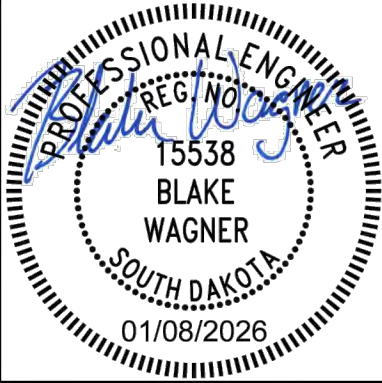


FILE LOCATION: Q:\2025\25547 Moberge WWTF\Mechanical\Drawings\25547 Mechanical.dwg

233700 - LOUVER SCHEDULE								
SCHEDULE NOTES:								
1. CUSTOM COLOR SELECTED BY ARCHITECT AT SHOP DRAWING REVIEW								
2. BPWP = BEGINNING POINT OF WATER PENETRATION IN FPM								
3. FURNISH WITH 1/2" SQUARE MESH, 16 GAUGE ALUMINUM BIRDSCREEN ON LOUVER INTERIOR								
TAG	MANUFACTURER	MODEL	DIMENSIONS			FUNCTION	FREE AREA	NOTES
			WIDTH	HEIGHT	DEPTH			
IL-1	GREENHECK	ESD-635	48	48	6	INTAKE	9.4 SQFT	ALL



233400 - FAN SCHEDULE																				
SCHEDULE NOTES:																				
1. PROVIDE FAN FOR SIDEWALL MOUNTING, SIDEWALL MOUNTING BRACKET, STAINLESS STEEL FASTENERS, STAINLESS STEEL BIRDSCREEN.																				
2. PROVIDE MOUNTING HARDWARE, ISOLATION DEVICES, FRAME WORK FOR SUSPENDED INSTALLATION																				
3. PROVIDE WITH GRAVITY BACKDRAFT DAMPER.																				
4. PROVIDE FACTORY DISCONNECT																				
5. PROVIDE ECM TYPE MOTOR AND SPEED CONTROL DIAL.																				
MARK	SERVES	MANUFACTURER	MODEL	FAN TYPE	SYSTEM	CFM	ESP	TSP	FAN RPM	SONES	SPEED CONTROL	FEI	MOTOR			ELECTRICAL				NOTES
													BHP	HP	WATTS	VOLT	Ph	Hz	SCCR	
EF-1	ENTIRE BUILDING	GREENHECK	CUE-160-VG	SIDEWALL UPBLAST	EXHAUST	2,400	0.75	0.854	1191	14.3	YES	1.58	0.61	1	N/A	115	1	60	5kA	ALL

238000 - UNIT HEATER - GAS														
NOTES:														
1. SEPARATED COMBUSTION														
2. PROVIDE WALL VENT TERMINATION														
MARK	MANUFACTURER	MODEL	AIR FLOW			FUEL		HEATING		MOTOR HP	ELECTRICAL			NOTES
			FLOW	EAT	LAT	TYPE	PRESSURE	INPUT	OUTPUT		VOLT	Ph	Hz	
UH-1	REZNOR	UDXC	600	55	115	PROPANE	11" W.C.	60 MBH	49.8 MBH	1/6	115	1	60	ALL
UH-2	REZNOR	UDXC	1921	55	115	PROPANE	11" W.C.	150 MBH	124.5 MBH	1/6	115	1	60	ALL

MECHANICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
STRUCTURE 78 - MECHANICAL SCHEDULES

DATE:	1/08/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	BAW
DESIGNER:	MJF
DRAFTER:	MJF
REVIEWER:	BAW

M78-603

FILE LOCATION: Q:\2025\25547 Mobridge WWTF\Mechanical\Drawings\25547 Mechanical.dwg



MECHANICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
STRUCTURE 78 - MECHANICAL SCHEDULES

237200 - MAKE-UP AIR UNIT - GAS																					
SCHEDULE NOTES																					
1. PROVIDE REMOTE TOUCHSCREEN CONTROL PANEL, MOUNTED ON WALL AS SHOWN ON DRAWINGS.											2. CONSTANT VOLUME AIRFLOW, 100% OUTDOOR AIR										
3. PROVIDE WITH MERV 13 FILTER SECTION.											4. DUCTED INLET										
5. PROVIDE W/DIRECT DRIVE, MIXED FLOW PLENUM FAN, W/MBRATION ISOLATION											6. DISCHARGE TEMPERATURE CONTROL										
7. PROVIDE WITH 3-WAY DISCHARGE DIFFUSER FOR FIELD INSTALLATION.											8. PROVIDE W/FACTORY ELECTRICAL DISCONNECT										
MARK	MANUFACTURER	MODEL	ARRANGEMENT	AIR SIDE				FURNACE						ELECTRICAL						NOTES	
				FLOW	ESP	MOTOR		FUEL		HEATING CAPACITY (MBH)		EAT	LAT	SCCR	MCA	MOP	VOLT	Ph	Hz		
						BHP	HP	TYPE	PRESSURE	INPUT	OUTPUT										
MAU-1	GREENHECK	DGX-P116-H12-MF	HORIZONTAL	2400	0.25	0.99	1.5	PROPANE	11" W.C.	253.6	233.3	-25	65	5kA	4.1	15	460	3	60	ALL	

DATE:	1/08/2026
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REV NUM:	---
RECORD:	---
PROJECT No. 25547	
MANAGER: BAW	
DESIGNER: MJF	
DRAFTER: MJF	
REVIEWER: BAW	

M78-604

FILE LOCATION: Q:\2025\25547 Mobridge WWTF\Elec Dwgs\25547 Electrical.dwg

STANDARD ELECTRICAL SYMBOLS

BASED ON ANSI Y32.9-1972, ANSI A117.1-1986, AND FEDERAL REGISTER 56-144(ADA)
MOUNTING HEIGHT MEASUREMENTS SHALL BE MADE FROM FINISH FLOOR TO CENTER LINE OF OUTLET

SYMBOL	DESCRIPTION	MTG. HT.
<u>LIGHTING OUTLETS</u>		
	EXTERIOR SITE LUMINAIRE	SCHEDULED
	EXTERIOR FLOOD LIGHT	
	FLUORESCENT, SLASH INDICATES INBOARD LAMP UNSWITCHED.	
	BARE LAMP FLUORESCENT STRIP WITH WIRE GUARD.	
	CEILING MOUNTED EXIT SIGN, SHADING INDICATES LIGHTED FACE.	
	WALL MOUNTED EXIT SIGN.	SCHEDULED
	EMERGENCY BATTERY UNIT	
	REMOTE SEALED BEAM	
	PORCELAIN LAMPHOLDER. 100A LAMP	SCHEDULED
	JUNCTION BOX	
<u>RECEPTACLE OUTLETS</u>		
	SINGLE. CKT 1	18"
	DUPLEX	18"
	DUPLEX - SPLIT WIRED	18"
	DUPLEX - GROUND FAULT CIRCUIT INTERRUPTER	18"
	DUPLEX - EMERGENCY	18"
	DOUBLE DUPLEX	SCHEDULED
	SPECIAL CONFIGURATION. DESIGNATION REFERS TO SCHEDULE	
	MULTI-OUTLET ASSEMBLY. ARROWS EXTEND TO LIMIT OF INSTALLATION. SUBSCRIPT INDICATES SPACING OF OUTLETS	
	CLOCK RECEPTACLE	82"
	DUPLEX RECEPTACLE - FLOOR BOX	
<u>SWITCH OUTLETS</u>		
	SINGLE POLE	46"
	DOUBLE POLE	46"
	THREE-WAY	46"
	FOUR-WAY	46"
	KEY OPERATED	46"
	MOTOR - PROVIDE OVERLOAD UNIT AS REQ'D. TOGGLE ACCEPTABLE IF INTERNAL THERMAL PROTECTION INCLUDED. SWITCH NOT REQUIRED IF MOTOR ASSEMBLY HAS INTEGRAL DISCONNECTING MEANS.	
	PILOT HANDLE	
	TIME DELAY	46"
	DIMMER - 1000W UNLESS OTHERWISE INDICATED	46"
	GANGED SWITCHES - ARROW INDICATES MULTI-LEVEL SWITCHING	46"
	WALL MOUNTED OCCUPANCY SENSOR	46"
	CEILING MOUNTED OCCUPANCY SENSOR. TYPE a, SW b. REFER TO SCHEDULE FOR TYPE.	
<u>COMMUNICATION/DATA SYSTEM OUTLETS</u>		
	VOICE OUTLET	18"
	VOICE OUTLET OR DATA OUTLET - FLOOR BOX	18"
	DATA OUTLET	
	BELL	
	BUZZER	52"
	INTERCOM STATION	
	MICROPHONE OUTLET	
	TELEVISION OUTLET	
	VOLUME CONTROL	
	PUSH BUTTON	52"
	SPEAKER/BAFFLE/BACKBOX COMBINATION	CEILING
	CLOCK	
<u>MISCELLANEOUS</u>		
	PLAN OR DETAIL NOTE	84"
	SPECIAL PURPOSE CONNECTION - AS REQUIRED BY EQUIPMENT MANUFACTURER. CO-ORDINATE ROUGH-IN WITH SHOP DWG.	
	BRANCH CIRCUIT PANELBOARD, SHADING INDICATES NEW PANEL	
	CONTROL PANEL	
	EXTERNALLY OPERATED DISCONNECT SWITCH	
	CONTROLLER OR RELAY	TOP 75"
	COMBINATION CONTROLLER AND DISCONNECTION MEANS	
	MOTOR. DESIGNATION REFERS TO SCHEDULE.	
	EQUIPMENT DESIGNATION. SEE SCHEDULE.	
	ELECTRIC HEAT TO SCALE. DESIGNATION REFERS TO SCHEDULE. "T" INDICATES INTEGRAL THERMOSTAT.	52"
	THERMOSTAT-PROVIDED BY DIV. 26	52"
	THERMOSTAT-FURNISHED BY DIV. 23, INSTALLED BY DIV. 26	52"
	HUMIDISTAT-FURNISHED BY DIV. 23, INSTALLED BY DIV. 26	52"
	POTENTIOMETER-FURNISHED BY DIV. 23, INSTALLED BY DIV. 26	52"
	TIME SWITCH	
	PHOTOELECTRIC SWITCH	

STANDARD ELECTRICAL SYMBOLS

BASED ON ANSI Y32.9-1972, ANSI A117.1-1986, AND FEDERAL REGISTER 56-144(ADA)
MOUNTING HEIGHT MEASUREMENTS SHALL BE MADE FROM FINISH FLOOR TO CENTER LINE OF OUTLET

SYMBOL	DESCRIPTION	MTG. HT.
<u>CIRCUITING</u>		
	HOME RUN. MIN 3/4" C. ARROWS AND SUBSCRIPTS INDICATE NUMBER AND IDENTIFICATION OF CIRCUITS.	
	EMERGENCY. MIN 1/2" C-#10 AWG.	
	TELEPHONE. MIN 3/4"C, HOME RUN TO TERMINAL BOARD	
	TELEPHONE. MIN 3/4"C, STUB INTO CEILING SPACE	
	LOW VOLTAGE. MIN 1/2"C-#14 AWG AS REQ'D.	
	SPECIAL SYSTEMS. MIN 3/4"C. PROVIDE CONDUCTORS AS REQ'D BY MANUFACTURER. SUBSCRIPT INDICATES SYSTEM. SEE STANDARD ABBREVIATIONS.	
<u>STANDARD ABBREVIATIONS</u>		
ABOVE COUNTER (MIN 4" ABOVE BACKSPLASH)	LV	LOW VOLTAGE
ABOVE FINISH FLOOR	MC	MECHANICAL CONTRACTOR
ABOVE FINISH GRADE	MCA	MINIMUM CIRCUIT AMPACITY
AIR HANDLING UNIT	MCB	MAIN CIRCUIT BREAKER
AUTOMATIC TEMPERATURE CONTROL	MLO	MAIN LUG ONLY
BOTTOM OF FIXTURE	NC	NURSE CALL
CIRCUIT	NFDS	NON-FUSIBLE DISCONNECT SWITCH
CEILING MOUNT	NR	NOT REQUIRED
CONDENSING UNIT	OPD	OVERCURRENT PROTECTIVE DEVICE
CABINET UNIT HEATER	P	PAGING/BACKGROUND MUSIC
DUST TIGHT	PA	PUBLIC ADDRESS
DATA RACK	PNL	PANELBOARD
ELECTRICAL CONTRACTOR	PRV	POWER ROOF VENTILATOR
EXHAUST FAN	RF	RELIEF FAN
EQUIPMENT GROUNDING CONDUCTOR	RGSC	RIGID GALVANIZED STEEL CONDUIT
EMERGENCY	RT	RAIN-TIGHT
EXPLOSION PROOF	RTU	ROOFTOP UNIT
ELECTRIC WATER COOLER	S	SECURITY
ELECTRIC WATER HEATER	SD	SEE DETAIL
FUSED	SS	SURGE SUPPRESSION
FIRE ALARM	SW	SWITCH
FIRE ALARM CONTROL PANEL	TOP	TOP OF PANEL
FIRE ALARM REMOTE ANNUNCIATOR	T	TELEPHONE
FUSIBLE DISCONNECT SWITCH	TSSW	TWO SPEED SEPARATE WINDING
FULL LOAD AMPERES	TTB	TELEPHONE TERMINAL BOARD
FRACTIONAL	UG	UNDERGROUND
FULL VOLTAGE NON REVERSING	VT	VAPOR TIGHT
FULL VOLTAGE REVERSING	W	WALL MTG. (46" AFF)
GENERAL CONTRACTOR	WP	WEATHERPROOF
INTERCOM	WT	WATER TIGHT
ISOLATED GROUND	WM	WIREMOLD
INTERLOCK		

SPECIAL SYMBOLS PECULIAR TO THIS PROJECT

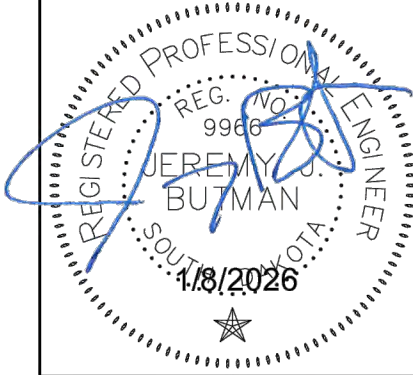
SPECIAL ABBREVIATIONS PECULIAR TO THIS PROJECT

STRUCTURE SCHEDULE

#	NAME
10	INFLUENT AND PRETREATMENT BUILDING
15.1	PRIMARY CLARIFIERS #1
15.2	PRIMARY CLARIFIERS #2
20	PUMP STATION CONTROL BUILDING
35	SELECTOR/AERATION BASINS
40	BLOWER BUILDING
50	FINAL CLARIFIER #1
52	FINAL CLARIFIER #2
55	DISINFECTION STRUCTURE
60	EFFLUENT PARSHALL FLUME
65	SLUDGE DIGESTION COMPLEX
78	BIOSOLIDS DEWATERING BUILDING
80	LABORATORY / OFFICE BUILDING

GENERAL NOTES

- FIELD VERIFY ALL PERTINENT EXISTING CONDITIONS AND INSTALLATION REQUIREMENTS IN CONNECTION WITH REMODEL. MAKE ALLOWANCES IN BID THERETO.
- DEVICES WITH SLASH THROUGH INDICATE SPECIFIC EXISTING DEVICES TO REMOVED. REMOVE OR RELOCATE ANY ELECTRICAL DEVICE AS REQUIRED BY REMODEL OPERATIONS. EXTEND EXISTING CIRCUITRY AS REQUIRED TO MAINTAIN DOWNSTREAM DEVICES OR FIXTURES. DISCONNECT AND REMOVE ANY EXISTING CIRCUITRY NOT BEING REUSED. RE-IDENTIFY EXISTING PANEL DIRECTORIES AS REQUIRED.
- SEE SPECIFICATION 260510 FOR REMODEL.
- ELECTRICAL CONTRACTOR SHALL LOCATE ALL PRIVATE (CITY OWNED) ELECTRICAL AND COMMUNICATIONS UTILITIES ON SITE PRIOR TO START OF CONSTRUCTION.



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
ELECTRICAL SYMBOL LEGEND

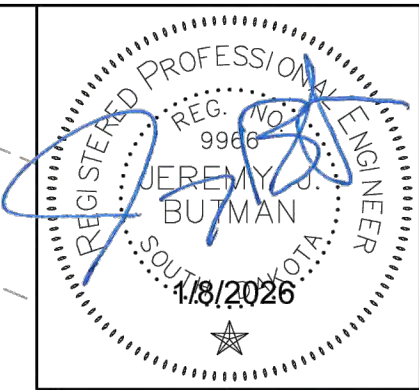
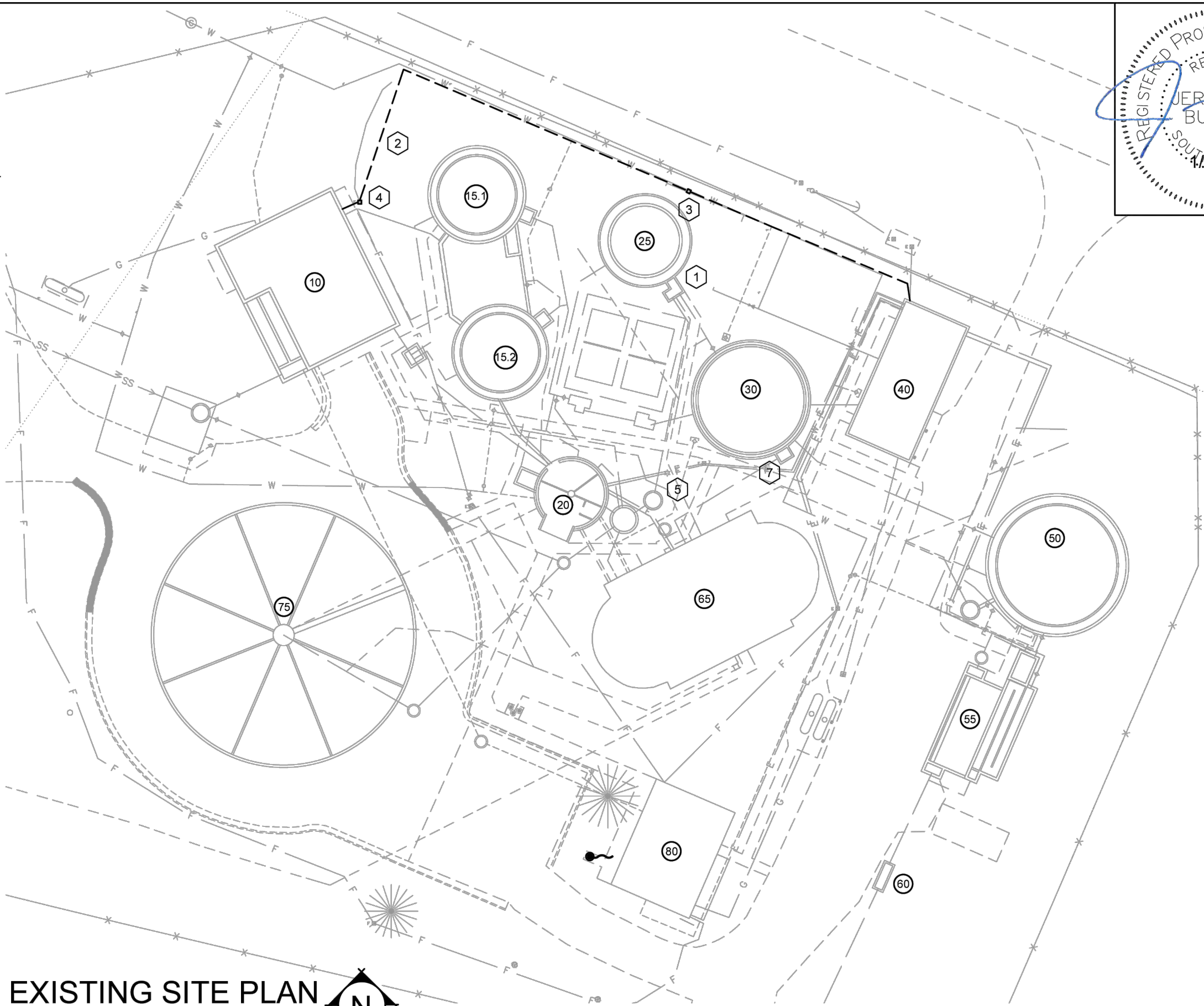
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REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB

FILE LOCATION: Q:\2025\25547 Moberge WWTF\Elec Dwg\25547 Electrical.dwg

NOTES: THIS SHEET



1. DISCONNECT POWER AND REMOVE ALL CIRCUITRY, LUMINAIRE AND CONTROL SWITCH FOR LUMINAIRE FROM TANK FOR DEMOLITION OF TANK STRUCTURE. REMOVE EXISTING CONTROL WIRING BETWEEN STRUCTURE AND BUILDING 20.
2. EXISTING POWER FEED TO EXISTING INTAKE BUILDING. SEE DETAIL 1/E-102 FOR NEW POWER FEED REQUIREMENTS. EXISTING POWER FEED TO BE ABANDONED IN PLACE AFTER NEW FEEDER IS INSTALLED.
3. AFTER NEW FEEDER IS IN PLACE, REMOVE EXISTING JUNCTION BOX COMPLETE.
4. EXISTING JUNCTION BOX MAY BE REUSED FOR NEW FEEDER.
5. REMOVE EXISTING SITE LIGHTING POLE, LUMINAIRE AND ASSOCIATED CIRCUITRY.
6. SEE DETAIL 1/E-103 FOR REMOVALS IN THIS BUILDING.
7. REMOVE EXISTING DISSOLVE OXYGEN INSTRUMENT AND TURN OVER TO OWNER. REMOVE ALL ASSOCIATED CABLING.



