

ASH FORK WELL NO. 3 APPROVAL TO CONSTRUCT WELL EQUIPPING AND CONNECTIONS ASH FORK DEVELOPMENT ASSOCIATION, INC. YAVAPAI COUNTY, ARIZONA



VICINITY MAP

SCALE: 1" = 1,000'

A PORTION OF SECTION 15, T-21-N, R-2-W
OF THE GILA AND SALT RIVER BASELINE AND MERIDIAN
YAVAPAI COUNTY, ARIZONA

ENGINEER

MATRIX NEW WORLD ENGINEERING, LAND
SURVEYING AND LANDSCAPE ARCHITECTURE, PC

CONTACT: ANDREW J. MACHUGH, P.E. #44674
PHONE: (602) 955-5547

3033 NORTH 44th STREET, SUITE 270
PHOENIX, AZ 85018

OWNER

ASH FORK DEVELOPMENT ASSOCIATION, INC.
450 W LEWIS AVE.
ASH FORK, AZ 86320
PHONE: (928) 637-2774

AGENCY

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
1110 W. WASHINGTON STREET
PHOENIX, AZ 85007
PHONE: (602) 771-2300

AS-BUILT CERTIFICATION:

I HEREBY CERTIFY THAT THE "AS-BUILT" INFORMATION SHOWN HEREON WAS OBTAINED UNDER MY DIRECT SUPERVISION AND IS CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR/ENGINEER _____

REGISTRATION NUMBER: _____ DATE _____
COMPANY NAME: _____
ADDRESS: _____
PHONE NUMBER: _____

GENERAL ENGINEERING NOTES

- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
- BACKFILLING SHALL NOT BE COMPLETED UNTIL PIPES ARE INSPECTED AND APPROVED BY THE PROPER INSPECTOR (IF NECESSARY).
- AN APPROVED SET OF PLANS SHALL BE AVAILABLE AT THE JOB SITE AT ALL TIMES.
- ALL CONSTRUCTION SHALL CONFORM TO THE JURISDICTIONAL AGENCY ENGINEERING DESIGN STANDARDS AND POLICIES AND AGENCY STANDARD DETAILS, UNLESS EXPLICITLY STATED OTHERWISE.
- PRIOR TO BIDDING THE WORK, THE CONTRACTOR SHALL THOROUGHLY SATISFY HIMSELF AS TO THE ACTUAL SITE CONDITIONS, REQUIREMENTS OF THE WORK, AND EXCESS OR DEFICIENCY IN QUANTITIES. NO CLAIMS SHALL BE MADE AGAINST THE OWNER OR ENGINEER FOR ANY EXCESS OR DEFICIENCY THEREIN, ACTUAL OR RELATIVE.
- THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, OR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL BE LIABLE FOR DELAYS OR DAMAGES TO UTILITIES RELATED TO THIS CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF UTILITIES, POWER POLES, ETC.
- KNOWN EXISTING UNDERGROUND CONDUITS, PIPELINES AND OTHER UTILITIES HAVE BEEN SHOWN ON THE CONTRACT DRAWINGS IN THEIR APPROXIMATE LOCATIONS. THE ACCURACY OR COMPLETENESS OF UTILITIES INDICATED ON THE DRAWINGS IS NOT GUARANTEED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES AND THEIR SERVICE CONNECTIONS. IF THE EXISTING UTILITY IS FOUND TO BE IN A SUBSTANTIALLY DIFFERENT LOCATION, OR WILL ADVERSELY AFFECT THE OPERATION OF THE UTILITY, THE CONTRACTOR SHALL NOTIFY THE JURISDICTIONAL AGENCY PRIOR TO MAKING CONNECTIONS. AMENDMENTS TO THE PLANS MAY BE REQUIRED PRIOR TO PROCEEDING WITH CONSTRUCTION ACTIVITIES.
- AS-BUILT DRAWINGS CERTIFIED BY THE OWNER'S ENGINEER SHALL BE SUBMITTED TO AND ACCEPTED BY THE JURISDICTIONAL AGENCY PRIOR TO FINAL ACCEPTANCE OF WORK (IF NECESSARY).
- ITEMS REQUIRING SUBMITTAL REVIEW SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. ONE (1) ELECTRONIC COPY OF EACH SUBMITTAL (SHOP DRAWINGS, ELECTRICAL DIAGRAMS, AND CATALOG CUTS FOR FABRICATED ITEMS AND MANUFACTURED ITEMS FURNISHED UNDER THIS CONTRACT, ETC.) SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER WITH SUFFICIENT TIME TO ALLOW THE ENGINEER NOT LESS THAN SEVEN (7) WORKING DAYS FOR EXAMINING THE SHOP DRAWINGS. SHOP DRAWINGS SHALL BE ACCURATE, DISTINCT, AND COMPLETE, AND SHALL CONTAIN ALL REQUIRED INFORMATION, INCLUDING SATISFACTORY IDENTIFICATION OF ITEMS, UNITS, AND ASSEMBLIES IN RELATION TO THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCALLY ADOPTED CODES APPLICABLE TO ITEMS REQUIRING SUBMITTAL REVIEW. ANY INSPECTION OR APPROVALS BY THE JURISDICTIONAL AGENCY, OWNER, ENGINEER, OR OTHERS SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR AND THEIR SUPPLIERS FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH APPLICABLE CODES AND AGENCY REQUIREMENTS.
- IN ACCORDANCE WITH ARIZONA ADMINISTRATIVE CODE (A.A.C.)

