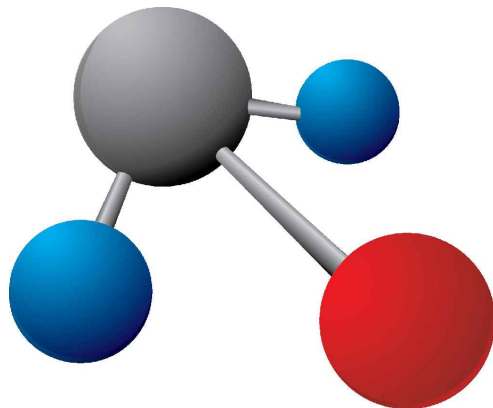
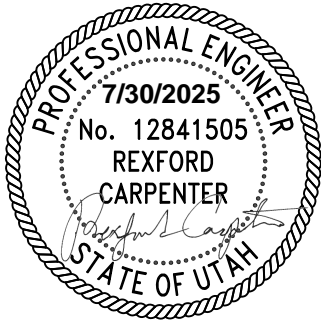


JVWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Certification of Individual Project Design Disciplines Are
Included On Their Individual Drawings, Respectively



JORDAN VALLEY WATER
CONSERVANCY DISTRICT

PREPARED FOR:
JORDAN VALLEY WATER CONSERVANCY DISTRICT

LOCATION:
SOUTH JORDAN, UTAH

DATE:
JULY 2025

AE2S PROJECT NO:
11910-2024-001

JVWCD PROJECT NO.
4366

ENGINEERING TEAM:

CIVIL ENGINEER
Advanced Engineering and Environmental Services, LLC

CORROSION ENGINEER
Infinity Corrosion Group

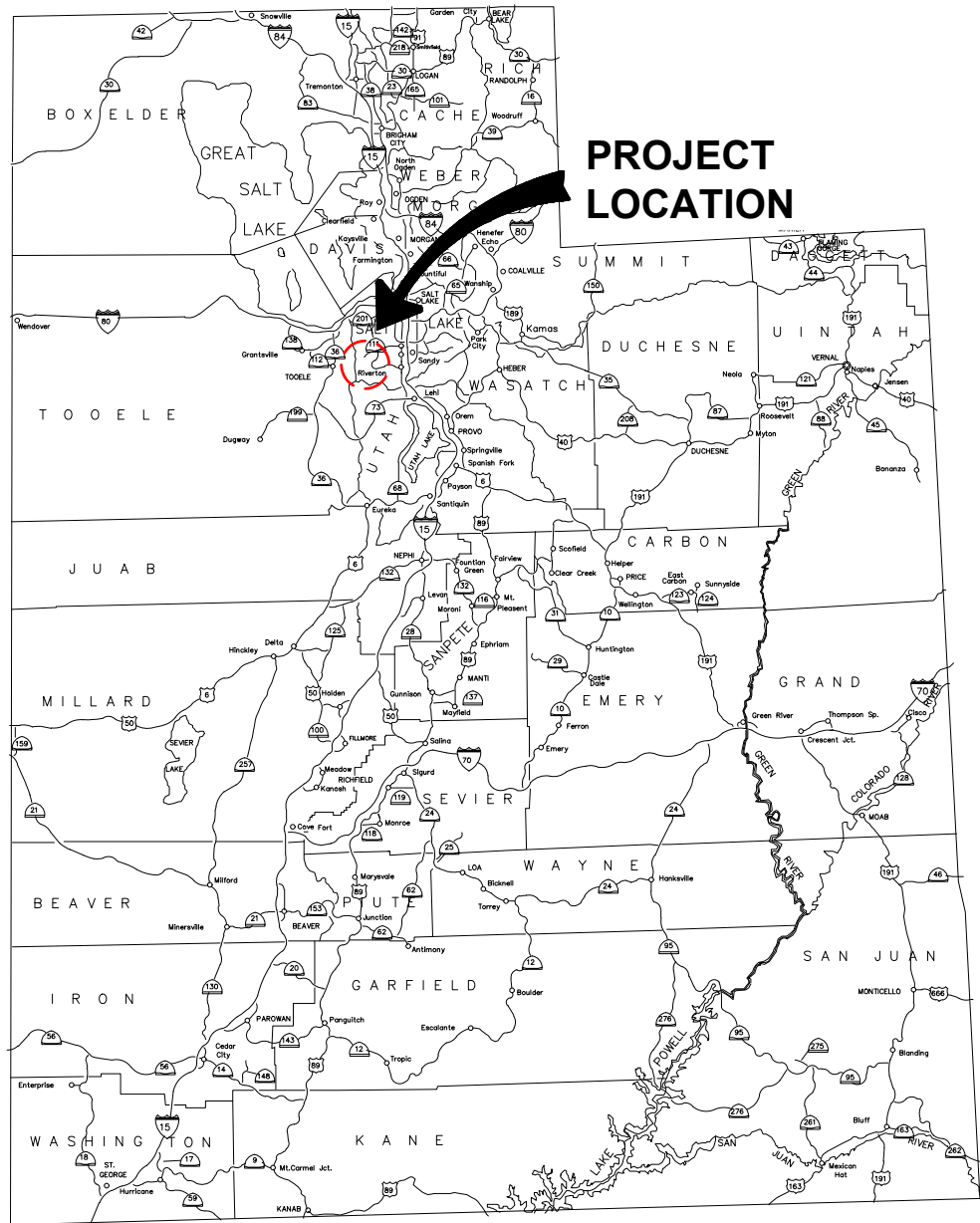
STRUCTURAL ENGINEER
Advanced Engineering and Environmental Services, LLC

PROCESS ENGINEER
Advanced Engineering and Environmental Services, LLC

MECHANICAL ENGINEER
KFI ENGINEERS, PC

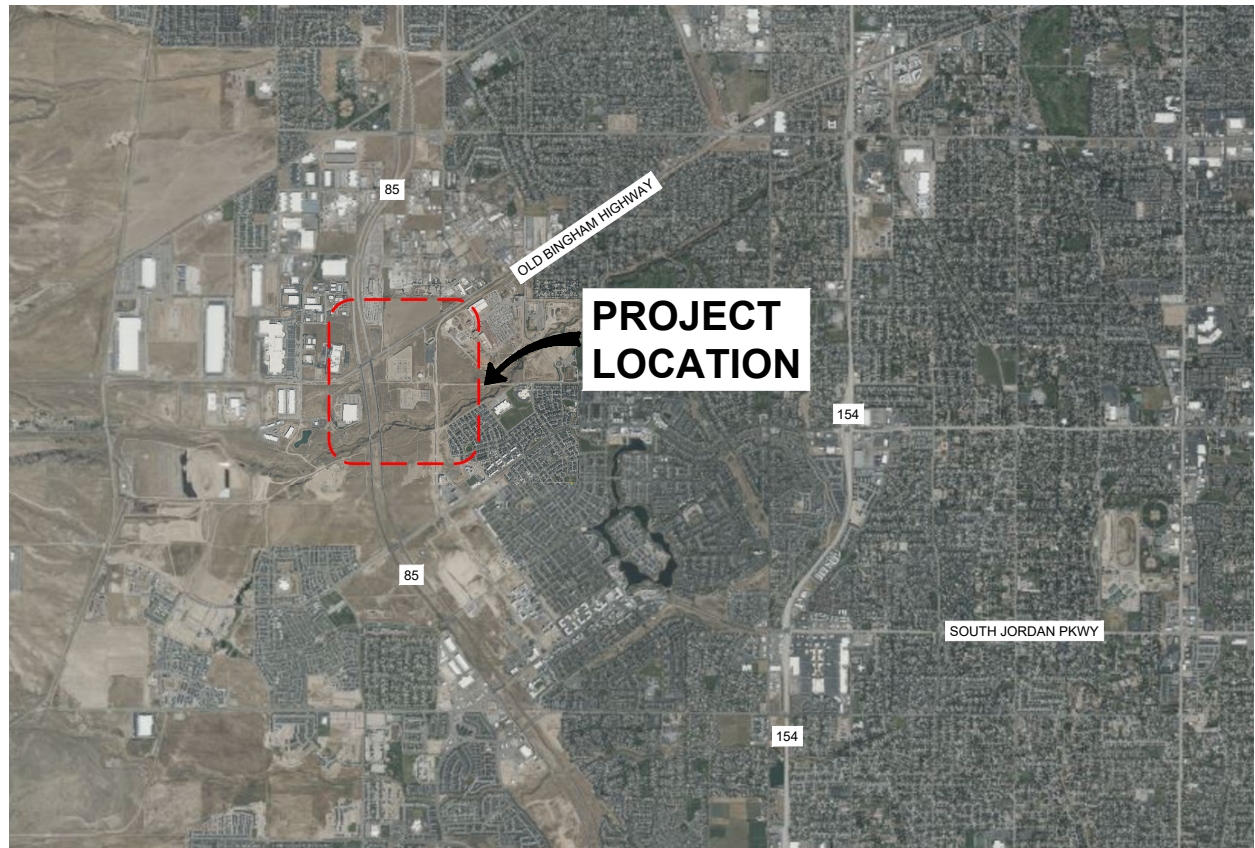
ELECTRICAL ENGINEER
Advanced Engineering and Environmental Services, LLC

I&C ENGINEER
Advanced Engineering and Environmental Services, LLC

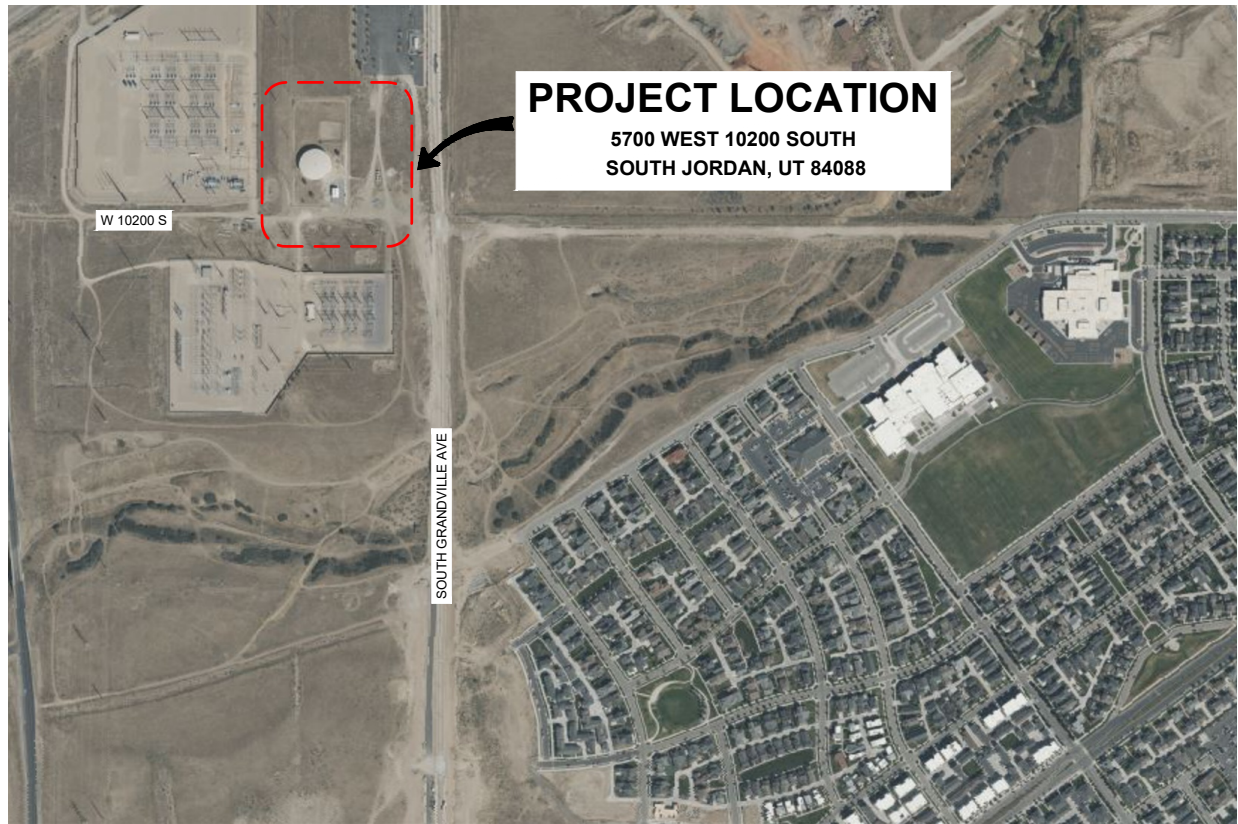


STATE OF UTAH

1 PROJECT LOCATION MAP
G002 SALT LAKE COUNTY



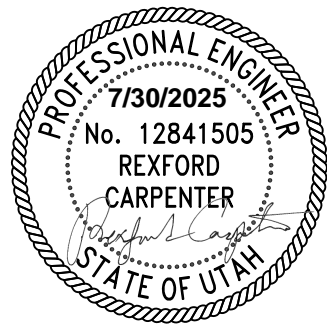
2 PROJECT VICINITY MAP
G002 SALT LAKE COUNTY



3 PROJECT AERIAL MAP
G002 SOUTH JORDAN



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



STATUS: FOR CONSTRUCTION

APPR

DATE

SYM

JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com

PROJECT TITLE:

SHEET TITLE:

LOCATOR MAP

CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT
SOUTH JORDAN, UTAH

PREPARED BY: JTL
CHECKED BY: RC
APPROVED BY: RC

PROJECT NO: 11910-2024-001
DATE: JULY 2025
ALT. PROJECT NO: 4366

SHEET DESIGNATOR:
GEN

SHEET NO:
G002

SHEET NUMBERING	
SHEET SERIES	SERIES DESCRIPTION
000	SYMBOLS LEGEND, DRAFTING CONVENTIONS, NOTES, ETC.
100	PLAN VIEWS AND COMBINATION PLAN & PROFILE VIEW (HORIZONTAL VIEWS)
200	ELEVATIONS AND PROFILES (VERTICAL VIEWS)
300	SECTIONS (SECTION VIEWS, WALL SECTIONS)
400	LARGE SCALE VIEWS (SCALED UP REPRODUCTIONS OF PLANS, ELEVATIONS OR SECTIONS NOT IN DETAILS)
500	DETAILS
600	SCHEDULES AND DIAGRAMS
700	STANDARD DETAILS

DRAWING INDEX						
SHEET DESIGNATOR	SHEET NUMBER	SHEET TITLE		PS	E607	RVSS WIRING SCHEMATIC
GEN	G001	COVER SHEET		PS	E608	VFD WIRING SCHEMATIC
GEN	G002	LOCATION MAP		PS	E609	VARIOUS SCHEDULES
GEN	G003	DRAFTING CONVENTIONS		PS	E701	VARIOUS DETAILS
GEN	G004	LEGEND & SYMBOLS		PS	E702	PUMPING MANHOLE SECTION DETAIL
CVL	C001	CIVIL NOTES		PS	E801	CABLE & CONDUIT SCHEDULE
CVL	C101	EXISTING CONDITIONS		PS	E802	CABLE & CONDUIT SCHEDULE
CVL	C102	DEMO PLAN		PID	IC001	PROCESS AND INSTRUMENTATION DIAGRAM SYMBOLS AND ABBREVIATIONS
CVL	C103	SITE PLAN		PID	IC002	PROCESS AND INSTRUMENTATION DIAGRAM SYMBOLS AND ABBREVIATIONS
DTL	C501	DETAILS		PID	IC101	PUMP STATION
DTL	C502	DETAILS		PID	IC102	PUMP STATION CONTINUED
DTL	C503	DETAILS		PID	IC103	RESERVOIR AND VAULT
DTL	C504	DETAILS		PID	IC104	DISCHARGE PIPING
DTL	C505	DETAILS		PID	IC105	ELECTRICAL EQUIPMENT
DTL	C506	DETAILS				
DTL	C507	DETAILS				
DTL	C508	TANK AND AQUEDUCT DRAIN VAULT DETAILS				
DTL	C509	TANK AND AQUEDUCT DRAIN VAULT DETAILS				
DTL	C510	TANK AND AQUEDUCT DRAIN VAULT DETAILS				
DTL	CP01	CATHODIC PROTECTION DETAILS I				
DTL	CP02	CATHODIC PROTECTION DETAILS II				
DTL	CP03	CATHODIC PROTECTION DETAILS III				
GEN	S001	STRUCTURAL GENERAL NOTES				
PS	S101	ROOF DEMO PLAN				
PS	S102	GALLERY FLOOR PLAN				
PS	S103	OPERATIONS FLOOR PLAN				
PS	S104	GRADE LEVEL PLAN				
PS	S105	ROOF PLAN				
PS	S501	STRUCTURAL DETAILS				
GEN	P001	PROCESS SYMBOLS AND ABBREVIATIONS				
PS	P002	PROCESS FLOW SCHEMATIC, HYDRAULIC PROFILE, AND BASIS OF DESIGN				
PS	P101	DEMOLITION FLOOR PLANS				
PS	P102	IMPROVEMENT FLOOR PLANS				
PS	P301	DEMOLITION SECTION VIEWS				
PS	P302	IMPROVEMENT SECTION VIEWS				
PS	P601	SCHEDULES				
SD	P701	STANDARD DETAILS				
PS	M001	MECHANICAL COVER PAGE				
PS	M002	MECHANICAL SYMBOLS AND ABBREVIATIONS				
PS	M101	OPERATIONS LEVEL DEMOLITION PLAN				
PS	M102	GALLERY LEVEL DEMOLITION PLAN				
PS	M103	GALLERY LEVEL HVAC PLAN				
PS	M104	OPERATIONS LEVEL HVAC PLAN				
PS	M501	MECHANICAL DETAILS				
PS	M601	MECHANICAL SCHEDULES				
PS	E001	ELECTRICAL SYMBOLS & ABBREVIATIONS				
PS	E002	OVERALL SITE PLAN				
PS	E003	ENLARGED ELECTRICAL DEMO SITE PLAN				
PS	E004	ENLARGED ELECTRICAL IMPROVEMENTS SITE PLAN				
PS	E005	ENLARGED ELECTRICAL IMPROVEMENTS SITE PLAN				
PS	E006	ENLARGED ELECTRICAL GROUNDING SITE PLAN				
PS	E101	GALLERY LEVEL ELECTRICAL DEMO PLAN				
PS	E102	OPERATIONS LEVEL ELECTRICAL DEMO PLAN				
PS	E103	ROOF LEVEL ELECTRICAL DEMO PLAN				
PS	E104	GALLERY LEVEL ELECTRICAL IMPROVEMENTS PLAN				
PS	E105	OPERATIONS LEVEL PROCESS ELECTRICAL IMPROVEMENTS PLAN				
PS	E106	OPERATIONS LEVEL LGPM IMPROVEMENTS PLAN				
PS	E601	PUMP STATION ONE-LINE DIAGRAM				
PS	E602	PUMP STATION ONE-LINE DIAGRAM				
PS	E603	PUMP STATION ONE-LINE DIAGRAM				
PS	E604	MCC ELEVATION				
PS	E605	PUMP STATION NETWORK DIAGRAM				
PS	E606	IO SCHEDULE				

CIVIL ABBREVIATIONS					
&	- AND	DRWY	- DRIVEWAY	PC	- POINT OF CURVATURE
∠	- ANGLE	DWG.	- DRAWING	PC	- PRECAST
@	- AT	E.	- EAST	P.C.C.	- PORTLAND CEMENT CONCRETE
⊕	- CENTERLINE	E-W	- EAST TO WEST	PE	- POLYETHYLENE
°	- DEGREES	EA.	- EACH	PE or P.E.	- PLAIN END
Δ	- DELTA	E.F.	- EACH FACE	PEP	- POLYETHYLENE PIPE
Ø	- DIAMETER	EJ	- EXPANSION JOINT	PI	- POINT OF INTERSECTION
□	- SQUARE	ELEC.	- ELECTRICAL	PO	- PUSH ON
±	- PLUS / MINUS	ELEV.	- ELEVATION	POLY	
ABS	- ACRYLONITRILE-BUTADIENE-STYRENE	EP	- END OF PROJECT	PRV	- PRESSURE REDUCING VALVE
ACI	- AMERICAN CONCRETE INSTITUTE	EQ.	- EQUAL	PSI	- POUNDS PER SQUARE INCH
ACP	- ASBESTOS CEMENT PIPE	EVC	- END VERTICAL CURVE	PT	- POINT OF TANGENCY
ADDL	- ADDITIONAL	E.W.	- EACH WAY	PLV	- PLUG VALVE
ADDM.	- ADDENDUM	EXIST.	- EXISTING	PVC	- POLYVINYL CHLORIDE
ADJ.	- ADJUSTABLE	EXP.	- EXPANSION	PVI	- POINT OF VERTICAL INTERSECTION
AGGR.	- AGGREGATE	FDN.	- FOUNDATION	R or RAD	- RADIUS
ALT.	- ALTERNATE	FIN.	- FINISH	R.	- RISER
APPR.	- APPROACH	FL	- FLOW LINE OR FLANGE	RCCP	- REINFORCED CONCRETE CYLINDER PIPE
APPROX.	- APPROXIMATE	FLR.	- FLOOR	RCP	- REINFORCED CONCRETE PIPE
APPURT.	- APPURTENANCE	FM	- FORCE MAIN	RDL	- ROOF DRAIN LINE
ARCH.	- ARCHITECT or ARCHITECTURAL	FRP	- FIBERGLASS REINFORCED PLASTIC	RES	- RESERVOIR
AR MH	- AIR RELEASE MANHOLE	FT.	- FOOT	REQD.	- REQUIRED
ARV	- AIR RELEASE VALVE	G&S	- GROOVE AND SHOULDER	REQMTS.	- REQUIREMENTS
ASSY.	- ASSEMBLY	GA.	- GAGE	RJ	- RESTRAINED JOINT
ASTM	- AMERICAN SOCIETY FOR TESTING MATERIALS	GALV.	- GALVANIZED	S.	- SOUTH
AVE	- AVENUE	GR.	- GRADE	S-N	- SOUTH TO NORTH
AVV	- AIR / VACUUM VALVE	GRD.	- GROUND	SAN	- SANITARY
BFV	- BUTTERFLY VALVE	GV	- GATE VALVE	SCH.	- SCHEDULE
BITUM.	- BITUMINOUS	H	- HATCH	SD	- STORM DRAIN
BL	- BUILDING LINE	HDD	- HORIZONTAL DIRECTIONAL DRILLING	SECT.	- SECTION
BLDG.	- BUILDING	HDPE	- HIGH DENSITY POLYETHYLENE	SF	- SQUARE FEET
BLK.	- BLOCK	HORZ.	- HORIZONTAL	SIM.	- SIMILAR
B.O.	- BY OTHERS	HR.	- HANDRAIL	SS	- SANITARY SEWER
BP	- BEGINNING OF PROJECT	HT.	- HEIGHT	SSSL	- SANITARY SEWER SERVICE LEAD
BRG.	- BEARING	HYD	- HYDRANT	SST	- STAINLESS STEEL
BSMT.	- BASEMENT	I.D.	- INSIDE DIAMETER	ST	- STREET
BVC	- BEGIN VERTICAL CURVE	I.E.	- INVERT ELEVATION	STA	- STATION
C-C	- CENTER TO CENTER	IN.	- INCH	STD.	- STANDARD
C&G	- CURB AND GUTTER	INSUL	- INSULATION	STL	- STEEL
CB	- CATCH BASIN	INV.	- INVERT	STN. STL.	- STAINLESS STEEL
CDF	- CONTROLLED DENSITY FILL	JT.	- JOINT	STR	- STRUCTURAL
CF	- CUBIC FEET	K	- RATE OF CURVATURE	STRUCT	- STRUCTURAL
CI	- CAST IRON	L	- LENGTH OF CURVE	SUP.	- SUPPORT
CIP	- CAST IRON PIPE	LB	- POUND	SWPP	- STORM WATER POLLUTION PROTECTION
C.I.P.	- CAST IN PLACE	LCCP	- LINED CONCRETE CYLINDER PIPE	SY	- SQUARE YARD
CJ	- CONSTRUCTION JOINT	LF	- LINEAR FEET	TEMP.	- TEMPORARY
CL	- CENTERLINE	LVC	- LENGTH OF VERTICAL CURVE	THK.	- THICK
CMP	- CORRUGATED METAL PIPE	LVL	- LEVEL	TOC	- TOP OF CASTING
CO	- CLEANOUT	MAX.	- MAXIMUM	T.O.P.	- TOP OF PIPE
CONC.	- CONCRETE	MECH	- MECHANICAL	TOS	- TOP OF STEEL
CONSTR.	- CONSTRUCTION	MFG.	- MANUFACTURER	TYP.	- TYPICAL
CONT.	- CONTINUOUS	MH	- MANHOLE	UON	- UNLESS OTHERWISE NOTED
CNTRL.	- CONTROL	MJ or M.J.	- MECHANICAL JOINT	USACE	- U.S. ARMY CORPS OF ENGINEERS
CSP	- CORRUGATED STEEL PIPE	MIN.	- MINIMUM	VCP	- VITRIFIED CLAY PIPE
CSV	- CURB STOP VALVE	MNDOT	- MINNESOTA DEPARTMENT OF TRANSPORTATION	VERT.	- VERTICAL
CTR	- CENTER	MTDOT	- MONTANA DEPARTMENT OF TRANSPORTATION	W.	- WEST
CU	- COPPER	MTR.	- METER	W-E	- WEST TO EAST
CY	- CUBIC YARD	N.	- NORTH	W/	- WITH
DEPR.	- DEPRESSION	N-S	- NORTH TO SOUTH	W/O	- WITHOUT
DTL	- DETAIL	NA	- NOT APPLICABLE	WM	- WATERMAIN
DI or D.I.	- DUCTILE IRON	NPT	- NIPPLE	WRF	- WATER RECLAMATION FACILITY
DIA.	- DIAMETER	NTS	- NOT TO SCALE	WSL	- WATER SERVICE LEAD
D.I.C.L	- DUCTILE IRON CONCRETE LINED	O.C.	- ON CENTER	WTF	- WATER TREATMENT FACILITY
DIM.	- DIMENSION	O.D.	- OUTSIDE DIAMETER	WTP	- WATER TREATMENT PLANT
DIP	- DUCTILE IRON PIPE	OH.	- OVERHEAD	WWF	- WELDED WIRE FABRIC
DIST.	- DISTANCE	OPNG.	- OPENING	WWTP	- WASTE WATER TREATMENT PLANT
DR	- DRIVE	OSHA	- OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION		

SHEET DESIGNATORS					
SHEET DESIGNATOR	DESCRIPTION	SHEET DESIGNATOR	DESCRIPTION	SHEET DESIGNATOR	DESCRIPTION
GEN	GENERAL SHEETS				
SW	SITE WORK				
SD	STANDARD DETAILS				
PS	PUMP STATION				
DTL	DETAIL				
CVL	CIVIL				
PID	INSTRUMENTATION AND CONTROL				

DRAWING, SECTION AND DETAIL CONVENTIONS

PLAN DRAWING TITLE

DETAIL NUMBER

SHEET WHERE DRAWN

GRAPHIC SCALE

REFERENCE NORTH (ORIENTED TO SITE OR STRUCTURE)

CONSTR

ACTUAL NORTH

DETAIL TITLE

DETAIL NUMBER

SHEET WHERE DRAWN

SHEET WHERE DETAIL IS CALLED FROM (EVERY OCCURRENCE)

