

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
Conceptual 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 05/21/2025, the Conceptual Grading & Drainage Plan is preliminary approved for action by the Development Facilitation Team (DFT) / Development Hearing Officer (DHO) on Site Plan for Building Permit and platting action.

Albuquerque

PRIOR TO BUILDING PERMIT:

NM 87103

1. Please submit a more detailed Grading & Drainage Plan to Hydrology for review and approval.

www.cabq.gov

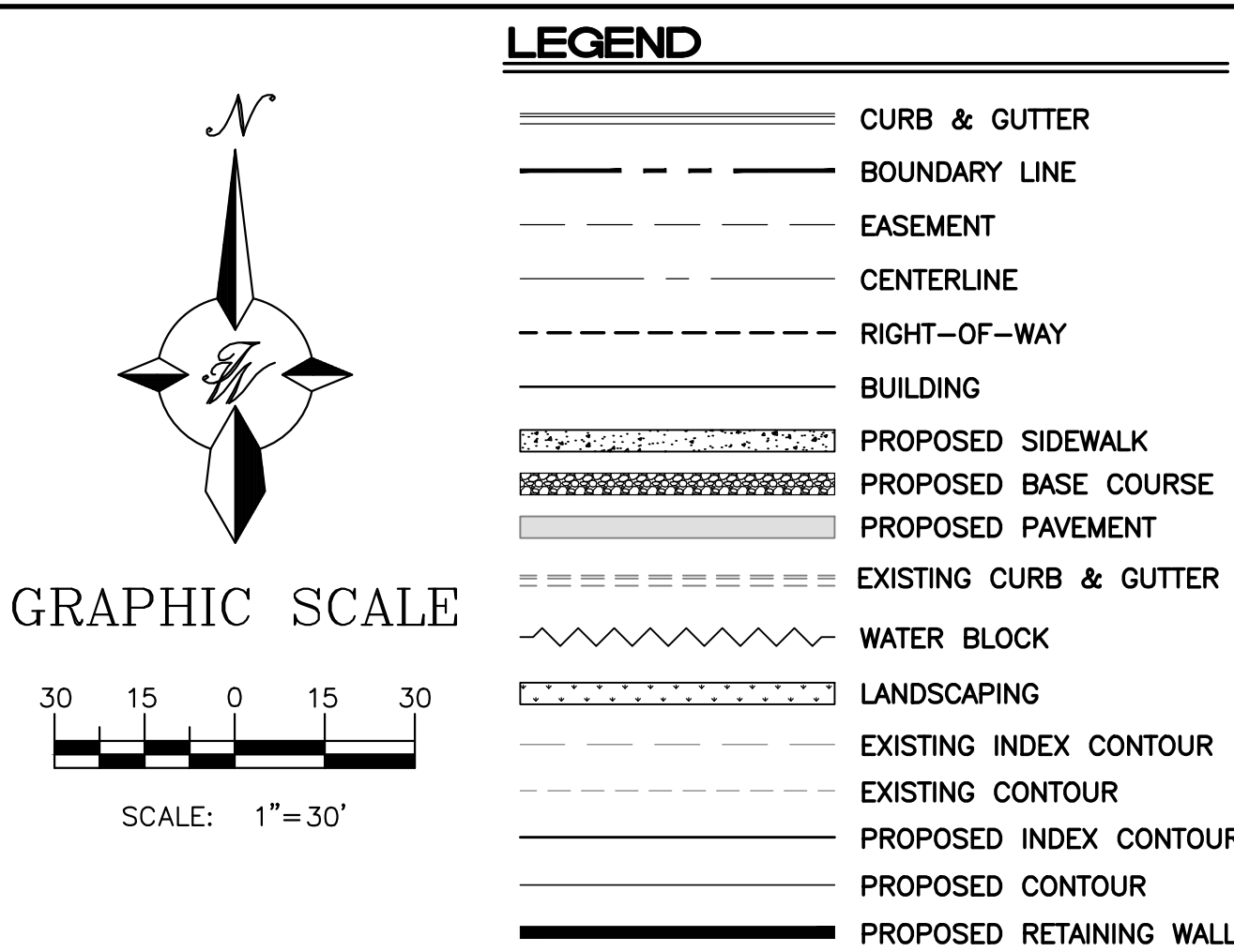
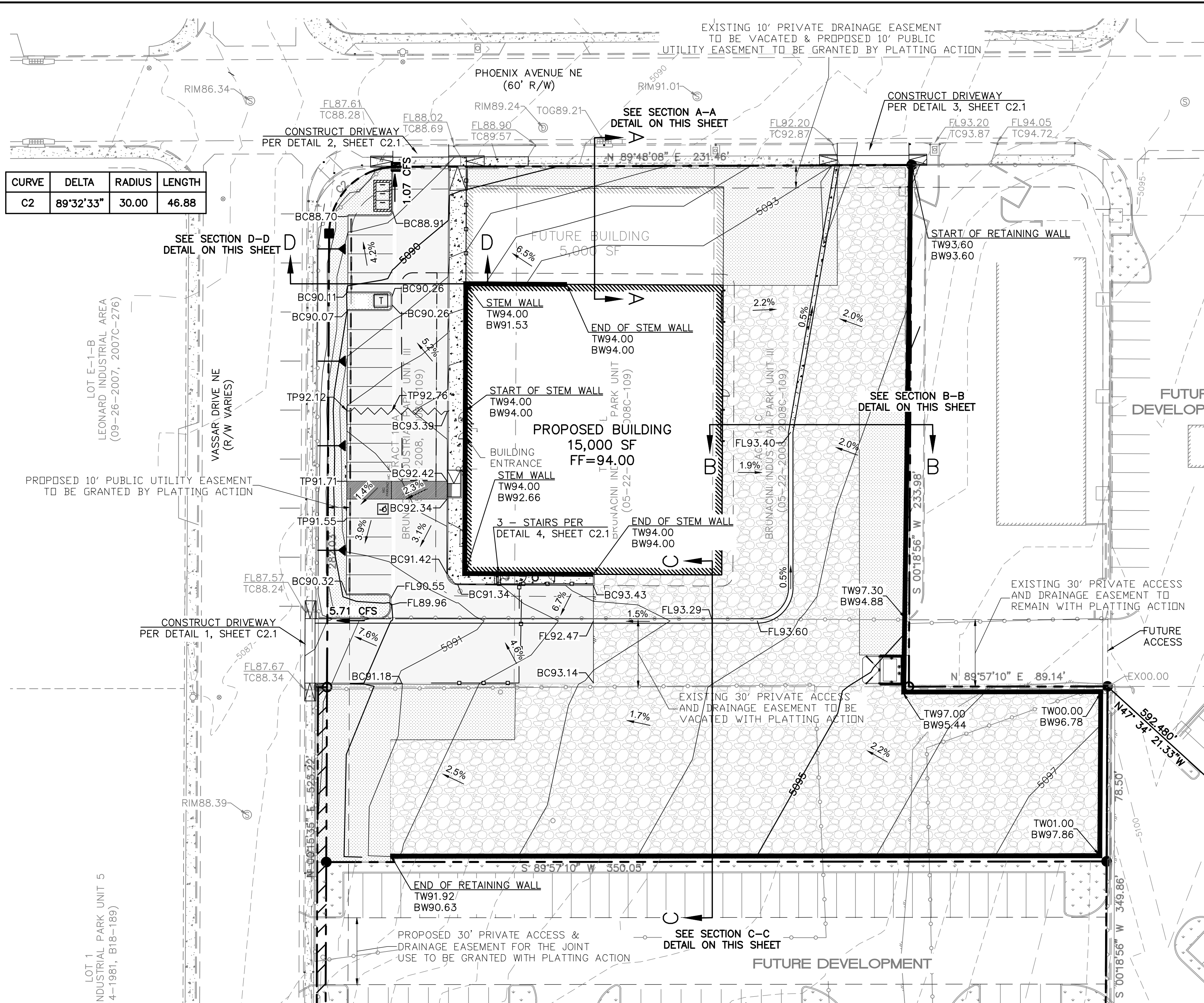
As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 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.

Sincerely,

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

CURVE	DELTA	RADIUS	LENGTH
C2	89°32'33"	30.00	46.88



CAUTION

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.

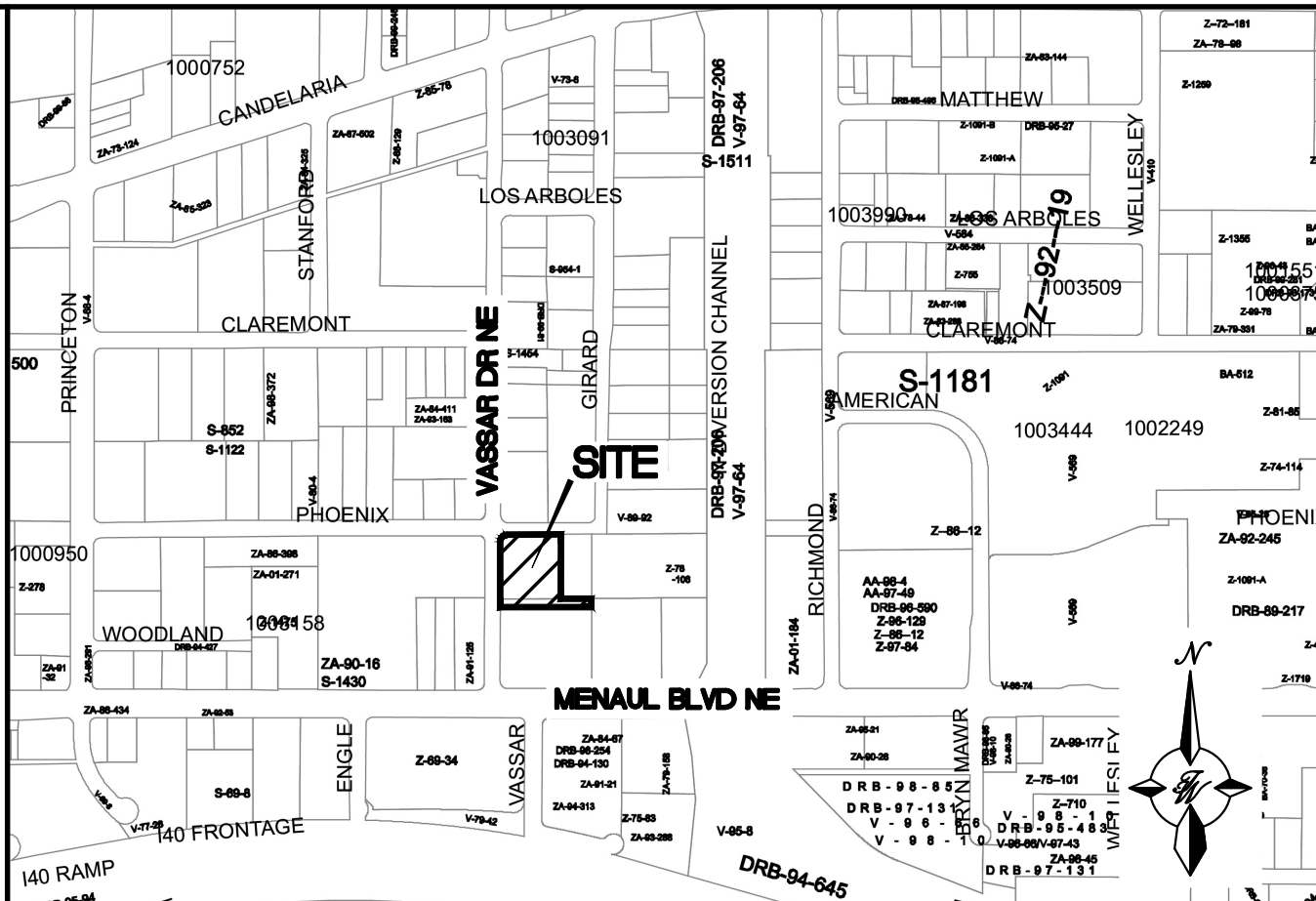
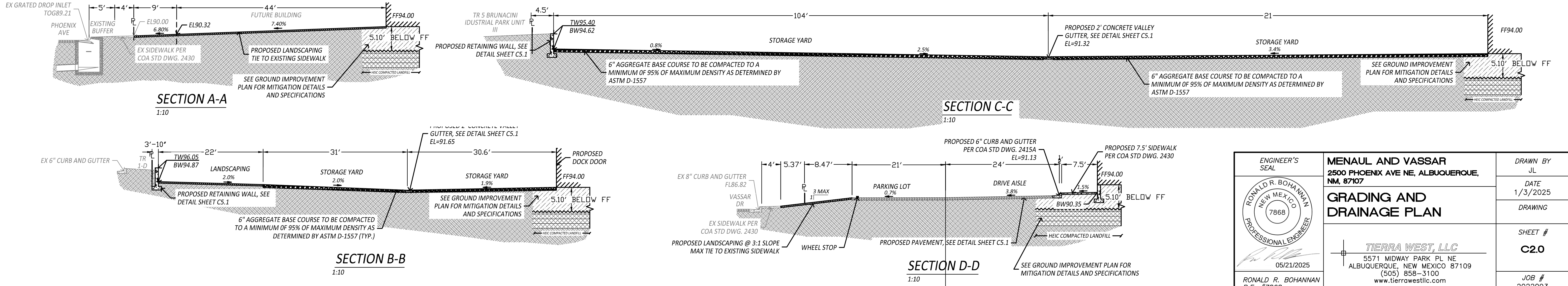
NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF RIO RANCHO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. 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.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
8. SEE WESTERN TECHNOLOGIES INC., GEOTECHNICAL EVALUATION, SHOPS AT HOTEL ROW, MANUAL BOULEVARD AND VASSAR DRIVE NE, ALBUQUERQUE, NEW MEXICO, JOB NO. 3227J276, FOR PAVEMENT SECTIONS.

