

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

February 25, 2020

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

**RE: Maverik – Montgomery & Carlisle
3601 Montgomery Blvd. NE
Conceptual Grading and Drainage Plan
Engineer's Stamp Date: 02/07/20
Hydrology File: F16D001A**

Dear Mr. Bohannon:

PO Box 1293

Based upon the information provided in your submittal received 02/11/2020, the Conceptual Grading & Drainage Plan is approved for action by the DRB on Preliminary Plat / Final Plat.

Albuquerque

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 to any earth disturbance.

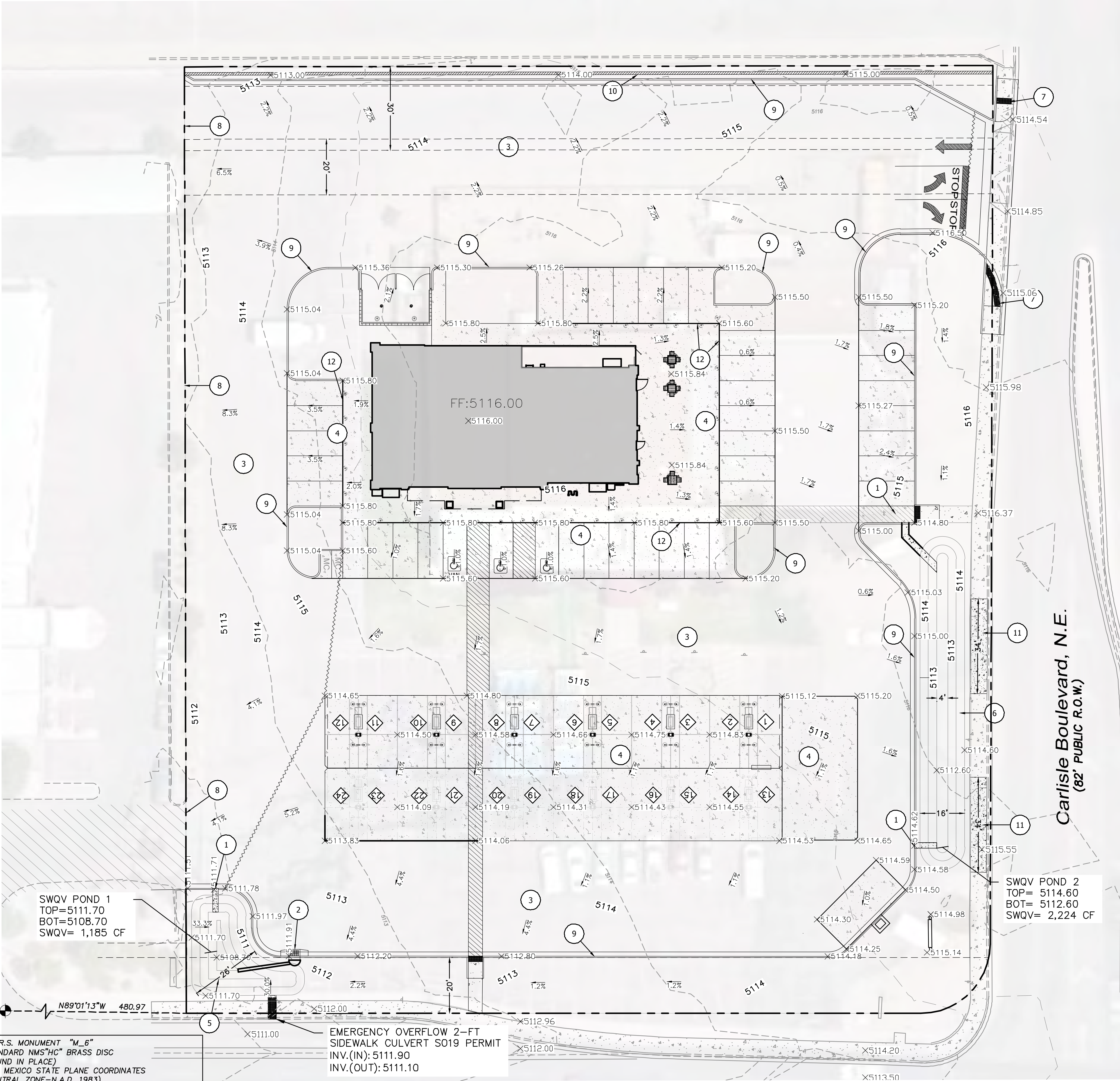
NM 87103

www.cabq.gov

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

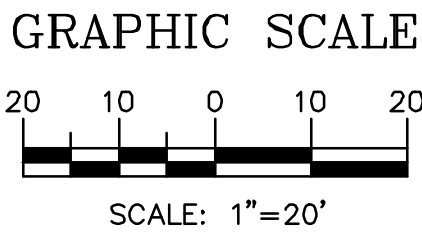
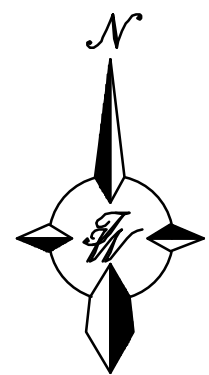


A.G.R.S. MONUMENT "M-6"
STANDARD NMS"HC" BRASS DISC
(FOUND IN PLACE)
NEW MEXICO STATE PLANE COORDINATES
(CENTRAL ZONE-N.A.D. 1983)
N=1,503,215.185 US SURVEY FEET
E=1,533,745.194 US SURVEY FEET
PUBLISHED EL=5113.206 US SURVEY FT (NAVD 1988)
GROUND TO GRID FACTOR=0.999672339
DELTA ALPHA ANGLE=-0°12'19.10"
REFERENCE DATE 1/29/2020

ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

LEGEND

- CURB & GUTTER
- BOUNDARY LINE
- EASEMENT
- CENTERLINE
- RIGHT-OF-WAY
- BUILDING
- CONCRETE / SIDEWALK
- GRADE BREAK
- RETAINING WALL
- CONTOUR MAJOR
- CONTOUR MINOR
- SPOT ELEVATION
- FLOW ARROW
- EXISTING CURB & GUTTER
- EXISTING BOUNDARY LINE
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- EXISTING SPOT ELEVATION
- CURB INLET



KEYED NOTES

- 2-FT CURB CUT AND 2-FT CONCRETE RUNDOWN
- WATER QUALITY INLET WITH OUTLET PROTECTION FOR OIL/WATER
- ASPHALT PAVING (SEE GEOTECH REPORT)
- CONCRETE SLAB WITH CHAMFERED CORNERS
- SWQV POND #1
- SWQV POND #2
- MATCH EXISTING FLOWLINE. BUILD NEW RAMP AT ENTRANCE PER DWG. 2446
- MATCH EXISTING ASPHALT PAVEMENT ON ADJACENT PROPERTY
- ONSITE CURB AND GUTTER
- NEW BOUNDARY/SCREEN WALL 6-FT HIGH, CMU BLOCK WALL, BY OWNER.
- REMOVE EXISTING DRIVEWAY (CURB, GUTTER & SW) AND REPLACE WITH COA STD. CURB, GUTTER & SW. MATCH EXISTING FL AT GUTTER.
- ZERO CURB

DRAINAGE PLANS ON FILE AT COA:

PROPERTY: F16D001, DATED 6/8/1973
PROPERTY EAST: F16D053 DATED 4/1/19 (CAR WASH AT 3525 MONTGOMERY BLVD.)

EXISTING DRAINAGE:

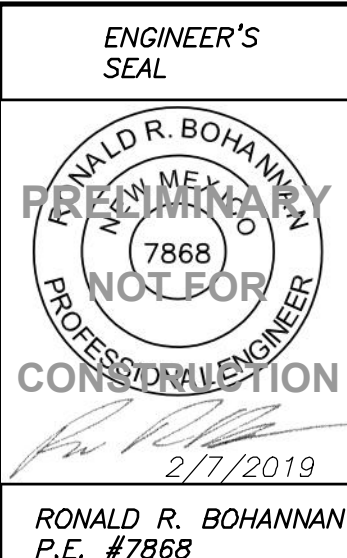
THE SUBJECT SITE IS LOCATED IN THE NORTHWEST QUADRANT OF THE INTERSECTION OF MONTGOMERY BLVD AND CARLISLE BLVD ADDRESS OF 3601 MONTGOMERY BLVD. NE. THE SITE IS CURRENTLY DEVELOPED WITH AN EXISTING CHURCH AND ASPHALT PARKING ACROSS THE ENTIRE PARCEL AND IS THEREFOR 95% IMPERVIOUS WITH RUNOFF FLOW ENTERING INTO THE PROPERTY TO THE WEST. THE NORTHERN PORTION OF THE SITE DRAINS TO THE CREDIT UNION PROPERTY AND ENTERS THE DETENTION POND BEFORE DISCHARGING TO THE NORTH DIVERSION CHANNEL. THIS WAS NOT ACCOUNTED FOR IN THE CREDIT UNION DRAINAGE REPORT BUT THE POND WAS OVERSIZED AND HAS EXCESS CAPACITY. THE SOUTHERN PORTION OF THE SITE DRAINS INTO THE CAR WASH PROPERTY ADJACENT AND FLOWS INTO MONTGOMERY BLVD BEFORE ENTERING THE CATCH BASIN APPROXIMATELY 130-FT TO THE WEST. THERE IS A BLANKET CROSS DRAINAGE EASEMENT TO THE ADJACENT PARCEL. CURRENTLY THERE ARE NO WATER QUALITY FEATURES AND THE ENTIRE SITE DISCHARGES WEST VIA SURFACE FLOW. THE SITE IS LOCATED IN FLOOD ZONE X.

PROPOSED DRAINAGE:

THE PROPOSED DEVELOPMENT WILL BE GRADED TO ACCOMMODATE THE LIGHT VEHICLE FUELING STATION AND CONVENIENCE STORE WITH A 4,425 SQ. FT. BUILDING, NEW ASPHALT AND CONCRETE PAVING, FUELING FACILITY AND ASSOCIATED SITE FEATURES. RUNOFF FROM THE SITE WILL CONTINUE TO FLOW FROM NORTH EAST TO SOUTHWEST HOWEVER WATER QUALITY PONDS WILL BE INSTALLED TO CAPTURE THE FIRST FLUSH VOLUME. IN ADDITION A WATER QUALITY INLET SHALL BE INSTALLED TO PROVIDE OIL/WATER SEPARATION FROM THE FLOW ACROSS THE FUELING AREAS. THE 100-YR PEAK DISCHARGE FROM THE SITE TO THE ADJACENT PROPERTY WILL BE 9.87 CFS WHICH IS LESS THAN HISTORIC DISCHARGE. THE RUNOFF FROM THE NORTHERN PORTION OF THE SITE THAT CANNOT PASS THROUGH A SWQV ON THE PROPERTY WILL ENTER THE DETENTION POND AT THE CREDIT UNION AND THEREFORE MEET THE REQUIRED SWQV PONDING REQUIREMENT.

ENTITLEMENT PROCESS & PUBLIC WORK ORDER NOTE:

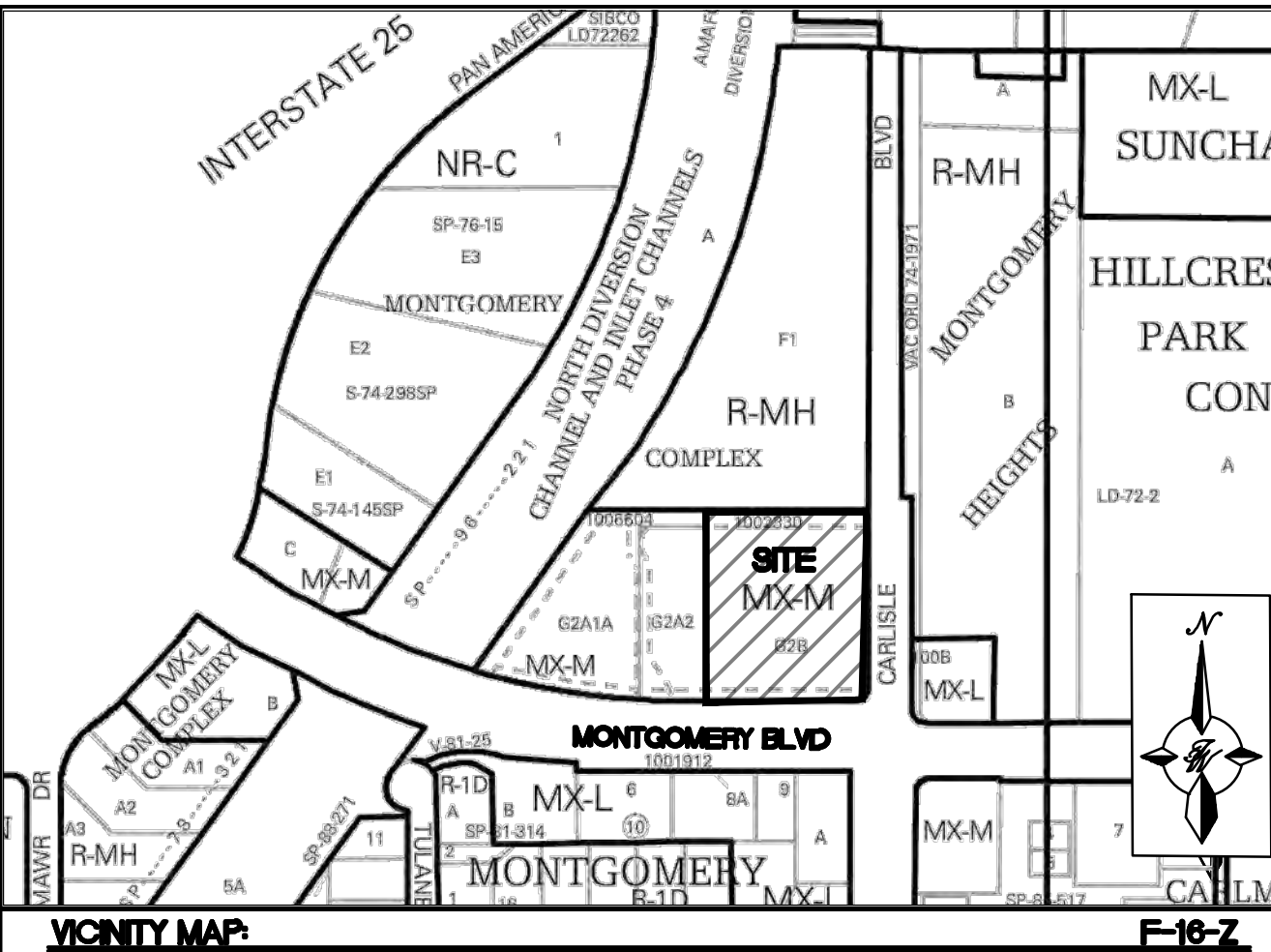
- CIVIL PLANS WILL BE SUBMITTED UNDER "SITE PLAN - ADMIN" FOR BUILDING PERMIT REVIEW & APPROVAL.
- THE PARCEL WILL BE RE-PLATTED TO VACATE UTILITY EASEMENTS AND DEDICATE SIDEWALK ENCROACHMENT TO THE RIGHT OF WAY.
- NO OFFSITE IMPROVEMENTS ARE PROPOSED. ALL WORK SHALL BE COMPLETED UNDER THE BUILDING PERMIT.



MAVERIK
3601 MONTGOMERY BLVD. NE
CONCEPTUAL GRADING &
DRAINAGE PLAN (NOT FOR CONSTRUCTION)

TERRA WEST, LLC
5571 MIDWAY PARK PLACE NE
ALBUQUERQUE, NM 87109
(505) 858-3100
www.tierrowestllc.com

DRAWN BY
RS
DATE
2/7/2020
2019050_GR
SHEET #
C2-A
JOB #
2019050



LEGAL DESCRIPTION: TRACT G-2-B, MONTGOMERY COMPLEX, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NOTICE TO CONTRACTORS

- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HERON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL, DIAL "811" (OR (505) 260-1990) FOR THE LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONNECTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
- CONTRACTOR MUST CONTACT JASON RODRIGUEZ AT 235-8016 AND CONSTRUCTION COORDINATION AT 924-3416 TO SCHEDULE AN INSPECTION.

