

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Interim Director



Mayor Timothy M. Keller

August 8, 2022

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

**RE: Quality Builders – Lujan – 512 Tres Lagunas
512 Tres Lagunas Ln NE
Grading and Drainage Plan
Engineer's Stamp Date: 06/16/2022
Hydrology File: E16D016**

Dear Ms. McDowell:

Based upon the information provided in your submittal received 07/06/2022, the Grading & Drainage Plan is approved for Grading Permit (earthwork can get started for the earth pad on the house).

Once the grading is complete, a pad certification (meaning that the earthwork is complete) will be required prior to release from Hydrology during the Building Permit process. Also, at the time of pad certification approval, Hydrology will concurrently approve the Grading & Drainage Plan for Building Permit.

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 (Dough Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior

If you have any questions, please contact me at 924-3695 or dggutierrez@cabq.gov
Sincerely,

David G. Gutierrez, P.E.
Senior Engineer, Hydrology
Planning Department



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Quality Builders - Lujan - 512 Tres Lagunas **Building Permit #:** _____ **Hydrology File #:** E16D016
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: LOT 3, TRES LAGUNAS SUBDIVISION
City Address: 512 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: Mike Martinez, Quality Builders **Contact:** Mike Martinez
Address: PO Box 951, Peralta, NM 87042
Phone#: 505-869-9075 **Fax#:** 505-869-9085 **E-mail:** qualitybldg@comcast.net

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

IS THIS A RESUBMITTAL? ☒ Yes _____ No

DEPARTMENT _____ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

_____ ENGINEER/ARCHITECT CERTIFICATION
_____ PAD CERTIFICATION
_____ CONCEPTUAL G & D PLAN
☒ 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:

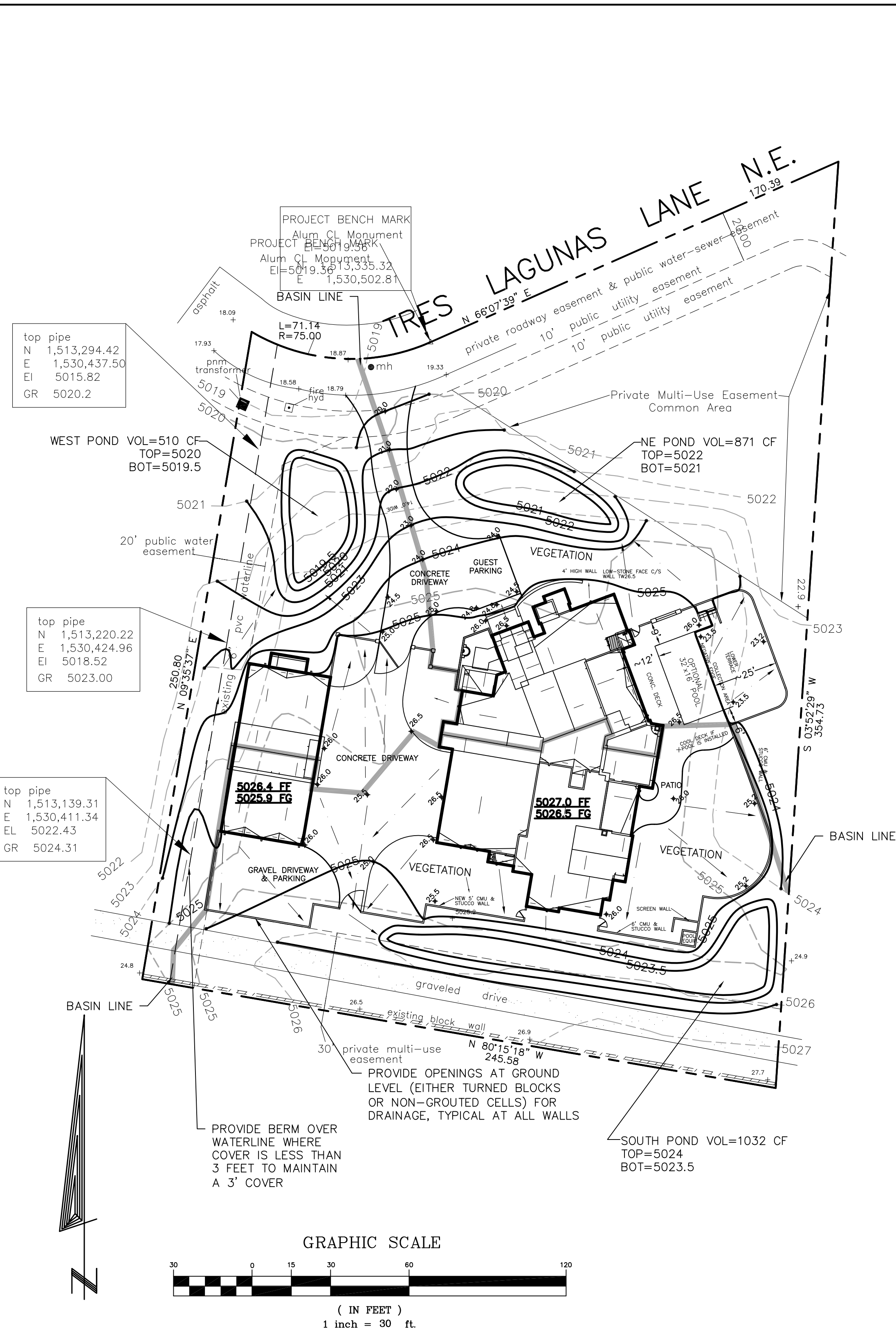
☒ BUILDING PERMIT APPROVAL
_____ CERTIFICATE OF OCCUPANCY
_____ PRELIMINARY PLAT APPROVAL
_____ SITE PLAN FOR SUB'D APPROVAL
_____ SITE PLAN FOR BLDG. PERMIT APPROVAL
_____ FINAL PLAT APPROVAL
_____ SIA/ RELEASE OF FINANCIAL GUARANTEE
_____ FOUNDATION PERMIT APPROVAL
☒ GRADING PERMIT APPROVAL
_____ SO-19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

