

# CITY OF ALBUQUERQUE

Planning Department  
Alan Varela, Director



Mayor Timothy M. Keller

June 24, 2025

Donna Sandoval  
Tierra West, LLC  
5571 Midway Park Place NE  
Albuquerque, NM 87109

**RE: 2500 Phoenix Ave. NE  
Grading & Drainage Plan  
Engineer's Stamp Date: 5/21/2025  
Hydrology File: H16D156  
Case # HYDR-2025-00060**

Dear Ms. Sandoval:

PO Box 1293

Based upon the information provided in your submittal received 5/21/2025, the Grading & Drainage Plans are approved for Building Permit, and Grading Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

Albuquerque

**PRIOR TO CERTIFICATE OF OCCUPANCY:**

NM 87103

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

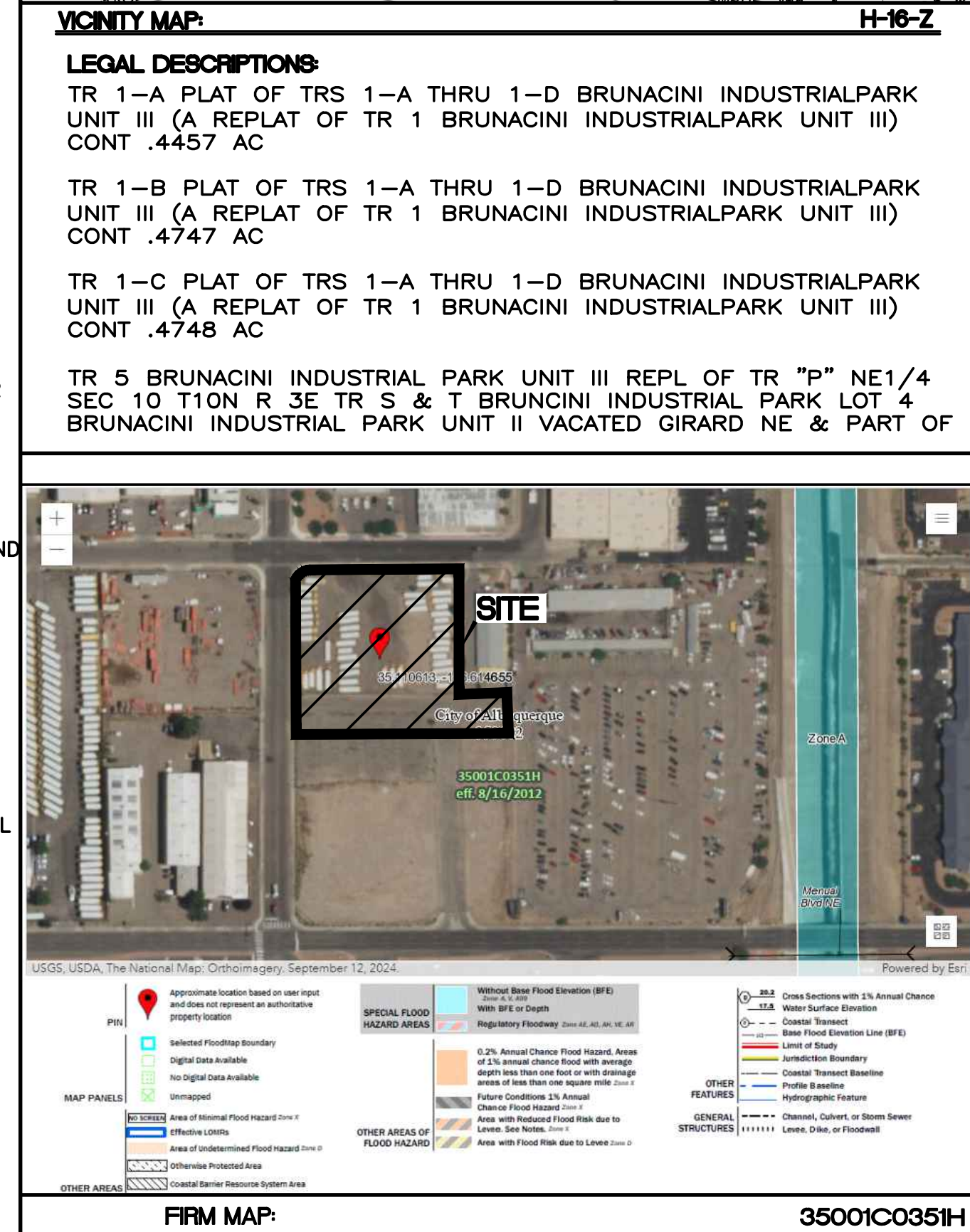
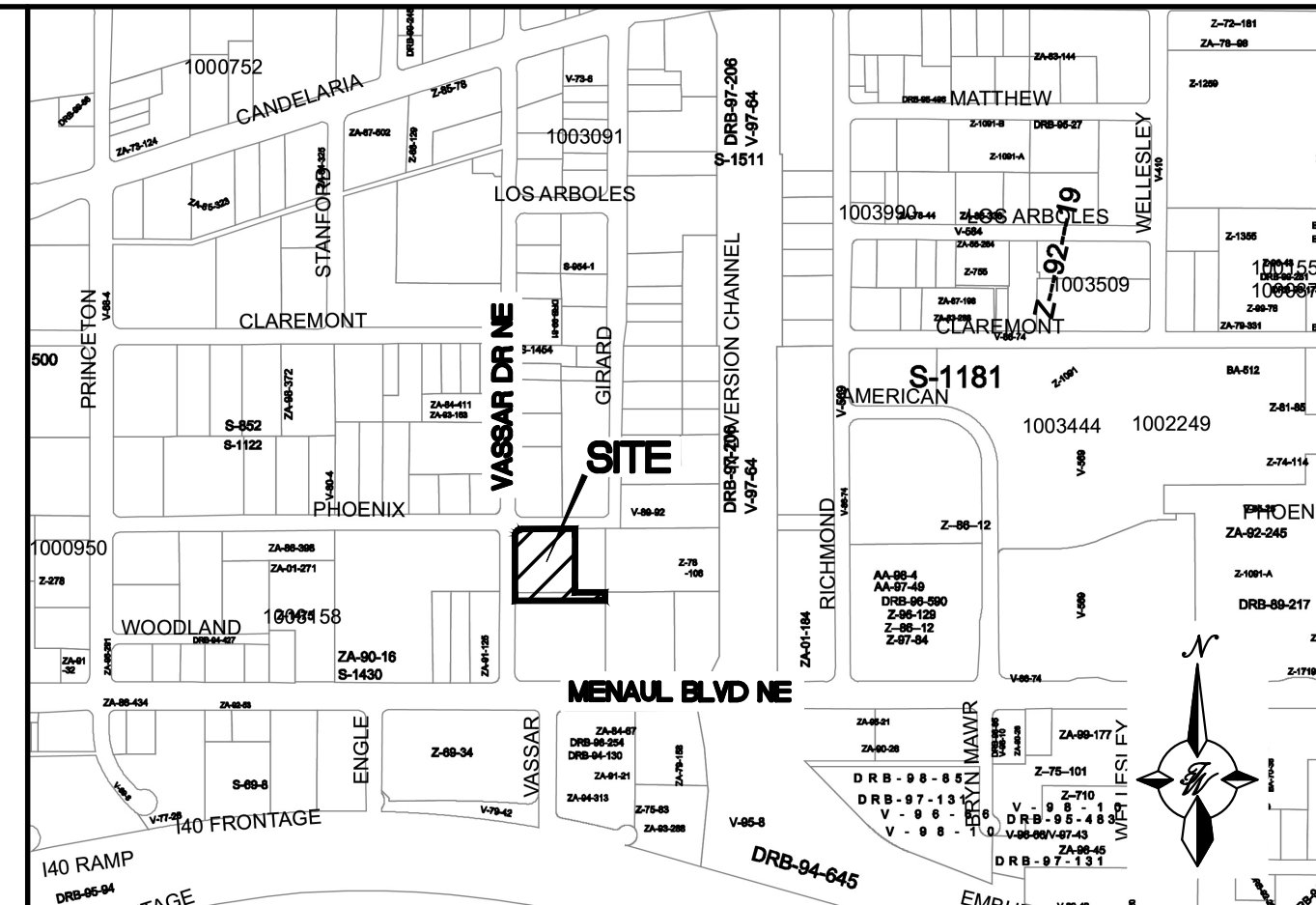
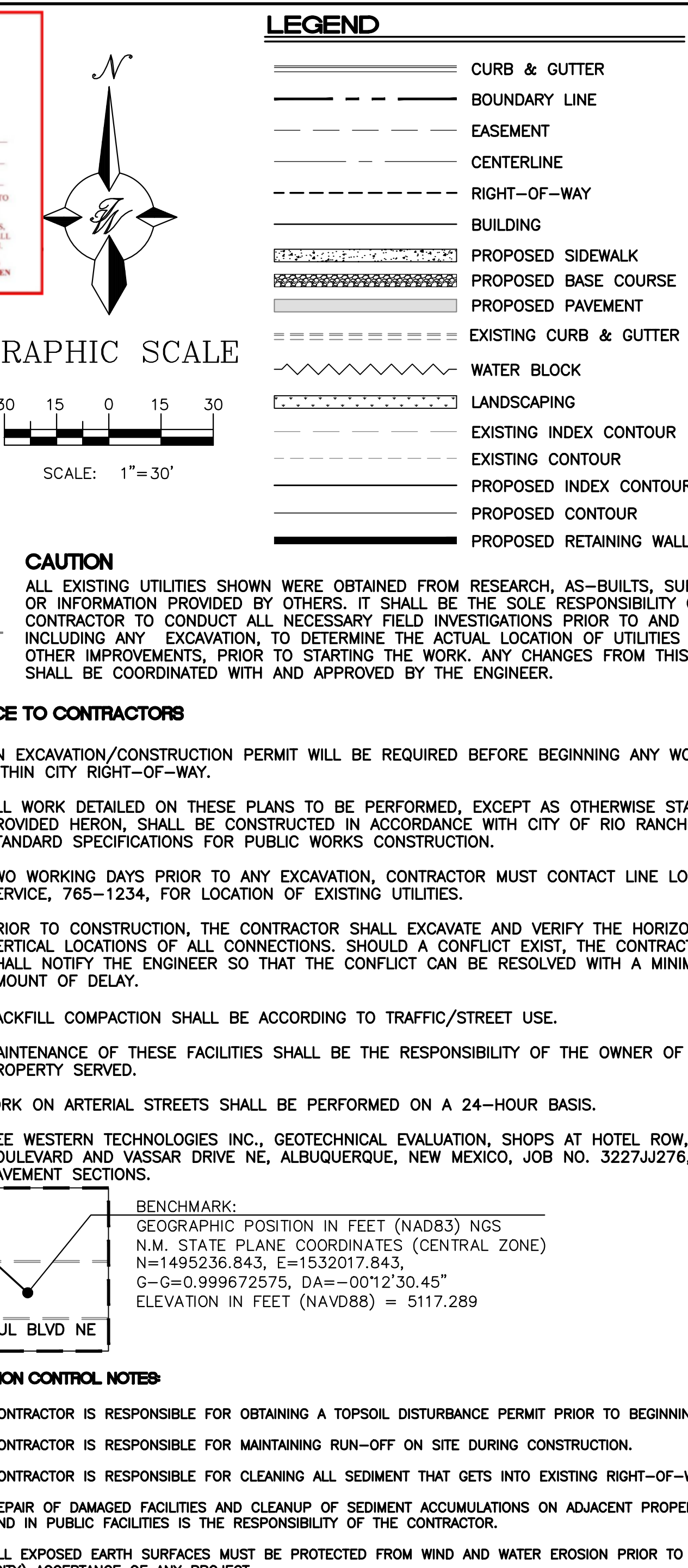
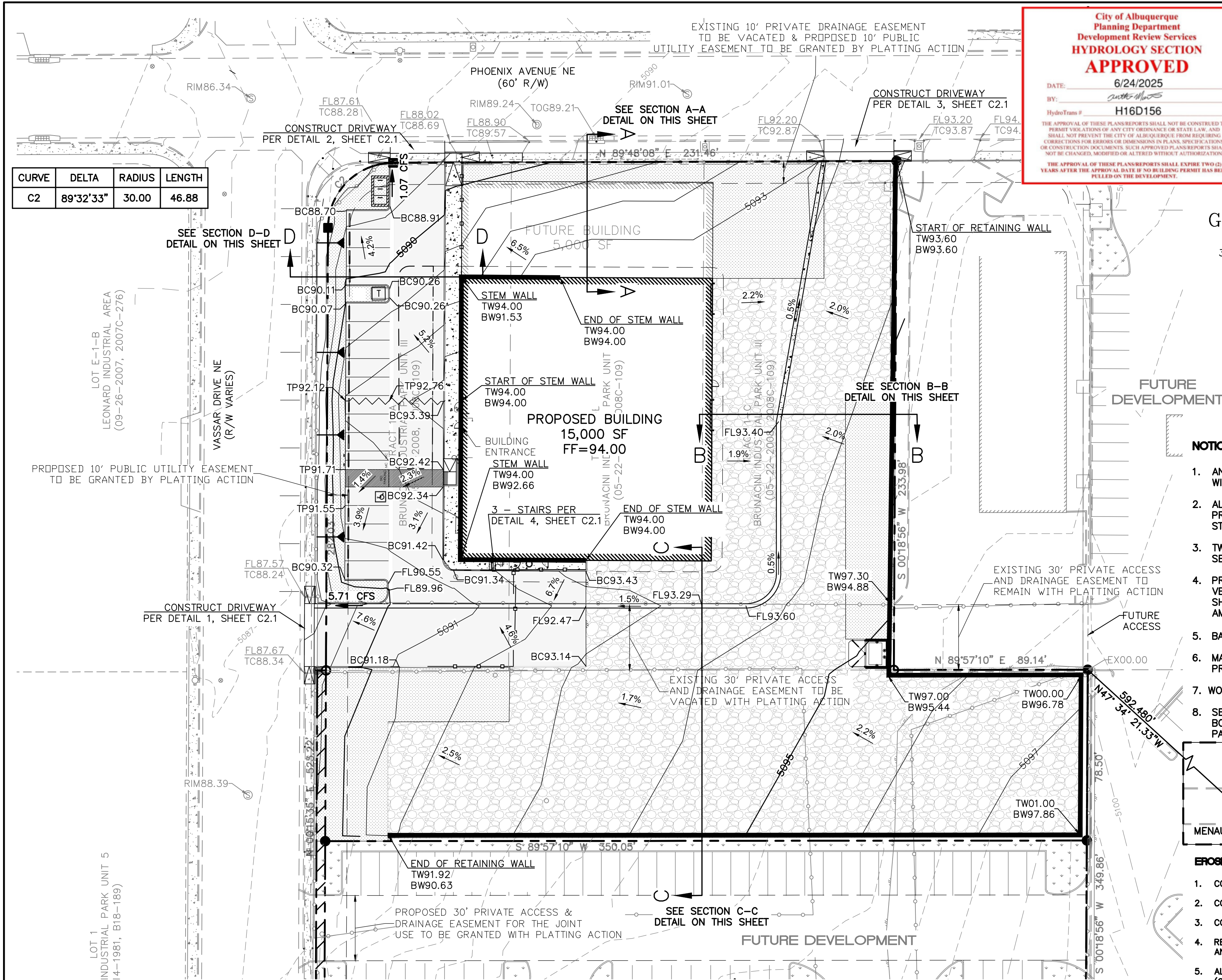
[www.cabq.gov](http://www.cabq.gov)