REF: C10, C12, C14

SECTION TITLE

DETAIL NUMBER

SHEET WHERE DRAWN

GRAPHIC SCALE

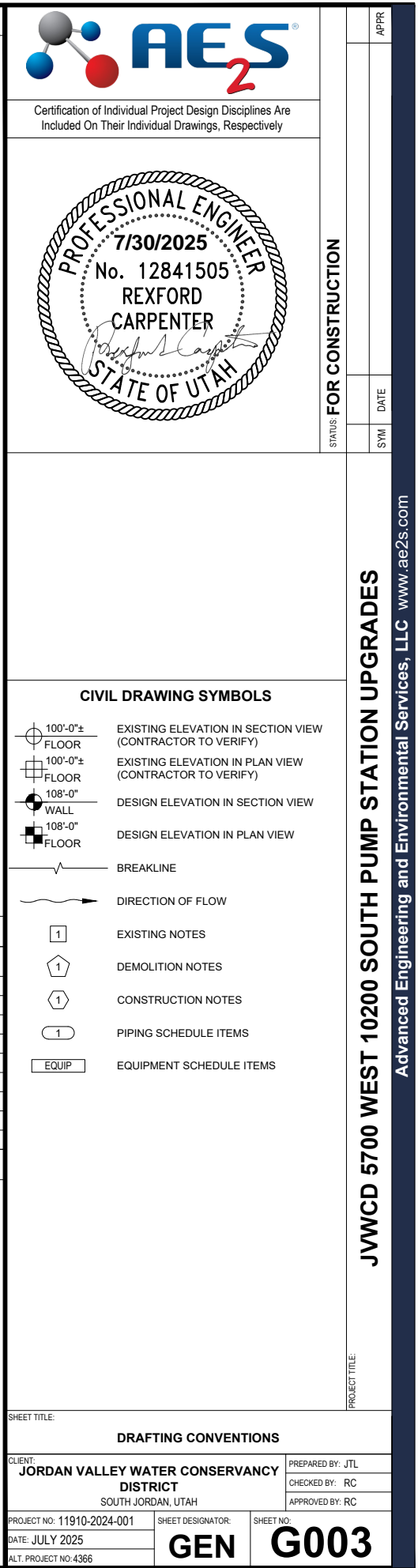
SECTION CUT WITHIN SAME DETAIL DRAWING

SECTION A-A

DETAIL NUMBER

DRAWING SUB-TITLE

SECTION CUT WITHIN SAME DETAIL DRAWING

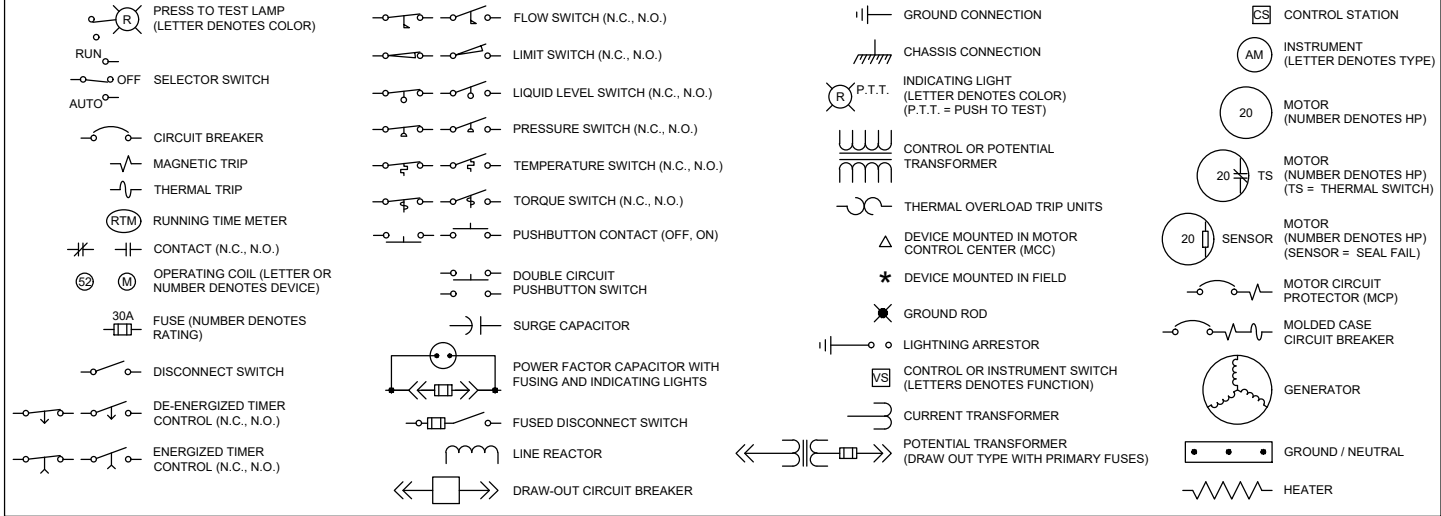


File: WJWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES Electrical Symbols & Abbreviations.dwg
Ploed By: Cole Tuel Date: Friday August 15, 2025

ELECTRICAL ABBREVIATIONS

A	AMPERES	F&I	FURNISH AND INSTALL	LGPM	LIGHTING, GENERAL POWER, MECHANICAL	SCP	SUPERVISORY CONTROL PANEL
AC	ABOVE COUNTER (VERIFY HEIGHT)	FCV	FLOW CONTROL VALVE	LIT	LEVEL INDICATING TRANSMITTER	SCADA	SUPERVISORY CONTROL AND DATA ACQUISITION
ACK	ACKNOWLEDGE	FE	FLOW ELEMENT	LMF	LIQUID-TIGHT METALLIC CORE FLEXIBLE CONDUIT	SE	SERVICE ENTRANCE
AE	ANALYZER ELEMENT	FIT	FLOW INDICATING TRANSMITTER	LSH	LEVEL SWITCH HIGH	SEC	SECOND OR SECONDARY
AI	ANALOG INPUT	FS	FLOW SWITCH	LSHH	LEVEL SWITCH HIGH HIGH	SIG	SIGNAL
AIT	ANALYZER INDICATION TRANSMITTER	FU	FUSE OR FUSIBLE	LSL	LEVEL SWITCH LOW	SOL Vv	SOLENOID VALVE
A.F.F.	ABOVE FINISHED FLOOR			LSLL	LEVEL SWITCH LOW LOW	SP	SINGLE POLE
AM	AMMETER	GC	GENERAL CONTRACTOR			SPECS	SPECIFICATIONS
ANN	ANNUNCIATOR	GDE	GAS DETECT ELEMENT	M	MOTOR STARTER OPERATING COIL	SSNR	"SOFT START" NON-REVERSING SWITCH
AO	ANALOG OUTPUT	GFI	GROUND FAULT INTERRUPTER	MAX	MAXIMUM	SSR SW	"SOFT START" REVERSING SWITCH
AWG	AMERICAN WIRE GAGE	GND	GROUND	MCM	THOUSAND CIRCULAR MILS	SUSE	SUITABLE FOR USE AS SERVICE ENTRANCE
		GRS	GALVANIZED RIGID STEEL CONDUIT	MCP	MOTOR CIRCUIT PROTECTOR		
BKR	BREAKER			MECH	MECHANICAL	TD	TIME DELAY
BLDG	BUILDING	HD	HEAVY DUTY	MFR	MANUFACTURER	TEMP	TEMPERATURE
		HH	HANDHOLE	MH	METAL HALIDE	TIT	TEMPERATURE INDICATING TRANSMITTER
CKT	CIRCUIT	H/R	HAND/REMOTE	MIN	MINUTE OR MINIMUM	TS	MOTOR THERMAL SWITCH
CL	CENTER LINE	HOA	HAND-OFF-AUTO	MTD	MOUNTED	TSTAT	THERMOSTAT
CONTR	CONTRACTOR	HOL	HAND-OFF-LOCAL			UH	UNIT HEATER
CP	CONTROL PANEL	HP	HORSEPOWER	NF	NON-FUSED		
CPT	CONTROL POWER TRANSFORMER	HPS	HIGH PRESSURE SODIUM	N.C.	NORMALLY CLOSED	V	VOLTS
CS	CONTROL STATION	HS	HAND SWITCH	N.O.	NORMALLY OPEN	VFD	VARIABLE FREQUENCY DRIVE
CT	CURRENT TRANSFORMER	HTR	HEATER	NTC	NOT CONNECTED	VM	VOLTMETER
		HZ	HERTZ (CYCLES / SECOND)			VS	VOLTMETER SWITCH
DE	DUAL ELEMENT			OL(S)	OVERLOAD RELAY CONTACT(S)	Vv	VALVE
DI	DIGITAL INPUT	IMC	INTERMEDIATE METAL CONDUIT			W	WATTS OR WIRE
DISC	DISCONNECT			PF	POWER FACTOR	W/	WITH
DO	DIGITAL OUTPUT	JBOX	JUNCTION BOX	PIT	PRESSURE INDICATING TRANSMITTER	WW	WIREWAY
DP	DAMP PROOF			PLC	PROGRAMMABLE LOGIC CONTROLLER	WP	WEATHERPROOF
EC	ELECTRICAL CONTRACTOR	KVA	KILOVOLT-AMPERES	PSH	PRESSURE SWITCH HIGH		
ELEC	ELECTRICAL	KVAR	KILOVOLT-AMPERES REACTIVE	PSL	PRESSURE SWITCH LOW	XFMR	TRANSFORMER
EMT	ELECTRICAL METALLIC TUBING	KW	KILOWATTS	PTT	PUSH TO TEST		
EXP	EXPLOSION PROOF			PVC	POLYVINYLCHLORIDE CONDUIT		
EQUIP	EQUIPMENT					ZC	POSITION CONTROLLER
				REQ'D	REQUIRED	ZI	POSITION INDICATOR
				RS	RIGID STEEL CONDUIT	ZSC	POSITION SWITCH CLOSED
				RTD	RESISTANCE TEMPERATURE DETECTOR	ZSO	POSITION SWITCH OPENED
				RTM	RUNNING TIME METER		
				RTR	REMOTE TEST / RESET		
				RVSS	REDUCED VOLTAGE SOFT STARTER		

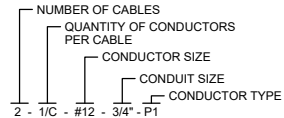
ONE-LINE DIAGRAM AND SCHEMATIC SYMBOLS



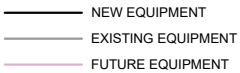
GENERAL NOTES

- AE2S ELECTRICAL DRAWINGS ARE INTENDED TO BE REPRODUCED IN COLOR. AE2S ASSUMES NO LIABILITY FOR CONTRACTORS CHOOSING TO REPRODUCE THESE DRAWINGS IN BLACK AND WHITE OR AT A SCALE WHICH REDUCES LEGIBILITY.
- PUMP STATION MUST REMAIN IN VIRTUALLY CONTINUOUS OPERATION DURING CONSTRUCTION. COORDINATE SEQUENCING, SWITCHOVERS, AND SHORT DOWNTIME PERIODS WITH LOCAL UTILITY COMPANY. THE OWNER, AND THE ENGINEER DURING CONSTRUCTION.
- COORDINATE THE INSTALLATION OF ALL BELOW-GRADE AND CAST-IN-PLACE CIRCUITRY WITH OTHER TRADES.
- CONTRACTOR SHALL RETURN ALL DISTURBED SURFACES AND SOILS TO ORIGINAL OR PRE-CONSTRUCTION CONDITION UNLESS SPECIFICALLY INDICATED OTHERWISE.
- CONTRACTOR SHALL LOCATE OR SHALL HAVE THE SERVING UTILITIES LOCATE ALL UNDERGROUND CABLE, CONDUITS, PIPING, UTILITIES, ETC., PRIOR TO COMMENCING CONSTRUCTION (UNDERGROUND EXCAVATION). CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGES DUE TO CONSTRUCTION ACTIVITIES.
- EXISTING AND / OR NEW UNDERGROUND CONDUITS, DUCTBANK, AND OTHER CIRCUITRY SHOWN ON THE PLANS ARE INTENDED TO BE DIAGRAMMATIC IN NATURE. CONTRACTOR IS RESPONSIBLE FOR FIELD CONFIRMING ALL CIRCUITRY AND ROUTING.
- CORE DRILL EXISTING STRUCTURES AS REQUIRED FOR NEW CONDUIT INSTALLATIONS. PATCH AROUND PENETRATIONS WITH NON-SHRINK GROUT AND PAINT TO MATCH SURROUNDING SURFACES WHERE APPLICABLE.
- PLUG ALL UNUSED OPENINGS IN PANELS / EQUIPMENT LEFT BY REMOVALS. CUT OFF ALL ABANDONED CONDUITS FLUSH WITH SURFACES AND FILL WITH NON-SHRINK GROUT.
- REFER TO EXISTING ELECTRICAL DRAWINGS FOR SITE PLAN DETAILS / CIRCUITRY.
- SCHEDULE 80 PVC CONDUIT IS ALLOWED UNDERGROUND FOR NON-VFD AND NON-SIGNAL CIRCUITS. TRANSITION TO RIGID STEEL CONDUIT BEFORE EXPOSING ABOVE GRADE.
- FIELD CONFIRM CONDUIT ROUTING. DO NOT ROUTE CONDUIT ON BUILDING EXTERIOR UNLESS NOTED OTHERWISE.
- WHERE THE PLANS CALL FOR DISCONNECTION AND REMOVAL OF CIRCUITRY (CABLE AND CONDUIT), COMPLETE CONDUIT REMOVAL MAY NOT BE PRACTICAL DUE TO THE LIMITS OF OTHER CONSTRUCTION. IN SUCH CASES, THE CONTRACTOR SHALL DISCONNECT AND REMOVE ALL CIRCUITRY FROM CONDUITS THAT ARE TO BE DEMOLISHED, SHALL REMOVE THE CONDUITS TO 18" MINIMUM BELOW GRADE, AND SHALL BE ALLOWED TO CUT OFF THE CONDUITS AND ABANDON IN PLACE. THIS APPROACH SHALL ONLY BE USED WHERE LARGE SCALE EXCAVATION DUE TO OTHER CONSTRUCTION ACTIVITIES IS NOT PLANNED IN AN AREA. ALL SUCH CONDUIT ABANDONMENT IN PLACE SHALL BE CONFIRMED WITH THE ENGINEER PRIOR TO DOING SO.
- SEE CIVIL, STRUCTURAL, MECHANICAL, AND PROCESS DRAWINGS FOR EXACT EQUIPMENT, PIPING, AND BUILDING LAYOUTS.
- ALL CONDUCTORS ARE TO BE COPPER.
- PROVIDE AS-BUILT DRAWINGS. DRAWINGS SHALL BE NEAT AND LEGIBLE.
- COORDINATE ELECTRICAL WORK WITH OTHER TRADES.
- PROVIDE PANEL SCHEDULES FOR ALL NEW AND / OR MODIFIED PANELS. SCHEDULES SHALL BE TYPED.
- ANY ELECTRICAL BOX THAT BECOMES ABANDONED DURING THE COURSE OF THE PROJECT SHALL HAVE A BLANK COVERPLATE.
- WHERE OTHER ELECTRICAL DEVICES ARE LOCATED ADJACENT TO LIGHT SWITCHES, MOUNT ALL DEVICES AT THE SAME CENTER LINE ELEVATION. WHERE ELECTRICAL DEVICES ARE NOT LOCATED ADJACENT TO LIGHT SWITCHES, MOUNT DEVICES AT 48" A.F.F. UNLESS NOTED OTHERWISE.
- DO NOT SCALE DRAWINGS. VERIFY DIMENSIONS IN FIELD PRIOR TO COMMENCEMENT OF WORK.
- FINAL CONNECTIONS TO EQUIPMENT SHALL BE PER MANUFACTURER'S APPROVED WIRING DIAGRAMS, DETAILS, AND INSTRUCTIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.
- ALL EMPTY RACEWAY SYSTEMS SHALL HAVE A PULLWIRE OR EQUAL AND SHALL BE IDENTIFIED AT ALL JUNCTION, PULL, AND TERMINATION POINTS USING PERMANENT METALLIC TAGS. TAG SHALL INDICATE INTENDED USE OF CONDUIT, ORIENTATION, AND TERMINATION POINTS OF EACH INDIVIDUAL CONDUIT.
- IT IS THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS TO ESTABLISH A STANDARD OF QUALITY. THE ENGINEER RESERVES THE RIGHT TO APPROVE METHODS AND MATERIALS NOT REFLECTED HEREIN.
- CONTRACTOR SHALL VISIT SITE PRIOR TO BID AND VERIFY THAT CONDITIONS ARE AS INDICATED. CONTRACTOR SHALL INCLUDE IN THEIR BID THE COSTS REQUIRED TO MAKE HIS WORK MEET EXISTING CONDITIONS.
- WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER TO THE SATISFACTION OF THE ENGINEER.
- WORK, MATERIALS, AND EQUIPMENT SHALL CONFORM TO THE LATEST EDITIONS OF LOCAL, STATE, AND NATIONAL CODES AND ORDINANCES.
- VERIFY THAT EXACT LOCATION OF EQUIPMENT TO BE FURNISHED BY OTHERS PRIOR TO ROUGH-IN.
- SYSTEMS SHALL BE TESTED FOR PROPER OPERATION. IF TESTS SHOW THAT WORK IS DEFECTIVE, CONTRACTOR SHALL MAKE CORRECTIONS NECESSARY AT NO COST TO OWNER.
- SYSTEMS SHALL BE COMPLETE, OPERABLE, AND READY FOR CONTINUOUS OPERATION. LIGHTS, SWITCHES, RECEPTACLES, MOTORS, ETC., SHALL BE CONNECTED AND OPERABLE.
- ALL CONDUIT IS TO BE RIGID STEEL WITH CAST 'FS' STYLE BOXES. MAKE FINAL EQUIPMENT CONNECTIONS USING LIQUID-TIGHT METALLIC FLEX.
- ALL LIGHTING AND RECEPTACLE CIRCUITRY CONDUCTOR QUANTITY AND CONDUIT IS THE RESPONSIBILITY OF THE CONTRACTOR. LIGHTING CIRCUITRY IS TO BE A MINIMUM OF #12AWG COPPER IN 3/4" CONDUIT, QUANTITY AS REQUIRED.
- ALL CABLE CONNECTIONS SHALL BE TORQUED ACCORDING TO MANUFACTURER REQUIREMENTS, UL STANDARD 486A-B, AND NEC ANNEX I AS APPLICABLE. ADDITIONALLY, CONTRACTOR SHALL MARK EACH PROPERLY TORQUED BOLT / LOCKWASHER / NUT ASSEMBLY WITH A PERMANENT PAINT STRIPE OVER BOTH THE BOLT / LOCKWASHER / NUT ASSEMBLY AND THE LUG ASSEMBLY TO INDICATE ANY CHANGES IN THE POSITION OVER TIME.

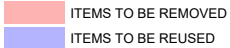
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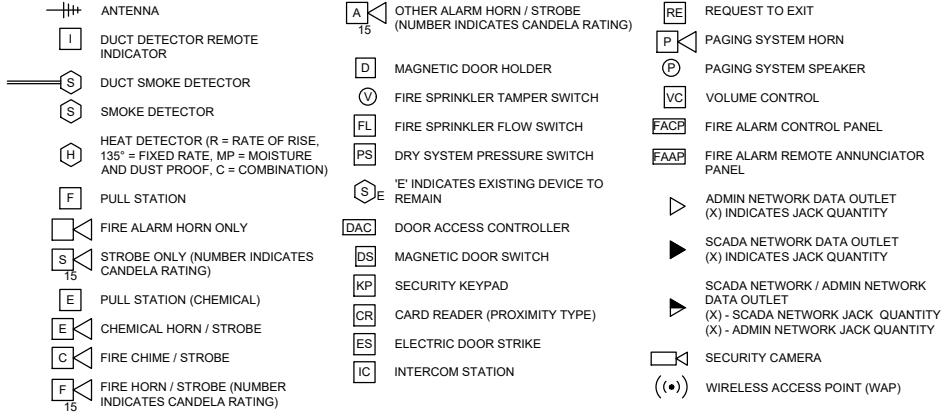
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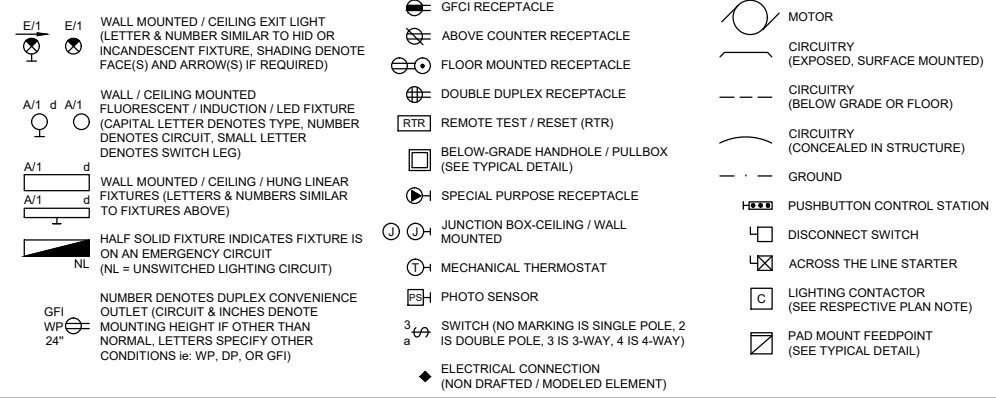
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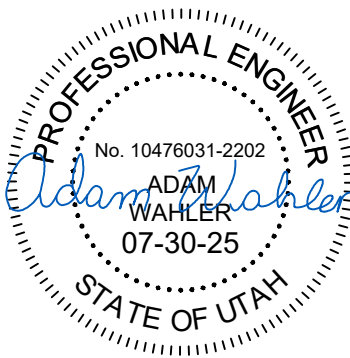
COMMUNICATION / SECURITY / FIRE PROTECTION SYMBOLS



DEVICE SYMBOLS



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



STATUS: FOR CONSTRUCTION

JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com

SHEET TITLE:

ELECTRICAL SYMBOLS & ABBREVIATIONS

CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH

PREPARED BY: CAT
CHECKED BY: TNF
APPROVED BY: AMW

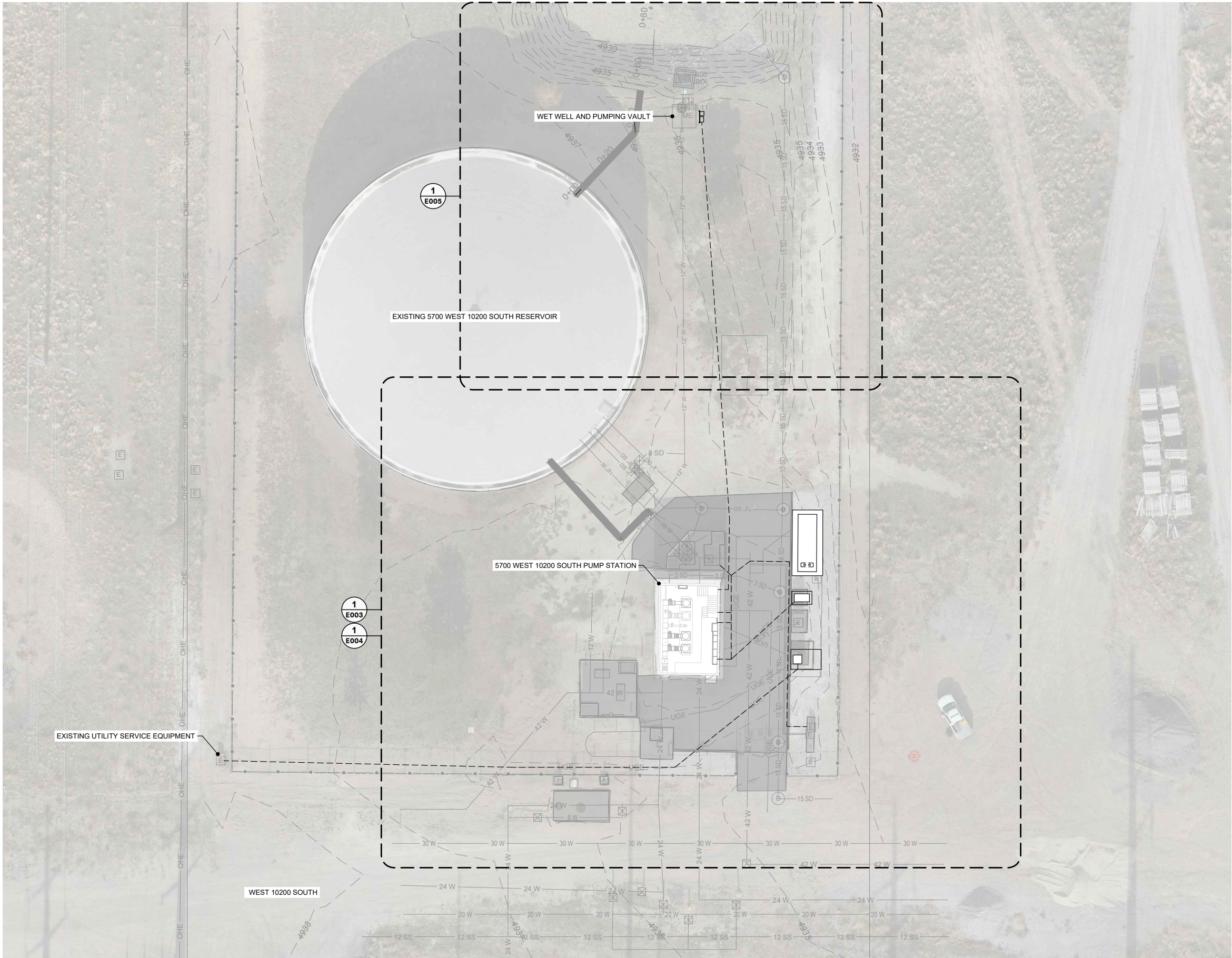
PROJECT NO: 11910-2024-001
DATE: JULY 2025
ALT. PROJECT NO: 4366

SHEET DESIGNATOR:

SHEET NO:

GEN

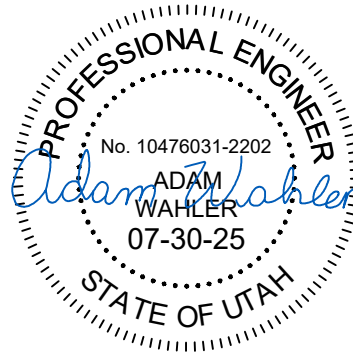
E001



1 E002 OVERALL SITE PLAN



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



GENERAL NOTES
1. SEE SHEET E001 FOR GENERAL NOTES.

STATUS: FOR CONSTRUCTION

SYM DATE APPR

PROJECT TITLE: JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com

SHEET TITLE: OVERALL SITE PLAN

CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT
SOUTH JORDAN, UTAH

PREPARED BY: CAT
CHECKED BY: TNF
APPROVED BY: AMW

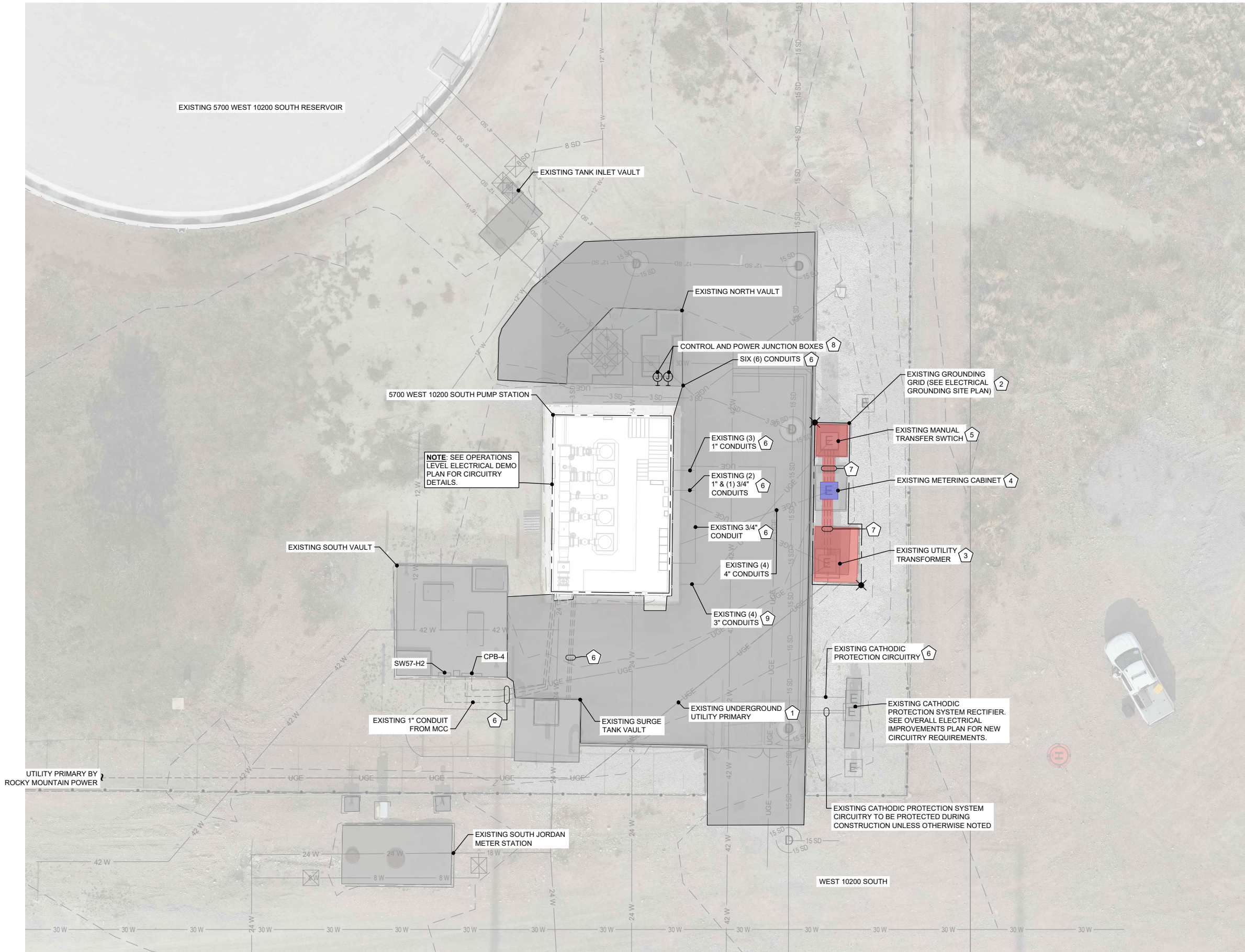
PROJECT NO: 11910-2024-001
DATE: JULY 2025
ALT. PROJECT NO: 4366

SHEET DESIGNATOR: PS

SHEET NO: E002

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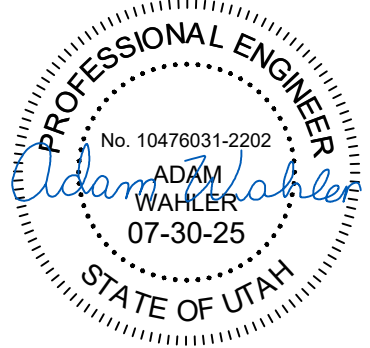
Plotted By: Cole Tuel Date: Friday August 15, 2025



1
E003 **ENLARGED ELECTRICAL DEMO SITE PLAN**



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



STATUS: **FOR CONSTRUCTION**

JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com

GENERAL NOTES

1. SEE SHEET E001 FOR GENERAL NOTES.

DEMOLITION LEGEND

- ITEMS TO BE REMOVED
- ITEMS TO BE REUSED

DEMOLITION NOTES

- 1 ROCKY MOUNTAIN POWER TO DISCONNECT AND REMOVE EXISTING CONDUCTORS FROM CONDUIT. SEE SECTION (26 05 08) FOR INCOMING UTILITY CIRCUITRY DETAILS.
- 2 EXISTING SERVICE EQUIPMENT GROUNDING GRID TO BE DISCONNECTED AND REMOVED IN ITS ENTIRETY.
- 3 COORDINATE WITH ROCKY MOUNTAIN POWER FOR REPLACEMENT OF EXISTING TRANSFORMER. COORDINATE ALL DOWNTIMES WITH OWNER AND ENGINEER. EXISTING TRANSFORMER PAD TO BE REMOVED.
- 4 EXISTING METERING CABINET TO BE MODIFIED. SEE ONE-LINE DIAGRAM FOR DETAILS.
- 5 EXISTING MANUAL TRANSFER SWITCH TO BE DISCONNECTED AND REMOVED. EXISTING PAD TO BE DEMOLISHED. SALVAGE EQUIPMENT TO OWNER.
- 6 EXISTING CONDUCTORS TO BE DISCONNECTED AND REMOVED TO SOURCE. CONDUIT TO REMAIN UNLESS OTHERWISE NOTED. EXISTING SERVICE CONDUITS FROM METERING PANEL TO MCC CONTAIN 3X#350AWG CONDUCTORS. CONDUITS RAN FROM PUMP STATION TO VAULTS AND CATHODIC PROTECTION SYSTEM CONTAIN CONDUCTORS RANGING FROM #14AWG TO #8AWG.
- 7 EXISTING CIRCUITRY (CONDUCTORS AND CONDUIT) TO BE REMOVED.
- 8 EXISTING INCOMING CONDUCTORS FROM PUMP STATION TO NORTH VAULT TO BE DISCONNECTED AND REMOVED FROM JUNCTION BOXES. CONDUCTORS ROUTED FROM JUNCTION BOXES TO EQUIPMENT OR INSTRUMENTS WITHIN VAULT TO REMAIN.
- 9 EXISTING CONDUIT TO BE REMOVED IN ITS ENTIRETY. SEE OVERALL ELECTRICAL IMPROVEMENTS SITE PLAN FOR NEW CIRCUITRY DETAILS.