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
ELECTRICAL EXISTING SITE PLAN

DATE:	1/8/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB

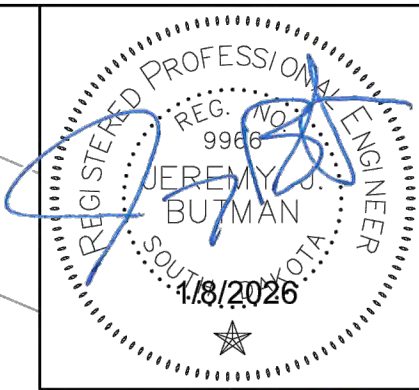
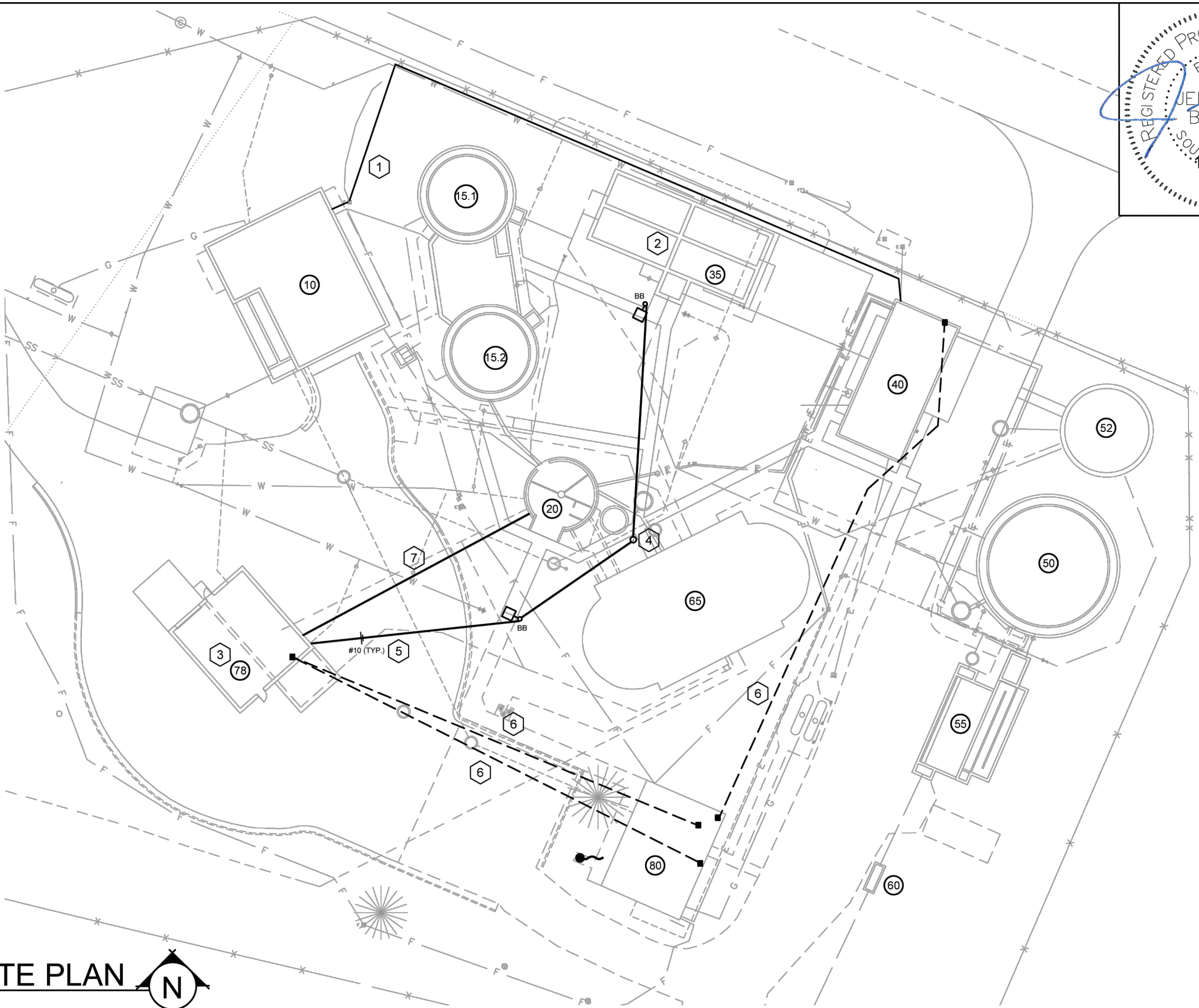
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FILE LOCATION: Q:\2025\25547 Moberge WWTF\Elec Dwg\25547 Electrical.dwg

NOTES: THIS SHEET



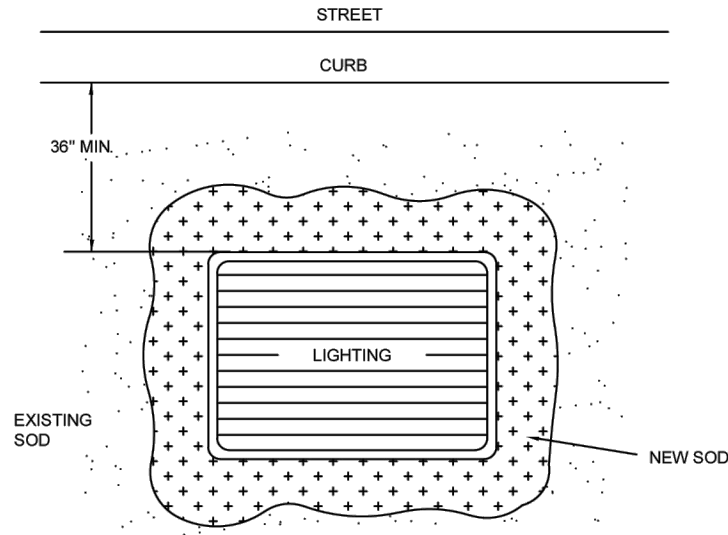
1. NEW FEEDER ROUTING TO EXISTING BUILDING. ROUTE FEEDER WITHIN EXISTING FENCE. THIS FEEDER TO BE IN PLACE PRIOR TO REMOVAL AND CONSTRUCTION OF NEW AERATION BASINS. THIS WORK TO BE COMPLETED AFTER AERATION BASIN UNDERGROUND WORK COMPLETION.
2. NEW AERATION BASINS. DURING CONSTRUCTION OF NEW AERATION BASINS, PROVIDE TEMPORARY POWER FEED AROUND CONSTRUCTION AREA TO EXISTING INTAKE BUILDING. NOTE 1 FEEDER TO BE INSTALLED AFTER COMPLETION OF UNDERGROUND AERATION BASINS.
3. NEW SLUDGE DEWATERING BUILDING. SEE E78 SERIES DRAWINGS.
4. IN-GRADE JUNCTION BOX. SEE DETAIL 1/E-103.
5. EXTEND SITE LIGHTING CIRCUIT TO LP1-19 IN BUILDING 78.
6. APPROXIMATE ROUTING FOR NEW FIBER. FIELD VERIFY EXACT ROUTING REQUIRED TO COORDINATE WITH ALL EXISTING AND NEW UNDERGROUND UTILITIES. SEE DETAIL 1/E-105 FOR FIBER REQUIREMENTS.
7. APPROXIMATE ROUTING FOR NEW BUILDING 78 POWER FEED FROM EXISTING BUILDING 20 MCC. SEE BUILDING 78 PLAN SHEETS.



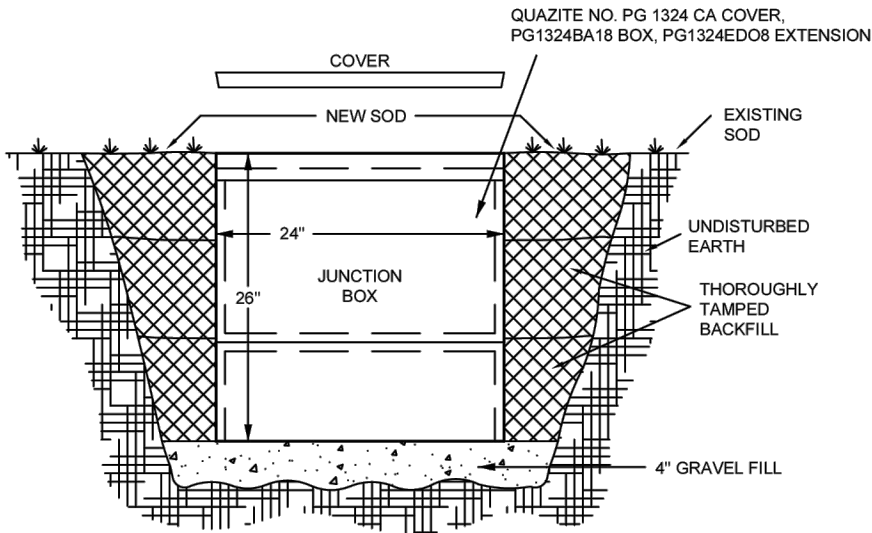
ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
ELECTRICAL REVISED SITE PLAN

DATE:	1/8/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB

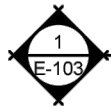
E-102



PLAN VIEW

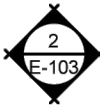
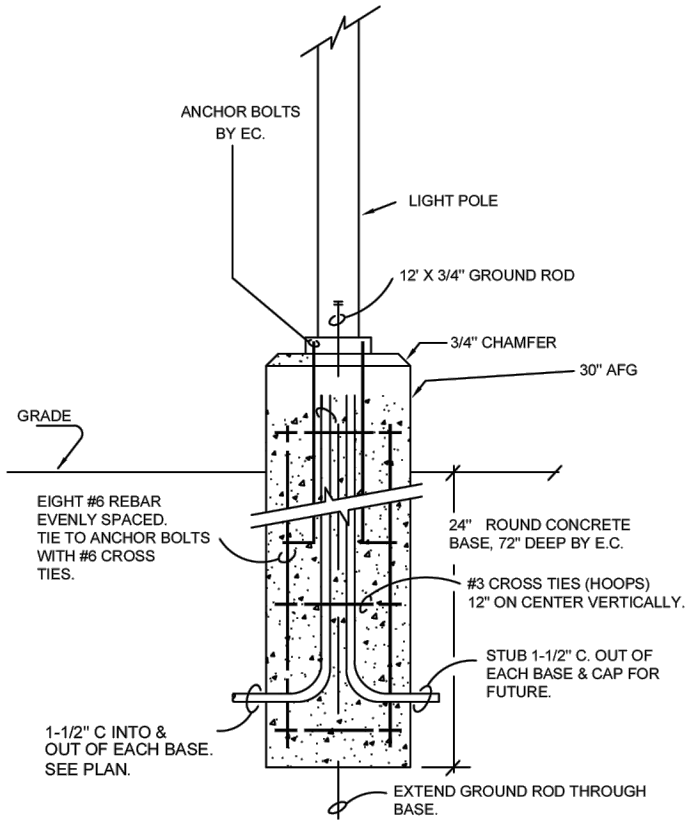


* PROVIDE MOUSE HOLES AS REQUIRED FOR EXISTING AND NEW CONDUCTORS.



JUNCTION BOX DETAIL

NO SCALE

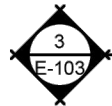
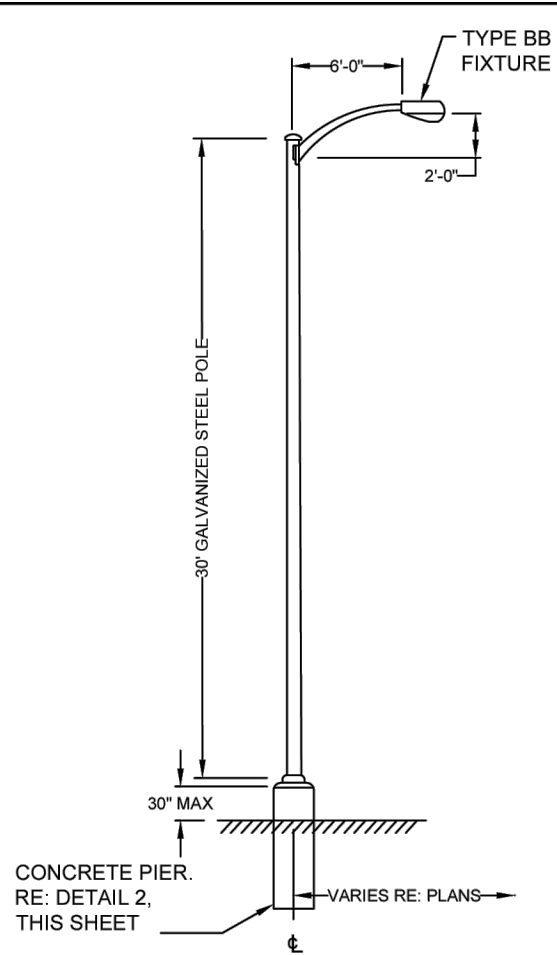


TYPE BB SERIES BASE

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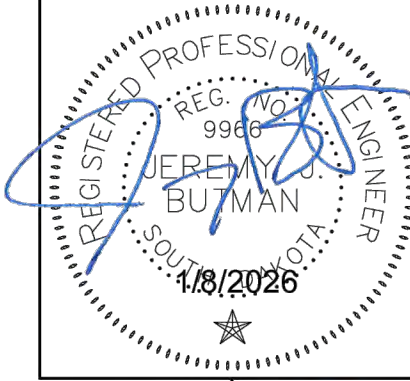
NOTES:

1. ROUTE ALL UNDERGROUND CONDUCTORS INTO AND OUT OF EACH POST. IDENTIFY EACH CONDUCTOR IN EACH POST AS TO FEED POINT, RELAY CIRCUIT, AND PHASE. USE PLASTIC MARKERS, PRINTED NEATLY WITH INDELIBLE MARKER.
2. ALL POST WIRING BETWEEN CABLE OR NEUTRAL WIRES, AND LUMINAIRES SHALL BE MINIMUM #10 AWG. PROVIDE IN-LINE FUSING AS REQUIRED (HEB-TYPE OR EQUAL).



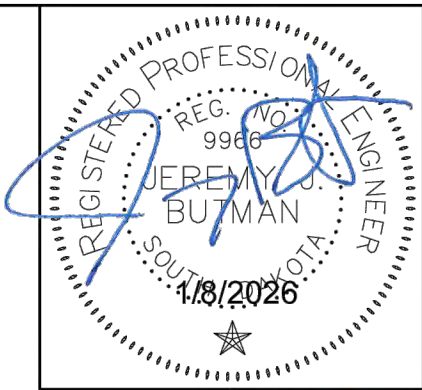
DETAIL - FIXTURE TYPE "BB"

NO SCALE



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
ELECTRICAL DETAILS

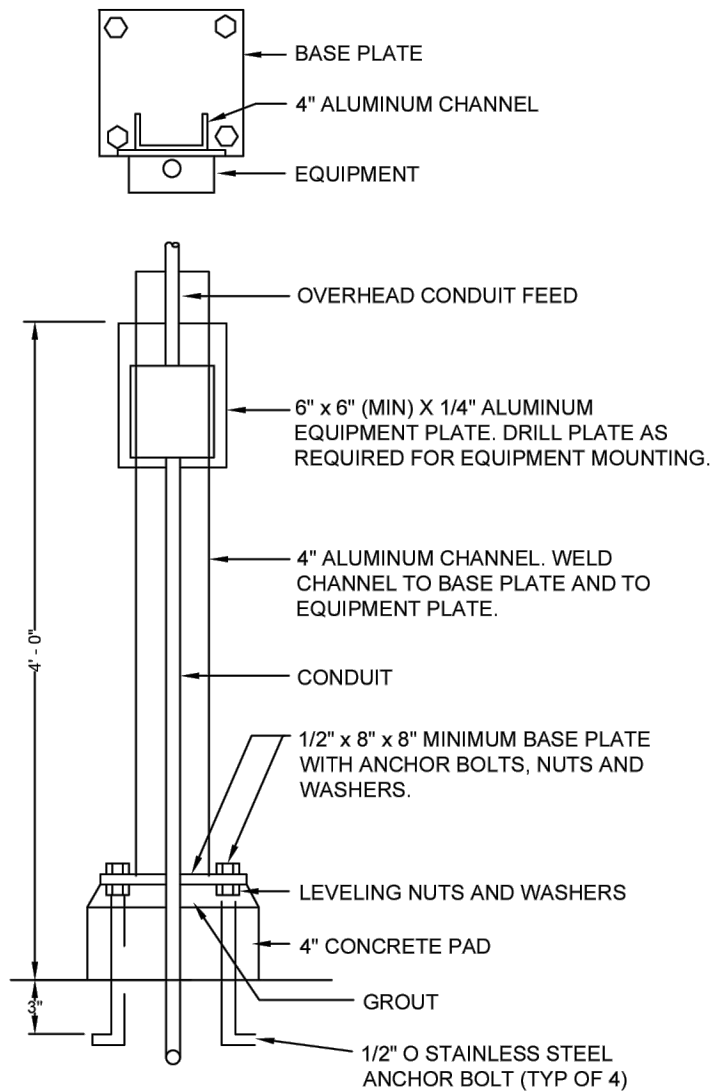
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ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
ELECTRICAL DETAILS

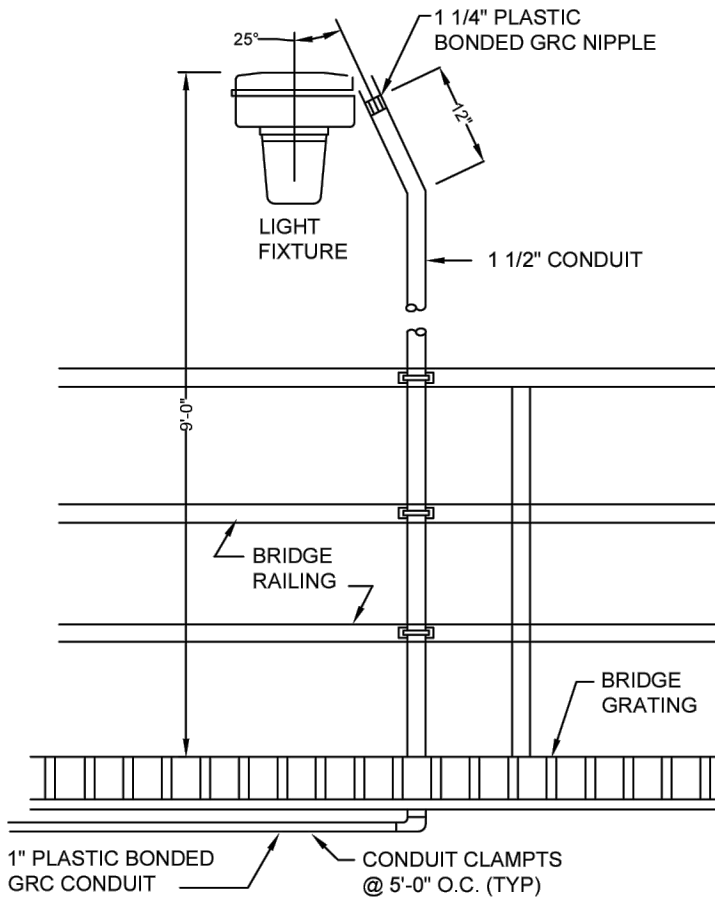
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MANAGER:	JJB
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REVIEWER:	JJB