R18-4-213, ALL MATERIALS ADDED AFTER JANUARY 1ST, 1993, WHICH MAY COME INTO CONTACT WITH DRINKING WATER, SHALL CONFORM TO NATIONAL SANITATION FOUNDATION STANDARDS 60 AND 61.

GENERAL WATER NOTES

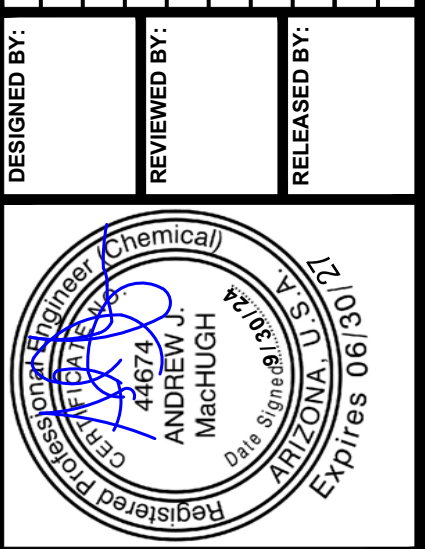
- A WATER SYSTEM SHALL NOT CONSTRUCT OR ADD TO ITS SYSTEM A WELL WHICH IS LOCATED:
 - WITHIN 50 FEET FROM EXISTING SEWERS UNLESS THE SEWER MAIN HAS BEEN CONSTRUCTED IN ACCORDANCE WITH R18-5-502 (C)(5)(A) OR (B)
 - WITHIN 100 FEET OF ANY EXISTING SEPTIC TANK OR SUBSURFACE DISPOSAL SYSTEM
 - WITHIN 100 FEET OF A DISCHARGE OR ACTIVITY WHICH IS REQUIRED TO OBTAIN AN INDIVIDUAL AQUIFER PROTECTION PERMIT, PURSUANT TO A.R.S. §§ 49-241 (A) THROUGH 49 - 251 - WITHIN 100 FEET OF AN UNDERGROUND STORAGE TANK AS DEFINED IN A.R.S. § 49-1001
 - WITHIN 100 FEET OF HAZARDOUS WASTE FACILITIES OPERATED BY LARGE QUANTITY GENERATORS AND TREATMENT, STORAGE, AND DISPOSAL FACILITIES REGULATED UNDER THE ARIZONA HAZARDOUS WASTE MANAGEMENT ACT, A.R.S. § 49 - 921 ET SEQ.
- THE WELL WILL BE DISINFECTED PER ENG. BULL. NO. 8 OR AWWA C654-13.
- PIPE, FITTINGS, VALVES AND OTHER APPURTENANCES SHALL CONFORM TO CURRENT AWWA, ASA OR FEDERAL STANDARDS.

SHEET INDEX

DESCRIPTION	DRAWING NAME	SHEET NO
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**ISSUED FOR
APPROVAL TO
CONSTRUCT**

DESIGNED BY:		REVIEWED BY:		RELEASED BY:		DATE:	



MATRIXNEWORLD
Engineering Progress

Matrix New World Engineering, Land Surveying
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3033 North 44th Street, Suite 270
Phoenix, Arizona 85018

Tel: 602-955-5547
Fax: 973-240-1818
www.matrixnewworld.com

COVER SHEET

APPROVAL TO CONSTRUCT
ASH FORK WELL NO. 3
ADWR #44093040
ASH FORK DEVELOPMENT ASSOCIATION, INC.
YAVAPAI COUNTY, ARIZONA

JOB NO:	733
DATE:	13/MAY/24
SCALE:	As Noted
GN01	SHEET 1 OF 6

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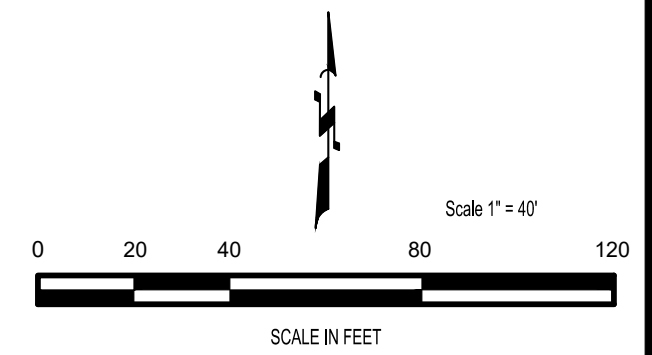
NOTES:

1. SITE PLAN IS SET TO NAD83 ARIZONA STATE PLANE, CENTRAL ZONE, US FOOT HORIZONTAL DATUM.
2. FLOOD ZONE IS 'AE'. THE PROJECT LOCATION IS LOCATED WITHIN THE REGULATORY FLOODWAY. LIMITS OF FLOODWAY DIGITIZED FROM FIRM PANEL 01025C0530G, EFFECTIVE DATE 9/3/2010.
3. THE TOP OF THE WELL STATION FLOOR WILL BE CONSTRUCTED A MINIMUM OF 2- FEET ABOVE THE 100-YEAR FREQUENCY FLOOD LEVEL; AND THE EARTH FILL SURROUNDING THE WELL STATION FLOOR WILL BE CONSTRUCTED TO BE A MINIMUM OF 1-FOOT ABOVE THE FLOOD LEVEL AND EXTENDING 15- FEET RADIALLY FROM WELL CASING.

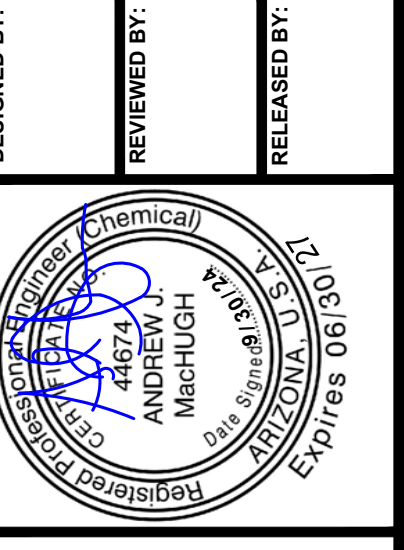
CONSTRUCTION NOTES:

1. ELECTRICAL PULL BOX SHALL BE INSTALLED BETWEEN WELL AND EXISTING BUILDING. SUBMITTAL FOR BOX TO BE REVIEWED BY ENGINEER.

ISSUED FOR APPROVAL TO CONSTRUCT



DESIGNED BY:		REVIEWED BY:		RELEASED BY:		DATE:	



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SITE PLAN

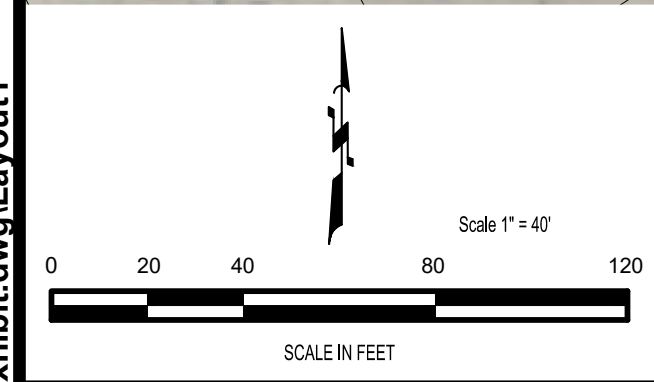
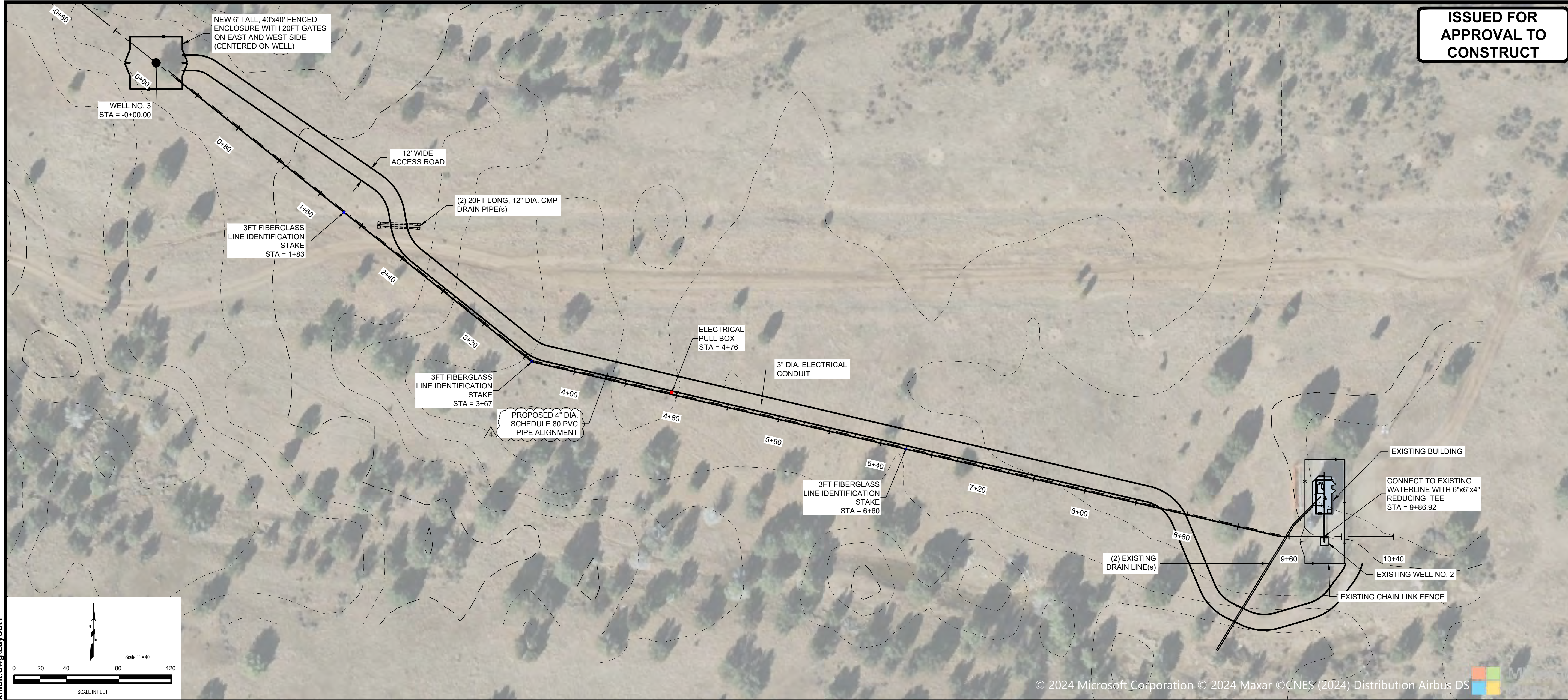
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ADWR #44093040
ASH FORK DEVELOPMENT ASSOCIATION, INC.
YAVAPAI COUNTY, ARIZONA