DPM Weighted E Method

Precipitation Zone 2
3601 Montgomery Blvd. NE Albuquerque NM
Maverik Gas Station
TWLLC Date 2/5/2020

Existing Conditions

Basin Descriptions										100-Year, 6-Hr			10-Year, 6-Hr				
Basin ID	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs
E1	35,093.96	0.81	0.00126	0%	0.000	0%	0.000	5%	0.040	95%	0.765	2.071	0.139	3.72	1.299	0.087	2.47
E2	60,912.96	1.40	0.00218	0%	0.000	0%	0.000	5%	0.070	95%	1.328	2.071	0.241	6.46	1.299	0.151	4.29
Total	96,007	2.20	0.00344		0.000		0.000		0.110		2.094		0.380	10.19		0.239	6.76

Proposed Conditions

Basin Descriptions										100-Year, 6-Hr			10-Year, 6-Hr				
Basin ID	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (in)	Volume (ac-ft)	Flow cfs	Weighted E (in)	Volume (ac-ft)	Flow cfs
				%	(acres)	%	(acres)	%	(acres)	%	(acres)						
P1	27,111.18	0.62	0.00097	0%	0.000	2%	0.012	0%	0.000	98%	0.610	2.093	0.109	2.90	1.319	0.068	1.93
P2	4,936.23	0.11	0.00018	0%	0.000	0%	0.000	0%	0.000	100%	0.113	2.120	0.020	0.53	1.340	0.013	0.36
P3	9,115.29	0.21	0.00033	0%	0.000	10%	0.021	0%	0.000	90%	0.188	1.986	0.035	0.93	1.234	0.022	0.61
P4	46,398.42	1.07	0.00166	0%	0.000	15%	0.160	0%	0.000	85%	0.905	1.919	0.170	4.62	1.181	0.105	2.99
P5	8445.80	0.19	0.00030	0%	0.000	5%	0.010	0%	0.000	95%	0.184	2.053	0.033	0.89	1.287	0.021	0.59
Total	96,007	2.20	0.00344		0.000		0.203		0.000		2.001		0.367	9.87		0.228	6.48

Equations:

Weighted E = Ea *Aa + Eb *Ab + Ec *Ac + Ed *Ad / (Total Area)

Volume = Weighted D * Total Area

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

Excess Precipitation, E (in.)			
Zone 2	100-Year	10-Year	
Ea	0.53	0.13	
Eb	0.78	0.28	
Ec	1.13	0.52	
Ed	2.12	1.34	

Peak Discharge (cfs/acre)			
Zone 2	100-Year	10-Year	
Qa	1.56	0.38	
Qb	2.28	0.95	
Qc	3.14	1.71	
Qd	4.70	3.14	

Water Quality Volume (Onsite)

Total Impervious Area = 2.20 Acres = 96,007 SF

Retainage depth = 0.28" = 0.023' (redevelopment)

