DOCUMENT 00 91 13 A2 ADDENDUM 2

PART 1 CONTRACT DOCUMENT MODIFICATIONS

1.1 CLARIFY THE ELECTRICAL AND CONDUIT REQUIREMENTS AT VALVE VAULT

- A. Delete Drawings E-001 Rev A, E-002 Rev A, E-003 Rev A, and E-005 Rev A in their entirety and replace them with Drawings E-001 Rev B, E-002 Rev B, E-003 Rev B, and E-005 Rev B. These replacement Drawings are attached to this Addendum 2.
- B. The effect of this change is to clarify the electrical and conduit requirements at and around the transmission line 24" valve vault (near Station 64+00).

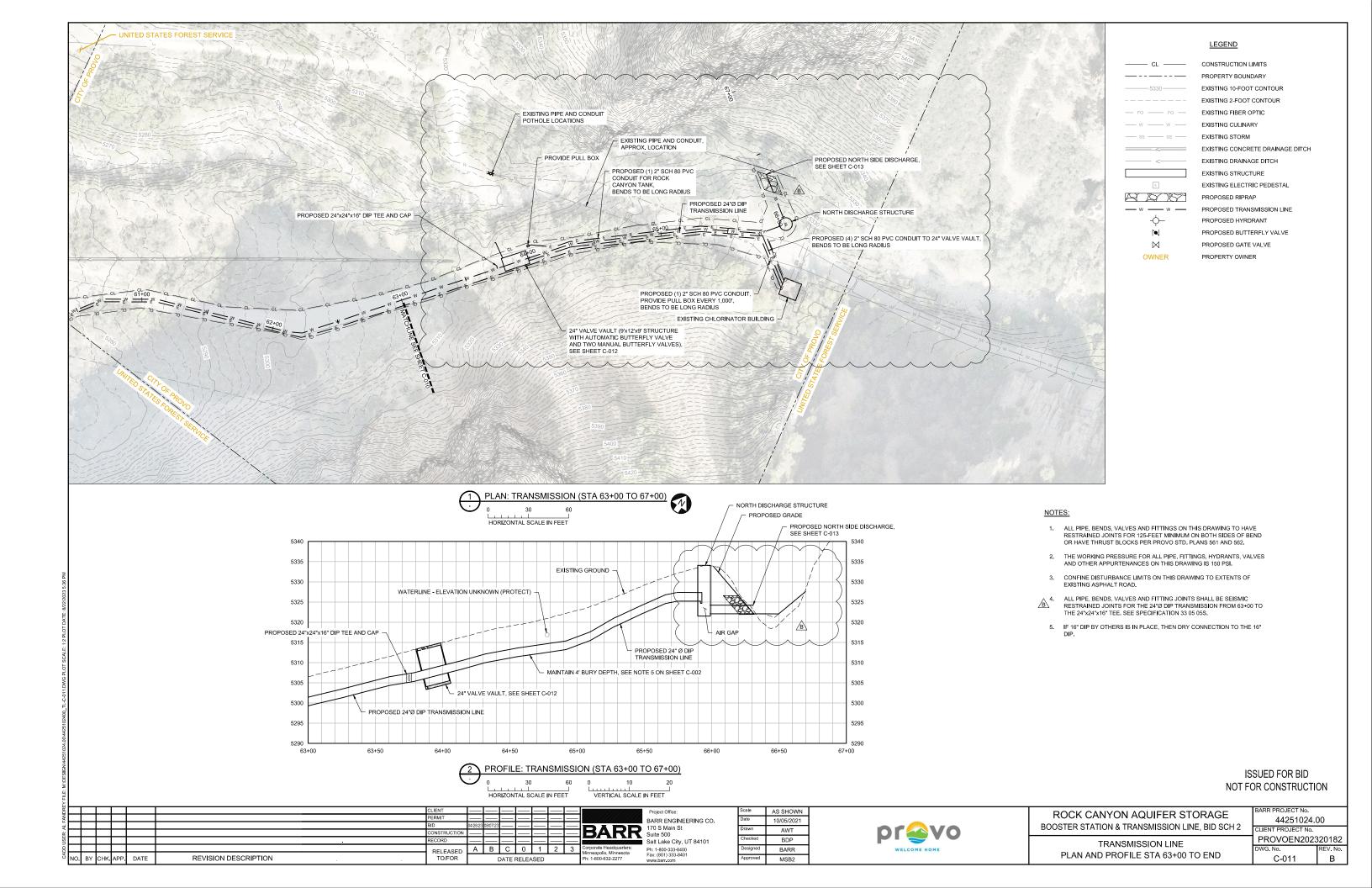
1.2 MODIFY THE NORTH SIDE DISCHARGE AND CLARIFY SEISMIC RESTRAINED JOINT REQUIREMENTS

