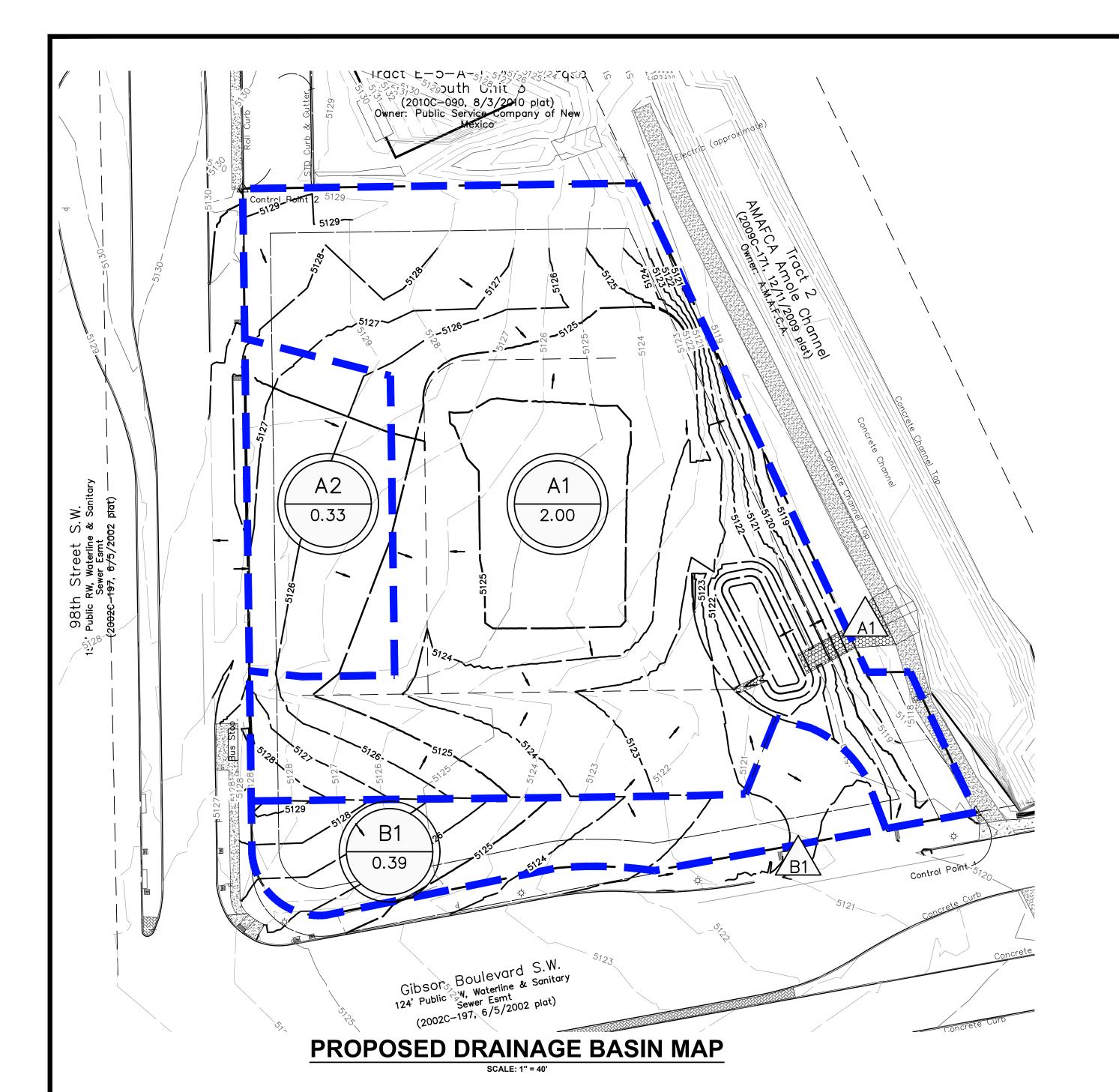
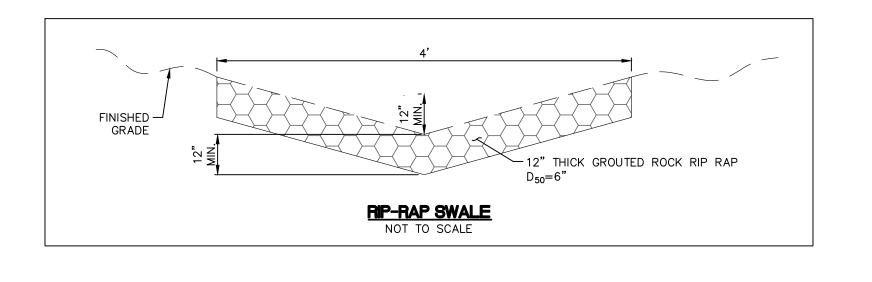
**EXHIBIT 1** HYDROLOGY SECTION Know what's below. APPROVED Call before you dig. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMIN THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES THE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BOCCASIONED BY THE CONTRACTOR'FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. <del>\_\_\_5128.14</del> NO HCL:

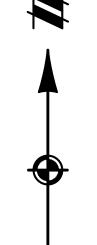
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS. COPYRIGHT © 2023 ATWELL LLC N REPRODUCTION SHALL BE MADE WITHOUT THE PRIOR WRITTEN CONSENT OF ATWELL LLC BLAKE ROAD SW <sup>−</sup>5124.41<del>−</del> **5127.52 ~**5125.73 ×5124.83 5126.42 5126.33 **VICINITY MAP** 5125.14 NOT TO SCALE **∽**5125.19 5125.26 PROPOSED 5125.66 PROPOSED OVERFLOW SPILLWAY.
SEE DETAIL NEXT SHEET. 5128.54 MATCH SPILLWAY TO EXISTING CONCRETE RUNDOWN **-5127.00** 5128.36 THE CONNECTION SHALL BE SUBJECT TO INSPECTION BY AMAFCA PRIOR TO CONSTRUCTION OF THE SPILLWAY. VERIFICATION OF TURNDOWN ON 5125.26 5125.44 **~**5125.26 EXISTING CONCRETE RUNDOWN IS REQUIRED. 5125.14-5124.27 5124.64 5124.71 5125.21 ×5124.13 PROPOSED RIP-RAP SWALE. -SEE DETAIL NEXT SHEET. FEMA FLOOD INSURANCE RATE MAP <sup>′</sup> 5125.41–<sup>′</sup> 5124.41— MAP #35001C0336H BERNALILLO COUNTY, NM AND INCORPORATED AREAS PANEL 336 OF 825, DATED AUGUST 16, 2012 5121.69 <u>\_\_5123.71</u> 4' CURB OPENING **LEGEND** 5121.83 PROPOSED TRENCH DRAIN-**5124.50** BOUNDARY LINE 5127.80EX FOR RUNOFF AT FUEL PUMPS <del>-5123.43</del> EXISTING ROW EXISTING CONTOUR March 10, 2023 PROPOSED CONTOUR PROPOSED 12" HDPE — STORM DRAIN PROPOSED SWALE -5128.57 --- --- PROPOSED RIDGE LINE PROPOSED 12" HDPE -5122.05-<u>\_\_5123.87</u> STORM DRAIN EXISTING STORM SEWER PROPOSED STORM SEWER PROPOSED OIL-WATER PROPOSED STORM CATCH BASIN/MANHOLE SEPARATOR × 5125.00EX EXISTING SPOT ELEVATION 5120.53 REVISIONS × 5125.00 PROPOSED SPOT ELEVATION 5120 6EX-PROPOSED DRAINAGE ARROW / 5120.39 丿 NOTES:

1. EXISTING GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS. Control Point 2. PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS. ろ、11/10/22 / 3. ALL SPOT GRADES ALONG CURB LINE ARE FLOWLINE GRADES UNLESS OTHERWISE NOTED. ALL RIM ELEVATIONS ARE FLOWLINE ELEVATIONS. 03/10/23 4. ALL STORM SEWER AND UTILITY STRUCTURE RIMS SHALL BE FLUSH WITH PAVEMENT OR FINISHED GRADE. 5. SPOT GRADE AT MPD IS TO FINSIHED GRADE AND DOES NOT INCLUDE 2" LIFT. DR. KJK ∥CH. CBS APPROVED FOR CONSTRUCTION WITHIN AMAFCA EASEMENT P.M. D. MADRUGA --IOB 22003692 SHEET NO. ~ \ \ \ | D01.0 (FOR AMAFCA)









Know what's **below**.

Call before you dig.

