

**November 9, 2023**

**RE: GENERATOR PROJECTS AT WATER TREATMENT PLANT AND  
BOOSTER STATIONS  
LOWER BRULE RURAL WATER SYSTEM  
LOWER BRULE, SOUTH DAKOTA  
SPN #16196**

**BID LETTING: THURSDAY, NOVEMBER 16, 2023 @ 10:00 AM**

***ADDENDUM NUMBER 1***

**The following modifications are to be made to the specifications for the Project.**

Refer to the Addendum by West Plains Engineering.

**All other items of the plans and specifications remain unchanged.**



*Camden A. Hofer, PE*  
Camden A. Hofer, Project Engineer  
Schmucker, Paul, Nohr & Associates

The undersigned hereby acknowledges receipt of Addendum Number 1 to the plans and specifications for the *GENERATOR PROJECTS AT WATER TREATMENT PLANT AND BOOSTER STATIONS*.

FIRM NAME \_\_\_\_\_  
BY \_\_\_\_\_  
TITLE \_\_\_\_\_  
DATE \_\_\_\_\_

**ATTACH THIS SIGNED ADDENDUM NO. 1 TO THE BID FORM WHEN SUBMITTING.**

**Date:** 11/7/2023**Project:** LBRWS**To:** All Bidders**Project #:** Generator Projects at Water Treatment Plant  
And Booster Stations**From:** WPE**Project Location:** Lower Brule, SD**Addendum Number:** 1

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**To:** All prime contract bidders and all others to whom Drawings and Specifications have been issued by the Engineer. Acknowledge receipt of the Addendum by inserting its number and date on the Bid Form. Failure to do so may subject bidder to disqualification. This Addendum forms a part of the Contract Documents. It modifies them as follows:

**Drawings**

Reference Drawing E130 – WTP Power Riser Diagram Demo

1. Remove the existing conductors and raceway from the pad-mounted CT cabinet up to the current metering kit located near the top of the pole.

Reference Drawing E140 – WTP Power Riser Diagram New

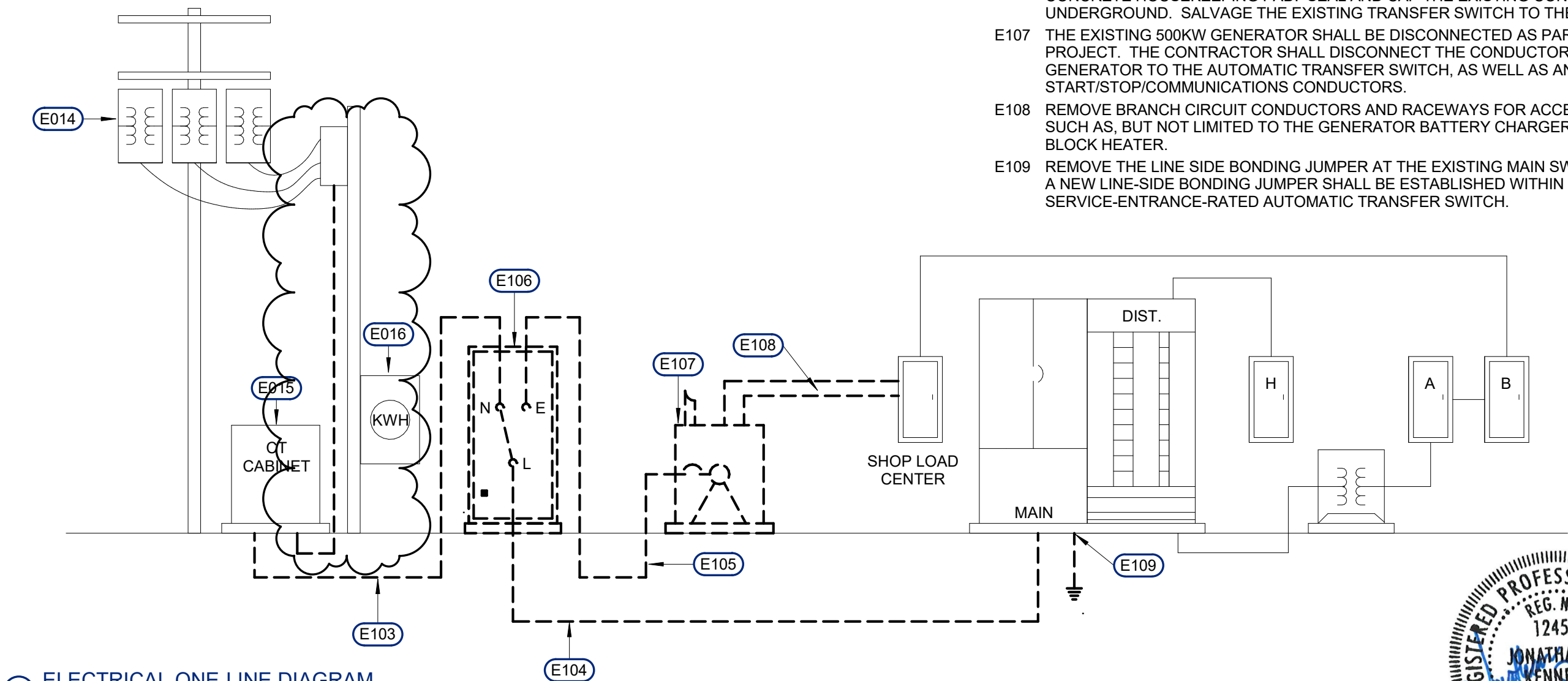
1. Provide new conductors (1000-amps, phase + neutral + ground) in raceway from the pad-mounted CT cabinet to the pole-mounted CTs located near the top of the pole. West Central Electric Coop will assist in running the wire up the pole and making the connections to the current metering kit at the top of the pole.