SHEET TITLE:

ENLARGED ELECTRICAL DEMO SITE PLAN

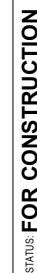
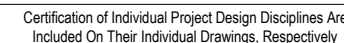
CLIENT:
JORDAN VALLEY WATER CONSERVANCY DISTRICT
SOUTH JORDAN, UTAH

PREPARED BY: CAT
CHECKED BY: TNF
APPROVED BY: AMW

PROJECT NO: 11910-2024-001
DATE: JULY 2025
ALT. PROJECT NO: 4366

SHEET DESIGNATOR:
PS

SHEET NO:
E003



1. SEE SHEET E001 FOR GENERAL NOTES

- ① UTILITY SERVICE TRANSFORMER (26 05 08) PROVIDED BY RMP ON CONTRACTOR PROVIDED VAULT. COORDINATE WITH ROCKY MOUNTAIN POWER FOR TRANSFORMER VAULT REQUIREMENTS AND FINAL LOCATION. SEE ONE-LINE DIAGRAM AND TRANSFORMER VAULT DETAIL FOR MORE INFORMATION.
- ② NEW DIESEL GENERATOR (26 32 16) PROVIDED BY CONTRACTOR ON GENERATOR PAD. SEE ONE-LINE DIAGRAM FOR DETAILS.
- ③ GENERATOR CONCRETE PAD BY CONTRACTOR. SEE STRUCTURAL PLANS (SHEET S501) FOR ADDITIONAL INFORMATION. CONFIRM BOX-OUT WITH GENERATOR SUPPLIER PRIOR TO INSTALLATION.
- ④ AUTOMATIC TRANSFER SWITCH (ATS) (26 23 16) PROVIDED BY CONTRACTOR ON NEW CONCRETE PAD. SEE ONE-LINE DIAGRAM FOR DETAILS.
- ⑤ EXISTING UTILITY METERING CABINET TO BE MODIFIED FOR REUSE. SEE ONE-LINE DIAGRAM FOR DETAILS.
- ⑥ SEE SPECIFICATION (26 05 08), CABLE AND CONDUIT SCHEDULE, AND ONE-LINE DIAGRAM FOR SERVICE CIRCUITRY DETAILS.
- ⑦ NEW POWER OR CONTROLS CONDUCTORS TO BE INSTALLED WITHIN EXISTING CONDUITS. SEE CABLE AND CONDUIT SCHEDULE FOR DETAILS.
- ⑧ NEW PUMP STATION FEEDER CIRCUITRY TO BE ROUTED 18" BELOW GRADE. CORE DRILL EXISTING PUMP STATION AND ROUTE CONDUITS TO MCC MAIN LUG SECTION. SEE ONE-LINE DIAGRAM, MCC ELEVATION, AND CABLE AND CONDUIT SCHEDULE FOR DETAILS.
- ⑨ NEW GENERATOR AND ATS CONTROLS CIRCUITRY. ROUTE 18" MINIMUM BELOW GRADE. CONFIRM DEPTH ON-SITE WITH EXISTING UNDERGROUND UTILITIES. COORDINATE FINAL CONDUIT DEPTH WITH ENGINEER.
- ⑩ NEW ATS POWER CIRCUITRY TO BE BURIED 18" BELOW GRADE MINIMUM. COORDINATE WITH CIVIL ENGINEER FOR LOCATION OF RELOCATED CATHODIC PROTECTION TEST STATION.
- ⑪ NEW ATS CONTROL CIRCUITRY. SEE ONE-LINE DIAGRAM AND CABLE AND CONDUIT SCHEDULE FOR DETAILS.
- ⑫ 4" THICK CONCRETE PAD REINFORCED WITH #4 AT 18" EACH WAY MID DEPTH. CHAMFER EXPOSED EDGES 3/4".
- ⑬ NEW RTU PANEL. SEE OPERATIONS LEVEL PROCESS ELECTRICAL IMPROVEMENTS PLAN, IO SCHEDULE, AND CABLE AND CONDUIT SCHEDULE FOR DETAILS.
- ⑭ PROVIDE NEW CONDUCTORS TO RESERVOIR HATCH INTRUSION SWITCH. INSTALL NEW CONDUIT AS REQUIRED 18" MINIMUM BELOW GRADE. COORDINATE WITH OWNER AND UNDERGROUND UTILITIES TO AVOID EXISTING PIPING. SEE CABLE AND CONDUIT SCHEDULE FOR DETAILS.

JUVWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES
Advanced Engineering and Environmental Services, LLC www.ae2s.com

SUBJECT TIME:

SHEET TITLE:
**ENLARGED ELECTRICAL IMPROVEMENTS SIT
PLAN**

CLIENT:
JORDAN VALLEY WATER CONSERVANCY
DISTRICT
SOUTH JORDAN, UTAH

PREPARED BY: CAT
CHECKED BY: TNF
APPROVED BY: AMV

PROJECT NO: 11910-2024-001
DATE: JULY 2025
ALT. PROJECT NO: 4366

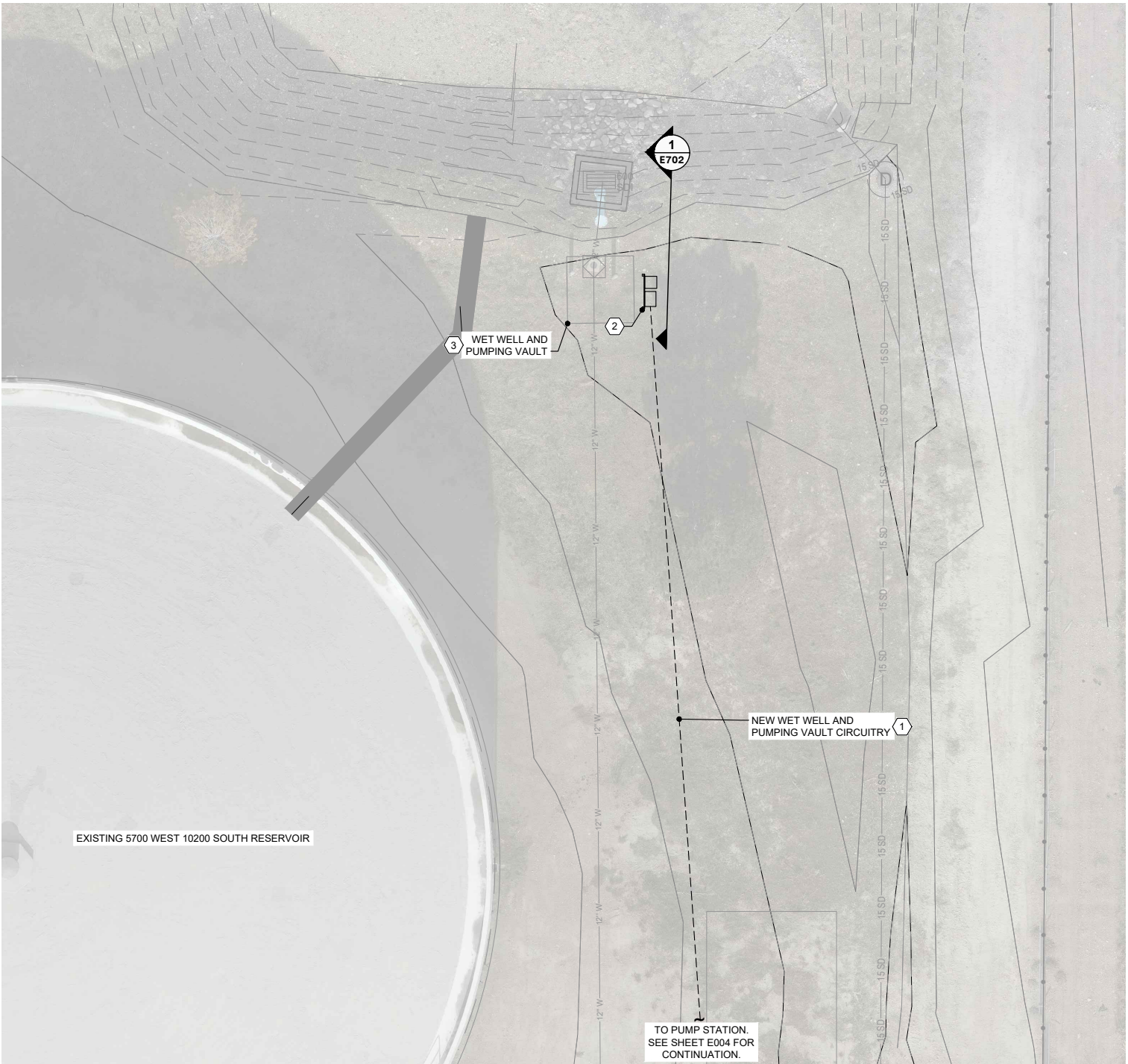
SHEET DESIGNATOR	
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SHEET NO.

PS

E

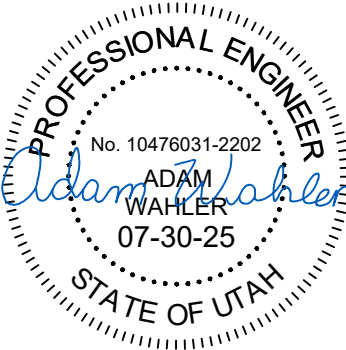
E004



1
E005 **ENLARGED ELECTRICAL IMPROVEMENTS SITE PLAN**



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



STATUS: FOR CONSTRUCTION

JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com

GENERAL NOTES

1. SEE SHEET E001 FOR GENERAL NOTES.

CONSTRUCTION NOTES

- 1 CIRCUITRY TO BE BURIED 18" BELOW GRADE MINIMUM. ROUTE CIRCUITRY FROM PUMP STATION TO WET WELL AND PUMPING VAULT JUNCTION BOX AND CONTROL PANEL STAND. SEE CABLE AND CONDUIT SCHEDULE FOR DETAILS.
- 2 PROVIDE REMOTE MOUNTED STRUT STAND FOR WET WELL AND PUMPING VAULT CIRCUITRY JUNCTION BOX AND CONTROL PANEL. SEE SHEET E702 FOR MORE INFORMATION.
- 3 SEE WET WELL AND PUMPING VAULT SECTIONS FOR MORE INFORMATION.

ENLARGED ELECTRICAL IMPROVEMENTS SITE PLAN

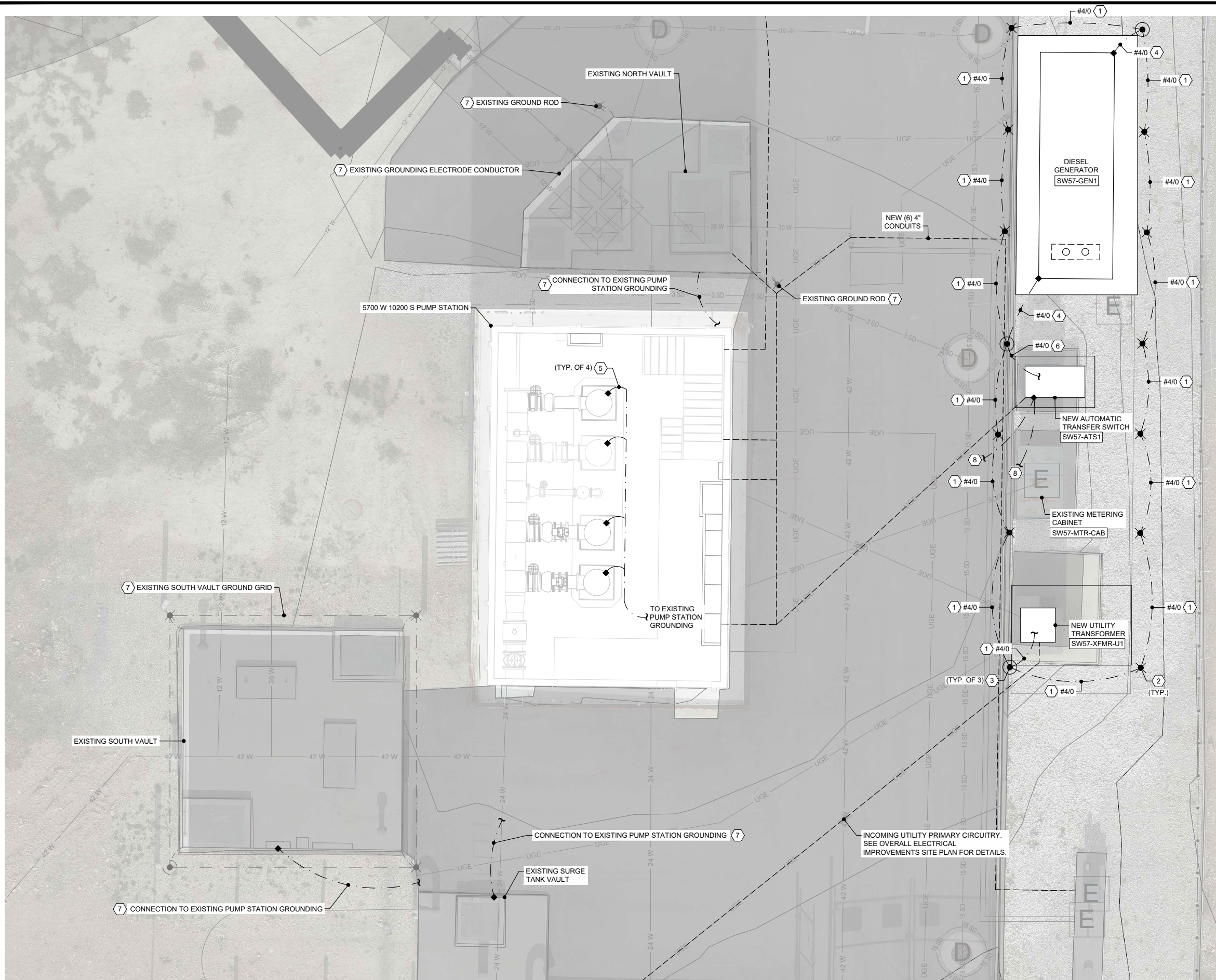
CLIENT:
JORDAN VALLEY WATER CONSERVANCY DISTRICT
SOUTH JORDAN, UTAH

PREPARED BY: CAT
CHECKED BY: TNF
APPROVED BY: AMW

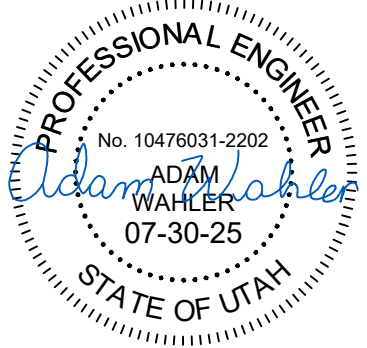
PROJECT NO: 11910-2024-001
DATE: JULY 2025
ALT. PROJECT NO: 4366

SHEET DESIGNATOR:
PS

SHEET NO:
E005



1
E006 ENLARGED ELECTRICAL GROUNDING SITE PLAN



GENERAL NOTES

1. SEE SHEET E001 FOR GENERAL NOTES.

CONSTRUCTION NOTES

- 1 BARE COPPER GROUNDING ELECTRODE CONDUCTOR OF SIZE SHOWN BURIED AT A MINIMUM DEPTH OF 18".
- 2 5/8"x10' COPPER CLAD STEEL GROUND ROD WITH TOP MOUNTED AT A MINIMUM OF 18" BELOW GRADE. ATTACHED TO GROUND CONDUCTOR WITH IRREVERSIBLE IEEE 837 TYPE COMPRESSION FITTING.
- 3 PROVIDE A GROUND TEST WELL AS SHOWN ON SHEET ###.
- 4 BARE COPPER CONDUCTOR OF SIZE SHOWN BONDED TO GENERATOR FRAME GROUND.
- 5 BARE COPPER CONDUCTOR OF SIZE SHOWN ROUTED UP THROUGH THE PUMP BASE AND BONDED TO THE MOTOR FRAME GROUND. PROTECT CONDUCTORS IN SCH. 80 PVC AS NEEDED.
- 6 BARE COPPER CONDUCTOR OF SIZE SHOWN CONNECTED TO THE MAIN BONDING JUMPER WITHIN THE ATS.
- 7 EXTEND AND RECONNECT GROUNDING SYSTEM FOR VAULT AS REQUIRED IF EXISTING SYSTEM IS DAMAGED DURING CONSTRUCTION.
- 8 CONNECT SERVICE ENTRANCE RATED ATS TO EXISTING PUMP STATION GROUNDING SYSTEM.

SHEET TITLE:

ENLARGED ELECTRICAL GROUNDING SITE PLAN

CLIENT:
JORDAN VALLEY WATER CONSERVANCY DISTRICT
SOUTH JORDAN, UTAH

PREPARED BY: CAT
CHECKED BY: TNF
APPROVED BY: AMW

PROJECT NO: 11910-2024-001
DATE: JULY 2025
ALT. PROJECT NO: 4366

SHEET DESIGNATOR:
PS

SHEET NO:
E006

STATUS: FOR CONSTRUCTION

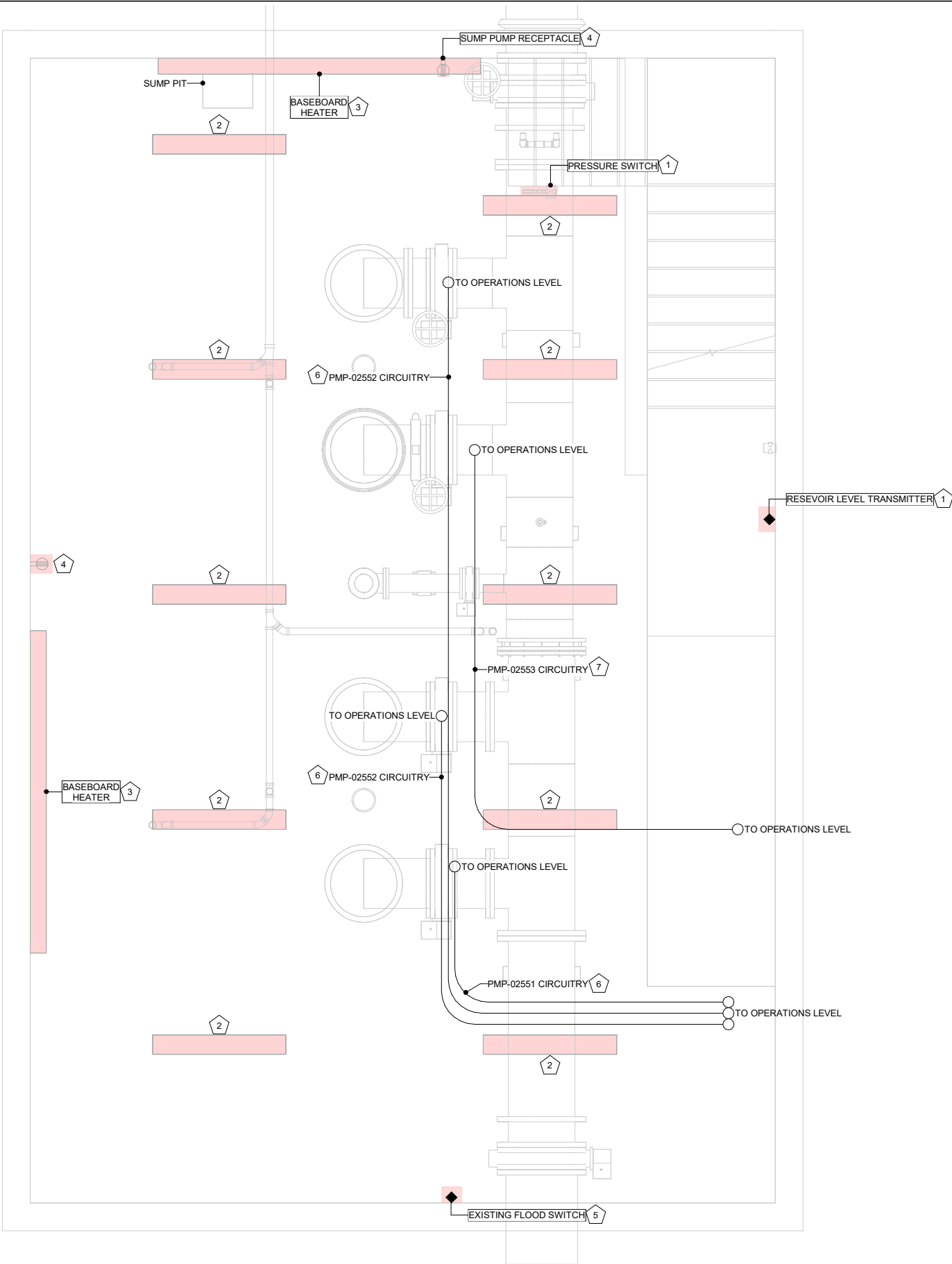
JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES
Advanced Engineering and Environmental Services, LLC www.ae2s.com

PROJECT TITLE:

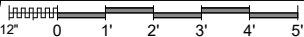
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DATE

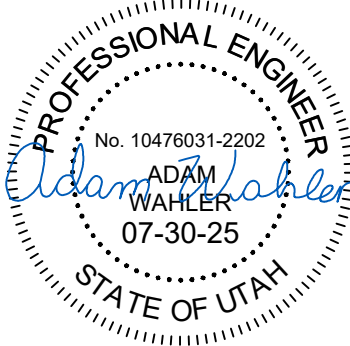
SYM



1 GALLERY LEVEL ELECTRICAL DEMO PLAN



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



STATUS FOR CONSTRUCTION

DESCRIPTION

SYM DATE

JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES
Advanced Engineering and Environmental Services, LLC www.ae2s.com

PROJECT TITLE:

SHEET TITLE: **GALLERY LEVEL ELECTRICAL DEMO PLAN**

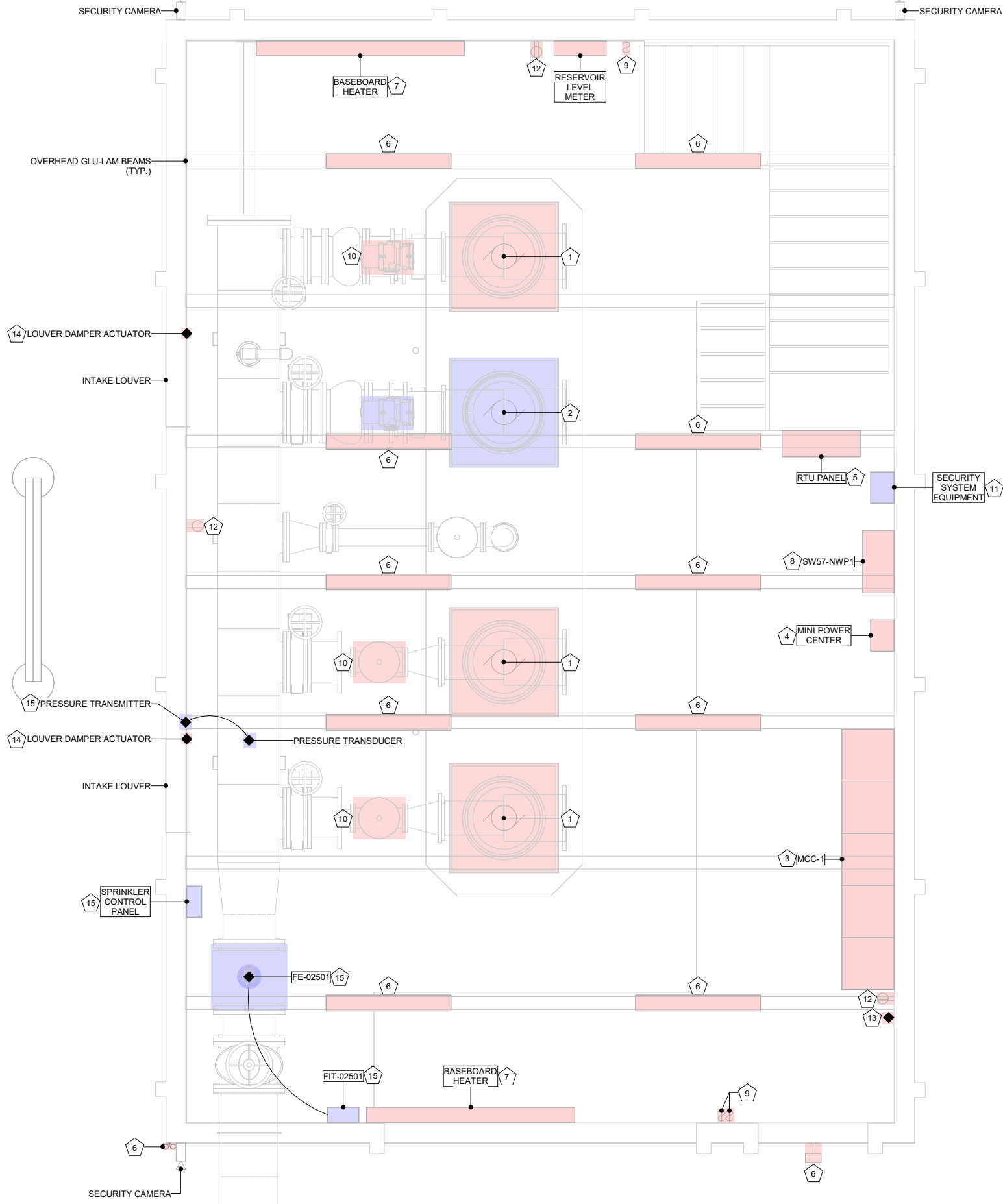
CLIENT: **JORDAN VALLEY WATER CONSERVANCY DISTRICT**
SOUTH JORDAN, UTAH

PREPARED BY: TED
CHECKED BY: TNF
APPROVED BY: AMW

PROJECT NO: 11910-2024-001
DATE: JULY 2025
ALT PROJECT NO: 4366

SHEET DESIGNATOR: **PS**

SHEET NO: **E101**



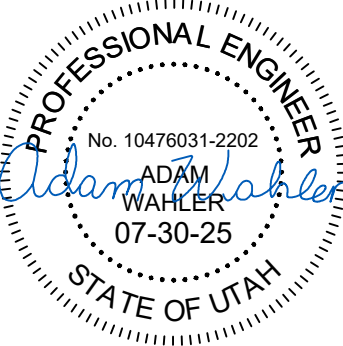
DEMOLITION LEGEND

ITEMS TO BE REMOVED

ITEMS TO BE REUSED



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



STATUS FOR CONSTRUCTION

JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com

GENERAL NOTES

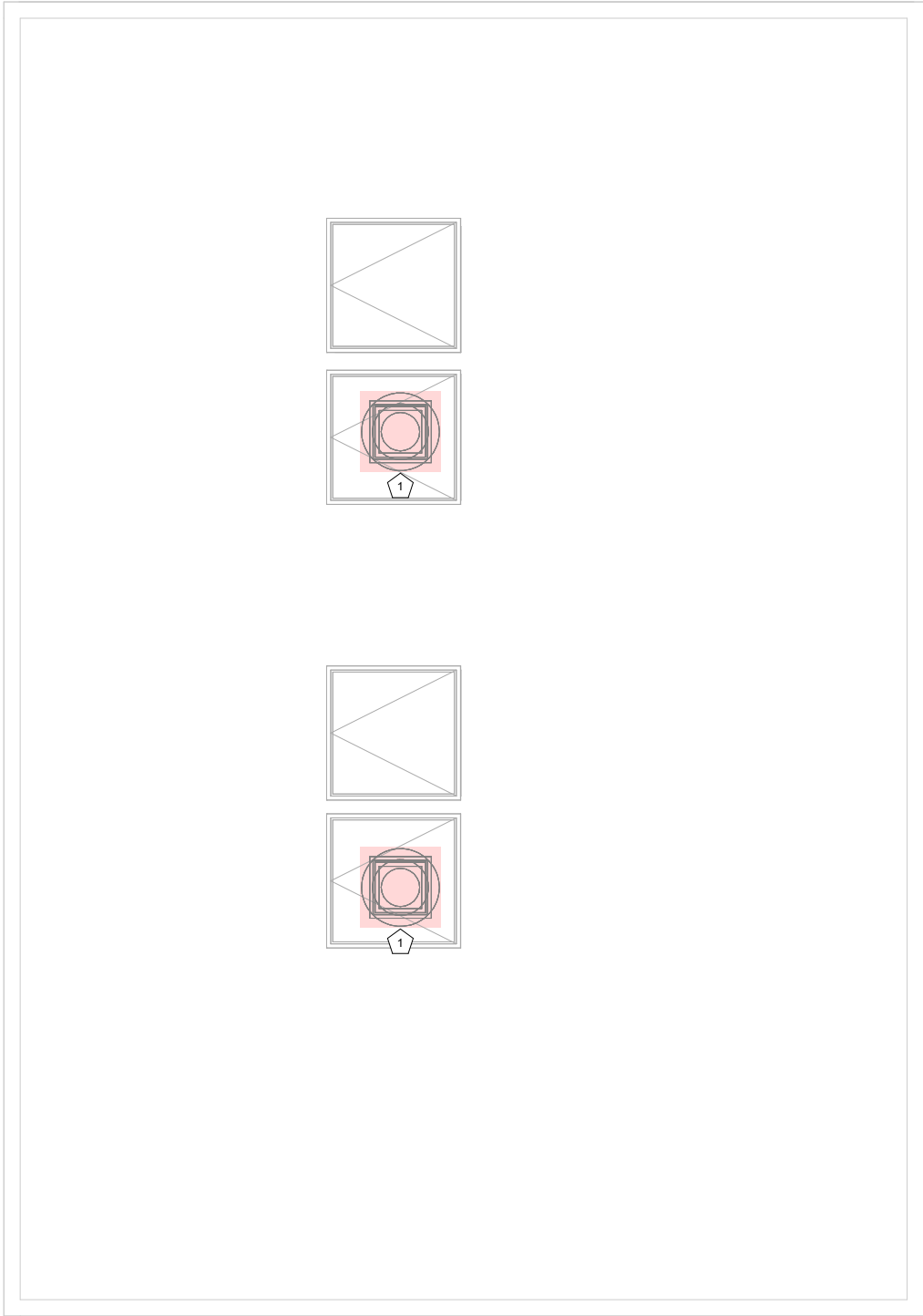
1. SEE SHEET E001 FOR GENERAL NOTES.
2. IN INSTANCES WHERE COMPLETE CONDUIT REMOVAL IS NOT FEASIBLE AND SUCH CONDUITS ARE NOT TO BE REUSED, CUT AND SAND CONDUIT FLUSH WITH SURFACE AND FILLED WITH NON-SHRINK GROUT.

