





















































LIGHTING SYMBOLS

	2'X4' GRID MOUNT LIGHT *W/ EMERGENCY BATTERY
	2'X2' GRID MOUNT LIGHT *W/ EMERGENCY BATTERY
	4' SURFACE WRAP
	*W/ EMERGENCY BATTERY
	STRIP LIGHT (LENGTH AS SHOWN)
	*W/ EMERGENCY BATTERY
	LINEAR PENDANT MOUNT (LENGTH AS SHOWN)
	RECESSED CAN LIGHT
	*W/ EMERGENCY BATTERY
	ROUND SURFACE LIGHT
	PENDANT LIGHT
	WALL LIGHT (LENGTH AS SHOWN)
	*W/ EMERGENCY BATTERY
	TRACK LIGHT (LENGTH AS SHOWN)
	POLE MOUNTED AREA LIGHT
	WALL MOUNTED LIGHT
	*W/ EMERGENCY BATTERY
	'BUG EYE' EGRESS LIGHT
	COMBO EXIT SIGN & EGRESS LIGHT
	SINGLE FACE, WALL MOUNTED EXIT SIGN
	DUAL FACE, WALL MOUNTED EXIT SIGN
	SINGLE FACE, CEILING MOUNTED EXIT SIGN
	DOUBLE FACE, CEILING MOUNTED EXIT SIGN
	ARROW INDICATED CHEVRON MARKERS

1. 'X' INDICATED LIGHT FIXTURE CALL OUT. SEE LIGHT FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION.
2. EXIT SIGNS TO BE CENTERED ABOVE DOORS OR OPENINGS WITH EXIT SIGN CENTER MOUNTED 12" ABOVE TOP OF DOOR.






DEVICES & EQUIPMENT

	SIMPLEX RECEPTACLE, +18" AFF (UNO)
	DUPLEX RECEPTACLE, +18" AFF (UNO)
	DUPLEX REC. (HALF SWITCHED), +18" (UNO)
	GFCI - DUPLEX RECEPTACLE, +18" (UNO)
	DOUBLE DUPLEX RECEPTACLE, +18" AFF (UNO)
	GFCI - DOUBLE DUPLEX REC., +18" (UNO)
	SPECIAL CONNECTION, +18" AFF (UNO)
	DUPLEX FLOOR RECEPTACLE
	DOUBLE DUPLEX FLOOR RECEPTACLE
	SINGLE SWITCH, +46" AFF (UNO)
	DIMMER SWITCH, +46" AFF (UNO)
	3-WAY SWITCH, +46" AFF (UNO)
	4-WAY SWITCH, +46" AFF (UNO)
	LOW VOLTAGE MOMENTARY SWITCH, +46" AFF (UNO)
	LOW VOLTAGE SWITCH, +46" AFF (UNO)
	SWITCH MOUNTED OCCUPANCY SENSOR, +46" AFF
	SWITCH MOUNTED VACANCY SENSOR, +46" AFF
	CEILING MOUNTED OCCUPANCY SENSOR
	CEILING MOUNTED VACANCY SENSOR
	TIME CLOCK
	PHOTOCELL
	DRY-TYPE TRANSFORMER
	ELECTRICAL ENCLOSURE
	ELECTRICAL PANEL, SURFACE MOUNTED
	ELECTRICAL PANEL, FLUSH MOUNTED
	FUSED SAFETY SWITCH
	NON-FUSED SAFETY SWITCH
60/3/3R	SWITCH RATING (AMP/POLES/NEMA RATING)
	CONNECTION TO MOTOR

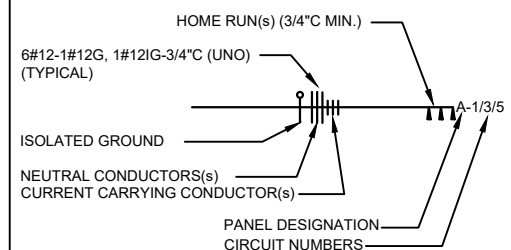
ONE-LINE SYMBOLS





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DRAFTING SYMBOLS

	KEYED NOTE CALL OUT
	CONDUIT STUB-UP
	CONDUIT STUB-DOWN
	CONDUIT STUB (CAP, MARK, INSTALL PULL LINE)
	EQUIPMENT CALL OUT

CIRCUITING LEGEND



NEW LINE TYPE	
EXISTING LINE TYPE	
DEMOLITION LINE TYPE	
FUTURE LINE TYPE	
UNDERGROUND LINE TYPE	

****WIRE SIZE SHALL BE MINIMUM #12 AWG COPPER UNLESS NOTED OTHERWISE. PROVIDE APPROPRIATELY SIZED EQUIPMENT GROUNDING CONDUCTOR WITH ALL CIRCUITS. WIRE SIZE SHALL NOT BE LESS THAN CORRESPONDING CIRCUIT BREAKER RATING AS REQUIRED BY NEC.**

PROJECT ELECTRICAL GENERAL NOTES

1. ALL WORK TO BE COMPLETED PER THE LATEST ADDITION OF NATIONAL ELECTRICAL CODE (NEC) ADOPTED BY THE AHJ AND ALL LOCAL CODES AND RESTRICTIONS.
2. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL REQUIRED PERMITS, TESTS AND INSPECTIONS THAT MAY BE REQUIRED DURING CONSTRUCTION.
3. THIS DOCUMENT SET IS TO BE CONSIDERED THE CONSTRUCTION DOCUMENTS INCLUDING ALL DRAWINGS, DETAILS, SCHEDULES AND SPECIFICATIONS. ANY DISCREPANCIES OR ISSUES SHOULD BE IMMEDIATELY BROUGHT TO THE ENGINEERS ATTENTION FOR CLARIFICATION.
4. ALL MATERIALS PROVIDED AND INSTALLED SHALL BE UL LISTED AND SHALL BE NEW UNLESS OTHERWISE NOTED.
5. ALL DEVICES, EQUIPMENT, CONDUIT, ETC. SHALL BE FLUSH MOUNTED OR CONCEALED IN WALL UNLESS OTHERWISE NOTED.
6. ELECTRICAL CONTRACTOR TO COORDINATE WITH OTHER TRADES TO AVOID INSTALLATION CONFLICTS PRIOR TO ROUGH-IN.
7. HACR RATED BREAKERS SHALL BE PROVIDED FOR ALL HVAC EQUIPMENT.
8. ALL BRANCH CIRCUITS AND FEEDER CIRCUITS ARE TO BE PROVIDED WITH SEPARATE APPROPRIATELY SIZED GROUNDING CONDUCTOR.
9. ALL WIRE IS SIZED BASED ON 75°C COPPER. COMPACT ALUMINUM IS APPROVED FOR ALL BRANCH AND FEEDER CIRCUITS OVER 100A (UNLESS COPPER IS REQUIRED BY EQUIPMENT MANUFACTURE, VERIFICATION IS THE RESPONSIBILITY OF THE CONTRACTOR). IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO UPSIZE CONDUIT AND CONDUCTORS AND VERIFY TERMINATION REQUIREMENTS AS REQUIRED IF ALUMINUM IS USED.

ELECTRICAL SHEET INDEX

E000	ELECTRICAL COVER SHEET
E100	ELECTRICAL SITE PLAN
E200	ELECTRICAL PLAN AREA 'A'
E201	ELECTRICAL PLAN AREA 'B'
E300	480V ONE-LINE DIAGRAM
E301	240V ONE-LINE DIAGRAM
E302	ELECTRICAL SCHEDULES
E303	ELECTRICAL DETAILS
E304	ELECTRICAL DETAILS
E305	ELECTRICAL SCHEDULES
E306	ELECTRICAL SCHEDULES
E307	ELECTRICAL SCHEDULES