**END OF DOCUMENT – JK**

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ELECTRICAL SPECIFIC NOTES

- E014 EXISTING POLE-MOUNTED UTILITY TRANSFORMERS TO REMAIN.  
E015 EXISTING PAD-MOUNTED UTILITY CT CABINET TO REMAIN.  
E016 EXISTING UTILITY METER TO REMAIN.  
E103 EXISTING UTILITY CONDUCTORS FROM THE PAD-MOUNTED CT CABINET TO THE EXISTING AUTOMATIC TRANSFER SWITCH SHALL BE REMOVED. COORDINATE SHUT-DOWN WITH UTILITY.  
E104 EXISTING CONDUCTORS FROM THE AUTOMATIC TRANSFER SWITCH TO THE EXISTING SWITCHBOARD SHALL BE REMOVED. THE EXISTING CONDUIT MAY BE ABANDONED IN PLACE. SEAL THE CONDUIT END INSIDE THE SWITCHBOAD WITH A MOISTURE-TIGHT SEAL.  
E105 EXISTING CONDUCTORS FROM THE AUTOMATIC TRANSFER SWITCH TO THE EXISTING GENERATOR SHALL BE REMOVED. THE EXISTING CONDUIT MAY BE ABANDONED IN PLACE.  
E106 REMOVE THE EXISTING AUTOMATIC TRANSFER SWITCH AND ASSOCIATED CONCRETE HOUSEKEEPING PAD. SEAL AND CAP THE EXISTING CONDUIT ENDS UNDERGROUND. SALVAGE THE EXISTING TRANSFER SWITCH TO THE OWNER.  
E107 THE EXISTING 500KW GENERATOR SHALL BE DISCONNECTED AS PART OF THIS PROJECT. THE CONTRACTOR SHALL DISCONNECT THE CONDUCTORS FROM THE GENERATOR TO THE AUTOMATIC TRANSFER SWITCH, AS WELL AS ANY START/STOP/COMMUNICATIONS CONDUCTORS.  
E108 REMOVE BRANCH CIRCUIT CONDUCTORS AND RACEWAYS FOR ACCESSORY ITEMS SUCH AS, BUT NOT LIMITED TO THE GENERATOR BATTERY CHARGER AND ENGINE BLOCK HEATER.  
E109 REMOVE THE LINE SIDE BONDING JUMPER AT THE EXISTING MAIN SWITCHBOARD. A NEW LINE-SIDE BONDING JUMPER SHALL BE ESTABLISHED WITHIN A NEW SERVICE-ENTRANCE-RATED AUTOMATIC TRANSFER SWITCH.



1 ELECTRICAL ONE-LINE DIAGRAM  
1/4" = 1'-0"



Plan Horiz. Scale:	1/4" = 1'-0"
Drawn By:	JK
Checked By:	JK
Date:	09/06/2023
Project No.:	16196
File Name:	16196-LBRWS WTP Generator

Project Name:  
Generator  
Projects at Water  
Treatment Plant  
and Booster  
Stations  
Located in:  
Lower Brule,  
South Dakota