DEMOLITION NOTES

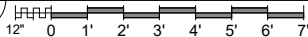
- 1 EXISTING PUMP AND RELATED CIRCUITRY (CONDUCTORS AND CONDUIT) TO BE DISCONNECTED AND REMOVED IN ITS ENTIRETY.
- 2 EXISTING PUMP TO REMAIN IN PLACE FOR REUSE. DISCONNECT AND REMOVE EXISTING CONDUCTORS BACK TO SOURCE. EXISTING CONDUIT TO REMAIN FOR REUSE.
- 3 EXISTING MCC TO BE DISCONNECTED AND REMOVED. INCOMING CONDUCTORS TO BE REMOVED FROM CONDUIT BACK TO SOURCE (EXISTING TRANSFER SWITCH). RELATED CAPACITORS (4 TOTAL) MOUNTED ABOVE MCC TO BE REMOVED. COORDINATE WITH OWNER FOR EQUIPMENT TO BE SALVAGED.
- 4 EXISTING MINI-POWER CENTER TO BE DISCONNECTED AND REMOVED. LINE SIDE CIRCUITRY FROM MCC TO BE REMOVED. MINI-POWER CENTER TO BE SALVAGED TO OWNER. SEE NEW PANEL SCHEDULE AND CABLE AND CONDUIT SCHEDULE FOR RECIRCUITING OF EXISTING LOADS.
- 5 EXISTING RTU PANEL TO BE DISCONNECTED AND REMOVED. INCOMING RTU PANEL POWER CIRCUITRY TO BE REMOVED TO SOURCE. EXISTING RADIO TO BE DISCONNECTED AND REMOVED FOR REUSE IN NEW RTU PANEL BY OWNER. SALVAGE EQUIPMENT TO OWNER.
- 6 EXISTING LIGHT FIXTURE TO BE DISCONNECTED AND REMOVED. EXISTING CONDUCTORS TO BE REMOVED FROM CONDUIT. EXISTING CONDUIT TO REMAIN FOR REUSE.
- 7 EXISTING MECHANICAL EQUIPMENT AND CIRCUITRY TO BE DISCONNECTED AND REMOVED BACK TO SOURCE.
- 8 EXISTING NETWORK RACK TO BE REMOVED BY OTHERS. EXISTING CIRCUITRY TO AND FROM NETWORK RACK TO BE REMOVED UNLESS OTHERWISE NOTED. SEE OPERATIONS LEVEL IMPROVEMENT PLAN AND NETWORK DIAGRAM FOR DETAILS.
- 9 EXISTING LIGHT SWITCH TO BE DISCONNECTED AND REMOVED. EXISTING EXPOSED CONDUIT TO BE REMOVED FROM SWITCH TO SOURCE.
- 10 EXISTING ELECTRICALLY ACTUATED FLOW CONTROL VALVE TO BE DISCONNECTED AND REMOVED. EXISTING CONDUCTORS TO BE REMOVED FROM CONDUIT BACK TO SOURCE. EXISTING CONDUIT WITHIN OPERATIONS LEVEL TO BE REMOVED. CONDUIT WITHIN GALLERY LEVEL TO REMAIN FOR REUSE.
- 11 EXISTING SECURITY SYSTEM EQUIPMENT TO BE RELOCATED AS PART OF A SEPARATE CONTRACT. CONFIRM EXISTING CIRCUITRY ROUTED TO LOCATION SHOWN IS REMOVED. SEE OPERATIONS LEVEL IMPROVEMENT PLAN AND NETWORK DIAGRAM FOR DETAILS.
- 12 EXISTING RECEPTACLE TO BE DISCONNECTED AND REMOVED. EXISTING CABLE TO BE REMOVED BACK TO SOURCE. EXISTING EXPOSED CONDUIT TO BE REMOVED.
- 13 EXISTING TEMPERATURE SENSORS AND RELATED BOX TO BE REMOVED. EXISTING CIRCUITRY TO BE REMOVED BACK TO SOURCE.
- 14 EXISTING MECHANICAL EQUIPMENT TO BE DISCONNECTED AND REMOVED. EXISTING CONDUCTORS TO BE REMOVED FROM CONDUIT. CONDUIT TO REMAIN FOR REUSE.
- 15 EXISTING CONDUCTORS TO BE REMOVED FROM CONDUIT. CONDUIT TO REMAIN FOR REUSE.

OPERATIONS LEVEL ELECTRICAL DEMO PLAN

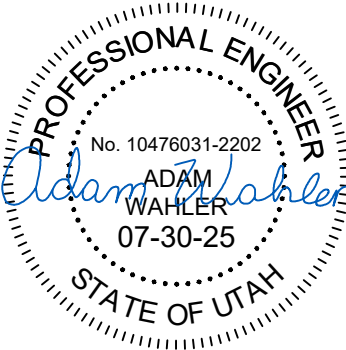
CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH	PREPARED BY: CAT CHECKED BY: TNF APPROVED BY: AMW
PROJECT NO: 11910-2024-001 DATE: JULY 2025 ALT PROJECT NO: 4366	SHEET DESIGNATOR: PS SHEET NO: E102



1 **ROOF LEVEL ELECTRICAL DEMO PLAN**



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



STATUS FOR CONSTRUCTION

APPR

DESCRIPTION

DATE

SYM

GENERAL NOTES

1. SEE SHEET E001 FOR GENERAL NOTES.
2. IN INSTANCES WHERE COMPLETE CONDUIT REMOVAL IS NOT FEASIBLE AND SUCH CONDUITS ARE NOT TO BE REUSED, CUT AND SAND CONDUIT FLUSH WITH SURFACE AND FILLED WITH NON-SHRINK GROUT.

DEMOLITION LEGEND

ITEMS TO BE REMOVED

DEMOLITION NOTES

- 1 EXISTING ROOF MOUNT EXHAUST FANS TO BE DISCONNECTED AND REMOVED. EXISTING CABLE AND CONDUIT TO BE REMOVED BACK TO SOURCE.

SHEET TITLE: **ROOF LEVEL ELECTRICAL DEMO PLAN**

CLIENT: **JORDAN VALLEY WATER CONSERVANCY DISTRICT**
SOUTH JORDAN, UTAH

PREPARED BY: CAT
CHECKED BY: TNF
APPROVED BY: AMW

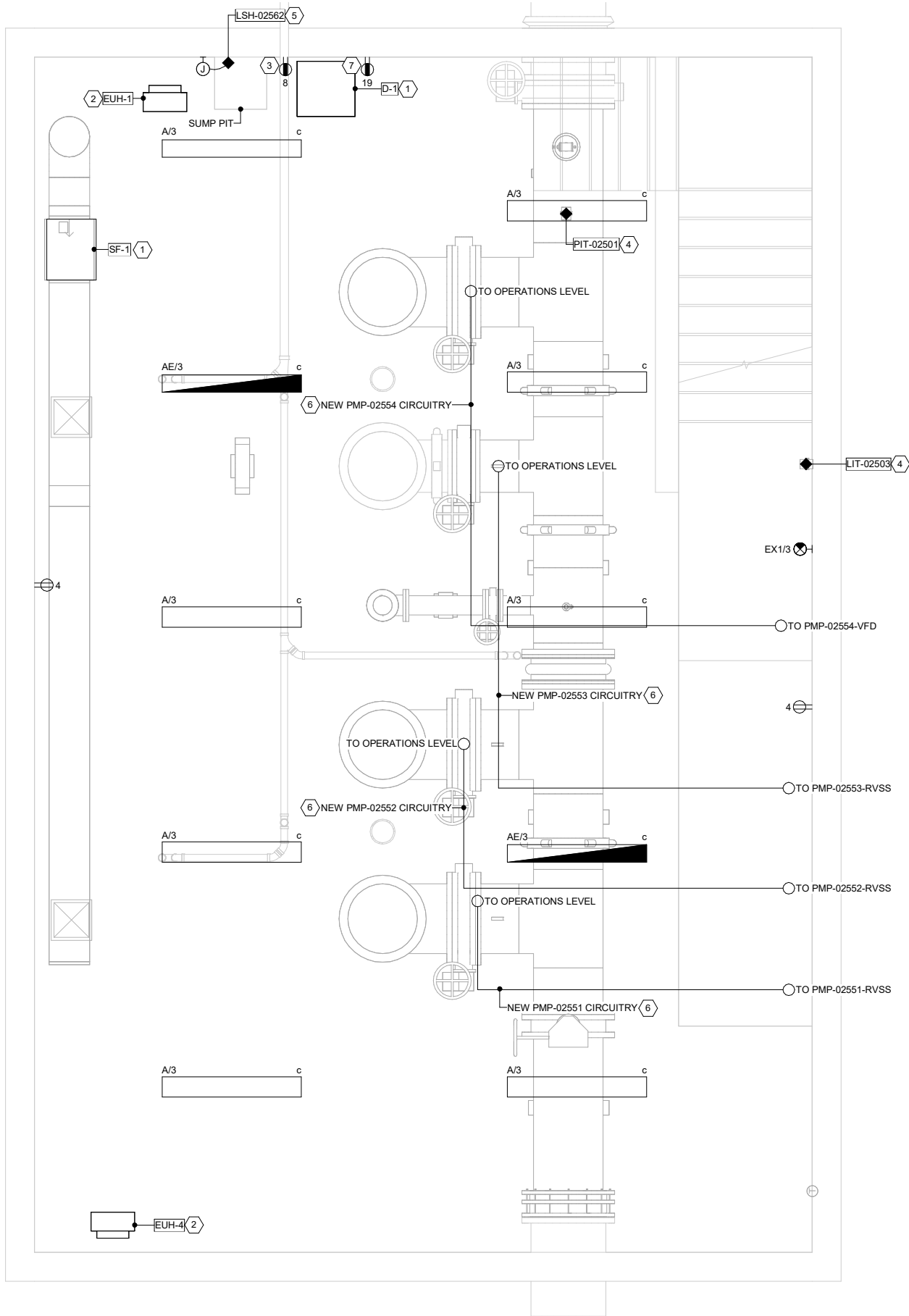
PROJECT NO: 11910-2024-001
DATE: JULY 2025
ALT PROJECT NO: 4366

SHEET DESIGNATOR: **PS**

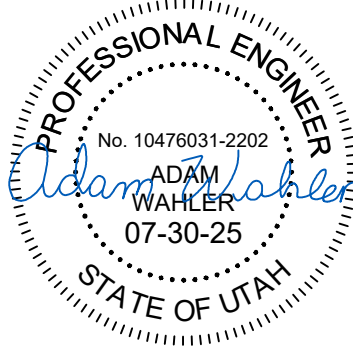
SHEET NO: **E103**

JVWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com



1
E104 **GALLERY LEVEL ELECTRICAL IMPROVEMENTS PLAN**



STATUS FOR CONSTRUCTION

GENERAL NOTES

1. SEE SHEET E001 FOR GENERAL NOTES.
2. SEE LUMINAIRE SCHEDULE FOR FIXTURE DETAILS.
3. COORDINATE ALL EXISTING BUILDING DRILLING FOR NEW CONDUIT RUNS WITH ENGINEER PRIOR TO ANY DRILLING WORK.

CONSTRUCTION NOTES

- 1 MECHANICAL EQUIPMENT INSTALLED BY DIV. 23 AND CIRCUITED BY DIV. 26. SEE MECHANICAL SCHEDULE AND CABLE AND CONDUIT SCHEDULE FOR DETAILS.
- 2 ELECTRIC UNIT HEATER PROVIDED BY DIV. 26. SEE MECHANICAL SCHEDULE AND ONE-LINE DIAGRAM FOR DETAILS.
- 3 PROVIDE 2-GANG BOX WITH SINGLE-GANG RECEPTACLE FOR CORD AND PLUG TYPE SUMP PUMP. PUMP SHALL PLUG INTO NEARBY RECEPTACLE DEDICATED TO THIS PUMP. LABEL RECEPTACLE "FOR USE WITH SUMP PUMP ONLY".
- 4 PRESSURE INDICATING TRANSDUCER & TRANSMITTER (40 73 00) PROVIDED BY CONTRACTOR. TRANSMITTER TO BE WALL MOUNTED PER MANUFACTURER RECOMMENDATIONS. EXTEND EXISTING CONDUIT TO NEW RTU PANEL LOCATION. SEE OPERATIONS LEVEL ELECTRICAL IMPROVEMENTS PLANS, IO SCHEDULE, AND CABLE AND CONDUIT SCHEDULE FOR DETAILS.
- 5 FLOOD SWITCH (40 72 00) PROVIDED BY CONTRACTOR. FLOOD SWITCH CONTACT SHALL BE INSTALLED 6" BELOW SUMP BASIN COVER. ROUTE MANUFACTURERS CABLE INTO A GENERAL PURPOSE JUNCTION BOX LOCATED 2'-0" TO A.F.F. TRANSITION TO BUILDING WIRE AND EXTEND TO RTU PANEL. CORE DRILL FLOOR AS REQUIRED AND SEAL AROUND CONDUIT FLOOR PENETRATION WITH NON-SHRINK GROUT. SEE RELATED DETAIL.
- 6 SEE ONE-LINE DIAGRAM AND OPERATIONS LEVEL PLAN FOR CIRCUITRY DETAILS.
- 7 PROVIDE 2-GANG BOX WITH SINGLE-GANG RECEPTACLE FOR CORD AND PLUG TYPE DEHUMIDIFIER. DEHUMIDIFIER SHALL PLUG INTO NEARBY RECEPTACLE DEDICATED TO THIS DEHUMIDIFIER. LABEL RECEPTACLE "FOR USE WITH DEHUMIDIFIER ONLY".

SHEET TITLE:
GALLERY LEVEL ELECTRICAL IMPROVEMENTS PLAN

CLIENT:
JORDAN VALLEY WATER CONSERVANCY DISTRICT
SOUTH JORDAN, UTAH

PREPARED BY: TED
CHECKED BY: TNF
APPROVED BY: AMW

PROJECT NO: 11910-2024-001
DATE: JULY 2025
ALT PROJECT NO: 4366

SHEET DESIGNATOR:

PS

SHEET NO:

E104

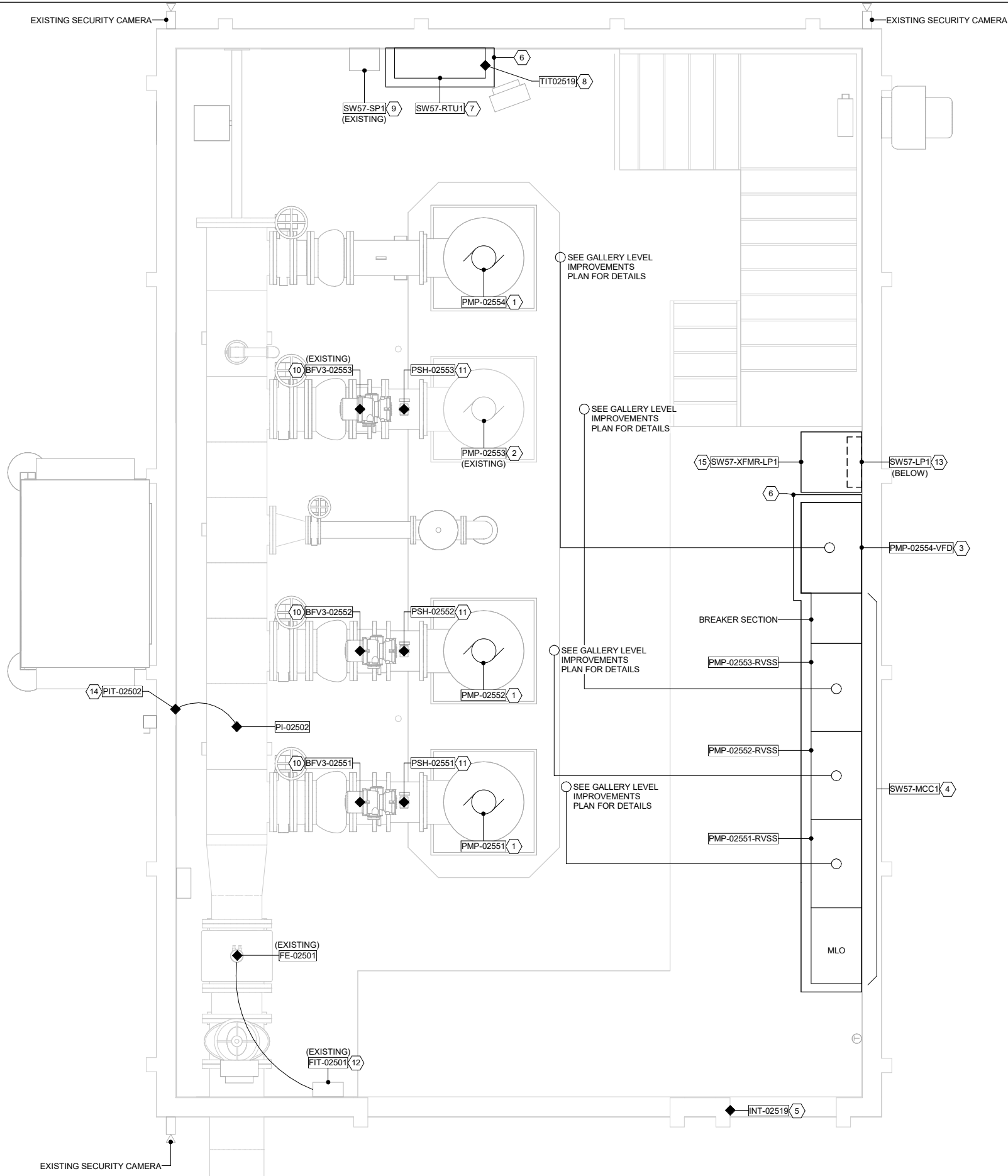
JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com

APPR

DESCRIPTION

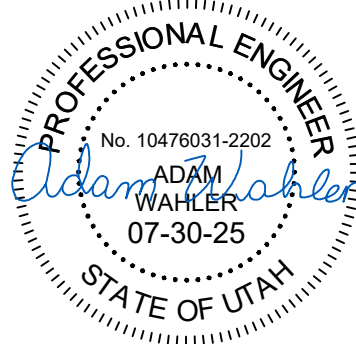
SYM DATE



1
E105
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Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



STATUS FOR CONSTRUCTION

GENERAL NOTES

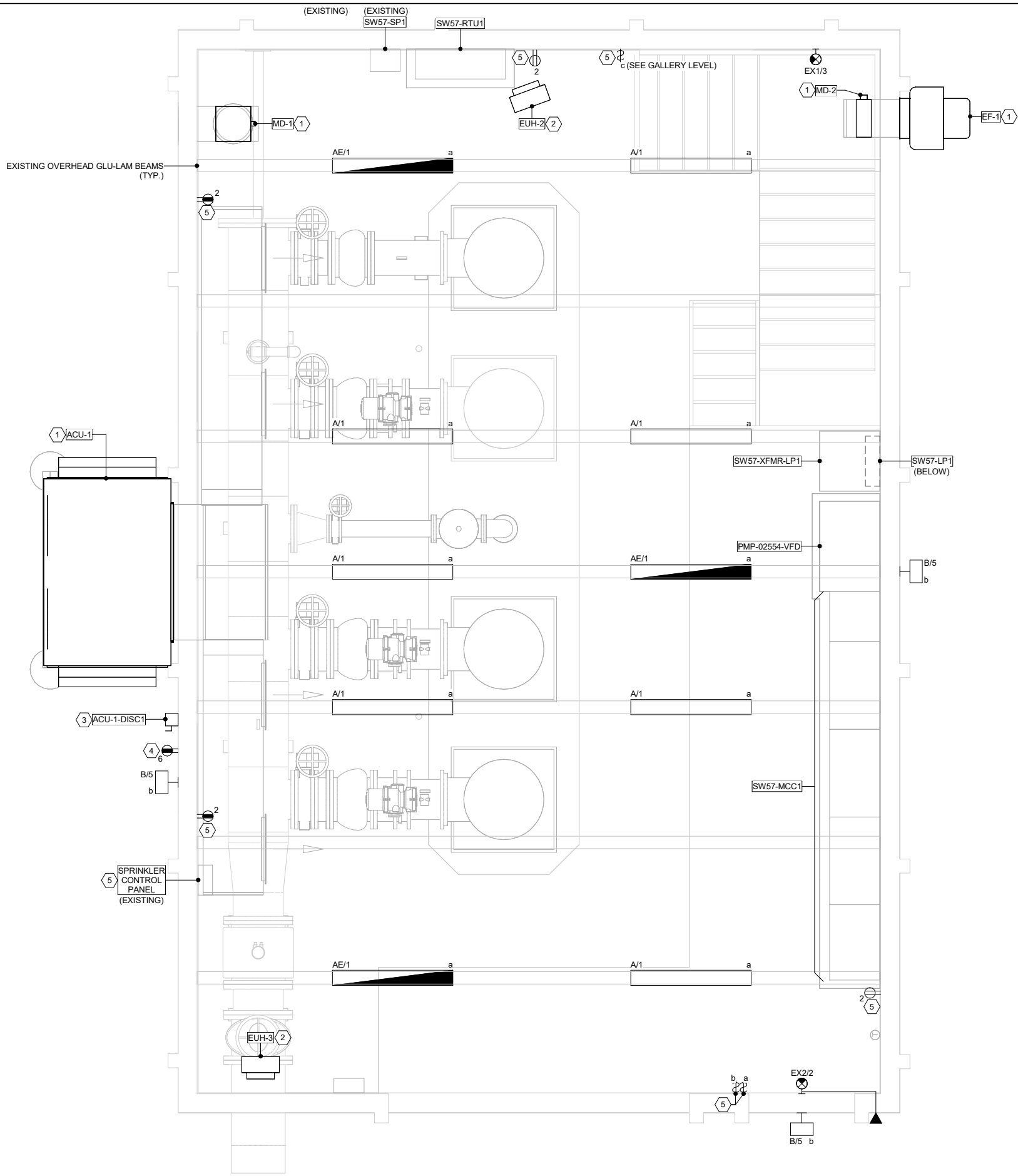
1. SEE SHEET E001 FOR GENERAL NOTES.
2. COORDINATE ALL EXISTING BUILDING DRILLING FOR NEW CONDUIT RUNS WITH ENGINEER PRIOR TO ANY DRILLING WORK.

CONSTRUCTION NOTES

- 1 NEW VERTICAL TURBINE PUMP (43 21 13) FURNISHED AND INSTALLED BY CONTRACTOR. PUMPS CIRCUITED BY DIV. 26. SEE ONE-LINE DIAGRAM AND CABLE AND CONDUIT SCHEDULE FOR CIRCUITRY REQUIREMENTS.
- 2 INSTALL NEW CONDUCTORS IN EXISTING CONDUIT. REUSE EXISTING CONDUIT TO THE GREATEST EXTENT POSSIBLE. INSTALL NEW CONDUIT OF THE SAME TYPE AND SIZE AS EXISTING AS REQUIRED. SEE ONE-LINE DIAGRAM AND CABLE AND CONDUIT SCHEDULE FOR DETAILS.
- 3 VARIABLE FREQUENCY DRIVE (26 29 23) PROVIDED BY CONTRACTOR. SEE ONE-LINE DIAGRAM AND VFD SCHEMATIC FOR DETAILS.
- 4 MOTOR CONTROL CENTER (26 24 19) PROVIDED BY CONTRACTOR. SEE ONE-LINE DIAGRAMS FOR DETAILS.
- 5 MAGNETIC DOOR INTRUSION SWITCH PROVIDED WITH MANUFACTURER SUPPLIED ARMORED FLEXIBLE LEADS. INSTALL JUNCTION BOX ABOVE THE DOOR FOR INTRUSION-MONITORING CIRCUITRY. SEE IO SCHEDULE FOR DETAILS.
- 6 3-1/2" HOUSEKEEPING PAD WITH 3/4" CHAMFERED EDGES PROVIDED BY CONTRACTOR.
- 7 RTU ENCLOSURE (HOFFMAN A723618FSG OR APPROVED EQUAL) (36"W x 72"H x 18"D) SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR. CONTROL PANEL BACKPLANE SHALL BE FURNISHED BY ELECTRICAL CONTRACTOR AND TURNED OVER TO OWNER FOR INSTALLATION OF CONTROL PANEL COMPONENTS BY OWNER. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CIRCUITING ACCORDING TO CONDUCTOR AND CONDUIT SCHEDULE. ELECTRICAL CONTRACTOR SHALL LEAVE A MINIMUM OF 6" OF CABLE FOR TERMINATION WITHIN THE CONTROL PANEL AND LABEL EACH WIRE WITH APPROPRIATE TAGGING. OWNER SHALL INSTALL AND TERMINATE COMPONENTS AND CIRCUITS ON CONTROL PANEL BACKPLANE.
- 8 PROVIDE TEMPERATURE INDICATING TRANSMITTER (40 74 00) POWERED BY RTU PANEL. COORDINATE WITH OWNER FOR MOUNTING LOCATION.
- 9 PUMP STATION SECURITY CONTROL AND MONITORING EQUIPMENT RELOCATED AS PART OF A SEPARATE CONTRACT. CONFIRM FINAL LOCATION ON-SITE.
- 10 DISCHARGE CONTROL VALVE (40 05 58) PROVIDED BY CONTRACTOR. SEE IO SCHEDULE AND CABLE AND CONDUIT SCHEDULE FOR DETAILS.
- 11 PUMP DISCHARGE PRESSURE SWITCH (40 73 00) INSTALLED BY OTHERS AND CIRCUITED BY DIV. 26. SEE CABLE AND CONDUIT SCHEDULE AND PRESSURE INSTRUMENT ASSEMBLY DRAWING WITHIN PROCESS STANDARD DETAILS FOR MORE INFORMATION.
- 12 PROVIDE NEW FLOW METER TRANSMITTER CIRCUITRY TO RELOCATED RTU PANEL. SEE CABLE AND CONDUIT SCHEDULE FOR DETAILS.
- 13 CONTRACTOR TO MOUNT PANELBOARD WITH TOP 72" A.F.F. SEE ONE-LINE DIAGRAM AND PANELBOARD SCHEDULE FOR DETAILS.
- 14 PROVIDE NEW CONDUCTORS WITHIN EXISTING CONDUIT. CUT AND EXTEND EXISTING CONDUIT AS NEEDED AND ROUTE TO NEW RTU PANEL.
- 15 LIGHTING PANEL TRANSFORMER WALL MOUNTED ABOVE THE LIGHTING PANEL WITH MANUFACTURERS MOUNTING KIT. SEE ONE-LINE DIAGRAM FOR DETAILS.