DATE SUBMITTED: 6-17-22 **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.

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 PERMITTER 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).

SURVEY NOTES

- 1) Elevations shown hereon are NAVD 88 values, GPS derived using OPUS Solution. All distances shown are ground.
- 2) Any underground structure is not a part of this survey.
- 3) Bearings and distances shown are based on the Plat of Record (2005C-Page 187).
- 4) This property is subject to pertinent easements, matters of zoning, covenants, restrictions and reservations of record.
- 5) This survey shows only those easements apparent on the ground and those disclosed by the Plat of Record. No title search was performed by the Surveyor.

LEGAL DESCRIPTION

Lot numbered Three (3) of TRES LAGUNAS SUBDIVISION, as the same is shown and designated on the Plat thereof, filed in the Office of the County Clerk of Bernalillo County, New Mexico on June 6, 2005 in Book 2005C, Page 187.

Note: Elevations in NAVD 88, Northings & Eastings are New Mexico State Plane (3002 NM C).

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 1.53 acre site is undeveloped but has been graded according to the master grading plan. The site is bounded on the east, south, and west by private property, and on the north by Tres Lagunas Lane NE. The site slopes from south to north. 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. No off-site flows enter the site due to existing grades and walls on adjacent lots. 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:

512 TRES LAGUNAS LN NE ALBUQUERQUE NM 87113

TOPOGRAPHY:

Topographic information provided by Christopher Dehler, dated May 9, 2022.