JOB NO: 733
DATE: 13/MAY/24
SCALE: 1" = 40'
CN01
SHEET 2 OF 6

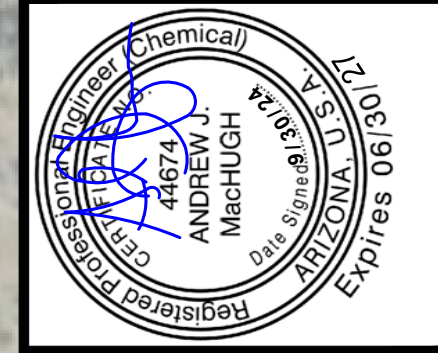
REVISIONS	
NO.	DESCRIPTION
1	Issued for Approval
2	A/DCO Deficiencies Resolved
3	Update Pump Specifications
4	Client Comments

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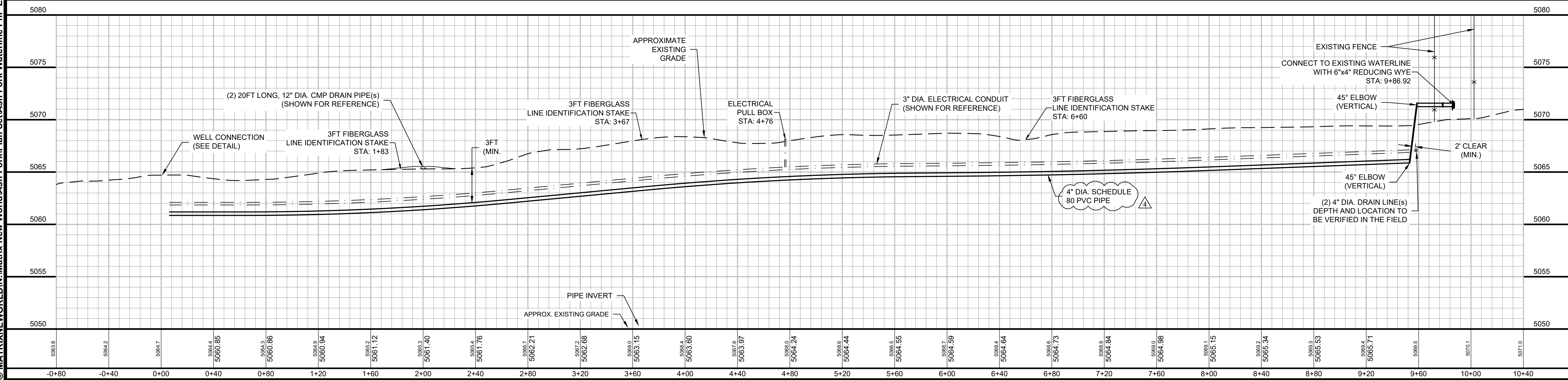
REVISIONS	
NO.	DESCRIPTION
1	Issued for Approval
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3	Update Pump Specifications
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PLAN AND PROFILE

