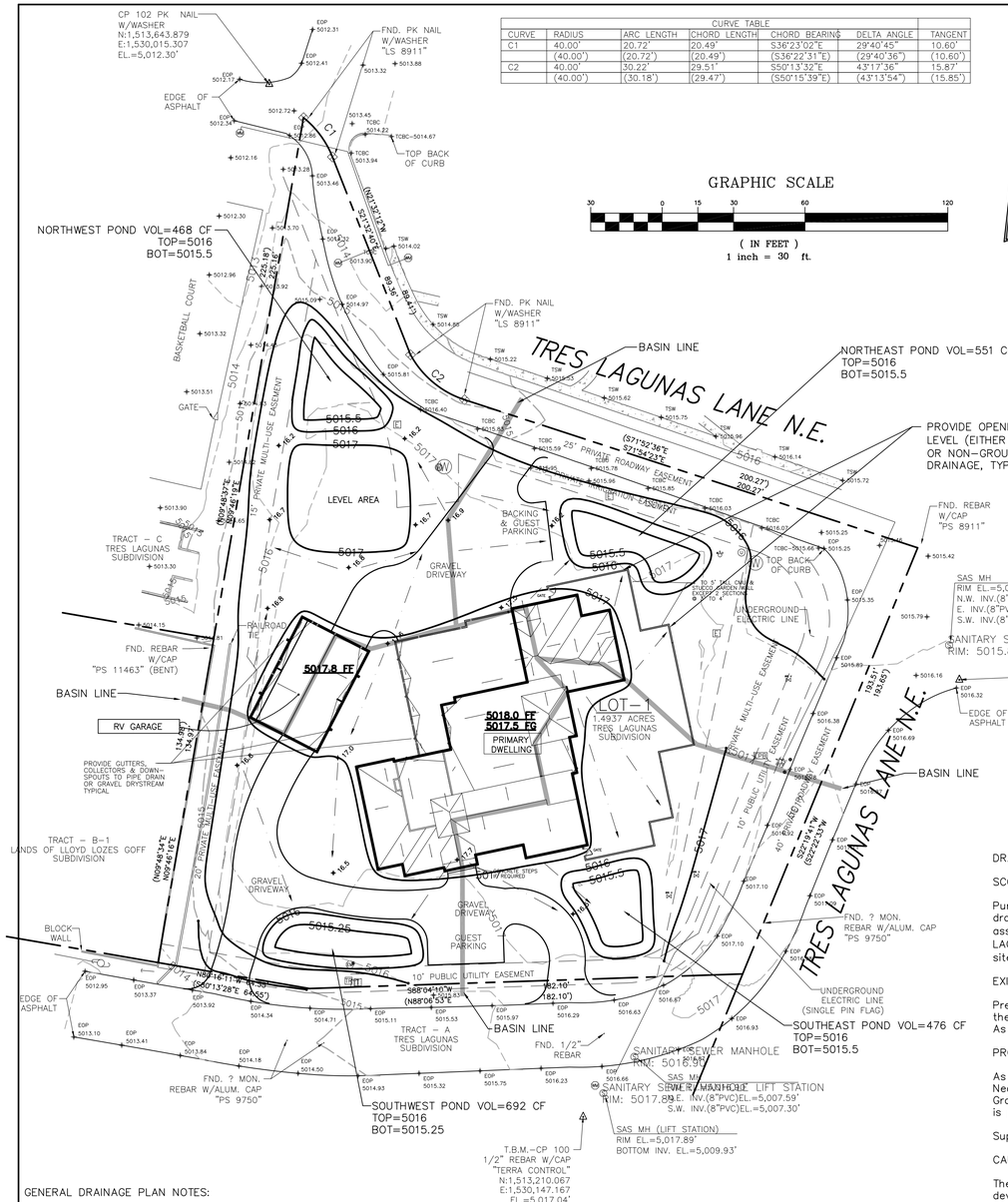
____ PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
____ SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL

____ 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: 3-20-23 By: JACKIE MCDOWELL

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



CURVE TABLE						
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE	TANGENT
C1	40.00'	20.72'	20.49'	S36°23'02"E	29°40'45"	10.60'
	(40.00')	(20.72')	(20.49')	(S36°22'31"E)	(29°40'36")	(10.60')
C2	40.00'	30.22'	29.51'	S50°13'32"E	43°17'36"	15.87'
	(40.00')	(30.18')	(29.47')	(S50°15'39"E)	(43°13'54")	(15.85')

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.