BENCHMARK:
GEOGRAPHIC POSITION IN FEET (NAD83) NGS
N.M. STATE PLANE COORDINATES (CENTRAL ZONE)
N=1495236.843, E=1532017.843,
G-G=0.999672575, DA=-00°12'30.45"
ELEVATION IN FEET (NAVD88) = 5117.289

EROSION CONTROL NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT.
6. ALL SLOPES NOT STABILIZED AT THE END OF THE PROJECT SHALL BE STABILIZED IN ACCORDANCE WITH THE CITY OF RIO RANCHO SPECS OR 3" GRAVEL.



VICINITY MAP:

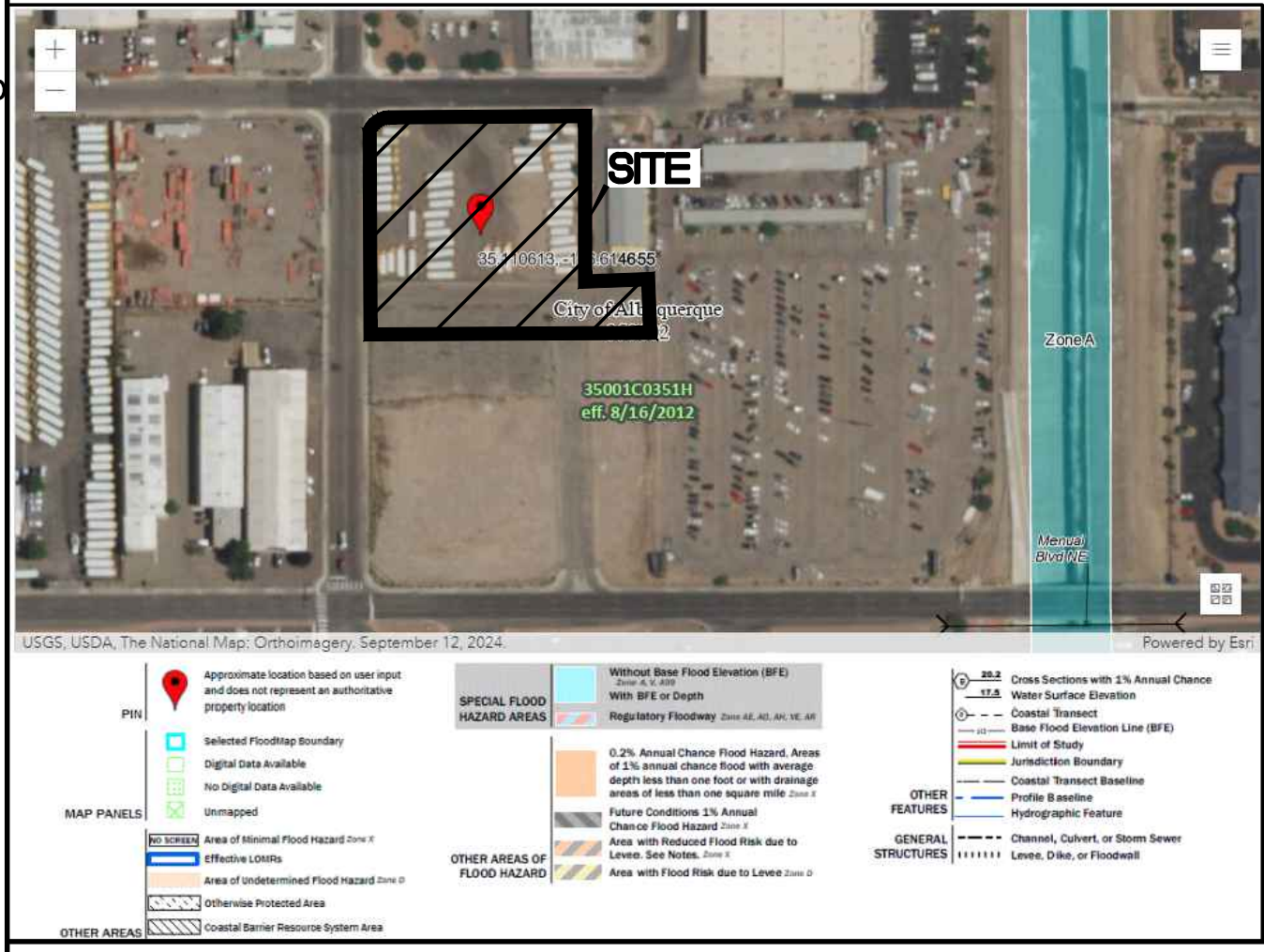
LEGAL DESCRIPTIONS

TR 1-A PLAT OF TRS 1-A THRU 1-D BRUNACINI INDUSTRIALPARK
UNIT III (A REPLAT OF TR 1 BRUNACINI INDUSTRIALPARK UNIT III)
CONT .4457 AC

TR 1-B PLAT OF TRS 1-A THRU 1-D BRUNACINI INDUSTRIALPARK
UNIT III (A REPLAT OF TR 1 BRUNACINI INDUSTRIALPARK UNIT III)
CONT .4747 AC

TR 1-C PLAT OF TRS 1-A THRU 1-D BRUNACINI INDUSTRIALPARK
UNIT III (A REPLAT OF TR 1 BRUNACINI INDUSTRIALPARK UNIT III)
CONT .4748 AC

TR 5 BRUNACINI INDUSTRIAL PARK UNIT III REPL OF TR "D" NE1/4
SEC 10 T10N R 3E TR S & T BRUNACINI INDUSTRIAL PARK LOT 4
BRUNACINI INDUSTRIAL PARK UNIT II VACATED GIRARD NE & PART OF



FIRM MAN

35001C0351H

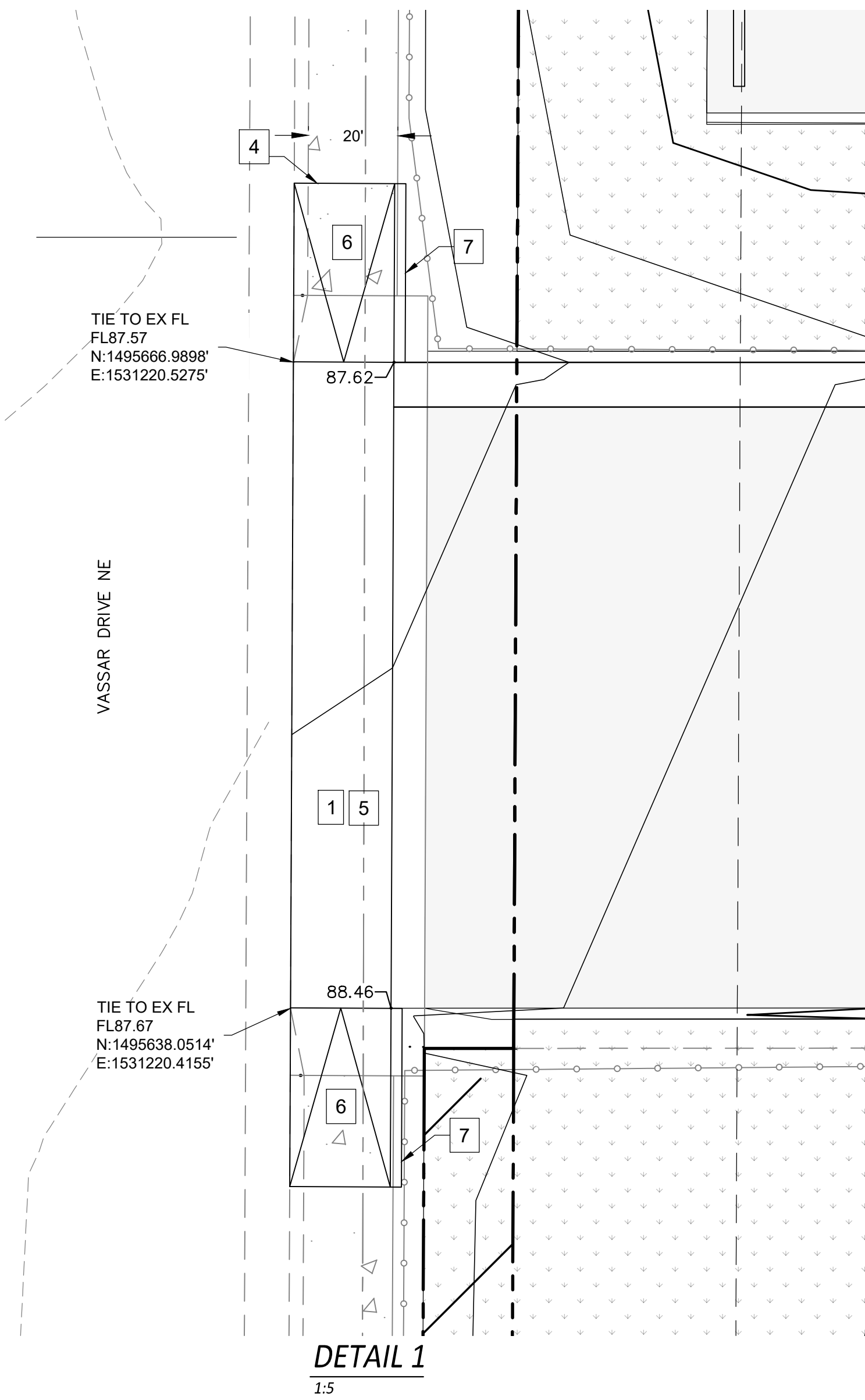
SPOT ELEVATION NOTE:
 1. ADD 5000 TO ALL SPOT ELEVATIONS

1. ADD 5200 TO ALL SPOT ELEVATIONS.
2. ALL SPOT ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE NOTED.

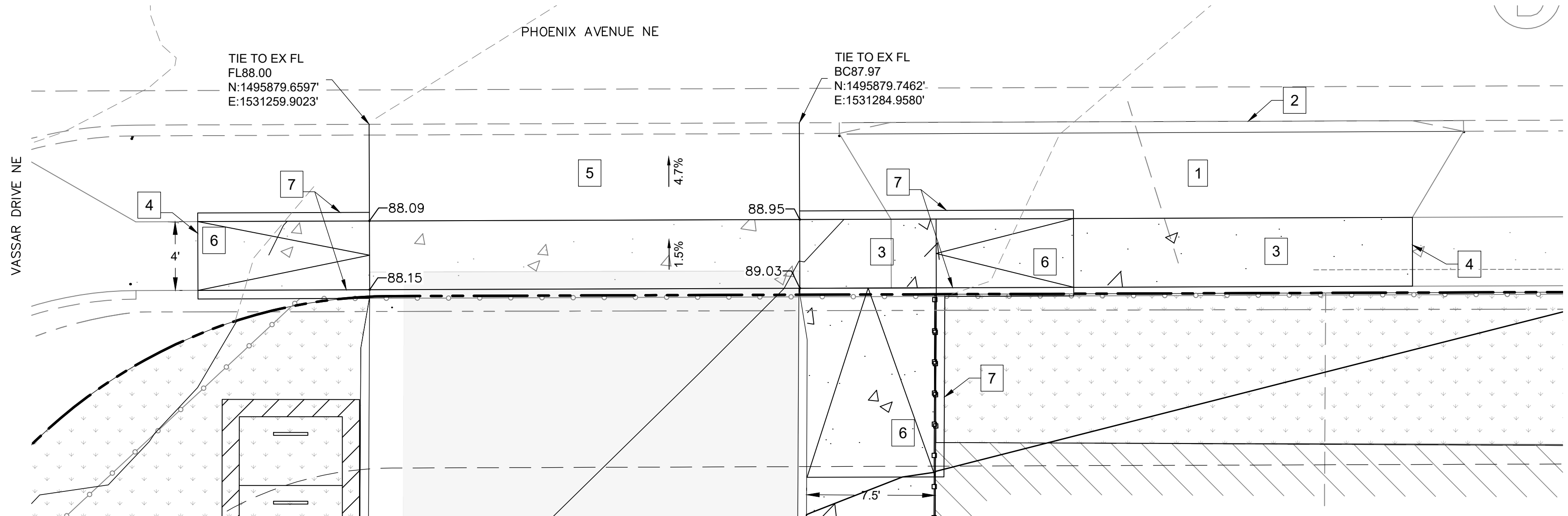
FF = FINISH FLOOR ELEVATION
TW = FINISH GRADE NEAR TOP WALL
BW = FINISHED GRADE NEAR BOTTOM OF WALL
FL = FLOW LINE ELEVATION
BC = BOTTOM OF CURB ELEVATION
TP = TOP OF PAVEMENT