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PHONE: 208-389-1030

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PICKLES BUTTE LANDFILL
CANYON COUNTY, IDAHO

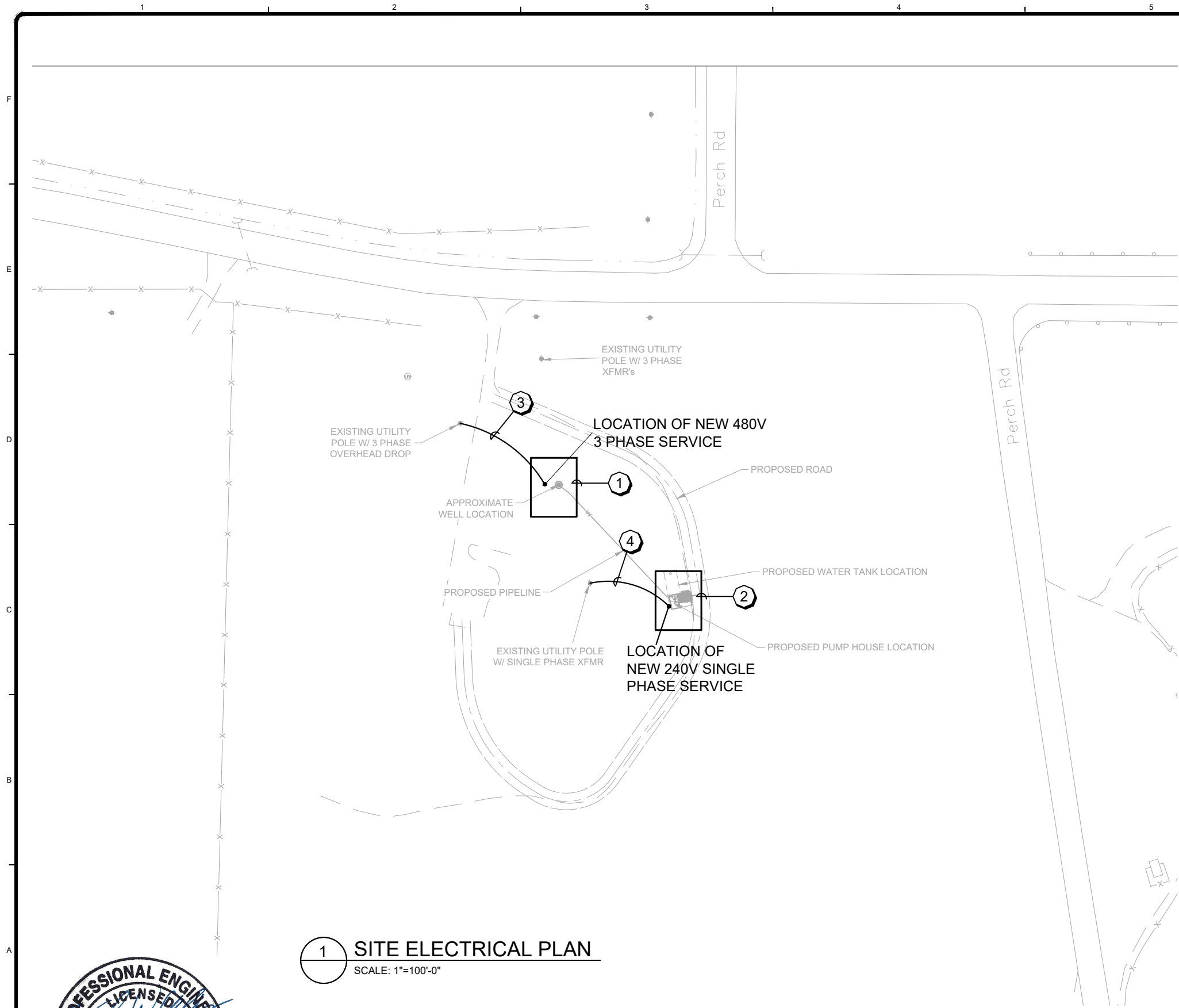
DUST CONTROL WELL PUMP STATION
AND STORAGE TANK

ELECTRICAL COVER SHEET

Project No.:	114-571040-2022
Designed By:	KWA
Drawn By:	NAA
Checked By:	KWA

E000

Bar Measures 1 inch



GENERAL NOTES:

- A. EQUIPMENT LAYOUT ON THIS SHEET IS SUBJECT TO CHANGE. CONTRACTOR TO COORDINATE ALL UTILITY INSTALLATIONS WITH LOCAL UTILITY COMPANIES PRIOR TO ANY WORK BEING STARTED. VERIFY LOCATIONS OF UTILITY TRENCHES AND EQUIPMENT AND COORDINATE WITH OTHER SITE FEATURES AND EQUIPMENT TO VERIFY ANY CONFLICTS.
- B. ALL CONDUITS TO BE INSTALLED A MINIMUM OF 24" BELOW FINISHED GRADE. ALL PRIMARY AND SECONDARY CONDUITS TO BE INSTALLED PER LOCAL UTILITY COMPANY REQUIREMENTS.
- C. CONTRACTOR TO COORDINATE ALL SITE WORK WITH CIVIL AND ARCHITECTURAL SITE PLANS PRIOR TO STARTING ANY WORK.
- D. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL LINE AND BE LABELED ON BOTH ENDS FOR FUTURE USE.
- E. UNLESS OTHERWISE NOTED, ALL UNDERGROUND CONDUIT SHALL BE PVC GALVANIZED STEEL. ALL EXPOSED CONDUIT SHALL BE RIGID GALVANIZED STEEL. FINAL CONNECTION TO FIELD DEVICES SHALL BE MADE WITH SHORT LENGTH (MAX 18") OF METALLIC SEALTITE FLEXIBLE CONDUIT AND APPROVED FITTINGS.
- F. WIRE SIZE SHALL BE MINIMUM #12 AWG COPPER UNLESS NOTED OTHERWISE. PROVIDE APPROPRIATELY SIZED EQUIPMENT GROUNDING CONDUCTOR WITH ALL CIRCUITS. WIRE SIZE SHALL NOT BE LESS THAN CORRESPONDING CIRCUIT BREAKER RATING AS REQUIRED BY NEC.

KEYED NOTES:

- 1. WORK AREA 'A'. SEE ENLARGED DRAWINGS FOR DETAILS IN THIS AREA.
- 2. WORK AREA 'B'. SEE ENLARGED DRAWINGS FOR DETAILS IN THIS AREA.
- 3. EXISTING SERVICE WIRE FOR NEW 480 VOLT SERVICE. OVERHEAD SERVICE WIRE INSTALLED BY UTILITY. ELECTRICAL CONTRACTOR RESPONSIBLE FOR METER CAN, MAST, WEATHER HEAD AND MAST WIRE. SEE ONE-LINE DIAGRAM FOR DETAILS IN THIS AREA.
- 4. NEW OVERHEAD SERVICE WIRE PROVIDED BY UTILITY. ELECTRICAL CONTRACTOR RESPONSIBLE FOR METER CAN, MAST, WEATHER HEAD AND MAST WIRE. SEE ONE-LINE DIAGRAM FOR DETAILS IN THIS AREA.

1 SITE ELECTRICAL PLAN
SCALE: 1"=100'-0"



MARK	DATE	DESCRIPTION	BY
0	1/27/22	ISSUED FOR BID	SEF

PICKLES BUTTE LANDFILL CANYON COUNTY, IDAHO
DUST CONTROL WELL PUMP STATION AND STORAGE TANK
SITE ELECTRICAL PLAN

Project No.: 114-571040-2022
Designed By: KWA
Drawn By: NAA
Checked By: KWA
E100

F

D

B

A

- A. EQUIPMENT LAYOUT ON THIS SHEET IS SUBJECT TO CHANGE. CONTRACTOR TO COORDINATE ALL UTILITY INSTALLATIONS WITH LOCAL UTILITY COMPANIES PRIOR TO ANY WORK BEING STARTED. VERIFY LOCATIONS OF UTILITY TRENCHES AND EQUIPMENT AND COORDINATE WITH OTHER SITE FEATURES AND EQUIPMENT TO VERIFY ANY CONFLICTS.
- B. ALL CONDUITS TO BE INSTALLED A MINIMUM OF 24" BELOW FINISHED GRADE. ALL PRIMARY AND SECONDARY CONDUITS TO BE INSTALLED PER LOCAL UTILITY COMPANY REQUIREMENTS.
- C. CONTRACTOR TO COORDINATE ALL SITE WORK WITH CIVIL AND ARCHITECTURAL SITE PLANS PRIOR TO STARTING ANY WORK.
- D. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL LINE AND BE LABELED ON BOTH ENDS FOR FUTURE USE.
- E. UNLESS OTHERWISE NOTED, ALL UNDERGROUND CONDUIT SHALL BE PVC. ALL EXPOSED CONDUIT SHALL BE RIGID GALVANIZED STEEL. FINAL CONNECTION TO FIELD DEVICES SHALL BE MADE WITH SHORT LENGTH (MAX 18") OF METALLIC SEALTITE FLEXIBLE CONDUIT AND APPROVED FITTINGS.
- F. WIRE SIZE SHALL BE MINIMUM #12 AWG COPPER UNLESS NOTED OTHERWISE. PROVIDE APPROPRIATELY SIZED EQUIPMENT GROUNDING CONDUCTOR WITH ALL CIRCUITS. WIRE SIZE SHALL NOT BE LESS THAN CORRESPONDING CIRCUIT BREAKER RATING AS REQUIRED BY NEC.