Precipitation Zone = 2				WEST BASIN				POND VOLUME PROVIDED:			
				Existing	Proposed	Existing	Proposed	ELEV.	AREA	VOL. (CF)	
Treatment A				0.31	0.00			5020	1211		
Treatment B				0.00	0.15						
Treatment C				0.00	0.07						
Treatment D				0.00	0.09						
Total (acres) =				0.31	0.31					510.75	
Volume				100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed		
Volume (acre-feet) =				0.014	0.032	0.003	0.017	0.000	0.007		
Volume (cubic feet) =				595	1,424	140	722	0	307		
FIRST FLUSH POND VOL = 0.34"/(12"/FT)*(0.31 AC * 43560 SF/AC) = 383 CF											
Total Q(g), cfs:				100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed		
Treatment A				0.48	0.00	0.12	0.00	0.00	0.00		
Treatment B				0.00	0.34	0.00	0.14	0.00	0.01		
Treatment C				0.00	0.22	0.00	0.12	0.00	0.04		
Treatment D				0.00	0.42	0.00	0.28	0.00	0.17		
Total Q (cfs) =				0.48	0.98	0.12	0.54	0.00	0.22		

Precipitation Zone = 2				NE BASIN				POND VOLUME PROVIDED:			
				Existing	Proposed	Existing	Proposed	ELEV.	AREA	VOL. (CF)	
Treatment A				0.56	0.25			5022	1075		
Treatment B				0.00	0.15						
Treatment C				0.00	0.07						
Treatment D				0.00	0.21						
Total (acres) =				0.56	0.68					871	
Volume				100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed		
Volume (acre-feet) =				0.029	0.057	0.007	0.027	0.000	0.012		
Volume (cubic feet) =				1,270	2,485	311	1,195	0	559		
FIRST FLUSH POND VOL = 0.34"/(12"/FT)*(0.68 AC * 43560 SF/AC) = 815 CF											
Total Q(g), cfs:				100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed		
Treatment A				1.03	0.44	0.25	0.11	0.00	0.00		
Treatment B				0.00	0.34	0.00	0.14	0.00	0.01		
Treatment C				0.00	0.22	0.00	0.12	0.00	0.04		
Treatment D				0.00	0.75	0.00	0.50	0.00	0.30		
Total Q (cfs) =				1.03	1.75	0.25	0.87	0.00	0.35		