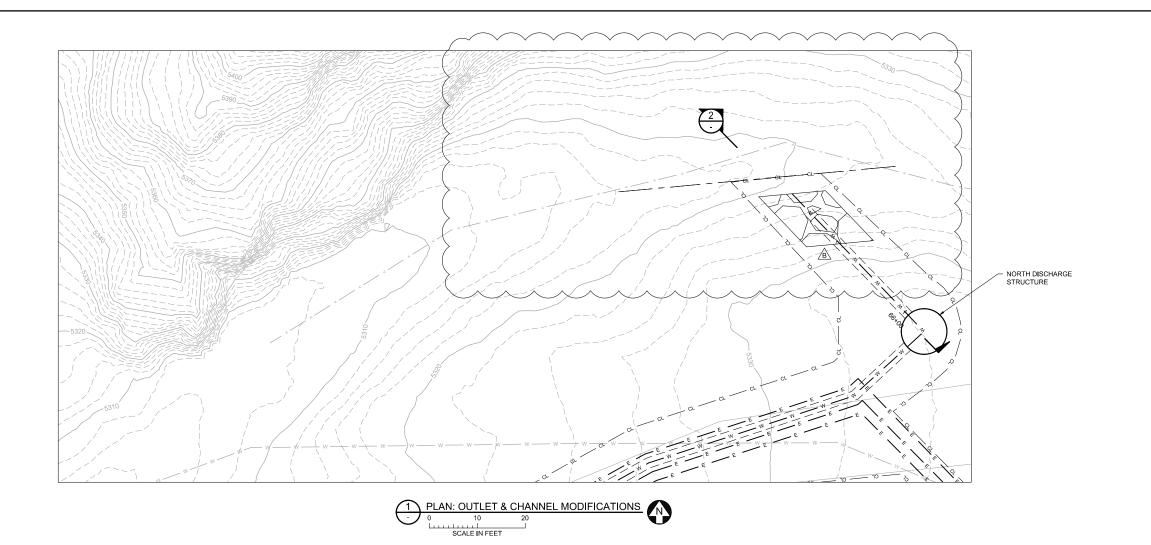
- A. Delete Drawings C-011 Rev A, and C-013 Rev A in their entirety and replace them with Drawings C-011 Rev B, and C-013 Rev B. These replacement Drawings are attached to this Addendum 2.
- B. The effect of this change is to modify the North Side Discharge by reducing the disturbed area and reducing the riprap requirements and to clarify the seismic restrained joint requirements..

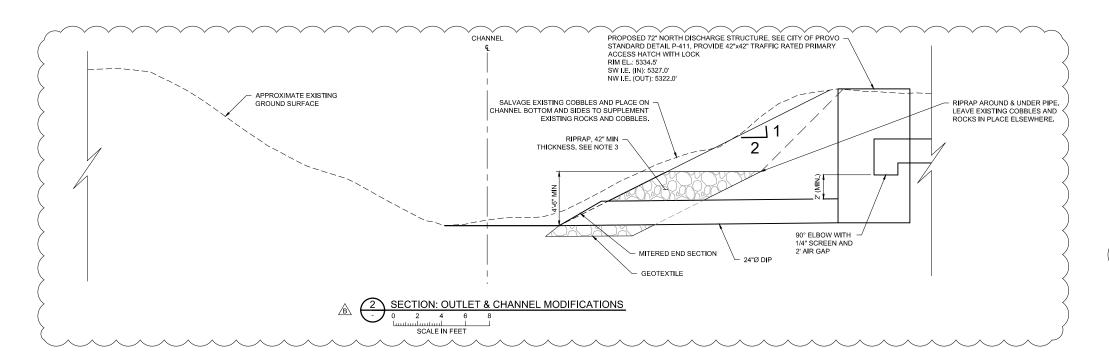
END OF ADDENDUM 2

00 91 13 A2-1









NOTES:

1. APPROXIMATE MODIFIED CHANNEL INVERT AT OUTLET IS ELEVATION 5320.0.

2. 50-YEAR FLOOD DEPTH IS ABOUT 2'-6"

3. RIPRAP SHALL CONFORM TO UDOT STANDARD SPECIFICATION 02373 AND SHALL HAVE A MINIMUM D50 OF 21 INCHES (CONTRACTOR MAY USE SALVAGED COBBLE AS RIPRAP IF IT MEETS SPECIFICATION), GEOTEXTILE SHALL CONFORM TO AASHTO M288 FOR PERMANENT EROSION CONTROL GEOTEXTILE EXCEPT THE GEOTEXTILE SHALL BE CLASS 1, HAVE A MINIMUM PERMITITIVITY OF 0.2 PER SECOND AND A MAXIMUM APPARENT OPENING SIZE OF 0.25 mm (MINIMUM AVERAGE ROLL VALUE). RIPRAP & GEOTEXTILE SHALL BE INSTALLED IN ACCORDANCE WITH UDOT STANDARD SPECIFICATION 02373.