1. LOCATION OF EXISTING 10HP 480 VOLT WELL PUMP.
2. PROVIDE CLASS 6, ROUND, 20' WOOD POLE FOR NEW 2" OVERHEAD MAST. COORDINATE REQUIREMENTS WITH IDAHO POWER PRIOR TO STARTING WORK.
3. PROVIDE 10HP 480V VFD IN 3R ENCLOSURE WITH ALL NECESSARY FUSING, VENTING, CONTROL POWER TRANSFORMER, SWITCHES, AND ALARMING AND FUNCTION AS DESCRIBED BELOW:
 - WELL PUMP TO OPERATE AT A MAXIMUM OF 20 GPM.
 - WELL PUMP TO OPERATE ONLY WHEN WELL WATER LEVEL IS ABOVE 490 FEET BELOW GROUND SURFACE AS INDICATED BY WELL LEVEL TRANSDUCER.
 - WELL PUMP LOW ALARM ACTIVATED WHEN WELL LEVEL IS BELOW 495 FEET BELOW GROUND SURFACE AS INDICATED BY WELL LEVEL TRANSDUCER.
 - INTERLOCK WELL PUMP WITH SUMP PUMP TANK LEVEL. WELL PUMP TO OPERATE ONLY WHEN TANK WATER LEVEL IS BELOW ELEVATION OF 2733 FEET. COORDINATE ELEVATIONS WITH CIVIL ENGINEER.
4. SEE DETAIL ON SHEET E304 FOR RACK REQUIREMENTS.
5. LOCATION OF EXISTING WELL TRANSDUCER. TIE INTO NEW VFD CONTROLS.
6. PROVIDE LIGHT FIXTURE, LITHONIA # 'ESXF1-PO-SWW2-THK-DDB' KNUCKLE MOUNT FLOODLIGHT. MOUNT HIGH ON 2" RGS POLE. PROVIDE WEATHER PROOF SWITCH ON RACK BELOW FOR CONTROL.



MARK	DATE	DESCRIPTION	BY	PICKLES BUTTE LANDFILL CANYON COUNTY, IDAHO DUST CONTROL WELL PUMP STATION AND STORAGE TANK ELECTRICAL PLAN AREA 'A'	Project No.: 114-571040-2022
0	1/27/22	ISSUED FOR BID	SEF		Designed By: KWA
					Drawn By: NAA
					Checked By: KWA
					<div style="font-size: 48pt; font-weight: bold; text-align: center;">E200</div>

Bar Measures 1 inch

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WELL/TANK PUMP CONDUIT SCHEDULE						
TAG	CONDUIT SIZE	WIRE	TYPE	FROM	TO	NOTES
1	1"	8 #14's & (1) #14 GND	CONTROL	TANK PUMP PANEL	WELL PUMP PANEL	-
2	1"	3#8's & 1#10 GND	480V POWER	PANEL 'H1'	TANK PUMP PANEL DISCONNECT	-
3	3/4"	6#14's & 1#14 GND	CONTROL	FLOAT J-BOX	TANK PUMP CONTROL/ ALARM PANEL	PROVIDE 4X RATED PVC J-BOX FOR FLOAT CONTROL
4	3/4"	2#14's & 1#14 GND	120V POWER	PANEL 'L1'	2" FLOW METER	-
5	3/4"	2#14's & 1#14 GND	120V POWER	PANEL 'L1'	4" FLOW METER	-
6	3/4"	2#14's & 1#14 GND	CONTROL	'ON - OFF' SWITCH	TANK PUMP CONTROL/ ALARM PANEL	-
7	1 1/2"	3#3's	SERVICE POWER	SERVICE METER	SERVICE MAST	SEE ONE-LINE FOR DETAILS
8	3/4"	3#12's & 1#12 GND	480V POWER	TANK PUMP	TANK PUMP CONTROL/ ALARM PANEL	SEE ONE-LINE FOR DETAILS

GENERAL NOTES:

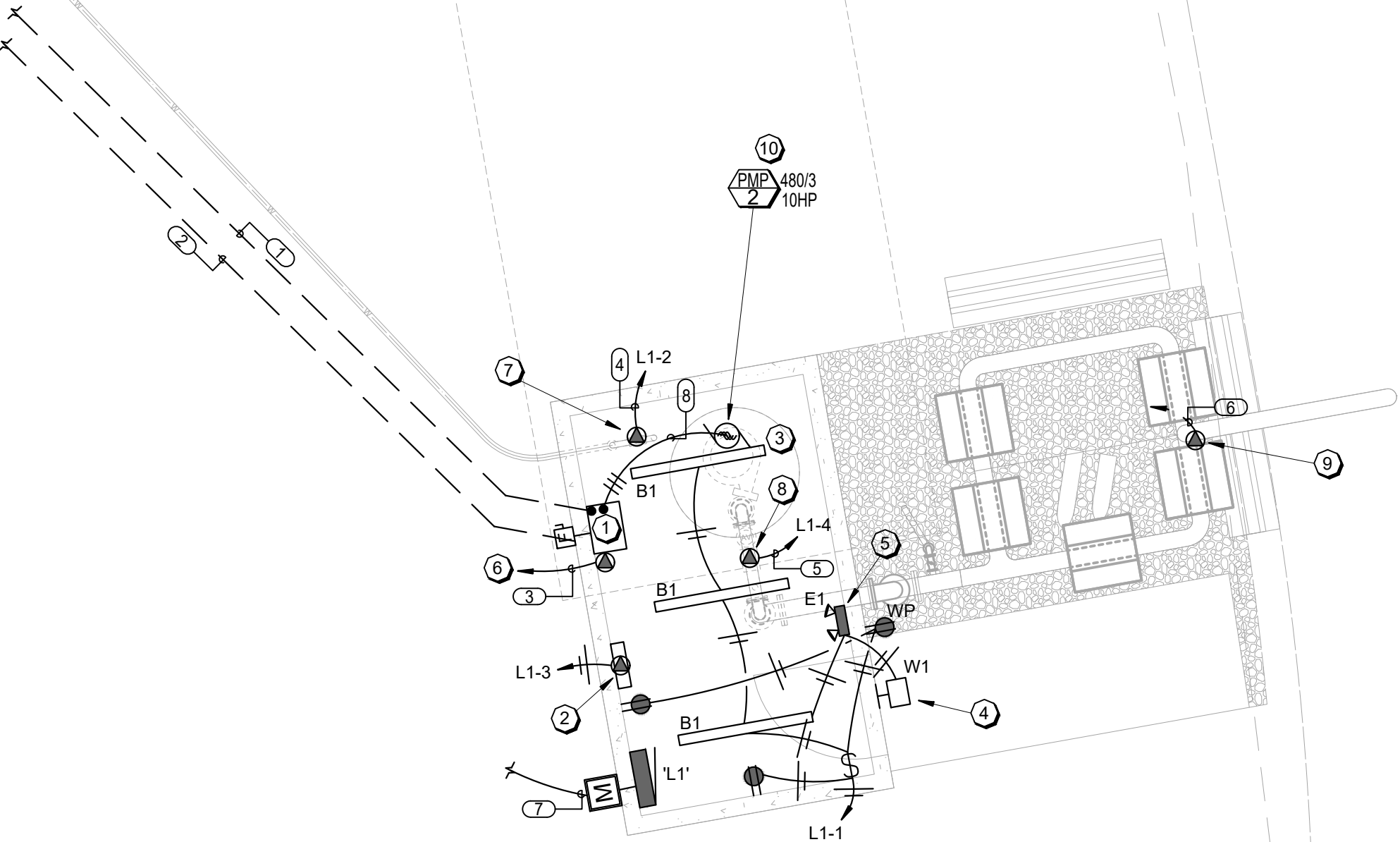
- A. EQUIPMENT LAYOUT ON THIS SHEET IS SUBJECT TO CHANGE. CONTRACTOR TO COORDINATE ALL UTILITY INSTALLATIONS WITH LOCAL UTILITY COMPANIES PRIOR TO ANY WORK BEING STARTED. VERIFY LOCATIONS OF UTILITY TRENCHES AND EQUIPMENT AND COORDINATE WITH OTHER SITE FEATURES AND EQUIPMENT TO VERIFY ANY CONFLICTS.
- B. ALL CONDUITS TO BE INSTALLED A MINIMUM OF 24" BELOW FINISHED GRADE. ALL PRIMARY AND SECONDARY CONDUITS TO BE INSTALLED PER LOCAL UTILITY COMPANY REQUIREMENTS.
- C. CONTRACTOR TO COORDINATE ALL SITE WORK WITH CIVIL AND ARCHITECTURAL SITE PLANS PRIOR TO STARTING ANY WORK.
- D. ALL EMPTY CONDUITS SHALL BE PROVIDED WITH PULL LINE AND BE LABELED ON BOTH ENDS FOR FUTURE USE.
- E. UNLESS OTHERWISE NOTED, ALL UNDERGROUND CONDUIT SHALL BE PVC. ALL EXPOSED CONDUIT SHALL BE RIGID GALVANIZED STEEL. FINAL CONNECTION TO FIELD DEVICES SHALL BE MADE WITH SHORT LENGTH (MAX 18") OF METALLIC SEALTITE FLEXIBLE CONDUIT AND APPROVED FITTINGS.
- F. WIRE SIZE SHALL BE MINIMUM #12 AWG COPPER UNLESS NOTED OTHERWISE. PROVIDE APPROPRIATELY SIZED EQUIPMENT GROUNDING CONDUCTOR WITH ALL CIRCUITS. WIRE SIZE SHALL NOT BE LESS THAN CORRESPONDING CIRCUIT BREAKER RATING AS REQUIRED BY NEC.