ENGINEER'S SEAL	MENAU AND VASSAR 2500 PHOENIX AVE NE, ALBUQUERQUE, NM, 87107	<i>DRAWN BY</i> JL
	GRADING AND DRAINAGE PLAN	<i>DATE</i> 1/3/2025
 05/21/2025	 <i>TIERRA WEST, LLC</i>	<i>SHEET #</i> C20
RONALD R. BOHANNAN P.E. #7868	5571 MIDWAY PARK PL NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com	<i>JOB #</i> 2022093

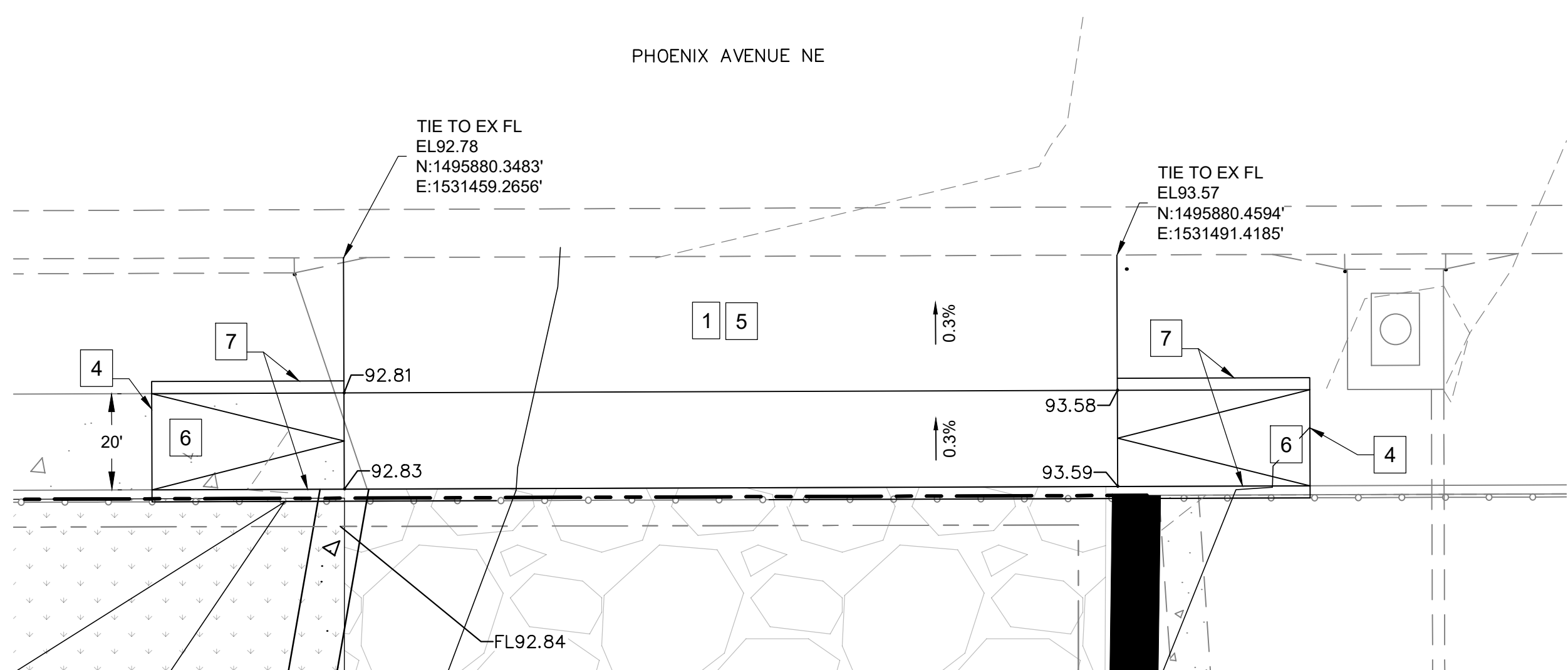
- KEYED NOTES:
1. REMOVE AND DISPOSED OF EXISTING DRIVE PAD.
 2. NEW 6" STANDARD CURB AND GUTTER, PER COA STANDARD DWG 2415A.
 3. INSTALL 4" SIDEWALK.
 4. MATCH EXISTING SIDEWALK.
 5. CONSTRUCT 6" CONCRETE DRIVE PAD.
 6. CONSTRUCT CURB RAMP, 12:1 MAX SLOPE..
 7. CONSTRUCT HEADER CURB PER COA STANDARD DWG 2415C.
 8. CONSTRUCT STAIRS WITH HANDRAIL PER DETAILS THIS SHEET.
 9. CONSTRUCT PEDESTRIAN HANDRAIL.