Retention Volume = 0.023*96,007 = 2,208 CF = 0.05 Ac-Ft

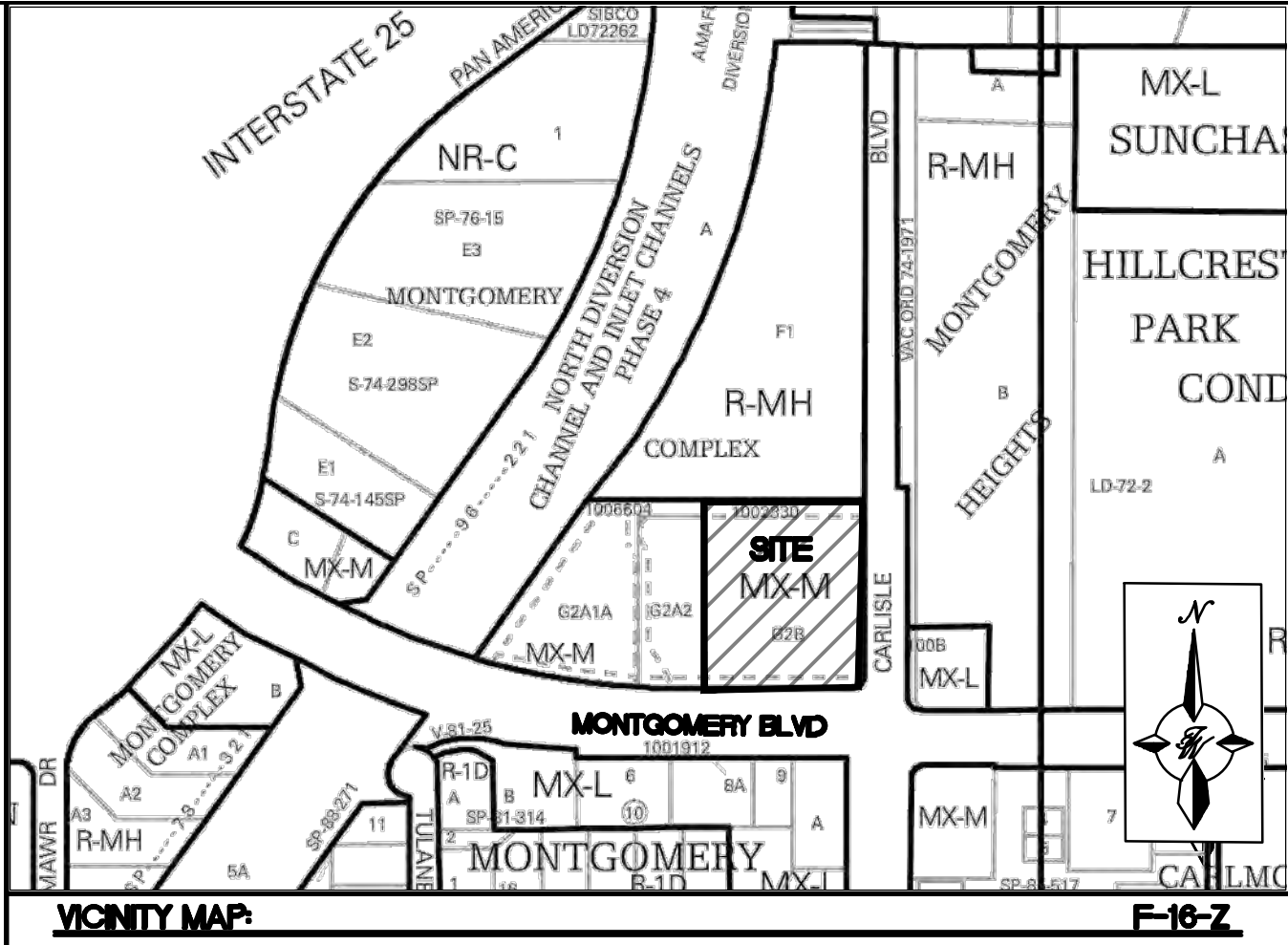
SWQV		
Required (cf)	Provided (cf)	Untreated (cf)
611	0	611
114		
189	2,224	0
907	1,185	0
185	0	185
2,005	3,409	796