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](mailto:jhughes@cabq.gov), 924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3314 or [amontoya@cabq.gov](mailto:amontoya@cabq.gov).

Sincerely,

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



ENGINEER'S SEAL  
RONALD R. BOHANNAN  
NEW MEXICO  
7868  
05/21/2025  
RONALD R. BOHANNAN  
P.E. #7868

MENAU AND VASSAR  
2500 PHOENIX AVE NE, ALBUQUERQUE,  
NM, 87107  
GRADING AND  
DRAINAGE PLAN

5571 MIDWAY PARK PL NE  
ALBUQUERQUE, NEW MEXICO 87109  
(505) 858-3100  
www.tierrawestllc.com

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JL  
DATE  
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FLOOD PLAN

THE SITE IS LOCATED WITHIN FLOOD ZONE X, WHICH IS DEFINED AS "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN." THE SITE DOES NOT LIE WITHIN A FLOOD HAZARD AREA AS SHOWN ON FIRM MAP 35001C0351H AND REQUIRES NO FURTHER FLOOD-PROOFING OR OTHER FLOOD MITIGATION.

METHODOLOGY

THE HYDROLOGIC ANALYSIS PROVIDED WITH THIS DRAINAGE MANAGEMENT PLAN HAS BEEN PREPARED IN ACCORDANCE WITH ARTICLE 6-2 OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL. THE SITE IS IN PRECIPITATION ZONE 2 PER TABLE 6.2.7 OF SECTION 6-2(A)(1). THE DESIGN STORM FOR EXISTING AND PROPOSED HYDROLOGY IS THE 100 YEAR 6 HR EVENT. LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ACCORDING TO THE SITE CONDITIONS. THE WEIGHTED E TABLE AND EQUATIONS USED ARE SHOWN ON THIS SHEET.

EXISTING CONDITIONS

THE EXISTING 2.02 ACRES FOR THE SUBJECT IS CURRENTLY DEVELOPED AND COVERED WITH MOSTLY COMPACTED SOIL, BASE COURSE AND PAVEMENT. THERE IS APPROXIMATELY 22'-FT OF FALL FROM THE SOUTHEAST TO THE NORTHWEST. AS SHOWN ON THIS SHEET, THE SITE IS DIVIDED INTO SEVEN BASINS AND REFERRED TO AS E1, E2, E3, O1, O2, O3, O4.

BASIN E1 IS THE SOUTH HALF OF THE SUBJECT SITE AND MADE OF TREATMENT C (55%) AND TREATMENT D (45%). IT GENERATES APPROXIMATELY 2.94 CFS FOR A 100-YEAR STORM.

BASIN E2 IS A MAJORITY OF THE NORTH HALF OF THE SUBJECT SITE AND IS MADE OF TREATMENT C (100%). IT GENERATES APPROXIMATELY 3.15 CFS FOR A 100-YEAR STORM.

BASIN O1 IS APPROXIMATELY 1.11 ACERS OF TRACT 5 AND IS COVERED WITH MOSTLY COMPACTED SOILS, BASE COURSE, AND PAVEMENT CONTAINING TREATMENT C (83%) AND TREATMENT D (17%). IT GENERATES APPROXIMATELY 3.62 CFS FOR A 100-YEAR STORM.

BASIN O2 IS APPROXIMATELY 0.06 ACERS OF TRACT 1-D AND IS MADE OF TREATMENT D (100%). IT GENERATES APPROXIMATELY 0.27 CFS FOR A 100-YEAR STORM.

BASIN O3 IS APPROXIMATELY 0.01 ACERS OF TRACT 1-D AND IS MADE OF TREATMENT C (100%). IT GENERATES APPROXIMATELY 0.03 CFS FOR A 100-YEAR STORM.

ALL FLOWS FROM BASIN E1, E2, O1, O2, O3 ARE DIRECTED NORTHWEST ONTO PHOENIX AVE. AND CAPTURED BY A ROADWAY CURB INLET APPROXIMATELY 75'-FT WEST OF THE INTERSECTION. THE COMBINED DISCHARGE IS 10.03 CFS FOR A 100-YEAR STORM.

BASIN E3 IS THE NORTHEAST CORNER OF THE SITE AND IS MADE OF TREATMENT C (100%). IT GENERATES APPROXIMATELY 0.54 CFS FOR A 100-YEAR STORM.

BASIN O4 IS APPROXIMATELY 0.01 ACERS OF TRACT 1-D AND IS MADE OF TREATMENT C (100%). IT GENERATES APPROXIMATELY 0.04 CFS FOR A 100-YEAR STORM.

ALL FLOWS FROM BASIN E3 AND O4 CONVEYS RUNOFF ONTO PHOENIX AVE AND CAPTURED BY A ROADWAY CURB INLET APPROXIMATELY 124'-FT EAST OF THE INTERSECTION. THE COMBINED DISCHARGE IS 0.58 CFS FOR A 100-YEAR STORM.

