

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

February 21, 2023

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

RE: 9508 Riverdale Lane NW
Grading and Drainage Plan
Engineer's Stamp Date: 02/06/23
Hydrology File: C13D027H

Dear Ms. McDowell:

Based upon the information provided in your submittal received 02/07/2023, the Grading & Drainage Plan is approved for Grading Permit (earthwork can get started for the earth pad on the house).

PRIOR TO BUILDING PERMIT:

1. Once the grading is complete, a pad certification (meaning that the earthwork is complete) will be required. **Please include a site photo with the submittal.** Also, at the time of pad certification approval, Hydrology will concurrently approve the Grading & Drainage Plan for Building Permit.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

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 6/2018)

Project Title: Lopez Home - Crescent Custom Homes **Building Permit #:** _____ **Hydrology File #:** _____

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

Legal Description: Lot 5, Unit 1, Black Farm Estates

City Address: 9508 Riverdale Ln NW, Albuquerque, NM 87114

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 Sanchez, Crescent Custom Homes **Contact:** Mike Sanchez

Address: _____

Phone#: 505-220-7507 **Fax#:** _____ **E-mail:** msanchez02@msn.com

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:

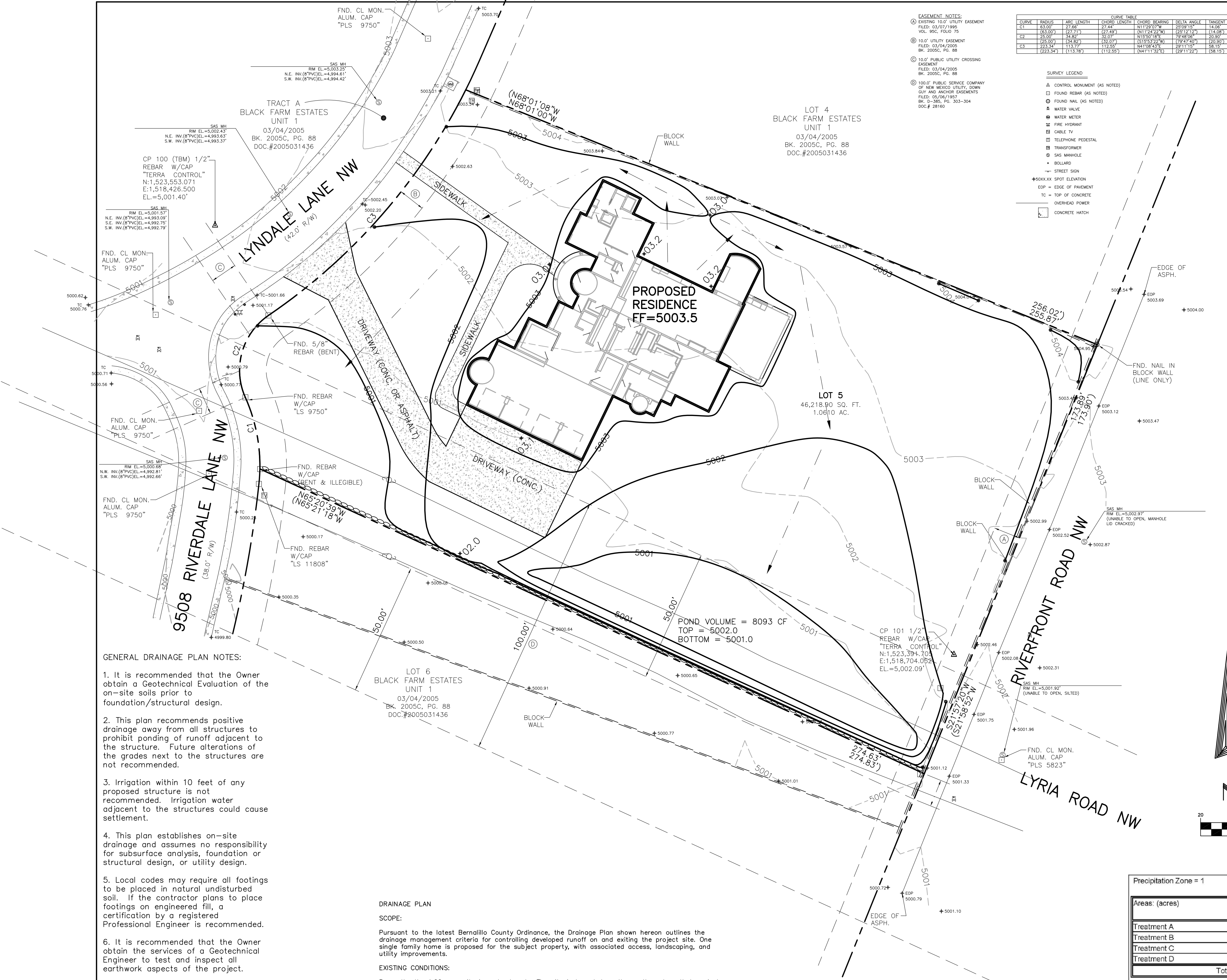
- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ SITE PLAN FOR SUB'D APPROVAL
- ☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ SO-19 APPROVAL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