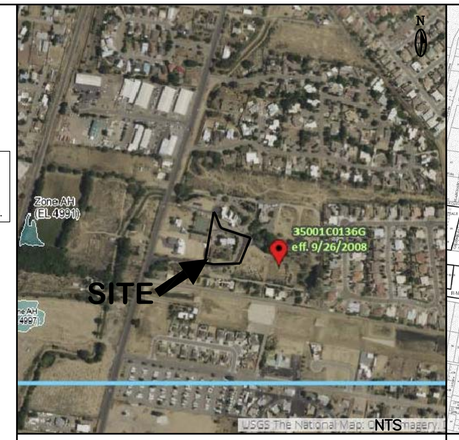
PROPERTY LINE WALLS AND GARDEN WALLS SHALL HAVE TURNED BLOCKS FOR DRAINAGE. ALL OPENINGS IN THE WALLS SHALL BE 3" ABOVE GRADE, TYP.

STANDARD WALL AND PAD CERTIFICATION NOTES:

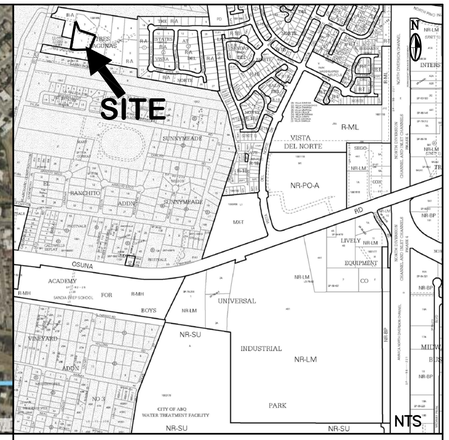
ALL PERMITER GARDEN WALLS SHALL BE PERMITTED SEPARATELY.

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

This is the plan to be used for any garden walls and any openings in the walls shall be placed 3" above final grade in the rear yard to allow for cross lot drainage from west to east (upstream to downstream).



FEMA FLOODWAY MAP PANEL #136G



VICINITY MAP ZONE ATLAS E-16

SURVEY NOTES:

PROJECT LOCATION

501 TRES LAGUNAS LANE NE, ALBUQUERQUE, NEW MEXICO

SURVEY INFORMATION

TOPOGRAPHIC SURVEY PERFORMED AND COMPILED BY TERRA LAND SURVEYS, LLC. CORRALES, NEW MEXICO JUNE 2022.

PROJECT BENCHMARK

PROJECT BENCHMARK IS A CITY OF ALBUQUERQUE 1 3/4" ALUMINUM DISK, STAMPED "ACS BM, 20-E15", EPOXIED ON TOP OF A CONCRETE CURB RETURN, SSE QUADRANT OF SECOND ST. & GREEN VALLEY RD. ELEVATION = 4,983.679 FEET (NAVD 88 VERTICAL DATUM).

TEMPORARY BENCHMARK

TEMPORARY BENCHMARK IS A TERRA LAND SURVEYS CONTROL MONUMENT CP 100 BEING A SET 1/2 INCH REBAR WITH CAP STAMPED "TERRA CONTROL". ELEVATION = 5,017.04 FEET (NAVD 88 VERTICAL DATUM)

NOTES

1. FIELD SURVEY PERFORMED IN JUNE 2022.

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 0.999677298291 SCALED AROUND CP 100.

3. ELEVATIONS SHOWN FOR PIPES ARE INVERT ELEVATIONS UNLESS OTHERWISE SPECIFIED.

4. CONTOURS SHOWN HEREON ARE AT A ONE FOOT INTERVAL REFERENCED TO THE NAVD 88 VERTICAL DATUM.

5. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL OF THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE

6. PIPE SIZES AND MATERIAL TYPES FOR MANHOLES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEYS AND VISUAL INSPECTIONS. THE SURVEYOR MAKES NO GUARANTEE THAT THE PIPE SIZES AND MATERIAL TYPES ARE EXACT BUT DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.

7. THIS IS NOT A BOUNDARY SURVEY PROPERTY LINES SHOWN ARE FOR ORIENTATION ONLY. INFORMATION TAKEN FROM PLAT RECORDED WITH THE BERNALILLO COUNTY CLERKS OFFICE.

EROSION AND SEDIMENT CONTROL:
PROVIDE SILT FENCING OR BERM AT DOWNSTREAM SIDE OF SITE DURING CONSTRUCTION TO PREVENT DEBRIS FROM ENTERING THE CITY STREET RIGHT-OF-WAY DURING CONSTRUCTION.

