

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

July 1, 2024

Ronald Bohannon, P.E.
Tierra West, LLC
5571 Midway Park Place NE
Albuquerque, NM, 87109

RE: Storage Facility (1.9 Ac)
3601 Seven Bar
Conceptual Grading and Drainage Plans
Engineer's Stamp Date: 06/03/24
Hydrology File: B14D019

Dear Mr. Bohannon:

PO Box 1293

Based upon the information provided in your submittal received 06/18/2024, the Conceptual Grading & Drainage Plans are preliminary approved for action by the Development Facilitation Team (DFT) on Site Plan for Building Permit.

Albuquerque

PRIOR TO BUILDING PERMIT:

NM 87103

1. Please submit a more detailed Grading & Drainage Plan to Hydrology for review and approval. This digital (.pdf) is emailed to PLNDRS@cabq.gov along with the Drainage Transportation Information Sheet.

www.cabq.gov

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, 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 924-3314 or amontoya@cabq.gov.

Sincerely,

Anthony Montoya, Jr., P.E.
Senior Engineer, Hydrology
Planning Department, Development Review Services



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (DTIS)

Project Title: _____ Hydrology File # _____

Legal Description: _____

City Address, UPC, OR Parcel: _____

Applicant/Agent: _____ Contact: _____

Address: _____ Phone: _____

Email: _____

Applicant/Owner: _____ Contact: _____

Address: _____ Phone: _____

Email: _____

TYPE OF DEVELOPMENT: Plat (# of lots) _____ Single Family Home
All other Developments

RE-SUBMITTAL: YES NO

DEPARTMENT: TRANSPORTATION HYDROLOGY/DRAINAGE

Check all that apply under Both the Type of Submittal and the Type of Approval Sought:

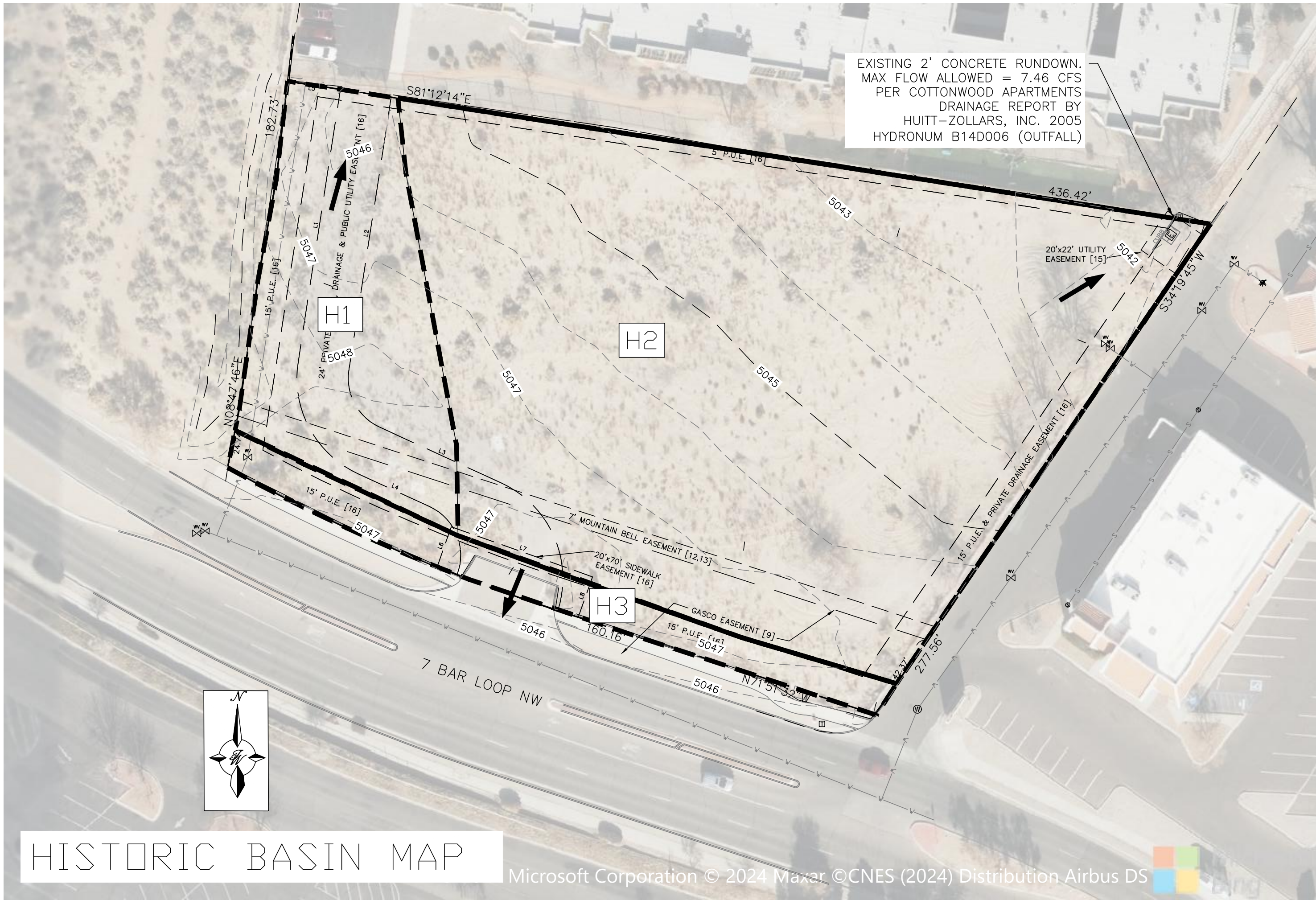
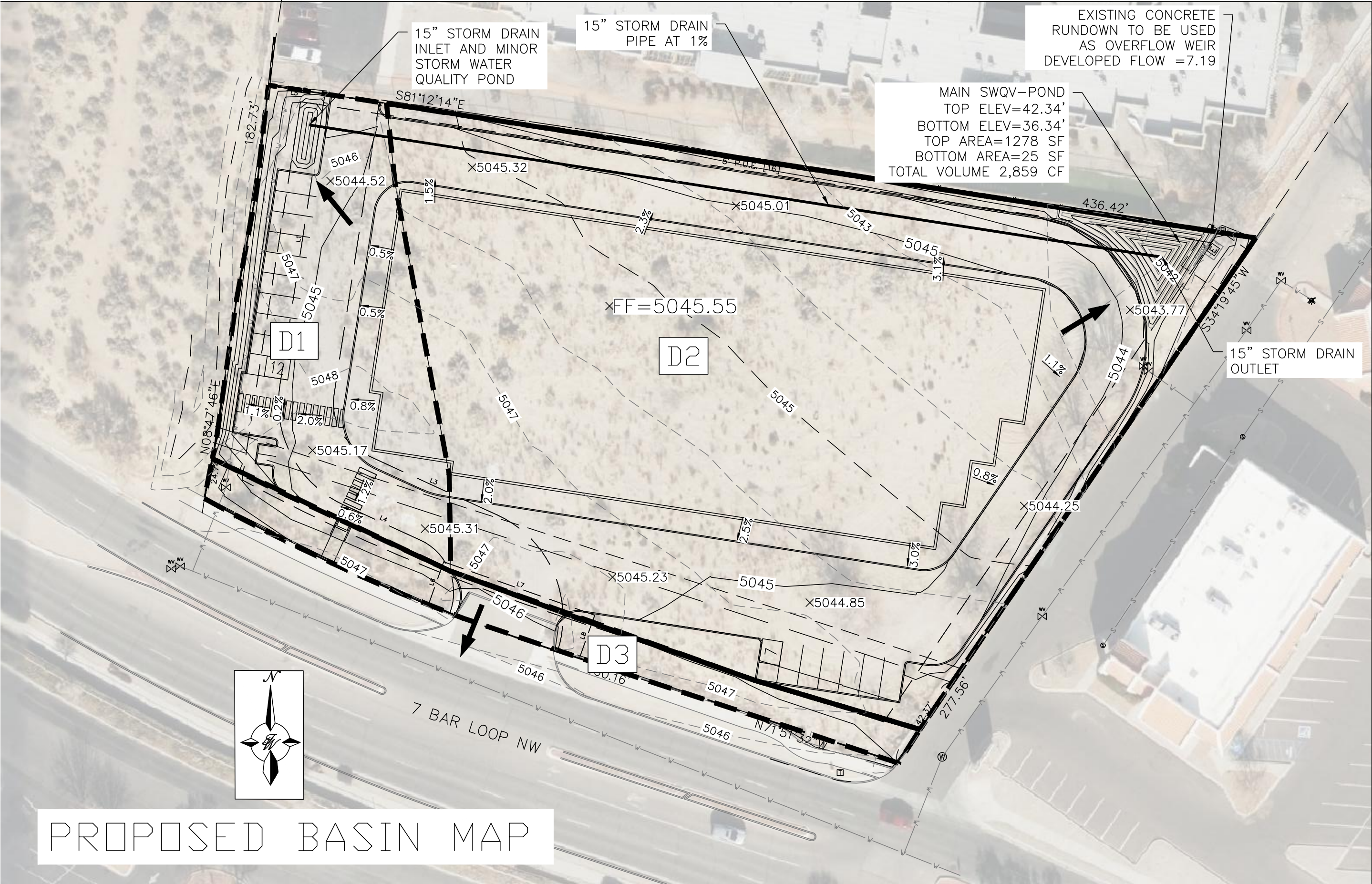
TYPE OF SUBMITTAL:

Engineering / Architect Certification
Conceptual Grading & Drainage Plan
Grading & Drainage Plan, and/or Drainage Report
Drainage Report (Work Order)
Drainage Master Plan
Conditional Letter of Map Revision (CLOMR)
Letter of Map Revision (LOMR)
Floodplain Development Permit
Traffic Circulation Layout (TCL) – Administrative
Traffic Circulation Layout (TCL) – DFT Approval
Traffic Impact Study (TIS)
Street Light Layout
OTHER (SPECIFY) _____

TYPE OF APPROVAL SOUGHT:

Pad Certification
Building Permit
Grading Permit
Paving Permit
SO-19 Permit
Foundation Permit
Certificate of Occupancy - Temp Perm
Preliminary / Final Plat
Site Plan for Building Permit - DFT
Work Order (DRC)
Release of Financial Guarantee (ROFG)
CLOMR / LOMR
Conceptual TCL - DFT
OTHER (SPECIFY) _____

DATE SUBMITTED: _____

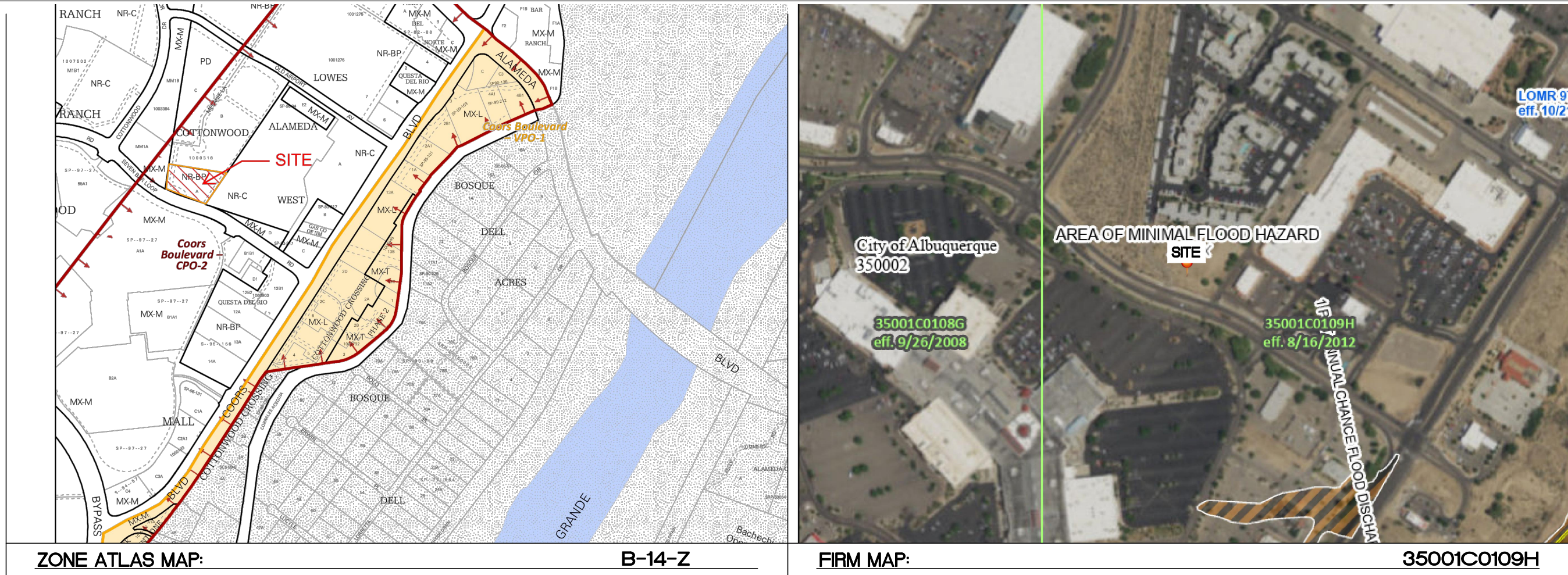
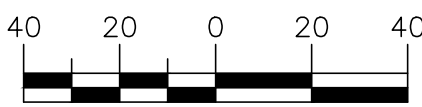