REMAINING OFFSITE FLOWS FROM TRACT 1-D ARE EXCLUDED DUE TO THE PROPERTIES USE OF STANDARD 6-INCH CURB AND GUTTER THAT DIRECTS FLOW THROUGH A 1-FOOT CONCRETE RUNDOWN INTO A VALLEY GUTTER AND DISCHARGES ONTO PHOENIX AVE AS SEEN BY FIELD OBSERVATION AND A GRADING AND DRAINAGE PLAN PREPARED BY TGC ENGINEERING, INC. (9/24/2008)

THE OFFSITE FLOWS FROM TRACTS 2, 3, AND 4 ARE EXCLUDED DUE TO THE PROPERTIES' USE OF HEADER CURBS. THE GRADING AND DRAINAGE PLAN PREPARED BY LEVI VALDEZ (2/23/2006) AND SITE INSPECTION CONFIRMS CURBING EXISTENCE.

PROPOSED CONDITIONS

ACCORDING TO THE ALBUQUERQUE MASTER DRAINAGE STUDY, VOLUME I, DATED JANUARY 1981, THE SUBJECT SITE IS ALLOWED FREE DISCHARGE ONTO VASSAR DR. AND PHOENIX AVE. THE PROPOSED INDUSTRIAL DEVELOPMENT IS DIVIDED UP INTO TWO PROPOSED BASINS AND THE EXISTING OFFSITE BASINS. THEY ARE REFERRED TO AS P1, P2, O1, O2, O3, AND O4 AS SHOWN ON THIS SHEET.

BASIN P1 IS APPROXIMATELY 0.80 ACRES AND GENERATES APPROXIMATELY 2.85 CFS FOR A 100-YEAR STORM. BASIN O2 WILL TRAVEL ONTO BASIN P1 GENERATING A COMBINED FLOW RATE OF APPROXIMATELY 3.12 CFS. FLOWS ARE DIRECTED NORTH THROUGH THE PARKING LOT BY A 2' VALLEY GUTTER AND CONVEY ONTO PHOENIX AVE.

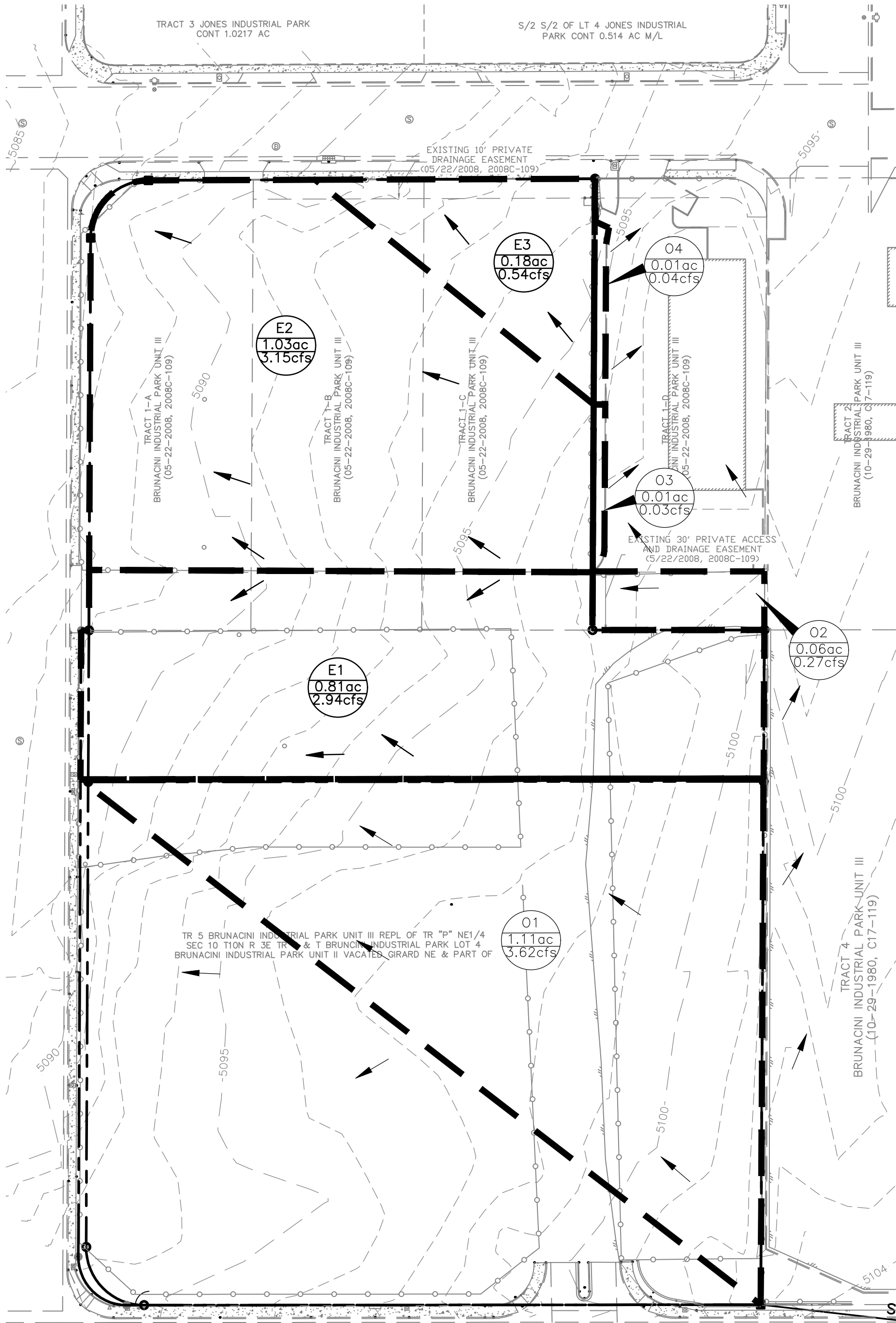
BASIN P2 IS APPROXIMATELY 1.22 ACRES AND GENERATES 4.15 CFS FOR A 100 YEAR STORM. FLOWS ARE DIRECTED SOUTH THROUGH THE PARKING LOT AND SOUTHWEST THROUGH THE GRAVEL YARD BY A 2' VALLEY GUTTER. ALL FLOWS WILL CONVEY ONTO VASSAR DR AND PHOENIX AVE.