LEGEND

CONSTRUCTION LIMITS

EXISTING 10-FOOT CONTOUR

EXISTING 2-FOOT CONTOUR

EXISTING DRAINAGE DITCH

EXISTING BITUMINOUS PAVEMENT

PROPOSED TRANSMISSION LINE

PROPOSED RIPRAP

KOKOKOX

4. SPOIL EXCESS SOIL ADJACENT TO STREAM AS APPROVED BY OWNER.

ISSUED FOR BID NOT FOR CONSTRUCTION

						CLIENT			l		_		_	
						PERMIT		_		_	_	_		
						BID	04/28/23	08/07/23		_	_	_		5
						CONSTRUCTION	_				_		_	В.
						RECORD	=		=					
						RELEASED	Α	В	С	0	1	2		Corpora
NO.	BY	снк.	APP.	DATE	REVISION DESCRIPTION	TO/FOR			DATE	RELEA	SED			Ph: 1-80
		_	_											

BARR

3 Corporate Headquarters:
Minneapolis, Minnesota
Ph: 1-800-632-2277

BARR ENGINEERING CO. 170 S Main St Suite 500 Salt Lake City, UT 84101 Ph: 1-800-333-8400 Fax: (801) 333-8401 AS SHOWN

2 FEB 2022

AJF BDP

BARR

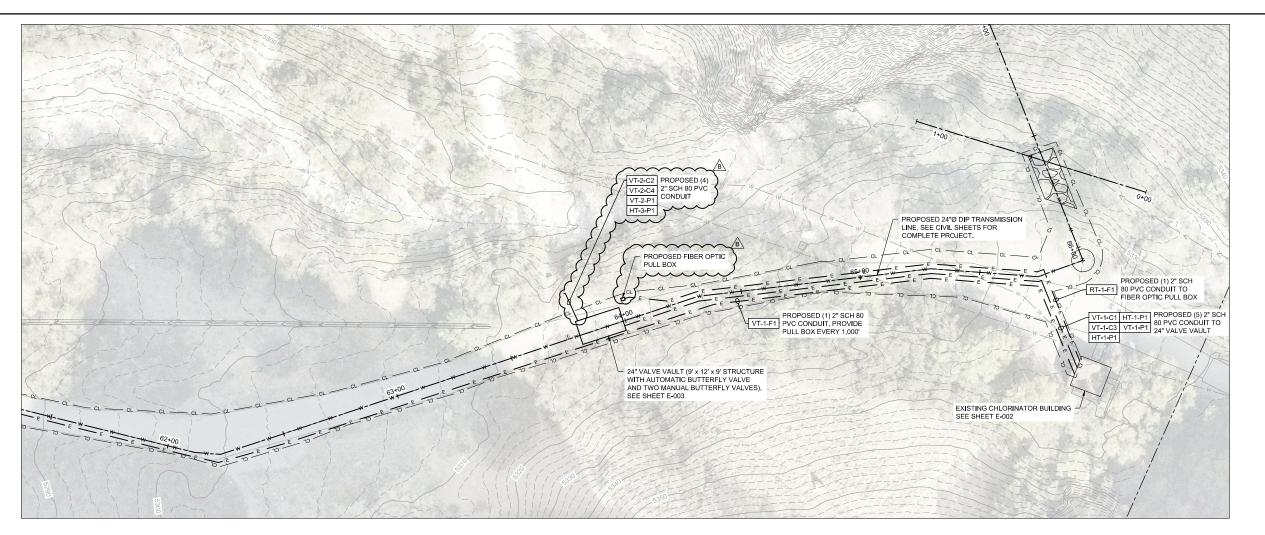


ROCK CANYON AQUIFER STORAGE
BOOSTER STATION & TRANSMISSION LINE, BID SCH

NORTH SIDE DISCHARGE - TRANSMISSION LINE DETAILS

BARR PROJECT No.	
44251024.0	00
CLIENT PROJECT No.	
PROVOEN2023	320182
DWG. No.	REV. No.