APPROVAL TO CONSTRUCT
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YAVAPAI COUNTY, ARIZONA

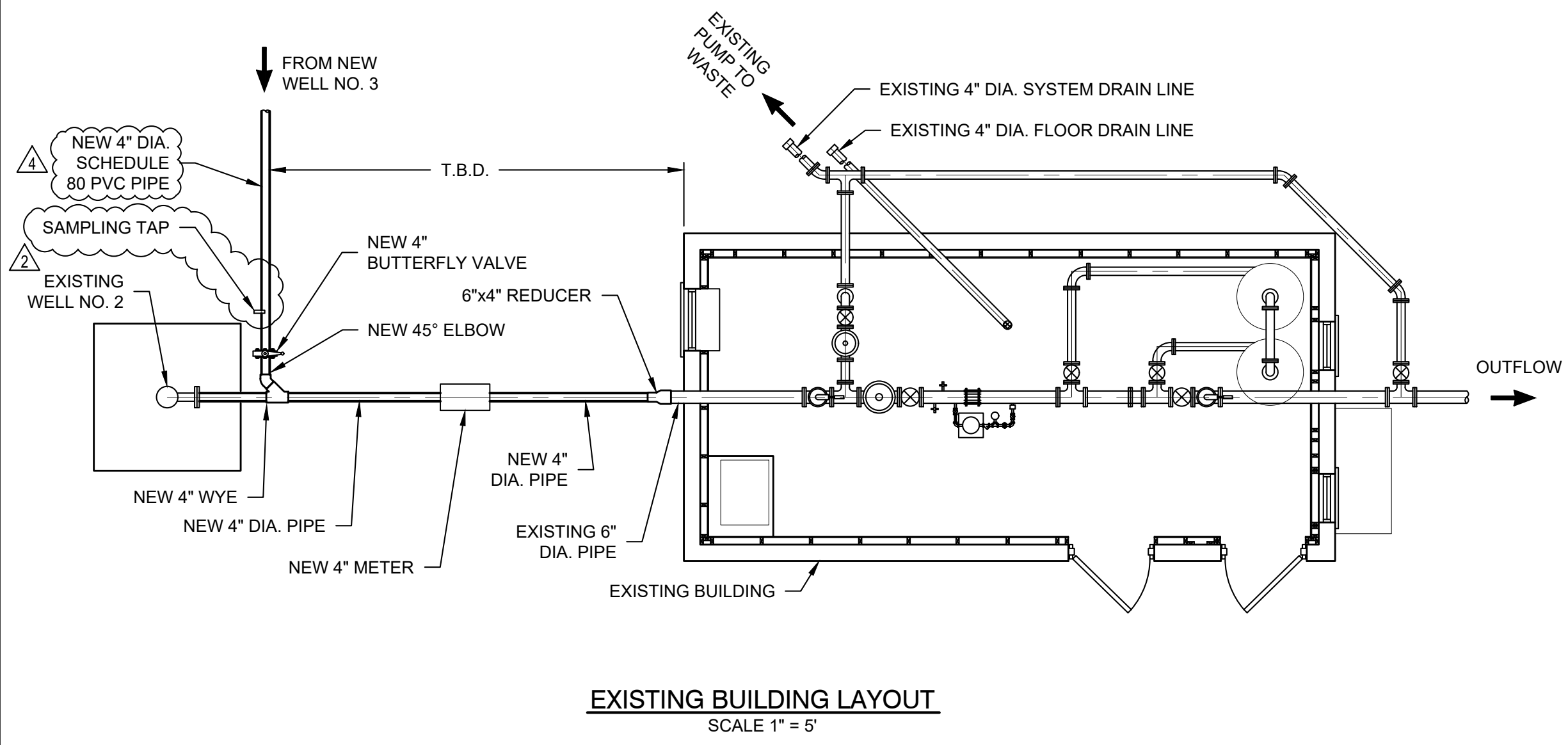
JOB NO: 733
DATE: 13/MAY/24
SCALE: 1" = 40' H / 1" = 5' V