DATE SUBMITTED: 2-6-23 **By:** JACKIE MCDOWELL

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



- 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.

DRAINAGE PLAN

SCOPE:

Pursuant to the latest Bernalillo County Ordinance, 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 for the subject property, with associated access, landscaping, and utility improvements.

EXISTING CONDITIONS:

Presently, the 1.06 acre site is undeveloped. The site is bounded on the north and south by private property, on the west by Lyndale Ln./Riverdale Ln., and on the east by Riverfront Rd. NW. The site is vegetated with native plants and slopes from the north to the south. As shown on FEMA Panel #1165, the site is not located in a 100 year flood plain. This plan follows the approved Drainage Report for Black Farms prepared by Tierra West, LLC, dated June 2004. The approved drainage study calls for all storm drainage from each lot to be retained on-site. The pond volume required is the 100-year, 10-day storm.

PROPOSED CONDITIONS:

As shown by the plan, the building is located within the center of the lot. There are no off-site flows entering the site with the exception of the roadway that fronts the property and will continue to drain into the site per the approved report. On site flows will drain around the structure via sheet flow and swales, and flow to the south and to the proposed retention pond. All roof drainage will discharge from the roof to the lot and be directed around the structure to drainage paths. Access will be taken from Lyndale Ln./Riverdale Ln. NW. This road is currently improved.

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 the Development Process Manual for the City of Albuquerque, New Mexico.

PROPERTY ADDRESS:

9508 Riverdale Ln NW, Albuquerque, NM 87114

TOPOGRAPHY:

Topographic information provided by Christopher Medina dated January, 2023.

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.

EASEMENT NOTES:

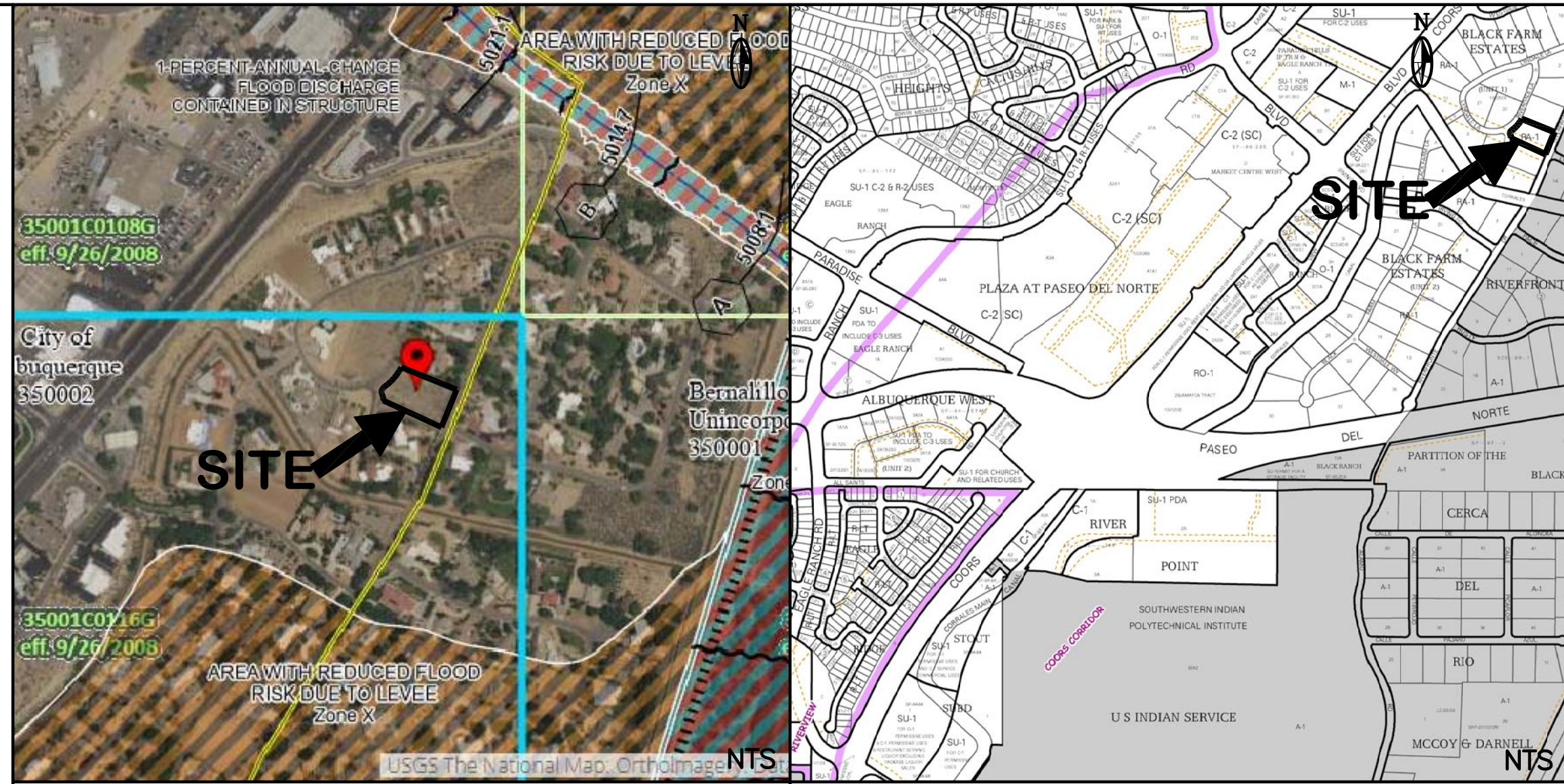
- ① EXISTING 10.0' UTILITY EASEMENT FILED 03/07/1996 VOL. RSC, FOLD 75
- ② 10.0' UTILITY EASEMENT FILED 03/04/2005 BK. 2005C, PG. 88
- ③ 10.0' PUBLIC UTILITY CROSSING EASEMENT FILED 03/04/2005 BK. 2005C, PG. 88
- ④ 100.0' PUBLIC SERVICE COMPANY OF NEW MEXICO UTILITY, DOWN GUY AND ANCHOR EASEMENTS FILED 05/06/1987 BK. 0-365, PG. 303-304 DOC.# 28160

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE	TANGENT
C1	133.00'	27.46'	27.46'	N117°22'30"W	152°09'15"	14.56'
C2	25.00'	14.82'	15.00'	N117°22'30"W	152°12'15"	14.68'
C3	123.34'	113.77'	112.56'	N41°11'32"E	29°11'22"	58.15'
C4	123.34'	113.78'	112.56'	N41°11'32"E	29°11'22"	58.15'