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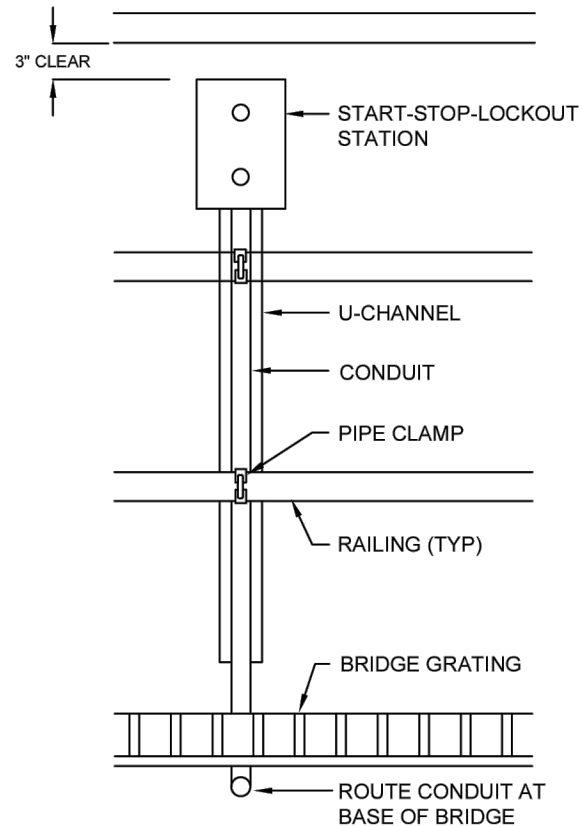


NOTE
OVERHEAD CONDUIT FEED WILL BE USED ONLY IN EXISTING BUILDINGS

PEDESTAL MOUNTED DEVICE DETAIL
NO SCALE

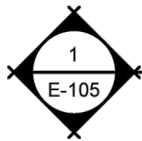
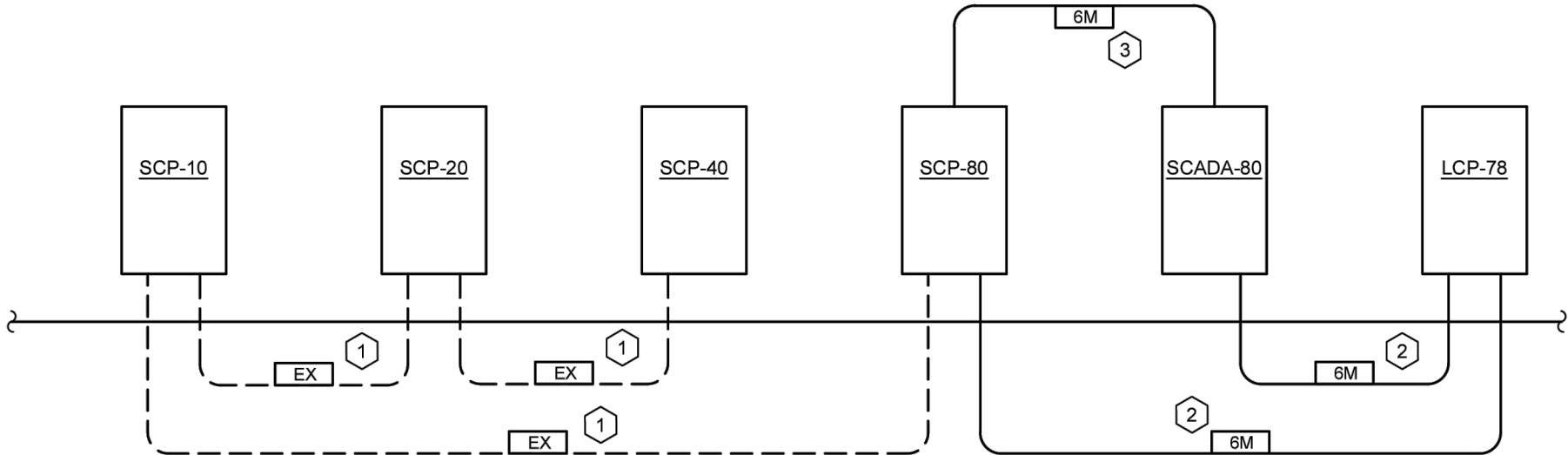


STANCHION MOUNTED LIGHT FIXTURE
NO SCALE



NOTE
ROUTE CONDUIT THROUGH GALLERY WALL BELOW CORBEL. INSTALL SEAL-OFF IN GALLERY.

RAIL MOUNTED DEVICE DETAIL
NO SCALE



SCADA FIBER RISER

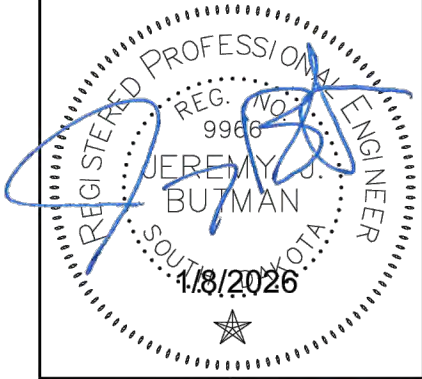
NO SCALE

FIBER SCHEDULE

DESIG-NATION	CONFIGU-RATION	STRANDS REQ'D	CONDUIT
6M	50 MICRON MM	6	2"
EX	EXISTING		

NOTES:

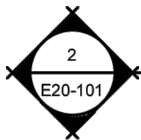
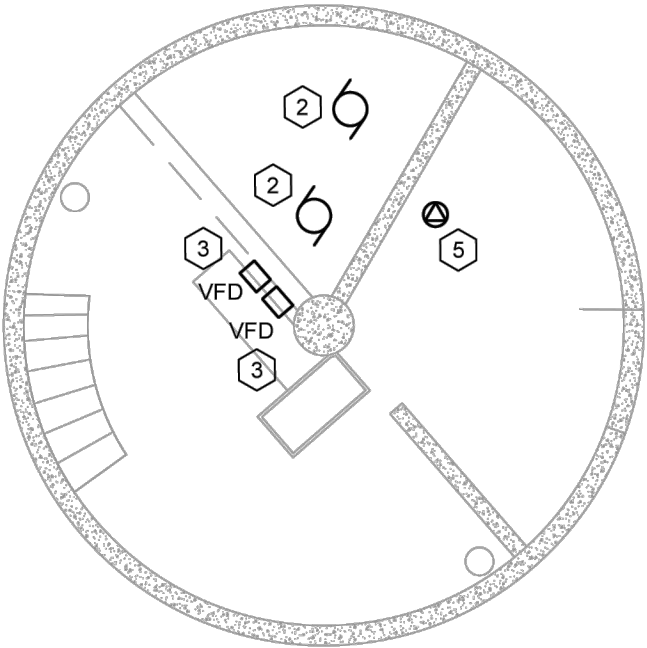
- EXISTING FIBER TO REMAIN IN PLACE.
- PROVIDE NEW FIBER INDICATED. SEE DETAIL 1/E-102 FOR APPROXIMATE ROUTING. FIELD VERIFY EXACT ROUTING REQUIRED TO COORDINATE WITH ALL EXISTING AND NEW UNDERGROUND UTILITIES.
- PROVIDE NEW FIBER BETWEEN EXISTING SYSTEM CONTROL PANEL AND SCADA COMPUTER IN BUILDING AS REQUIRED.



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
SCADA SYSTEM FIBER RISER

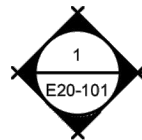
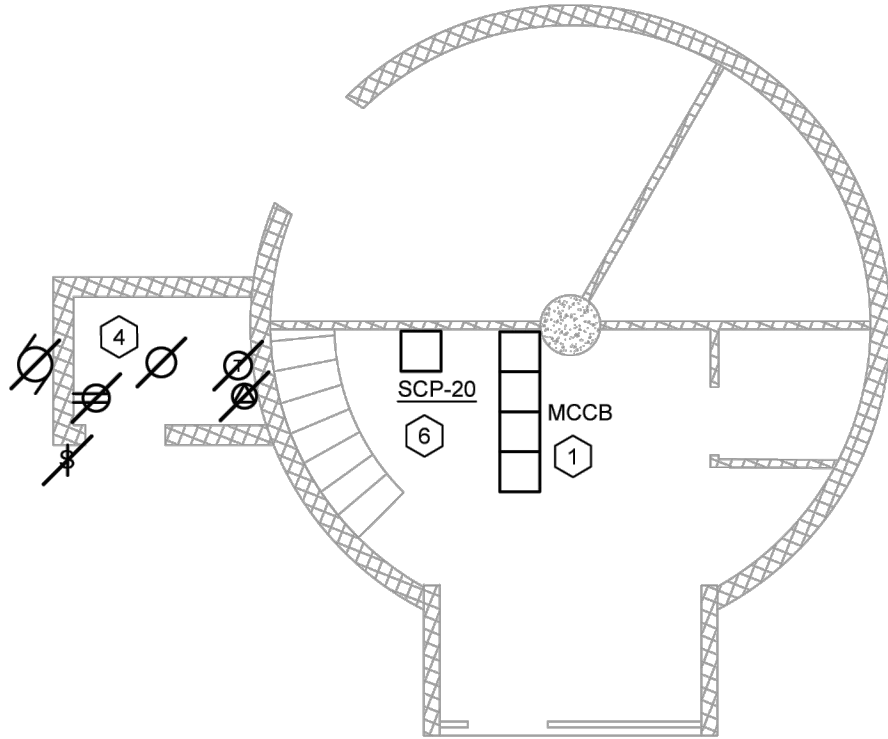
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PROJECT No.	25547
MANAGER:	JJB
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DRAFTER:	JJB
REVIEWER:	JJB

E-105



LOWER LEVEL PLAN

1/8" = 1'-0"



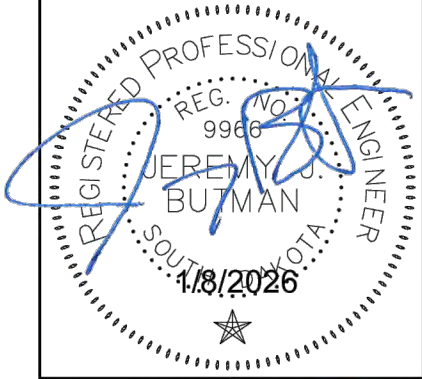
UPPER LEVEL PLAN

1/8" = 1'-0"

NOTES: THIS SHEET



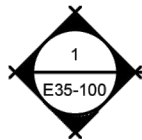
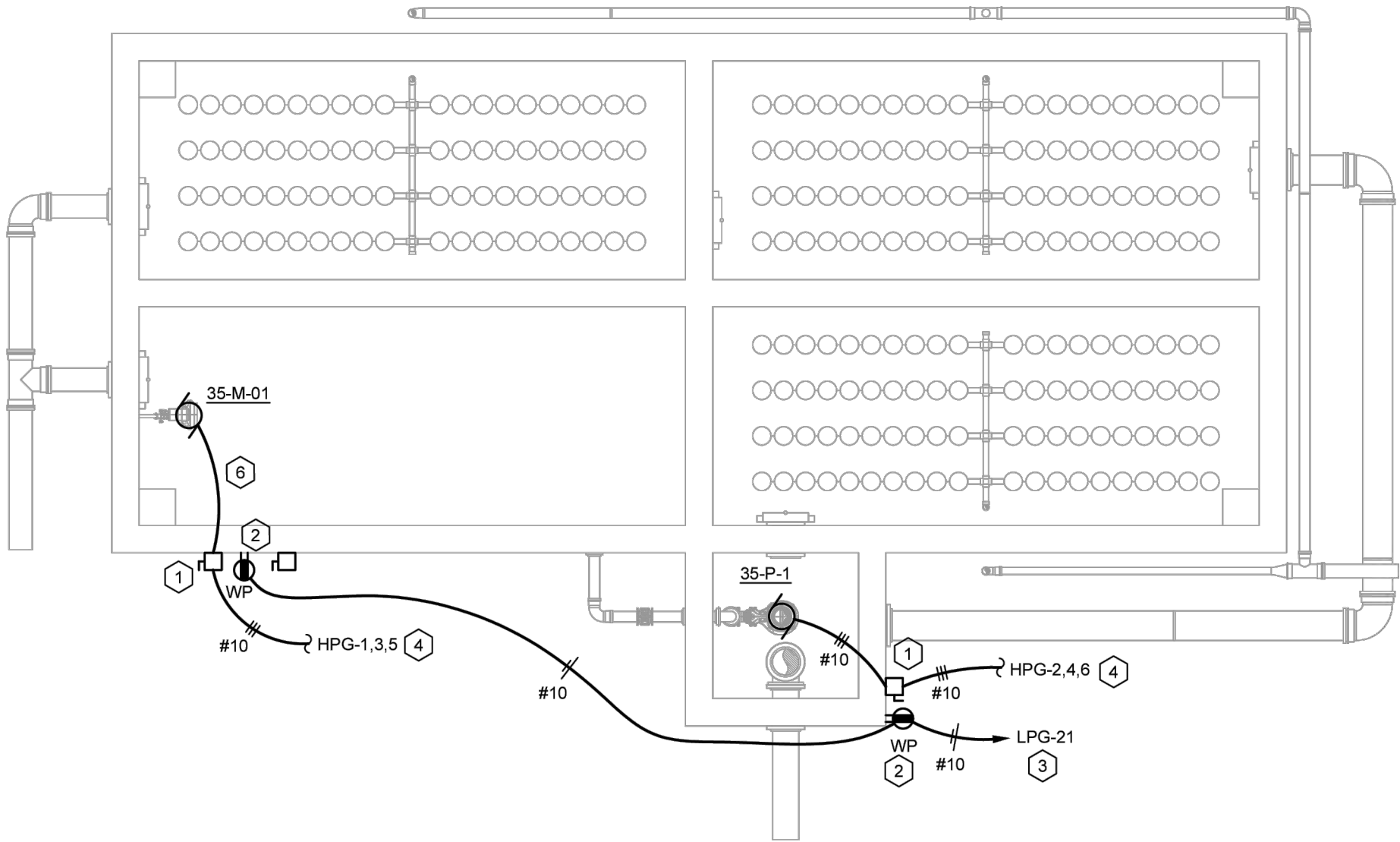
1. EXISTING GENERAL ELECTRIC 8000 SERIES MCCB AND CONTROL PANEL SCP-20 TO REMAIN IN PLACE. OVERCURRENT PROTECTIVE DEVICES THAT SERVE EQUIPMENT TO BE REMOVED TO BECOME SPARE. PROVIDE NEW 100/3 BREAKER IN MCCB TO SERVE NEW PANEL HP1. SEE BUILDING 78 SERIES SHEETS.
2. DISCONNECT EXISTING PUMP FOR REMOVAL. REMOVE ALL ASSOCIATED CONDUIT AND CIRCUITRY COMPLETE.
3. DISCONNECT AND REMOVE EXISTING VFD. VFD TO BE RELOCATED TO BUILDING 65 FOR NEW BLOWER. SEE SERIES E65 SHEETS.
4. DISCONNECT AND REMOVE THE FOLLOWING EQUIPMENT AND ASSOCIATED CIRCUITRY COMPLETE FOR REMOVAL OF THIS PORTION OF THE BUILDING: EXTERIOR SWITCH, INTERIOR LIGHT, INTERIOR HEATER WITH ASSOCIATED THERMOSTAT AND DISCONNECT, INTERIOR RECEPTACLE, AND EXTERIOR EXHAUST FAN.
5. DISCONNECT EXISTING AIR COMPRESSOR TO BE RELOCATED TO NEW BUILDING 78.
6. EXISTING SYSTEM CONTROL PANEL SCP-20 TO BE REPLACED. SEE SECTION 275100.



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
BUILDING 20 EXISTING PLANS

DATE:	1/8/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB

E20-101



NEW AERATION BASIN POWER PLAN

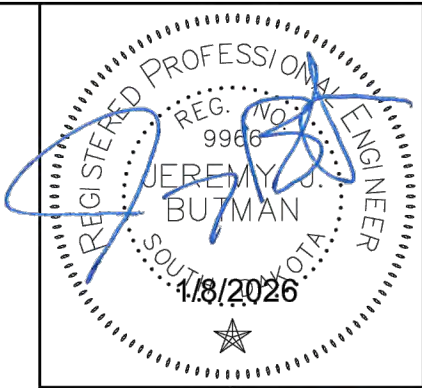
1/8" = 1'-0"

NOTES: THIS SHEET



1. PROVIDE NEMA 4X RATED 30/3 NFDS FOR EQUIPMENT DISCONNECT. LOCATE ABOVE GRADE AND PROVIDE UNI-STRUT STAND FOR MOUNTING OF EQUIPMENT. DISCONNECT TO BE 48" AFG.
2. PROVIDE RECEPTACLE ON UNI-STRUT STAND WITH DISCONNECT. RECEPTACLE TO BE 48" AFG.
3. PROVIDE NEW 20/1 IN EXISTING GE #PN3Q TYPE PANEL IN BUILDING 40. HOMERUN CIRCUITRY MAY BE ROUTED IN SAME CONDUIT AS 35-RP-1 CIRCUITRY.
4. EXTEND HOMERUN CIRCUITRY THROUGH ASSOCIATED COMBINATION STARTER MOUNTED IN BUILDING 40.
5. PROVIDE POWER TO DISSOLVE OXYGEN SENSOR 35-DOS LOCAL TRANSMITTER AS REQUIRED.
6. EXTEND MANUFACTURER'S CABLE TO JUNCTION BOX SHOWN ON DETAIL 1/E35-101. FROM JUNCTION BOX EXTEND POWER CONDUCTORS TO DISCONNECT SWITCH AND CONTROL CONDUCTORS TO CONTROL PANEL AS INDICATED ON DETAIL 1/E35-101.

BUILDING 78 MOTOR & EQUIPMENT SCHEDULE										
DESIG.	EQUIPMENT SERVED	CHARACTERISTICS			DISCONNECT (BY EC)	CONTROLLER (BY EC)	CONTROL INITIATING DEVICE			NOTE
		HP	VOLT	PHASE			DEVICE	FURN	MTD	
<u>35-M-01</u>	MIXER	2.4	480	3	WP 30/3 NFDS, NEMA 4X RATED	FVNR, COMB 0	CONTROL PANEL SCP-40	EC	EC	1,2
<u>35-P-1</u>	RECYCLE PUMP	3	480	3	WP 30/3 NFDS, NEMA 4X RATED	VFD	CONTROL PANEL SCP-40	EC	EC	1,2
<u>NOTES:</u> 1. SEE DETAIL 2/E78-300 FOR VFD CABLING REQUIREMENTS. 2. STARTERS LOCATED IN BUILDING 40. SEE SERIES E40 SHEET.										