OPERATIONS LEVEL PROCESS ELECTRICAL IMPROVEMENTS PLAN

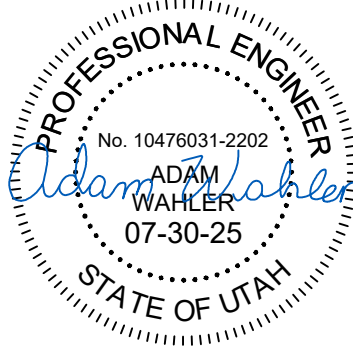
CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH	PREPARED BY: CAT CHECKED BY: TNF APPROVED BY: AMW
PROJECT NO: 11910-2024-001 DATE: JULY 2025 ALT PROJECT NO: 4366	SHEET DESIGNATOR: PS SHEET NO: E105



1 OPERATIONS LEVEL LGPM IMPROVEMENTS PLAN
E106
12" 0 1' 2' 3' 4' 5'
NORTH



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



STATUS FOR CONSTRUCTION

JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES
Advanced Engineering and Environmental Services, LLC www.ae2s.com

GENERAL NOTES

1. SEE SHEET E001 FOR GENERAL NOTES.
2. SEE LUMINAIRE SCHEDULE FOR FIXTURE DETAILS.
3. COORDINATE ALL EXISTING BUILDING DRILLING FOR NEW CONDUIT RUNS WITH ENGINEER PRIOR TO ANY DRILLING WORK.

CONSTRUCTION NOTES

- 1 MECHANICAL EQUIPMENT INSTALLED BY DIV. 23 AND CIRCUITED BY DIV. 26. SEE MECHANICAL SCHEDULE AND CABLE AND CONDUIT SCHEDULE FOR DETAILS.
- 2 ELECTRIC UNIT HEATER PROVIDED BY DIV. 26. SEE MECHANICAL SCHEDULE AND ONE-LINE DIAGRAM FOR DETAILS.
- 3 PROVIDE A WALL MOUNTED DISCONNECT SWITCH (26 28 18) FOR MECHANICAL EQUIPMENT. COORDINATE EXACT MOUNTING LOCATION WITH ENGINEER PRIOR TO INSTALLATION. SEE MECHANICAL EQUIPMENT SCHEDULE AND CABLE AND CONDUIT SCHEDULE FOR DETAILS.
- 4 CONTRACTOR TO PROVIDE A GASKETED FS-STYLE BOX WITH A GFCI RECEPTACLE AND A WEATHERPROOF, IN-USE COVER. RECEPTACLE TO BE WALL MOUNTED. SEE PANELBOARD SCHEDULE FOR DETAILS.
- 5 ROUTE NEW CONDUCTORS IN EXISTING CONDUITS. USE EXISTING CONDUITS TO THE GREATEST EXTENT POSSIBLE. EXTEND CONDUITS AS NEEDED. SEE PANELBOARD SCHEDULE FOR DETAILS.

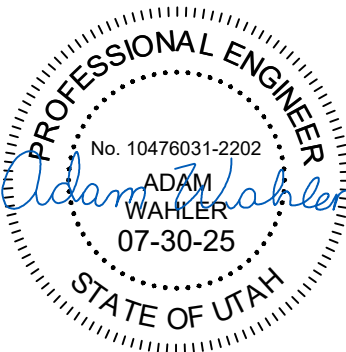
SHEET TITLE: OPERATIONS LEVEL LGPM IMPROVEMENTS PLAN

CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH	PREPARED BY: CAT CHECKED BY: TNF APPROVED BY: AMW
PROJECT NO: 11910-2024-001 DATE: JULY 2025 ALT PROJECT NO: 4366	SHEET DESIGNATOR: PS SHEET NO: E106

NOTE: THE SITE ELEVATION IS APPROXIMATELY 4,950 FEET ABOVE SEA LEVEL. ALL EQUIPMENT AS NOTED WITHIN THE CONTRACT DOCUMENTS SHALL CARRY A RATING AS INDICATED AT THIS NOTED SITE ELEVATION. THE EQUIPMENT MANUFACTURERS SHALL BE RESPONSIBLE FOR APPLYING ALL NECESSARY ALTITUDE DE-RATING FACTORS.



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



STATUS: FOR CONSTRUCTION

JWVCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

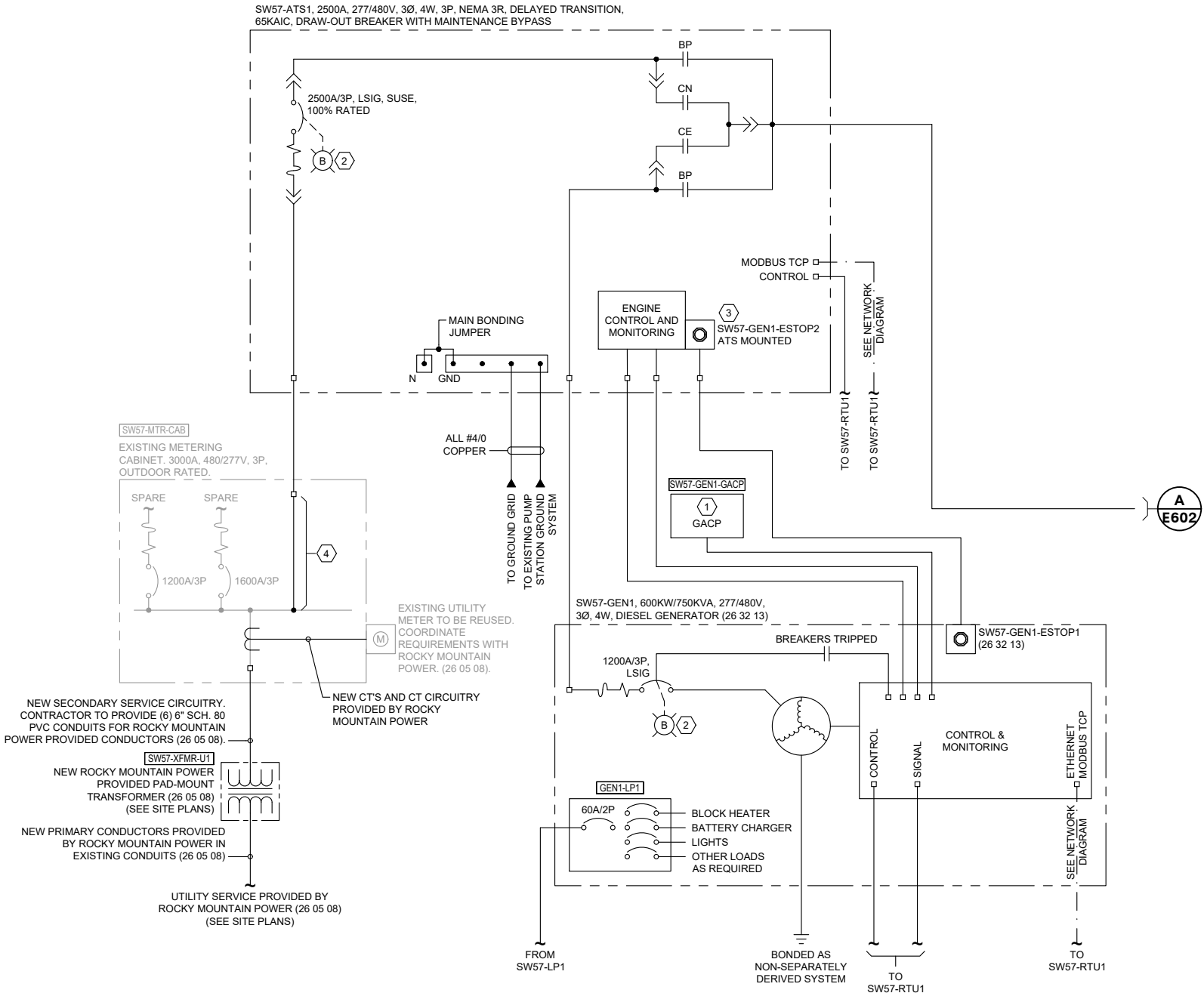
Advanced Engineering and Environmental Services, LLC www.ae2s.com

GENERAL NOTES

- SEE SHEET E001 FOR GENERAL NOTES.
- SEE CABLE AND CONDUIT SCHEDULE FOR ADDITIONAL INFORMATION ON ALL ELECTRICAL EQUIPMENT SHOWN.

CONSTRUCTION NOTES

- GENERATOR ANNUNCIATOR CONTROL PANEL (SW57-GEN1-GACP) FURNISHED WITH THE GENERATOR AS SPECIFIED IN SECTION (26 32 13) AND INSTALLED WITHIN THE PUMP STATION.
- PROVIDE WITH ARC FLASH MAINTENANCE REDUCTION SWITCH AND P.T.T. PILOT LIGHT
- ESTOP PROVIDED ON THE ATS SHOWN PARALLELED WITH THE ESTOP INTEGRAL TO THE ENGINE ENCLOSURE.
- CONTRACTOR PROVIDED BUS FILLER SPLICE PLATE KIT WITH AN AMPACITY OF 2500A MINIMUM.

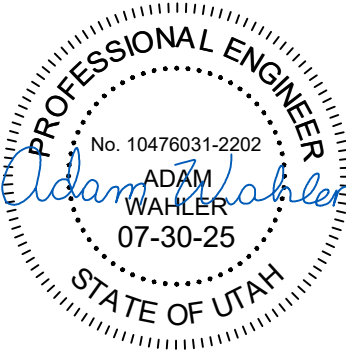


1 PUMP STATION ONE-LINE DIAGRAM
E601

NOTE: THE SITE ELEVATION IS APPROXIMATELY 4,950 FEET ABOVE SEA LEVEL. ALL EQUIPMENT AS NOTED WITHIN THE CONTRACT DOCUMENTS SHALL CARRY A RATING AS INDICATED AT THIS NOTED SITE ELEVATION. THE EQUIPMENT MANUFACTURERS SHALL BE RESPONSIBLE FOR APPLYING ALL NECESSARY ALTITUDE DERATING FACTORS.



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



STATUS: FOR CONSTRUCTION

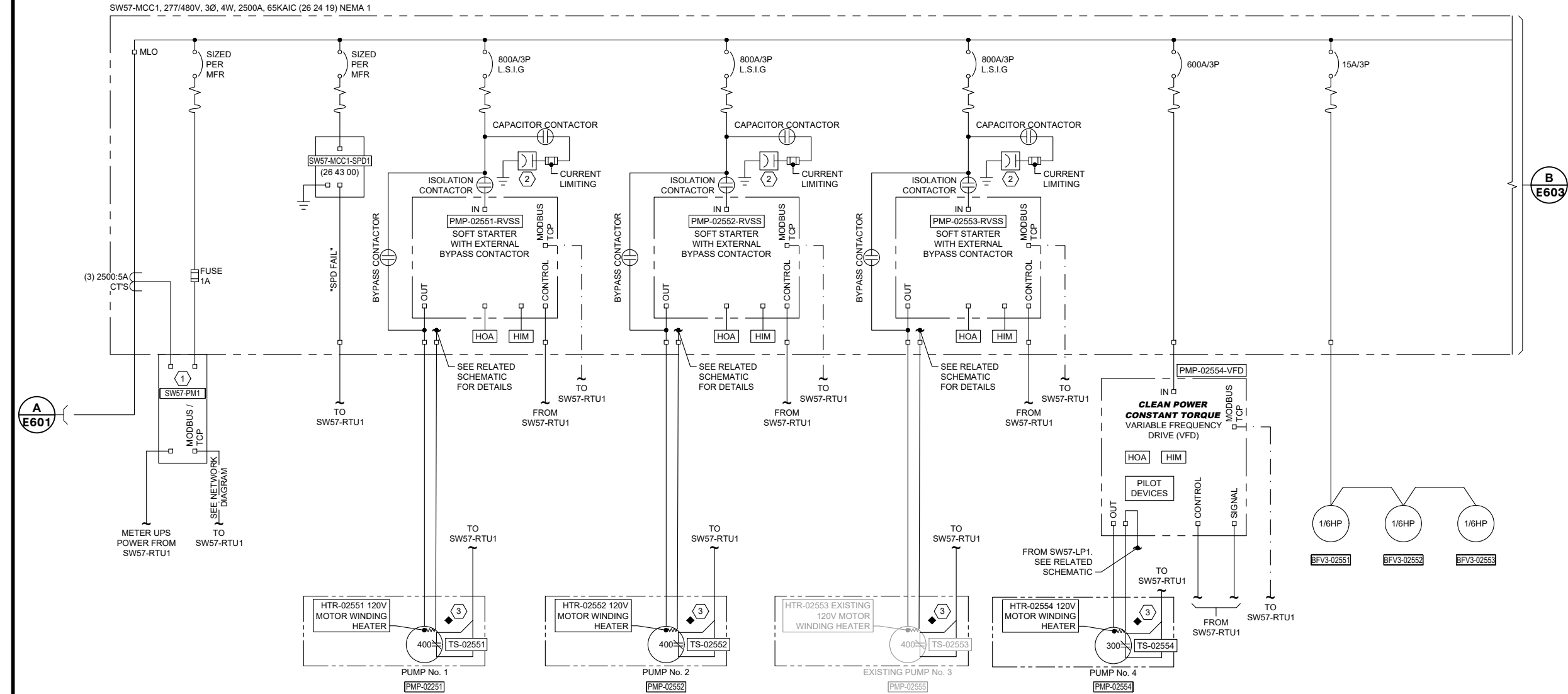
JWVCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES
Advanced Engineering and Environmental Services, LLC www.ae2s.com

GENERAL NOTES

- 1. SEE SHEET E001 FOR GENERAL NOTES.
- 2. SEE CABLE AND CONDUIT SCHEDULE FOR ADDITIONAL INFORMATION ON ALL ELECTRICAL EQUIPMENT SHOWN.

CONSTRUCTION NOTES

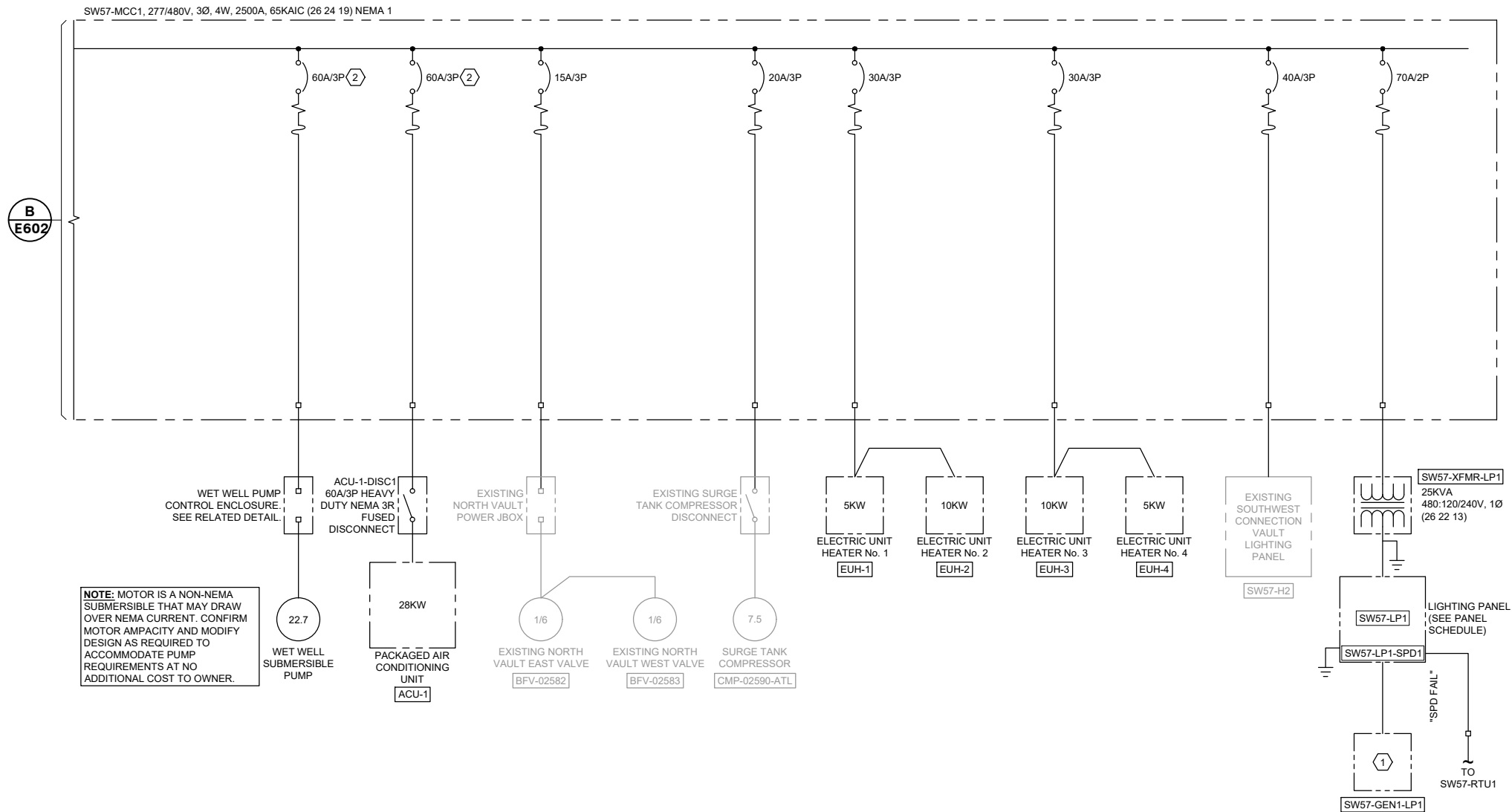
- 1 CUSTOMER METER PROVIDED BY CONTRACTOR TO INCLUDE THE FOLLOWING FROM THE FACTORY. SEE SECTION (26 13 50) FOR ADDITIONAL REQUIREMENTS:
 - ENCLOSURE
 - FORM 9 METERING (FOUR-WIRE WYE, 3 PTS, 3 CTS)
- 2 PFCC KVAR RATING AS RECOMMENDED BY THE MOTOR MANUFACTURER. PFCC TO BE MOUNTED WITHIN MCC UNLESS SPACING WITHIN PUMP STATION DOES NOT ALLOW. MOUNT PFCC ABOVE MCC TO REDUCE WIDTH OF RVSS SECTIONS AS NEEDED TO MEET NEC CLEARANCE REQUIREMENTS.
- 3 NEW MOTOR VIBRATION SWITCH. SEE P&ID DRAWINGS AND SCHEMATICS FOR ADDITIONAL REQUIREMENTS.



1 PUMP STATION ONE-LINE DIAGRAM
E602 SW57-MCC1

PUMP STATION ONE-LINE DIAGRAM

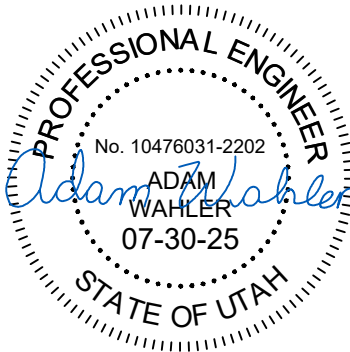
CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH	PREPARED BY: CAT CHECKED BY: TNF APPROVED BY: AMW
PROJECT NO: 11910-2024-001 DATE: JULY 2025 ALT. PROJECT NO: 4366	SHEET DESIGNATOR: PS SHEET NO: E602



NOTE: THE SITE ELEVATION IS APPROXIMATELY 4,950 FEET ABOVE SEA LEVEL. ALL EQUIPMENT AS NOTED WITHIN THE CONTRACT DOCUMENTS SHALL CARRY A RATING AS INDICATED AT THIS NOTED SITE ELEVATION. THE EQUIPMENT MANUFACTURERS SHALL BE RESPONSIBLE FOR APPLYING ALL NECESSARY ALTITUDE DERATING FACTORS.



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



STATUS: FOR CONSTRUCTION

JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com

GENERAL NOTES

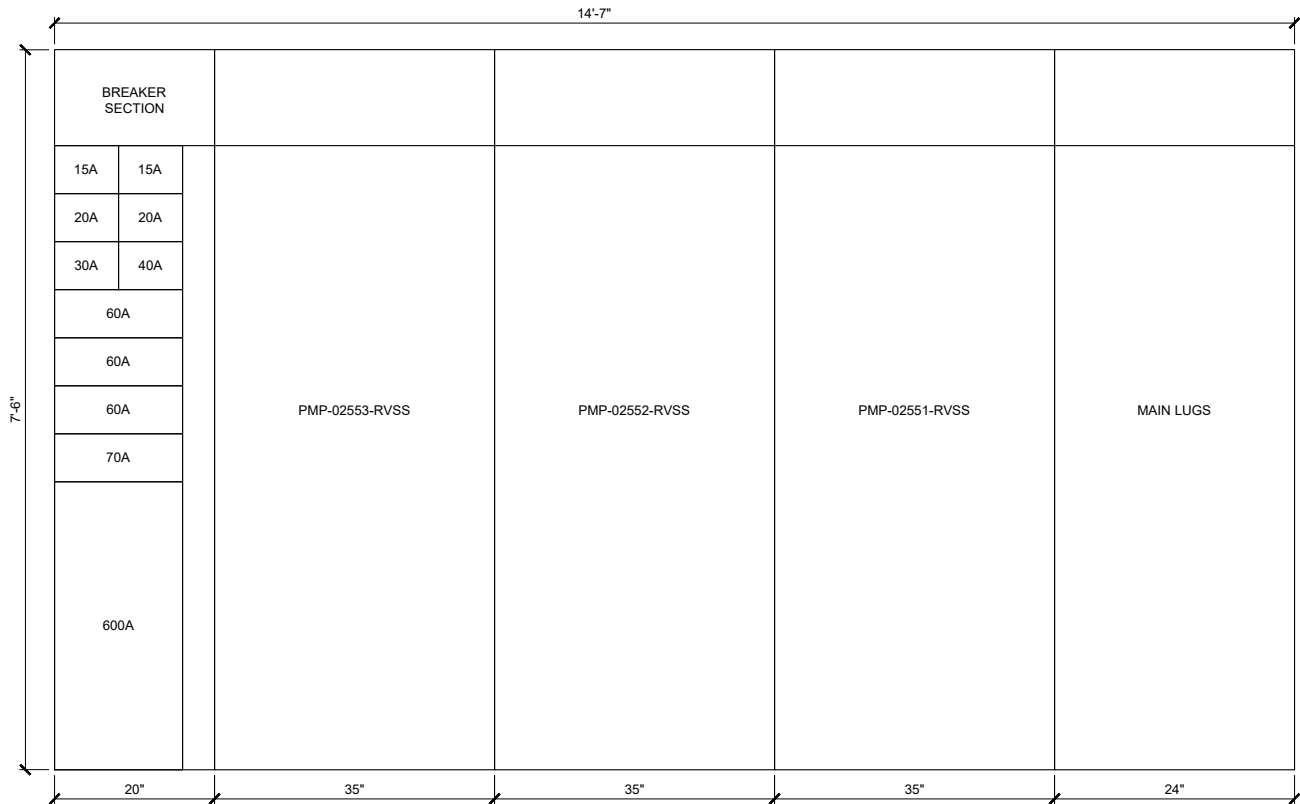
1. SEE SHEET E001 FOR GENERAL NOTES.
2. SEE CABLE AND CONDUIT SCHEDULE FOR ADDITIONAL INFORMATION ON ALL ELECTRICAL EQUIPMENT SHOWN.

CONSTRUCTION NOTES

1. PANELBOARD SHOWN TO BE FACTORY INSTALLED WITHIN GENERATOR ENCLOSURE. SEE SECTION (26 32 13).
2. COORDINATE MOPD RATINGS WITH MANUFACTURER EQUIPMENT SUBMITTALS AND ADJUST ACCORDINGLY TO SATISFY MANUFACTURER REQUIREMENTS.

PUMP STATION ONE-LINE DIAGRAM

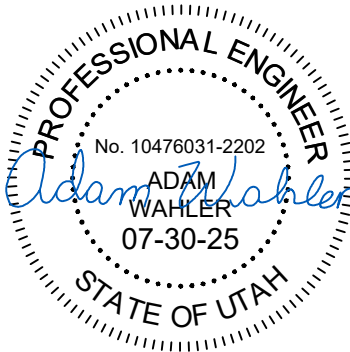
CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH		PREPARED BY: CAT
		CHECKED BY: TNF
		APPROVED BY: AMW
PROJECT NO: 11910-2024-001	SHEET DESIGNATOR:	SHEET NO:
DATE: JULY 2025	PS	E603
ALT. PROJECT NO: 4366		



1 SW57-MCC1 FRONT ELEVATION
E604

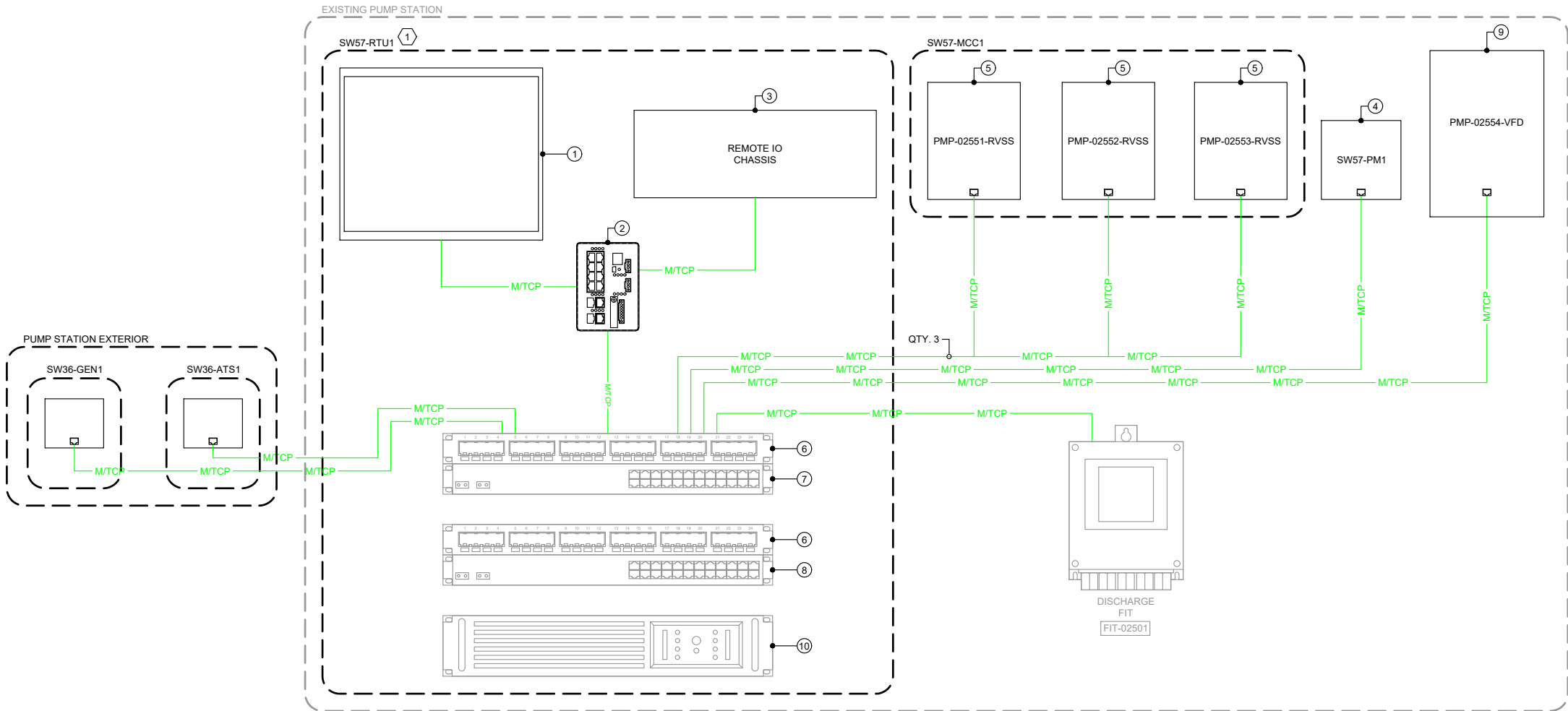


Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



- GENERAL NOTES
- 1. SEE SHEET E001 FOR GENERAL NOTES.
 - 2. SEE ONE-LINE DIAGRAM FOR ADDITIONAL DETAILS.

SHEET TITLE: MCC ELEVATION			
CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH		PREPARED BY: CAT CHECKED BY: TNF APPROVED BY: AMW	
PROJECT NO: 11910-2024-001 DATE: JULY 2025 ALT. PROJECT NO: 4366	SHEET DESIGNATOR: PS	SHEET NO: E604	

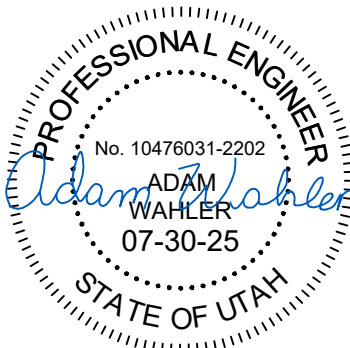


LINETYPE LEGEND	
— M/TCP	ETHERNET SCADA NETWORK (MODBUS/TCP PROTOCOL)

PARTS LIST	
MARK	DESCRIPTION
①	10" OIT TOUCH SCREEN*
②	8 PORT ETHERNET SWITCH*
③	REMOTE IO CHASSIS (SEE IO SCHEDULE)*
④	MCC REMOTE MOUNTED POWER MONITOR
⑤	REDUCED VOLTAGE SOFT STARTER
⑥	COPPER PATCH PANEL*
⑦	24 PORT ETHERNET SWITCH (SCADA SYSTEM)*
⑧	24 PORT ETHERNET SWITCH (SECURITY SYSTEM)*
⑨	VARIABLE FREQUENCY DRIVE
⑩	UNINTERRUPTIBLE POWER SUPPLY
*	EQUIPMENT PROVIDED BY JVWCD*



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STATUS: FOR CONSTRUCTION

JVWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com

GENERAL NOTES

- SEE SHEET E001 FOR GENERAL NOTES.
- SEE CABLE AND CONDUIT SCHEDULE FOR CIRCUITRY DETAILS.