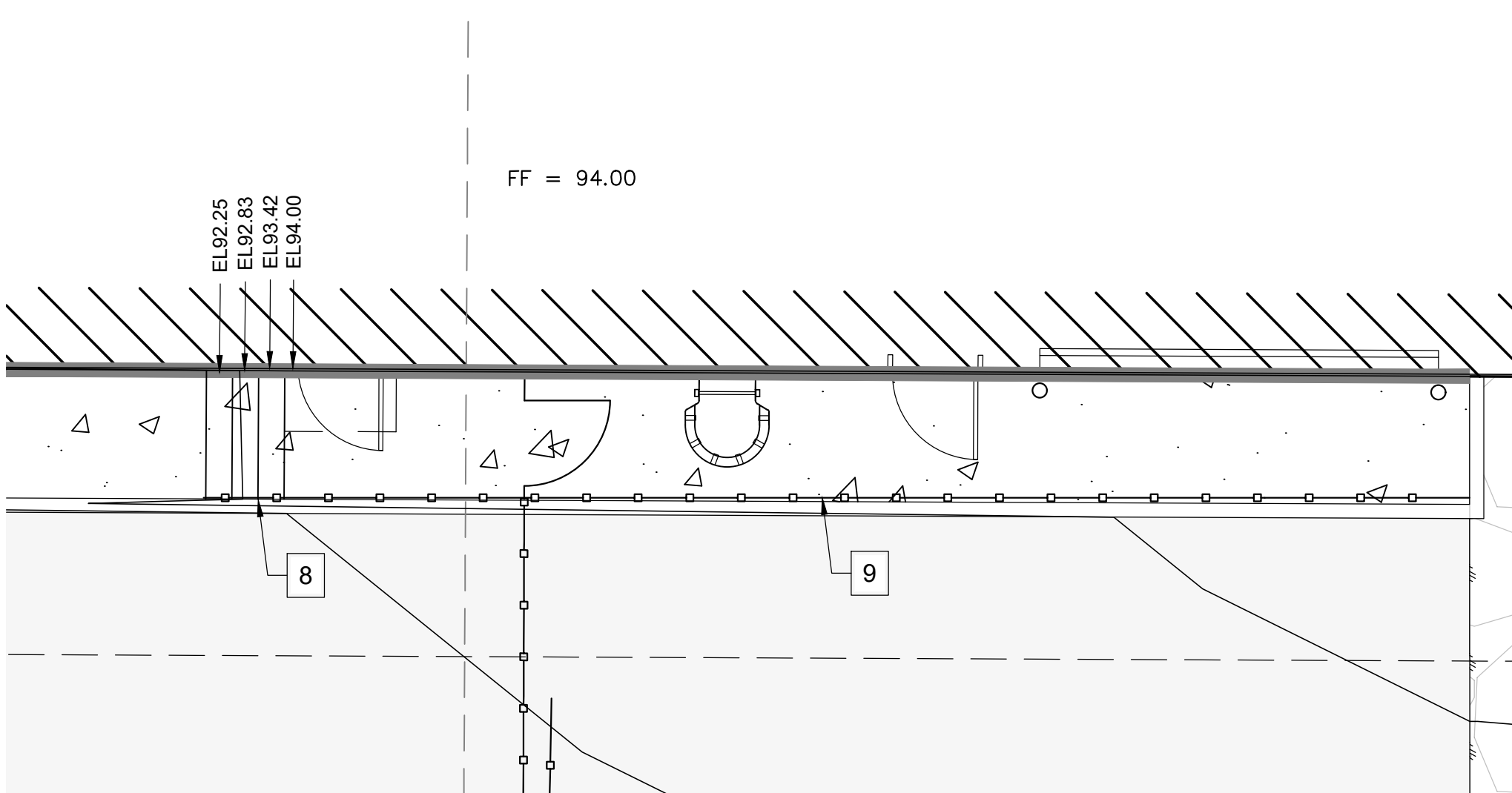
DETAIL 1
1:5



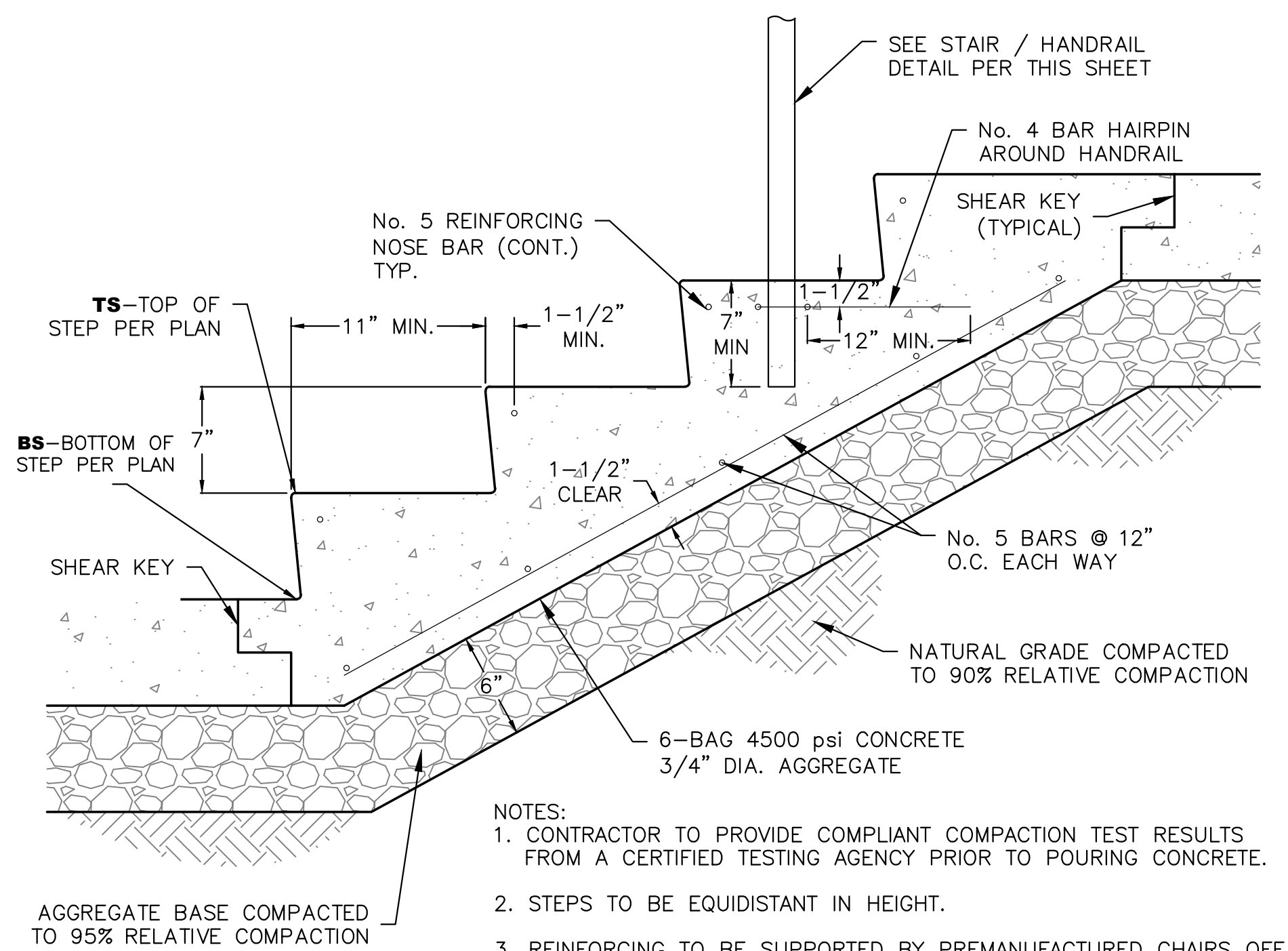
DETAIL 2
1:5



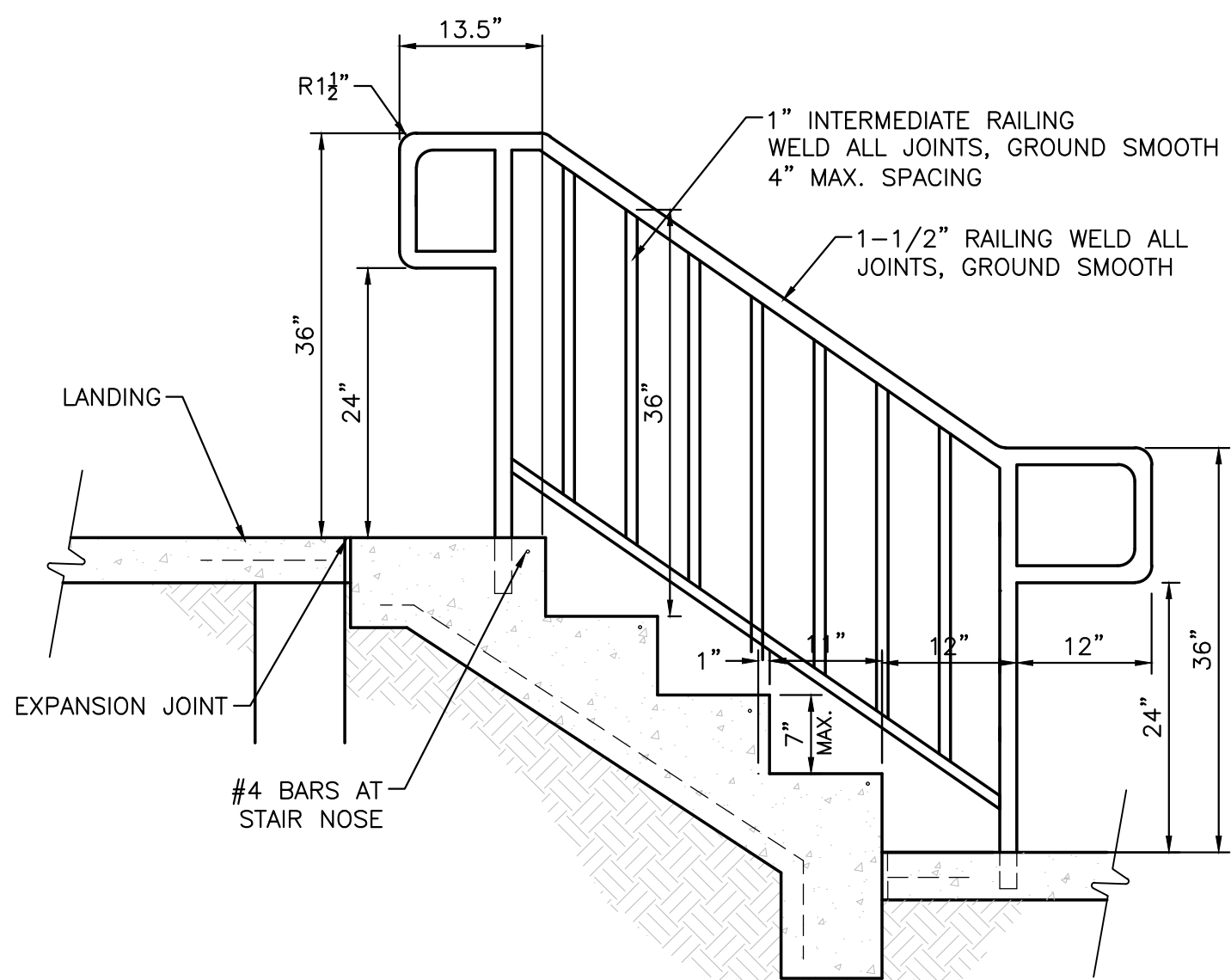
DETAIL 3
1:5



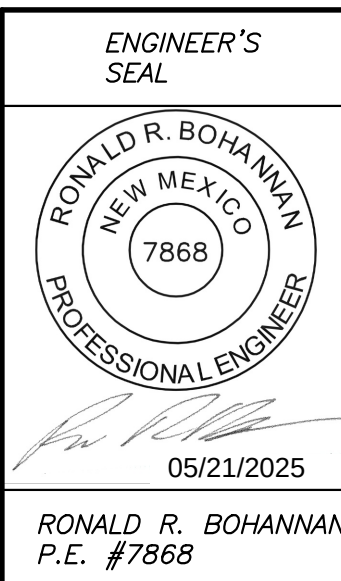
DETAIL 4
1:5



CONCRETE STEPS DETAIL
NTS



STAIR / HANDRAIL DETAIL
NTS

 ENGINEER'S SEAL RONALD R. BOHANNON NEW MEXICO 7868 PROFESSIONAL ENGINEER 05/21/2025 RONALD R. BOHANNON P.E. #7868	MENAU AND VASSAR 2500 PHOENIX AVE NE, ALBUQUERQUE, NM, 87107	DRAWN BY JL
	GRADING AND DRAINAGE PLAN	DATE 1/3/2025
	TIERRA WEST, LLC 5571 MIDWAY PARK PL NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com	SHEET # C2.0
		JOB # 2022093

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.

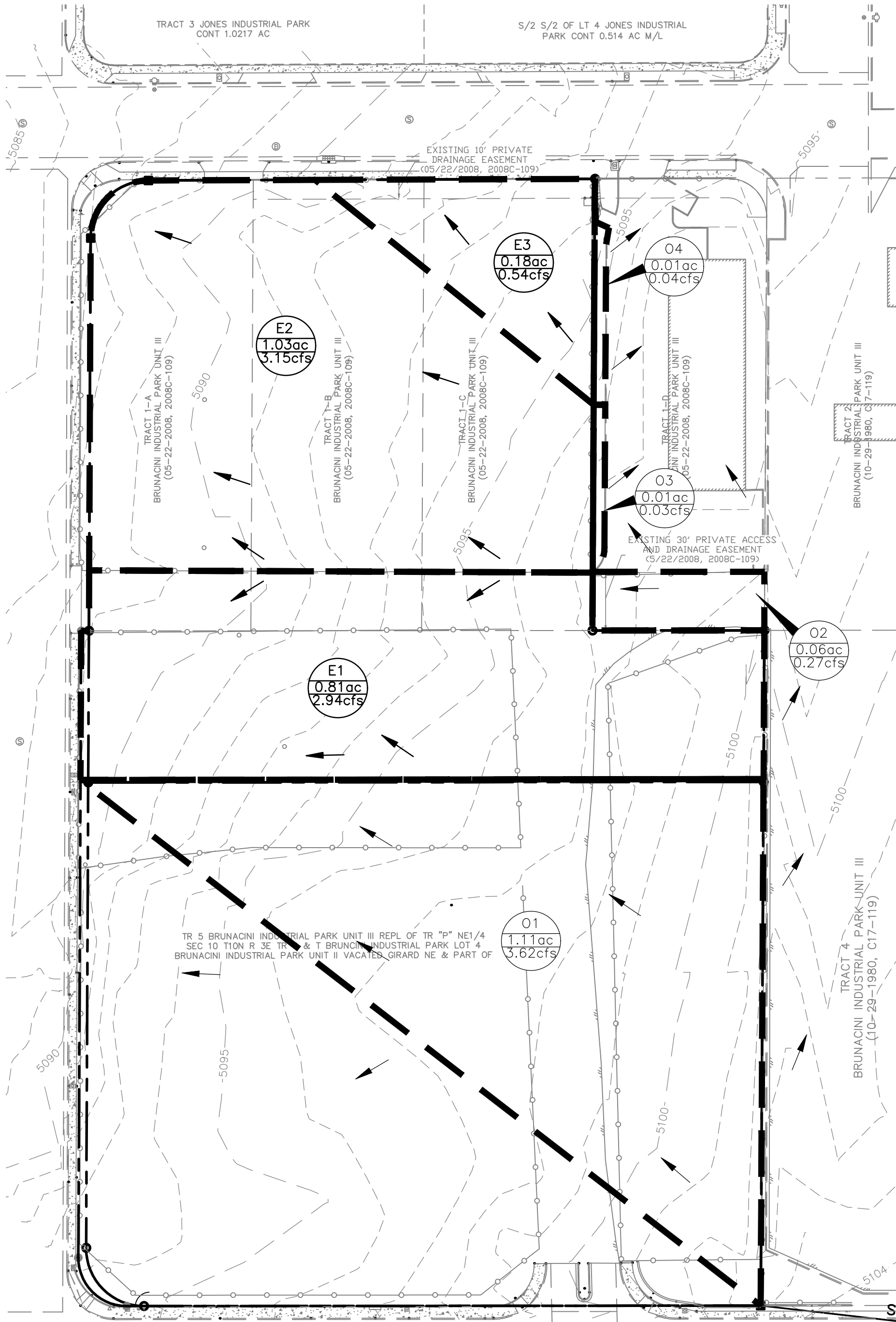
BASIN P2 IS APPROXIMATELY 1.22 ACRES AND GENERATES 4.15 CFS FOR A 100 YEAR STORM. FLOWS ARE DIRECTED SOUTH THROUGH THE PARKING LOT AND SOUTHWEST THROUGH THE GRAVEL YARD BY A 2' VALLEY GUTTER. ALL FLOWS WILL CONVEY ONTO VASSAR DR AND PHOENIX AVE.

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.

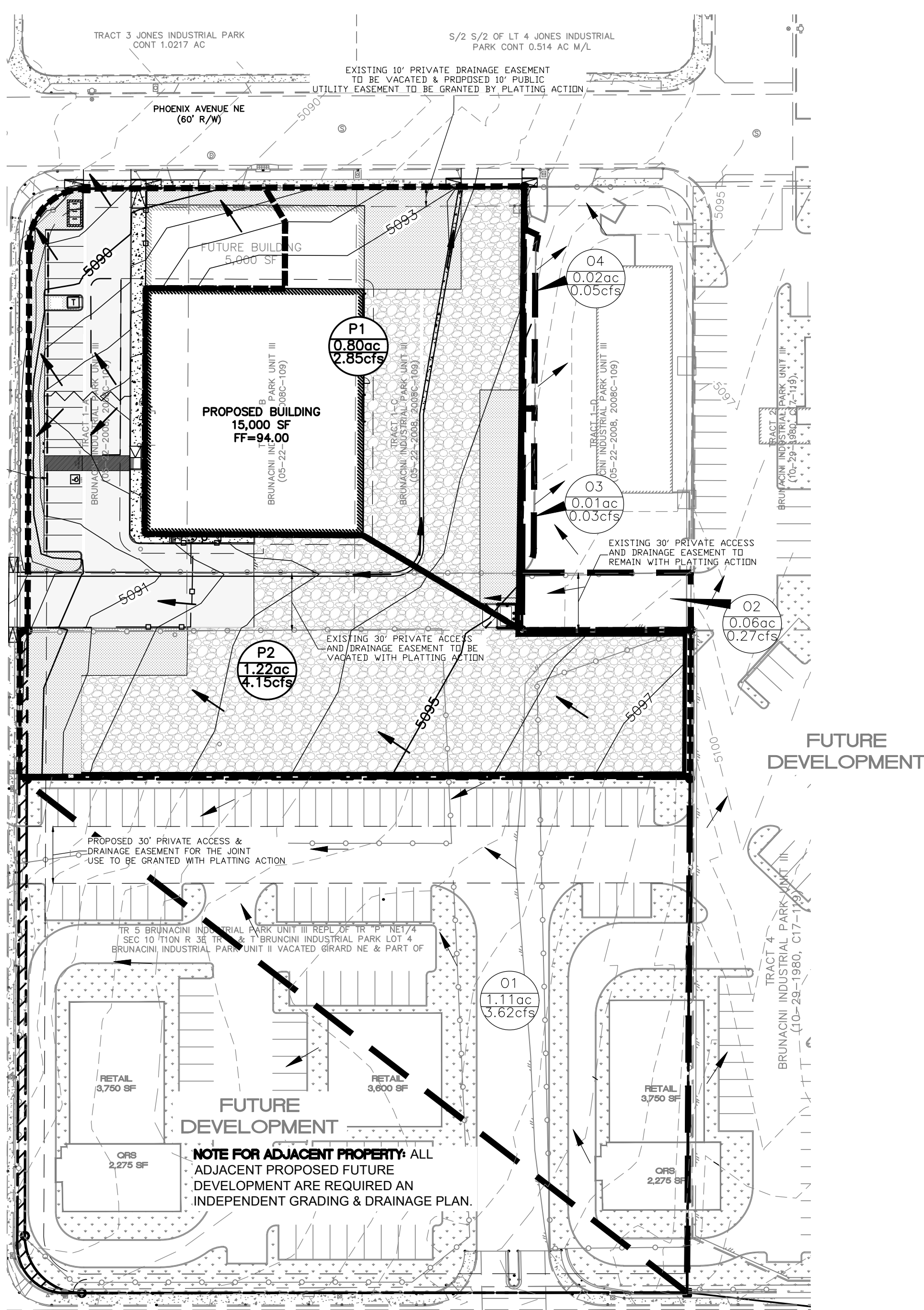
ALL FLOWS FROM BASINS O1, O2, O3, AND O4 ARE EXCLUDED FROM DRAINING ONTO SUBJECT SITE AS SHOWN ON GRADING PLAN.