C-013



1	PLAN:	: TRANSMI	SSION LI	NE - ELEC	CTRICAL SI	TE PLAN	
\supset	0	20 Innuluul SCALE IN FEET	40				

				PROVO ASR V	AULTS	CABLE SCHE	EDULE							
	FROM		ТО		CA	BLE DATA AND	WIRE S	SIZE						
CABLE \ CONDUIT ID NUMBER	DESCRIPTION	EQUIPMENT TAG	DESCRIPTION	EQUIPMENT TAG	IDENTIFIER NUMBER OF CABLES	NUMBER OF CONDUCTORS IN CABLE	SIZE AWG OR KCMIL	CABLE TYPE	CU/AL	INSULATION	VOLTAGE	CONDUIT TYPE	CONDUIT SIZE	NOTE: ALL CABLE SIZES ARE SHOWN BASED ON AVAILABLE INFORMATION AND DISTANCE AS OF THE DATE OF ISSUE OF THESE DRAWINGS. FUTURE LOCATION CHANGES OF EQUIPMENT MAY AFFECT CONDUCTOR SIZES.
FVT-1-F1	CHLORINATOR BUILDING SCADA PANEL		FIBERVAULT1450.EAST	FVT-1	F1						FIBER	PVC SCH 80	2"	CONDUIT ONLY, PROVIDE PULL ROPE
RT-1-F1	CHLORINATOR BUILDING SCADA PANEL	SP-1	PULL BOX NEAR NORTHERLY CORNER OF VALVE VAULT)	RT-1	F1						FIBER	PVC SCH 80	2"	CONDUIT ONLY, PROVIDE PULL ROPE
- VT-1-C1	CHLORINATOR BUILDING SCADA PANEL	SD-1	VAULT 24" LINE	VT-1	C1 2	8 WIRE + GND	14	90C	CU	XLPE	600	PVC SCH 80	2"	CONTROL CABLES FOR VAULT 24" LINE AND 16" LINE
VT-1-C3	CHLORINATOR BUILDING SCADA PANEL	SD-1	VAULT 24" LINE	VT-1	C3 2	8 WIRE 4 PAIR TS	14	90C	CU	XLPE	600	PVC SCH 80	2"	TWISTED SHIELDED CONTROL CABLES FOR VAULT 24" LINE AND 16" LINE
- VT-1-P1	CHLORINATOR BUILDING 120 / 240V PANEL	CB-LT-01	VAULT 24" LINE 120 V OUTLET	VT-1	P1 2	3 WIRE + GND	8	90C	CU	XLPE	600	PVC SCH 80	2"	120 V POWER FOR VAULTS 24" LINE AND 16" LINE
- HT-1-P1	CHLORINATOR BUILDING 120 / 240V PANEL	CB-LT-01	HEATER VAULT 24" LINE AND 16" LINE	VT-1	P1 2	3 WIRE + GND	8	90C	CU	XLPE	600	PVC SCH 80	2"	HEATER WIRING VAULT 24" LINE AND 16" LINE
~ ~	***************************************	******	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	******					~~~		~~~	~~~	~~~	***************************************
VT-2-C2	VAULT 24" LINE	VT-1	VAULT 16" LINE	VT-2	C2 1	8 WIRE + GND	14	90C	CU	XLPE	600	PVC SCH 80	2"	CONTROL CABLES FOR VAULT 16" LINE
VT-2-C4	VAULT 24" LINE	SD-1	VAULT 16" LINE	VT-2	C4 1	8 WIRE 4 PAIR TS	14	90C	CU	XLPE	600	PVC SCH 80	2"	TWISTED SHIELDED CONTROL CABLES FOR VAULT 16" LINE
- VT-2-P1	VAULT 24" LINE	VT-1	VAULT 16" LINE 120 V OUTLET	VT-2	P1 1	3 WIRE + GND	8	90C	CU	XLPE	600	PVC SCH 80	2"	120 V POWER FOR VAULTS 16" LINE
- HT-3-P1	VAULT 24" LINE	CB-LT-01	HEATER VAULT 16" LINE	HT-3	P1 1	3 WIRE + GND	8	90C	CU	XLPE	600	PVC SCH 80	2"	HEATER WIRING VAULT 16" LINE

ISSUE FOR BID
NOT FOR CONSTRUCTION

PROPERTY BOUNDARY
EXISTING 10-FOOT CONTOUR
EXISTING 2-FOOT CONTOUR
EXISTING FIBER OPTIC
EXISTING CULINARY
EXISTING STORM
EXISTING STRUCTURE
EXISTING ELECTRIC PEDESTAL

PROPOSED RIPRAP
PROPOSED ELECTRICAL

PROPOSED HYRDRANT

PROPOSED GATE VALVE

PROPOSED BUTTERFLY VALVE

RAY

 $-\diamondsuit$

	10	DV	CHK.	ADD	DATE	REVISION DESCRIPTION	RELEASED TO/FOR	Α	В	C	D	0	1		Corp Mini Ph:
ΙL							RECORD				l	l		l	
έC							CONSTRUCTION			_	_		_		E
Ŀ							BID	04/28/23	08/09/23					_	F
ŧΕ							PERMIT			_			_	_	
Ē							CLIENT	Ī	l						

BARR

Corporate Headquarters:
Minneapolis, Minnesota
Ph: 1-800-632-2277

BARR ENGINEERING CO. 170 S Main St Suite 500 Salt Lake City, UT 84101 Ph: 1-800-333-8400 Fax: (801) 333-8401

SCAIE	AS SHOWN
Date	12/22/2021
Drawn	TJT2
Checked	RSH
Designed	RSH
Approved	JSV

p	r VC
	WELCOME HOME

ROCK CANYON AQUIFER STORAGE
BOOSTER STATION & TRANSMISSION LINE, BID SCI

ELECTRICAL SITE PLAN AND CABLE SCHEDULE

ON INTO INTO IQUIT ET COTO ICIC	44251024.0	00
ATION & TRANSMISSION LINE, BID SCH 2	CLIENT PROJECT No.	
TRANSMISSION LINE	PROVOEN2023	320182
TIVALIONISSION EINE	DWC No	DEV/ No.



ELEVATION: CHLORINATOR BUILDING - NORTH/WEST EXTERIOR WALLS
NOT TO SCALE



3 ELEVATION: CHLORINATOR BUILDING - NORTH EXTERIOR WALL NOT TO SCALE



ELEVATION: CHLORINATOR BUILDING - WEST INTERIOR WALL NOT TO SCALE

	12	0/24	OV F	PAN	ΙEΙ	СВ	-LT-	-01	
MOUNTING: WALL MOUNT	BUS AM	PS:	100A						REMARKS
LOCATION: FED FROM 100A	VOLTS:		120/24	0V					100A MAIN CIRCUIT BREAKER
BREAKER BY WATER TANK	PHASE/	MRE:	1/3						PROVO CITY ASR
DESCRIPTION	BKR.	CKT. NO.	LOAD KVA	PH A	PH B	LOAD KVA	CKT. NO.	BKR.	DESCRIPTION
LIGHTS	20A-1P	1					2	20A-1P	OUTLETS 1
OLITLETS?	20A-1P	3					4	20A-1P	OUTLETS 3 B
HEATER #1 5kW 24' VAULT	30A-2P	5					6	20A-1P	VALVE #1 24' VAULT
HEATER #1 5kW 24' VAULT	30A-2P	7					8	20A-1P	VALVE #2 16' VAULT
HEATER #2 5kW 16' VAULT	30A-2P	9					10	20A-1P	120V - VAULT #1 24' VAULT
HEATER #2 5kW 16' VAULT	30A-2P	11					12	20A-1P	120V - VAULT #2 16' VAULT
SPARE	20A-1P	13					14	20A-1P	SPARE
SPARE	20A-1P	15					16	20A-1P	SPARE
SPARE	20A-1P	17					18	20A-1P	SPARE

