



**1 S. 649 Shaffner Road
Wheaton, IL 60189
630-668-1515**

Electrical Equipment Bid Document

March 2026

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INVITATION TO BID

ELECTRICAL EQUIPMENT

WEST BRANCH WATER RECLAMATION DISTRICT

OWNER: The West Branch Water Reclamation District hereby gives notice that sealed bids will be received for Electrical Equipment

TIME: Sealed Bids will be received until **11:30am Monday, April 6, 2026**, at the office of the Wheaton Sanitary District, 1 S. 649 Shaffner Road, Wheaton, Illinois 60189, at which time all bids will be publicly opened and read aloud.

PROJECT: The WORK, officially known as “**Electrical Equipment**”, consists of providing switchboard and enclosed switches and circuit breakers.

BIDDING DOCUMENTS: All pertinent documents may be obtained from the Wheaton Sanitary District, website at <https://mywestbranch.org/news/>, or by calling 630-668-1515.

BID REJECTION/ACCEPTANCE: The Owner reserves the right to reject any and all Bids, waive any informalities in bidding or to accept the Bid, which best serve the interests of the Owner.

BID WITHDRAWAL: No Bid shall be withdrawn for a period of 45 days after the scheduled opening of the Bids without the consent of the Owner.

Published by authority of the Wheaton Sanitary District, Wheaton, Illinois.

Matthew A. Larson, P.E.
Executive Director & District Engineer

INSTRUCTION TO BIDDERS

SECTION 1. Submission of BID

- 1.0 Submission of BID. Each BID must be delivered in an envelope addressed to the **West Branch Water Reclamation District, 1 S 649 Shaffner Road, Wheaton, Illinois 60189**. Each envelope containing a BID must be plainly marked on the outside as **“Electrical Equipment.”**
- 1.1 Preparation of BIDs. The bidders shall submit their BID on the BID form provided. The bidder shall indicate, in figures, a lump sum price.
- 1.2 Rejection of BIDs. BIDs that contain omissions, erasures, alterations, additions not called for, conditions or alternate bids, unless called for, irregularities of any kind shall be rejected as informal or insufficient. However, the District reserves the right to reject any or all BIDs and to waive such technical errors as may be deemed best for the interest of the District.
- 1.3 Withdrawal of BIDs. Permission will be given to a bidder to withdraw a BID if he makes his request in writing before the time for opening BIDs.
- 1.4 Public Opening of BIDs. BIDs will be opened and read publicly at the time and place specified in the Invitation to Bid.
- 1.5 Disqualification of Bidders. Any one or more of the following causes may be considered as sufficient for the disqualification of a bidder and the rejection of his BID:
 - A. More than one BID for the same work from an individual, firm partnership, or corporation under the same name.
 - B. Evidence of collusion among bidders.

SECTION 2. Award and Execution of the Contract

- 2.1 Award of Contract. Except in cases where the District exercises the right to reject any or all BIDs, the Contract will be awarded, as soon as practical, after the opening of BIDs to the lowest responsible and qualified bidder. Unless otherwise specified, if a Contract is not awarded within forty-five (45) days after the opening of BIDs, a bidder may file a written request with the District for the withdrawal of his bid. The District will have a maximum of ten (10) days after the receipt of such request to award the Contract.
- 2.2 Failure to Execute Contract. Failure on the part of the successful bidder to execute a Contract within fifteen (15) days from the date of receipt of the Contract from the District will be considered as just cause for cancellation of the award.
- 2.3 Failure to Perform. If the successful bidder fails to perform its obligations, the District may terminate the Contract upon seven (7) days' written notice. The remedies provided herein shall be in addition to any other remedies available in accordance with Illinois law.

GENERAL CONDITIONS

1.0 SPECIFICATIONS AND DRAWING

- **See following pages**

1.1 Quantity: Per specifications and drawing.

1.2 Invoicing: Invoices will be paid by the District in a minimum of 45 days.

SECTION 26 28 16

ENCLOSED SWITCHES AND CIRCUIT BREAKERS

PART 1 - GENERAL

1.1 SUMMARY

- A. Provide enclosed circuit breaker, as specified herein, and as needed for a complete and proper installation.