PP01
SHEET 3 OF 6

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GRUNDFOS

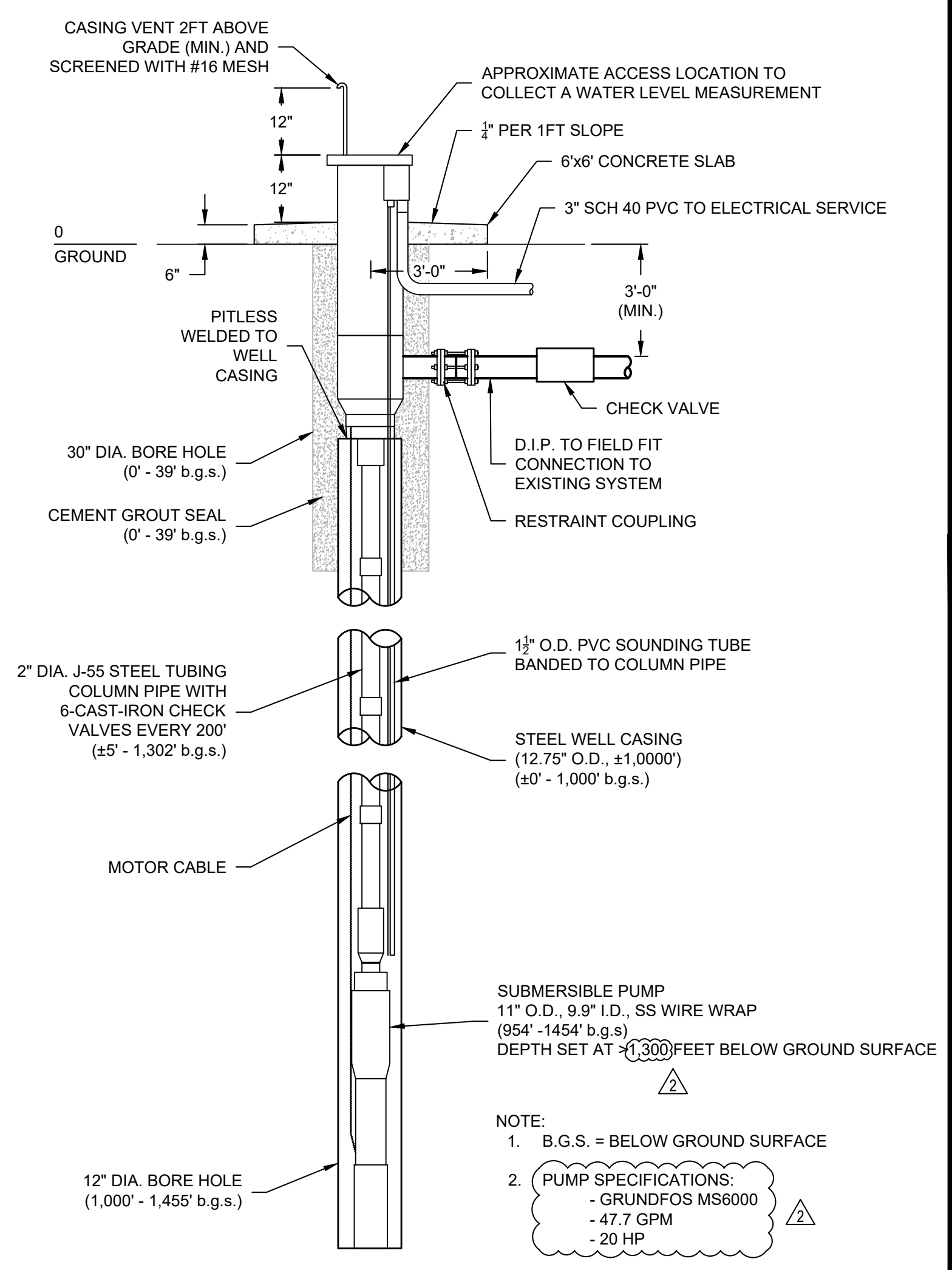
Company name: _____
Created by: _____
Phone: _____

Date: 25/09/2024

Description	Value
General information:	
Product name:	45S200-47
Product No.:	98924606
EAN number:	5712603665870
Price:	\$ 28498
Technical:	
Pump speed on which pump data are based:	3450 rpm
Actual calculated flow:	47.7 US GPM
Rated flow:	47.1 US GPM
Resulting head of the pump:	1186 ft
Rated head:	1158 ft
Stages:	47
Number of reduced-diameter impellers:	NONE
Shaft seal for motor:	SIC/SICNBR
Approvals:	CULDWUS,CCSAUS
Approvals for drinking water:	PR0P65
Curve tolerance:	ISO9906:2012 3B
Model:	A
Motor version:	T40
Return valve:	YES
Materials:	
Pump:	Stainless steel
Pump:	EN 1.4301
Pump:	AISI 304
Impeller:	Stainless steel
Impeller:	EN 1.4301
Impeller:	AISI 304
Motor:	Stainless steel
Motor:	DIN W.-Nr. 1.4301
Motor:	AISI 304
Installation:	
Maximum ambient pressure:	870.23 psi
Maximum operating pressure:	870.23 psi
Maximum outlet pressure:	648.32 psi
Type of connection:	NPT(M)
Size of connection:	2 inch
Motor diameter:	6 inch
Minimum borehole diameter:	5.71 in
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	5 .. 104 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft³
Electrical data:	
Motor type:	MS6000
Motor flange design:	NEMA
Rated power - P2:	20 HP
Power (P2) required by pump:	20 HP
KVA code:	J
Mains frequency:	60 Hz
Rated voltage:	3 x 440-460-480 V
Service factor:	1.15
Rated current:	33.5-32.5-32.0 A
Starting current:	520-570-610 %
Cos phi - power factor:	0.85-0.84-0.81
Rated speed:	3450-3470-3480 rpm