THE LOCATIONS OF EXISTING

UNDERGROUND UTILITIES ARE
SHOWN IN AN APPROXIMATE WAY
ONLY AND HAVE NOT BEEN
INDEPENDENTLY VERIFIED BY THE
OWNER OR ITS REPRESENTATIVE

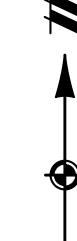
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THE CONTRACTOR SHALL DETERMIN
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EXISTING UTILITIES BEFORE
COMMENCING WORK, AND AGREES
BE FULLY RESPONSIBLE FOR AN

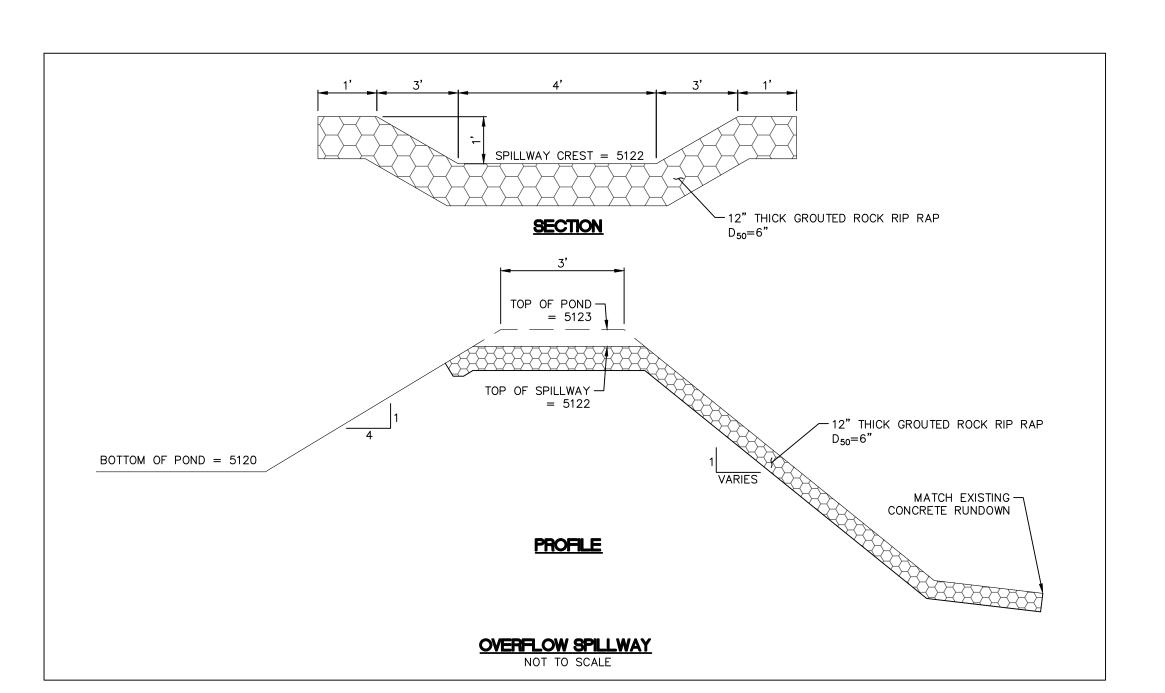
OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE ANI PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:

CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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# STORMWATER CALCULATIONS

STORMWATER QUALITY POND						
ELEVATION	EVATION STAGE		VOLUME			
(FT)	(FT)	(SF)	(CF)			
5119	0.00	795	0			
5120	1.00	1,441	1118			
5121	2.00	2,171	2924			

## STORMWATER QUALITY POND SIZING:

 $\frac{\text{REQUIRED}}{\text{SWQV}} = A_{\text{IMP}} \times 0.42 \text{ IN}.$ 

 $= (73,623 \text{ FT}^2) \times (0.42 \text{ IN.}) / (12 \text{ IN./FT})$  $= 2,577 \text{ FT}^3$ 

 $\frac{PROVIDED}{SWQV} = 2,789 \text{ FT}^3$ 

BASIN HYDROLOGY									
		LA							
BASIN	AREA	Α	В	С	D	Q100			
	(AC)	(AC)				(CFS)			
EXISTING CONDITIONS									
EX1	2.72	2.72	0.00	0.00	0.00	4.19			
PROPOSED CONDITIONS									
A1	2.00	0.00	0.00	0.66	1.35	7.43			
A2	0.33	0.00	0.00	0.00	0.33	1.36			
B1	0.39	0.00	0.00	0.31	0.08	1.21			
TOTAL	2.72					10.00			

