

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

May 31, 2023

Robert Fierro, P.E.
Fierro & Company
6300 Montano RD. NW
Albuquerque NM, 87104

RE: **Lot 21 Block 6 Volcano Cliffs Unit 18
6505 Pato Rd NW SAD 228
Grading and Drainage Plan
Engineers Stamp Date 5/23/2023 (D10D003J5)**

Mr. Fierro,

Based upon the information provided in your submittal received 5/25/2023, this plan is approved for Grading Permit.

PO Box 1293

Prior to Building permit approval, a Pad Certification will be required, provided by the Engineer or a registered Land Surveyor.

Albuquerque

Advise the owner contractor not to use dirt as a ramp to climb the curb, use lumber or crusher fines for this purpose.

NM 87103

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained with the approved G&D plan and Pad Certification. Also, if a swimming pool is to be placed the grading and drainage plan will change and will need to be resubmitted.

www.cabq.gov

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist is required.

If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

Tiequan Chen, P.E., CFM
Principal Engineer, Hydrology
Planning Department, Development Review Services

RR/TC
File D10D003J5



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____

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

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Owner: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

TYPE OF SUBMITTAL: _____ PLAT (____# OF LOTS) _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes _____ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION _____ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- _____ ENGINEER/ARCHITECT CERTIFICATION
- _____ PAD CERTIFICATION
- _____ CONCEPTUAL G & D PLAN
- _____ GRADING PLAN
- _____ DRAINAGE MASTER PLAN
- _____ DRAINAGE REPORT
- _____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- _____ ELEVATION CERTIFICATE
- _____ CLOMR/LOMR
- _____ TRAFFIC CIRCULATION LAYOUT (TCL)
- _____ TRAFFIC IMPACT STUDY (TIS)
- _____ 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: _____ **By:** _____

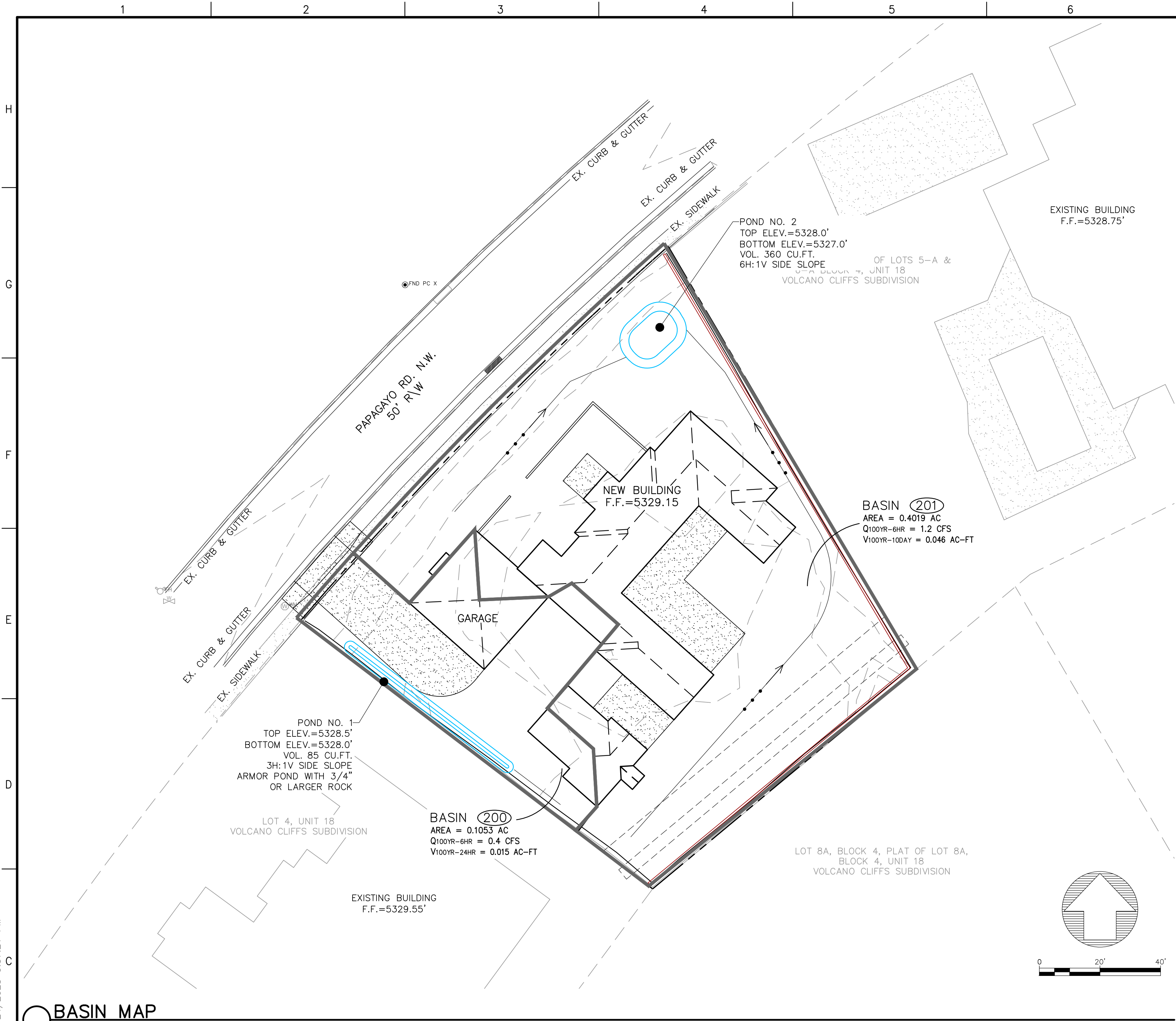
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ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