KEYED NOTES:

1. USE EXISTING OWNER PROVIDED 10HP RATED PUMP PANEL. PROVIDE ANY ADDITIONAL RELAY(S), TERMINAL BLOCKS, FLOATS, ETC. FOR A COMPLETE INSTALLATION. PUMP TO OPERATE AND FUNCTION AS DESCRIBED BELOW:
- TANK PUMP TO OPERATE ONLY WHEN TANK WATER LEVEL ELEVATION IS 2726 FEET OR HIGHER AS INDICATED BY TANK FLOATS. INSTALL PUMP 'OFF' CONTROL FLOAT JUST BELOW HIGH ALARM FLOAT AND PUMP 'ON' CONTROL FLOAT JUST ABOVE LOW ALARM FLOAT.
 - TANK PUMP TO BE OPERATED BY WATER TRUCK OPERATOR USING 'ON-OFF' SWITCH.
2. PROVIDE (1) 120V, 1500 WATT WALL MOUNTED HEATER WITH INTEGRAL THERMOSTAT.
3. PROVIDE (3) 4' LED STRIP LIGHTS LITHONIA #CLX-L48-5000LM-SEF-RDL-MVOLT-GZ10-40K-80CRI-WH OR APPROVED EQUAL.
4. PROVIDE (1) LED WALL PACK WITH INTEGRAL PHOTOCCELL, LITHONIA #TWS-LED-P1-50K-MVOLT-PE-DDB-M4 OR APPROVED EQUAL.
5. PROVIDE (1) LED EMERGENCY LIGHT - LITHONIA #ELM2LM12 OR APPORVED EQUAL.
6. PROVIDE (1) NC AND (1) NO FLOAT TO BE INSTALLED IN WATER TANK. HIGH ALARM FLOAT (NO) TO BE INSTALLED AT 2733.1 FEET. LOW LEVEL FLOAT (NC) TO BE INSTALLED AT 2725.8 FEET. TIE FLOAT CONTROL INTO TANK PUMP CONTROL/ALARM PANEL.
7. OWNER PROVIDED 2" FLOW METER. FLOW METER INSTALLED BY MECHANICAL CONTRACTOR AND WIRED BY ELECTRICAL CONTRACTOR.
8. OWNER PROVIDED 4" FLOW METER. FLOW METER INSTALLED BY MECHANICAL CONTRACTOR AND WIRED BY ELECTRICAL CONTRACTOR.
9. PROVIDE 3R RATED TWO POSITION 'ON - OFF' SWITCH IN WEATHER TIGHT J-BOX FOR PUMP CONTROLS. ROUTE 4#14's AWG BACK TO TANK PUMP CONTROL PANEL FOR CONTROL. COORDINATE SWITCH LOCATION AND MOUNTING HEIGHT WITH OWNER PRIOR TO ROUGH-IN.
10. OWNER PROVIDED 10HP 480 VOLT PUMP.

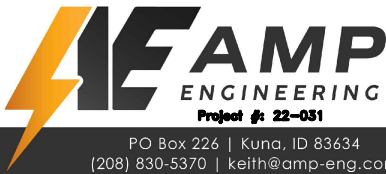
WELL/TANK PUMP CONDUIT SCHEDULE

TAG	CONDUIT SIZE	WIRE	TYPE	FROM	TO	NOTES
1	1"	8 #14's & (1) #14 GND	CONTROL	TANK PUMP PANEL	WELL PUMP PANEL	-
2	1"	3#8's & 1#10 GND	480V POWER	PANEL 'H1'	TANK PUMP PANEL DISCONNECT	-
3	3/4"	6#14's & 1#14 GND	CONTROL	FLOAT J-BOX	TANK PUMP CONTROL/ ALARM PANEL	PROVIDE 4X RATED PVC J-BOX FOR FLOAT CONTROL
4	3/4"	2#14's & 1#14 GND	120V POWER	PANEL 'L1'	2" FLOW METER	-
5	3/4"	2#14's & 1#14 GND	120V POWER	PANEL 'L1'	4" FLOW METER	-
6	3/4"	2#14's & 1#14 GND	CONTROL	'ON - OFF' SWITCH	TANK PUMP CONTROL/ ALARM PANEL	-
7	1 1/2"	3#3's	SERVICE POWER	SERVICE METER	SERVICE MAST	SEE ONE-LINE FOR DETAILS
8	3/4"	3#12's & 1#12 GND	480V POWER	TANK PUMP	TANK PUMP CONTROL/ ALARM PANEL	SEE ONE-LINE FOR DETAILS



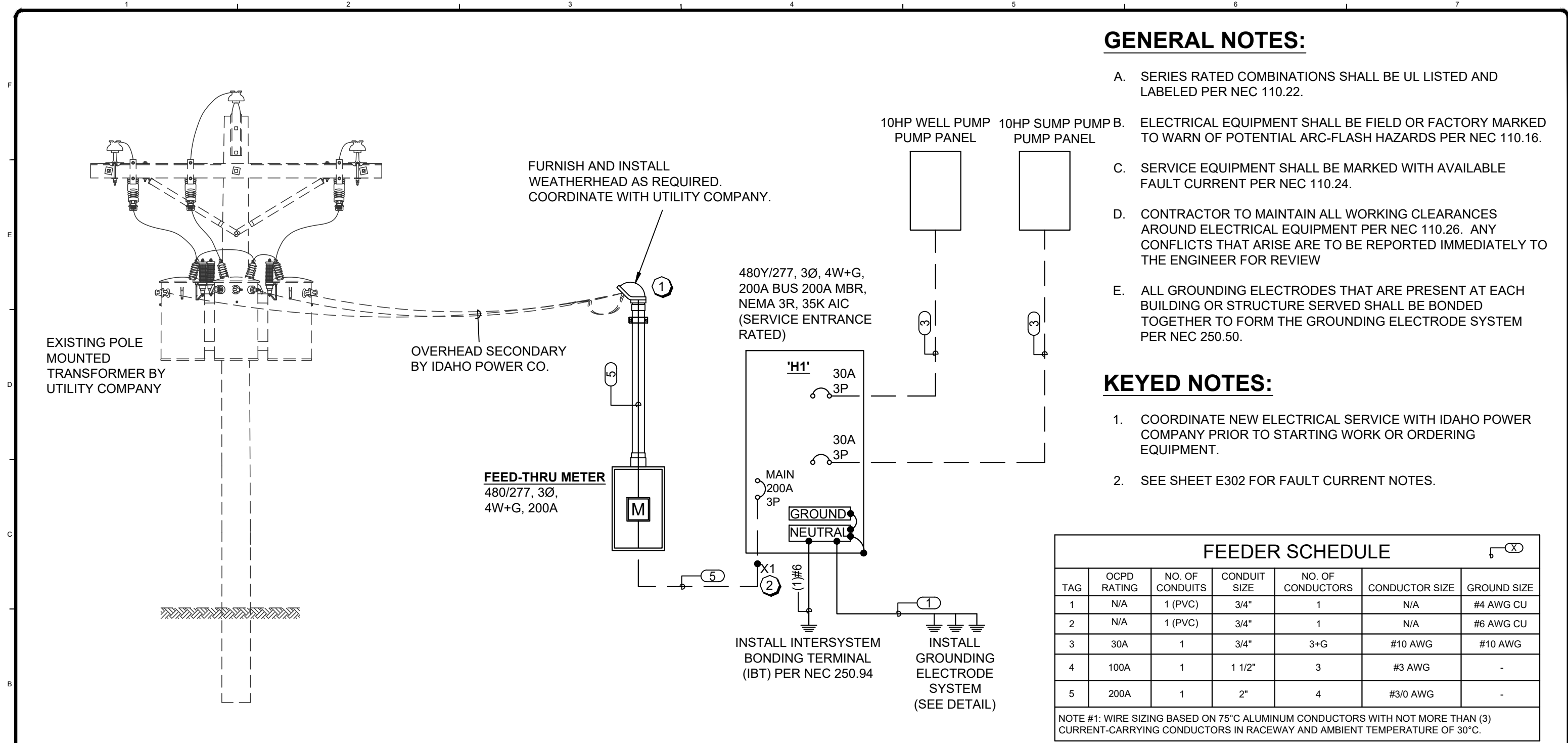
1 ELECTRICAL PLAN AREA 'B'