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
AERATION BASIN 35 POWER PLAN

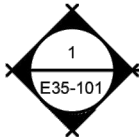
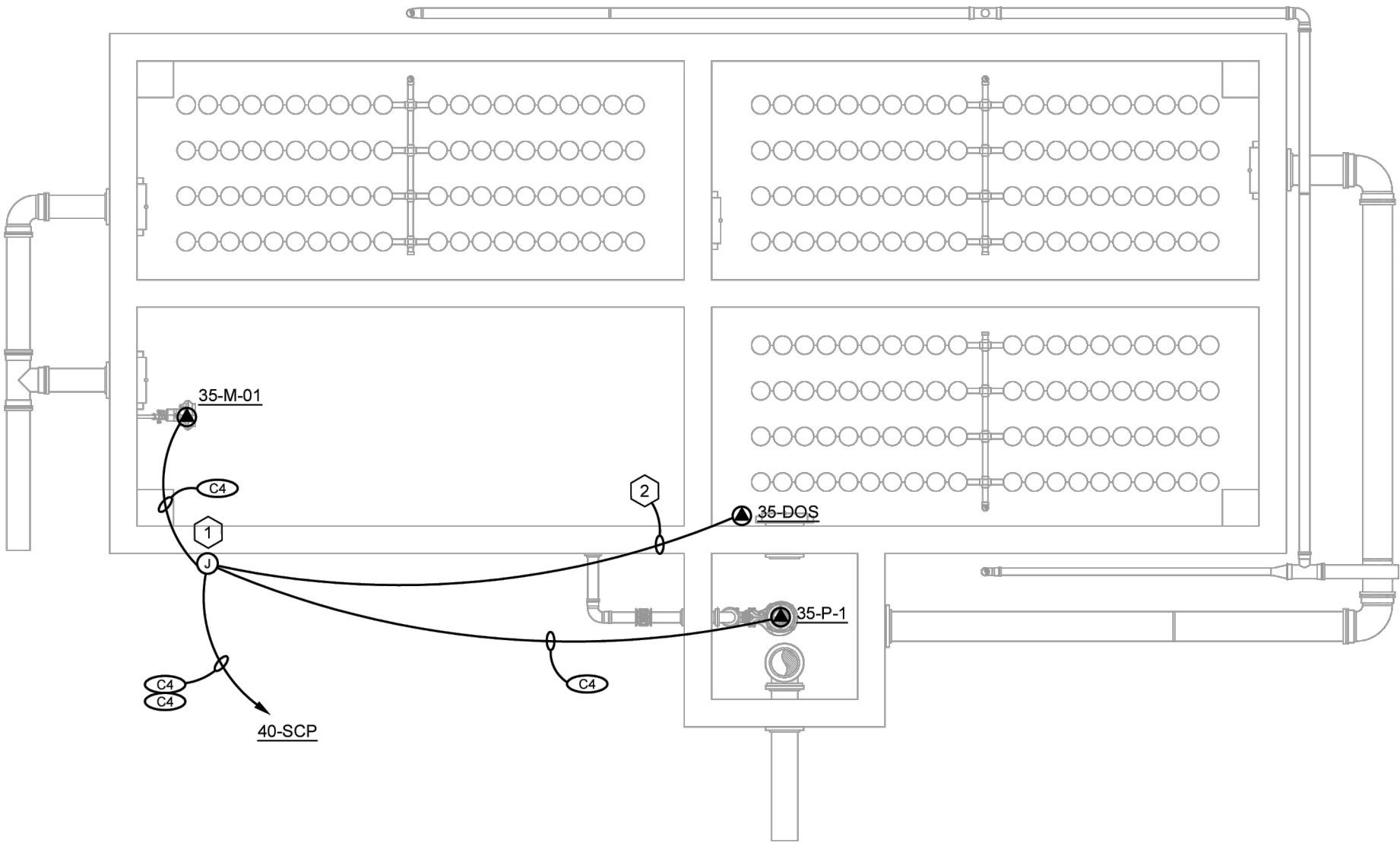
DATE:	1/8/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB

E35-100

CONTROL & INSTRUMENTATION ABBREVIATIONS		
ABR.	DEVICE	NOTE
35-DOS	DISSOLVE OXYGEN SENSOR	1
35-HLF	POLYMER FLOWMETER	-
35-LLF	SLUDGE FLOWMETER	-
35-M-01	AERATION BASIN MIXER	-

NOTES:
1. RELOCATE EXISTING EQUIPMENT TO NEW AERATION BASIN. PROVIDE NEW CONTROL CIRCUITRY INDICATED.

CONTROL & INSTRUMENTATION WIRING SCHEDULE			
DESIG.	CONDUCTORS/CABLES	QTY	CONDUIT
C1A	BELDEN #29528 (#1) VFD CABLE	1	2-1/2"
C1B	BELDEN #29527 (#2) VFD CABLE	1	2"
C1C	BELDEN #29526 (#4) VFD CABLE	1	2"
C1D	BELDEN #29522 (#12) VFD CABLE	1	3/4"
C2	BELDEN #8760 CABLE	1	1/2"
C2A	BELDEN #8760 CABLE	2	1/2"
C3	#16 AWG TFFN	5	1/2"
C4	BELDEN #8760 CABLE #16 AWG TFFN	1 6	3/4"
C5	(2) BELDEN #8760 CABLE #16 AWG TFFN	1 4	3/4"
C6	BELDEN #8720 BELDEN #8762	1 1	1/2"
C7	BELDEN #8760 CABLE #14 AWG THHN	1 3	1/2"
C8	CAT 6	1	1/2"
C9	CAT 6	2	3/4"
C10	#12 AWG THHN	4	1/2"
C11	BELDEN #8760 CABLE CAT 6 #16 AWG TFFN	1 1 8	3/4"
C11A	BELDEN #8760 CABLE CAT 6 #16 AWG TFFN	2 2 16	1-1/2"
C12	BELDEN #8760 CABLE #14 AWG THHN	2 8	1/2"
C13	#12 AWG THHN	5	1/2"
C14	BELDEN #8760 CABLE #16 AWG THHN	2 12	3/4"
C15	BELDEN #1032A CABLE #14 AWG THHN	1 3	3/4"
C16	BELDEN #8760 CABLE #16 AWG TFFN	1 4	1/2"

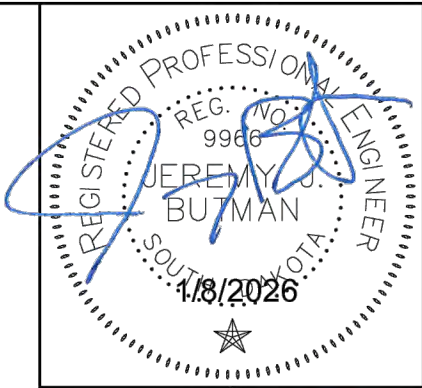


NEW AERATION BASIN SYSTEM PLAN

1/8" = 1'-0"

NOTES: THIS SHEET

1. PROVIDE NEMA 4X JUNCTION BOX ON UNI-STRUT RACK WITH DISCONNECT AND RECEPTACLE, MINIMUM 24" AFG. EXTEND CONTROL CIRCUITRY INDICATED FROM 35-MX TO BUILDING 40 CONTROL PANEL AS INDICATED. CONDUIT FROM JUNCTION BOX TO BUILDING 40 CONTROL PANEL TO BE MINIMUM 1".
2. EXTEND MANUFACTURER'S CABLE TO JUNCTION BOX. EXTEND CIRCUITRY TO NEW TRANSMITTER LOCATION IN BUILDING 40. SEE DETAIL E40-102. VERIFY CABLING REQUIREMENTS WITH MANUFACTURER AND PROVIDE APPROPRIATE CONDUCTORS.

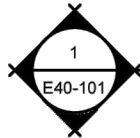
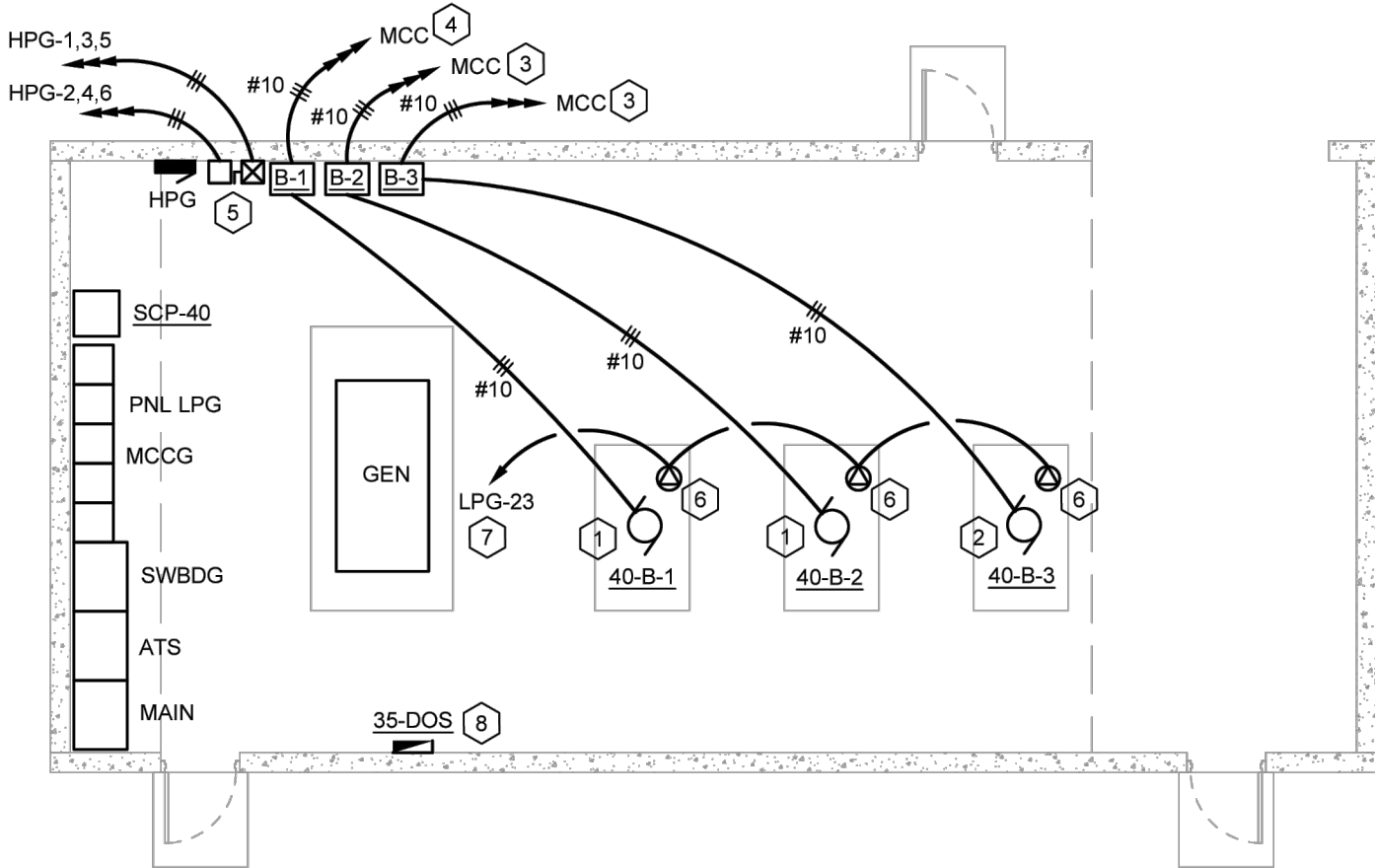


ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
AERATION BASIN 35 SYSTEM PLAN

DATE:	1/8/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB

E35-101

PANEL HPG SCHEDULE								
277/480 VOLTS 3Ø 4W 225 AMP MLO SURFACE MOUNTED								
EATON POW-R-LINE SERIES OR EQUIVALENT								
CIRCUIT DESCRIPTION	POLES	AMPS	CKT	Ø	CKT	AMPS	POLES	CIRCUIT DESCRIPTION
<u>35-M-01</u>	3	20	1	A	2	20	3	<u>35-RP-1</u>
	-	-	3	B	4	-	-	
	-	-	5	C	6	-	-	
SPARE	3	40	7	A	8	20	3	SPARE
	-	-	9	B	10	-	-	
	-	-	11	C	12	-	-	
SPARE	3	40	13	A	14	20	3	SPARE
	-	-	15	B	16	-	-	
	-	-	17	C	18	-	-	
SPARE	3	40	19	A	20	20	3	SPARE
	-	-	21	B	22	-	-	
	-	-	23	C	24	-	-	
SPARE	3	30	25	A	26	70	3	SPARE
	-	-	27	B	28	-	-	
	-	-	29	C	30	-	-	
SPARE	3	20	19	A	20	20	3	SPARE
	-	-	21	B	22	-	-	
	-	-	23	C	24	-	-	
SPARE	1	20	25	A	26	20	1	SPARE
SPARE	1	20	27	B	28	20	1	SPARE
SPARE	1	20	29	C	30	20	1	SPARE



REVISED POWER

$$1/8'' = 1'-0''$$

NOTES: THIS SHEET



1. DISCONNECT EXISTING 25 HP BLOWER IN THIS LOCATION FOR REMOVAL. PROVIDE CIRCUITRY TO NEW 20 HP BLOWER FROM NEW VFD AS SHOWN.
2. PROVIDE CIRCUITRY TO NEW 20 HP BLOWER FROM NEW VFD AS SHOWN.
3. PROVIDE NEW CIRCUITRY TO EXISTING MCC. REMOVE EXISTING BLOWER BUCKET AND PROVIDE NEW 30/3 BREAKER BUCKET TO SERVE NEW BLOWER.
4. REMOVE EXISTING SPACE IN EXISTING MCC FOR FUTURE BLOWER AND PROVIDE NEW 30/3 BREAKER BUCKET TO SERVE NEW BLOWER.
5. STARTERS FOR AERATION BASIN EQUIPMENT. SEE SHEET E35-100.
6. PROVIDE POWER CONNECTION FOR BLOWER HOUSING FAN. COORDINATE EXACT REQUIREMENTS FOR CONNECTION ON SITE.
7. PROVIDE NEW 20/1 IN EXISTING GE #PN3Q TYPE PANEL FOR NEW LOAD.
8. REPLACE EXISTING DISSOLVE OXYGEN TRANSMITTER WITH NEW. FIELD VERIFY EXACT LOCATION OF EXISTING EQUIPMENT AND MOUNT NEW EQUIPMENT ADJACENT TO EXISTING. EXTEND EXISTING 120-VOLT POWER FROM EXISTING TRANSMITTER TO NEW.

BUILDING 78 MOTOR & EQUIPMENT SCHEDULE										
DESIG.	EQUIPMENT SERVED	CHARACTERISTICS			DISCONNECT (BY EC)	CONTROLLER (BY EC)	CONTROL INITIATING DEVICE			NOTE
		HP	VOLT	PHASE			DEVICE	FURN	MTD	
<u>40-B-1</u>	BLOWER #1	20	480	3	INCLUDED WITH STARTER	VFD	CONTROL PANEL SCP-40	EC	EC	1
<u>40-B-2</u>	BLOWER #2	20	480	3	INCLUDED WITH STARTER	VFD	CONTROL PANEL SCP-40	EC	EC	1
<u>40-B-3</u>	BLOWER #3	20	480	3	INCLUDED WITH STARTER	VFD	CONTROL PANEL SCP-40	EC	EC	1

NOTES:

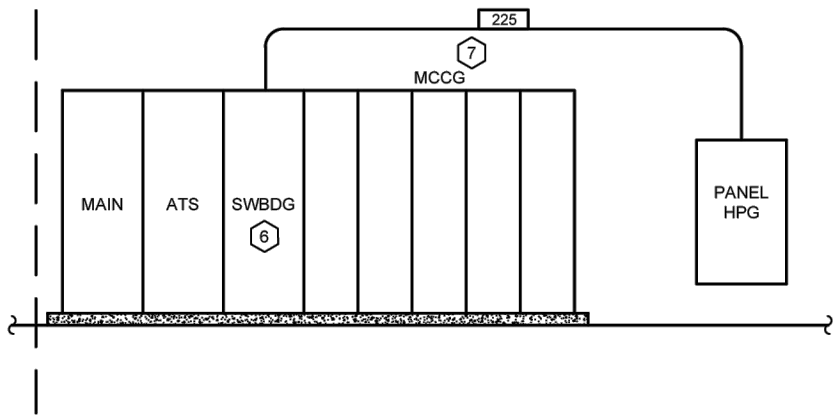
1. SEE DETAIL 2/E78-300 FOR VFD CABLING REQUIREMENTS.

ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
BUILDING 40 REVISED POWER PLAN

DATE:	1/8/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No. 25547	
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB

E40-101

EXTERIOR ← BUILDING 40 → INTERIOR



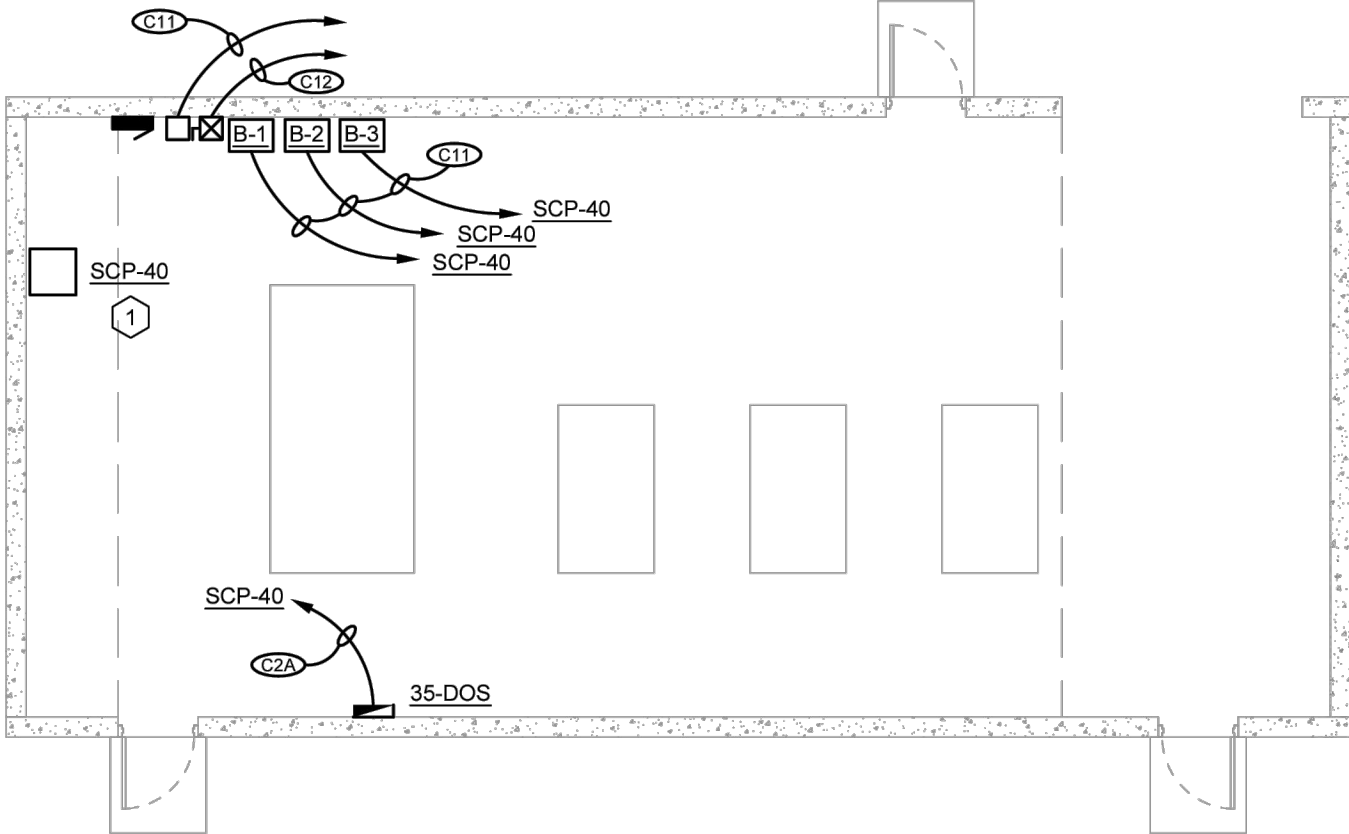
BUILDING 40 RISER
NO SCALE

FEEDER SCHEDULE

DESIG-NATION	CONFIGU-RATION	REQUIRED AMPACITY	CONDUCTOR SIZE (NOTE 3)			CONDUIT
			PHASE	NEUTRAL	EGC (NOTE 4)	
225	3Ø 4W	225	#4/0	#4/0	#4	2"

NOTES:

- FEEDER RISERS ARE SCHEMATIC ONLY, AND NOT INTENDED TO INFER LUG ARRANGEMENTS.
- SEE SPECIFICATION FOR GROUNDING REQUIREMENTS, ALLOWABLE PVC USAGE, AND ALLOWABLE EXPOSED EXTERIOR STUB-UPS.
- CONDUCTORS SIZING BASED UPON 60 DEGREE TERMINATION'S FOR OVERCURRENT PROTECTIVE DEVICES RATED 100 AMPERES OR LESS, AND 75 DEGREE TERMINATION'S FOR RATINGS GREATER THAN 100 AMPERES, AS PER NEC TABLE 310.16, 240.4, 310.15(B2), AND 310.15(B4). IN NO CASE SHALL INDICATED SIZING BE DECREASED.
- EQUIPMENT GROUNDING CONDUCTOR.
- NEW PANEL HPG SHALL HAVE AN AIC RATING OF 35,000 AMPERES. SERIES RATINGS FOR ELECTRICAL GEAR DOWNSTREAM OF PANEL HPG MAY BE SERIES RATED.
- EXISTING GENERAL ELECTRIC GEAR SWBDG. PROVIDE ONE 225/3 GE TJJ-LINE CIRCUIT BREAKER IN EXISTING SWBDG TO SERVE NEW PANEL HPG.