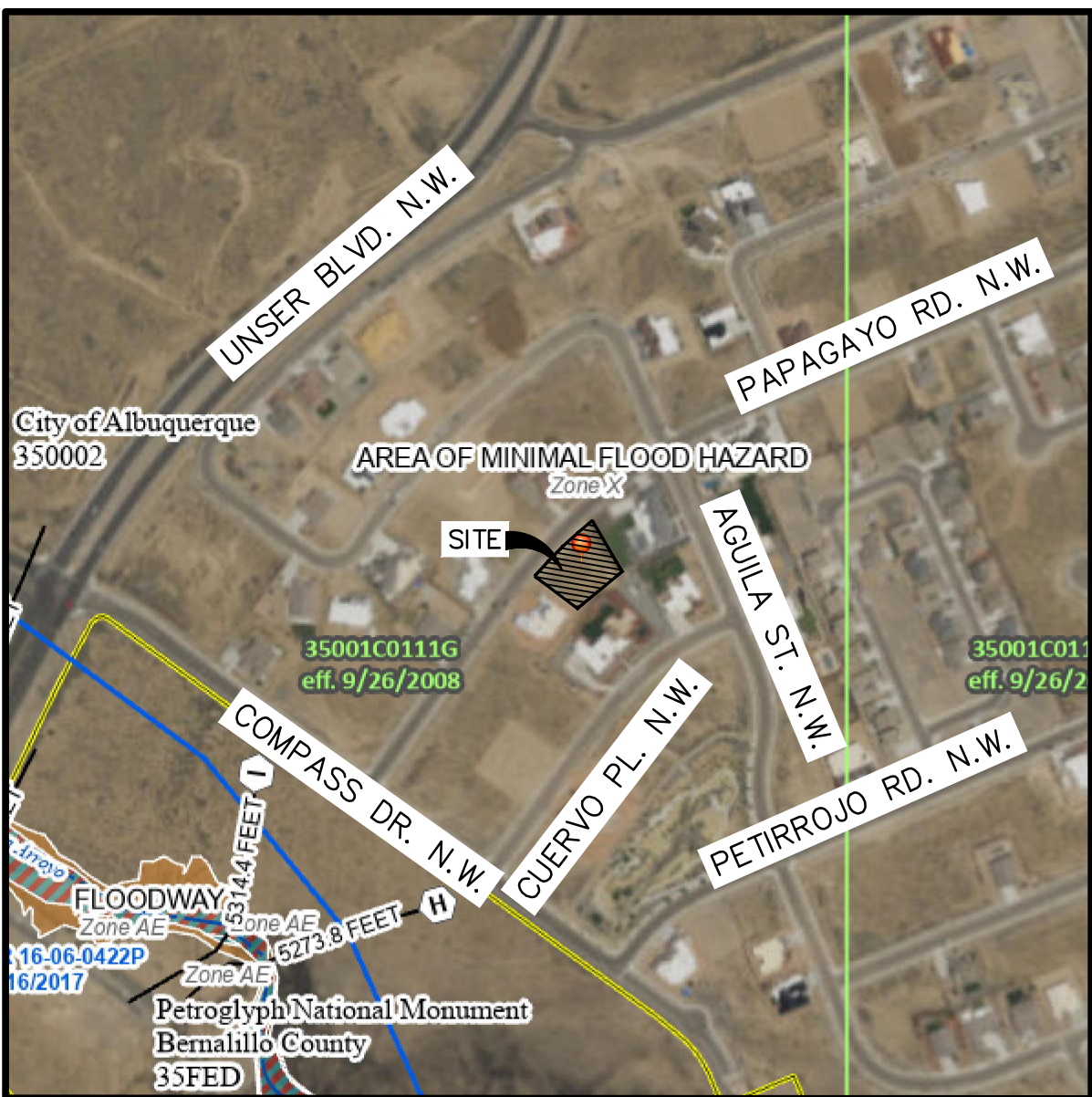
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HYDROLOGY SUMMARY									
BASIN	Total Area (acres)	Land Treatment (%)				Weighted E	Q ₁₀₀ (cfs)	V _{100yr-24hr} (ac-ft)	SWQV
		A	B	C	D				
200	0.1053	0.0	20.0	32.0	48.0	1.526	0.4	0.015	77
201	0.4019	0.0	20.0	50.1	29.9	1.291	1.2	0.046	183
ALLOWABLE	0.5072	0.0	20.0	46.0	34.0	1.345	1.6	0.061	2676