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)	Flow cfs
				%	(acres)	%	(acres)	%	(acres)	%	(acres)			
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
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
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
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
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
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
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
Total	140,196.9	3.218	0.00503	0%		0%		81%		19%		0.343	10.61	5.81

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)	Flow cfs
				%	(acres)	%	(acres)	%	(acres)	%	(acres)			
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
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
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
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
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
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
Total	90,704.1	2.1	0.0	0%		14%		45%		42%		0.3	7.3	4.1

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

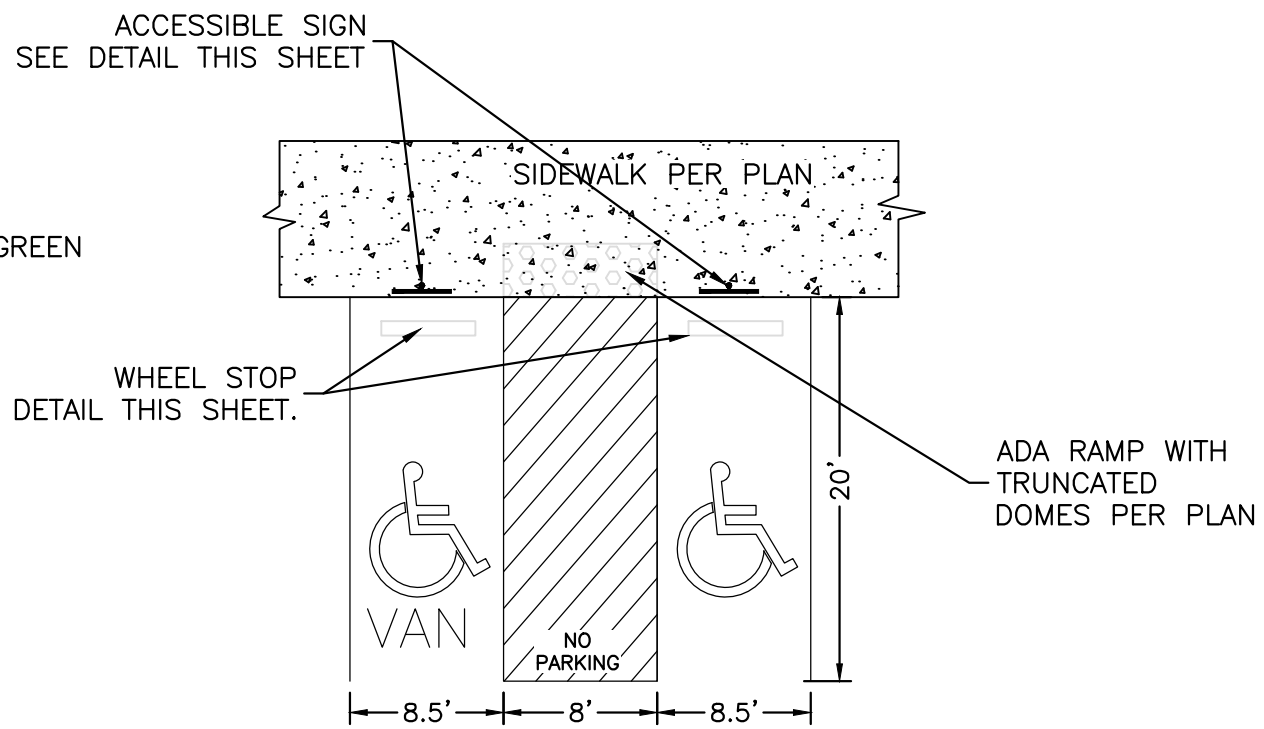
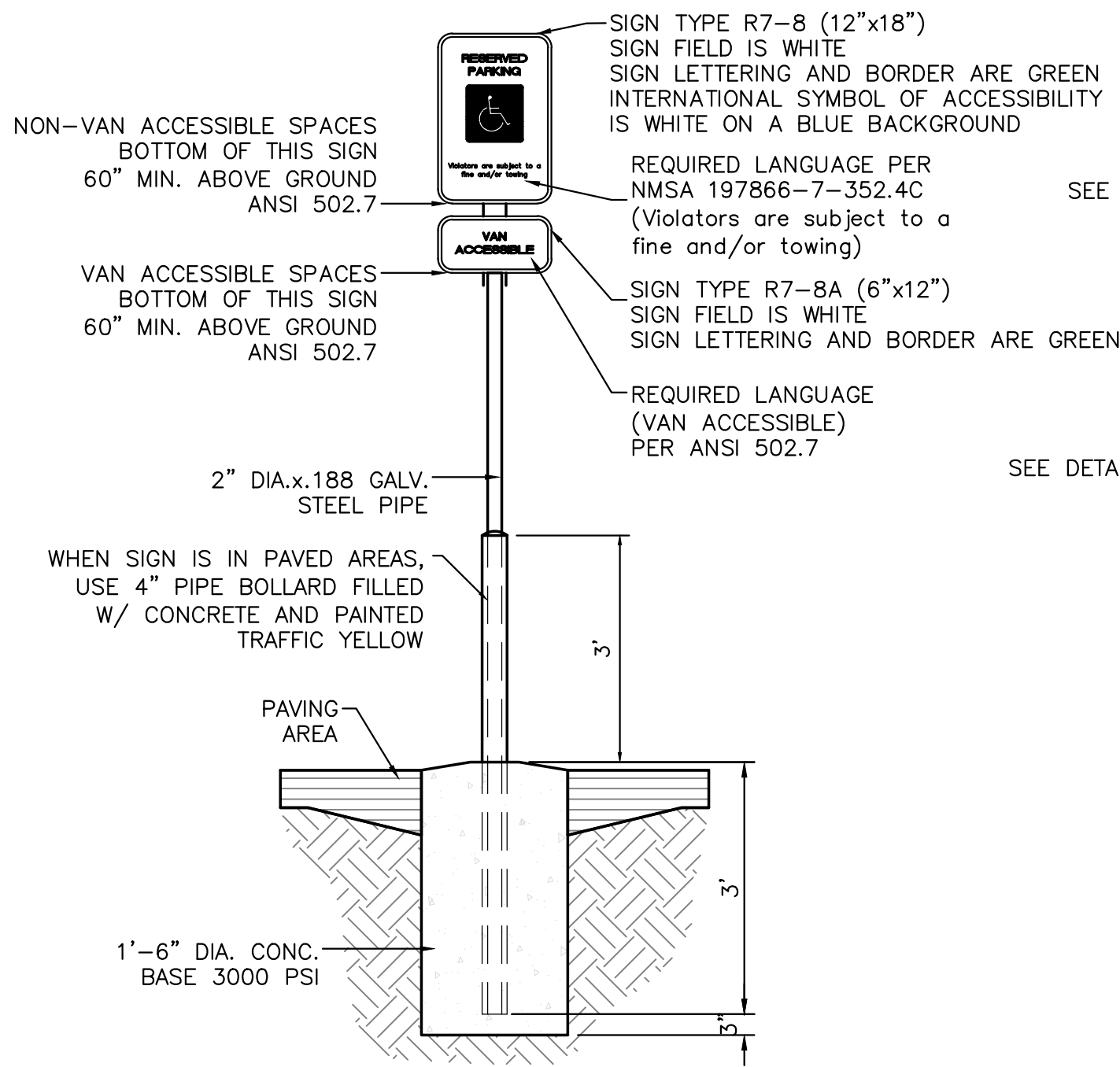
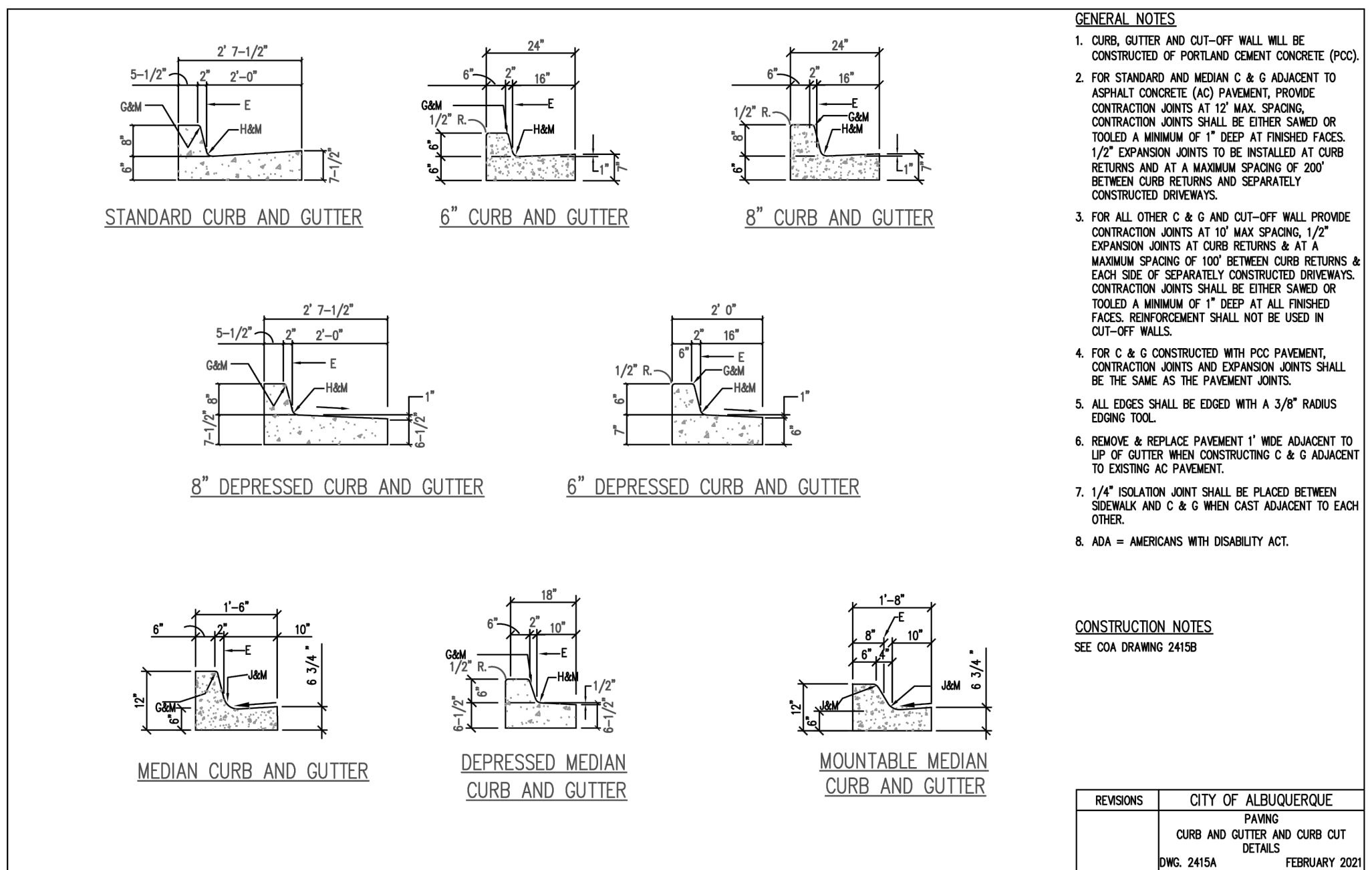
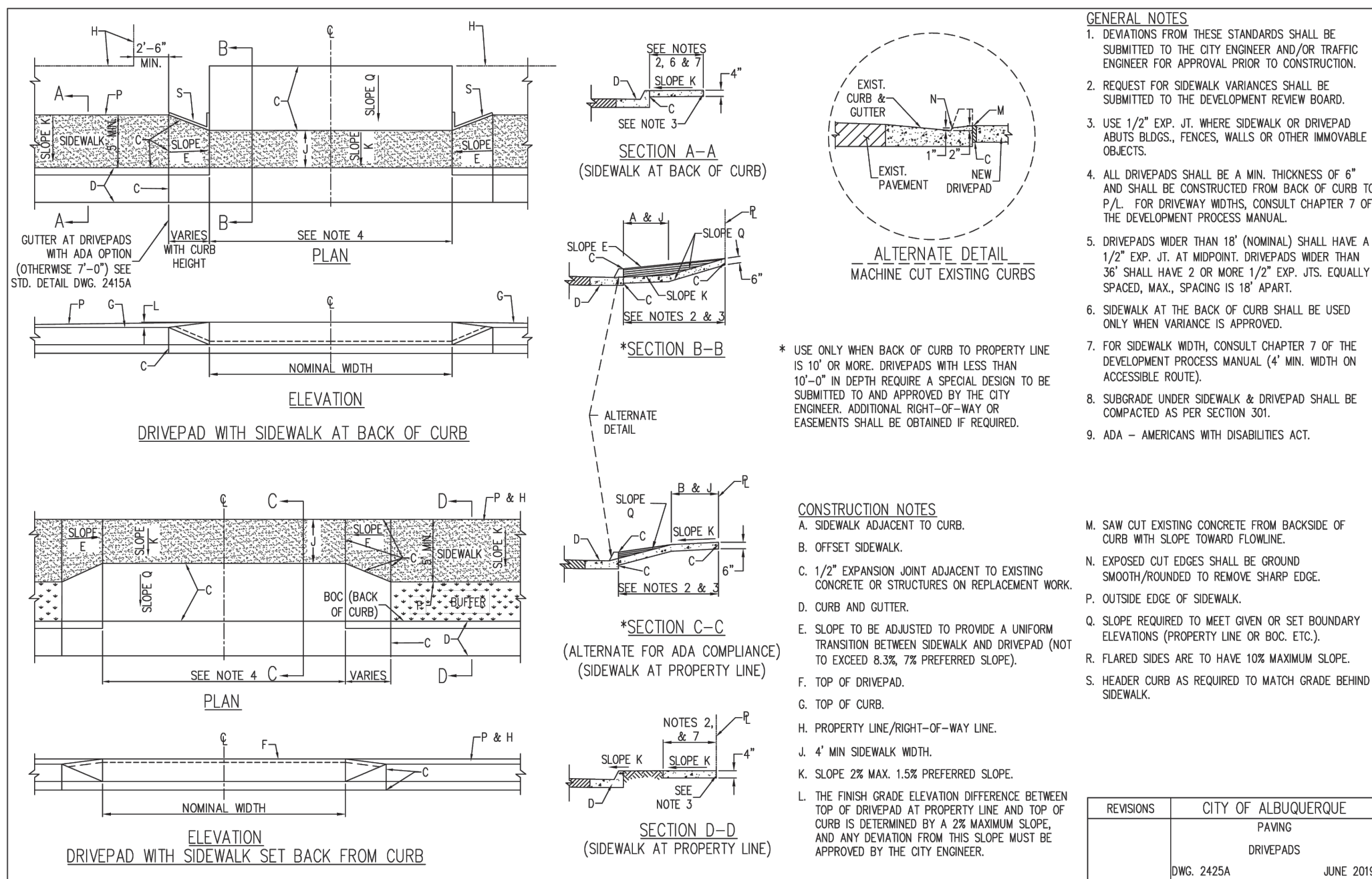
V10-DAY=V6HR*Ac*(P10DAY/6HR)/12 IN/FT