SEE POND CALCS
THIS SHEET

To downstream
detention pond

SWQV POND CALCULATIONS			
POND No.	MIDPOINT (SF)	POND DEPTH (FT)	POND VOLUME (CF)
1	395	3.0	1,185
2	1,112	2.0	2,224

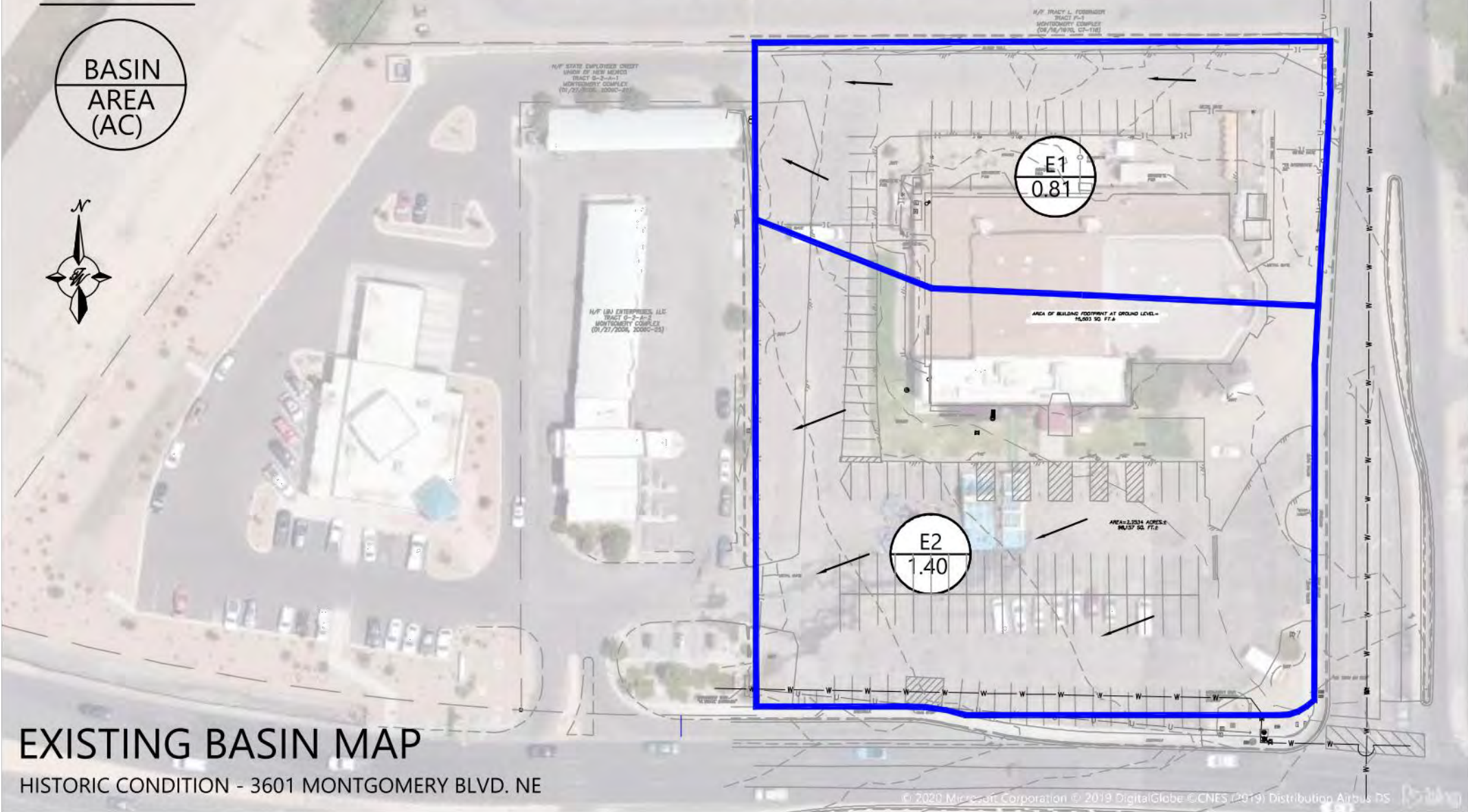
The required SWQV Retention is 2,005 cubic feet.
3,409 cubic feet SWQV retention is provided in two onsite ponds
796 cubic feet does not enter the onsite ponds but does enter
the downstream detention pond.