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LEGEND

--- BASIN BOUNDARY

GRAPHIC SCALE



DPM CH 6 Weighted E Method

Precipitation Zone 1

7 BAR LOOP STORAGE-FACILITY
SEVEN BAR LP NW ALBUQUERQUE 87114
TWLLC

Date

6/14/2024

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed

Volume = Weighted E * Total Area

Flow = Qa*Aa + Qb*Ab + Qc*Ac + Qd*Ad

6 Hr Excess Precipitation, E (in.)

Zone 1	100-Year	10-Year
Ea	0.55	0.08
Eb	0.73	0.22
Ec	0.95	0.44
Ed	2.24	1.24

Peak Discharge (cfs/acre)

Zone 1	100-Year	10-Year
Qa	1.54	0.3
Qb	2.16	0.81
Qc	2.87	1.46
Qd	4.12	2.57

Existing Conditions

		Basin Descriptions										100-Year, 6-Hr			
Basin ID	Tract	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E	Volume	Flow
					(%)	(acres)	(%)	(acres)	(%)	(acres)	(%)	(acres)	(in)	(ac-ft)	cfs
H1	A	14,580	0.33	0.00052	40%	0.134	0%	0.000	60%	0.201	0%	0.000	0.790	0.022	0.78
H2	A	65,011	1.49	0.00233	80%	1.194	0%	0.000	20%	0.298	0%	0.000	0.630	0.078	2.70
H3	A	5,492	0.13	0.00020	70%	0.088	5%	0.006	20%	0.025	10%	0.013	0.836	0.009	0.27
Total		85,083	1.95	0.00305		1.416		0.006		0.525		0.013		0.109	3.75

Proposed Conditions

Basin Descriptions												100-Year, 6-Hr			
Basin ID	Tract	Area (sf)	Area (acres)	Area (sq miles)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	Weighted E (in)	Volume (ac-ft)	Flow cfs
D1	A	14,580	0.33	0.00052	0%	0.000	0%	0.000	15%	0.050	85%	0.285	2.047	0.057	1.32
D2	A	65,011	1.49	0.00233	0%	0.000	0%	0.000	15%	0.224	85%	1.269	2.047	0.255	5.87
D3	A	5,492	0.13	0.00020	0%	0.000	0%	0.000	90%	0.113	10%	0.013	1.079	0.011	0.38
Total		85,083	1.95	0.00305		0.000		0.000		0.388		1.566		0.323	7.563

Stormwater Quality Volume			
Total Impervious Area =	ΣArea in "Treatment D"		
Retainage depth = 0.42" Per DPM	0.0350	FT	
Retention Volume =	0.035 x area D	CF	
Area D (1.553) =	67,649	SF	
Volume Required =	2368	CF	
Volume Provided =	2859	CF	