P10DAYS = 3.67 IN

P6HR = 2.20 IN

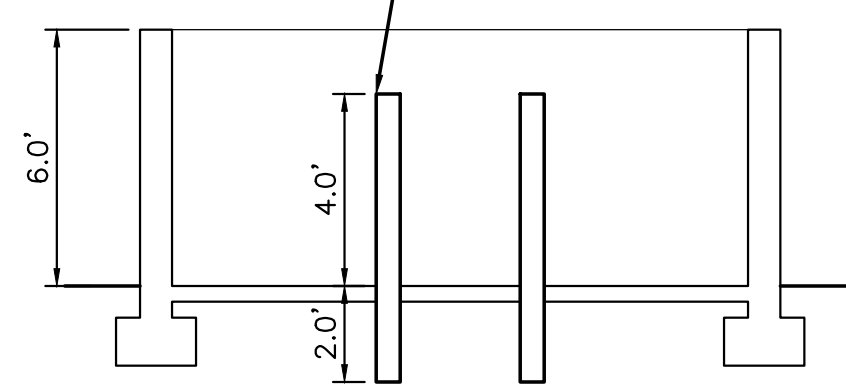
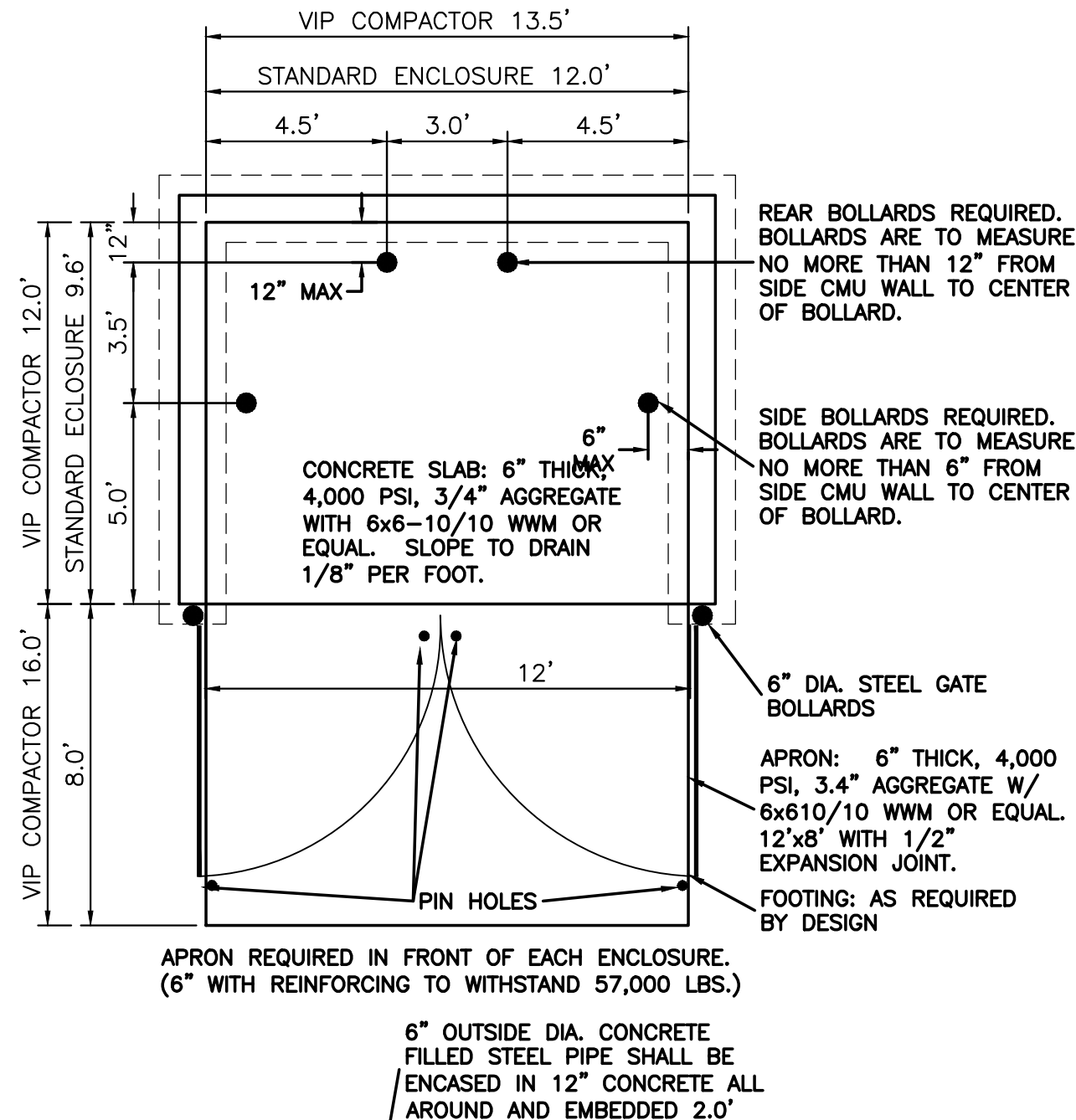
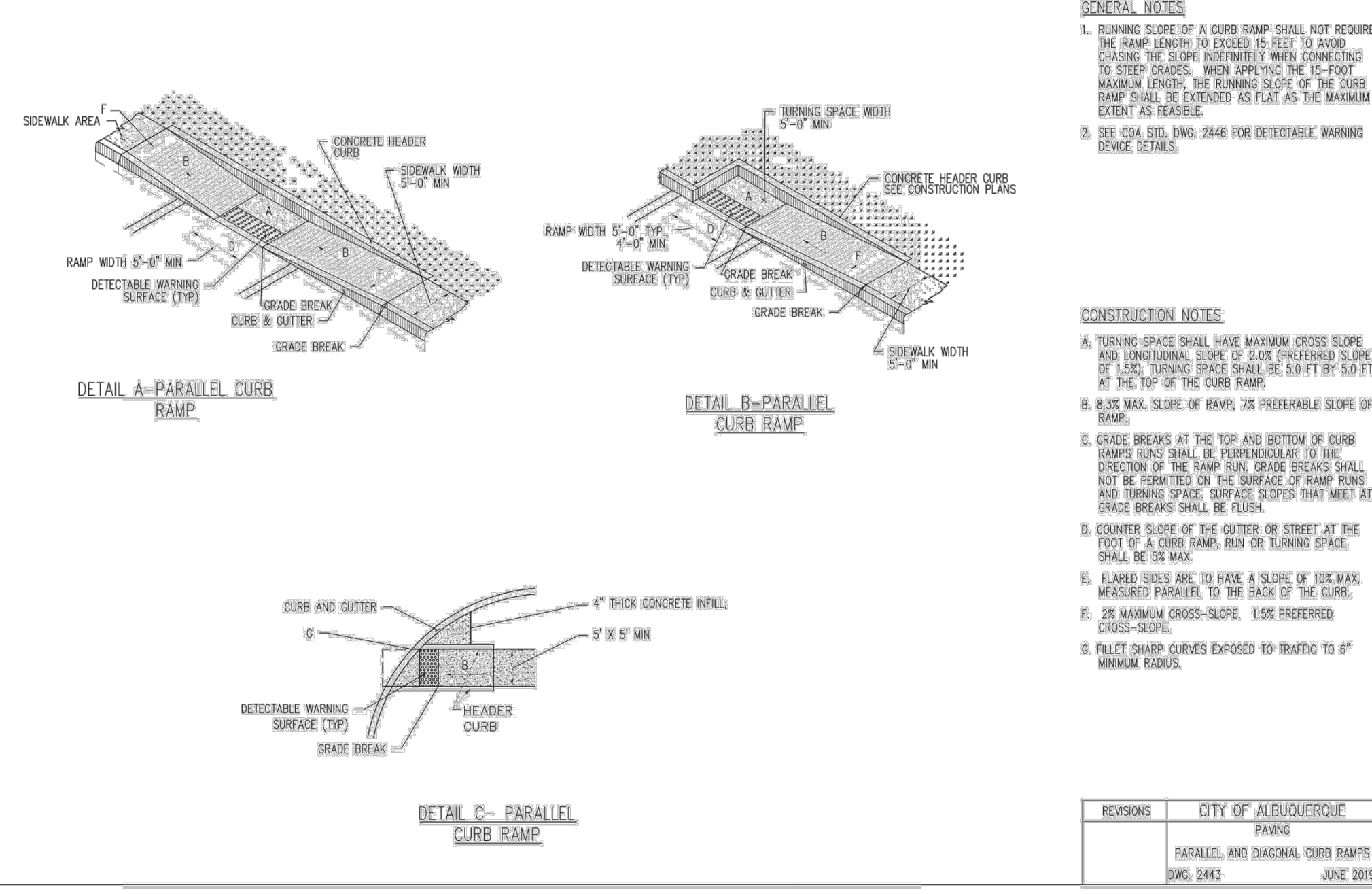
(For New Development sites)

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



(1) HC PARKING DETAIL

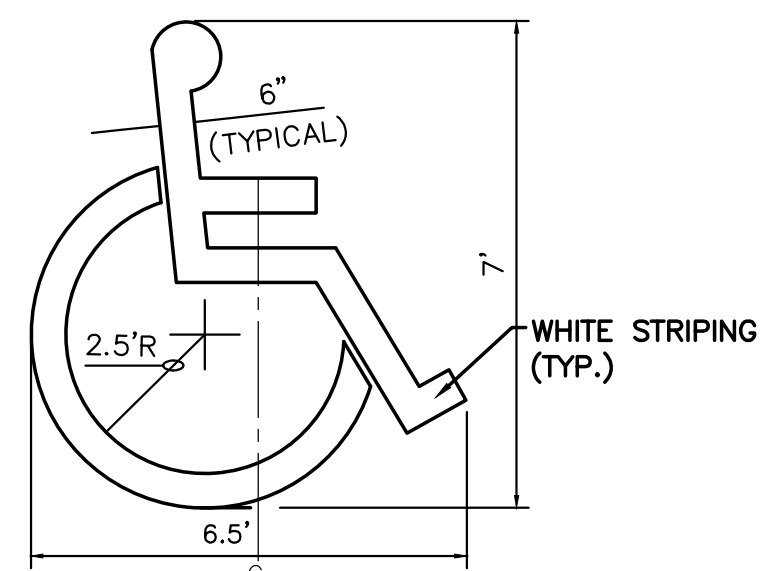
SCALE: NTS



NOTE: THESE ARE THE MINIMUM REQUIREMENTS FOR TRASH ENCLOSURES. DESIGNS MAY VARY TO FIT THE SELECTED ENCLOSURE.