NOTES:

NUMBERED NOTES:

1. CHLORINATOR BUILDING PANEL TO BE UPGRADED WITH NEW PANEL

PROVIDE CONTROL CABLES FROM EXISTING SCADA PANEL TO VAULTS.
 WIRE TERMINATIONS INSIDE SCADA PANEL WILL BE DONE BY OTHERS.
 ALL UNDERGROUND CONDUIT EXITING TRENCHES VERTICAL SHALL BE GALVANIZED STEEL (RGS) WRAPPED WITH 3M PIPE WRAP OR EQUAL.

1 REMOVE EXISTING PANEL IN CHLORINATOR BUILDING AND REPLACE WITH NEW PANEL CB-LT-01. RECONNECT EXISTING CABLE AND CONDUIT TO NEW PANEL CB-LT-01 $\fbox{2}$ CONDUITS TO ENTER BUILDING INTO GUTTERS BELOW PANELS.

2. PROVIDE ELECTRICAL SERVICE TO VAULT FROM NEW PANEL IN CHLORINATOR BUILDING. SEE CABLE SCHEDULE SHEET E-003.

CB-LT-01. SEE PANEL SCHEDULE BELOW.

(3) 6" x 6" WIRE GUTTER OR CONDUITS INTO PANEL

ISSUE FOR BID NOT FOR CONSTRUCTION

A B C D 0 1 2 RELEASED REVISION DESCRIPTION

BARR ENGINEERING CO. 170 SOUTH MAIN STREET SALT LAKE CITY, UT 84101 Ph: 1-800-632-2277 Fax: (952) 832-2601 www.barr.com

AS SHOWN

12/22/2021

TJT2

RSH

RSH

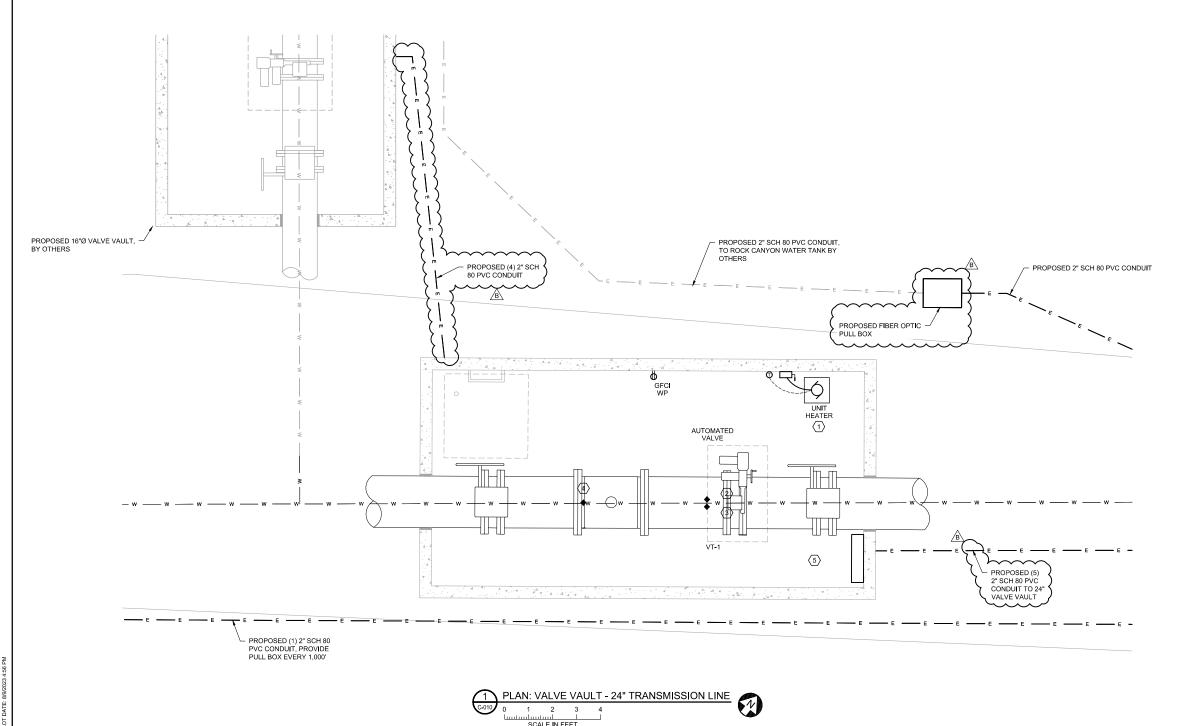


ROCK CANYON AQUIFER STORAGE BOOSTER STATION & TRANSMISSION LINE, BID SCH 2

TRANSMISSION LINE

44251024.00 PROVOEN202320182

CHLORINATOR BUILDING ELECTRICAL E-002



- CHLORINATOR BUILDING PANEL TO BE UPGRADED WITH NEW PANEL, SEE SHEET E-002.
- 2. PROVIDE ELECTRICAL SERVICE TO VAULT FROM NEW PANEL IN CHLORINATOR BUILDING.
- 3. SEE SHEET E-004 FOR VALVE CONTROL WIRING DIAGRAMS.