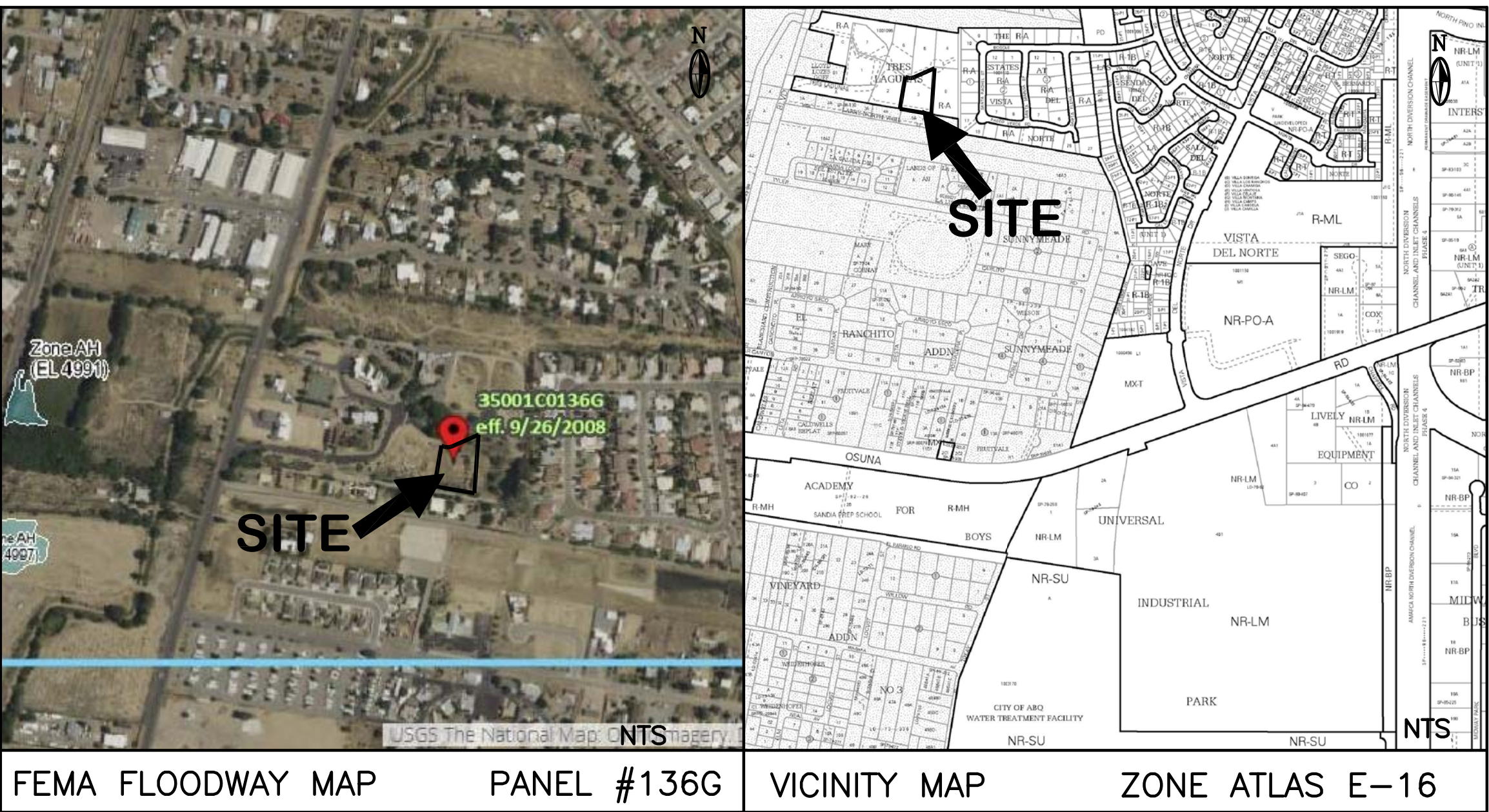
Precipitation Zone = 2				SOUTH BASIN				POND VOLUME PROVIDED:			
				Existing	Proposed	Existing	Proposed	ELEV.	AREA	VOL. (CF)	
Treatment A				0.56	0.30			5024	2581		
Treatment B				0.00	0.20						
Treatment C				0.00	0.15			5023.5	1548		
Treatment D				0.00	0.21						
Total (acres) =				0.56	0.56					1032.25	
Volume				100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed		
Volume (acre-feet) =				0.025	0.084	0.006	0.035	0.000	0.016		
Volume (cubic feet) =				1,077	2,709	264	1,509	0	699		
FIRST FLUSH POND VOL = 0.34"/(12"/FT)*(0.56 AC * 43560 SF/AC) = 691 CF											
Total Q(g), cfs:				100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed		
Treatment A				0.87	0.35	0.21	0.00	0.00	0.00		
Treatment B				0.00	0.40	0.00	0.19	0.00	0.02		
Treatment C				0.00	0.47	0.00	0.29	0.00	0.09		
Treatment D				0.00	0.99	0.00	0.66	0.00	0.39		
Total Q (cfs) =				0.87	1.91	0.21	1.11	0.00	0.50		

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.

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, dhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.



	LEGEND	
	EXISTING	PROPOSED
CONTOUR	5043	5043
PROPERTY LINE		
ROAD		
SETBACK		
WALL		
SPOT ELEVATION	18.09 +	24.4

5-16-22
REV. 6-16-22



ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on May 10, 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. A few debris piles exist which will be removed with this project effort.

512 TRES LAGUNAS LN NE ALBUQUERQUE NM 87113
CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

LOT 3
TRES LAGUNAS SUBDIVISION

LUJAN - QUALITY BUILDERS - GRADING & DRAINAGE PLAN

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

Designed JSM Drawn STAFF Checked JSM Sheet of
File QUA0122L Date MAY,2022 1 1