DUMPSTER ENCLOSURE DETAIL

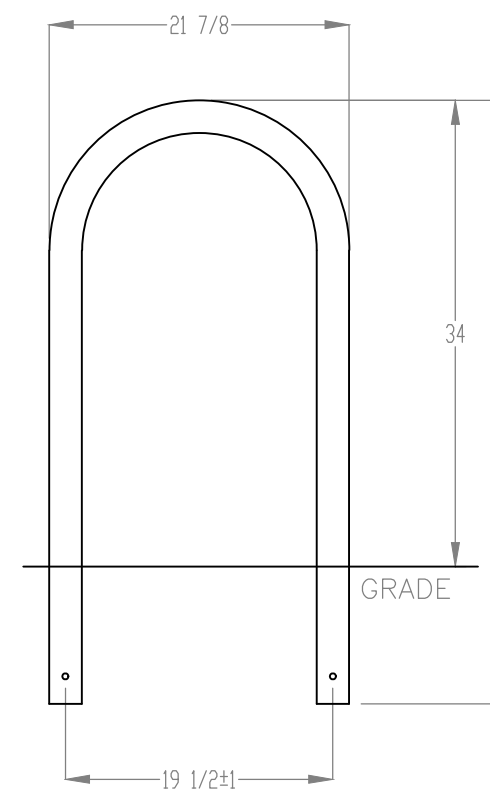
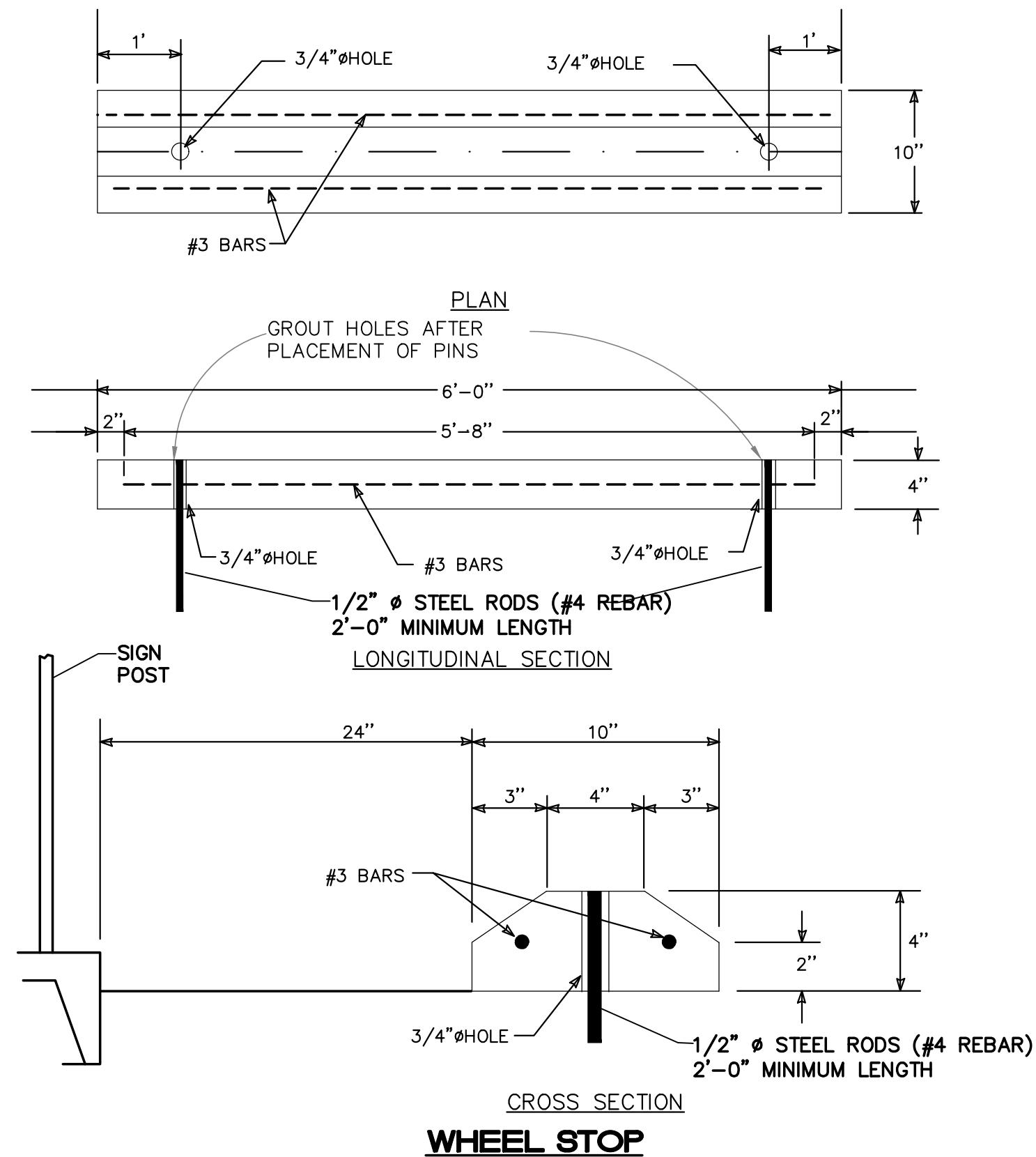
NTS



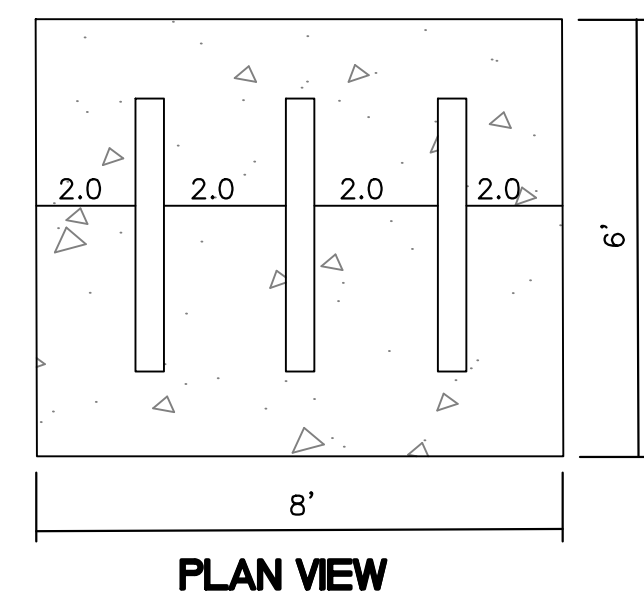
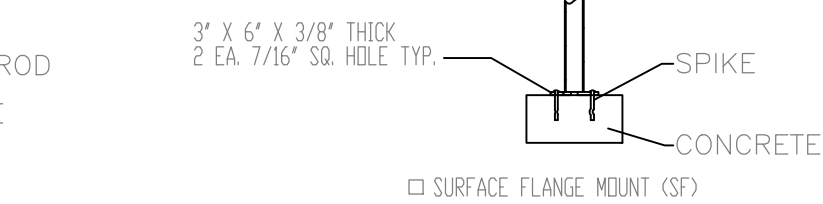
LOCATE AT EDGE OF PARKING SPACE UNLESS ACCOMPANIED BY "VAN" LETTERING

ACCESSIBLE PARKING SYMBOL

NTS



CHECK DESIRED MOUNT



PRODUCT: 1238-1537

DESCRIPTION: 1" BIKE RACK

2 BIKE, SURFACE OR IN GROUND MOUNT

DATE: 10-4-18

CHK: SNC

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NOTES:

1) INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

2) CONSULTANT TO SELECT COLOR OF FINISH; SEE MANUFACTURER'S SPECIFICATIONS.

3) SEE SITE PLAN FOR LOCATION OR CONSULT OWNER.

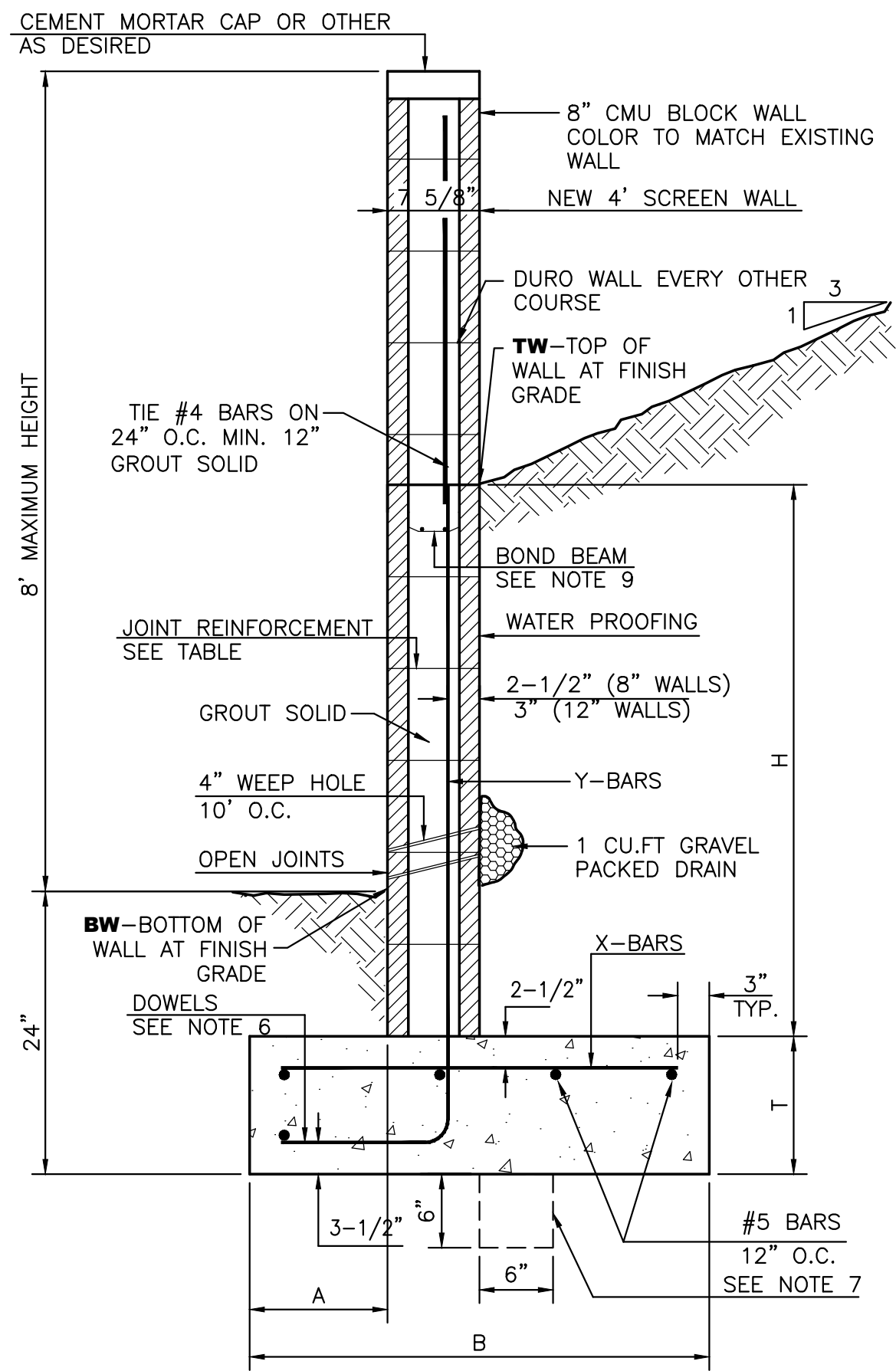
4) BIKE RACK SHALL HAVE A 4-FOOT CLEAR ZONE ALL AROUND.

5) EACH BIKE RACK SPACE SHALL BE AT LEAST 6 FEET LONG AND 2 FEET WIDE.

BIKE RACK DETAIL

SCALE: NONE

ENGINEER'S SEAL RONALD R. BOHANNAN NEW MEXICO PROFESSIONAL ENGINEER 7868 05/21/2025 RONALD R. BOHANNAN P.E. #7868	MENAU AND VASSAR 2500 PHOENIX AVE NE, ALBUQUERQUE, NM, 87107 DETAIL SHEET	DRAWN BY JL DATE 1/3/2025 DRAWING
	TIERRA WEST, LLC 5571 MIDWAY PARK PL NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com	SHEET # C5.0
		JOB # 2022093



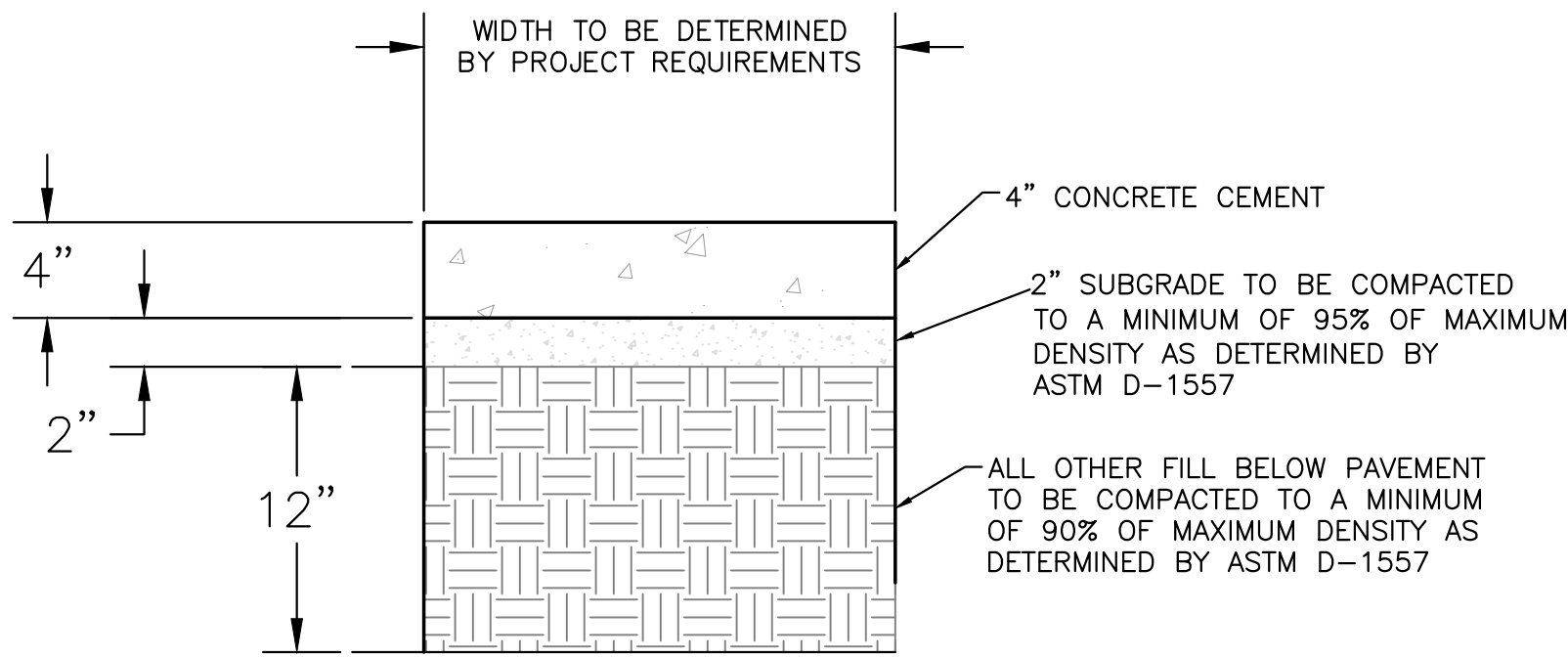
RETAINING WALL DETAIL
NTS

8 INCH REINFORCED CONCRETE MASONRY WALL					
H	A	B	T	Y-BARS	X-BARS
ft.-in.	in.	ft.-in.	in.		
2'-0"	8"	2'-0"	9"	#4 @32" O.C.	
2'-8"	8"	2'-0"	9"	#4 @32" O.C.	#4 @24" O.C.
3'-4"	8"	2'-4"	9"	#4 @32" O.C.	#4 @24" O.C.
4'-0"	10"	2'-8"	9"	#4 @32" O.C.	#4 @24" O.C.
4'-8"	12"	3'-4"	10"	#5 @32" O.C.	#4 @18" O.C.
5'-4"	14"	3'-10"	10"	#6 @16" O.C.	#4 @18" O.C.
6'-0"	16"	4'-8"	12"	#6 @8" O.C.	#4 @12" O.C.