ALL FLOWS FROM P1, P2, AND O2 WILL TRAVEL WEST ON PHOENIX AVE AND CAPTURED BY THE ROADWAY CURB INLET APPROXIMATELY 75'-FT WEST OF THE INTERSECTION. THE COMBINED DISCHARGE IS APPROXIMATELY 6.78 CFS FOR A 100-YEAR STORM.

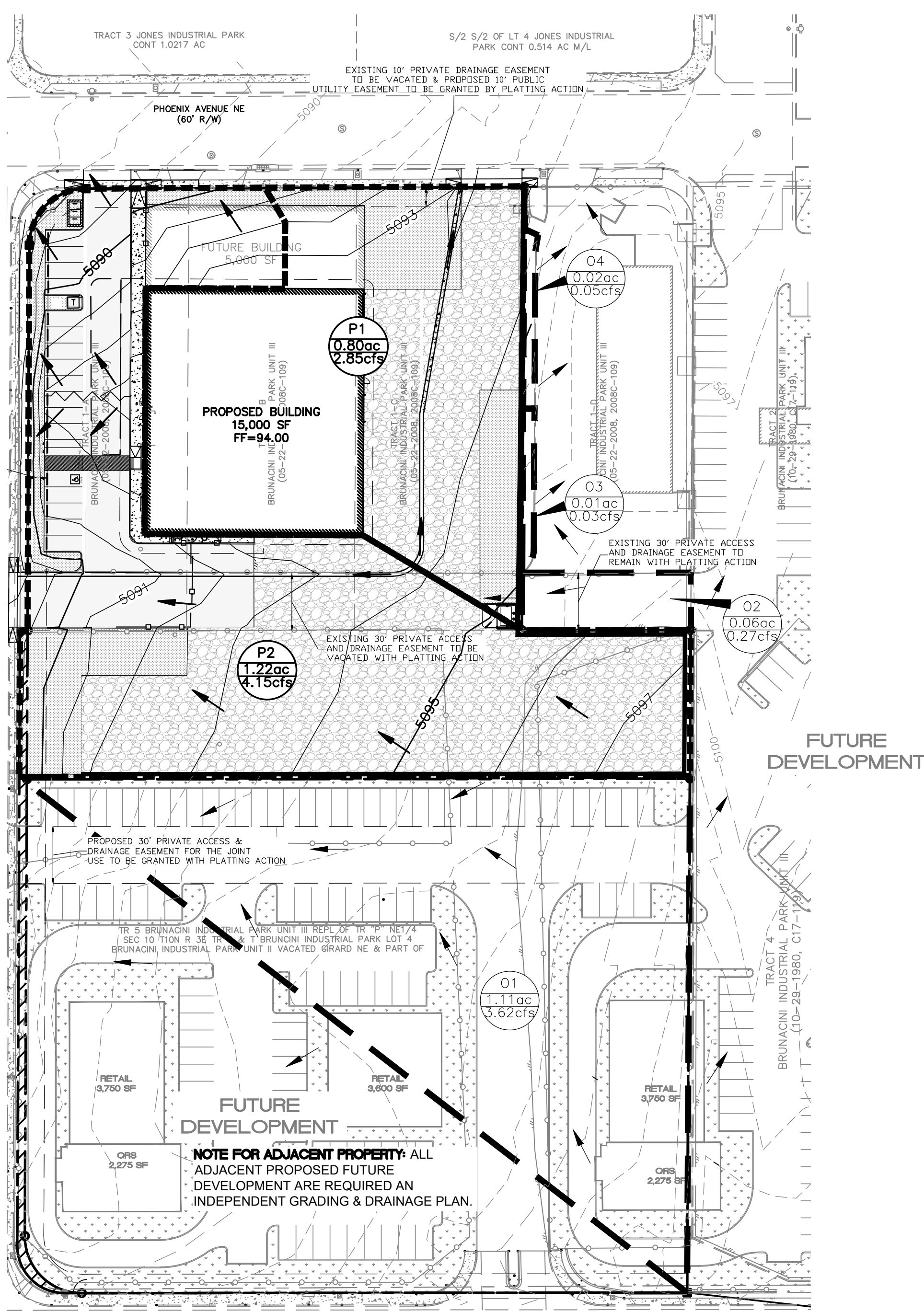
ALL FLOWS FROM BASINS O1, O2, O3, AND O4 ARE EXCLUDED FROM DRAINING ONTO SUBJECT SITE AS SHOWN ON GRADING PLAN.