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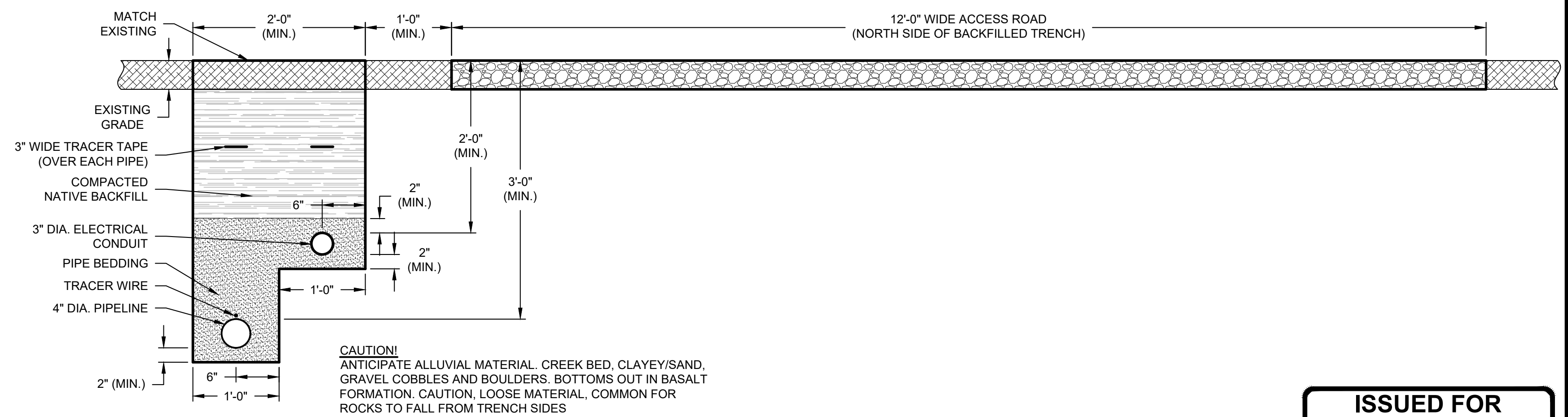
PUMP PERFORMANCE CURVE



WELL CONNECTION NOT TO SCALE

APPROXIMATE QUANTITIES	
4in Dia. Schedule 80 PVC Pipe	960 l.f.
3in Dia. Sch40 PVC (Conduit)	960 l.f.
Water Meter	1
4" Wye	1
6"x6"x4" Reducing Tee	1
4" Butterfly Valve	2
4" Dia. 45° ELBOW	2

- 1 CONTRACTOR TO PROVIDE SUBMITTALS FOR EACH COMPONENT TO ENGINEER / OWNER FOR REVIEW.
- 2 ALL PRESSURE PIPING SHALL BE HYDROSTATIC PRESSURE TESTED FOLLOWING MAG SPECIFICATION 611.2.2 AND AWWA 600. THE ENGINEER SHALL BE NOTIFIED 1 DAY IN ADVANCE OF TESTING. IF USED, THRUST BLOCKS MUST BE INSTALLED A MINIMUM OF 5 DAYS PRIOR TO PRESSURE TESTING.



TYPICAL PIPING BEDDING DETAIL NOT TO SCALE

ISSUED FOR APPROVAL TO CONSTRUCT

NO.	DESCRIPTION	DATE	BY:	APP.
1	Issued for Approval	18/MAY/24	LD	LD
2	A/DCO Deficiencies Resolved	6/JUN/24	LD	LD
3	Update Pump Specifications	30/SEP/24	LD	LD
4	Client Comments	31/OCT/24	LD	LD