NUMBERED NOTES:

- (1) 5kW 240V UNIT HEATER SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- 2 SOLENOID VALVE, SEE SHEET E-004 FOR WIRING DETAILS.
- $\boxed{3}$ LIMIT SWITCH, SEE SHEET E-004 FOR WIRING DETAILS.
- $\begin{tabular}{lll} \hline 4 & FLOW METER, MAKE ELECTRICAL CONNECTIONS, SEE BELOW FOR DETAILS & 1 &$
- $\fbox{5}\ \ \ 24" \times 24 \times 6"$ ELECTRICAL JUNCTION BOX SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR.

AC INPUT POWER - L1 AC INPUT POWER -PULSE OUTPUT PULSE -4-20mA -

DETAIL: VAULT FLOW METER ELECTRICAL CONNECTION

ISSUE FOR BID NOT FOR CONSTRUCTION

RELEASED REVISION DESCRIPTION

BARR ENGINEERING CO. BARR 170 SOUTH MAIN STREET SUITE 500 SALT LAKE CITY, UT 84101

	AS SHOWN
te	12/22/2021
awn	TJT2
ecked	RSH
signed	RSH
proved	IS//



ROCK CANYON AQUIFER STORAGE BOOSTER STATION & TRANSMISSION LINE, BID SCH 2

> TRANSMISSION LINE VALVE VAULT ELECTRICAL PLAN

44251024.00 PROVOEN202320182

GENERAL REQUIREMENTS

- 1.1.0 GENERAL
- 1.1.2 POINTS NOT SPECIFICALLY MENTIONED SHALL BE IN STRICT ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND REGULATIONS OF THE ELECTRICAL INSPECTIONS DEPARTMENT FROM WHICH THE PERMIT WAS OBTAINED. THE LATEST REVISIONS AND/OR AMENDMENTS TO THIS CODE, WITH APPLICABLE DATE RESTRICTIONS, SHALL ALSO GOVERN WORK ON THIS CONTRACT.
- 1.1.3 IT IS THE INTENT THAT THESE DRAWINGS AND SPECIFICATIONS PROVIDE FOR AN ELECTRICAL INSTALLATION COMPLETE AND IN OPERATING CONDITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING AND INSTALLING ALL MATERIAL NECESSARY TO ACCOMPLISH THIS, EXCEPT WHERE SPECIFICALLY NOTED THAT SUCH WORK OR MATERIAL IS NOT
- 1.1.4 WHERE THE WORDS 'FURNISH.' 'PROVIDE' OR 'INSTALL' APPEAR IN THIS DIVISION, OR A MANUFACTURER IS INDICATED WITH ITEM OR PRODUCT CATALOG NUMBER LISTED; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FURNISH AND INSTALL THE ITEM COMPLETE AND OPERATING FOR THE PURPOSE OR FUNCTIONS INTENDED. UNLESS NOTED OTHERWISE
- 1.1.5 INSTALLATION SHALL COMPLY WITH APPLICABLE CODES AND STANDARDS FROM THE

NATIONAL ELECTRIC CODE

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION NEMA: AMERICAN NATIONAL STANDARDS INSTITUTE

NATIONAL FIRE PROTECTION ASSOCIATION
OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