SCALE: 1/4"=1'-0"



MARK	DATE	DESCRIPTION	BY
0	1/27/22	ISSUED FOR BID	SEF

PICKLES BUTTE LANDFILL CANYON COUNTY, IDAHO		Project No.: 114-571040-2022
DUST CONTROL WELL PUMP STATION AND STORAGE TANK		Designed By: KWA
		Drawn By: NAA
		Checked By: KWA
ELECTRICAL PLAN AREA 'B'		E201



480Y/277 VOLT ONE-LINE DIAGRAM
SCALE: NTS



KEAMP
ENGINEERING
Project #: 22-031
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(208) 830-5370 | keith@amp-eng.com

TETRA TECH
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MARK	DATE	DESCRIPTION	BY
0	1/27/22	ISSUED FOR BID	SEF

PICKLES BUTTE LANDFILL
CANYON COUNTY, IDAHO

DUST CONTROL WELL PUMP STATION
AND STORAGE TANK

480V ONE LINE DIAGRAM

Project No.: 114-571040-2022
Designed By: KWA
Drawn By: NAA
Checked By: KWA

E300

EXISTING POLE MOUNTED
TRANSFORMER BY UTILITY
COMPANY

OVERHEAD SECONDARY
BY IDAHO POWER CO.

FURNISH AND INSTALL
WEATHERHEAD AS REQUIRED.
COORDINATE WITH UTILITY COMPANY.

120/240, 1Ø, 3W+G, 100A BUS
100A MBR, NEMA 3R, 35K AIC
(SERVICE ENTRANCE RATED)

FEED-THRU METER
120/240, 1Ø,
3W+G, 100A

INSTALL INTERSYSTEM
BONDING TERMINAL
(IBT) PER NEC 250.94

INSTALL
GROUNDING
ELECTRODE
SYSTEM
(SEE DETAIL)

GENERAL NOTES:

- SERIES RATED COMBINATIONS SHALL BE UL LISTED AND LABELED PER NEC 110.22.
- ELECTRICAL EQUIPMENT SHALL BE FIELD OR FACTORY MARKED TO WARN OF POTENTIAL ARC-FLASH HAZARDS PER NEC 110.16.
- SERVICE EQUIPMENT SHALL BE MARKED WITH AVAILABLE FAULT CURRENT PER NEC 110.24.
- CONTRACTOR TO MAINTAIN ALL WORKING CLEARANCES AROUND ELECTRICAL EQUIPMENT PER NEC 110.26. ANY CONFLICTS THAT ARISE ARE TO BE REPORTED IMMEDIATELY TO THE ENGINEER FOR REVIEW
- ALL GROUNDING ELECTRODES THAT ARE PRESENT AT EACH BUILDING OR STRUCTURE SERVED SHALL BE BONDED TOGETHER TO FORM THE GROUNDING ELECTRODE SYSTEM PER NEC 250.50.

KEYED NOTES:

- COORDINATE NEW ELECTRICAL SERVICE WITH IDAHO POWER COMPANY PRIOR TO STARTING WORK OR ORDERING EQUIPMENT.
- SEE SHEET E302 FOR FAULT CURRENT NOTES.

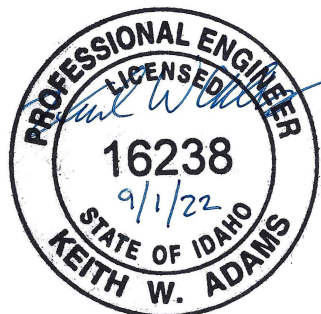
FEEDER SCHEDULE

TAG	OCPD RATING	NO. OF CONDUITS	CONDUIT SIZE	NO. OF CONDUCTORS	CONDUCTOR SIZE	GROUND SIZE
1	N/A	1 (PVC)	3/4"	1	N/A	#4 AWG CU
2	N/A	1 (PVC)	3/4"	1	N/A	#6 AWG CU
3	30A	1	3/4"	3+G	#10 AWG	#10 AWG
4	100A	1	1 1/2"	3	#3 AWG	-
5	200A	1	2"	4	#3/0 AWG	-

NOTE #1: WIRE SIZING BASED ON 75°C ALUMINUM CONDUCTORS WITH NOT MORE THAN (3) CURRENT-CARRYING CONDUCTORS IN RACEWAY AND AMBIENT TEMPERATURE OF 30°C.

240/120 VOLT ONE-LINE DIAGRAM

SCALE: NTS



MARK	DATE	DESCRIPTION	BY
0	1/27/22	ISSUED FOR BID	SEF

PICKLES BUTTE LANDFILL
CANYON COUNTY, IDAHO
DUST CONTROL WELL PUMP STATION
AND STORAGE TANK
240V ONE-LINE DIAGRAM

Project No.: 114-571040-2022
Designed By: KWA
Drawn By: NAA
Checked By: KWA

E301

480V FAULT CURRENT CALCULATIONS •XX

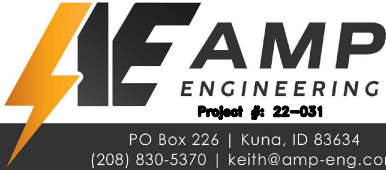
POINT #	LOCATION	EST. DISTANCE (FT.)	AVAILABLE FAULT CURRENT (A)
X1	SERVICE ENTRANCE	~220'	804

NOTES: AVAILABLE FAULT CURRENT AT UTILITY XFMR SECONDARY BASED ON AN ESTIMATED 15KVA XFMR WITH 2% IMPEDANCE AND (1) RUN OF #1/0 ALUMINUM CONDUCTORS RAN OVERHEAD. CONTRACTOR TO VERIFY ACTUAL EQUIPMENT TO BE INSTALLED WITH UTILITY COMPANY PRIOR TO ORDERING ELECTRICAL GEAR. IF ANY ITEMS DO NOT MATCH ABOVE ASSUMPTIONS, NOTIFY ENGINEER IMMEDIATELY FOR UPDATED FAULT CURRENT CALCULATIONS.

240V FAULT CURRENT CALCULATIONS •XX

POINT #	LOCATION	EST. DISTANCE (FT.)	AVAILABLE FAULT CURRENT (A)
X2	SERVICE ENTRANCE	~120	2,753

NOTES: AVAILABLE FAULT CURRENT AT UTILITY XFMR SECONDARY BASED ON AN ESTIMATED 25KVA XFMR WITH 2% IMPEDANCE AND (1) RUNS OF #1/0 ALUMINUM CONDUCTORS RAN OVERHEAD. CONTRACTOR TO VERIFY ACTUAL EQUIPMENT TO BE INSTALLED WITH UTILITY COMPANY PRIOR TO ORDERING ELECTRICAL GEAR. IF ANY ITEMS DO NOT MATCH ABOVE ASSUMPTIONS, NOTIFY ENGINEER IMMEDIATELY FOR UPDATED FAULT CURRENT CALCULATIONS.