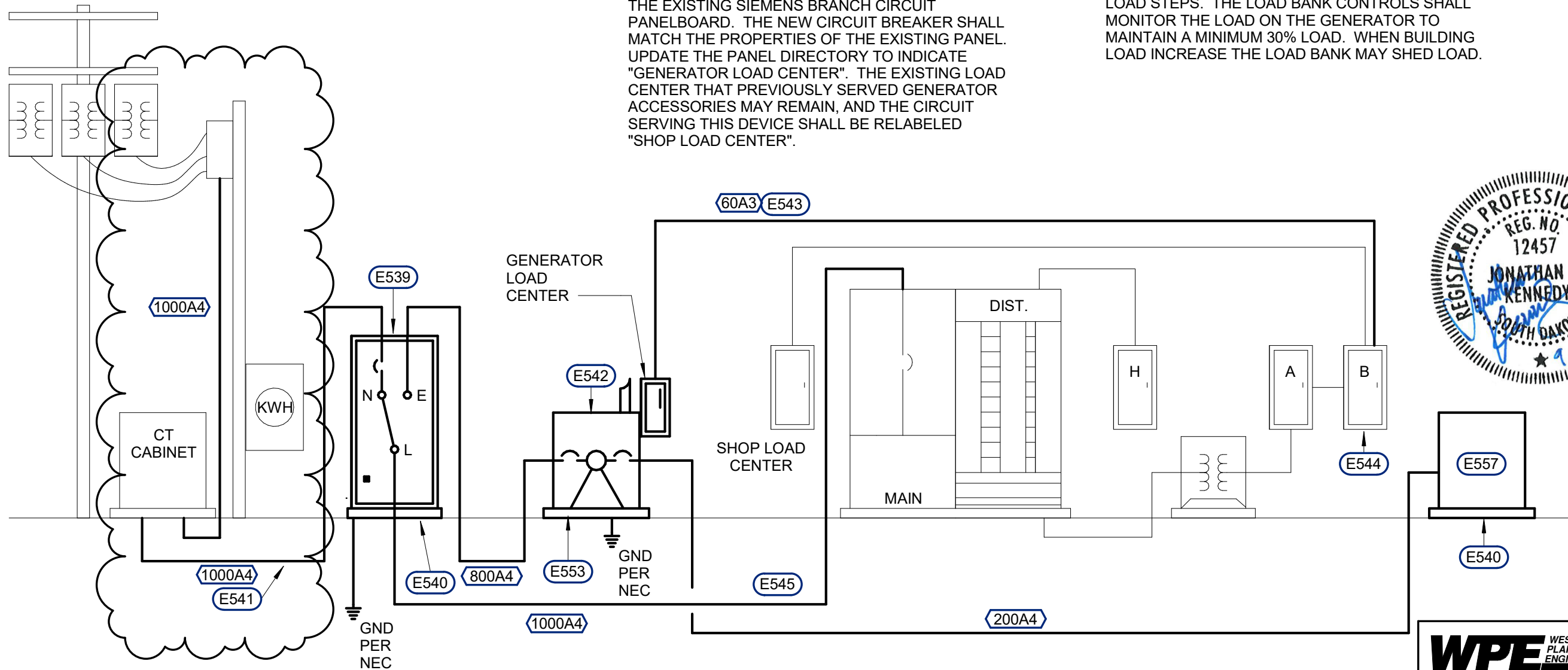
Sheet Name:  
WTP POWER RISER  
DIAGRAM DEMO

Sheet Number:	Total Sheets:
E130	13

- # ELECTRICAL SPECIFIC NOTES
- E539 PROVIDE A NEW 1,000-AMP, 3-POLE, 480-VOLT OPEN TRANSITION, SERVICE-ENTRANCE-RATED AUTOMATIC TRANSFER SWITCH IN A NEMA 3R DOOR-IN-DOOR STYLE ENCLOSURE. TRANSFER SWITCH SHALL HAVE A MINIMUM 65,000 AIC RATING.
- E540 PROVIDE A NEW 4-INCH TALL CONCRETE HOUSEKEEPING PAD THAT EXTENDS NO LESS THAN 3-INCHES BEYOND THE PERIMETER OF THE EQUIPMENT.
- E541 NEW CONDUCTORS SHALL BE PROVIDED FROM THE PAD-MOUNTED UTILITY CT CABINET TO THE NEW PAD-MOUNTED ATS. COORDINATE THE INSTALLATION WITH THE ELECTRIC UTILITY. THE NEW CONDUCTORS SHALL BE INSTALLED UNDERGROUND IN RACEWAY. COORDINATE EXACT ROUTING WITH THE OWNER AND THE CIVIL ENGINEER PRIOR TO ROUGH-IN.

