# CITY OF ALBUQUERQUE

Planning Department Alan Varela, Director



December 23, 2022

Birkie Ayer, PE Ayer Design Group 215 Johnston Street Rock Hill, South Carolina 29730

RE: Lexus of Albuquerque
4821 Pan American Frwy
Grading and Drainage Plan
Engineer's Stamp Date: 12/16/2022
Hydrology File: F17D078

Dear Mr. Ayer:

Based upon the information provided in your submittal received 12/20/2022, the Grading & Drainage Plan is approved for Grading Permit and Building Permit approval. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PO Box 1293

### PRIOR TO CERTIFICATE OF OCCUPANCY:

Albuquerque

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

NM 87103

2. Please pay the Payment-in-Lieu of \$ 24,400.00 by emailing the attached approved Waiver Application from Stormwater Quality Volume Management On-site to PLNDRS@cabg.gov. Once this is received, a receipt will then produce and email back with instructions on how to pay online. Once paid, please email me proof of payment.

www.cabq.gov

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 (Doug Hughes, PE, jhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3695 or tchen@cabq.gov.

Sincerely,

Tiequan Chen, P.E.

Principal Engineer, Hydrology

Planning Department, Development Review Services



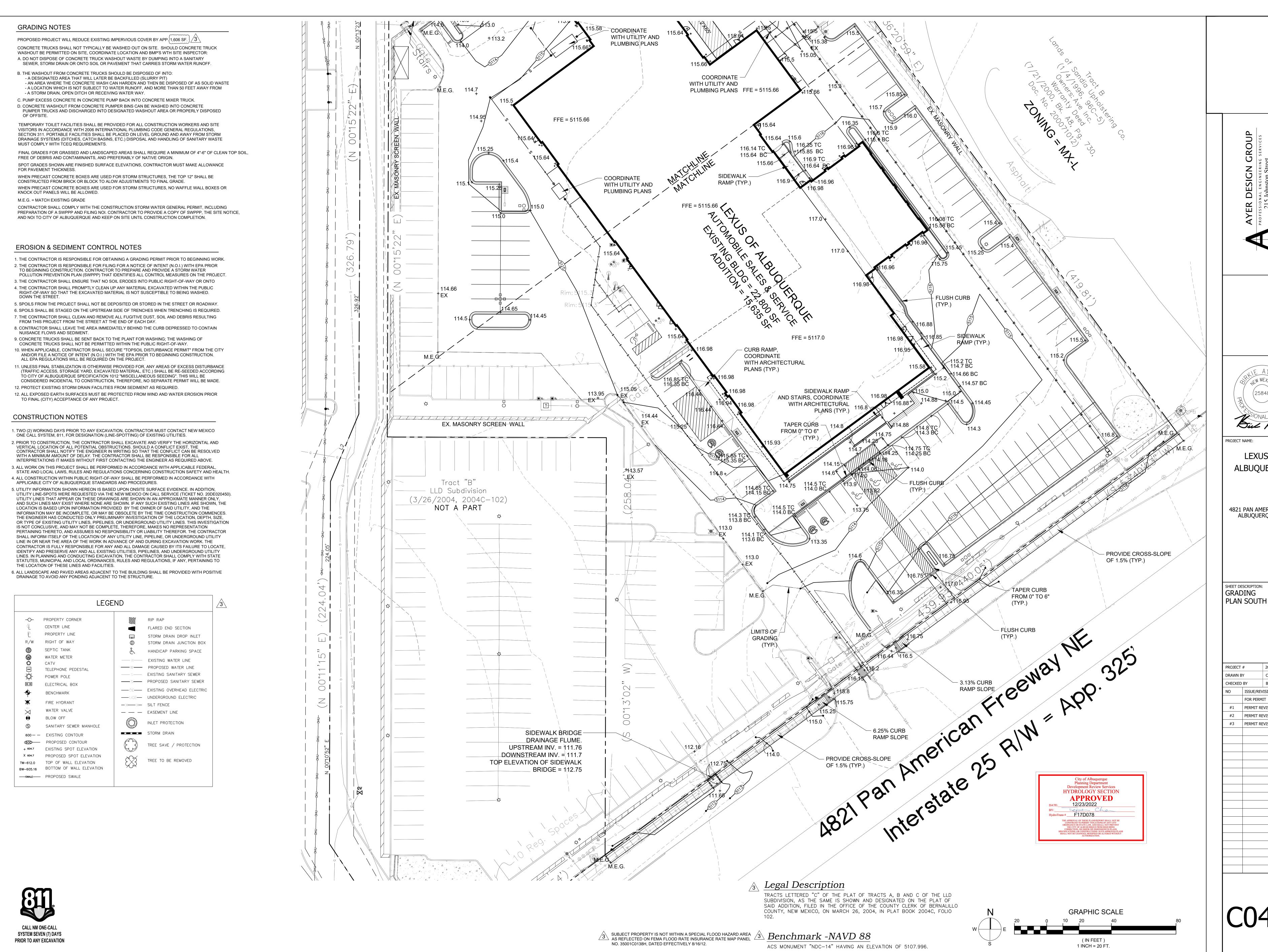
# City of Albuquerque

## Planning Department

## Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET

	xus of Albuquerque	_Building Permit #	Hydrology File #_F17D078
DRB#		EPC#	
Legal Description	Lot 3, Block 0, Tract C o	f Tracts City Addr	ess OR Parcel 4821 Pan American F
Applicant/Agent	Ayer Design Group	Contact:	Birkie Ayer, P.E.
Address: 215 J	ohnston St., Rock Hill, SC	29730 Phone:	Birkie Ayer, P.E. 803-328-5858
Email: birk@a	yerdesigngroup.com		
Applicant/Owner	Group 1 Realty, Inc.	Contact:	Christine Scott
Address: 800 Ge	r: Group 1 Realty, Inc. essner, Suite 500, Houstor	n, TX 77024 Phone:	713-647-5700
Email: cscott@g	roup1auto.com		
<b>DEPARTMENT</b> : Check all that apply:	.: X YES NO : TRANSPORTATE		
TYPE OF SUBM			VAL/ACCEPTANCE SOUGHT:
	RCHITECT CERTIFICATIO	<del></del>	NG PERMIT APPROVAL
PAD CERTIFIC			ICATE OF OCCUPANCY
CONCEPTUAL  X GRADING PLA			PTUAL TCL DRB APPROVAL
X DRAINAGE RE	IN ZDODT		INARY PLAT APPROVAL
DRAINAGE M			AN FOR SUB'D APPROVAL AN FOR BLDG PERMIT APPROVAL
	DEVELOPMENT PERMIT		LAT APPROVAL
ELEVATION C		<del></del>	EASE OF FINANCIAL GUARANTEE
CLOMR/LOMR			ATION PERMIT APPROVAL
	CULATION LAYOUT (TCL		IG PERMIT APPROVAL
ADMINISTRAT	,		PPROVAL
TRAFFIC CIRC	CULATION LAYOUT FOR	DRBPAVING	PERMIT APPROVAL
APPROVAL		GRADIN	IG PAD CERTIFICATION
TRAFFIC IMPA	ACT STUDY (TIS)	WORK (	ORDER APPROVAL
STREET LIGHT	ΓLAYOUT	CLOMR	LOMR
OTHER (SPECI	(FY)	FLOOD	PLAN DEVELOPMENT PERMIT
PRE-DESIGN N	MEETING?	OTHER	(SPECIFY)
DATE SURMITTE	D. 12-16-22		



PROJECT NAME:

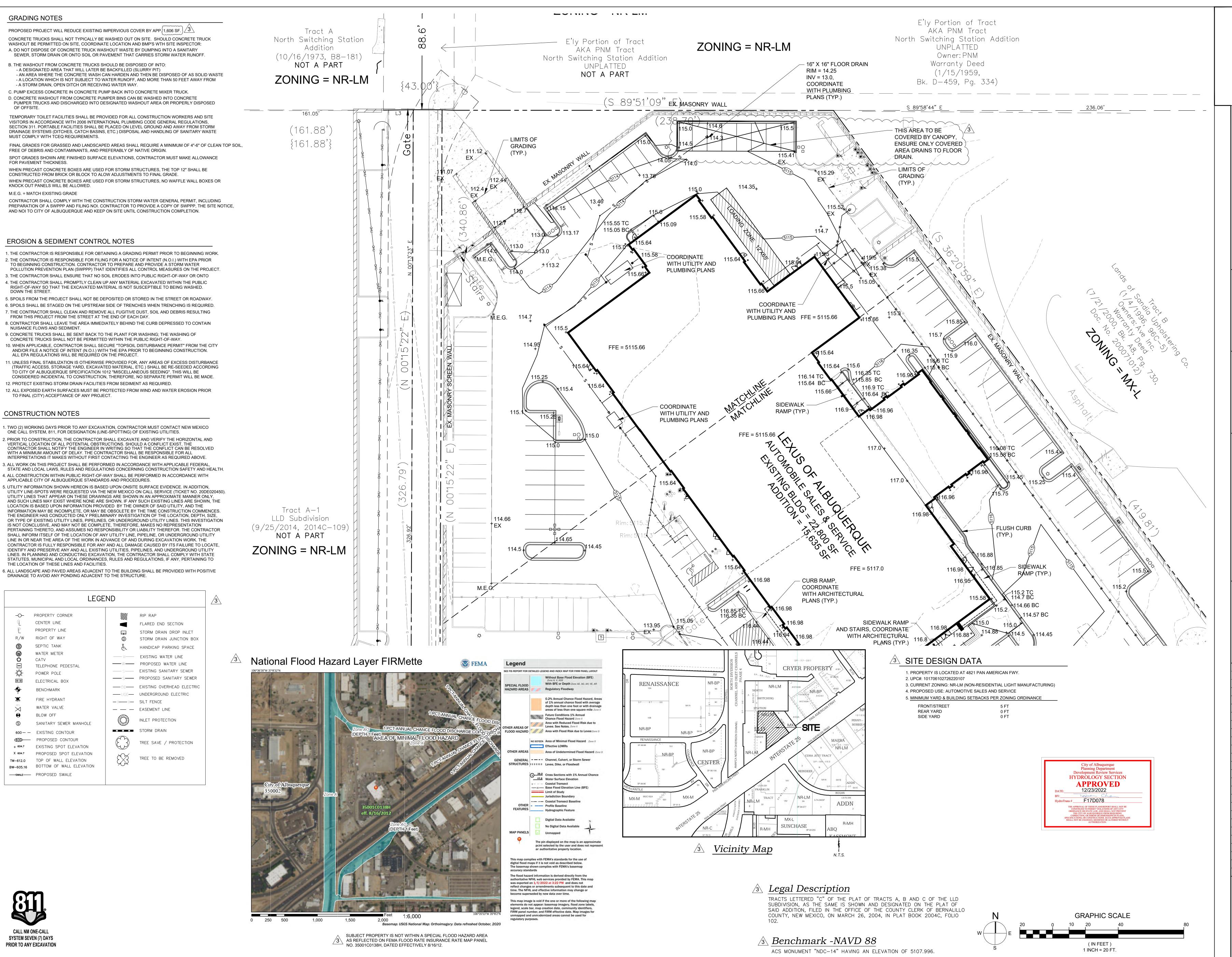
**LEXUS OF** ALBUQUERQUE

4821 PAN AMERICAN FWY. ALBUQUERQUE, NM

GRADING

CC CHECKED BY NO ISSUE/REVISION DATE #1 PERMIT REVISIONS 7/1/22 #2 PERMIT REVISIONS 10/31/22 #3 PERMIT REVISIONS 12/16/22

2021-12



AYER DESIGN GROUP
PROFESSIONAL ENGINEERING SERVICES
215 Johnston Street
Rock Hill, SC 29730
Phone: 803-328-5858