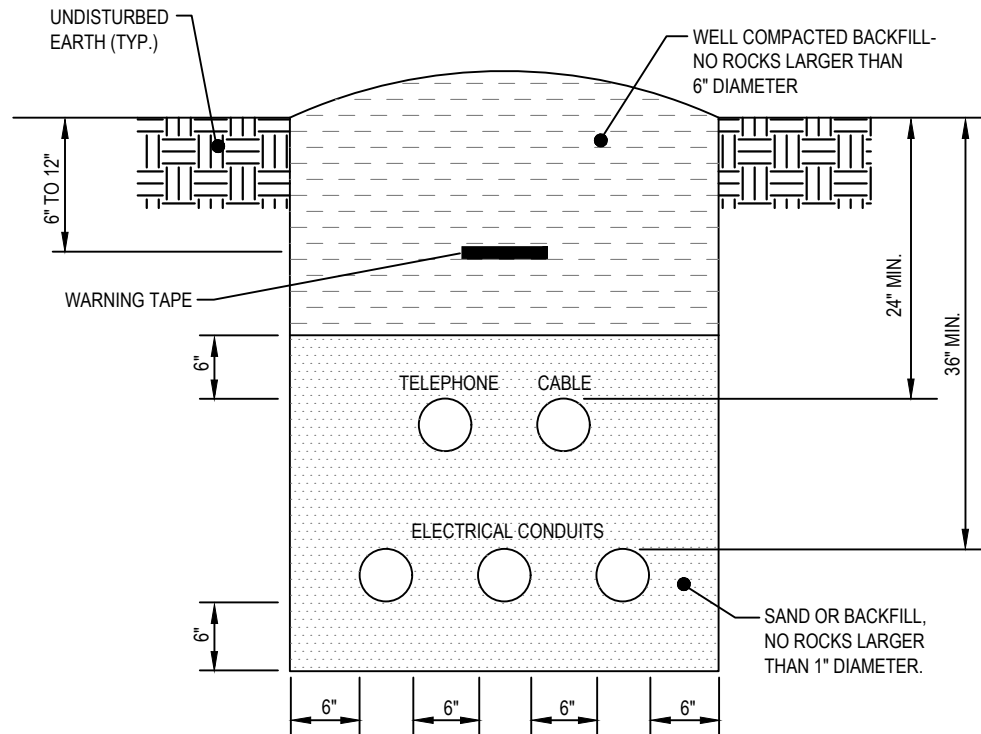


MARK	DATE	DESCRIPTION	BY
0	1/27/22	ISSUED FOR BID	SEF

PICKLES BUTTE LANDFILL
CANYON COUNTY, IDAHO
DUST CONTROL WELL PUMP STATION
AND STORAGE TANK
ELECTRICAL SCHEDULES

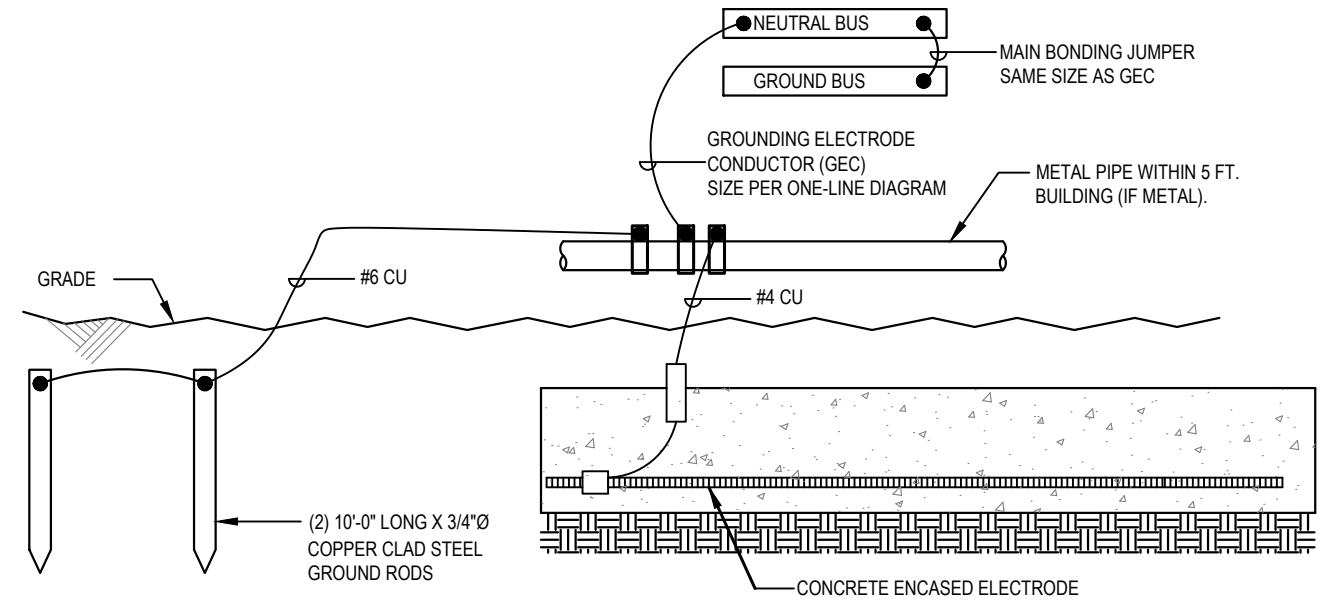
Project No.:	114-571040-2022
Designed By:	KWA
Drawn By:	NAA
Checked By:	KWA