POND NO. 1					
Stage Storage Rating Curve					
Elevations (ft)	Area (sq ft)	Area (ac)	Volume (ac-ft)	Cumulative Vol. (ac-ft)	Cumulative Vol. cu.ft.
5328	65	0.001	0	0.000	0
5328.5	273	0.006	0.002	0.002	65

POND NO. 2					
Stage Storage Rating Curve					
Elevations (ft)	Area (sq ft)	Area (ac)	Volume (ac-ft)	Cumulative Vol. (ac-ft)	Cumulative Vol. cu.ft.
5327	173	0.004	0	0.000	0
5327.5	345	0.008	0.003	0.003	130
5328	675	0.013	0.005	0.008	360



FLOOD INSURANCE RATE MAP
MAP NO. 35001C0111G
EFFECTIVE DATE: 09/26/2008

Introduction
The site is located at 6604 PAPAGAYO ROAD N.W. THE PROPERTY IS VACANT AND A 3,500 SQ.FT. CUSTOM HOME IS PROPOSED. THE PURPOSE OF THIS GRADING & DRAINAGE PLAN IS TO 1) PROVIDE HYDROLOGIC AND HYDRAULIC ANALYSIS OF THE PROPOSED CONDITION, 2) SATISFY ALLOWABLE STORMWATER DISCHARGE RATES, AND 4) SEEK APPROVAL FOR BUILDING PERMIT.

METHODOLOGY
HYDROLOGIC PROCEDURES PRESENTED IN THE HYDROLOGY SECTION OF THE DMP, ARTICLE 6-2(A), APPROVED JUNE 8, 2020 WERE FOLLOWED. PRECIPITATION ZONE 1 DATA WAS USED IN THE HYDROLOGIC COMPUTATIONS.

EXISTING CONDITION
THE VACANT PROPERTY IS 0.5 ACRES. THE ADJOINING LOTS ARE DEVELOPED WITH CUSTOM HOMES. THE SITE DOES NOT RECEIVE OFFSITE RUNOFF FROM THE ADJOINING LOTS. THERE IS A 20-FOOT WIDE DRAINAGE EASEMENT ALONG THE REAR PROPERTY LINE. A 42-INCH RCP PIPE IS CENTERED IN THIS EASEMENT. THE LOT IS LOWER THAN THE ROAD; THEREFORE, RUNOFF PUDDLES AT THE REAR OF THE PROPERTY.

PROPOSED CONDITION
A CUSTOM HOME WITH A FOOTPRINT OF APPROXIMATELY 3,500 SQ.FT. IS PROPOSED. THIS SITE IS ALLOWED 34% LAND TREATMENT "D" AS OUTLINED IN THE SAD 228 DRAINAGE REPORT. THE PROPOSED LAND TREATMENT IS 33.6% WHICH IS LESS THAN THE ALLOWABLE. THEREFORE, THE PROPOSED SITE IS ONLY RESPONSIBLE FOR STORING THE STORM WATER QUALITY VOLUME. TWO PONDS ARE PROPOSED TO STORE THE STORM WATER QUALITY VOLUME. RUNOFF VOLUME IN EXCESS OF THE 90 PERCENTILE STORM WILL OVERFLOW TO PAPAGAYO ROAD.

LEGEND

- PROPERTY BOUNDARY
- FLOW PATH
- ROOF FLOW
- SURFACE DRAINAGE
- UTILITY EASEMENT LINE
- FLOWLINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED BASIN

Fierro & Company
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3201 4TH STREET NW, SUITE C
ALBUQUERQUE, NEW MEXICO 87107
PH (505) 352-8930
www.fierrocompany.com



ENGINEER'S SEAL

ARAGON RESIDENCE
6604 PAPAGAYO RD N.W.
ALBUQUERQUE, NM 87120

PROJECT NAME

REV.	DATE	DESCRIPTION	BY

PROJECT NO: 23029
DESIGNED BY: RJF
DRAWN BY: JB
CHECKED BY: RJF
DATE: MAY 2023

SHEET TITLE
DRAINAGE PLAN

SHEET NO:
D-1