SWQ POND VOLUME CALCULATIONS			
ELEVATION (ft)	AREA (sf)	VOLUME (cf)	CUMULATIVE VOLUME (cf)
36.34	25	0	0
37.34	94	2,859	2859
38.34	211	152.5	3012
39.34	380	295.5	3307
40.34	608	494	3801
41.34	914	761	4562
42.34	1278	1096	5658

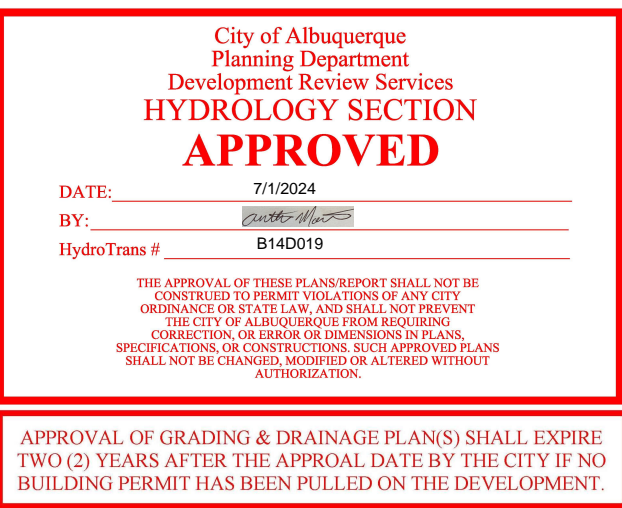
EXISTING CONDITIONS

THE SUBJECT SITE IS CURRENTLY VACANT WITH GROWING VEGETATION. BASED ON THE TOPOGRAPHY, RUNOFF SURFACE FLOWS SOUTH TO NORTH, WHILE A PORTION FLOWS TOWARDS THE NORTHEAST AND THE OTHER THE NORTHWEST AND A PORTION OF THE SOUTH SIDE OF THE LOT FLOWS TOWARDS 7 BAR LOOP INCLUDING THE EXISTING DRIVEWAY. PER THE COTTONWOOD APARTMENTS DRAINAGE REPORT BY HUITT-ZOLLARS, INC. 2005 (HYDRONUM:B14D006) THE SUBJECT SITE IS ALLOWED TO FREE FLOW TOWARDS THE APARTMENTS SITE TO THE NORTH VIA AN EXISTING 2' CONCRETE RUNDOWN LOCATED ON THE NORTHEAST CORNER. OF THE SITE

PROPOSED CONDITIONS

THE DEVELOPED FLOWS WILL SURFACE FLOW INTO TWO STORM WATER QUALITY PONDS ONE LOCATED ON THE NORTHEAST CORNER AND THE OTHER TO THE NORTHWEST CORNER OF THE SELF STORAGE FACILITY. ROUGHLY ONE-THIRD OF THE SITE (BASIN D1) WILL DRAIN TO THE DETENTION POND ON THE NORTHWEST CORNER WERE THE FLOW WILL BE PICKED UP BY A 15" STORM DRAIN PIPE. FLOW FROM BASIN D1 WILL BE CONVEYED TO THE LARGER STORMWATER QUALITY POND LOCATED ON THE NORTHEAST CORNER OF THE SITE INCLUDING THE DEVELOPED FLOW FROM BASIN D2. OVERFLOW WILL BE DIRECTED TOWARDS THE EXISTING 2 FT CONCRETE RUNDOWN JUST NORTH OF THE MAIN STORM WATER QUALITY POND. THE PROPOSED DEVELOPED FLOW IS BELLOW THE ALLOWED FLOW PER THE COTTONWOOD APARTMENTS DRAINAGE REPORT BY HUITT-ZOLLARS, INC. 2005 (HYDRONUM:B14D006)

BASIN D3 WILL CONTINUE TO FLOW SOUTH WITH NEGGLIGIBLE INCREASE IN FLOW DUE TO LANDSCAPING IMPROVEMENTS.



	ENGINEER'S SEAL	STORAGE FACILITY 7 BAR LOOP, ALBUQUERQUE, NM	DRAWN BY BF
		CONCEPTUAL GRADING AND DRAINAGE PLAN	DATE 06/03/2024
			2024014_BASINS
			SHEET # GR-1
		JOB # 2024014	