E302



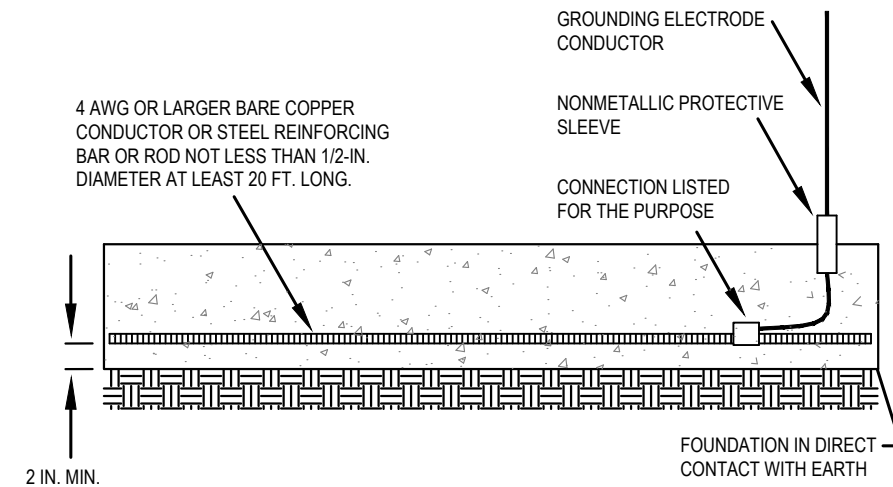
ELECTRICAL TRENCH DETAIL

SCALE: NTS



GROUNDING ELECTRODE SYSTEM DETAIL

SCALE: NTS



CONCRETE ENCASED ELECTRODE DETAIL

SCALE: NTS

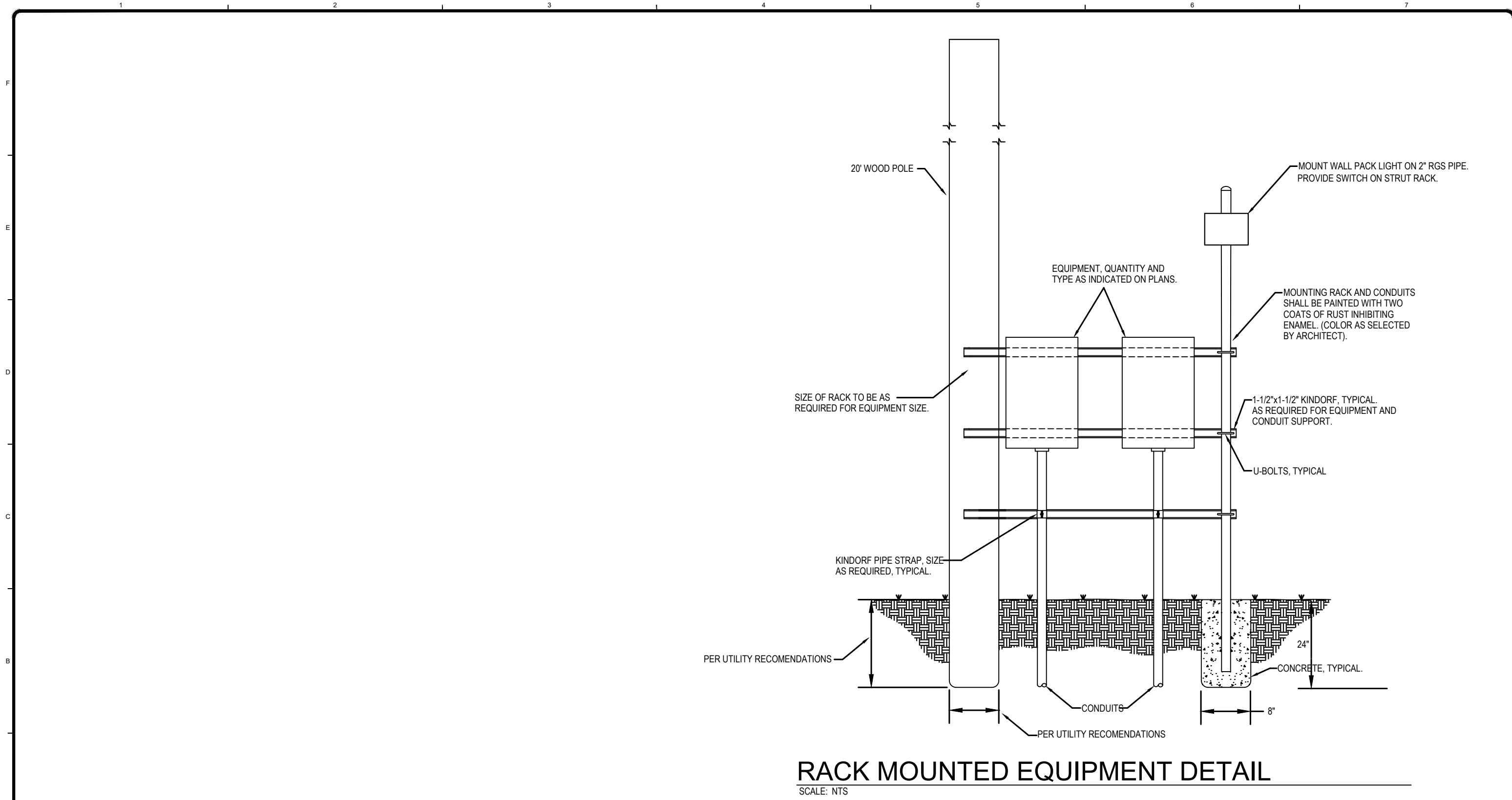


MARK	DATE	DESCRIPTION	BY
0	1/27/22	ISSUED FOR BID	SEF

PICKLES BUTTE LANDFILL CANYON COUNTY, IDAHO	Project No.: 114-571040-2022
DUST CONTROL WELL PUMP STATION AND STORAGE TANK	Designed By: KWA
ELECTRICAL DETAILS	Drawn By: NAA
	Checked By: KWA

E303

Bar Measures 1 inch



RACK MOUNTED EQUIPMENT DETAIL

SCALE: NTS



AMP
ENGINEERING
Project #: 22-031
PO Box 226 | Kuna, ID 83634
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TETRA TECH

www.tetrattech.com

380 Americana Terrace, Suite 201
Boise, ID 83706
PHONE: 208-389-1030



MARK	DATE	DESCRIPTION	BY
0	1/27/22	ISSUED FOR BID	SEF

PICKLES BUTTE LANDFILL CANYON COUNTY, IDAHO
DUST CONTROL WELL PUMP STATION AND STORAGE TANK
ELECTRICAL DETAILS

Project No.: 114-571040-2022
Designed By: KWA
Drawn By: NAA
Checked By: KWA
E304

ELECTRICAL SERVICE LOAD SUMMARY

PROJECT: PICKLES BUTTE

EQUIPMENT: H1

VOLTAGE: 480Y/277

PHASE, WIRE: 3-PHASE, 4-WIRE + GND

OCPD RATING: 200 AMPS STANDARD

BUS RATING: 200 AMPS

ENCLOSURE: NEMA 3R, LOCKABLE


MAIN: BREAKER

MOUNTING: SURFACE

FED FROM: IP XFMR

NEUTRAL: 100%

LOCATION: BY IP POLE



AVAILABLE FAULT CURRENT:		804	AMPS	AVAILABLE FAULT CURRENT TO BE MARKED ON SERVICE EQUIPMENT PER NEC 110.24					
EQUIPMENT RATING:		10K	AIC						
PANEL 'H1'		LTG (KVA)	REC (KVA)	MOTOR (KVA)	KITCHEN (KVA)	CONT. (KVA)	NON-CONT. (KVA)	HVAC (KVA)	ELEC. HEAT (KVA)
		-	-	23.3	-	-	-	-	-
TOTAL CONN. LOAD	(KVA):	-	-	23.3	-	-	-	-	-
	(AMPS):	-	-	28.0	-	-	-	-	-
DEMAND FACTOR:		-	-	146%	-	-	-	-	-
TOTAL DEMAND LOAD	(KVA):	-	-	34.0	-	-	-	-	-
	(AMPS):	-	-	40.9	-	-	-	-	-
		LARGEST (KVA)		43.0	0	TOTAL KITCHEN UNITS			

OVERALL LOAD SUMMARY					
	TOTAL CONNECTED		DEMAND FACTOR	TOTAL DEMAND	
	(KVA)	(AMPS)		(KVA)	(AMPS)
TOTAL NEW LOAD:	23.3	28.0	146%	34.0	40.9
EQUIPMENT OCPD OR BUS RATING:					200
				PANEL 'OK'	

ELECTRICAL SERVICE LOAD SUMMARY

PROJECT: PICKLES BUTTE DUST CONTROL

EQUIPMENT: L1

VOLTAGE: 240/120

PHASE, WIRE: 1 PHASE, 3 WIRE + GND

OCPD RATING: 100 STANDARD

BUS RATING: 100

ENCLOSURE: NEMA 1

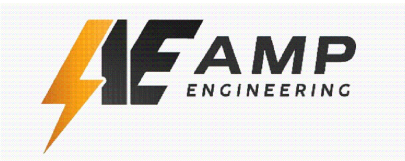
PANEL TYPE: MAIN BREAKER

MOUNTING: SURFACE

FED FROM: UTILITY XFMR

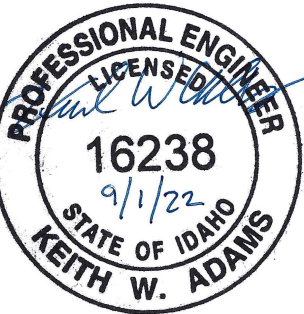
NEUTRAL: 100%


LOCATION: TANK BLDG



AVAILABLE FAULT CURRENT:			2,753	AMPS	AVAILABLE FAULT CURRENT TO BE MARKED ON SERVICE EQUIPMENT PER NEC 110.24			
EQUIPMENT RATING:			10K	AIC				
PANEL 'L1'	LTG (KVA)	REC (KVA)	MOTOR (KVA)	KITCHEN (KVA)	CONT. (KVA)	NON-CONT. (KVA)	HVAC (KVA)	ELEC. HEAT (KVA)
	-	0.9	-	-	-	0.2	-	1.5
TOTAL CONN. (KVA):	0.0	0.9	0.0	0.0	0.0	0.2	0.0	1.5
LOAD (AMPS):	0.0	4.3	0.0	0.0	0.0	1.0	0.0	7.2
DEMAND FACTOR:	125%	100%	-	-	125%	100%	100%	100%
TOTAL (KVA):	0.0	0.9	0.0	0.0	0.0	0.2	0.0	1.5
DEMAND LOAD (AMPS):	0.0	4.3	0.0	0.0	0.0	1.0	0.0	7.2
LARGEST (KVA)			0.0	0	TOTAL UNITS			

OVERALL LOAD SUMMARY					
	TOTAL CONNECTED		DEMAND FACTOR	TOTAL DEMAND	
	(KVA)	(AMPS)		(KVA)	(AMPS)
TOTAL NEW LOAD:	2.6	12.5	100%	2.6	12.5
EQUIPMENT OCPD OR BUS RATING:					100
				PANEL 'OK'	






Project #:

22-031

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TETRA TECH

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PHONE: 208-389-1030



MARK	DATE	DESCRIPTION	BY	<div>PICKLES BUTTE LANDFILL CANYON COUNTY, IDAHO</div> <div>DUST CONTROL WELL PUMP STATION AND STORAGE TANK</div> <div>ELECTRICAL SCHEDULES</div>		Project No.: 114-571040-2022
0	1/27/22	ISSUED FOR BID	SEF			Designed By: KWA
						Drawn By: NAA
						Checked By: KWA
E305						

SCHEDULE - PANEL 'H1'

PROJECT: PICKLES BUTTE

VOLTAGE: 480Y/277
PHASE, WIRE: 3-PHASE, 4 WIRE + GND
OCPD RATING: 200 AMPS
BUS RATING: 200 AMPS
ENCLOSURE: NEMA 3R, LOCKABLE
MAIN: BREAKER

AIC RATING:	10K
MOUNTING:	SURFACE
FED FROM:	UTILITY XFMR
NEUTRAL:	100%
LOCATION:	RACK BY UTILITY POLE
MAIN RATING:	STANDARD RATED

PANEL NOTES:
A. SERIES COMBINATIONS SHALL BE UL LISTED AND LABELED PER NEC 110.22.