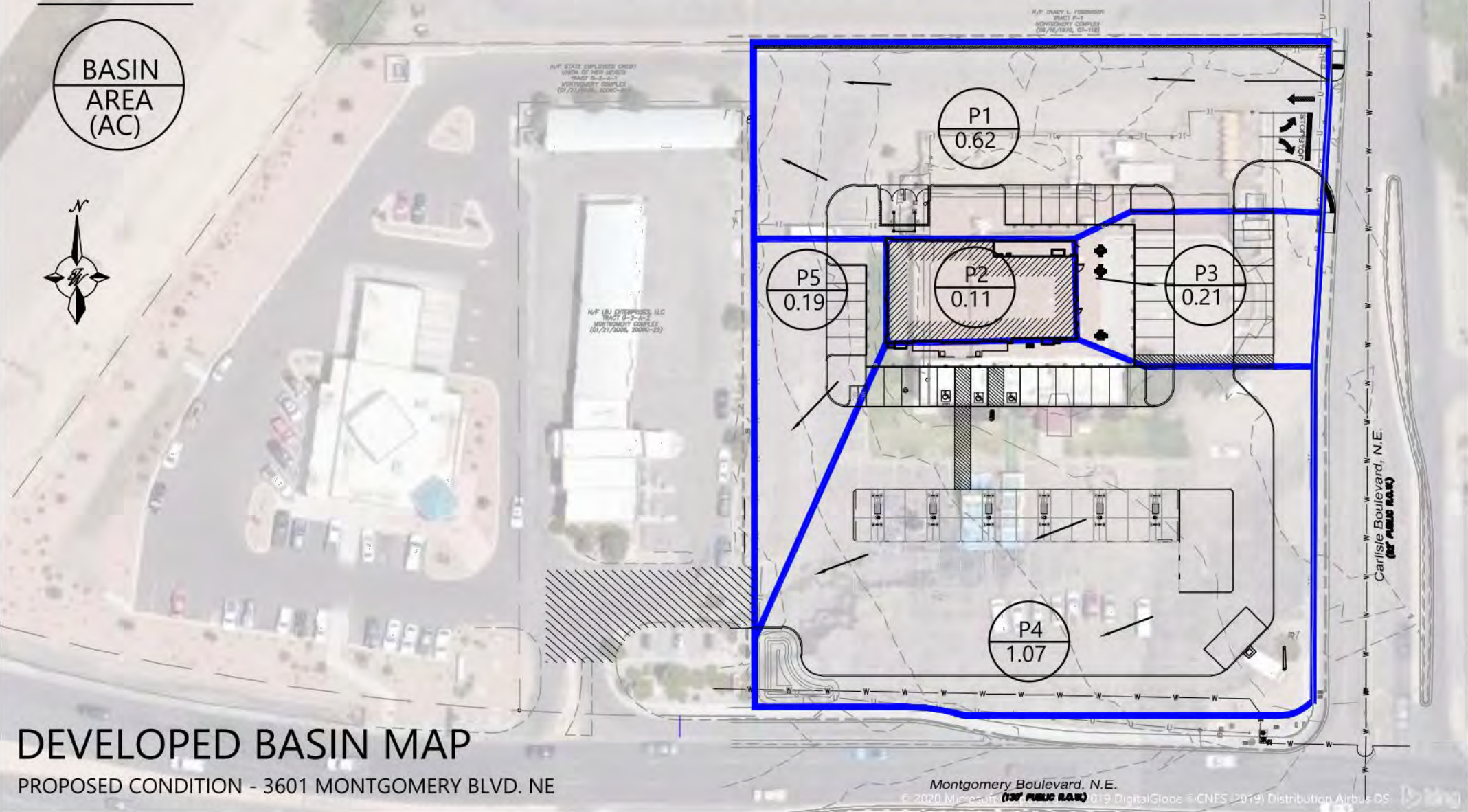
FRM MAP: #35001C0138H DATED AUGUST 16, 2012

LEGAL DESCRIPTION: TRACT G-2-B, MONTGOMERY COMPLEX, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

LEGEND



LEGEND



	ENGINEER'S SEAL	MAVERIK	DRAWN BY
		3601 MONTGOMERY BLVD. NE	RS
		CONCEPTUAL GRADING & DRAINAGE PLAN (NOT FOR CONSTRUCTION)	DATE
			2/7/2020
	TERRA WEST, LLC 5571 MIDWAY PARK PLACE NE ALBUQUERQUE, NM 87109 (505) 858-3100 www.terrawestllc.com		2019050_GR
			SHEET #
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