STORMWATER QUALITY

ARTICLE 6-12 OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL STATES THAT ALL NEW DEVELOPMENT MUST MANAGE THE STORMWATER QUALITY VOLUME BY MANAGEMENT ON-SITE OR PAYMENT-IN-LIEU. THE PROPOSED PROJECT IS UNABLE TO ACCOMMODATE MANAGEMENT ON-SITE DUE THE AMOUNT OF FALL AND THE SIZE OF THE SITE RELATIVE TO THE EXISTING 22'-FT OF FALL FROM THE SOUTHEAST TO THE NORTHWEST. PAYMENT-IN-LIEU IS THE NECESSARY OPTION TO ACCOMMODATE THE REQUIREMENT. THE SITE IS LOCATED IN A METROPOLITAN REDEVELOPMENT AREA. ACCORDING TO SECTION 6-12(C)(1), PAYMENT-IN-LIEU SHALL BE WAIVED.



EXISTING BASIN MAP



PROPOSED BASIN MAP

WEIGHTED E METHOD

Existing Basins

Basin	Basin Area			Treatments				100-Year				10-Year			
	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)		Volume (ac-ft)	
				%	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(ac-ft)	%	(ac-ft)
E1	35,324.5	0.81	0.001	0%	0.00	0%	0.00	55%	0.45	45%	0.36	1.615	0.109	2.94	0.944
E2	45,035.0	1.03	0.002	0%	0.00	0%	0.00	100%	1.03	0%	0.00	1.030	0.089	3.15	0.480
E3	7,766.8	0.18	0.000	0%	0.00	0%	0.00	100%	0.18	0%	0.00	1.030	0.015	0.54	0.480
O1	48,294.5	1.11	0.002	0%	0.00	0%	0.00	83%	0.92	17%	0.19	1.251	0.116	3.62	0.655
O2	2,704.1	0.06	0.000	0%	0.00	0%	0.00	0%	0.00	100%	0.06	2.330	0.012	0.27	1.510
O3	497.7	0.01	0.000	0%	0.00	0%	0.00	100%	0.01	0%	0.00	1.030	0.001	0.03	0.480
O4	574.3	0.01	0.000	0%	0.00	0%	0.00	100%	0.01	0%	0.00	1.030	0.001	0.04	0.480
Total	140,196.9	3.218	0.00503	0%		0%		81%		19%			0.343	10.61	0.182

Developed Basins

Basin	Basin Area			Treatments				100-Year				10-Year			
	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)		Volume (ac-ft)	
				%	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(ac-ft)	%	(ac-ft)
P1	34,771.0	0.80	0.001	0%	0.00	16%	0.13	35%	0.28	49%	0.39	1.630	0.108	2.85	0.956
P2	53,229.0	1.22	0.002	0%	0.00	13%	0.16	53%	0.65	34%	0.42	1.442	0.147	4.15	0.807
O1	48,294.5	1.11	0.002	0%	0.00	0%	0.00	83%	0.92	17%	0.19	1.251	0.116	3.62	0.655
O2	2,704.1	0.06	0.000	0%	0.00	0%	0.00	0%	0.00	100%	0.06	2.330	0.012	0.27	1.510
O3	497.7	0.01	0.000	0%	0.00	0%	0.00	100%	0.01	0%	0.00	1.030	0.001	0.03	0.480
O4	574.3	0.01	0.000	0%	0.00	0%	0.00	100%	0.01	0%	0.00	1.030	0.001	0.04	0.480
Total	90,704.1	2.1	0.0	0%		14%		45%		42%			0.3	7.3	0.2

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

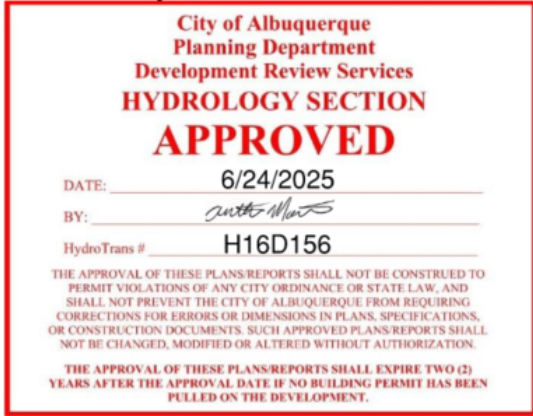
FIRST FLUSH VOLUME= Impervious Area\*0.42 inches