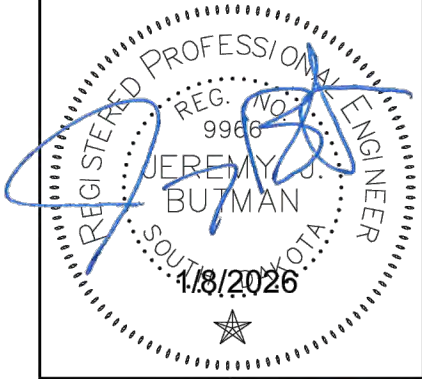


CONTROL & INSTRUMENTATION WIRING SCHEDULE			
DESIG.	CONDUCTORS/CABLES	QTY	CONDUIT
C1A	BELDEN #29528 (#1) VFD CABLE	1	2-1/2"
C1B	BELDEN #29527 (#2) VFD CABLE	1	2"
C1C	BELDEN #29526 (#4) VFD CABLE	1	2"
C1D	BELDEN #29522 (#12) VFD CABLE	1	3/4"
C2	BELDEN #8760 CABLE	1	1/2"
C2A	BELDEN #8760 CABLE	2	1/2"
C2B	BELDEN #8760 CABLE	3	1/2"
C3	#16 AWG TFFN	5	3/4"
C4	BELDEN #8760 CABLE #16 AWG TFFN	1 6	3/4"
C5	(2) BELDEN #8760 CABLE #16 AWG TFFN	1 4	3/4"
C6	BELDEN #8720 BELDEN #8762	1 1	1/2"
C7	BELDEN #8760 CABLE #14 AWG THHN	2 3	1/2"
C8	CAT 6	1	1/2"
C9	CAT 6	2	3/4"
C10	#12 AWG THHN	4	1/2"
C11	BELDEN #8760 CABLE CAT 6 #16 AWG TFFN	1 1 8	3/4"
C11A	BELDEN #8760 CABLE CAT 6 #16 AWG TFFN	2 2 16	2"
C12	BELDEN #8760 CABLE #14 AWG THHN	2 8	1/2"
C13	#12 AWG THHN	5	1/2"
C14	BELDEN #8760 CABLE #16 AWG THHN	2 12	3/4"
C15	BELDEN #1032A CABLE #14 AWG THHN	1 3	3/4"
C16	BELDEN #8760 CABLE #16 AWG TFFN	1 4	1/2" 1/2"

REVISED CONTROLS
1/8" = 1'-0"

NOTES: THIS SHEET

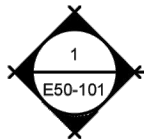
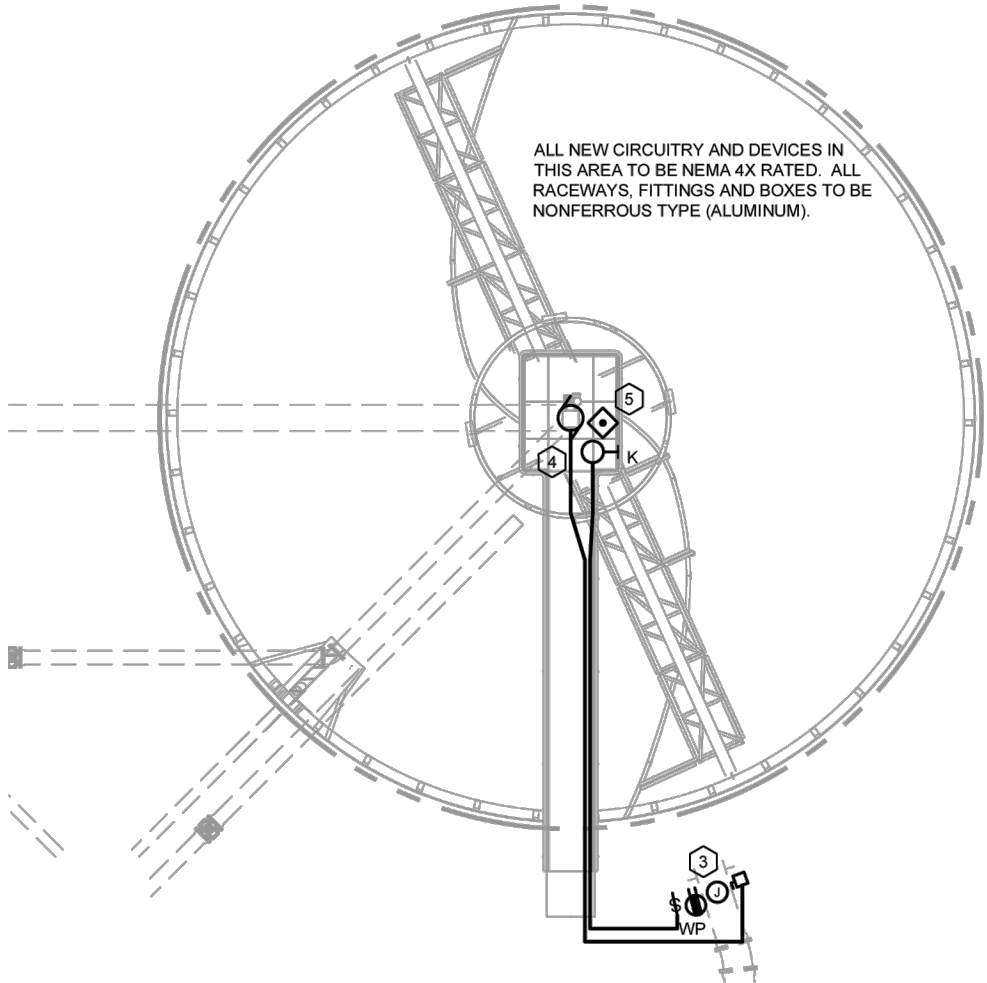
- EXISTING LOCAL SYSTEM CONTROL PANEL SCP-40 IN EXISTING BUILDING. PANEL TO REMAIN IN PLACE AND BE MODIFIED FOR CONTROL OF NEW EQUIPMENT AS SHOWN.



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
BUILDING 40 REVISED CONTROLS PLAN

DATE:	1/8/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB

E40-102



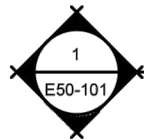
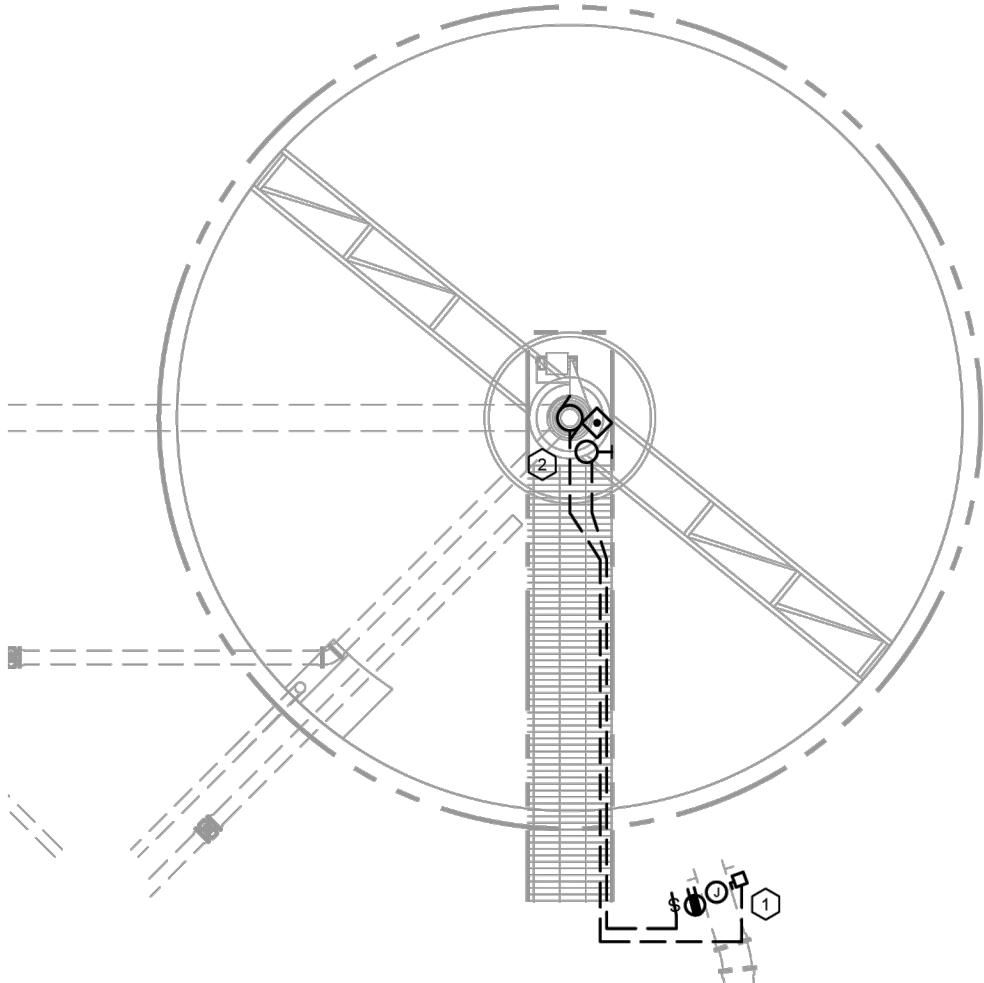
REVISED PLAN

3/32" = 1'-0"

NOTES: THIS SHEET

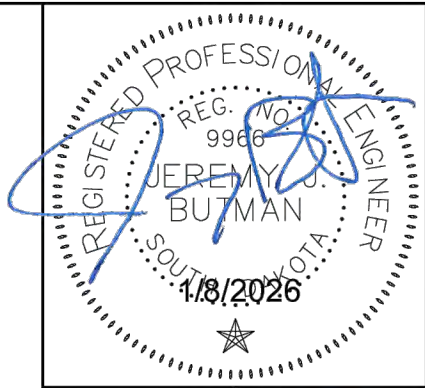


1. REMOVE EXISTING JUNCTION BOX, DISCONNECT SWITCH, RECEPTACLE, LIGHTING CONTROL SWITCH AND ALL ASSOCIATED CIRCUITRY INTO CLARIFIER. EXISTING POWER FEED TO CLARIFIER TO REMAIN. COORDINATE REMOVALS WITH TANK COVER REMOVAL.
2. DISCONNECT EXISTING MOTOR FOR REMOVAL. REMOVE EXISTING LUMINAIRE AND CONTROL STATION FOR REPLACEMENT.
3. PROVIDE NEW JUNCTION BOX FOR EXISTING POWER FEED. EXTEND NEW CIRCUITRY TO NEW WP 30/3 NFDS. EXTEND POWER CIRCUITRY DISCONNECT TO NEW MOTOR, AND FROM DISCONNECT TO NEW RECEPTACLE AND NEW LUMINAIRE CONTROL SWITCH. ALL NEW CIRCUITRY SHALL BE #10 AWG CONDUCTORS IN MINIMUM 3/4" CONDUIT. ROUTE CIRCUITRY AT BASE OF BRIDGE RAILING TO CENTER PIVOT AREA. SEE DETAILS ON SHEET E-104.
4. PROVIDE NEW CONTROL STATION AND LUMINAIRE. RAIL MOUNT DEVICES SIMILAR TO EXISTING. EXTEND CIRCUITRY TO MOTOR FROM NEW DISCONNECT AS REQUIRED. EXTEND (3) #14 AWG CONDUCTORS IN SEPARATE 3/4" CONDUIT TO NEW NOTE 3 JUNCTION BOX FOR CONTROLS AND RECONNECT. SEE DETAILS ON SHEET E-104.
5. CONTROL STATION TO BE ALLEN 800H-2HXX SERIES STAINLESS STEEL 2-BUTTON CONTROL STATION WITH ONE MAINTAINED CONTACT BUTTON FOR MOTOR CONTROL DISCONNECT AND ONE ROTARY SWITCH WITH LOCKING MEANS, SIMILAR TO EXISTING, OR EQUIVALENT.



EXISTING PLAN

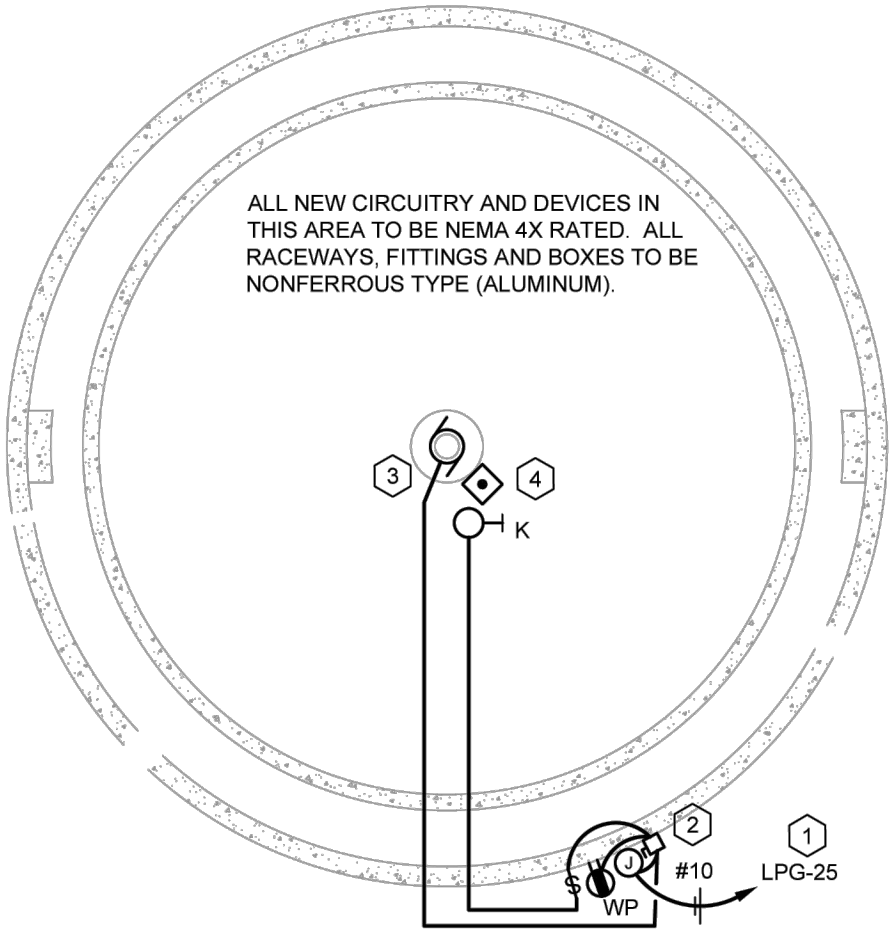
3/32" = 1'-0"



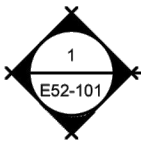
ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
BUILDING 50 EXISTING CLARIFIER PLANS

DATE:	1/8/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB

E50-101



ALL NEW CIRCUITRY AND DEVICES IN THIS AREA TO BE NEMA 4X RATED. ALL RACEWAYS, FITTINGS AND BOXES TO BE NONFERROUS TYPE (ALUMINUM).



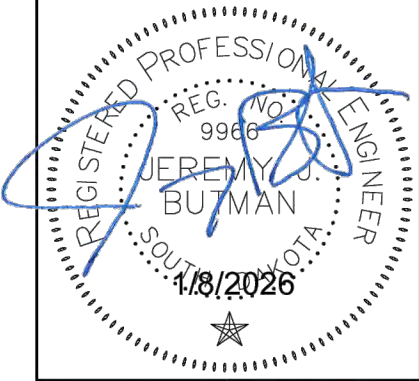
NEW CLARIFIER

1/8" = 1'-0"

NOTES: THIS SHEET



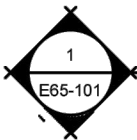
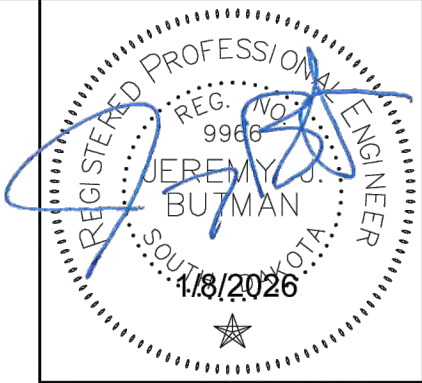
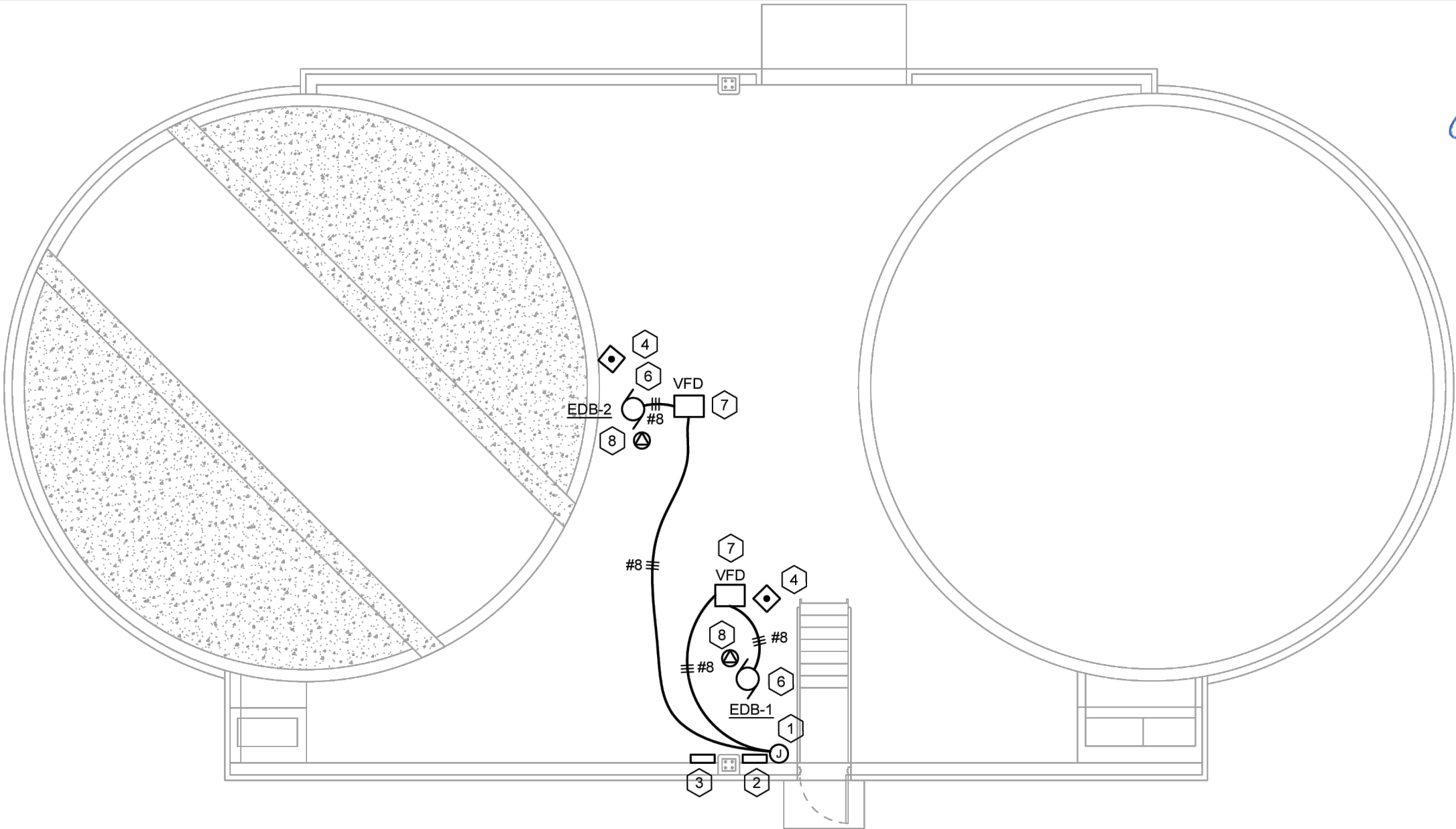
1. PROVIDE NEW 20/1 IN EXISTING PANEL LPG (GE #PN3Q TYPE PANEL) IN BUILDING 40 FOR NEW LOAD.
2. PROVIDE NEW JUNCTION BOX TO EXTEND NEW POWER FEED FROM PANEL LPG. EXTEND POWER CIRCUITRY FROM DISCONNECT TO NEW MOTOR, AND FROM DISCONNECT TO NEW RECEPTACLE AND NEW LUMINAIRE CONTROL SWITCH. ALL NEW CIRCUITRY SHALL BE #10 AWG CONDUCTORS IN MINIMUM 3/4" CONDUIT. ROUTE CIRCUITRY AT BASE OF BRIDGE RAILING TO CENTER PIVOT AREA, SIMILAR TO EXISTING CLARIFIER.
3. PROVIDE CONTROL STATION AND LUMINAIRE AS INDICATED. RAIL MOUNT DEVICES SIMILAR TO EXISTING CLARIFIER. EXTEND (3) #14 AWG CONDUCTORS IN SEPARATE 3/4" CONDUIT TO NOTE 2 JUNCTION BOX FOR CONTROLS. EXTEND (3) #14 CONDUCTORS FROM NOTE 2 JUNCTION BOX TO SCP IN BUILDING 40 TO MONITOR TORQUE SWITCHES.
4. CONTROL STATION TO BE ALLEN 800H-2HXX SERIES STAINLESS STEEL 2-BUTTON CONTROL STATION WITH ONE MAINTAINED CONTACT BUTTON FOR MOTOR CONTROL DISCONNECT AND ONE ROTARY SWITCH WITH LOCKING MEANS, SIMILAR TO EXISTING, OR EQUIVALENT.