IN THE EVENT OF DIFFERENCES BETWEEN CODES AND/OR STANDARDS, THE MOST STRINGENT

- 1.2.0 CODES, PERMITS AND INSPECTIONS
- 1.2.1 THE INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODE AND THE REGULATIONS OF THE ELECTRICAL INSPECTION DEPARTMENT HAVING JURISDICTION.
- 1.2.2 THE ELECTRICAL TRADE SHALL OBTAIN ALL ELECTRICAL PERMITS REQUIRED AND AFTER B COMPLETION OF THE WORK SHALL FURNISH TO THE ENGINEER A CERTIFICATE OF FINAL INSPECTION AND APPROVAL FROM THE INSPECTION DEPARTMENT. ELECTRICAL TRADE SHALL OBTAIN ALL PERMITS AT THE BEGINNING OF THE WORK.
- 1.2.3 THE ELECTRICAL CONTRACTOR SHALL SUBMIT TWO (2) SETS OF DRAWINGS TO THE ELECTRICAL INSPECTION DEPARTMENT AND SHALL INCLUDE ALL COSTS FOR PRINTS, SURVEYS, ETC. IN THIS ELECTRICAL TENDER.
- 1.2.4 HAZARDOUS LOCATIONS CONSTRUCTION SHALL COMPLY WITH THE NEC.
- 1.3.0 STANDARD OF MATERIAL AND WORKMANSHIP
- 1.3.1 ALL MATERIALS SUPPLIED BY THE CONTRACTOR SHALL BE NEW AND OF THE QUALITY SPECIFIED, ALL SUCH MATERIAL SHALL BE THE UL LISTED.
- 1.4.1 THE ELECTRICAL TRADE SHALL BE RESPONSIBLE FOR CORRECTING ALL WORK COMPLETED CONTRARY TO THE INTENT OF THE DRAWINGS AND SPECIFICATIONS AND SHALL BEAR ALL COST FOR SAME WHERE THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS NOT CLEAR, THE CONTRACTOR SHALL OBTAIN A CLARIFICATION FROM THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 1.4.2 THE ELECTRICAL TRADE SHALL GIVE THE WORK HIS PERSONAL SUPERVISION, LAY OUT HIS OWN WORK, DO ALL NECESSARY LEVELING AND MEASURING OR EMPLOY A COMPETENT ENGINEER TO DO SO. FIGURES, FULL-SIZE DRAWINGS AND DETAILS SHALL TAKE PRECEDENCE OVER SCALE MEASUREMENTS.
- 1.4.3 WHERE ANY EQUIPMENT SUPPLIED BY THE ELECTRICAL TRADE MUST BE BUILT-IN WITH WORK OF OTHER CONTRACTORS, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SUPPLYING OF THE EQUIPMENT TO BE BUILT-IN OR MEASUREMENTS TO ALLOW NECESSARY OPENINGS TO BE LEFT SO AS NOT TO HOLD UP THE WORK
- 1.4.4 THE ELECTRICAL TRADE IN SETTING OUT OF HIS WORK, SHALL MAKE REFERENCE TO ARCHITECTURAL STRUCTURAL AND MECHANICAL DRAWING AND SPECIFICATION. HE SHALL CONSULT WITH THE RESPECTIVE TRADES IN SETTING OUT LOCATIONS FOR CONDUIT RUNS, LIGHTING FIXTURES, PANEL ASSEMBLIES, ETC. SO THAT CONFLICTS ARE AVOIDED AND SYMMETRICAL, EVEN SPACING IS MAINTAINED.
- 1.4.6 HVAC THERMOSTATS SHALL BE MOUNTED IN OPEN ACCESSIBLE AREAS
- 14.8 INSTALLATION OF CONDUITS OUTLIETS AND FOLIPMENT SHALL NOT PROCEED UNTIL THE INSTALLATION OF THE APPARATUS HAS BEEN ASSESSED ENOUGH TO AVOID CONFLICTS, POSITION OF APPARATUS AND THE SERVICE ENTRANCE SHALL BE COORDINATED AS

- 1.5.1 THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCHING PERTAINING TO HIS WORK AND SHALL ARRANGE AND PAY FOR HIS TRENCHING. REQUIREMENTS FOR SITE PREPARATION AND BACKFILLING SHALL BE AS SET FORTH IN THE GENERAL CONDITIONS OF THE GENERAL CONTRACT. ALL TRENCHING SHALL BE TO THE APPROVAL OF, AND AS DIRECTED, BY THE OWNER.
- 1.5.2 BOTTOMS OF TRENCHES, ETC. FOR CONDUITS SHALL BE LEVELED WITH A 100MM SAND BED. ALL TRENCHES SHALL BE BACKFILLED TO HAVE A COVERAGE OF 24 INCHES AS PROTECTION AGAINST DAMAGE TO THE INSTALLATION. THIS BACKFILLING TO BE COMPACTED TO THE STANDARD PROCTOR OF THE SPECIFICATIONS.
- 1.5.3 FINAL BACKFILLING AND TAMPING WILL BE BY THE GENERAL CONTRACTOR AND IN HIS
- 1.6.0 CUTTING AND PATCHING
- 1.6.1 STRUCTURAL MEMBERS SHALL NOT BE CUT WITHOUT THE CONSENT OF THE ENGINEER AND/OR STRUCTURAL ENGINEERS ON THE SITE FOR ALL NECESSARY CUTTING CHANNELING CORE DRILLING SLEEVING, ETC. THE ELECTRICAL CONTRACTOR SHALL PROVIDE HIS OWN FORCES AND NECESSARY EQUIPMENT REQUIRED TO COMPLETE THE ELECTRICAL INSTALLATION.
- 1.8.0 SHOP DRAWINGS
- 1.8.1 SUBMIT SETS OF MANUFACTURER'S DETAILED SHOP DRAWINGS (NUMBER OF SETS TO BE DETERMINED LATER), SPECIFICATIONS, DATA SHEETS, CATALOG CUTS, ETC. FOR EQUIPMENT INCLUDING, BUT NOT LIMITED TO PANELBOARDS, SERVICE EQUIPMENT, SAFETY SWITCHES, LIGHTING FIXTURES, MCC OR A SMAY BY CONSIDERED