This plan shall be used for the Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) which is required to be submitted by the owner/contractor to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.

COA EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.

3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.

5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.

SURVEY LEGEND

- CONTROL MONUMENT (AS NOTED)
- FOUND REBAR (AS NOTED)
- FOUND PK NAIL (AS NOTED)
- SAS MANHOLE
- WATER WELL
- YARD HYDRANT
- IRRIGATION VALVE
- WATER METER
- FIRE HYDRANT
- ELECTRIC BOX
- ELECTRIC PULLBOX
- GUY WIRE
- POWER POLE
- TRANSFORMER
- ELECTRIC METER
- TELEPHONE PEDESTAL
- UNKNOWN MANHOLE
- STREET SIGN
- BOLLARD
- 5090.XX SPOT ELEVATION
- RECORD PROPERTY LINE
- CHAIN LINK FENCE
- OVERHEAD POWER
- UNDERGROUND WATER LINE
- UNDERGROUND FIBER OPTIC LINE
- UNDERGROUND GAS LINE
- CONCRETE HATCH

LEGEND

	EXISTING	PROPOSED
CONTOUR	5043	5043
PROPERTY LINE		
ROAD		
SETBACK		
WALL		
SPOT ELEVATION	18.09	+XX.X

City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED
03/29/23
DATE:
BY: Renée C. Brissette
HydroTrans # E16D016A
THE APPROVAL OF THESE PLANS/REPORT SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS, SPECIFICATIONS, OR CONSTRUCTIONS. SUCH APPROVED PLANS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION.

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. This project includes a home with associated driveway, landscaping, and utilities. There is a master drainage plan for the site identified as "E16-D16_TRES LAGUNAS SUBD_PLANS_No_" in the City files which shows the required ponding locations and as-built conditions for the entire site. This plan includes water harvesting/first flush ponding for the site for best practices.

EXISTING CONDITIONS:

Presently, the 1.49 acre site is undeveloped but has been graded according to the master grading plan. The site is bounded on the west by private property, and on the north, east, and south by Tres Lagunas Lane NE. The site slopes from east to west. As shown on FEMA Panel #136G, dated September 26, 2008, the site is not located in a 100 year flood plain.

PROPOSED CONDITIONS:

As shown by the plan, the site will drain around the home to ponding areas and will mostly follow the existing grades. Negligible off-site flows enter the site due to existing grades and will continue to flow per existing patterns. Per the Master Grading & Drainage plan for Tres Lagunas Subdivision, the site is not required to have additional ponding, but First Flush ponding is provided for best practices.

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.

PROPERTY ADDRESS:

501 TRES LAGUNAS LN NE ALBUQUERQUE NM 87113

TOPOGRAPHY:

Topographic information provided by Christopher Medina, dated June 28, 2022.

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
10-26-22
1=30
WIL0122L

Precipitation Zone = 2
NORTHWEST BASIN

Areas: (acres)	Existing	Proposed
Treatment A	0.37	0.00
Treatment B	0.00	0.16
Treatment C	0.00	0.10
Treatment D	0.00	0.02
Total (acres) =	0.37	0.37

POND VOLUME PROVIDED:

ELEV.	AREA	VOL. (CF)
5016	1259	
		468.25
5015.5	614	
	TOTAL	468.25

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.015	0.034	0.004	0.015	0.000	0.006
Volume (cubic feet) =	712	1,494	175	708	0	242

FIRST FLUSH POND VOL = 0.34"(12"/FT")/0.37 AC * 43560 SF/AC) = 456 CF

Total Q(p), cfs:	100 yr Existing Q(p)*A	100 yr Proposed Q(p)*A	10 yr Existing Q(p)*A	10 yr Proposed Q(p)*A	2 yr Existing Q(p)*A	2 yr Proposed Q(p)*A
Treatment A	0.58	0.00	0.14	0.00	0.00	0.00
Treatment B	0.00	0.36	0.00	0.15	0.00	0.01
Treatment C	0.00	0.50	0.00	0.27	0.00	0.10
Treatment D	0.00	0.24	0.00	0.18	0.00	0.09
Total Q (cfs) =	0.58	1.10	0.14	0.58	0.00	0.20

Precipitation Zone = 2
NORTHEAST BASIN

Areas: (acres)	Existing	Proposed
Treatment A	0.40	0.00
Treatment B	0.00	0.19
Treatment C	0.00	0.19
Treatment D	0.00	0.02
Total (acres) =	0.40	0.40