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
BUILDING 52 NEW CLARIFIER PLAN

DATE:	1/8/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB

E52-101



SLUDGE DIGESTER COMPLEX POWER

1/8" = 1'-0"

NOTES: THIS SHEET



BUILDING 65 MOTOR & EQUIPMENT SCHEDULE										
DESIG.	EQUIPMENT SERVED	CHARACTERISTICS			DISCONNECT (BY EC)	CONTROLLER (BY EC)	CONTROL INITIATING DEVICE			NOTE
		HP	VOLT	PHASE			DEVICE	FURN	MTD	
65-DB-1	DIGESTER BLOWER	20 HP	480	3	INCLUDED WITH STARTER	EXISTING VFD. NOTE 2.	CONTROL PANEL SCP IN BLDG 20	EC	EC	1
65-DB-2	DIGESTER BLOWER	20 HP	460	3	INCLUDED WITH STARTER	EXISTING VFD. NOTE 2.	CONTROL PANEL SCP IN BLDG 20	EC	EC	1
NOTES: 1. EXISTING BLOWER FED FROM MCCB IN BUILDING 20. EXISTING STARTER TO BE TURNED TO "HAND" AND BLOWER TO BE FED FROM NEW VFD MOUNTED IN BUILDING 65. SEE DETAIL 1/E78-501 AND SPECIFICATION FOR VFD CABLE AND TERMINATION REQUIREMENTS. 2. RELOCATE EXISTING VFD REMOVED FROM BUILDING 20 TO LOCATIONS INDICATED ON DRAWINGS FOR CONTROL OF NEW BLOWERS.										

- EXISTING JUNCTION BOX WITH POWER CIRCUITRY FROM BUILDING 20 MCCB TO EXISTING BLOWERS. VERIFY EXACT LOCATION WITHIN BUILDING. INTERCEPT EXISTING CONDUCTORS TO BLOWERS AND EXTEND TO NEW VFD'S AS INDICATED.
- EXISTING WIREWAY WITH CONTROL/POWER CABLING TO MCCB IN BUILDING 20 TO REMAIN IN PLACE.
- EXISTING WIREWAY WITH POWER CONDUCTORS TO PANEL LPB IN BUILDING 20 TO REMAIN IN PLACE.
- REMOVE EXISTING CONTROL STATION FOR BLOWER. CAP CIRCUITRY AND LABEL AS SPARE. LABEL CONDUCTORS IN MCCB IN BUILDING 20 SPARE.
- PROVIDE VFD CABLE BETWEEN DRIVE AND BLOWER. SEE DETAIL 2/E78-300 AND SPECIFICATION.
- DISCONNECT POWER TO EXISTING 50 HP BLOWER FOR REMOVAL. PROVIDE POWER CONNECTION TO NEW 20 HP BLOWER AS INDICATED.
- EXISTING RELOCATED VFD FROM BUILDING 20. PROVIDE UNI-STRUT RACK ADJACENT TO NEW BLOWER ENCLOSURE FOR RELOCATED VFD.
- PROVIDE 120-VOLT POWER CONNECTION TO NEW BLOWER HOUSING FAN. EXTEND FROM EXISTING BUILDING RECEPTACLE CIRCUIT.

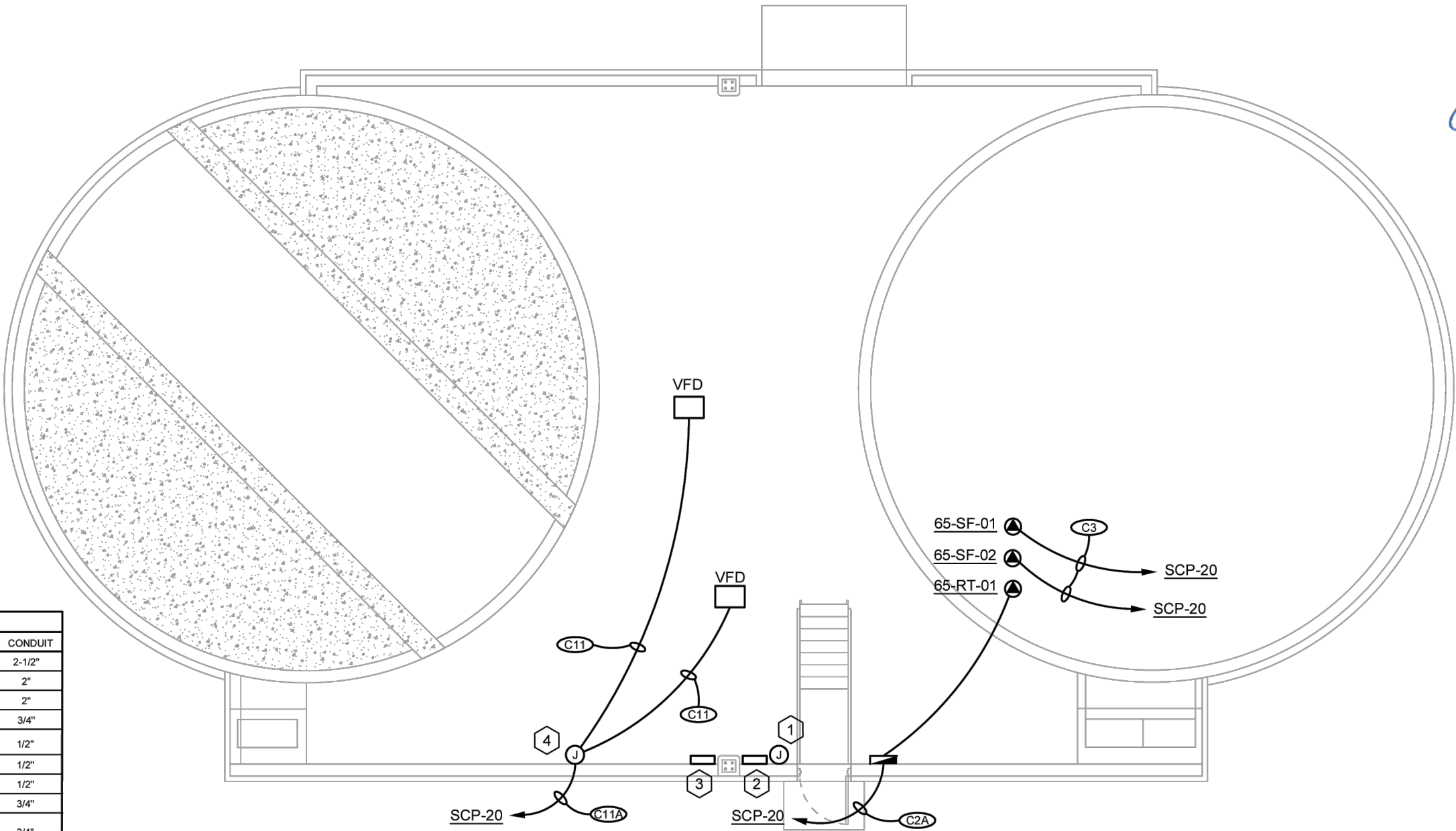
ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
BUILDING 65 ELECTRICAL POWER PLAN

DATE:	1/8/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB

E65-101

CONTROL & INSTRUMENTATION WIRING SCHEDULE			
DESIG.	CONDUCTORS/CABLES	QTY	CONDUIT
C1A	BELDEN #29528 (#1) VFD CABLE	1	2-1/2"
C1B	BELDEN #29527 (#2) VFD CABLE	1	2"
C1C	BELDEN #29526 (#4) VFD CABLE	1	2"
C1D	BELDEN #29522 (#12) VFD CABLE	1	3/4"
C2	BELDEN #8760 CABLE	1	1/2"
C2A	BELDEN #8760 CABLE	2	1/2"
C2B	BELDEN #8760 CABLE	3	1/2"
C3	#16 AWG TFFN	5	3/4"
C4	BELDEN #8760 CABLE #16 AWG TFFN	1 6	3/4"
C5	(2) BELDEN #8760 CABLE #16 AWG TFFN	1 4	3/4"
C6	BELDEN #8720 BELDEN #8762	1 1	1/2"
C7	BELDEN #8760 CABLE #14 AWG THHN	2 3	1/2"
C8	CAT 6	1	1/2"
C9	CAT 6	2	3/4"
C10	#12 AWG THHN	4	1/2"
C11	BELDEN #8760 CABLE CAT 6 #16 AWG TFFN	1 1 8	3/4"
C11A	BELDEN #8760 CABLE CAT 6 #16 AWG TFFN	2 2 16	2"
C12	BELDEN #8760 CABLE #14 AWG THHN	2 8	1/2"
C13	#12 AWG THHN	5	1/2"
C14	BELDEN #8760 CABLE #16 AWG THHN	2 12	3/4"
C15	BELDEN #1032A CABLE #14 AWG THHN	1 3	3/4"
C16	BELDEN #8760 CABLE #16 AWG TFFN	1 4	1/2" 1/2"

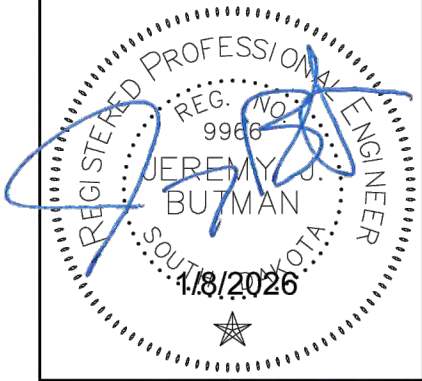
CONTROL & INSTRUMENTATION ABBREVIATIONS		
ABR.	DEVICE	NOTE
65-SF-01	HIGH LEVEL FLOAT	1
65-SF-02	LOW LEVEL FLOAT	1
65-RT-01	RADAR TRANSMITTER	1
NOTES:		
1. COORDINATE EXACT INSTALLATION LOCATION AND MOUNTING REQUIREMENTS ON SITE.		



SLUDGE DIGESTER COMPLEX CONTROLS

NOTES: THIS SHEET

- EXISTING JUNCTION BOX WITH POWER CIRCUITRY FROM BUILDING 20 MCCB.
- EXISTING WIREWAY WITH CONTROL/POWER CABLING TO MCCB IN BUILDING 20 TO REMAIN IN PLACE. EXTEND NEW CONTROL WIRING TO EXISTING GUTTER. PROVIDE ONE NEW 2" CONDUIT TO BUILDING 20 CONTROL PANEL AND EXTEND ALL NEW CONTROL CONDUCTORS TO BUILDING IN NEW NEW CONDUIT.
- EXISTING WIREWAY WITH POWER CONDUCTORS TO PANEL LPB IN BUILDING 20 TO REMAIN IN PLACE.
- PROVIDE NEW 4"x4"x1' WIREWAY 3' AFF TO ROUTE NEW CONTROL CABLING FROM BUILDING 20 SCP-20 TO NEW VFD'S AS INDICATED.



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
BUILDING 65 ELECTRICAL CONTROLS PLAN

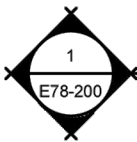
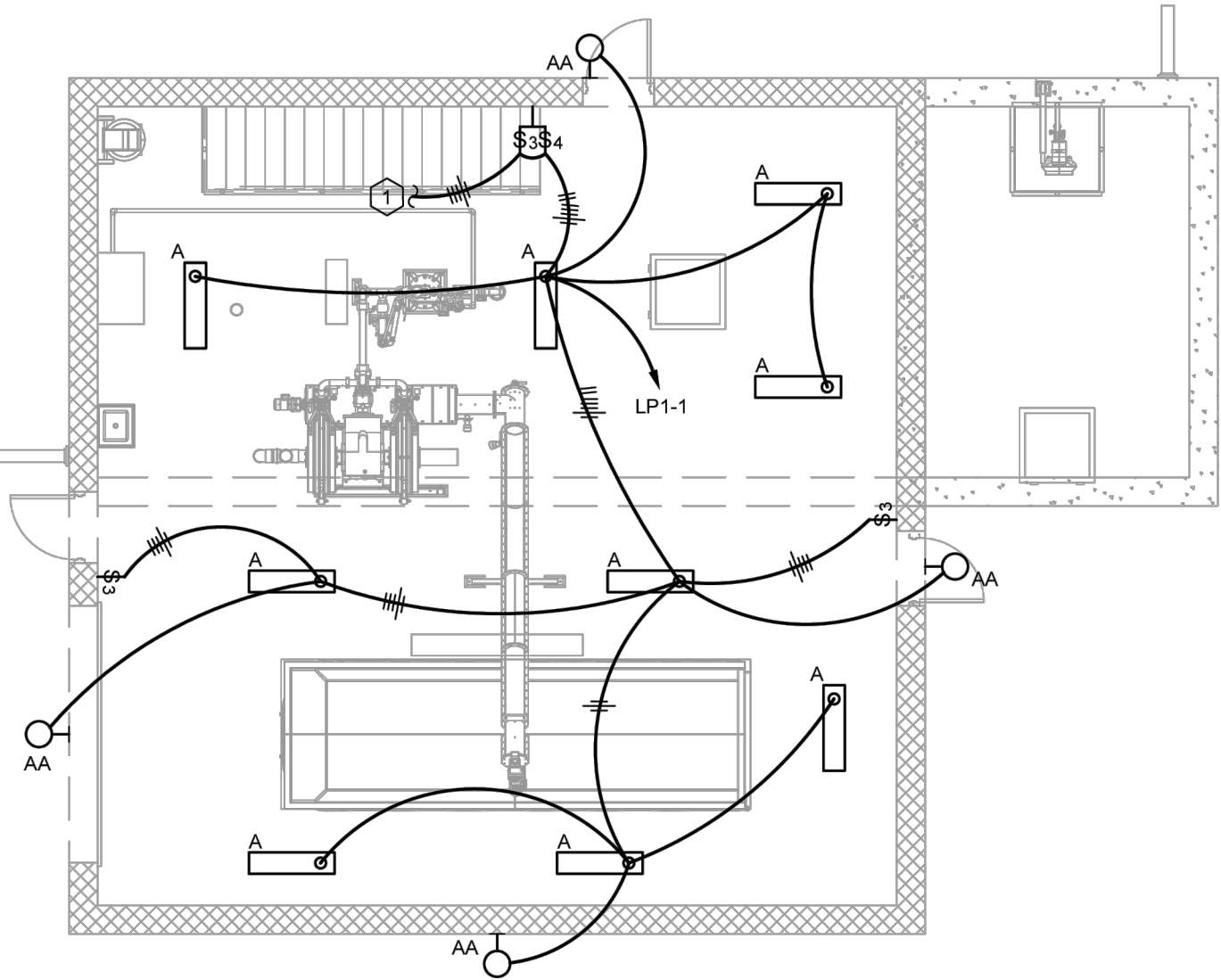
DATE:	1/8/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB

E65-102

LUMINAIRE SCHEDULE							
TYPE	MANUFACTURER	CATALOG NO.	LAMPS		FINISH	MOUNTING	REMARKS
			NO.	TYPE			
A	LITHONIA	CSS-48-AL03-MVOLT-MIN10-SWW3-80CRI SERIES	LED	6,000 LUMEN, 4000K LED'S	WHITE	CEILING SURFACE	4' LINEAR SURFACE MOUNTED LED LUMINAIRE WITH INTEGRAL 0-10V DIMMING, MULTI-VOLT DRIVER.
K	METALUX	4SLSTPSC-UNV SERIES					
K	KILLARK	VML-1-7-30-X-2-5W-G SERIES	LED	7,000 LUMEN, 5000K LED'S	WHITE	STANCHION, NOTE 2.	CLASS 1, DIVISION 2 RATED ENCLOSED AND GASKETED LUMINAIRE WITH ALUMINUM CONSTRUCTION, WHITE POLYCARBONATE REFLECTOR, GUARD, AND 3/4" CONDUIT ENTRIES.
AA	LITHONIA	TWR1-LED-AL0-SWW2-UVOLT-PE-DBTxD SERIES	LED	6,200 LUMEN, 4000K LED'S	DARK BRONZE	WALL, HIGH AS POSSIBLE	LED WALL PACK WITH MULTI-VOLT DRIVER, SELECTABLE OUTPUT AND COLOR TEMP, AND INTEGRAL PHOTO CONTROL.
	LUMARK	WPSLED15S SERIES					
BB	MCGRAW EDISON	GALN-SA3C-740-U-5WQ-SPX-XX-PRX SERIES	LED	22,000 LUMEN, 4000K LED'S	DARK BRONZE	POLE, NOTE 4. SD 2 AND 3 OF E-103.	LED AREA LUMINAIRE WITH TYPE 5 WIDE DISTRIBUTION AND SLIPFITTER MOUNTING FOR 6' MAST ARM.

NOTES:

- UNLESS OTHERWISE INDICATED ALL LLUMINAIRES TO INCLUDE MULTI-VOLT DRIVERS, POWERED AT 120-VOLTS.
- LUMINAIRE TO BE STANCHION MOUNTED FROM RAILING, 9'-0" ABOVE BRIDGE, SIMILAR TO EXISTING. VERIFY EXISTING MOUNTING ANGLE AND MATCH.
- LUMINAIRE TO BE MOUNTED PRIOR TO CEILING INSTALLATION. COORDINATE ENTIRE INSTALLATION AND FRAMING AROUND LUMINAIRE WITH GC.
- PROVIDE 30' ROUND GALVANIZED STEEL POLE WITH INTEGRAL VIBRATION DAMPER AND 6' ARM, SIMILAR TO EXISTING SITE POLE. SEE DETAILS 2 AND 3 OF SHEET E-103.