DESIGNED BY: _____
REVIEWED BY: _____
RELEASED BY: _____

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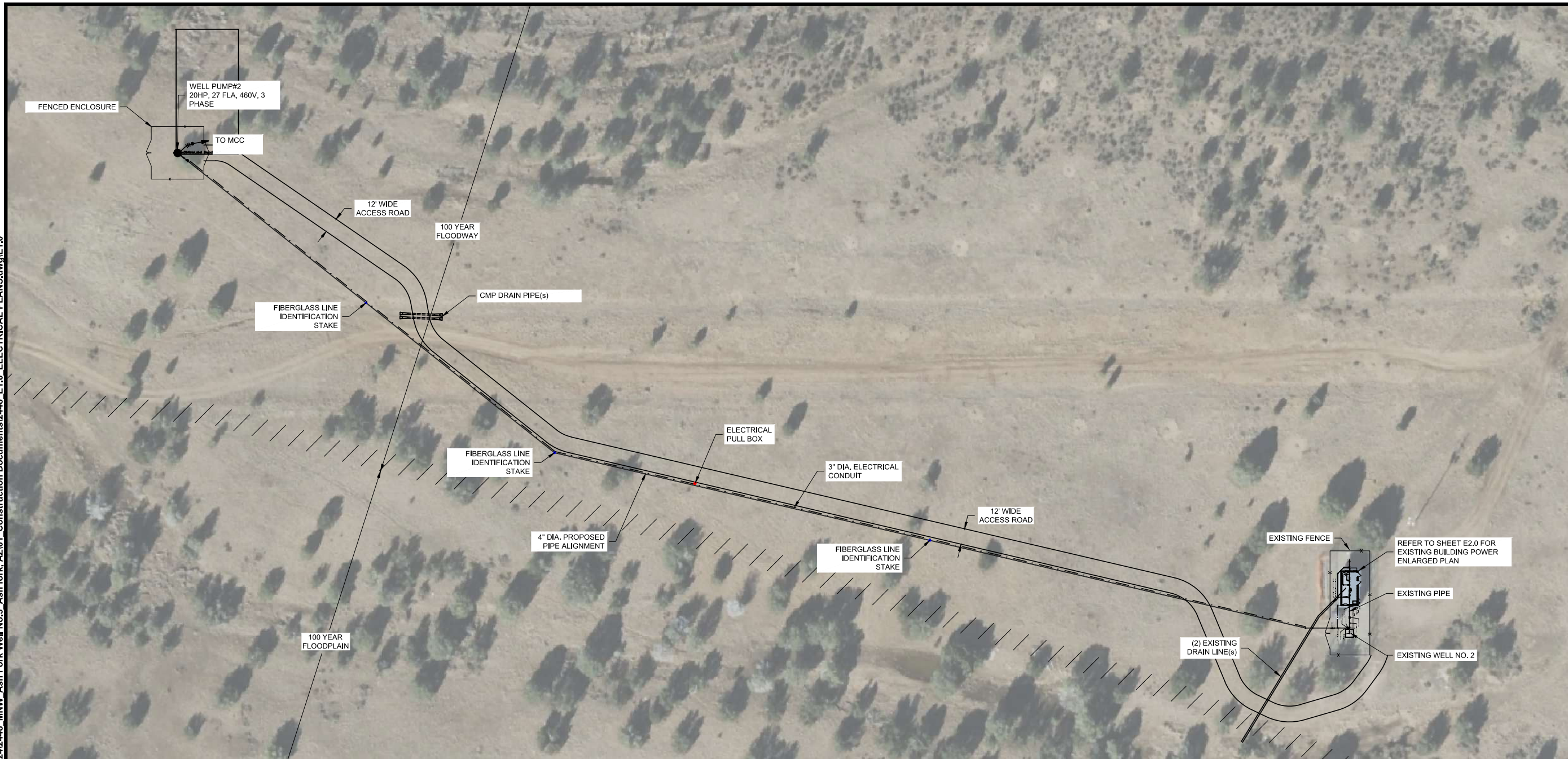
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DETAILS

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YAVAPAI COUNTY, ARIZONA

JOB NO: 733
DATE: 13/MAY/24
SCALE: As Noted
DTL1
SHEET 4 OF 6

© MATRIXNEWORLD\Users\jortfi\OneDrive\Electrical Design Services\2024\2448_MNW_Ash Fork Well No.3_Ash fork_AZ01_Construction Documents\2448_E1.0 ELECTRICAL PLANS.dwg[E1.0



1
E1.0 **ELECTRICAL SITE PLAN**
SCALE: 1"=40'-0"

- GENERAL NOTES :**
- A. ALL PVC CONDUIT MUST HAVE A MINIMUM OF #12 CU. GROUND CONDUCTOR.
 - B. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND SCHEDULING WITH POWER AND TELEPHONE UTILITY COMPANIES INCLUDING PROVIDING (2) COMPLETE SETS OF DRAWINGS TO EACH COMPANY. ALL WORK SHALL BE INSTALLED PER EACH UTILITY COMPANIES FINAL DESIGN DRAWINGS.

ELECTRICAL SHEET INDEX	
E1.0	ELECTRICAL SITE PLAN
E2.0	ONE-LINE DIAGRAM

SCOPE OF WORK:
PROVIDE POWER FOR NEW 20HP, 480V, 3Ø, WELL PUMP CONNECTED TO EXISTING S.E.S.



DESIGNED BY:	REVIEWED BY:	RELEASED BY:	NO.	DATE:	BY:	APR:

NO.	DESCRIPTION	DATE:	BY:	APR:
2	ADEC Delinquencies Reported			
1	Issued for Approval			

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ELECTRICAL SITE PLAN

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ASH FORK DEVELOPMENT ASSOCIATION, INC.
YAVAPAI COUNTY, ARIZONA

JOB NO:	733
DATE:	29/SEP/24
SCALE:	1" = 40'
E1.0	
SHEET	1 OF 2