POND VOLUME PROVIDED:

ELEV.	AREA	VOL. (CF)
5016	1486	
		551
5015.5	718	
	TOTAL	551

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.018	0.036	0.004	0.015	0.000	0.006
Volume (cubic feet) =	770	1,471	189	649	0	178

FIRST FLUSH POND VOL = 0.34"(12"/FT")/0.40 AC * 43560 SF/AC) = 494 CF

Total Q(p), cfs:	100 yr Existing Q(p)*A	100 yr Proposed Q(p)*A	10 yr Existing Q(p)*A	10 yr Proposed Q(p)*A	2 yr Existing Q(p)*A	2 yr Proposed Q(p)*A
Treatment A	0.62	0.00	0.15	0.00	0.00	0.00
Treatment B	0.00	0.43	0.00	0.18	0.00	0.02
Treatment C	0.00	0.60	0.00	0.32	0.00	0.11
Treatment D	0.00	0.09	0.00	0.06	0.00	0.04
Total Q (cfs) =	0.62	1.12	0.15	0.57	0.00	0.17

Precipitation Zone = 2
SOUTHEAST BASIN

Areas: (acres)	Existing	Proposed
Treatment A	0.31	0.00
Treatment B	0.00	0.13
Treatment C	0.00	0.13
Treatment D	0.00	0.05
Total (acres) =	0.31	0.31

POND VOLUME PROVIDED:

ELEV.	AREA	VOL. (CF)
5016	1249	
		476.25
5015.5	656	
	TOTAL	476.25

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.014	0.030	0.003	0.014	0.000	0.005
Volume (cubic feet) =	596	1,280	146	621	0	224

FIRST FLUSH POND VOL = 0.34"(12"/FT")/0.31 AC * 43560 SF/AC) = 382 CF

Total Q(p), cfs:	100 yr Existing Q(p)*A	100 yr Proposed Q(p)*A	10 yr Existing Q(p)*A	10 yr Proposed Q(p)*A	2 yr Existing Q(p)*A	2 yr Proposed Q(p)*A
Treatment A	0.48	0.00	0.12	0.00	0.00	0.00
Treatment B	0.00	0.30	0.00	0.12	0.00	0.01
Treatment C	0.00	0.41	0.00	0.22	0.00	0.08
Treatment D	0.00	0.24	0.00	0.16	0.00	0.09
Total Q (cfs) =	0.48	0.94	0.12	0.50	0.00	0.18

Precipitation Zone = 2
SOUTHWEST BASIN

Areas: (acres)	Existing	Proposed
Treatment A	0.42	0.00
Treatment B	0.00	0.14
Treatment C	0.00	0.14
Treatment D	0.00	0.14
Total (acres) =	0.42	0.42

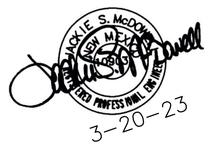
POND VOLUME PROVIDED:

ELEV.	AREA	VOL. (CF)
5016	1277	
		692.625
5015.25	570	
	TOTAL	692.625

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.019	0.047	0.005	0.023	0.000	0.011
Volume (cubic feet) =	808	2,048	198	1,088	0	488

FIRST FLUSH POND VOL = 0.34"(12"/FT")/0.42 AC * 43560 SF/AC) = 518 CF

Total Q(p), cfs:	100 yr Existing Q(p)*A	100 yr Proposed Q(p)*A	10 yr Existing Q(p)*A	10 yr Proposed Q(p)*A	2 yr Existing Q(p)*A	2 yr Proposed Q(p)*A
Treatment A	0.65	0.00	0.16	0.00	0.00	0.00
Treatment B	0.00	0.32	0.00	0.13	0.00	0.01
Treatment C	0.00	0.44	0.00	0.24	0.00	0.08
Treatment D	0.00	0.66	0.00	0.44	0.00	0.26
Total Q (cfs) =	0.66	1.42	0.16	0.81	0.00	0.36



ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on July 20, 2022 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.

501 TRES LAGUNAS LN NE ALBUQUERQUE NM 87113

CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

LOT 1
TRES LAGUNAS SUBDIVISION

WILKIE - GRADING & DRAINAGE PLAN

McDowell Engineering, Inc.
7820 BEVERLY HILLS AVE. NE, ALBUQUERQUE, NM 87122
TELE: 505-828-2430 EMAIL: JackMcDowell@comast.net

Designed	Drawn	Checked	Sheet of
JSM	STAFF	JSM	1 1
File WIL0122L	Date OCTOBER,2022		