PROPERTY
THE SITE IS A 2.72 ACRE UNDEVELOPED PROPERTY BOUNDED TO THE WEST BY 98TH STREET, TO THE SOUTH BY GIBSON BLVD, AND TO THE EAST BY THE AMOLE ARROYO CHANNEL. THE SITE SLOPES TO THE EAST AND CURRENTLY DISCHARGES TO THE AMOLE ARROYO CHANNEL VIA A CONCRETE RUNDOWN TO THE SOUTHEAST.

PROPOSED IMPROVEMENTS
THE PROPOSED SITE IS A GAS STATION AND CONVENIENCE STORE WITH CONCRETE ACCESS, PARKING AND LANDSCAPING. THE SITE MATCHES THE EXISTING DRAINAGE PATTERN, WITH RUNOFF FLOWING SOUTHEAST. STORMWATER QUALITY VOLUME IS CAPTURED IN WATER QUALITY POND 1. A TRENCH DRAIN AROUND THE FUEL CANOPY DIRECTS RUNOFF FROM THE FUEL PUMPS TO AN OIL WATER SEPARATOR BEFORE DISCHARGING INTO POND 1. AN OVERFLOW SPILLWAY DIVERTS EXCESS RUNOFF VOLUME TO THE EXISTING CONCRETE RUNDOWN AND INTO THE AMOLE CHANNEL. THE SITE IS PERMITTED FREE DISCHARGE TO THE CHANNEL.

OFF-SITE FLOW OFF-SITE FLOWS DO NOT IMPACT THE PROPERTY.

FLOOD HAZARD

ACCORDING TO BERNALILLO COUNTY FIRM MAP #35001C0336H, THE SITE IS LOCATED WITHIN ZONE X AND IS

LEGAL DESCRIPTION
TRACT E-5-A-2, OF ALBUQUERQUE SOUTH, UNIT 3, WITHIN THE TOWN OF ATRISCO GRANT, PROJECTED SECTION 4, TOWNSHIP 9 NORTH, RANGE 2 EAST, NMPM, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT THEREOF, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON AUGUST 3, 2010, IN PLAT BOOK 2010C, PAGE 090, AS DOCUMENT NO

CONTAINING 2.7189 ACRES (118,435 SF), MORE OR LESS.

### BASIS OF BEARING

THE BASIS OF BEARINGS IS BETWEEN THE SE CORNER OF TRACT E-5-A-2 AND USC&GS BRASS CAP "TRANS 1969" AS MEASURED WITH THE "TRIMBLE VRS NOW" GNSS VIRTUAL REFERENCE SYSTEM. BEARINGS ARE NEW MEXICO STATE PLANE BEARINGS, CENTRAL ZONE, NAD 83. DISTANCE ARE GROUND DISTANCES. ELEVATION DATUM IS NAVD88

## BENCHMARKS CSC CONTROL POINT 1

SW CORNER, TRACT E-5-A-2 5/8" REBAR W/CAP ILLEGIBLE N' = 1471548.485 US FTE = 1495079.073 US FT Z = 5119.71 US FT NAVD 1988

CSC CONTROL POINT 2 NW CORNER, TRACT E-5-A-2 REBAR W/CAP LS 16006 N = 1471895.209 US FT E = 1494671.543 US FT Z = 5129.368 US FT NAVD 1988

IMPACT STATEMENT
ANALYSIS OF THE 100-YEAR WATER SURFACE ELEVATION AT THE AMOLE CHANNEL CONFIRMED A HEADWATER ELEVATION OF 5118.6. THE OVERFLOW SPILLWAY FROM THE ON-SITE STORMWATER QUALITY POND RELEASES AT AN ELEVATION OF 5121.0. THEREFORE, THE SITE IS NOT IMPACTED BY THE 100-YEAR STORM EVENT AND WILL CONTINUE TO DRAIN FREELY TO THE AMOLE CHANNEL.

REVISIONS

March 10, 2023

11/10/22 FSS/ONAL ENGI

SCALE

AS SHOWN DR. KJK CH. CBS

03/10/23

P.M. D. MADRUGA \_\_ JOB 22003692

SHEET NO. D01.1