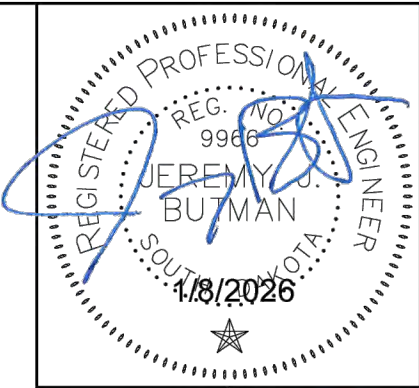
UPPER LEVEL LIGHTING PLAN

NO SCALE

NOTES: THIS SHEET



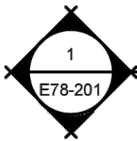
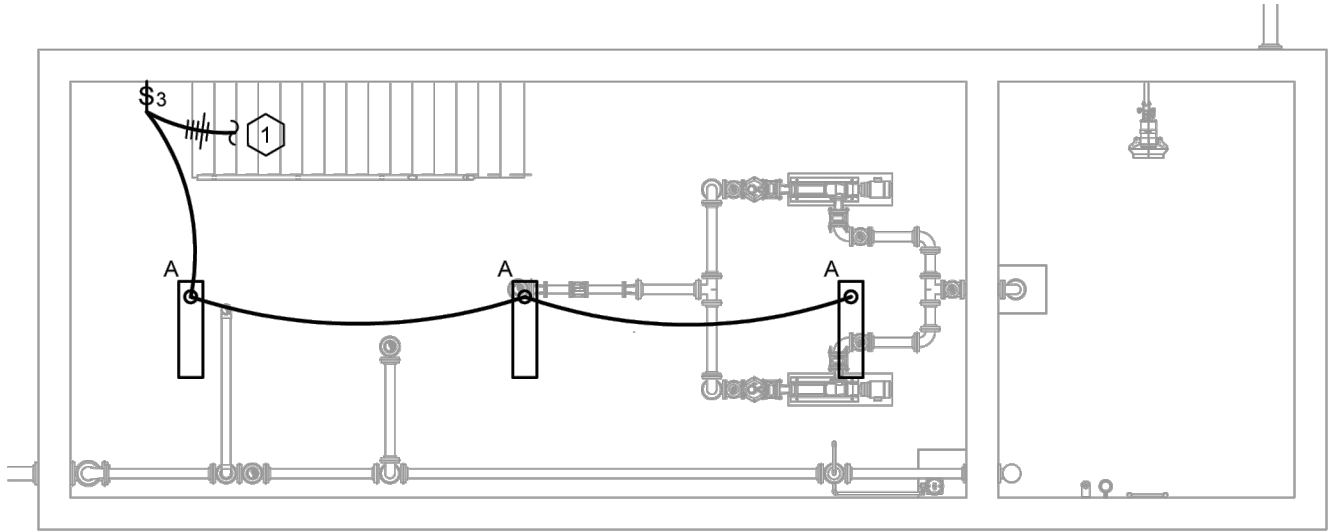
- DOWN TO LOWER LEVEL 3-WAY SWITCH.



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
PROCESS BUILDING 78 UPPER LEVEL LIGHTING PLAN

DATE:	1/8/2026
REV DATE:	---
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RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB

E78-200



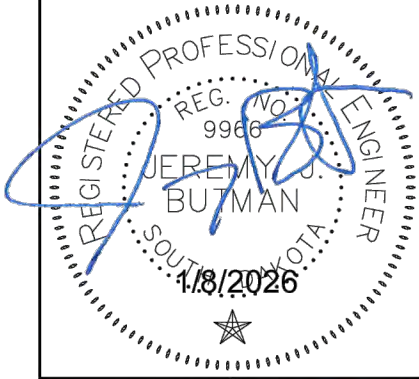
LOWER LEVEL LIGHTING PLAN

NO SCALE

NOTES: THIS SHEET



- 1. TO UPPER LEVEL 3-WAY SWITCH.

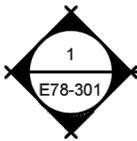
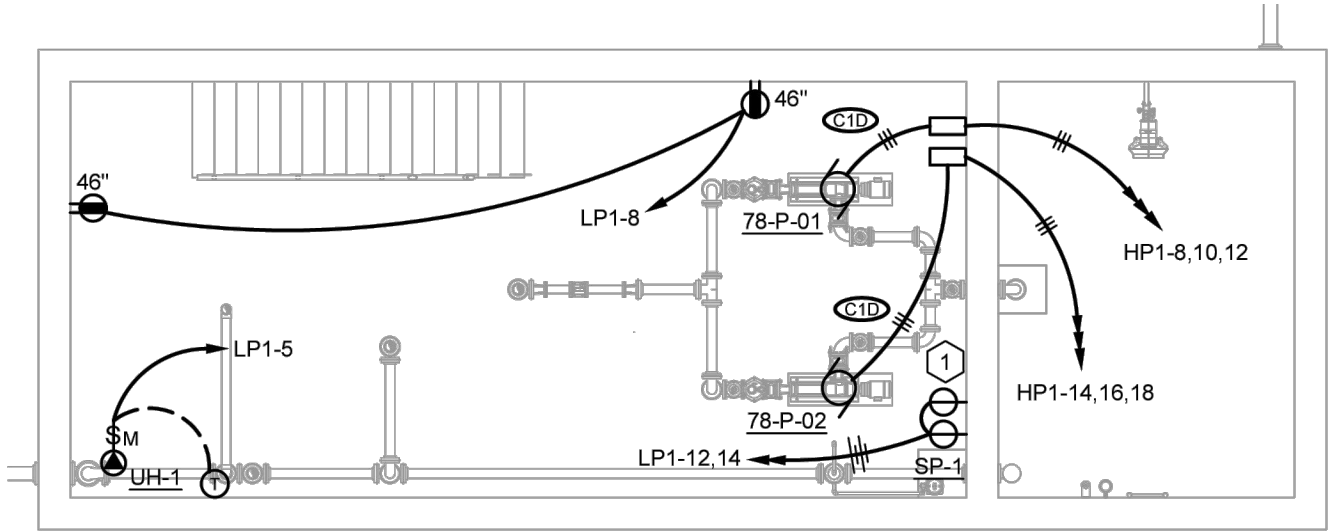


ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
PROCESS BUILDING 78 LOWER LEVEL LIGHTING PLAN

DATE:	1/8/2026
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PROJECT No.	25547
MANAGER:	JJB
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DRAFTER:	JJB
REVIEWER:	JJB

E78-201

E78-300

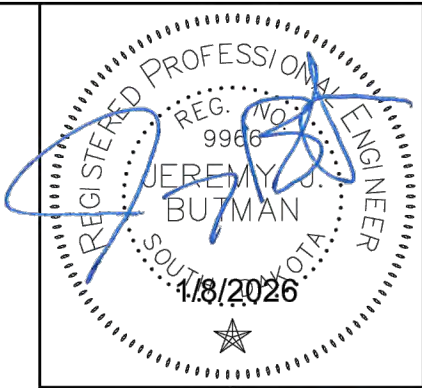


LOWER LEVEL POWER PLAN

NO SCALE

NOTES: THIS SHEET

- 1. PROVIDE TWO SINGLE RECEPTACLES 30" AFF, EACH ON AN INDIVIDUAL CIRCUIT. ONE FOR SUMP PUMP SP-1 AND ONE FOR SUMP PUMP ALARM.



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
PROCESS BUILDING 78 LOWER LEVEL POWER PLAN

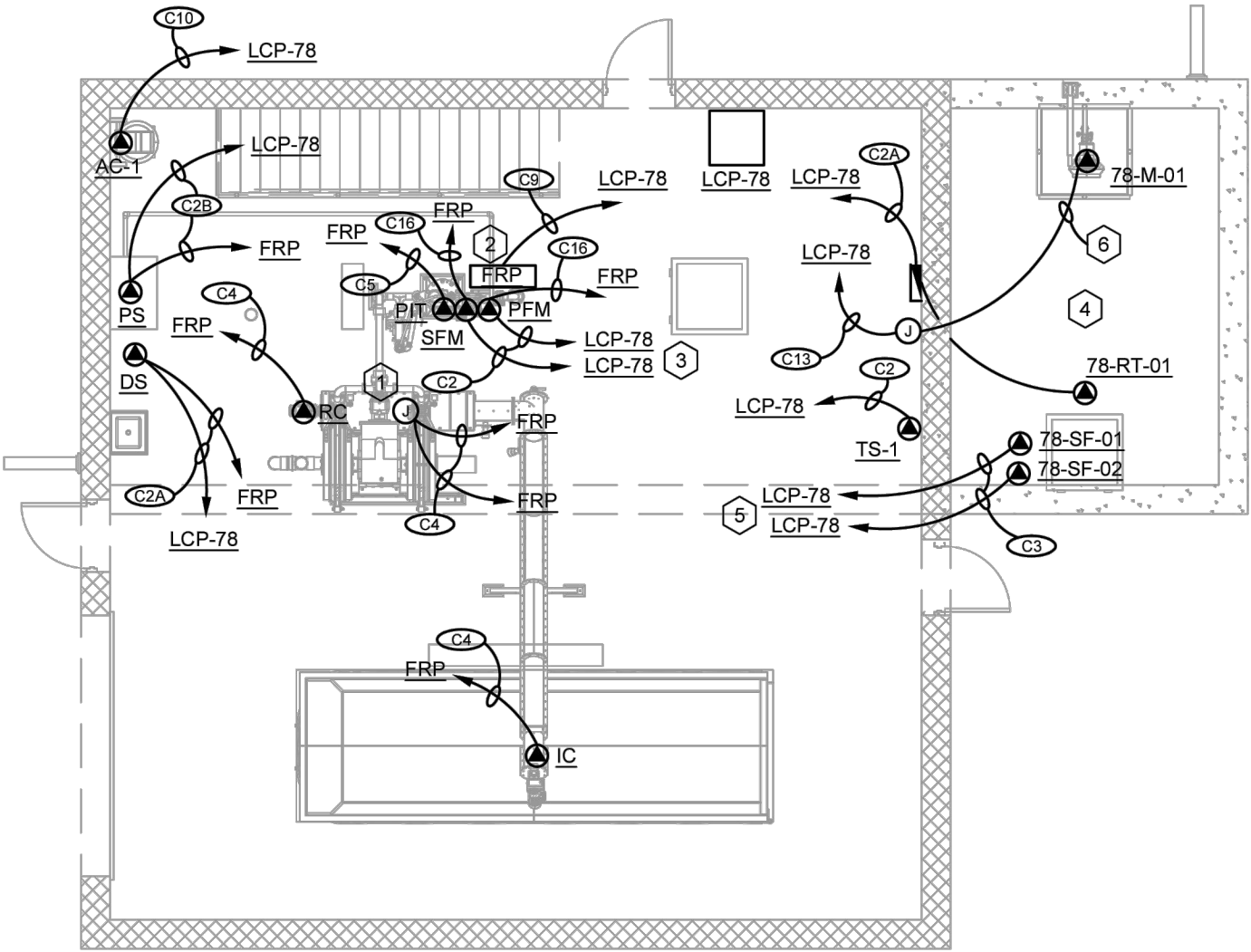
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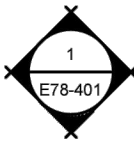
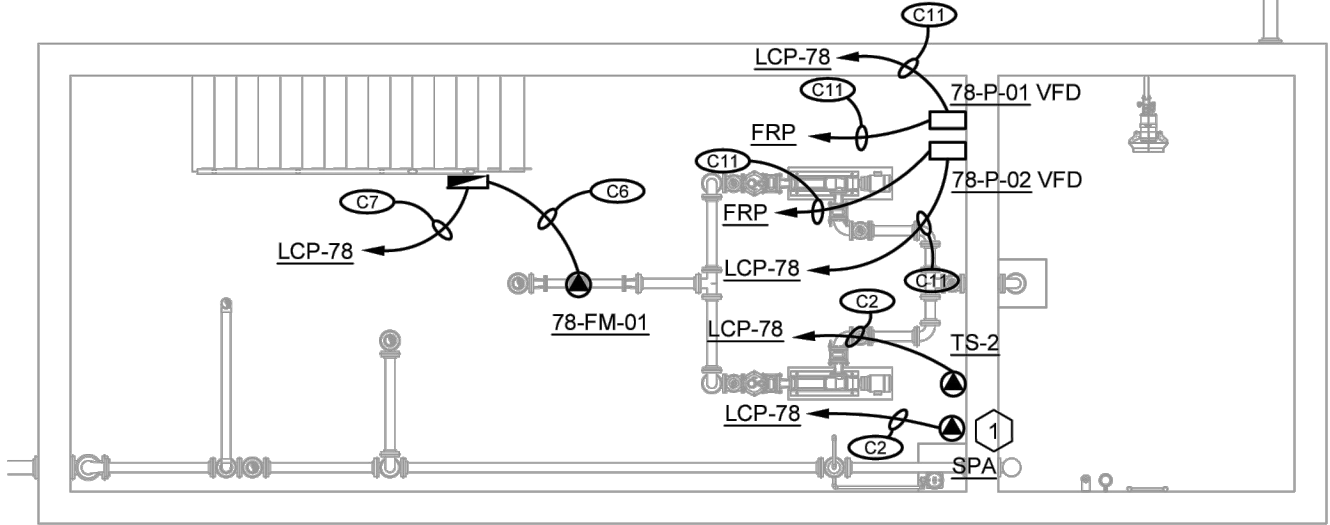
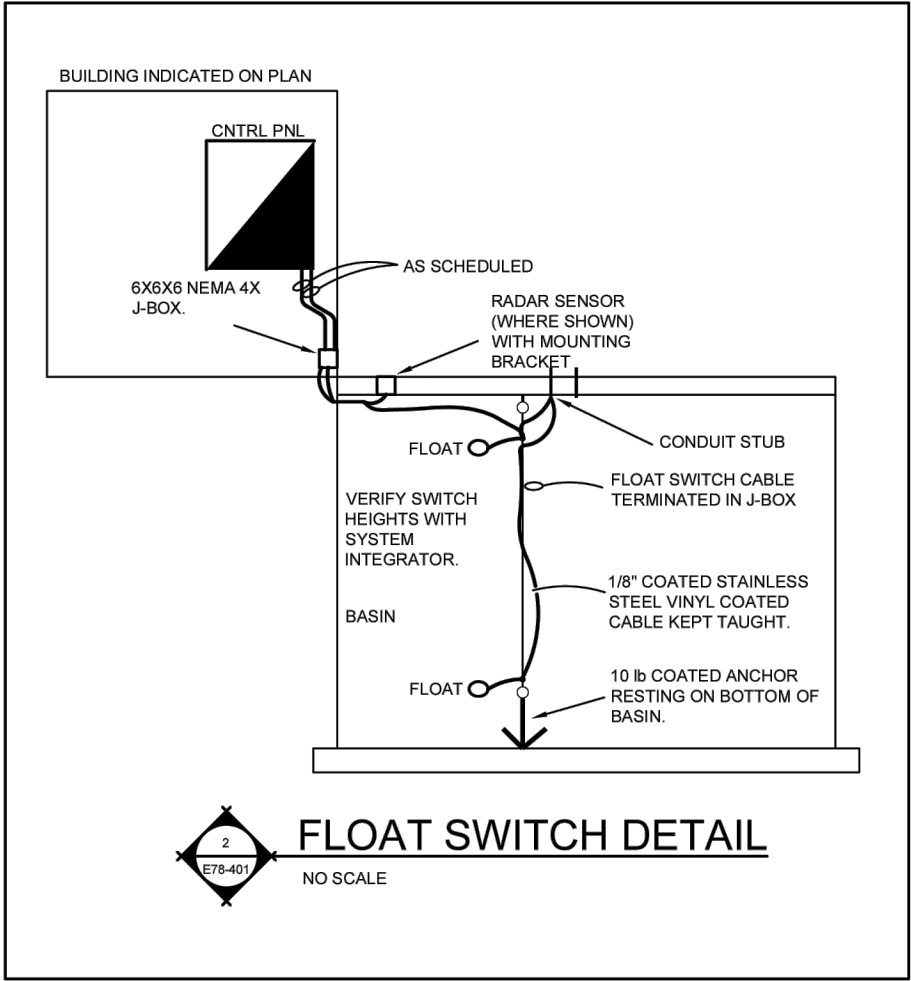
E78-301

CONTROL & INSTRUMENTATION ABBREVIATIONS		
ABR.	DEVICE	NOTE
MCP	WWTP MAIN CONTROL PANEL	2
LCP	WWTP LOCAL CONTROL PANEL	3
FRP	FOURNIER ROTARY PRESS CONTROL PANEL	1
IC	INCLINED CONVEYOR - ROTATION DETECTION	1
RC	RECEIVING CONVEYOR - ROTATION DETECTION	1
PIT	FLOCCULATOR INLET PRESSURE	1
PFM	POLYMER FLOWMETER	1
SFM	SLUDGE FLOWMETER	1
PS	POLYMER SYSTEM	1
SPA	SUMP PUMP ALARM	-
TS-1	TEMPERATURE SENSOR - UPPER LEVEL	-
TS-2	TEMPERATURE SENSOR - LOWER LEVEL	-
78-FM-01	FLOW METER	-
78-MX	SLUDGE TANK MIXER	-
78-RT-01	RADAR LEVEL SENSOR	-
78-SF-01	HIGH LEVEL FLOAT	-
78-SF-02	LOW LEVEL FLOAT	-

- NOTES:
- FURNISHED AS PART OF DEWATERING SYSTEM EQUIPMENT. UNDER SEPARATE CONTRACT. ALL CONTROLS EQUIPMENT MOUNTED AND WIRED BY ELECTRICAL CONTRACTOR. PROVIDE POWER AND CONTROLS CIRCUITRY AS SHOWN ON DRAWINGS.
 - EXISTING CONTROL PANEL TO REMAIN. SEE SPECIFICATION FOR MODIFICATION/UPGRADE REQUIREMENTS.
 - NEW CONTROL PANEL TO BE PROVIDED UNDER ELECTRICAL CONTRACT. SEE SPECIFICATION.
 - SYSTEM EQUIPMENT PROVIDED BY GENERAL CONTRACTOR. VFD PROVIDED AND PROGRAMMED BY DIVISION 26, WIRED BY DIVISION 26. SEE DETAIL SPECIFICATION.

CONTROL & INSTRUMENTATION WIRING SCHEDULE			
DESIG.	CONDUCTORS/CABLES	QTY	CONDUIT
C1A	BELDEN #29528 (#1) VFD CABLE	1	2-1/2"
C1B	BELDEN #29527 (#2) VFD CABLE	1	2"
C1C	BELDEN #29526 (#4) VFD CABLE	1	2"
C1D	BELDEN #29522 (#12) VFD CABLE	1	3/4"
C2	BELDEN #8760 CABLE	1	1/2"
C2A	BELDEN #8760 CABLE	2	1/2"
C2B	BELDEN #8760 CABLE	3	1/2"
C3	#16 AWG TFFN	5	3/4"
C4	BELDEN #8760 CABLE	1	3/4"
C4A	#16 AWG TFFN	6	3/4"
C5	(2) BELDEN #8760 CABLE	1	3/4"
C5A	#16 AWG TFFN	4	3/4"
C6	BELDEN #8720	1	1/2"
C6A	BELDEN #8762	1	1/2"
C7	BELDEN #8760 CABLE	2	1/2"
C7A	#14 AWG THHN	3	1/2"
C8	CAT 6	1	1/2"
C9	CAT 6	2	3/4"
C10	#12 AWG THHN	4	1/2"
C11	BELDEN #8760 CABLE	1	3/4"
C11A	CAT 6	1	3/4"
C11B	#16 AWG TFFN	8	3/4"
C12	BELDEN #8760 CABLE	2	2"
C12A	CAT 6	2	2"
C12B	#16 AWG TFFN	16	2"
C13	BELDEN #8760 CABLE	2	1/2"
C13A	#14 AWG THHN	8	1/2"
C14	#12 AWG THHN	5	1/2"
C15	BELDEN #8760 CABLE	2	3/4"
C15A	#16 AWG THHN	12	3/4"
C16	BELDEN #1032A CABLE	1	3/4"
C16A	#14 AWG THHN	3	3/4"
C17	BELDEN #8760 CABLE	1	1/2"
C17A	#16 AWG TFFN	4	1/2"





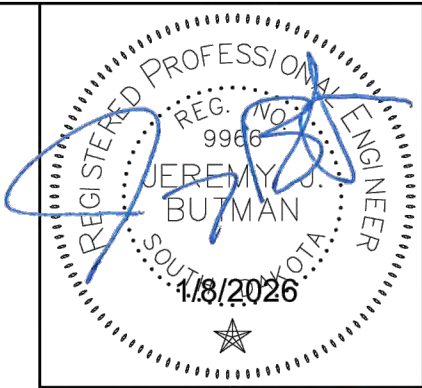
LOWER LEVEL CONTROLS PLAN

NO SCALE

NOTES: THIS SHEET



1. EXTEND ALARM CIRCUITRY FROM SUMP ALARM DEVICE TO LCP. WHEN SUMP ALARM IS ACTIVE, LCP SHALL COMMUNICATE ALARM THROUGH SCADA SYSTEM.