1.2 SUBMITTALS

- A. Shop Drawing Submittals:
 - 1. Electrical ratings, physical dimensions, NEMA rating, and manufacturer's detailed specifications.
- B. Operation and Maintenance Manuals:
 - 1. Submit operation and maintenance manuals at the Owner's request.

1.3 QUALITY ASSURANCE

- A. Comply with the following requirements:
 - 1. NFPA 70 National Electrical Code (NEC).

1.4 DELIVERY

- A. Deliver specified equipment to 1S 649 Shaffner Road, Wheaton, IL. Owner will unload.

1.5 WARRANTY

- A. Twenty-four (24) months from equipment delivery or eighteen (18) months from equipment start-up, whichever occurs first.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Rating:
 - 1. 480Y/277 volt AC, 3 phase, 4 wire, 60 Hertz.
 - 2. 2000A current ratings
 - 3. Minimum 65,000 RMS symmetrical amperes short circuit current.
 - 4. Circuit breaker will be installed in a self contained NEMA 3R enclosure with an accompanying utility CT cabinet installed on a concrete pad.
- B. Acceptable manufacturers:
 - 1. Eaton.
 - 2. Square D.
 - 3. ABB
 - 4. Power Distribution Equipment.

5. Erickson Electrical Equipment Co.

2.2 ENCLOSED CIRCUIT BREAKER

- A. Molded case service entrance protective devices shall be fixed mounted molded case circuit breakers for 2000A rating.
- B. All main and tie circuit breakers shall have a minimum symmetrical interrupting capacity of 65,000 amperes. Main and tie circuit breakers shall have 3 cycle short-time withstand ratings.
- C. All main case circuit breakers shall be UL489 listed.
- D. All molded case circuit breakers shall have a nameplate clearly marking any electrical accessories that are mounted in the breaker at the time of sale. The accessory shall have a label that will indicate its function and voltage. All accessories shall be modular, plug and lock type, and UL listed for easy field installation.
- E. Each molded case circuit breaker shall be equipped with a true RMS sensing, solid-state tripping system consisting of at least three current sensors microprocessor-based trip device and trip actuator. The trip unit shall use microprocessor-based technology to provide the basic adjustable time-current protection.
- F. Provide trip units with integral arc flash reduction mode (ARMS) for 1200A frame and above to meet NEC Article 240.87. The use of ZSI to satisfy NEC 240.87 does not meet the intent of these specifications and will not be acceptable as a substitution.
- G. Provide adjustable rotary switches for the following microprocessor-based time-current curve shaping adjustments:
 - 1. Adjustable long-delay pick-up setting with minimum of 10 settings
 - 2. Adjustable long-delay time - 0.5 to 24 seconds
 - 3. Adjustable short-delay pick-up setting – 1.5x to Max allowable by frame
 - 4. Adjustable short-delay time 0.0 sec up to 0.5 sec depending on frame with selectable flat or I²t curve shaping
 - 5. Adjustable instantaneous setting 2x to Max allowable by frame
 - 6. Where indicated, adjustable ground fault current pickup (0.2 – 1.0 x I_n in 0.10x increments) and time (0.1 – 1.0 sec in 0.10sec increments), with selectable flat or I²t curve shaping. Provide switch selectable options for GF OFF, GF alarm, or GF trip.
- H. Provide 100% rated UL listed circuit breakers.

2.3 UTILITY CURRENT TRANSFORMER CABINET

- A. Provide **ComEd Approved** CT Cabinet with the following
 - 1. Three-point latching handle and locking mechanism
 - 2. Lugs: Tin-plated aluminum, suitable for copper conductors and rated for 90°. Lugs are sized for #3/0-800 MCM for 1600 Amps and above.

3. Potential tap: Included on buss.
4. Wind-stop latch.
5. Grounding lug.
6. Aluminum shell.
7. UL-listed.
8. Short circuit rating: 65,000 RMS symmetrical amps minimum.

2.4 ENCLOSURES

- A. Outdoor or wet locations: NEMA 3R steel construction.
- B. Provide space heaters as required for outdoor operation of the circuit breaker.