V10-DAY=V6-HR\*Aa(P10-DAY S-P6-HR)/12 IN/FT

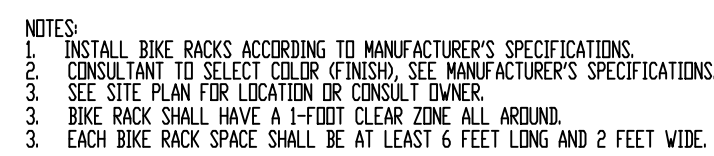
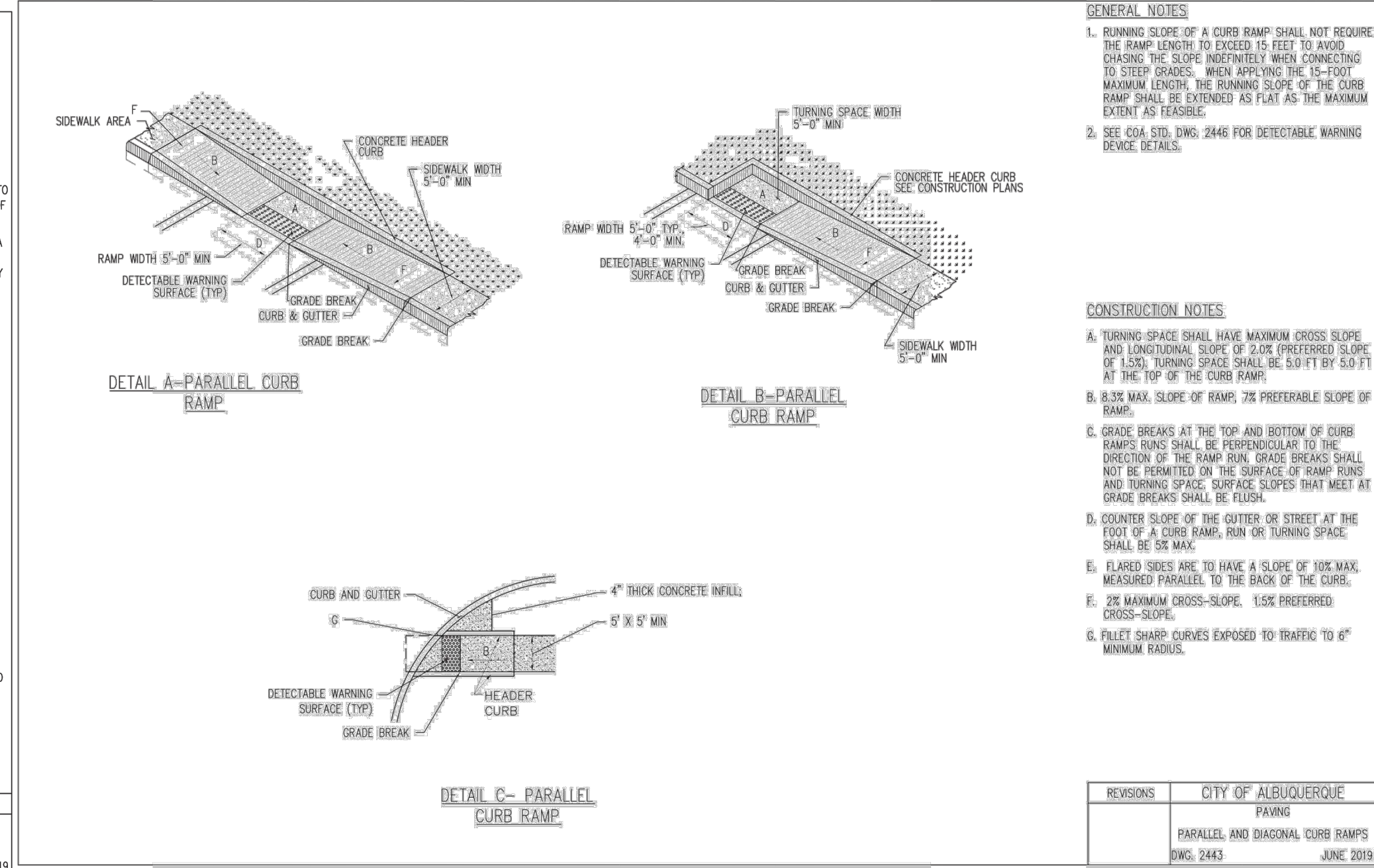
P10-DAYS = 3.67 IN




P6-HR = 2.20 IN

(For New Development sites)



<div>ENGINEER'S SEAL</div> <div>RONALD R. BOHANNAN</div> <div>NEW MEXICO</div> <div>7868</div> <div>PROFESSIONAL ENGINEER</div> <div>05/21/2025</div> <div>RONALD R. BOHANNAN</div> <div>P.E. #7868</div>	<div>MENAU AND VASSAR</div> <div>2500 PHOENIX AVE NE, ALBUQUERQUE, NM, 87107</div>	<div>DRAWN BY</div> <div>JL</div>
	<div>GRADING AND DRAINAGE PLAN</div>	<div>DATE</div> <div>1/3/2025</div>
	<div>TIERRA WEST, LLC</div> <div>5571 MIDWAY PARK PL NE</div> <div>ALBUQUERQUE, NEW MEXICO 87109</div> <div>(505) 858-3100</div> <div>www.tierrawestllc.com</div>	<div>SHEET #</div> <div>C2.1</div> <div>JOB #</div> <div>2022093</div>



<p>ENGINEER'S SEAL</p>	<p><b>MENAU AND VASSAR</b>  <b>2500 PHOENIX AVE NE, ALBUQUERQUE,</b>  <b>NM, 87107</b></p>	<p><i>DRAWN BY</i>  <b>JL</b></p>
	<p><b>DETAIL SHEET</b></p>	<p><i>DATE</i>  <b>1/3/2025</b></p> <p><i>DRAWING</i></p>
 <p><b>05/21/2025</b></p> <p><b>RONALD R. BOHANNAN</b>  <b>P.E. #7868</b></p>	<div style="text-align: center;">  <p><b><i>TIERRA WEST, LLC</i></b></p> <p>5571 MIDWAY PARK PL NE  ALBUQUERQUE, NEW MEXICO 87109  (505) 858-3100  www.tierrawestllc.com</p> </div>	<p><i>SHEET #</i>  <b>C5.0</b></p> <p><i>JOB #</i>  <b>2022093</b></p>