SECTION 2.0 WORK AND MATERIALS

- 2.1.0 CONDUIT AND DUCT
- 2.1.1 CONDUCTOR IN EARTH SUSCEPTIBLE TO FREEZING CAN BE TECK 90 CABLE RATED FOR
- 2.1.2 PROVIDE PULL WIRE IN ALL EMPTY CONDUITS AND CAP EMPTY CONDUITS. INTERIOR CABLE IN TECK 90 OR TRAY CABLE. ALL CONDUITS RACEWAY AND CABLE TRAY WILL BE INSTALLED PER NEC AND LOCAL CODES. CONDUITS WILL BE RAN IN RIGID GALVANIZED STEEL (RMC). EXCEPT WHERE NOTED.
- 2.2.0 BRANCH CIRCUIT WIRING
- 2.2.1 BRANCH CIRUIT WIRING TO BE COPPER, 600 VOLT, MINIMUM #12 AWG RW90 XLPE OR AS SPECIFIED. NO ALUMINUM WIRING WILL BE PERMITTED. NOTE THAT WHENEVER WIRE SIZE ARE NOT SHOWN ON THE DRAWINGS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE CONDUCTORS COMPLY WITH THE NEC. & THE CORRESPONDING VOLTAGE
- 2.2.2 INTERIOR WIRING MAY BE RIGID METALLIC CONDUIT OR TECK FROM WALL PENETRATIONS TO ELECTRICAL APPARATUS. CONTRACTOR SHALL INSTALL FIRE-STOPPING RATED EQUIVALENT TO RATING OF THE PENETRATED WALLS.
- 2.2.3 TECK 90 CABLE/ TRAY CABLE
 - CONDUCTORS: ARMORED TECK 90, COPPER OR TRAY CABLE, SIZE CONDUCTOR SIZED AS INDICATED.
 - 2. INSULATION: RATE AS 90°C DRY AND WET AND -40°C IN ACCORDANCE
 - 3. FASTENINGS: ONE-HOLE STEEL STRAP TO SECURE SURFACE CABLES 2 INCH AND SMALLER TWO-HOLE STEEL STRAPS FOR CABLES LARGER THAN 2".
 - 4. CONNECTORS: WATERTIGHT, APPROVED FOR TECK CABLE OR CLASSIFIED
- 2.4.0 WIRING DEVICES
- 2.4.2 DUPLEX RECEPTACLES SHOULD BE LEVITON 5362 (INDUSTRIAL 20A) OR EQUAL
- 2.4.3 COVER PLATES TO BE STAINLESS STEEL LEVITON 84004-40 (RECEPTACLES), 84001-40
- 2.5.0 MOUNTING HEIGHTS AND IDENTIFICATION
- 2.5.1 VERIFY HEIGHTS OF ALL DEVICES SUCH AS RECEPTACLES, SWITCHES, BRACKET LIGHTS, ETC. WITH THE ENGINEER BEFORE ROUGH-IN. IN GENERAL, MOUNTING HEIGHTS SHALL BE AS FOLLOWS, UNLESS OTHERWISE SPECIFIED IN THE DRAWINGS:

 - TELECOM AND DATA SWITCHES 4'
- 2.5.2 LABEL ALL STARTERS AND PANELS, MOTORS, INDICATING THE VOLTAGE, USAGE AND OTHER RELEVANT INFORMATION. LABELS SHALL BE LAMICOID PLATES, 1/2 INCH MINIMUM HEIGHT AND PERMANENTLY AFFIXED.
- 2.6.0 MOTOR STARTERS AND CONNECTORS
- 2.6.1 FURNISH DISCONNECT SWITCH FOR ALL MOTORS AS REQUIRED BY THE NEC.
- 2.7.0 WIRING FOR MECHANICAL TRADE
- 2.7.1 ALL WIRING FOR THE MECHANICAL TRADE TO BE BY THE ELECTRICAL CONTRACTOR. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF MOTORS, THERMOSTATS, ETC.
- 2.11.0 LIGHTING FIXTURES
- 2.11.1 THE ELECTRICAL CONTRACTOR SHALL APPLY AND INSTALL LIGHT FIXTURES AS NOTED ON
- 2.12.0 BRANCH CIRCUIT PANELS
- 2.12.1 ALL PANELBOARDS ARE TO BE OF THE BUSSING AND VOLTAGE RATING AS SPECIFIED AND ARE TO BE COMPLETE WITH FLUSH-TYPE HINGES, LOCKING DOORS AND BOLT-IN BREAKERS.
- 2.12.2 PROVIDE TYPEWRITTEN PANEL DIRECTORIES IN ALL PANELS
- 2.13.0 GROUNDING
- 2.13.1 PROVIDE ALL NECESSARY GROUNDING, WHETHER SHOWN ON THE DRAWINGS OR NOT, AS PER THE LATEST NEC. REQUIREMENTS.
- 2.15.0 FINAL
- 2.12.2 PROVIDE TYPEWRITTEN PANEL DIRECTORIES IN ALL PANELS

ISSUE FOR BID NOT FOR CONSTRUCTION

A B C D 0 1 2 RELEASED REVISION DESCRIPTION

BARR

BARR ENGINEERING CO 170 SOUTH MAIN STREET SALT LAKE CITY, UT 84101

Scale	AS SHOWN
Date	12/22/2021
Drawn	TJT2
Checked	RSH
Designed	RSH
Approved	JSV



ROCK CANYON AQUIFER STORAGE BOOSTER STATION & TRANSMISSION LINE, BID SCH 2

TRANSMISSION LINE **ELECTRICAL SPECIFICATIONS**

RR PROJECT No 44251024.00 PROVOEN202320182

E-005