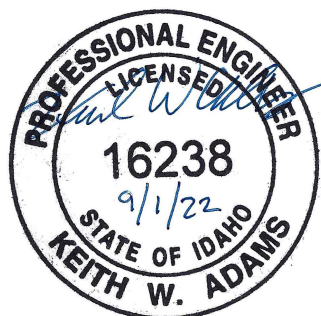
NOTES	LOAD TYPE	CKT #	DESCRIPTION	BRK SIZE	# POLE	LOAD (VA)	LOAD (A)	PHASE LOADS (VA)			LOAD (A)	LOAD (VA)	# POLE	BRK SIZE	DESCRIPTION	CKT #	LOAD TYPE	NOTES
						'A'	'B'	'C'										
	M	1	10HP WELL PUMP	30	3	3,879	14.0	3,879		-		3	50	SPARE	2			
	M	3		30		3,879	14.0		3,879		-				50	4		
	M	5		30		3,879	14.0			3,879	-				50	6		
	M	7	10HP SUMP PUMP	30	3	3,879	14.0	3,879		-		1	20	SPARE	8			
	M	9		30		3,879	14.0		3,879		-		1	20	SPARE	10		
	M	11		30		3,879	14.0			3,879	-		1	20	SPARE	12		
		13	SPARE	20	3		-	0		-				BLANK	14			
		15		20			-		0		-				BLANK	16		
		17		20			-			0	-				BLANK	18		
	L	19	LTG - WALL PACK	20	1	18	0.1	18		-				BLANK	20			
		21	BLANK				-		0	-				BLANK	22			
		23	BLANK				-			0	-			BLANK	24			
		25	BLANK				-	0		-				BLANK	26			
		27	BLANK				-		0	-				BLANK	28			
		29	BLANK				-			0	-			BLANK	30			
						TOTAL (VA)			7,776	7,758	7,758							
						TOTAL (AMPS)			28.1	28.0	28.0							
						% UNBALANCE			0.2%	0.1%	0.1%							

PANEL LOAD SUMMARY		LOAD TYPE	CONN. LOAD	DEMAND FACTOR	DEMAND LOAD
23.3	CONNECTED LOAD (KVA)	LIGHTING (VA):	18	125%	23
28.0	CONNECTED LOAD (AMPS)	RECEPTACLE (VA):	0	-	0
		MOTORS (VA):	23,274	146%	34,024
34.0	DEMAND LOAD (KVA)	KITCHEN (VA):	0	-	0
41.0	DEMAND LOAD (AMPS)	CONTINUOUS (VA):	0	125%	0
PANEL 'OK'		NON-CONTINUOUS (VA):	0	100%	0
		HVAC (VA):	0	100%	0
		ELECTRIC HEAT (VA):	0	100%	0
		TOTAL:	23.292	146%	34.047




BRANCH CIRCUIT NOTES:

1. PROVIDE CLASS 'A' GFCI TYPE BREAKER
2. PROVIDE CLASS 'B' GFEP TYPE BREAKER
3. ROUTE CIRCUIT THROUGH RELAY PANEL FOR CONTROL
4. BREAKER TO BE LOCKABLE PER NEC 110.25.
5. ROUTE CIRCUIT THROUGH HOOD CONTACTOR FOR ANSUL SHUT DOWN
7. BREAKER HANDLE TO BE RED PER NFPA 72.
8. BREAKER TO BE LOCKABLE IN THE 'ON' POSITION.
9. SUB FEED LOAD INCLUDED IN PANEL LOAD SUMMARY
10. --



MARK	DATE	DESCRIPTION	BY	PICKLES BUTTE LANDFILL CANYON COUNTY, IDAHO DUST CONTROL WELL PUMP STATION AND STORAGE TANK ELECTRICAL SCHEDULES	Project No.: 114-571040-2022
0	1/27/22	ISSUED FOR BID	SEF		Designed By: KWA
					Drawn By: NAA
					Checked By: KWA
					<div style="font-size: 2em; font-weight: bold; text-align: center;">E306</div>

SCHEDULE - PANEL 'L1'								PROJECT: PICKLES BUTTE DUST CONTROL									
VOLTAGE: 240/120				AIC RATING: 10K				PANEL NOTES: A. SERIES COMBINATIONS SHALL BE UL LISTED AND LABELED PER NEC 110.22. B. C. D. E.									
PHASE, WIRE 1 PHASE ,3 WIRE + GND				MOUNTING: SURFACE													
OCPD RATING: 100 STANDARD RATED				FED FROM: UTILITY XFMR													
BUS RATING: 100				NEUTRAL: 100%													
ENCLOSURE: NEMA 1				LOCATION: TANK BUILDING													
PANEL TYPE: MAIN BREAKER																	
NOTES	LOAD TYPE	CKT #	DESCRIPTION	BRK SIZE	# POLE	LOAD (VA)	LOAD (A)	PHASE LOADS (VA)		LOAD (A)	LOAD (VA)	# POLE	BRK SIZE	DESCRIPTION	CKT #	LOAD TYPE	NOTES
	R	1	LTG & REC - TANK BUILDING	20	1	900	7.5	1,000		0.8	100	1	15	2" FLOW METER	2	N	
	E	3	WALL HEATER	20	1	1,500	12.5		1,600	0.8	100	1	15	4" FLOW METER	4	N	
		5					-	0		-					6		
		7					-		0	-					8		
		9					-	0		-					10		
		11					-		0	-					12		
		13					-	0		-					14		
		15					-		0	-					16		
		17					-	0		-					18		
		19					-		0	-					20		
TOTAL (VA)								1,000		1,600							
% UNBALANCE								23.1%		23.1%							
PANEL LOAD SUMMARY				LOAD TYPE		CONN. LOAD	DEMAND FACTOR	DEMAND LOAD	<div></div> <div>LARGEST (KVA) EQUIP. COUNT</div> <div>BRANCH CIRCUIT NOTES: 1. PROVIDE CLASS 'A' GFCI TYPE BREAKER 2. PROVIDE CLASS 'B' GFEP TYPE BREAKER 3. ROUTE CIRCUIT THROUGH RELAY PANEL FOR CONTROL 4. BREAKER TO BE LOCKABLE PER NEC 110.25. 5. ROUTE CIRCUIT THROUGH HOOD CONTACTOR FOR ANSUL SHUT DOWN 7. -- 8. -- 9. -- 10. --</div>								
2.6	CONNECTED LOAD (KVA)			LIGHTING (VA):		0	125%	0									
12.5	CONNECTED LOAD (AMPS)			RECEPTACLE (VA):		900	100%	900									
				MOTORS (VA):		0	-	0									
2.6	DEMAND LOAD (KVA)			KITCHEN (VA):		0	-	0									
12.5	DEMAND LOAD (AMPS)			CONTINUOUS (VA):		0	125%	0									
PANEL 'OK'				NON-CONTINUOUS (VA):		200	100%	200									
				HVAC (VA):		0	100%	0									
				ELECTRIC HEAT (VA):		1,500	100%	1,500									
				TOTAL:		2,600	100%	2,600									



MARK	DATE	DESCRIPTION	BY
0	1/27/22	ISSUED FOR BID	SEF

PICKLES BUTTE LANDFILL CANYON COUNTY, IDAHO		Project No.: 114-571040-2022
DUST CONTROL WELL PUMP STATION AND STORAGE TANK		Designed By: KWA
ELECTRICAL SCHEDULES		Drawn By: NAA
		Checked By: KWA

E307