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
PROCESS BUILDING 78 LOWER LEVEL CONTROLS PLAN

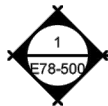
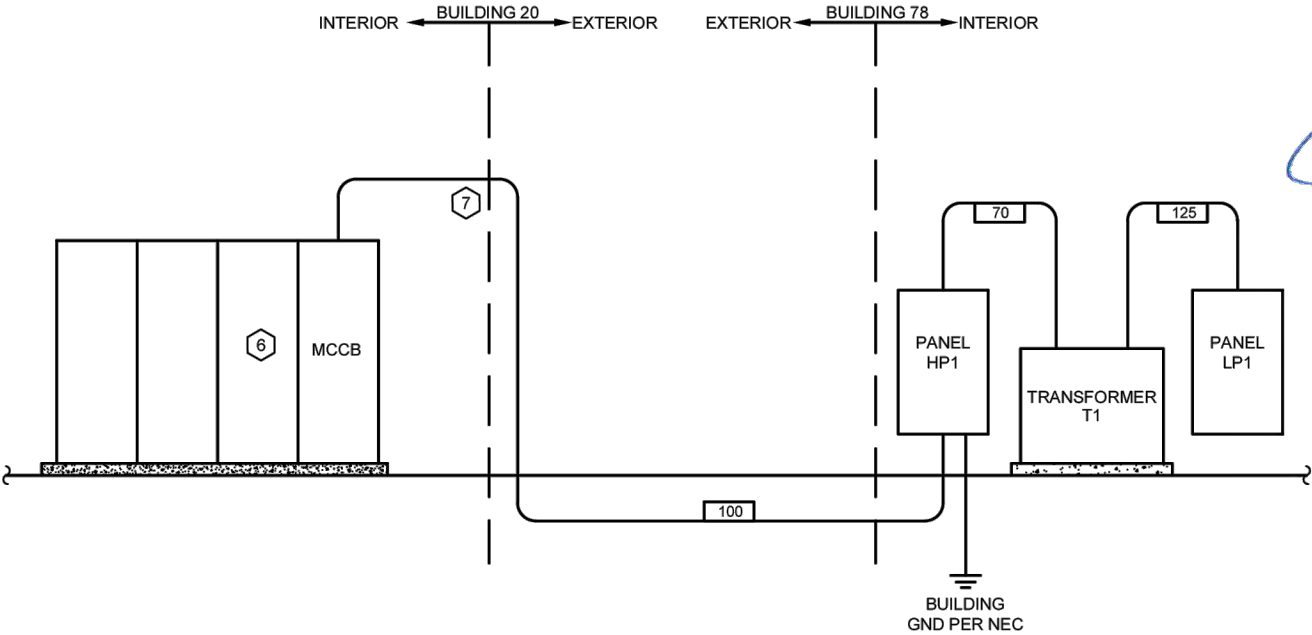
DATE:	1/8/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
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DRAFTER:	JJB
REVIEWER:	JJB

E78-401

BUILDING 78 MOTOR & EQUIPMENT SCHEDULE										
DESIG.	EQUIPMENT SERVED	CHARACTERISTICS			DISCONNECT (BY EC)	CONTROLLER (BY EC)	CONTROL INITIATING DEVICE			NOTE
		HP	VOLT	PHASE			DEVICE	FURN	MTD	
EF-1	EXHAUST FAN	1 HP	120	1	INCLUDED WITH STARTER	TOGGLE OR MANUAL AS REQUIRED	CONTROL PANEL LCP	EC	EC	1
MAU-1	MAKE-UP AIR UNIT	4.1 MCA, MOCP 15A	460	3	INTEGRAL	INTEGRAL	CONTROL PANEL LCP	EC	EC	2
MD	MOTORIZED DAMPER	FRAC.	120	1	INCLUDED WITH STARTER	TOGGLE OR MANUAL AS REQUIRED	CONTROL PANEL LCP	EC	EC	1
UH-1	UNIT HEATER #1	FRAC.	120	1	INCLUDED WITH STARTER	TOGGLE OR MANUAL AS REQUIRED	T-STAT	MC	EC	3
UH-2	UNIT HEATER #2	FRAC.	120	1	INCLUDED WITH STARTER	TOGGLE OR MANUAL AS REQUIRED	T-STAT	MC	EC	3
WH-1	WATER HEATER	28.8 A	208	1	60/2 FDS, FUSE AT 40A	INTEGRAL	INTEGRAL	MC	EC	—

NOTES:

- EF-1 AND MD TO BE POWERED FROM THE SAME CIRCUIT. ROUTE HOMERUN CIRCUITRY THROUGH LCP RELAY FOR EQUIPMENT CONTROL.
- EXTEND CONTROL CIRCUITRY FROM LCP TO MAU-1 AS REQUIRED FOR UNIT CONTROL. EXTEND LOW VOLTAGE CONTROL CIRCUITRY BETWEEN MAU-1 AND REMOTE TOUCHSCREEN AS REQUIRED BY MANUFACTURER.
- LOW-VOLTAGE THERMOSTAT TO BE FURNISHED BY MECHANICAL CONTRACTOR, MOUNTED AND WIRED BY DIVISION 26 ELECTRICAL CONTRACTOR.



BUILDING 78 RISER

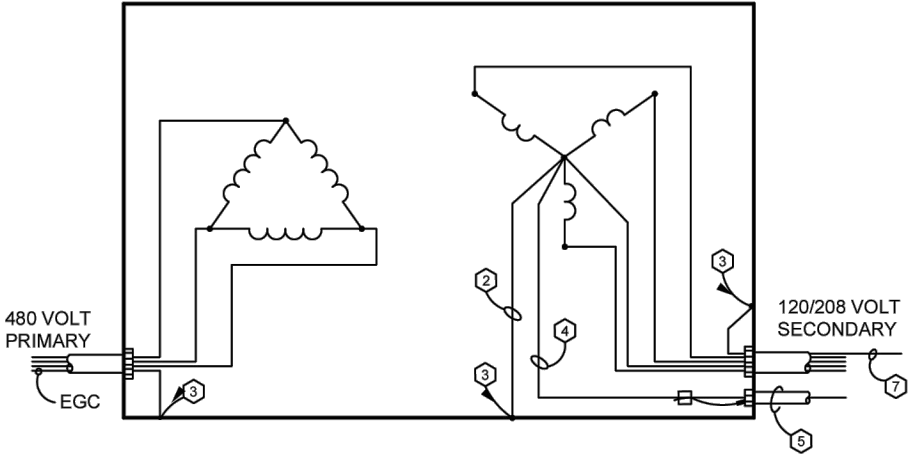
NO SCALE

FEEDER SCHEDULE

DESIG-NATION	CONFIGU-RATION	REQUIRED AMPACITY	CONDUCTOR SIZE (NOTE 3)			CONDUIT
			PHASE	NEUTRAL	EGC (NOTE 4)	
125	3Ø 4W	125	#1	#1	#6	2"
100	3Ø 4W	100	#2	#2	#8	1-1/2"
70	3Ø 3W	70	#4	NR	#8	1"

NOTES:

- FEEDER RISERS ARE SCHEMATIC ONLY, AND NOT INTENDED TO INFER LUG ARRANGEMENTS.
- SEE SPECIFICATION FOR GROUNDING REQUIREMENTS, ALLOWABLE PVC USAGE, AND ALLOWABLE EXPOSED EXTERIOR STUB-UPS.
- CONDUCTORS SIZING BASED UPON 60 DEGREE TERMINATION'S FOR OVERCURRENT PROTECTIVE DEVICES RATED 100 AMPERES OR LESS, AND 75 DEGREE TERMINATION'S FOR RATINGS GREATER THAN 100 AMPERES, AS PER NEC TABLE 310.16, 240.4, 310.15(B2), AND 310.15(B4). IN NO CASE SHALL INDICATED SIZING BE DECREASED.
- EQUIPMENT GROUNDING CONDUCTOR.
- NEW PANEL HP1 SHALL HAVE AN AIC RATING OF 35,000 AMPERES. SERIES RATINGS FOR ELECTRICAL GEAR DOWNSTREAM OF PANEL HP1 MAY BE SERIES RATED.
- EXISTING GENERAL ELECTRIC 8000 SERIES MCC IN BUILDING 20. PROVIDE ONE 100/3 CIRCUIT BREAKER IN ONE EMPTY BUCKET SPACE, OR REPLACE ONE UNUSED STARTER BUCKET FROM REMOVE EQUIPMENT WITH NEW 100/3 BREAKER, TO SERVE NEW PANEL HP1.
- ROUTE FEEDER THROUGH BUILDING, DOWN EXTERIOR WALL, AND TO NEW BUILDING 78. FIELD VERIFY EXACT INTERIOR AND EXTERIOR ROUTING REQUIRED.



DISTRIBUTION TRANSFORMER

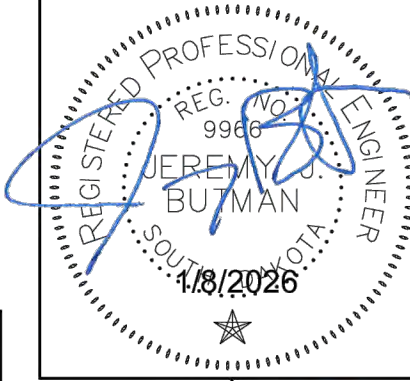
NO SCALE

NOTES ()

- ALL GROUNDING PER NEC 250. REFER TO NEC 250.30 FOR GROUNDING SEPARATELY DERIVED SYSTEMS.
- BONDING JUMPER, SIZED IN ACCORDANCE WITH NEC 250.28(D).
- COMPRESSION LUG BOLTED TO TRANSFORMER CASE.
- GROUNDING ELECTRODE CONDUCTOR, SIZED IN ACCORDANCE WITH NEC 250.66. THE GROUNDING ELECTRODE SHALL BE THE NEAREST ONE OF THE FOLLOWING AS PER NEC 250-30(A)(7):
A. METAL WATER PIPE GROUNDING ELECTRODE AS SPECIFIED IN NEC 250.52(A)(1), (ATTACHED WITH T&B 3900 SERIES WATER PIPE GROUND CLAMP), OR
B. STRUCTURAL METAL GROUNDING ELECTRODE AS SPECIFIED IN NEC 250.52(A)(2), (ATTACHED WITH BOLTED COMPRESSION LUG).
WHERE THE ELECTRODES LISTED ABOVE ARE NOT AVAILABLE, ANY OF THE OTHER ELECTRODES IDENTIFIED IN NEC 250.52(A) SHALL BE USED.
- METALLIC CONDUIT ENCLOSING GROUNDING ELECTRODE CONDUCTOR SHALL COMPLY WITH NEC 250.64(E). PROVIDE GROUNDING BUSHINGS AT EACH END COMPLETE WITH JUMPERS SAME SIZE AS GROUNDING ELECTRODE CONDUCTOR. USE SPLIT BOLT CONNECTOR TO BOND JUMPER TO GROUNDING ELECTRODE CONDUCTOR.
- PROVIDE FUSED DISCONNECT SWITCH ADJACENT TO TRANSFORMER WHEN REQUIRED BY NEC 240.21(B)(3).
- SUPPLY SIDE BONDING JUMPER, SIZED IN ACCORDANCE WITH NEC 250.102.

DRY TYPE TRANSFORMER SCHEDULE

DESIG.	KVA	PHASE	PRIMARY VOLTAGE	SECONDARY VOLTAGE	PRIMARY O/C PROTECTION	SECONDARY O/C PROTECTION	MOUNTING	REMARKS
T1	45	3	480 DELTA	208Y/120	HD1 CB	LP1 MCB	FLOOR	SEE DETAIL 2/E78-500.



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
PROCESS BUILDING 78 ELECTRICAL RISER

DATE:	1/8/2026
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PROJECT No.	25547
MANAGER:	JJB
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DRAFTER:	JJB
REVIEWER:	JJB

E78-500

PROCESS EQUIPMENT SCHEDULE										
DESIG.	EQUIPMENT SERVED	CHARACTERISTICS			DISCONNECT (BY EC)	CONTROLLER (BY EC)	CONTROL INITIATING DEVICE			NOTE
		HP	VOLT	PHASE			DEVICE	FURN	MTD	
<u>AC-1</u>	AIR COMPRESSOR	5	460	3	CB IN HP1	INTEGRAL	LOCAL CONTROL PANEL	--	--	5
<u>DS</u>	DRUM SCALE	FRAC.	120	1	NR	NR	FRP CONTROL PANEL	--	--	6
<u>FRP</u>	FOURNIER ROTARY PRESS	30 AMP	460	3	INTEGRAL	INTEGRAL	FRP CONTROL PANEL	--	--	1
<u>FL</u>	FLOCULATOR	1 HP	460	3	CONTROL PANEL	CONTROL PANEL	FRP CONTROL PANEL	--	--	1
<u>RP</u>	ROTARY PRESS	5 HP	460	3	CONTROL PANEL	CONTROL PANEL	FRP CONTROL PANEL	--	--	1
<u>RC</u>	RECEIVING CONVEYOR	1 HP	460	3	CONTROL PANEL	CONTROL PANEL	FRP CONTROL PANEL	--	--	1
<u>IC</u>	INCLINE CONVEYOR	5 HP	460	3	CONTROL PANEL	CONTROL PANEL	FRP CONTROL PANEL	--	--	1
<u>PS</u>	POLYMER SYSTEM	FRAC.	120	1	INTEGRAL	INTEGRAL	FRP CONTROL PANEL	--	--	2
<u>SP-1</u>	SUMP PUMP	FRAC.	120	1	CORD AND PLUG	INTEGRAL	INTEGRAL	MC	MC	--
<u>78-M-01</u>	SLUDGE TANK MIXER	2-1/2 HP	460	3	INCLUDED WITH STARTER	FVNR, COMB 0	LOCAL CONTROL PANEL	--	--	4
<u>78-P-01</u>	SLUDGE PUMP #1	5 HP	460	3	INCLUDED WITH STARTER	VFD	LOCAL CONTROL PANEL	--	--	3
<u>78-P-02</u>	SLUDGE PUMP #2	5 HP	460	3	INCLUDED WITH STARTER	VFD	LOCAL CONTROL PANEL	--	--	3
<div>NOTES:</div> <div><div>1. EQUIPMENT FURNISHED UNDER SEPARATE BID PACKAGE. ALL POWER AND CONTROLS EQUIPMENT TO BE MOUNTED AND WIRED BY DIVISION 26 ELECTRICAL CONTRACTOR. SEE ELECTRICAL DRAWINGS FOR CIRCUITRY REQUIREMENTS.</div><div>2. SYSTEM EQUIPMENT PROVIDED BY GENERAL CONTRACTOR, VFD FURNISHED AND WIRED BY DIVISION 26 CONTRACTOR. SEE SPECIFICATION.</div><div>3. VFD FOR EQUIPMENT FURNISHED AND WIRED BY DIVISION 26 CONTRACTOR. SEE SPECIFICATION AND DETAIL 2/E78-300.</div><div>4. COORDINATE INSTALLATION WITH ALL OTHER TRADES.</div><div>5. EXISTING AIR COMPRESSOR TO BE RELOCATED TO NEW BUILDING AND INSTALLED. EXTEND CONTROL CIRCUITRY SIMILAR OT EXISTING BETWEEN AIR COMPRESSOR AND LOCAL CONTROL PANEL.</div><div>6. PROVIDE POWER CONNECTION TO EQUIPMENT PER MANUFACTURER INSTRUCTIONS.</div></div>										

PANEL HP1 SCHEDULE								
277/480 VOLTS 3Ø 4W 100 AMP MCB SURFACE MOUNTED								
EATON POW-R-LINE SERIES OR EQUIVALENT								
CIRCUIT DESCRIPTION	POLES	AMPS	CKT	Ø	CKT	AMPS	POLES	CIRCUIT DESCRIPTION
SPARE	3	30	1	A	2	30	3	FRP
	-	-	3	B	4	-	-	
	-	-	5	C	6	-	-	
<u>MAU-1</u>	3	15	7	A	8	20	3	<u>SP-1</u>
	-	-	9	B	10	-	-	
	-	-	11	C	12	-	-	
<u>MX</u>	3	20	13	A	14	20	3	<u>SP-2</u>
	-	-	15	B	16	-	-	
	-	-	17	C	18	-	-	
<u>AC-1</u>	3	20	19	A	20	20	3	SPARE
	-	-	21	B	22	-	-	
	-	-	23	C	24	-	-	
SPARE	3	40	25	A	26	70	3	TRANSFORMER T1
	-	-	27	B	28	-	-	
	-	-	29	C	30	-	-	
SPARE	3	20	31	A	32	20	3	SPARE
	-	-	33	B	34	-	-	
	-	-	35	C	36	-	-	
SPARE	1	20	37	A	38	20	1	SPARE
SPARE	1	20	39	B	40	20	1	SPARE
SPARE	1	20	41	C	42	20	1	SPARE

PANEL LP1 SCHEDULE								
120/208 VOLTS 3Ø 4W 125 AMP MCB SURFACE MOUNTED								
EATON POW-R-LINE SERIES OR EQUIVALENT								
CIRCUIT DESCRIPTION	POLES	AMPS	CKT	Ø	CKT	AMPS	POLES	CIRCUIT DESCRIPTION
LIGHTING	1	20	1	A	2	20	1	RECEPTACLES
<u>LCP</u>	1	20	3	B	4	20	1	RECEPTACLES
<u>UH-1</u>	1	20	5	C	6	20	1	<u>QHD</u> , RECEPTACLES
<u>UH-2</u>	1	20	7	A	8	20	1	RECEPTACLES
<u>EF-1</u>	1	20	9	B	10	20	1	RECEPTACLES
SPARE	1	20	11	C	12	20	1	<u>SP-1</u>
SPARE	1	20	13	A	14	20	1	SUMP PUMP ALARM
	2	40	15	B	16	20	1	SPARE
	-	-	17	C	18	20	1	SPARE
SPARE	1	20	19	A	20	20	1	SPARE
SPARE	1	20	21	B	22	20	1	SPARE
SPARE	1	20	23	C	24	20	1	SPARE
SPARE	1	20	25	A	26	20	1	SPARE
SPARE	1	20	27	B	28	50	2	WELDING RECEPT.
SPARE	1	20	29	C	30	-	-	



ELECTRICAL PLANS
WASTEWATER TREATMENT FACILITY UPGRADES
WASTEWATER TREATMENT PLANT IMPROVEMENTS
MOBRIDGE, SOUTH DAKOTA
PROCESS BUILDING 78 SCHEDULES

DATE:	1/8/2026
REV DATE:	---
REV NUM:	---
RECORD:	---
PROJECT No.	25547
MANAGER:	JJB
DESIGNER:	JJB
DRAFTER:	JJB
REVIEWER:	JJB