DEN MEXICO CD (25848) SSIONAL ENGINE

LEXUS OF
ALBUQUERQUE

4821 PAN AMERICAN FWY. ALBUQUERQUE, NM

SHEET DESCRIPTION:
GRADING
PLAN NORTH

PROJECT # 2021-12

DRAWN BY CC

CHECKED BY BA

HO ISSUE/REVISION DATE
FOR PERMIT 6/23/22
#1 PERMIT REVISIONS 7/1/22
#2 PERMIT REVISIONS 10/31/22
#3 PERMIT REVISIONS 12/16/22

C04.1

## DRAINAGE PLAN:

## I. INTRODUCTION & EXECUTIVE SUMMARY

Group 1 Automotive, Inc. plans to renovate and expand the existing Lexus of Albuquerque automotive dealership located at 4821 Pan American Freeway NE in Albuquerque, New Mexico. The project consists of renovating and expanding the existing showroom and service area. The existing site parking and circulation will be adjusted to accommodate the building expansion. The existing site does not have stormwater infrastructure and the proposed project will reduce the existing impervious cover by app.

# II. PROJECT DATA

A. Project location: 4821 Pan American Fwy. NE

Lot 3, Blk 0, Tract C of Tracts A, B & C LLD Subdivision B. Legal Description:

C. FEMA FIRM Panel: 35001C0138H, effective 8/16/2012

D. Special Flood Hazard Area: Zone X, Area of Minimal Flood Hazard

E. Site Area: 3.91 Acres

F. UPC#: 101706102726220107

G. Precipitation Zone: Zone 2, Between Rio Grande and San Mateo

III. Background Documents: The following documents available on GIS were referenced in preparation of

A: F16-D19 Rocky Mountain Stone Company Road-Parking Documents: 12-20-1999

Shows the existing contributing drainage area to the concrete flume to the AMAFCA North Diversion Channel as 6.53 ac with Peak Discharge (Q100/6hr) = 23.04 cfs.

Shows the existing contributing drainage area to the I-25 Frontage Road reduced from 6.3 acres to 1.34 acres with a Peak Discharge (Q100/6hr) = 5.69 cfs from the former Dickey's Barbecue Restaurant, now Lexus Inventory Lot, and the southern parking lot of Rocky Mountain Stone Company, a reduction of 15.54 cfs.

B: F16-D19 Rocky Mountain Stone Co. Road-Parking Plans

C: F17-D102 GP Pave Appr

## IV. Existing Conditions

The site is currently fully developed as an automotive dealership. There are no existing storm drain structures on the site except for a concrete flume under a site wall. The site slopes generally from east to west with storm water runoff leaving the site via overland flow in two locations. Location 1 is the existing roadside ditch on Southbound Pan American Freeway, the frontage road for I-25. Discharge location 2 is at the rear (North) boundary of the facility where overland flow discharges into an access road shared by the PNM Electrical Substation and the Rocky Mountain Stone Property. Eventually all of the runoff from this site reaches the AMAFCA North Diversion Channel. Existing slopes ranges from less than 0.5% to 2.5%. Offsite flows do not impact the site.

## V. Proposed Conditions

The site will continue to be an automotive dealership. The proposed building expansion area replaces existing pavement area with a net reduction in impervious area of 2,078 sf. The proposed site will have concrete curb & gutter, paved swales, paving, utilities and landscaping. Because the impervious area of the site will be reduced from existing conditions, peak runoff will be reduced below runoff levels prior to the expansion. No new storm drain structures are proposed. The site slopes generally from east to west with storm water runoff leaving the site via overland flow at the same locations as existing conditions. Proposed finish grades range from 0.6% to 5%. Offsite flows do not impact the site.

## VI. Sediment & Erosion Control

Erosion control measures consisting of silt fence, diversion ditches, stone construction entrance will be utilized during construction to minimize sediment and dust from leaving the site. Final stabilization will be accomplished by paving and with a vegetative cover established by landscaping and stone mulch

VII. Calculations

limits following the procedure set forth in the Design Process Manual for 40 Acre and smaller basins. As shown by the calculations included, the peak flow rate of runoff leaving the site is very slightly decreased due to a small increase in pervious area. VIII. Stormwater Quality

Existing and proposed conditions for the 100-year, 6-hour storm have been prepared for the project

Water quality volume for the 80<sup>th</sup> percentile storm was determined using the Redevelopment criteria of 0.26 Inches depth over the total impervious area of the proposed development. The developer has determined that reducing parking area, providing underground detention or limiting the proposed building expansion are undesirable options and has instead elected to make a payment in lieu for the WQV.