CONSTRUCTION NOTES

- CONTRACTOR TO PROVIDE RTU PANEL ENCLOSURE AND BACKPANEL. BACKPANEL TO BE TURNED OVER TO OWNER FOR RTU COMPONENT PROVISIONS. SEE OPERATIONS LEVEL PROCESS ELECTRICAL IMPROVEMENTS PLAN FOR DETAILS.

PUMP STATION NETWORK DIAGRAM

CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH		PREPARED BY: CAT
		CHECKED BY: TNF
		APPROVED BY: AMW
PROJECT NO: 11910-2024-001	SHEET DESIGNATOR:	SHEET NO:
DATE: JULY 2025	PS	E605
ALT. PROJECT NO: 4366		

Jordan Valley Water Treatment Plant 57 & 102 Pump Station PLC									
I/O List									
Digital Inputs			Digital Outputs		Analog Inputs		Analog Outputs		
Address	Item	Address	Item	Address	Item	Address	Item	Address	Item
1	P1 Run Status	1	P1 Call PMP02551	1	PRV Flow FIT02502	1	PRV Setpoint		
2	P1 MCC Fault	2	P1 Valve Open Command	2	Discharge Pressure PIT02502	2	P4 Speed Command		
3	P1 Auto Switch	3	P1 Valve Close Command	3	Reservoir Level LIT02503	3	Spare		
4	P1 Hand Switch	4	P2 Call PMP02552	4	Surge Tank Level LT02504	4	Spare		
5	P1 Start Push Button	5	P2 Valve Open Command	5	P4 Speed Feedback				
6	P1 Stop Push Button	6	P2 Valve Close Command	6	Suction Pressure PIT02501				
7	P1 High Pressure Switch PSH02551	7	P3 Call PMP02553	7	PRV Position PRV02501				
8	P1 Valve Open Status VLV02551	8	P3 Valve Open Command	8	Pump Station Ambient Temperature TIT02519				
9	P1 Valve Close Status VLV02551	9	P3 Valve Close Command	9	Pump Station Generator Fuel Level				
10	P2 Run Status	10	P4 Call PMP02554	10	Spare				
11	P2 MCC Fault	11	P4 Valve Open Command	11	Spare				
12	P2 Auto Switch	12	P4 Valve Close Command	12	Spare				
13	P2 Hand Switch	13	Pump Station ATS Remote Start	13	Spare				
14	P2 Start Push Button	14	Surge Tank Air Fill SV02592	14	Spare				
15	P2 Stop Push Button	15	Spare	15	Spare				
16	P2 High Pressure Switch PSH02552	16	Spare	16	Spare				
17	P2 Valve Open Status VLV02552	17	Spare						
18	P2 Valve Close Status VLV02552	18	Spare						
19	P3 Run Status	19	Spare						
20	P3 MCC Fault	20	Spare						
21	P3 Auto Switch	21	BFV1 Open Command BFV02582	Modbus Inputs					
22	P3 Hand Switch	22	BFV1 Close Command BFV02582	Address	Item				
23	P3 Start Push Button	23	BFV2 Open Command BFV02583	1	Pump Outflow FIT02501				
24	P3 Stop Push Button	24	BFV2 Close Command BFV02583						
25	P3 High Pressure Switch PSH02553	25	BFV3 Open Command BFV02586						
26	P3 Valve Open Status VLV02553	26	BFV3 Close Command BFV02586						
27	P3 Valve Close Status	27	Spare						
28	P4 Run Status	28	Spare						
29	P4 VFD Fault	29	Spare						
30	P4 Auto Switch	30	Spare						
31	P4 Hand Switch	31	Spare						
32	P4 Start Push Button	32	Spare						
33	P4 Stop Push Button								
34	P4 High Pressure Switch PSH02554								
35	P4 Valve Open Status VLV02554								
36	P4 Valve Close Status								
37	MCC SPD Failure								
38	Panel L1 SPD Failure								
39	South Vault Flood Switch LSH02563								
40	Pump Station Door Intrusion INTO2519								
41	Spare								
42	Low Pressure Switch PSL02550								
43	Building Flood Switch LSH02562								
44	Reservoir Hatch Switch INTO2561								
45	Motion Switch								
46	Door Switch INTO22561B								
47	Spare								
48	Power Fail PWR02590								
49	North Vault Flood Switch LSH02564								
50	North Vault Hatch Switch 1 INTO2564								
51	North Vault Hatch Switch 2 INTO2564B								
52	North Vault BFV1 Open Status BFV02582								
53	North Vault BFV1 Closed Status BFV02582								
54	North Vault BFV1 Remote Status BFV02582								
55	North Vault BFV2 Open Status BFV02583								
56	North Vault BFV2 Closed Status BFV02583								
57	North Vault BFV2 Remote Status BFV02583								
58	West Vault Flood Switch LSH02565								
59	West Vault Hatch Switch INTO2565								
60	West Vault BFV3 Open Status BFV02586								
61	West Vault BFV3 Closed Status BFV02586								
62	P1 Vibration Switch								
63	P1 Temperature Switch								
64	P2 Vibration Switch								
65	P2 Temperature Switch								
66	P3 Vibration Switch								
67	P3 Temperature Switch								
68	P4 Vibration Switch								
69	P4 Temperature Switch								
70	UPS Power Available								
71	SPD Failure								
72	Reservoir Overflow Pipe Moisture Detected MSH02551								
73	Pump Station Generator Running								
74	Pump Station Generator Not In Auto								
75	Pump Station Generator Pre-high Engine Temperature								
76	Pump Station Generator High Engine Temperature								
77	Pump Station Generator Overspeed								
78	Pump Station Generator Low Engine Temperature								
79	Pump Station Generator Low Coolant Level								
80	Pump Station Generator Pre-low Oil Pressure								
81	Pump Station Generator Low Oil Pressure								
82	Pump Station Generator Fuel Tank Leak								
83	Pump Station Generator Battery Charger Fault								
84	Pump Station Generator Running								
85	Pump Station ATS Utility Power Available								
86	Pump Station ATS Generator Power Available								
87	Pump Station ATS Connected to Utility								
88	Pump Station ATS Connected to Generator								
89	Pump Station ATS Pre-transfer Signal								
90	MCC Phase Failure								

Green = Verified / Shown on P&ID

Blue = Added

Red = removed

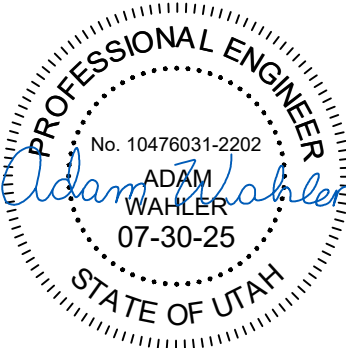
Black = Not shown on P&ID / Unverified

Green = Verified / Shown on P&ID
Blue = Added
Red = removed

Black = Not shown on P&ID / Unverified



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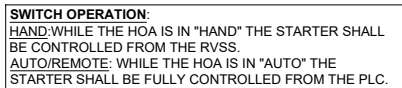
STATUS: FOR CONSTRUCTION

JVWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

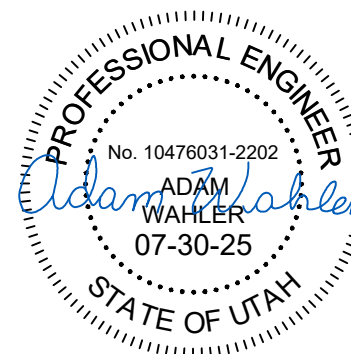
Advanced Engineering and Environmental Services, LLC www.ae2s.com

- GENERAL NOTES
- SEE SHEET E001 FOR GENERAL NOTES.
 - IO SCHEDULE AS SHOWN IS FOR OWNER REFERENCE ONLY. SEE OPERATIONS LEVEL PROCESS ELECTRICAL IMPROVEMENTS PLAN FOR RTU PANEL SCOPE SPLIT.

SHEET TITLE:			
IO SCHEDULE			
CLIENT:		PREPARED BY: CAT	
JORDAN VALLEY WATER CONSERVANCY		CHECKED BY: TNF	
DISTRICT		APPROVED BY: AMW	
SOUTH JORDAN, UTAH			
PROJECT NO: 11910-2024-001	SHEET DESIGNATOR:	SHEET NO:	
DATE: JULY 2025	PS	E606	
ALT. PROJECT NO: 4366			



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



GENERAL NOTES

1. SEE SHEET E001 FOR GENERAL NOTES

STATUS: **FOR CONSTRUCTION**

JJVWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES
Advanced Engineering and Environmental Services, LLC www.ae2s.com

SUBJECT TIME:

SHEET TITLE:

RVSS WIRING SCHEMATIC

CLIENT:
**JORDAN VALLEY WATER CONSERVANCY
DISTRICT**
SOUTH JORDAN, UTAH

PREPARED BY: CAT
CHECKED BY: TNF
APPROVED BY: AMW

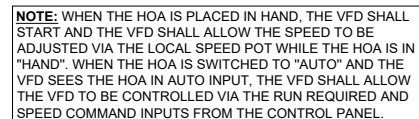
PROJECT NO: 11910-2024-001
DATE: JULY 2025
ALT. PROJECT NO: 4366

SHEET DESIGNATOR	
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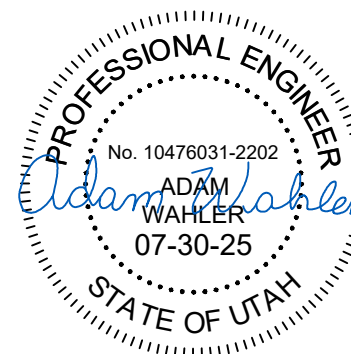
SHEET NO.

PS

E607



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



GENERAL NOTES

1. SEE SHEET E001 FOR GENERAL NOTES

STATUS: **FOR CONSTRUCTION**

JJVWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES
Advanced Engineering and Environmental Services, LLC www.ae2s.com

DO NOT WRITE IN THESE SPACES.

SHEET TITLE:

VFD WIRING SCHEMATIC

CLIENT:
JORDAN VALLEY WATER CONSERVANCY
DISTRICT
SOUTH JORDAN, UTAH

PREPARED BY: CAT
CHECKED BY: TNF
APPROVED BY: AMW

PROJECT NO: 11910-2024-001
DATE: JULY 2025
ALT. PROJECT NO: 4366

SHEET DESIGNATOR	
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SHEET NO.

PS

E608

PANEL SCHEDULE															
PANEL: SW57-LP		LOCATION: MCC-1		VOLTS: 240 / 120		PHASE: 1		W: 3							
AMP MAIN BKR: 125A		AIC RATING: 22,000		MOUNT: MCC		FED FROM: LP-1-XFMR-1									
CIRCUIT DESCRIPTION		LOAD VA	CKT. BKR.	P	CKT. No.	PH.	CKT. No.	P	CKT. BKR.	LOAD VA	CIRCUIT DESCRIPTION				
PS - OPERATIONS LVL LIGHTING		670	20	1	1	A	2	1	20	720	PS - OPERATIONS LVL RECEPTACLES				
PS - GALLERY LVL LIGHTING		670	20	1	3	B	4	1	20	540	PS - GALLERY LVL RECEPTACLES				
PS - EXTERIOR LIGHTING		74	20	1	5	A	6	1	20	360	PS - EXTERIOR RECEPTACLES				
PS - EXHAUST FAN (EF-1)		187	15	1	7	B	8	1	20	1000	PS - SUMP PUMP RECEPTACLE				
PS - SW57-RTU-1		500	20	1	9	A	10	1	15	100	PS - DAMPER (MD-1)				
CATHODIC PROTECTION		900	20	2	11	B	12	1	15	100	PS - DAMPER (MD-2)				
		900			13	A	14	1	20	500	PS - SECURITY PANEL				
PS - SF-1		200	20	1	15	B	16	2	60	-	GENERATOR LOADCENTER (SW57-GEN1-LP1)				
NV - RECEPTACLES		360	20	1	17	A	18		-	-					
D-1 RECEPTACLE		1440	20	1	19	B	20	1	15	100	PS - SPRINKLERS				
NV - EXHAUST FAN		1000	20	1	21	A	22	1	15	150	NV - FLOW METER				
NV - SUMP PUMP RECEPTACLE		1000	20	1	23	B	24	1	20	500	STV - VAULT LIGHTING & FAN MOTOR				
NV - LIGHTING		430	20	1	25	A	26	1	20	360	STV - VAULT RECEPTACLES				
PS - HTR-02551		400	15	1	27	B	28	1	20	56	WET WELL & PUMPING VAULT LIGHT				
PS - HTR-02552		400	15	1	29	A	30	1	30	-	SPARE				
PS - HTR-02553		400	15	1	31	B	32	1	25	-	SPARE				
PS - HTR-02554		400	15	1	33	A	34	1	25	-	SPARE				
SPARE		-	40	1	35	B	36	1	20	-	SPARE				
SPARE		-	20	2	37	A	38	1	20	-	SPARE				
		-			39	B	40	1	20	-	SPARE				
SPARE		-	20	2	41	A	42	2	BY MFG	-	SPD				
		-			43	B	44		-	-					
CONNECTED TOTALS:						NOTES:									
KVA		14.42		- ALL CIRCUIT BREAKERS SHALL BE LOCKABLE IN THE OFF POSITION - PROVIDE SPD AS SPECIFIED IN SECTION 26 43 00 - PS = PUMP STATION - NV = NORTH VAULT - STV = SURGE TANK VAULT											
AMPS		60.07													
Phase A		57.7												Amps	
Phase B		62.4												Amps	

LUMINAIRE SCHEDULE									
TYPE	DESCRIPTION	VOLTAGE	TYPE	TOTAL WATTAGE	DIFFUSER	MOUNTING	MANUFACTURER	CATALOG NUMBER	NOTES
A	LOW PROFILE ENCLOSED AND GASKETED 4' INDUSTRIAL LED, 4000K	MVOLT	LED	67W	FROSTED POLYCARBONATE LENS	CEILING MOUNT	LITHONIA	FEM-L48-8000LM-LPPFL-MD-MVOLT-40K-80CRI	1
							RAB	EQUAL	
							LSI	EQUAL	
							APPROVED EQUAL	APPROVED EQUAL	
AE	LOW PROFILE ENCLOSED AND GASKETED 4' INDUSTRIAL LED, 4000K, EMERGENCY BATTERY PACK	MVOLT	LED	67W	FROSTED POLYCARBONATE LENS	CEILING MOUNT	LITHONIA	FEM-L48-8000LM-LPPFL-MD-MVOLT-40K-80CRI-E10WMCP	1
							RAB	EQUAL	
							LSI	EQUAL	
							APPROVED EQUAL	APPROVED EQUAL	
B	EXTERIOR WALL MOUNT FIXTURE	MVOLT	LED	37W	REFRACTIVE OPTIC	WALL MOUNT	RAB	SLIMFC-37N-D10-PC	1
							LUMARK OUTDOOR	AXCS3A-PC	
							LITHONIA	WPX1 LED P2 40K MVOLT DDBXD	
EX1	LED EXIT LIGHTING UNIT	MVOLT	LED	4	-	WALL/CEILING	LITHONIA	EXRG-EL-M6	-
							SURE-LITES	LPX7	
EX2	LED EXIT LIGHTING UNIT WITH REMOTE MOUNTED HEAD	MVOLT	LED	4	-	WALL/CEILING	LITHONIA	EXRG-EL-M6 & ELA-LED-M12	-
							SURE-LITES	LPXC25R3 SRM25WH	

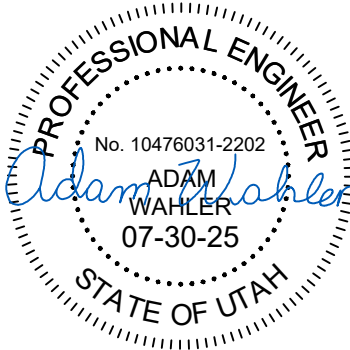
NOTES:
1. PROVIDE TWO (2) COMPLETE SETS OF SPARE LUMINARE IN FACTORY BOX, TURN OVER TO OWNER FOR STORAGE

MECHANICAL SYSTEMS - EQUIPMENT SCHEDULE															
EQUIPMENT ID	LOCATION	HP/KW/ AMPS	PHASE	VOLTS	POWER SOURCE	DISCONNECT		CONTROL DEVICE			DEVICES TO BE INTERLOCKED			NOTES & CKT	EQUIPMENT ID
						SIZE/TYPE	BY (DIV.)	DEVICE	FURN. BY	WIRED BY	DEVICE	FURN. BY	WIRED BY		
ACU-1	PUMP STATION WEST WALL	38.4A	3	480	SW57-MCC1	60A/3P FUSED	DIV. 26	TSTAT.	DIV. 23	DIV. 23	N/A	-	-		ACU-1
D-1	GALLERY LEVEL	12A	1	120	SW57-LP1	POWER CORD	DIV. 23	-	-	-	N/A	-	-		D-1
EF-1	OPERATIONS LEVEL	12A	1	120	SW57-LP1	SNAP SWITCH	DIV. 26	INTEGRAL	-	-	MD-2	DIV. 23	DIV. 23		EF-1
SF-1	GALLERY LEVEL	0.25HP	1	120	SW57-LP1	SNAP SWITCH	DIV. 26	INTEGRAL	-	-	MD-1	DIV. 23	DIV. 23		SF-1
MD-1	OPERATIONS LEVEL	0.1A	1	120	SW57-LP1	SNAP SWITCH	DIV. 26	-	DIV. 23	DIV. 23	SF-1	DIV. 23	DIV. 23		MD-1
MD-2	OPERATIONS LEVEL	0.1A	1	120	SW57-LP1	SNAP SWITCH	DIV. 26	-	DIV. 23	DIV. 23	EF-1	DIV. 23	DIV. 23		MD-2
EUH-1	GALLERY LEVEL	5KW	3	480	SW57-MCC1	INTEGRAL	DIV. 26	TSTAT.	DIV. 23	DIV. 23	N/A	-	-	BERKO HUHAA548 OR EQUAL	EUH-1
EUH-2	OPERATIONS LEVEL	10KW	3	480	SW57-MCC1	INTEGRAL	DIV. 26	TSTAT.	DIV. 23	DIV. 23	N/A	-	-	BERKO HUHAA1048 OR EQUAL	EUH-2
EUH-3	OPERATIONS LEVEL	10KW	3	480	SW57-MCC1	INTEGRAL	DIV. 26	TSTAT.	DIV. 23	DIV. 23	N/A	-	-	BERKO HUHAA1048 OR EQUAL	EUH-3
EUH-4	GALLERY LEVEL	5KW	3	480	SW57-MCC1	INTEGRAL	DIV. 26	TSTAT.	DIV. 23	DIV. 23	N/A	-	-	BERKO HUHAA548 OR EQUAL	EUH-4

ABBREVIATIONS:
MAG - MAGNETIC, HOA - HAND/OFF/AUTOMATIC, SS - START/STOP, TT - THERMAL TOGGLE, PB - PUSHBUTTON, START - STARTER, EMS - ENERGY MANAGEMENT SYSTEM, SW - TOGGLE SWITCH, MECH- MECHANICAL CONTRACTOR, ELEC - ELECTRICAL CONTRACTOR
BKR - CIRCUIT BREAKER,C&P - CORD AND PLUG, FVNR - FULL VOLTAGE NON-REVERSING, DSD - DUCT SMOKE DETECTOR
NOTE: ALL MOTORIZED DAMPERS ARE THE RESPONSIBILITY OF THE TEMPERATURE AND CONTROLS CONTRACTOR. COORDINATE ALL POWER CONNECTIONS WITH THE TEMPERATURE AND CONTROLS CONTRACTOR.



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



GENERAL NOTES
1. SEE SHEET E001 FOR GENERAL NOTES.

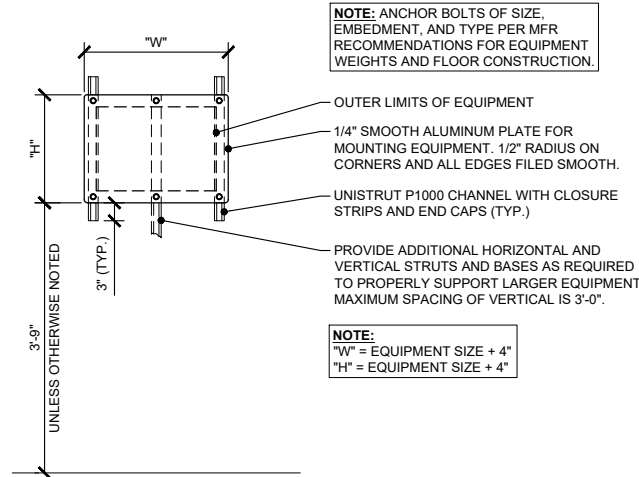
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JWVCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES
Advanced Engineering and Environmental Services, LLC www.ae2s.com

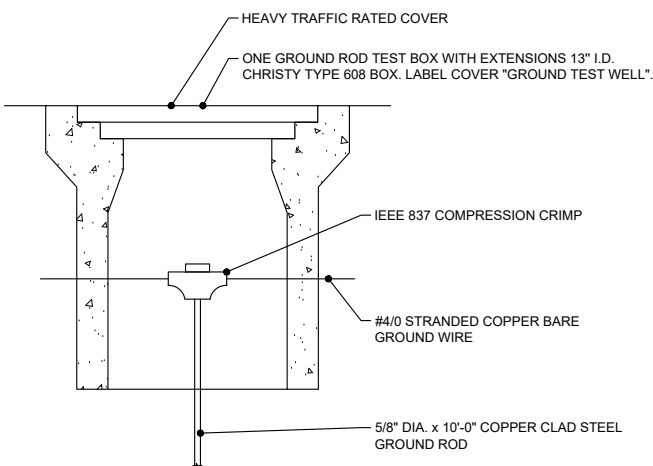
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VARIOUS SCHEDULES			
CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH		PREPARED BY: CAT CHECKED BY: TNF APPROVED BY: AMW	
PROJECT NO: 11910-2024-001 DATE: JULY 2025 ALT. PROJECT NO: 4366	SHEET DESIGNATOR: PS	SHEET NO: E609	

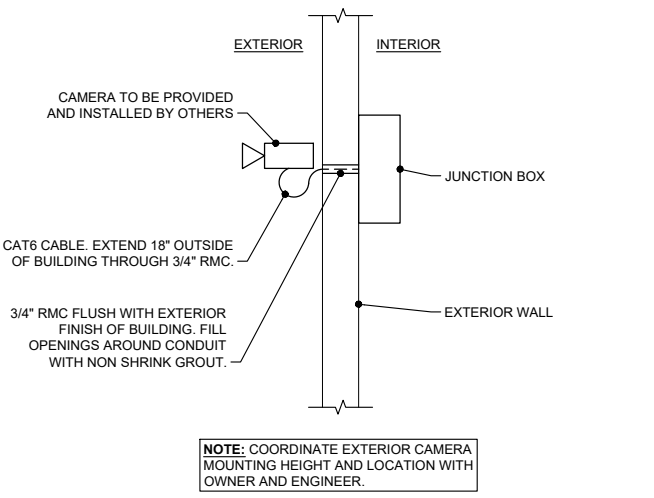
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Printed By: Cole Tuel Date: Thursday, August 14, 2025



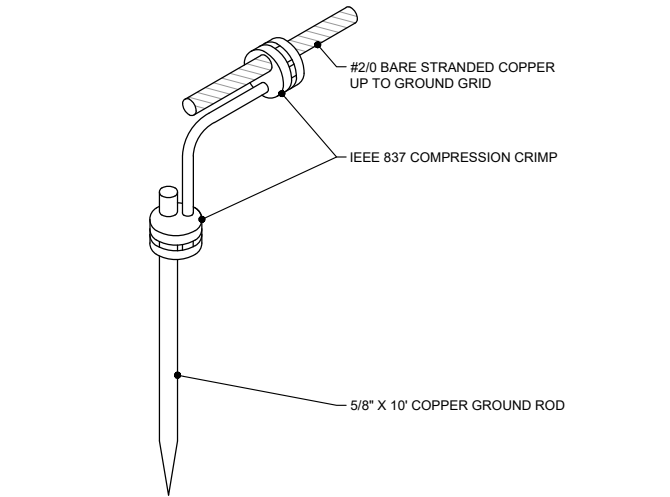
1 WALL MOUNTED EQUIPMENT DETAIL
E701 SCALE: NONE EQPM022



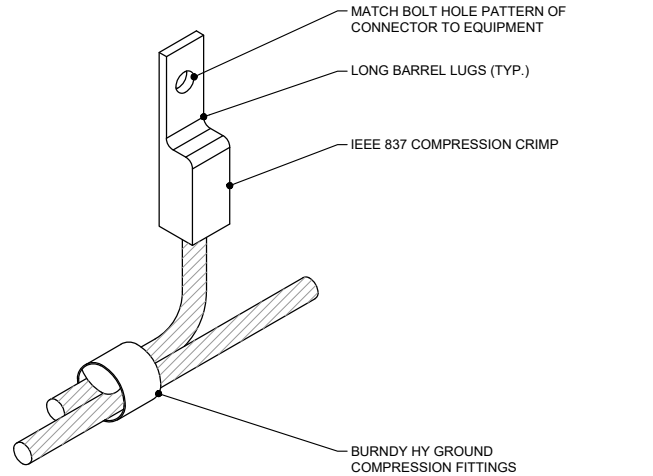
2 GROUND TEST WELL DETAIL
E701 SCALE: NONE GRND007



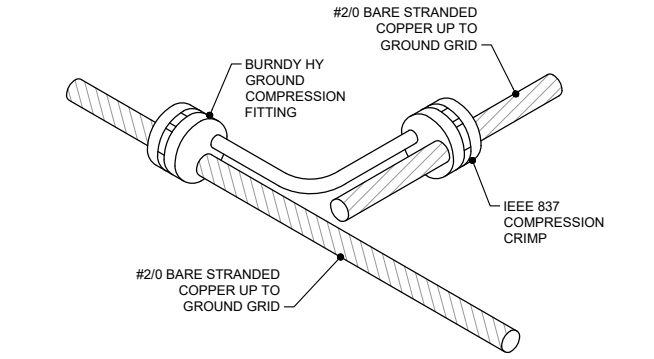
3 EXTERIOR VIDEO CAMERA MOUNTING DETAIL
E701 SCALE: NONE EQPM008



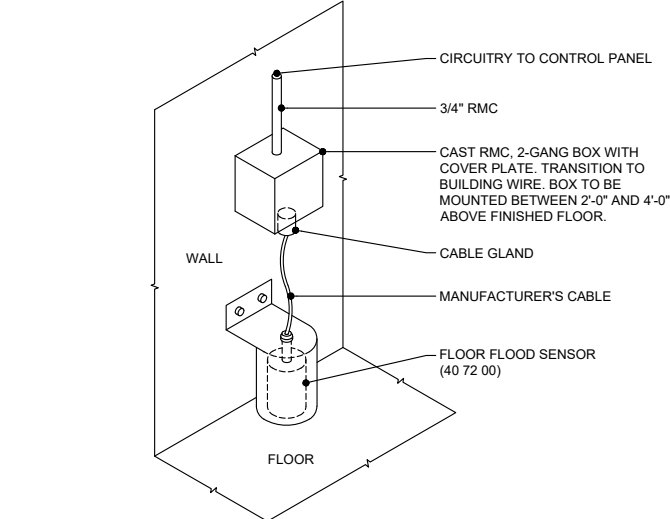
4 CONDUCTOR TO GROUND ROD CONNECTION DETAIL
E701 SCALE: NONE GRND020



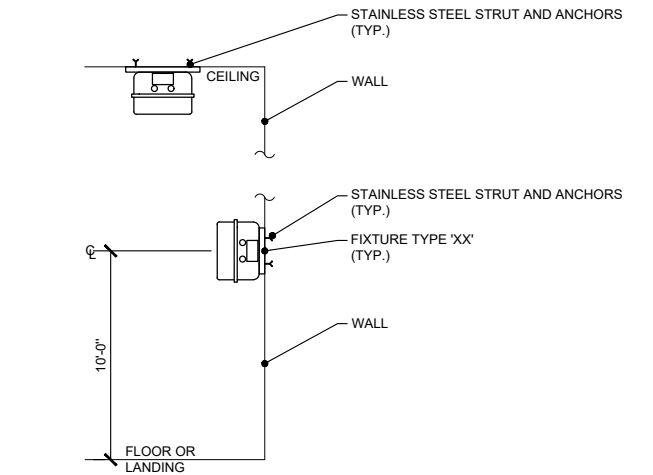
5 EQUIPMENT GROUNDING CONNECTION DETAIL
E701 SCALE: NONE GRND001



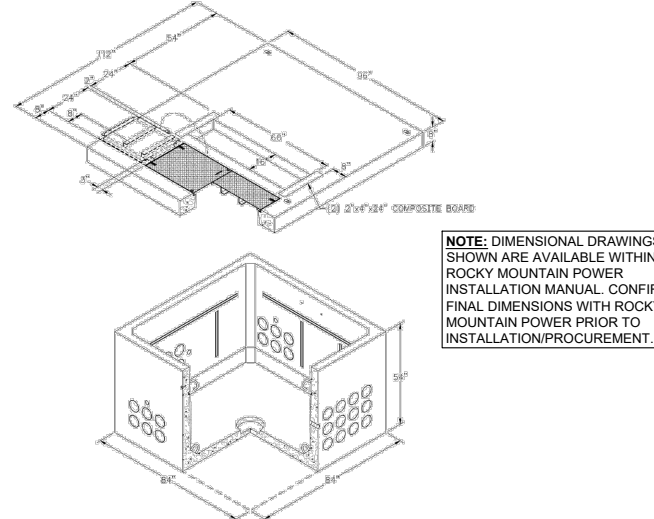
6 CONDUCTOR TO CONDUCTOR GROUND GRID CONNECTION DETAIL
E701 SCALE: NONE GRND018



7 FLOOR FLOOD SWITCH DETAIL
E701 SCALE: NONE EQPM128



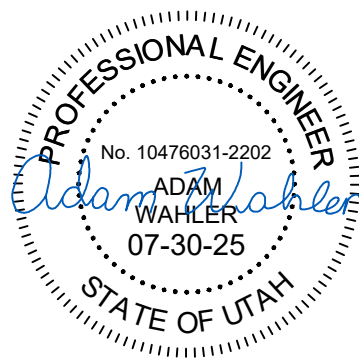
8 WALL AND CEILING FIXTURE MOUNTING DETAIL
E701 SCALE: NONE LGHT016



9 RADIAL-FEED TRANSFORMER PADVAULT
E701 SCALE: NONE



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



GENERAL NOTES
1. SEE SHEET E001 FOR GENERAL NOTES.