SURVEY LEGEND

- △ CONTROL MONUMENT (AS NOTED)
- FOUND REBAR (AS NOTED)
- FOUND NAIL (AS NOTED)
- ▲ WATER VALVE
- WATER METER
- FIRE HYDRANT
- ▣ CABLE TV
- ▢ TELEPHONE PEDESTAL
- TRANSFORMER
- SAG MANHOLE
- BOLLARD
- STREET SIGN
- ✕ SPOT ELEVATION
- EOP = EDGE OF PAVEMENT
- TOP OF CONCRETE
- OVERHEAD POWER
- ▣ CONCRETE HATCH



FEMA FLOODWAY MAP PANEL #116G VICINITY MAP ZONE ATLAS C-13

SURVEY NOTES:

PROJECT LOCATION:

9508 RIVERDALE LANE NW, ALBUQUERQUE, NEW MEXICO

LEGAL DESCRIPTION:

LOT 5, BLACK FARM ESTATES, UNIT 1
FILED: MARCH 3, 2005
BOOK: 2005C, PAGE 88, DOCUMENT NUMBER 2005031436

SURVEY INFORMATION:

TOPOGRAPHIC SURVEY PERFORMED AND COMPILED BY TERRA LAND SURVEYS, LLC, CORRALES, NEW MEXICO JANUARY 2023.

PROJECT BENCHMARK:

PROJECT BENCHMARK IS A NEW MEXICO STATE, HIGHWAY COMMISSION CONTROL BRASS DISC SET IN THE TOP OF A CONCRETE POST BEHIND A RAILROAD TIE RETAINING WALL 0.2 FEET ABOVE GROUND STAMPED "NM 448-NOT TO BE USED TO REACH THE STATION FROM THE INTERSECTION OF COORS BOULEVARD AND IRVING BOULEVARD TRAVEL NORTH ON COORS BOULEVARD 0.24 MILES TO THE STATION ON THE RIGHT. ELEVATION = 5,048.205 FEET (NAVD 88 VERTICAL DATUM).

TEMPORARY BENCHMARKS:

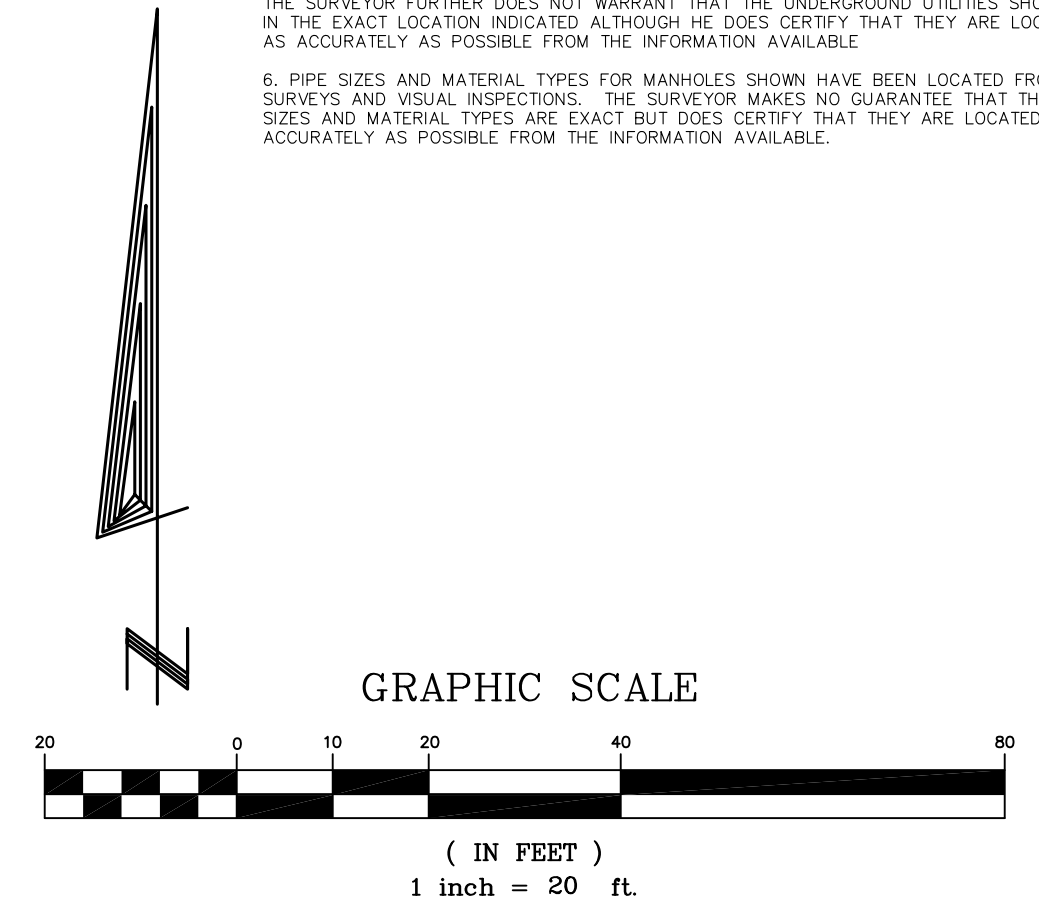
TEMPORARY BENCHMARK IS A TERRA LAND SURVEYS CONTROL MONUMENT CP 100 BEING A SET 1/2 INCH REBAR WITH CAP STAMPED "TERRA CONTROL".
ELEVATION = 5,001.40 FEET (NAVD 88 VERTICAL DATUM)