# IX. Conclusions

- a. The runoff generated by the proposed improvements will continue to drain via surface drainage to the same two existing discharge locations and ultimately to the AMAFCA North Diversion Channel.
- b. Total runoff is essentially the same with a calculated reduction of 0.1 cfs.
- c. Free discharge of runoff from this site at the proposed rate is appropriate and in conformance with previously approved drainage plans.

d. Onsite measures are not feasible for addressing stormwater quality and detention. So the developer agrees to pay the cash-in-lieu fee.

# 3 HYDROLOGY CALCULATIONS:

Drainage Area 1: EXISTING CONDITION

Area	Area	% of Total	Table 6-2(A)(5)	Q	Table 6.2.13	Volume	Volume
SF	AC	Area	CFS/AC	CFS	Excess Precip	E*A	
			100-yr	100-YR	E-100YR-6HR	Ac-In	Ac-ft
0	0	0	1.71	0	0.62	0	0
21018	0.483	13.2%	2.36	1.14	0.80	0.39	0.03
0	0	0.0%	3.05	0	1.03	0	0.00
137895	3.166	86.8%	4.34	13.74	2.33	7.38	0.61
158913	3.648	100.0%		14.88		7.76	0.65
	0 21018 0 137895	SF AC  0 0 21018 0.483 0 0 137895 3.166	SF     AC     Area       0     0     0       21018     0.483     13.2%       0     0     0.0%       137895     3.166     86.8%	SF     AC     Area     CFS/AC 100-yr       0     0     0     1.71       21018     0.483     13.2%     2.36       0     0     0.0%     3.05       137895     3.166     86.8%     4.34	SF     AC     Area     CFS/AC 100-yr     CFS 100-YR       0     0     0     1.71     0       21018     0.483     13.2%     2.36     1.14       0     0     0.0%     3.05     0       137895     3.166     86.8%     4.34     13.74	SF         AC         Area         CFS/AC 100-yr         CFS 100-YR         Excess Precip E-100YR-6HR           0         0         0         1.71         0         0.62           21018         0.483         13.2%         2.36         1.14         0.80           0         0         0.0%         3.05         0         1.03           137895         3.166         86.8%         4.34         13.74         2.33	SF         AC         Area         CFS/AC 100-yr         CFS 100-YR         Excess Precip E*A E-100YR-6HR         E*A Ac-In           0         0         0         1.71         0         0.62         0           21018         0.483         13.2%         2.36         1.14         0.80         0.39           0         0         0.0%         3.05         0         1.03         0           137895         3.166         86.8%         4.34         13.74         2.33         7.38

Drainage Are	a 2: EXISTING	CONDITIO	N					
Land	Area	Area	% of Total	Table 6-2(A)(5)	Q	Table 6.2.13	Volume	Volume
Treatment	SF	AC	Area	CFS/AC	CFS	Excess Precip	E*A	
				100-yr	100-YR	E-100YR-6HR	Ac-In	Ac-ft
Α	0	0	0	1.71	0	0.62	0	0
В	4234	0.097	2.7%	2.36	0.23	0.80	0.08	0.01
С	0	0	0.0%	3.05	0	1.03	0	0.00
D	4960	0.114	3.1%	4.34	0.49	2.33	0.27	0.02
Totals	9194	0.211	5.8%		0.72		0.34	0.03

Land	Area	Area	% of Total	Table 6-2(A)(5)	Q	Table 6.2.13	Volume	Volume
Treatment	SF	AC	Area	CFS/AC	CFS	Excess Precip	E*A	
				100-yr	100-YR	E-100YR-6HR	Ac-In	Ac-ft
А	0	0	0	1.71	0	0.62	0	0
В	18790	0.431	15.2%	2.36	1.02	0.80	0.3450872	0.03
С	0	0	0.0%	3.05	0	1.03	0	0.00
D	105019	2.411	84.8%	4.34	10.46	2.33	5.6174075	0.47
Totals	123809	2.842	100.0%		11.48		5.96	0.50