- # ELECTRICAL SPECIFIC NOTES
- E542 PROVIDE A NEW 500KW, 480-VOLT 3-PHASE, 4-WIRE ENGINE-GENERATOR IN AN OUTDOOR-RATED, SOUND-ATTENUATED REACH-IN STYLE ENCLOSURE. PROVIDE WITH A SUB-BASE DIESEL FUEL TANK WITH A MINIMUM OF 24-HOURS OF CAPACITY AT 100% LOAD. PROVIDE WITH AN INTEGRAL ELECTRIC LOAD CENTER (100-AMP, 1-PHASE RATED) AND FACTORY-WIRED TO ALL ACCESSORY DEVICES SUCH AS, BUT NOT LIMITED TO THE BATTERY CHARGER, ENGINE BLOCK HEATER, MOTORIZED INTAKE LOUVERS, AND INTERNAL ENCLOSURE SPACE HEATER. PROVIDE THE GENERATOR WITH AN 800-AMP, 100% RATED, ADJUSTABLE ELECTRONIC TRIP (LONG-TIME, SHORT-TIME, AND INSTANTANEOUS) PRIMARY CIRCUIT BREAKER, AND A SECOND OUTPUT CIRCUIT BREAKER (200-AMPS, 100% RATED, THERMAL-MAGNETIC) FOR CONNECTION OF THE PERMANENT LOAD BANK. LABEL BOTH CIRCUIT BREAKERS.
- E543 THE CONTRACTOR SHALL PROVIDE A NEW FEEDER CIRCUIT TO THE GENERATOR LOAD CENTER.
- E544 PROVIDE A 60-AMP, 2-POLE CIRCUIT BREAKER IN THE EXISTING SIEMENS BRANCH CIRCUIT PANELBOARD. THE NEW CIRCUIT BREAKER SHALL MATCH THE PROPERTIES OF THE EXISTING PANEL. UPDATE THE PANEL DIRECTORY TO INDICATE "GENERATOR LOAD CENTER". THE EXISTING LOAD CENTER THAT PREVIOUSLY SERVED GENERATOR ACCESSORIES MAY REMAIN, AND THE CIRCUIT SERVING THIS DEVICE SHALL BE RELABELLED "SHOP LOAD CENTER".

- # ELECTRICAL SPECIFIC NOTES
- E545 THE NEW NORMAL-POWER FEEDER FROM THE ATS TO THE EXISTING MAIN SWITCHBOARD MAY BE RUN INSIDE THE BUILDING, ACROSS THE CEILING OF THE EXISTING SHOP SPACE. THE CONTRACTOR SHALL SEAL ALL PENETRATIONS THROUGH THE EXTERIOR BUILDING ENVELOPE. THE NEW FEEDER MAY CONNECT TO THE EXISTING SWITCHBOARD FROM ABOVE. THERE IS AN EXISTING GYP BOARD CEILING IN THE ELECTRICAL ROOM. THE CONTRACTOR MAY CUT THE CEILING AS REQUIRED TO INSTALL NEW FEEDER CONDUITS, AND SHALL PATCH THE CEILING UPON COMPLETION.
- E553 PROVIDE A NEW 4-INCH TALL REINFORCED CONCRETE HOUSEKEEPING PAD THAT EXTENDS NO LESS THAN 3-INCHES BEYOND THE PERIMETER OF THE EQUIPMENT. THE REBAR REINFORCED CONCRETE PAD SHALL BE SIZED FOR THE WEIGHT OF THE EQUIPMENT WITH ALL FLUIDS INCLUDED.
- E557 PROVIDE A 150KW, 480-VOLT, 3-PHASE PERMANENTLY-INSTALLED LOAD BANK WITH INTEGRAL MAIN CIRCUIT BREAKER AND INTERNAL CONTROLS. THE LOAD BANK SHALL BE CONSTRUCTED TO HAVE A MINIMUM OF THREE LOAD STEPS. THE LOAD BANK CONTROLS SHALL MONITOR THE LOAD ON THE GENERATOR TO MAINTAIN A MINIMUM 30% LOAD. WHEN BUILDING LOAD INCREASE THE LOAD BANK MAY SHED LOAD.



1 ELECTRICAL ONE-LINE DIAGRAM  
1/4" = 1'-0"

SPN  
& Associates

Engineers - Planners - Surveyors

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Plan Horiz. Scale: 1/4" = 1'-0"  
Drawn By: JK  
Checked By: JK  
Date: 09/06/2023  
Project No.: 16196  
File Name: 16196-LBRWS  
WTP Generator

Project Name:  
Generator  
Projects at Water  
Treatment Plant  
and Booster  
Stations  
Located in:  
Lower Brule,  
South Dakota

Sheet Name:  
WTP POWER RISER  
DIAGRAM NEW

Sheet Number: E140  
Total Sheets: 13



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