NOTES:

1. FIELD SURVEY PERFORMED IN JANUARY 2023.
2. TOPOGRAPHIC SURVEY WAS COMPILED UTILIZING GROUND COORDINATES REFERENCED TO NAD 1983 NEW MEXICO CENTRAL ZONE. PRIMARY HORIZONTAL AND VERTICAL CONTROL WAS ESTABLISHED UTILIZING GNSS RTK METHODS. COMBINED GROUND TO GRID FACTOR IS 0.99968180153 SCALED AROUND CP 100. N: 1,323,353.071, E: 1,518,426.500
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 COMPREHEND 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.

LEGEND

	EXISTING	PROPOSED
CONTOUR	--- 6045 ---	— 6045 —
PROPERTY LINE	---	---
ROAD	---	---
SETBACK	---	---
WALL	---	---
SPOT ELEVATION	✕ 5003.64	✕✕✕



2-6-23

Precipitation Zone = 1

Areas (acres)	Existing	Proposed
Treatment A	1.06	0.00
Treatment B	0.00	0.40
Treatment C	0.00	0.44
Treatment D	0.00	0.22
Total (acres) =	1.06	1.06

POND VOLUME PROVIDED			
ELEV	AREA (SF)	VOL (CF)	
5002	11797	8093.5	
5001	4390		

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.039	0.095	0.007	0.046	0.000	0.018
Volume (cubic feet) =	1,693	4,127	308	2,012	0	781

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	1.37	0.00	0.25	0.00	0.00	0.00
Treatment B	0.00	0.61	0.00	0.30	0.00	0.01
Treatment C	0.00	1.26	0.00	0.66	0.00	0.21
Treatment D	0.00	0.96	0.00	0.64	0.00	0.37
Total Q (cfs) =	1.37	3.04	0.25	1.60	0.00	0.59

$\sqrt{(10 \text{ day})} = \sqrt{(360) + A(D) * (P10\text{day}-P360)/12 \text{ in}} = 0.1217 \text{ ac-ft}$
 $= 5301 \text{ cu-ft}$

ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on January 25, 2023 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.

9508 Riverdale Ln NW, Albuquerque, NM 87114

CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

LOT 5, UNIT 1, BLACK FARM ESTATES

LOPEZ — MIKE SANCHEZ, CRESCENT — GRADING & DRAINAGE PLAN

McDowell Engineering, Inc.

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

Designed JSM Drawn STAFF Checked JSM Sheet of
File CRE0123L Date JANUARY, 2023 1 1