Land	Area	Area	% of Total	Table 6-2(A)(5)	Q	Table 6.2.13	Volume	Volume
Treatment	SF	AC	Area	CFS/AC	CFS	Excess Precip	E*A	
				100-yr	100-YR	E-100YR-6HR	Ac-In	Ac-ft
Α	0	0	0	1.71	0	0.62	0	0
В	8540	0.196	6.9%	2.36	0.46	0.80	0.16	0.01
С	0	0	0.0%	3.05	0	1.03	0	0.00
D	35758	0.821	28.9%	4.34	3.56	2.33	1.91	0.16
Totals	44298	1.017	35.8%		4.03		2.07	0.17

UMMARY & COMPARISON	OF EXISTI	NG VS. RE-DE	VELOPED COND	ITION 100-	YR, 6-HOUR	
	Q	Q	Q	V	V	V
DEVELOPED CONDITION	DA#1	DA#2	TOTAL	DA#1	DA#2	TOTAL
	CFS	CFS	CFS	AC-FT	AC-FT	AC-FT
EXISTING	14.88	0.72	15.60	0.65	0.03	0.68
REDEVELOPED	11.48	4.03	15.51	0.50	0.17	0.67
		DECREASE	-0.09		DECREASE	-0.01

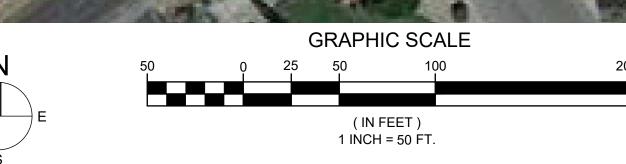
FIRST FILISH	WATER QUALI	TV VOLLIMI	= WOV			
DRAINAGE	AREA	AREA	DEPTH	WQV	WQV	WQV
BASIN	AC	SF	IN	AC-IN	AC-FT	CF
A <sub>D1</sub>	2.411	105019	0.26	0.627	0.052	2275
A <sub>D2</sub>	0.821	35758	0.26	0.213	0.018	775
Total A <sub>D</sub>	3.232	140777	0.26	0.840	0.070	3050

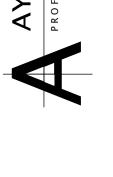
WQV = IMPVERVIOUS AREA \*0.26 IN  $WQV = (A_{D1} + A_{D2}) * 0.26 IN$ 

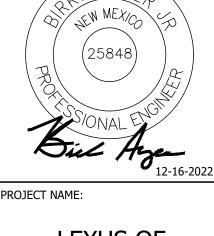
> HYDROLOGY SECTION **APPROVED** 12/23/2022 BY: The state of t