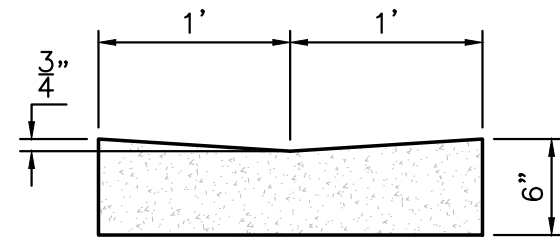
12 INCH REINFORCED CONCRETE MASONRY WALL					
H	A	B	T	Y-BARS	X-BARS
ft.-in.	in.	ft.-in.	in.		
5'-4"	14"	3'-8"	10"	#6 @18" O.C.	#4 @24" O.C.
6'-0"	15"	4'-2"	12"	#4 @16" O.C.	#4 @18" O.C.
6'-8"	16"	4'-6"	12"	#6 @24" O.C.	#5 @18" O.C.
7'-4"	18"	4'-10"	12"	#6 @16" O.C.	#5 @18" O.C.
8'-0"	20"	5'-4"	12"	#7 @18" O.C.	#6 @12" O.C.
8'-8"	20"	5'-8"	12"	#7 @16" O.C.	#6 @12" O.C.

GENERAL NOTES:

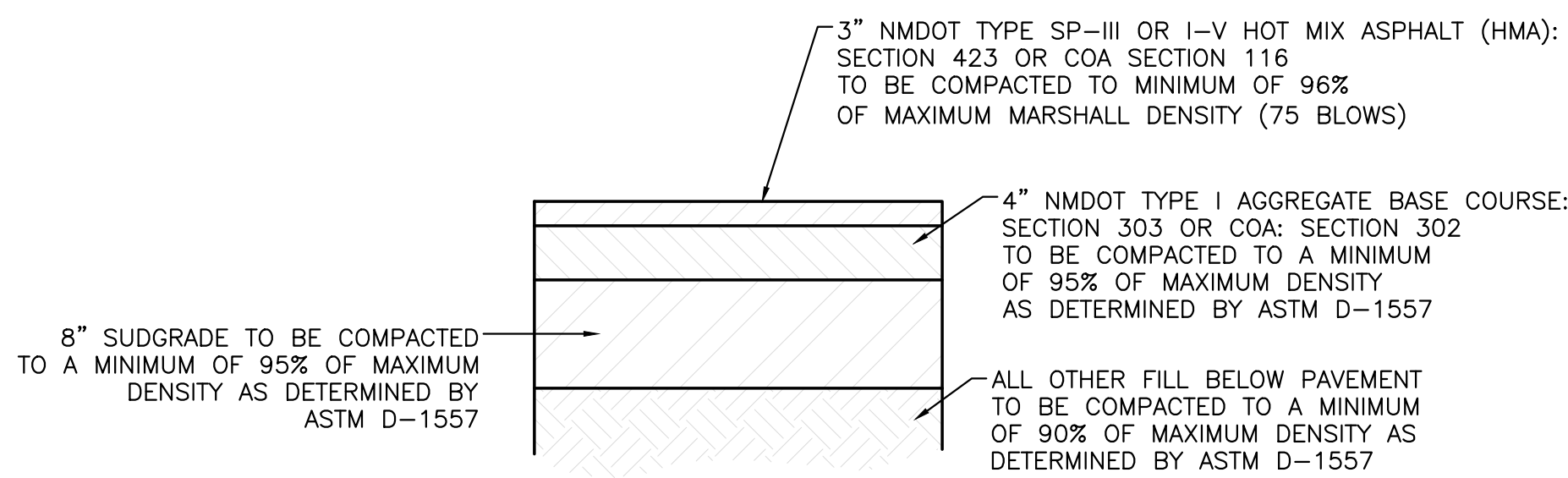
1. ALL CONCRETE IS TO BE 4000 PSI @ 28 DAYS.
2. MINIMUM COMPACTION UNDER FOOTINGS IS TO BE 95% PER ASTM. D 1557 FOR A DEPTH OF 12" MOISTURE CONTENT IS TO BE $\pm 2.0\%$.
3. BACK FILL AGAINST WALLS IS TO BE HAND-PLACED AND COMPACTED.
4. ALL BARS ARE TO BE GRADE 60, ASTM 615.
5. TRUSS TYPE DUR-O-WALL EVERY OTHER COURSE.
6. DOWELS SHALL BE AT LEAST EQUAL IN SIZE AND SPACING TO Y-BARS, SHALL PROJECT A MINIMUM OF 30 BAR DIA. INTO THE FILLED BLOCK CORES, AND SHALL EXTEND TO THE TOE OF THE FOOTING.
7. PROVIDE KEY FOR 8" AND 12" WALLS WHERE H EXCEEDS 6'-0"
8. USE EITHER EXPANSION JOINTS ON 20' CENTERS OR PILASTERS EVERY 16'.
9. BOND BEAM, 1-#4 BARS FOR WALLS UNDER 3'-4", 2-#4 BARS FOR WALLS UNDER 5'-4", 2-#5 BARS FOR WALLS OVER 5'-4".



CONCRETE SIDEWALK SECTION

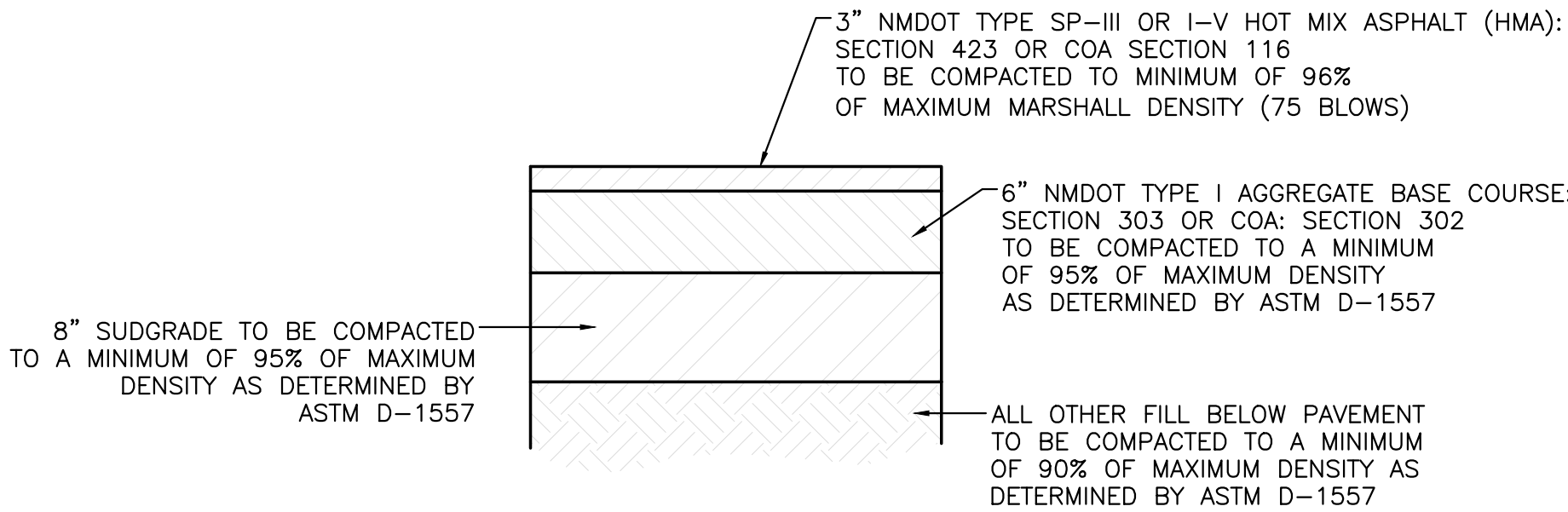


CONCRETE VALLEY GUTTER DETAIL
SCALE: 1"=1'



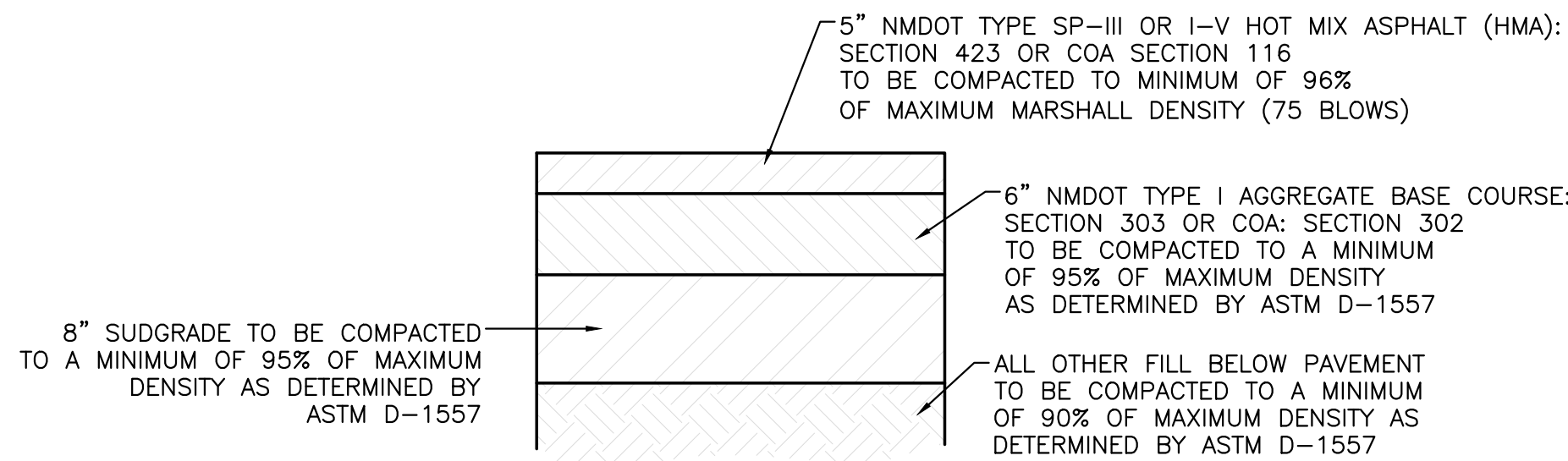
CLASS II: TRAFFIC CONSISTING OF DELIVERY TRUCKS, TRASH PICKUP, AND EMERGENCY RESPONSE VEHICLES (HEAVY-DUTY PAVEMENTS)

1" = 1' DESIGNATED BY [REDACTED]



CLASS I: PARKING STALLS FOR AUTOS AND/OR PICKUP TRUCKS (STANDARD-DUTY PAVEMENTS)

1" = 1' DESIGNATED BY [REDACTED]



CLASS III: TRAFFIC CONSISTING OF TRACTOR TRAILER, SEMI-HAIL-TRUCKS AND CITY AND SCHOOL BUSES (EXTRA-HEAVY-DUTY PAVEMENTS)

1" = 1' DESIGNATED BY [REDACTED]

ENGINEER'S SEAL RONALD R. BOHANNAN NEW MEXICO 7868 PROFESSIONAL ENGINEER 05/21/2025 RONALD R. BOHANNAN P.E. #7868	MENAU AND VASSAR 2500 PHOENIX AVE NE, ALBUQUERQUE, NM, 87107	DRAWN BY JL
	DATE 1/3/2025	DRAWING
	DETAIL SHEET	
	Tierra West, LLC 5571 MIDWAY PARK PL NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrowestllc.com	SHEET # C5.1
		JOB # 2022093