VARIOUS DETAILS			
CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH		PREPARED BY: CAT CHECKED BY: TNF APPROVED BY: AMW	
PROJECT NO: 11910-2024-001	SHEET DESIGNATOR:	SHEET NO:	
DATE: JULY 2025		SD E701	
ALT. PROJECT NO: 4366			

STATUS: FOR CONSTRUCTION
SYN DATE

PROJECT TITLE:
JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES
Advanced Engineering and Environmental Services, LLC www.ae2s.com

APPR

File: WJWCD11910-2024-001-CAD Dwg06-Electrical-Auxiliary-Pan-Sheet06-Pumping Manhole Section.dwg
Plotted By: Cole Tuel Date: Thursday, August 14, 2025

CONTRACTOR TO PROVIDE LEVER ARM STYLE LIMIT SWITCH FOR USE WITH PUMPING MANHOLE ACCESS HATCH AND LIGHT. PROVIDE 15A SQUARE D 9007 C HEAVY DUTY COMPACT TYPE LIMIT SWITCH WITH ASSOCIATED LEVER ARM ACTUATOR. INTENT IS TO TURN VAULT LIGHT ON WHILE ACCESS HATCH IS OPEN AND VICE VERSA WHILE ACCESS HATCH IS CLOSED.

LIGHTING FIXTURE TO BE LITHONIA FEM-L48-8000LM-LPPFL-MD-MVOLT 40K-80CRI (TYPE A WITHIN LUMINAIRE SCHEDULE) OR EQUAL. FIXTURE TO BE CEILING MOUNTED. PROVIDE MOUNTING EQUIPMENT AS NECESSARY. FIXTURE TO BE TIED TO ACCESS HATCH LIMIT SWITCH. CONFIRM FINAL LOCATION WITH ENGINEER.

NEMA 3R/4 PUMP MANUFACTURER SUPPLIED CONTROL ENCLOSURE. PUMP CONTROL PANEL TO INCLUDE AT MINIMUM: 10A/1P CONTROLS CIRCUIT BREAKER, 60A/3P PUMP CIRCUIT BREAKER, HOA TOGGLE SWITCH, 25HP SOFT STARTER, ISOLATION MOTOR CONTACTOR, CONTROLS TRANSFORMER AND RELATED CONTROL RELAYS, TERMINAL BLOCKS, AND OTHER CONTROLS APPURTENANCES AS REQUIRED.

MOUNT PUMP CONTROL ENCLOSURE AND JUNCTION BOX ON STRUT STAND. STRUT TO BE 1-5/8" GALVANIZED STRUCTURAL CHANNEL (TYP.).

NEMA 3R PUMPING MANHOLE LIGHTING JUNCTION BOX. JUNCTION BOX TO BE 12" x 12" x 6" MINIMUM. TRANSITION FROM BUILDING WIRE TO PUMP MANUFACTURER SUPPLIED SUBMERSIBLE CABLE.

PUMP SUBMERSIBLE CABLES FURNISHED BY OTHERS AND INSTALLED BY CONTRACTOR WITHIN 1" CONDUIT

1" PVC CONDUIT FROM PUMP STATION CONTAINING WET WELL LIGHTING POWER CONDUCTORS SUBMERSIBLE PUMP BUILDING WIRE TO PUMP STATION. SEE SITE PLAN FOR CIRCUITRY ROUTING DETAILS.

PROVIDE (1) SPARE 1" PVC CONDUIT BETWEEN CONTROL ENCLOSURE AND PUMP STATION

EXISTING GROUND EL 4935.00 ±

18" MIN. ABOVE GRADE

BELL ENDS

CORE DRILL OR SLEEVE STRUCTURE FOR CONDUIT INSTALLATION. FILL OPENING AROUND CONDUIT AS NEEDED WITH NON-SHRINK GROUT.

SECURE CONDUIT WITH CONDUIT HANGERS AS REQUIRED WITHIN MANHOLE

CONTRACTOR TO PROVIDE CABLE HOLDER

COIL 10' EXTRA CABLE

NOTE: PUMPING MANHOLE IS A NON-RATED / NON-HAZARDOUS SPACE.

POND HIGH LEVEL EL 4933.50 ±

POND FLOOR EL 4929.00 ±

SUBMERSIBLE PUMP PROVIDED BY OTHERS AND CIRCUITED BY DIV. 26. PUMP TO BE EQUIPPED WITH BALL CHECK VALVE AND FLOAT SWITCH INTEGRAL TO UNIT. SEE CIVIL PLANS FOR DETAILS.

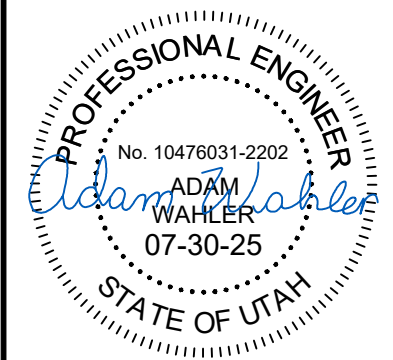
EL 4922.30 ±

EL 4921.00 ±

1 PUMPING MANHOLE ELECTRICAL SECTION - LOOKING WEST
E702



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



GENERAL NOTES

- 1. SEE SHEET E001 FOR GENERAL NOTES.

SHEET TITLE: PUMPING MANHOLE SECTION DETAIL

CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH	PREPARED BY: CAT CHECKED BY: TNF APPROVED BY: AMW
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PROJECT NO: 11910-2024-001 DATE: JULY 2025 ALT. PROJECT NO: 4366	SHEET DESIGNATOR: SD	SHEET NO: E702
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STATUS: FOR CONSTRUCTION

DATE

SYM

APPR

JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES
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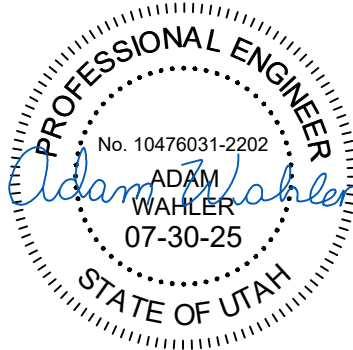
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Printed By: Cole Tiedt Date: Thursday, August 14, 2025

CABLE AND CONDUIT SCHEDULE - 5700 W 10200 S PUMP STATION														
TAGNAME	IDENTIFIER	CONDUIT		SERVICE RATING		CONDUCTORS						FROM	TO	NOTES
						Ø IN	PARALLEL SETS				NTRL			GND
		CURRENT CARRYING												
		QTY	TYPE	SIZE	QTY		TYPE	SIZE						
SW57-XFMR-U1		PROVIDED BY ROCKY MOUNTAIN POWER										UTILITY	SW57-XFMR-U1	-
SW57-MTR-CAB		6	6"	PROVIDED BY ROCKY MOUNTAIN POWER							SW57-XFMR-U1	SW57-MTR-CAB	-	
		-	-	-	-	-	-	-	-	-			-	
SW57-ATS1	A	6	4"	277/480	3	6	3	1/C	#600	#600	-	SW57-MTR-CAB	SW57-ATS1	TYPE P2
	B	3	4"	277/480	3	3	3	1/C	#600	#600	#3/0	SW57-GEN1	SW57-ATS1	TYPE P2
	C	1	1"	CONTROL	-	-	1	12/C	#14	-	-	SW57-GEN1	SW57-ATS1	TYPE C1
	D	1	1"	SIGNAL	-	-	2	2/C	#16	-	SHIELD	SW57-GEN1	SW57-ATS1	TYPE S1
	E	1	1"	CONTROL	-	-	1	12/C	#14	-	-	SW57-ATS1	SW57-RTU1	TYPE C1
	F	1	3/4"	DATA	-	-	1	CAT 6	-	-	-	SW57-ATS1	SW57-RTU1	TYPE D4
		-	-	-	-	-	-	-	-	-	-			-
SW57-GEN1	A	1	1"	120/240	1	1	2	1/C	#6	#6	#10	SW57-LP1	SW57-GEN1-LP1	TYPE P2
	B	1	1-1/4"	CONTROL	-	①					SW57-GEN1-GACP	SW57-GEN1	TYPE C1	
	C	1	1-1/4"	CONTROL	-	-	1	25/C	#14	-	-	SW57-GEN1	SW57-RTU1	TYPE C1
	D	1	1"	SIGNAL	-	-	2	2/C	#16	-	SHIELD	SW57-GEN1	SW57-RTU1	TYPE S1
	E	1	3/4"	DATA	-	-	1	CAT 6	-	-	-	SW57-GEN1	SW57-RTU1	TYPE D4
		-	-	-	-	-	-	-	-	-	-			-
GENERATOR EMERGENCY STOP	1	3/4"	CONTROL	-	-	1	2/C	#14	-	-	SW57-GEN1-ESTOP1	SW57-GEN1-ESTOP2	TYPE C1	
		-	-	-	-	-	-	-	-	-	-			-
SW57-MCC1	6	4"	277/480	3	6	3	1/C	#600	#600	#350	SW57-ATS1	SW57-MCC1	TYPE P2	
		-	-	-	-	-	-	-	-	-	-			-
SW57-PM1	A	1	3/4"	480	3	1	3	1/C	#12	-	#12	SW57-MCC1	SW57-PM1	TYPE P1
	B	1	3/4"	480	3	1	3	1/C	#12	-	#12	SW57-MCC1	SW57-PM1	TYPE P1
	C	1	3/4"	120/240	3	1	3	1/C	#12	#12	#12	SW57-RTU1 UPS	SW57-PM1	TYPE P1
	D	1	3/4"	DATA	-	-	1	CAT 6	-	-	-	SW57-PM1	SW57-RTU1	TYPE D4
		-	-	-	-	-	-	-	-	-	-			-
SW57-MCC1-SPD1	1	3/4"	CONTROL	-	-	1	2/C	#14	-	-	SW57-MCC1-SPD1	SW57-RTU1	TYPE C1	
		-	-	-	-	-	-	-	-	-	-			-
PMP-02551	A	2	3"	480	3	2	3	1/C	#350	-	#2/0	PMP-02551-RVSS	PMP-02551	TYPE P1
	B	1	3/4"	CONTROL	-	-	1	2/C	#14	-	-	SW57-RTU1	TS-02551	TYPE C1
	C	1	3/4"	CONTROL	-	-	1	9/C	#14	-	-	PMP-02551-RVSS	SW57-RTU1	TYPE C1
	D	1	3/4"	DATA	-	-	1	CAT 6	-	-	-	PMP-02551-RVSS	SW57-RTU1	TYPE D4
	E	1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	SW57-MCC1	TYPE P1
	F	1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-MCC1	HTR-02551	TYPE P1
		-	-	-	-	-	-	-	-	-	-			-
PMP-02552	A	2	3"	480	3	2	3	1/C	#350	-	#2/0	PMP-02552-RVSS	PMP-02552	TYPE P1
	B	1	3/4"	CONTROL	-	-	1	2/C	#14	-	-	SW57-RTU1	TS-02552	TYPE C1
	C	1	3/4"	CONTROL	-	-	1	9/C	#14	-	-	PMP-02552-RVSS	SW57-RTU1	TYPE C1
	D	1	3/4"	DATA	-	-	1	CAT 6	-	-	-	PMP-02552-RVSS	SW57-RTU1	TYPE D4
	E	1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	SW57-MCC1	TYPE P1
	F	1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-MCC1	HTR-02552	TYPE P1
		-	-	-	-	-	-	-	-	-	-			-
PMP-02553	A	2	3"	480	3	2	3	1/C	#350	-	#2/0	PMP-02553-RVSS	PMP-02553	TYPE P1
	B	1	3/4"	CONTROL	-	-	1	2/C	#14	-	-	SW57-RTU1	TS-02553	TYPE C1
	C	1	3/4"	CONTROL	-	-	1	9/C	#14	-	-	PMP-02553-RVSS	SW57-RTU1	TYPE C1
	D	1	3/4"	DATA	-	-	1	CAT 6	-	-	-	PMP-02553-RVSS	SW57-RTU1	TYPE D4

CABLE AND CONDUIT SCHEDULE - 5700 W 10200 S PUMP STATION														
TAGNAME	IDENTIFIER	CONDUIT		SERVICE RATING		CONDUCTORS						FROM	TO	NOTES
		QTY	SIZE			Ø #	PARALLEL SETS				NTRL			GND
				CURRENT CARRYING										
				QTY	TYPE		SIZE							
	E	1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	SW57-MCC1	TYPE P1
	F	1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-MCC1	HTR-02553	TYPE P1
	-	-	-	-	-	-	-	-	-	-	-			-
PMP-02554-VFD	A	2	3"	277/480	3	2	3	1/C	#350	#350	#1	SW57-MCC1	PMP-02554-VFD	TYPE P1
	B	1	3/4"	CONTROL	-	-	1	9/C	#14	-	-	PMP-02554-VFD	SW57-RTU1	TYPE C1
	C	1	1"	SIGNAL	-	-	3	2/C	#16	-	SHIELD	PMP-02554-VFD	SW57-RTU1	TYPE S1
	D	1	3/4"	DATA	-	-	1	CAT 6 SHIELDED	-	-	-	PMP-02554-VFD	SW57-RTU1	TYPE D3
	E	1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	PMP-02554-VFD	TYPE P1
PMP-02554	A	1	3/4"	120	1	1	1	1/C	#12	#12	#12	PMP-02554-VFD	HTR-02554	TYPE P1
	B	2	2-1/2"	480	3	2	3	1/C	#4/0	-	#1/0	PMP-02554-VFD	PMP-02554	TYPE P1
	C	1	3/4"	CONTROL	-	-	1	2/C	#14	-	-	SW57-RTU1	TS-02554	TYPE C1
	-	-	-	-	-	-	-	-	-	-	-			-
BFV3-02551	A	1	3/4"	480	3	1	3	1/C	#12	-	#12	SW57-MCC1	BFV3-02551	TYPE P1
	B	1	1"	CONTROL	-	-	1	12/C	#14	-	-	SW57-MCC1	BFV3-02551	TYPE C1
BFV3-02552	A	1	3/4"	480	3	1	3	1/C	#12	-	#12	BFV3-02551	BFV3-02552	TYPE P1
	B	1	1"	CONTROL	-	-	1	12/C	#14	-	-	BFV3-02551	BFV3-02552	TYPE C1
BFV3-02553	A	1	3/4"	480	3	1	3	1/C	#12	-	#12	BFV3-02552	BFV3-02553	TYPE P1
	B	1	1"	CONTROL	-	-	1	12/C	#14	-	-	BFV3-02552	BFV3-02553	TYPE C1
	-	-	-	-	-	-	-	-	-	-	-			-
ACU-1	A	1	1"	480	3	1	3	1/C	#6	-	#10	SW57-MCC1	ACU-1-DISC1	TYPE P2
	B	1	1"	480	3	1	3	1/C	#6	-	#10	ACU-1-DISC1	ACU-1	TYPE P2
	-	-	-	-	-	-	-	-	-	-	-			-
PUMPING MANHOLE PUMP	A	1	1"	480	3	1	3	1/C	#6	-	#10	SW57-MCC1	PUMPING MANHOLE PUMP CONTROLLER	TYPE P2
	B	1	1"	PUMP MANUFACTURER SUPPLIED SUBMERSIBLE CABLE								PUMPING MANHOLE PUMP CONTROLLER	PUMPING MANHOLE PUMP	-
	C	1	1"	PUMP MANUFACTURER SUPPLIED SUBMERSIBLE CABLE								PUMPING MANHOLE PUMP CONTROLLER	PUMPING MANHOLE PUMP	-
PUMPING MANHOLE LIGHTING	A	1	1"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	PUMPING MANHOLE LIGHTING JBOX	TYPE P2
	B	1	1"	120	1	1	1	1/C	#12	#12	#12	PUMPING MANHOLE LIGHTING JBOX	PUMPING MANHOLE LIGHTING	TYPE P2
PUMPING MANHOLE SPARE CONDUIT	1	1"	SPARE CONDUIT FOR FUTURE USE								EXISTING PUMP STATION	PUMPING MANHOLE SPARE CONDUIT	-	
	-	-	-	-	-	-	-	-	-	-	-			-
CMP-02590-ATL	1	3/4"	480	3	1	3	1/C	#12	-	#12	SW57-MCC1	CMP-02590-ATL DISCONNECT	TYPE P2	
	-	-	-	-	-	-	-	-	-	-	-			-
EUH-1	1	3/4"	480	3	1	3	1/C	#10	-	#10	SW57-MCC1	EUH-1	TYPE P1	
EUH-2	1	3/4"	480	3	1	3	1/C	#10	-	#10	EUH-1	EUH-2	TYPE P1	
EUH-3	1	3/4"	480	3	1	3	1/C	#10	-	#10	SW57-MCC1	EUH-3	TYPE P1	
EUH-4	1	3/4"	480	3	1	3	1/C	#10	-	#10	EUH-3	EUH-4	TYPE P1	
	-	-	-	-	-	-	-	-	-	-	-			-
D-1	1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	D-1 RECEPTACLE	TYPE P1	
	-	-	-	-	-	-	-	-	-	-	-			-
SW57-H2	1	1"	480	3	1	3	1/C	#8	-	#10	SW57-MCC1	SW57-H2	TYPE P2	
	-	-	-	-	-	-	-	-	-	-	-			-
SW57-XFMR-LP1	1	1"	480	1	1	2	1/C	#4	-	#8	SW57-MCC1	SW57-XFMR-LP1	TYPE P1	
SW57-LP1	1	1-1/2"	120/240	1	1	2	1/C	#1	#1	#6	SW57-XFMR-LP1	SW57-LP1	TYPE P1	
SW57-GEN1-LP1	1	1"	120/240	1	1	2	1/C	#6	#6	#10	SW57-LP1	SW57-GEN1-LP1	TYPE P2	
SW57-LP1-SPD1	1	3/4"	CONTROL	-	-	2	1/C	#14	-	-	SW57-LP1-SPD1	SW57-RTU1	TYPE P1	
	-	-	-	-	-	-	-	-	-	-	-			-



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



- GENERAL NOTES**
- SEE SHEET E001 FOR GENERAL NOTES.
 - SEE ELECTRICAL IMPROVEMENTS PLANS FOR EXISTING UNDERGROUND CONDUITS TO BE REUSED OR EXTENDED.
- CONSTRUCTION NOTES**
- ① FURNISHED BY GENERATOR MANUFACTURER (26 32 13) AND INSTALLED BY CONTRACTOR.

SHEET TITLE: CABLE & CONDUIT SCHEDULE		
CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH	PREPARED BY: CAT CHECKED BY: TNF APPROVED BY: AMW	
PROJECT NO: 11910-2024-001 DATE: JULY 2025 ALT. PROJECT NO: 4366	SHEET DESIGNATOR: PS	SHEET NO: E801

STATUS: FOR CONSTRUCTION

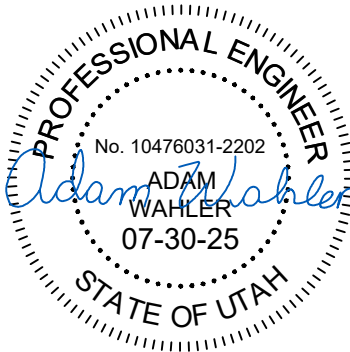
DATE
SYN

JVWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES
Advanced Engineering and Environmental Services, LLC www.ae2s.com

CABLE AND CONDUIT SCHEDULE - 5700 W 10200 S PUMP STATION														
TAGNAME	IDENTIFIER	CONDUIT		SERVICE RATING		LO #	CONDUCTORS					FROM	TO	NOTES
		QTY	SIZE				PARALLEL SETS				NTRL			GND
				CURRENT CARRYING										
				QTY	TYPE		SIZE							
SW57-RTU-1		1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	SW57-RTU1	TYPE P1
SW57-RTU1		1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	SW57-RTU1	TYPE P1
PUMP STATION SECURITY PANEL		1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	PUMP STATION SECURITY PANEL	TYPE P1
DAMPER (MD-1)		1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	DAMPER (MD-1)	TYPE P1
DAMPER (MD-2)		1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	DAMPER (MD-2)	TYPE P1
		-	-	-	-	-	-	-	-	-	-			-
FIT-02501		1	3/4"	DATA	-	-	1	CAT 6	-	-	-	SW57-RTU1	FIT-02501	TYPE D4
		-	-	-	-	-	-	-	-	-	-			-
SW57-DS1		1	3/4"	CONTROL	-	-	1	2/C	#14	-	-	SW57-RTU1	SW57-DS1	TYPE C1
		-	-	-	-	-	-	-	-	-	-			-
PUMP STATION SPRINKLERS		1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	PUMP STATION SPRINKLERS	TYPE P1
		-	-	-	-	-	-	-	-	-	-			-
EF-1		1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	EF-1	TYPE P1
SF-1		1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	SF-1	TYPE P1
		-	-	-	-	-	-	-	-	-	-			-
SURGE TANK FAN MOTOR		1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	SURGE TANK FAN MOTOR	TYPE P1
NORTH VAULT FLOWMETER		1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	NORTH VAULT FLOWMETER	TYPE P2
NORTH VAULT EXHAUST FAN		1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	NORTH VAULT EXHAUST FAN	TYPE P2
		-	-	-	-	-	-	-	-	-	-			-
CATHODIC PROTECTION		1	3/4"	240	1	1	2	1/C	#12	-	#12	SW57-LP1	CATHODIC PROTECTION	TYPE P2
		-	-	-	-	-	-	-	-	-	-			-
PSH-02551		1	3/4"	CONTROL	-	-	1	4/C	#14	-	-	SW57-RTU1	PSH-02551	TYPE C1
PSH-02552		1	3/4"	CONTROL	-	-	1	4/C	#14	-	-	SW57-RTU1	PSH-02552	TYPE C1
PSH-02553		1	3/4"	CONTROL	-	-	1	4/C	#14	-	-	SW57-RTU1	PSH-02553	TYPE C1
PSH-02554		1	3/4"	CONTROL	-	-	1	4/C	#14	-	-	SW57-RTU1	PSH-02554	TYPE C1
		-	-	-	-	-	-	-	-	-	-			-
PIT-02502		1	3/4"	SIGNAL	-	-	1	2/C	#16	-	SHIELD	SW57-RTU1	PIT-02502	TYPE S1
TIT-02519		1	3/4"	SIGNAL	-	-	1	2/C	#16	-	SHIELD	SW57-RTU1	TIT-02519	TYPE S1
INT-02519		1	3/4"	CONTROL	-	-	1	2/C	#14	-	-	SW57-RTU1	INT-02519	TYPE C1
LSH-02562		1	3/4"	CONTROL	-	-	1	2/C	#14	-	-	SW57-RTU1	LSH-02562	TYPE C1
		-	-	-	-	-	-	-	-	-	-			-
NORTH VAULT CONTROL JBOX	A	1	1"	CONTROL	-	-	20	1/C	#14	-	-	SW57-RTU1	NORTH VAULT CONTROL JBOX	TYPE P1
	B	1	1"	SIGNAL	-	-	2	2/C	#16	-	SHIELD	SW57-RTU1	NORTH VAULT CONTROL JBOX	TYPE S1
NORTH VAULT POWER JBOX	A	1	3/4"	480	3	1	3	1/C	#12	-	#12	SW57-MCC1	NORTH VAULT POWER JBOX	TYPE P2
	B	1	1"	120	1	1	8	1/C	#12	-	#12	SW57-LP1	NORTH VAULT POWER JBOX	TYPE P2
		-	-	-	-	-	-	-	-	-	-			-
INT-02561		1	3/4"	CONTROL	-	-	1	2/C	#14	-	-	SW57-RTU1	INT-02561	TYPE C1
MSH-02551		1	3/4"	CONTROL	-	-	1	2/C	#14	-	-	SW57-RTU1	MSH-02551	TYPE C1
		-	-	-	-	-	-	-	-	-	-			-
SURGE TANK FAN MOTOR		1	3/4"	120	1	1	1	1/C	#12	#12	#12	SW57-LP1	SURGE TANK FAN MOTOR	TYPE P1
LT-02504		1	3/4"	SIGNAL	-	-	1	2/C	#16	-	SHIELD	SW57-RTU1	LT-02504	TYPE S1
SV-02592		1	3/4"	CONTROL	-	-	2	1/C	#14	-	-	SW57-RTU1	SV-02592	TYPE P1
		-	-	-	-	-	-	-	-	-	-			-
CPB-4		1	1-1/2"	CONTROL	-	-	12	1/C	#14	-	-	SW57-RTU1	CPB-4	TYPE P1



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



GENERAL NOTES

- 1. SEE SHEET E001 FOR GENERAL NOTES.
- 2. SEE ELECTRICAL IMPROVEMENTS PLANS FOR EXISTING UNDERGROUND CONDUITS TO BE REUSED OR EXTENDED.

STATUS: FOR CONSTRUCTION

JVWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com

PROJECT TITLE:

SHEET TITLE:

CABLE & CONDUIT SCHEDULE

CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH

PREPARED BY: CAT

CHECKED BY: TNF

APPROVED BY: AMW

PROJECT NO: 11910-2024-001

SHEET DESIGNATOR:

SHEET NO:

DATE: JULY 2025

ALT. PROJECT NO: 4366

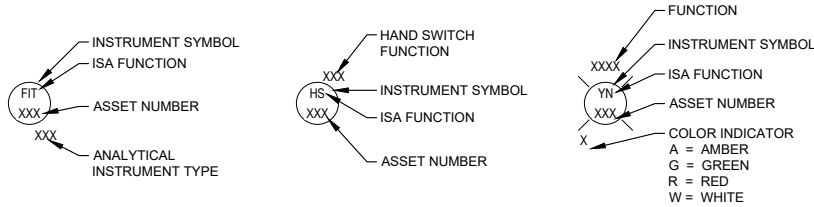
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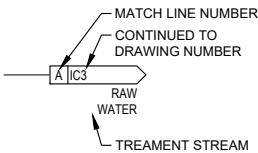
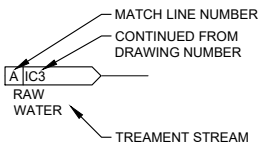
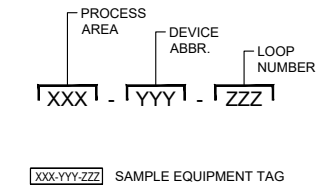
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IDENTIFICATION LETTERS					
FIRST LETTER			SUCCEEDING LETTERS		
LETTER	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	INPUT / OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		AUTO
B	BURNER, COMBUSTION		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C	COMMUNICATION			CONTROL	CLOSE
D	USER'S CHOICE	DIFFERENTIAL			
E	VOLTAGE		SENSOR (PRIMARY ELEMENT)		
F	FLOW RATE	RATIO (FRACTION)			FAULT
G	USER'S CHOICE		GLASS, VIEWING DEVICE		
H	HAND				HIGH
I	CURRENT (ELECTRICAL)		INDICATE		
J	POWER	SCAN			
K	TIME, TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L	LEVEL		LIGHT		LOW
M	MOTOR	MOMENTARY			MIDDLE INTERMEDIATE
N	SECURITY		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
O	USER'S CHOICE		ORIFICE, RESTRICTION		OPEN
P	PRESSURE, VACUUM		POINT (TEST) CONNECTION		
Q	QUANTITY OR EVENT	INTEGRATE, TOTALIZE			
R	RADIATION		RECORD		RUN/REMOTE
S	SPEED, FREQUENCY	SAFETY		SWITCH/STATUS	STOP
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V	VIBRATION, MECHANICAL ANALYSIS			VALVE, DAMPER, LOUVER	
W	WEIGHT, FORCE		WELL		
X	UNCLASSIFIED	X-AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT, STATE OR PRESENCE	Y-AXIS		RELAY, COMPUTE, CONVERT	
Z	POSITION, DIMENSION	Z-AXIS		DRIVER, ACTUATOR	

GENERAL INSTRUMENT OR FUNCTION SYMBOLS LEGEND					
	FIELD MOUNTED	PRIMARY LOCATION (ACCESSIBLE)	PRIMARY LOCATION (INACCESSIBLE)	AUXILIARY LOCATION (ACCESSIBLE)	AUXILIARY LOCATION (INACCESSIBLE)
DISCRETE INSTRUMENTS					
SHARED CONTROL/ DISPLAY ELEMENTS					
COMPUTER FUNCTIONS					
PLC					



EQUIPMENT DESIGNATOR



PROCESS EQUIPMENT LINETYPE / COLOR LEGEND			
EXISTING	PROPOSED	FUTURE	DESCRIPTION
			PROCESS PIPING / FLOW
			CHEMICAL PIPING
			PIPE FITTING
			EQUIPMENT
			VALVES
			SENSORS
			INSTRUMENT
			PLANT AIR

POWER AND COMMUNICATION CABLE LINETYPE / COLOR LEGEND			
EXISTING	PROPOSED	FUTURE	DESCRIPTION
			SIGNAL - ELECTRIC
			24VDC POWER
			120VAC POWER
			208VAC POWER
			240VAC POWER
			480VAC POWER
			SCADA NETWORK (FIBER)
			SCADA NETWORK (ETHERNET/IP)
			SCADA NETWORK (MODBUS/TCP)
			SCADA NETWORK (DEVICENET)

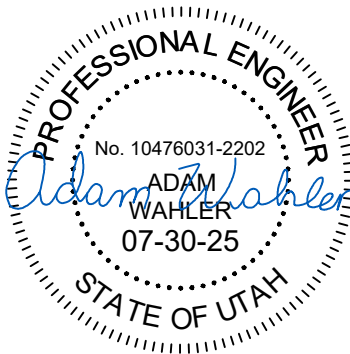
GENERAL NOTES

- THE SYMBOLIZATION AND NOMENCLATURE USED ON THESE P&ID DRAWINGS ARE BASED ON ISA STANDARDS AND INDUSTRY CONVENTIONS. SOME MODIFICATIONS AND ADDITIONS HAVE BEEN MADE FOR CLARIFICATIONS AND OMISSIONS IN STANDARDS.
- THE SYMBOLIZATION AND NOMENCLATURE SHOWN HERE APPLIES TO P&ID DRAWINGS ONLY. ADDITIONAL LEGENDS MAY BE USED ON OTHER DRAWINGS.
- SOME SYMBOLS MAY NOT BE SHOWN ON THIS LEGEND. NOT ALL SYMBOLS SHOWN MAY NECESSARILY BE USED ON THESE DRAWINGS.