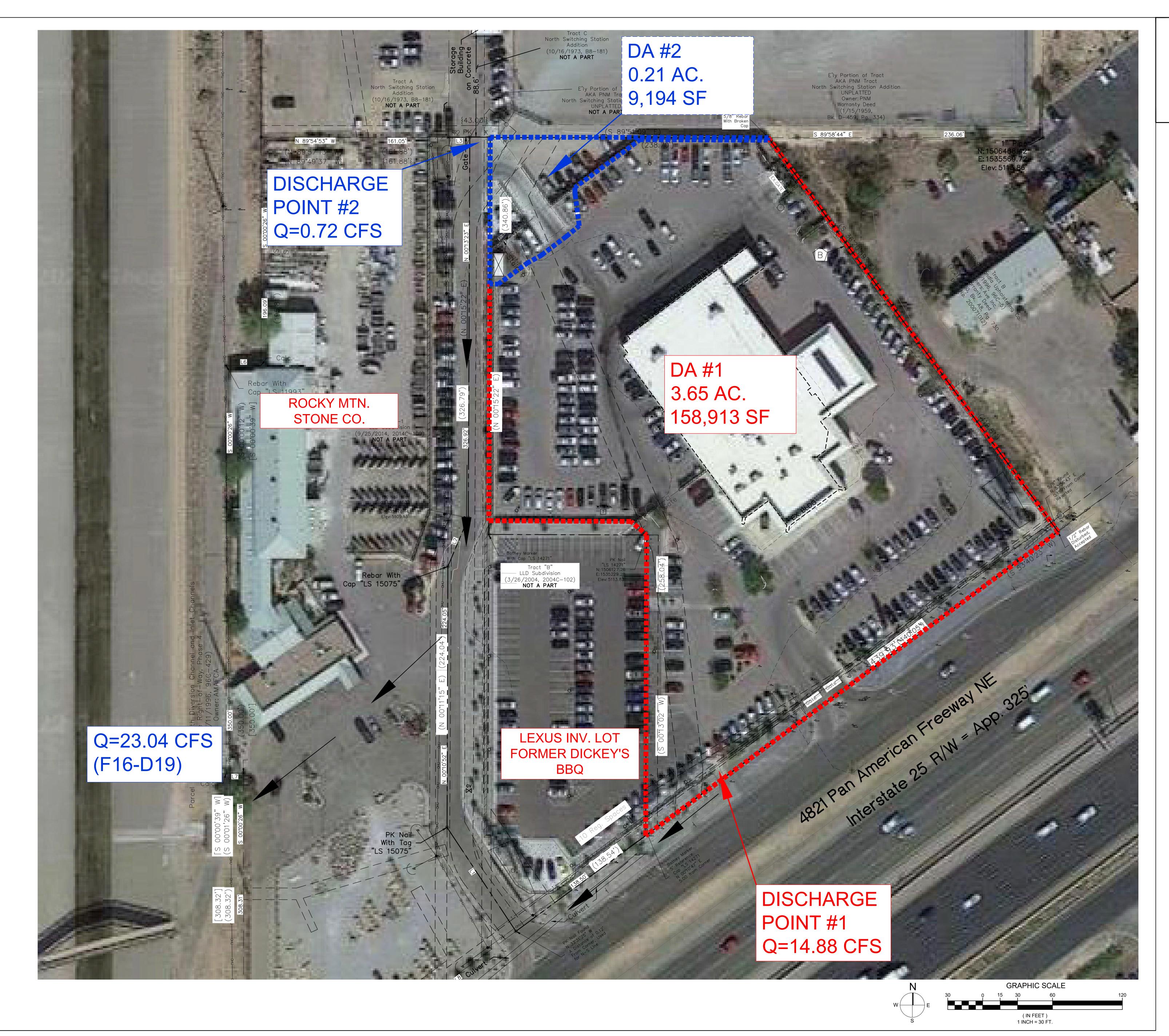
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4821 PAN AMERICAN FWY. ALBUQUERQUE, NM

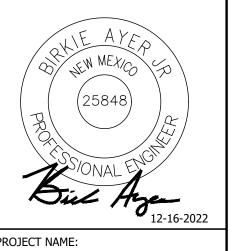
PROPOSED CONDITION DRAINAGE AREA MAP

RAWN B	Y	CC	
HECKED	BY	BA	
0	ISSUE/REV	ISION	DATE
	FOR PERM	IT	6/23/22
#1	PERMIT RE	VISIONS	7/1/22
#2	PERMIT RE	VISIONS	10/31/22
#3	PERMIT RE	VISIONS	12/16/22

2021-12



AYER DESIGN GROUP
PROFESSIONAL ENGINEERING SERVICES
215 Johnston Street
Rock Hill, SC 29730
Phone: 803-328-5858



LEXUS OF ALBUQUERQUE

4821 PAN AMERICAN FWY. ALBUQUERQUE, NM

SHEET DESCRIPTION:
EXISTING CONDITIONS
DRAINAGE AREA MAP

		T			
PROJECT #		2021-12			
DRAWN	BY	CC			
CHECKE	D BY	BA			
NO	ISSUE/REV	/ISION	DATE		
	FOR PERM	IT	6/23/22		
#1	PERMIT RE	EVISIONS	7/1/22		
#2	PERMIT RE	PERMIT REVISIONS			
#3	PERMIT RE	EVISIONS	12/16/2		

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