HAND SWITCH ABBREVIATIONS	
MARK	DESCRIPTION
0-100%	POTENTIOMETER CONTROL
E-STOP	EMERGENCY STOP
FOR	FORWARD OFF REVERSE
HOA	HAND OFF AUTO
HOO	HAND ON/OFF
HOR	HAND OFF REMOTE
HORN	ALARM HORN
JOR	JOG OFF REMOTE
L/R	LOCAL REMOTE
LOR	LOCAL OFF REMOTE
LSR	LOCAL STOP REMOTE
MA	MANUAL AUTO
MR	MANUAL REMOTE
O/C	OPEN CLOSE
OCA	OPEN CLOSE AUTO
OCR	OPEN CLOSE REMOTE
OSC	OPEN STOP CLOSE
POT	POTENTIOMETER
RST	RESET
SC	SPEED CONTROL
SIL	HORN SILENCE
SS	START STOP
STP	STOP
STR	START
TOA	TEST OFF/AUTO
WDA	WET DRY AUTO



Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively



STATUS: FOR CONSTRUCTION

JVWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com

PROCESS AND INSTRUMENTATION DIAGRAM SYMBOLS AND ABBREVIATIONS

CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH

PREPARED BY: MAW

CHECKED BY: MAW

APPROVED BY: AMW

PROJECT NO: 11910-2024-001

DATE: JULY 2025

SHEET DESIGNATOR: PID

SHEET NO: IC001

ALT. PROJECT NO: 4366

ANNOTATION LEGEND	
MARK	DESCRIPTION
	EQUIPMENT TAG
	ON/OFF PAGE CONNECTORS 1-WAY
	ON/OFF PAGE CONNECTORS 2-WAY
	BREAK
	PROCESS FLOW DIRECTION ARROW
	HART TOTALIZER
	ANALOG INPUT / INTRINSICALLY SAFE ANALOG INPUT
	ANALOG OUTPUT
	DIGITAL INPUT / INTRINSICALLY SAFE DIGITAL INPUT
	DIGITAL OUTPUT
	PUMP SUPERVISORY RELAY
	HARDWARE INTERFACE MODULE
	HUMAN MACHINE INTERFACE
	OPERATOR INTERFACE TERMINAL
	INTERLOCK
	PIPE JUMP
	LEAK PROBE
	REDUCER / EXPANDER

VALVE/GATE LEGEND	
MARK	DESCRIPTION
	AIR RELEASE
	AIR VACUUM / RELEASE
	GENERIC
	GATE
	BUTTERFLY
	PLUG
	PINCH
	BALL
	BALL V-NOTCH THROTTLING
	BALL - FLOAT
	KNIFE GATE
	MUD
	NEEDLE
	DIAPHRAGM
	GENERIC N.C.
	GATE N.C.
	BUTTERFLY N.C.
	PLUG N.C.
	PINCH N.C.
	BALL N.C.
	KNIFE GATE N.C.
	NEEDLE N.C.
	DIAPHRAGM N.C.
	DOUBLE BLOCK
	PLUG - 3-WAY
	3-WAY
	4-WAY
	CHECK
	SURGE ANTICIPATOR
	PRESSURE REDUCING
	PRESSURE SUSTAINING / FLOW CONTROL VALVE
	ANGLE
	RUPTURE DISK - PRESSURE
	REDUCED PRESSURE ZONE / BACKFLOW PREVENTER
	GATE (GENERIC)
	STOP PLATE
	WEIR GATE (MANUAL AND ACTUATED)
	SLUICE GATE (MANUAL AND ACTUATED)
	DIVERTER GATE
	STRAINER
	BASKET STRAINER
	CAP
	QUICK CONNECT/ADAPTER
	AUTO FEED VALVE
	FLEX CONNECTION
	DRAIN
	AIR BREAK
	BLIND FLANGE
	SIGHT GLASS
	PVC TO FLEXIBLE TUBING ADAPTER


VALVE ACTUATOR LEGEND	
MARK	DESCRIPTION
	DIAPHRAGM
	ROTARY MOTOR
	ELECTRIC
	ELECTRIC - OPEN/CLOSE
	ELECTRIC - MODULATING
	PNEUMATIC
	PNEUMATIC - OPEN/CLOSE
	PNEUMATIC - MODULATING
	HYDRAULIC
	SOLENOID
	HAND
	HAND WHEEL
	CHAIN WHEEL
	FLOOR STAND
	FLOOR BOX
	WEIGHTED PRESSURE RELIEF

INSTRUMENT LEGEND	
MARK	DESCRIPTION
	FLOW METER - MAGNETIC
	FLOW METER - TURBINE OR PROPELLER
	FLOW METER - POSITIVE DISPLACEMENT
	FLOW METER - CORIOLLIS
	FLOW METER - SONIC OR ULTRASONIC
	FLOW TUBE
	ORIFICE PLATE - GENERIC
	ORIFICE PLATE - CONCENTRIC
	OPEN CHANNEL WEIR PLATE
	OPEN CHANNEL FLUME
	THERMAL DISPERSION FLOW ELEMENT
	ROTAMETER
	ULTRASONIC LEVEL SENSOR
	RADAR LEVEL SENSOR
	DIAPHRAGM SEAL

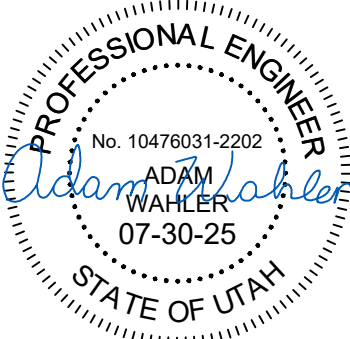
PUMP LEGEND	
MARK	DESCRIPTION
	GENERIC
	SUBMERSIBLE
	SLUDGE DIAPHRAGM
	ROTARY LOBE POSITIVE DISPLACEMENT PUMP
	CHEMICAL FEED - METERING PUMP
	CHEMICAL FEED - PERISTALTIC PUMP
	PROGRESSIVE CAVITY
	VERTICAL TURBINE - IN BASIN
	VERTICAL TURBINE - IN CAN
	SUBMERSIBLE WELL PUMP

BLOWER LEGEND	
MARK	DESCRIPTION
	TURBO BLOWER
	BLOWER (GENERIC)

EQUIPMENT LEGEND	
MARK	DESCRIPTION
	MOTOR - PUMPS / BLOWERS
	AERATOR
	MIXER
	POLYMER INLINE MIXER
	CALIBRATION COLUMN / FLOW INDICATOR
	PULSATION DAMPENER
	AERATION DIFFUSERS
	JET MIXING HEADER
	EJECTOR
	EDUCTOR
	CHEMICAL INJECTOR
	CHEMICAL STORAGE TANK
	CHEMICAL STORAGE TOTE
	CHEMICAL STORAGE DRUM
	DESSICANT DRYER
	FLOW STRAIGHTENING
	HYDRANT
	SEDIMENT TRAPPER FILTER
	STATIC MIXER
	AIR FILTER
	PRESSURE REGULATOR
	AIR DRYER
	PILOT NOZZLE
	FLAME ARRESTOR
	DRIP TRAP
	DAMPER
	ALARM
	STROBE



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FOR CONSTRUCTION

PROJECT NO: 11910-2024-001

DATE: JULY 2025

ALT. PROJECT NO: 4366

SHEET DESIGNATOR:

PID

SHEET NO:

IC002

CLIENT:
JORDAN VALLEY WATER CONSERVANCY
DISTRICT
SOUTH JORDAN, UTAH

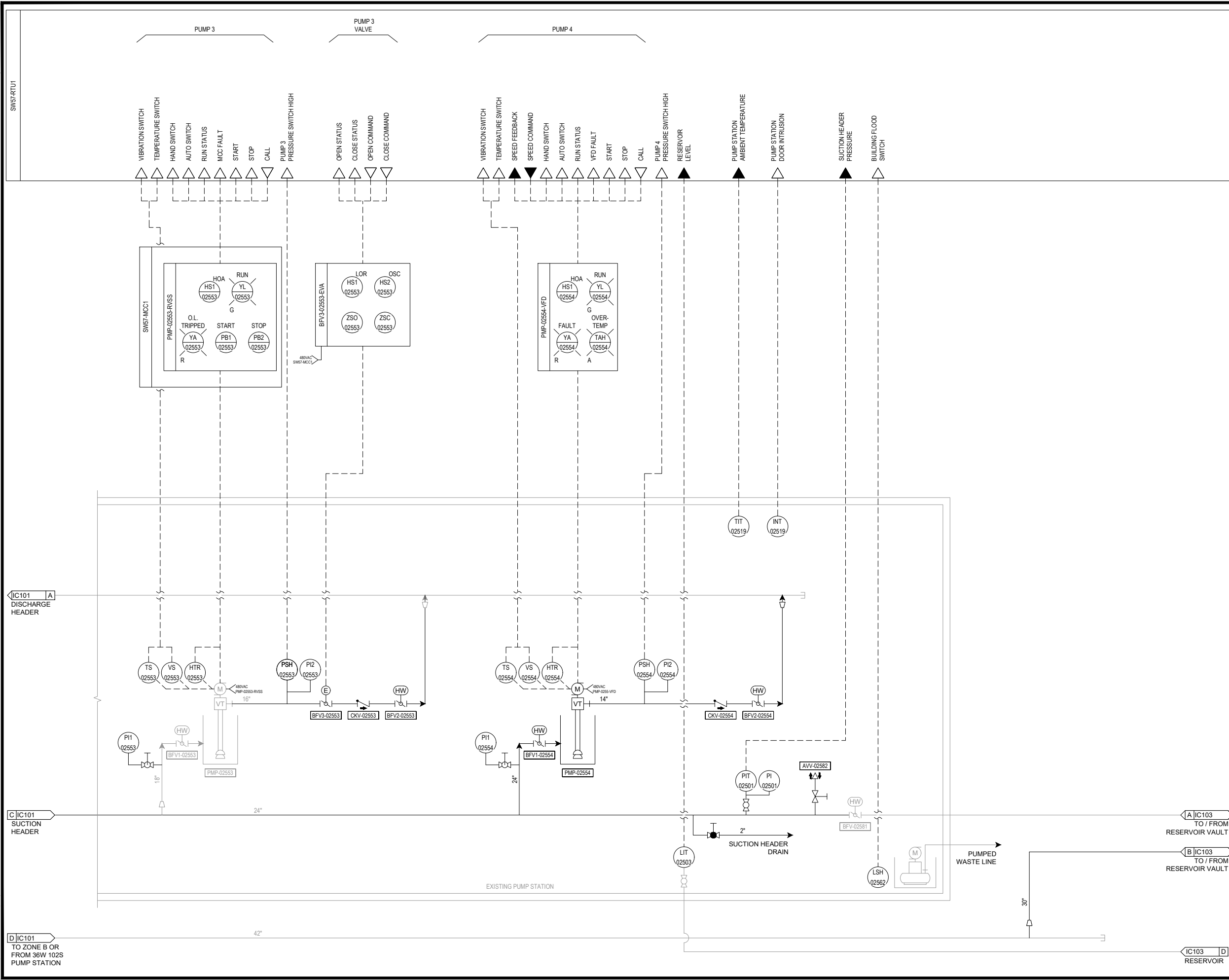
PREPARED BY: MAW
CHECKED BY: MAW
APPROVED BY: AMW


JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com



File: WJWCD 5700 WEST 10200 SOUTH PUMP STATION P&ID.dwg
Printed By: Cole Tuel Date: Friday, August 15, 2025





Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively

PROFESSIONAL ENGINEER

No. 10476031-2202

ADAM WAHLER

07-30-25

STATE OF UTAH

GENERAL NOTES

1. P&ID'S SHOWN BASED ON EXISTING DRAWINGS AND FIELD OBSERVATION. EXACT ROUTING AND TAGGING MAY VARY.

SHEET TITLE: PUMP STATION CONTINUED	
CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH	PREPARED BY: MAW CHECKED BY: MAW APPROVED BY: AMW
PROJECT NO: 11910-2024-001 DATE: JULY 2025 ALT. PROJECT NO: 4366	SHEET DESIGNATOR: PID SHEET NO: IC102

STATUS: **FOR CONSTRUCTION**

SYMBOL: **SYM**

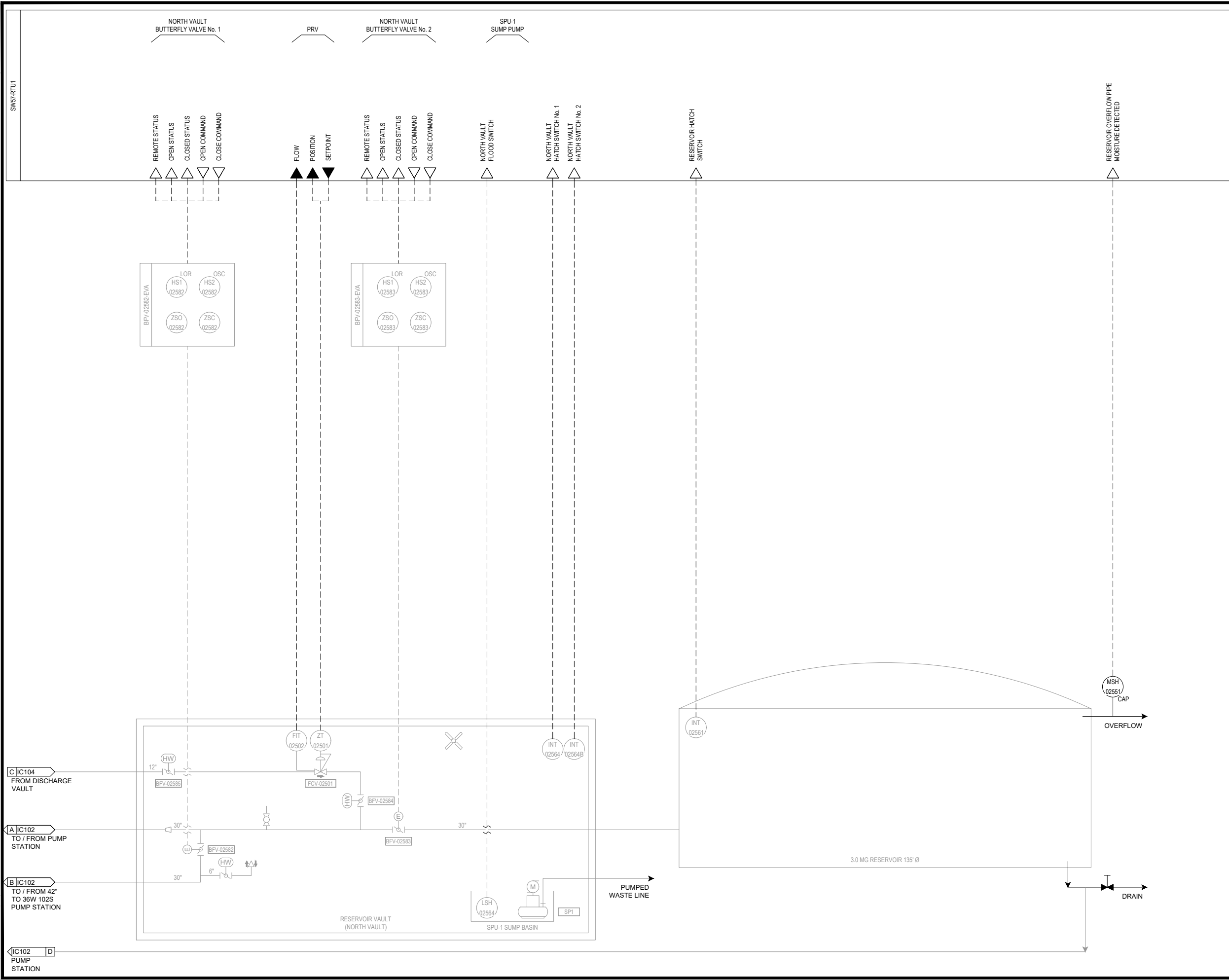
DATE: **DATE**


APPROVED: **APPR**

PROJECT TITLE:
JWVCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com

File: WJWCD571020-2024-001 (CAD Dwg) 07-2025en Sheets\IC_P&ID.dwg
Printed By: Cole Tuel Date: Friday, August 15, 2025





Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively

PROFESSIONAL ENGINEER

No. 10476031-2202

ADAM WAHLER

07-30-25

STATE OF UTAH

STATUS: FOR CONSTRUCTION

SYM

DATE

APPR

GENERAL NOTES

1. P&ID'S SHOWN BASED ON EXISTING DRAWINGS AND FIELD OBSERVATION. EXACT ROUTING AND TAGGING MAY VARY.

SHEET TITLE:

RESERVOIR AND VAULT

CLIENT:

JORDAN VALLEY WATER CONSERVANCY DISTRICT

SOUTH JORDAN, UTAH

PROJECT NO. 11910-2024-001

DATE: JULY 2025

ALT. PROJECT NO. 4366

SHEET DESIGNATOR:

PID

SHEET NO.

IC103

PREPARED BY: MAW

CHECKED BY: MAW

APPROVED BY: AMW

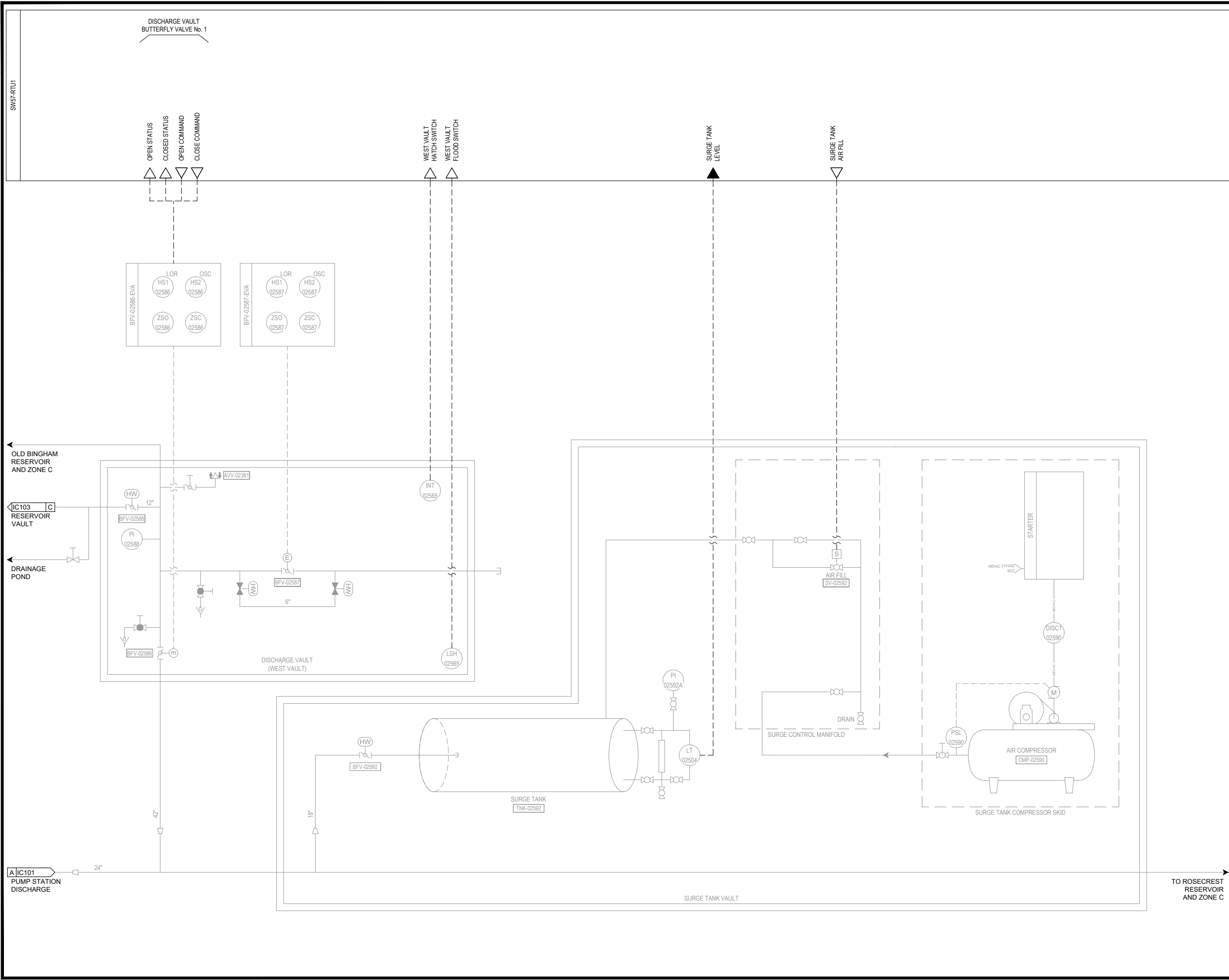
PROJECT TITLE:


JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC

www.ae2s.com

File: JWCD 5700 West 10200 South Pump Station Upgrades.dwg
Plotted By: Cole Tuel Date: Friday, August 15, 2025





Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively

PROFESSIONAL ENGINEER

No. 10476031-2202

ADAM WAHLER

07-30-25

STATE OF UTAH

GENERAL NOTES

1. P&ID'S SHOWN BASED ON EXISTING DRAWINGS AND FIELD OBSERVATION. EXACT ROUTING AND TAGGING MAY VARY.

DISCHARGE PIPING			
CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH		PREPARED BY: MAW CHECKED BY: MAW APPROVED BY: AMW	
PROJECT NO: 11910-2024-001	SHEET DESIGNATOR:	SHEET NO:	
DATE: JULY 2025		PID IC104	
ALT. PROJECT NO: 4366			

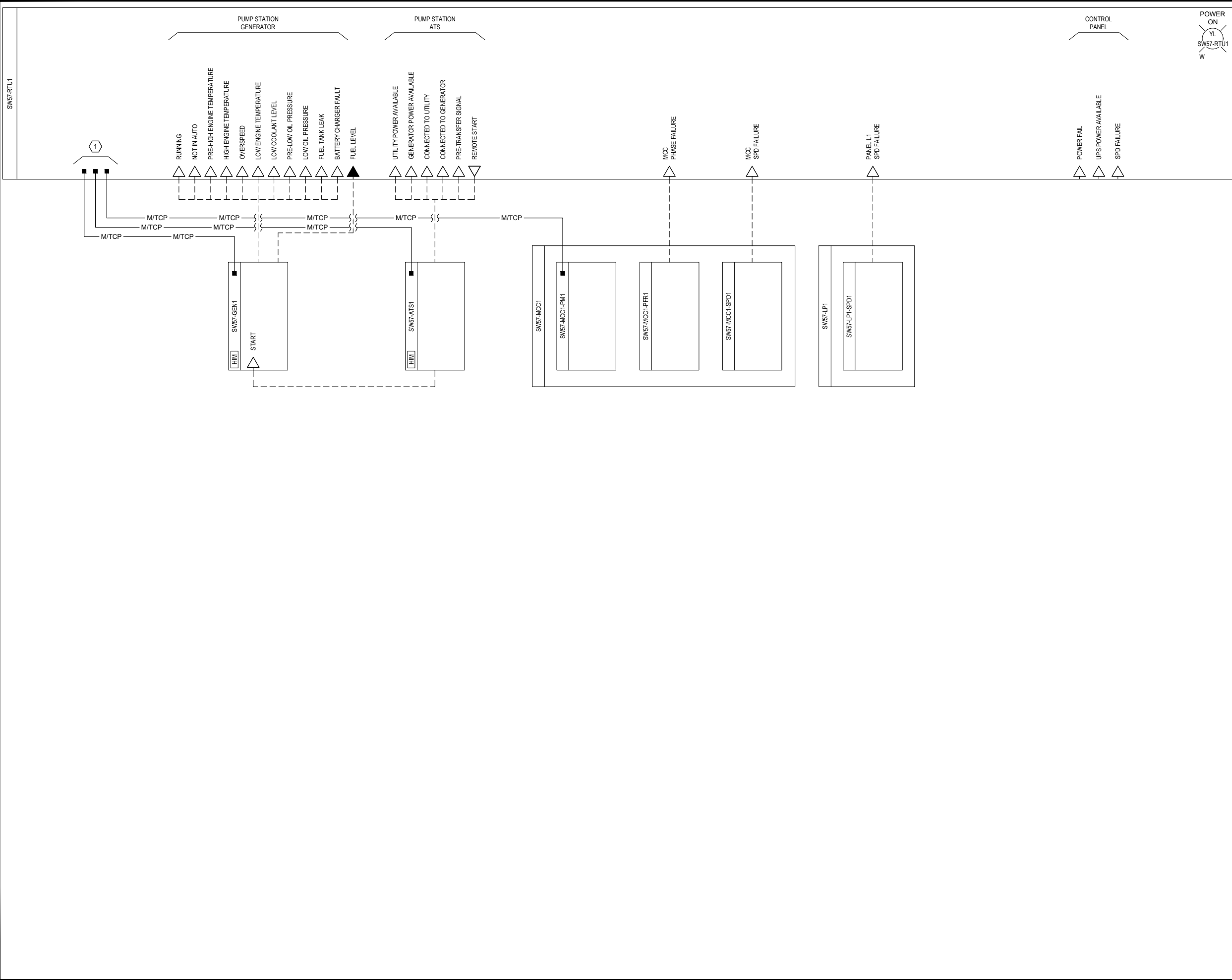
STATUS: FOR CONSTRUCTION


SYMBOL: DATE: APPR:

PROJECT TITLE:

JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES

Advanced Engineering and Environmental Services, LLC www.ae2s.com





Certification of Individual Project Design Disciplines Are Included On Their Individual Drawings, Respectively

PROFESSIONAL ENGINEER

No. 10476031-2202

ADAM WAHLER

07-30-25

STATE OF UTAH

STATUS: **FOR CONSTRUCTION**

SYN: DATE: APPR:

GENERAL NOTES

1. P&ID'S SHOWN BASED ON EXISTING DRAWINGS AND FIELD OBSERVATION. EXACT ROUTING AND TAGGING MAY VARY.

CONSTRUCTION NOTES

1. ADDITIONAL INFORMATION COMMUNICATED BETWEEN THE GENERATOR, ATS AND POWER MONITOR SHALL BE OVER THE ETHERNET NETWORK VIA THE MODBUS/TCP PROTOCOL.

SHEET TITLE: **ELECTRICAL EQUIPMENT**

CLIENT: JORDAN VALLEY WATER CONSERVANCY DISTRICT SOUTH JORDAN, UTAH	PREPARED BY: MAW CHECKED BY: MAW APPROVED BY: AMW	
PROJECT NO: 11910-2024-001 DATE: JULY 2025 ALT. PROJECT NO: 4366	SHEET DESIGNATOR: PID	SHEET NO: IC105

PROJECT TITLE: **JWCD 5700 WEST 10200 SOUTH PUMP STATION UPGRADES**

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