2.5 NAMEPLATES

- A. Provide engraved laminated plastic type.
- B. Use 3/16-inch high white or black letters on background of opposite color.
- C. Identify disconnect means as follows:
 1. Disconnect: For purpose of switch or equipment controlled.

END OF SECTION

SECTION 26 24 13

SWITCHBOARDS

PART 1 - GENERAL

1.1 SUMMARY

- A. Provide switchboards, as specified herein, and as needed for a complete and proper installation.

1.2 SUBMITTALS

- A. Shop Drawing Submittals:
 - 1. Submit shop drawings including electrical ratings, diagrams, dimensions, nameplate listings, and manufacturer's detailed specifications.
- B. Operation and Maintenance Manuals:
 - 1. Submit operation and maintenance manuals at the Owner's request.

1.3 QUALITY ASSURANCE

- A. Comply with the following requirements:
 - 1. NFPA 70 National Electrical Code (NEC).

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Deliver specified equipment to 1S 649 Shaffner Road, Wheaton, IL. Owner will unload.

1.5 WARRANTY

- A. Twenty-four (24) months from equipment delivery or eighteen (18) months from equipment start-up, whichever occurs first.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Comply with the requirements of UL 891 & 869A, NEMA PB2, and ANSI C37.20 standards.
- B. Rating:
 - 1. 480Y/277 volt AC, 3 phase, 4 wire, 60 Hertz.
 - 2. Continuous current ratings as shown on the Drawings
 - 3. Minimum 65,000 RMS symmetrical amperes short circuit current.

- C. Acceptable manufacturers:
1. Eaton.
 2. Square D.
 3. ABB.
 4. Power Distribution Equipment Co.
 5. Erickson Electrical Equipment Co.

2.2 SWITCHBOARD

- A. Provide switchboard as follows:
1. NEMA 12 steel construction of one or more totally enclosed, dead front, vertical sections joined together to form a rigid, free-standing assembly.
 2. Thoroughly cleaned and phosphatized structure prior to application of light gray ANSI 61 finish.
 3. Laminated plastic engraved tag number identification nameplate with 1/2-inch high white or black letters on background of opposite color.
 4. Open bottom and removable top plate on each section for conduit entry.
 5. Labeled to indicate suitability for use as service entrance equipment.
- B. Provide bussing and terminations as follows:
1. Front accessible tin plated bus bars and/or insulated copper conductors braced to withstand a fault current of 65,000 RMS symmetrical amperes.
 2. Provide line and load terminations accessible from front, suitable for the size, number of conductors, and conductor material.
- C. Provide distribution section(s) as follows:
1. Molded case thermal magnetic circuit breakers and fuses.
 2. Transformers.
 3. Power monitoring and protection:
 - a. Provide current transformers (CTs) as required by manufacturer.
 - b. Provide potential transformers (PTs) and fuse protection as required by manufacturer.
 4. Surge protectors.

2.3 MOLDED CASE CIRCUIT BREAKERS

- A. General:
1. Comply with UL 489 requirements.
 2. Provide thermal and magnetic protection.
- B. Provide permanent trip power panel and circuit breakers as follows:
1. Single magnetic trip adjustment.
 2. Bolt-on type.
 3. Short circuit rating (integrated equipment rating):
 - a. Main: 42,000 RMS symmetrical amps minimum.
 - b. Branch: 14,000 RMS symmetrical amps minimum.
 4. Provide auxiliary Form C (NO-NC) contacts for breakers requiring a shunt trip as shown on the Drawings.

2.4 FUSES

- A. General purpose fuses for protection of motors, transformers, feeders and main service:
1. Use UL Class RK-1 fuses:
 - a. Single end rejection or to fit mountings specified.
 - b. 0-600 ampere rating.
 - c. 200,000 ampere interrupting capacity.
 - d. Dual element, time delay.
 - e. Use Bussman Low Peak LPN-RK, or equal: 250 volt rating.
 - f. Use Bussman Low Peak LPS-RK, or equal: 600 volt rating.
 2. Use UL Class L fuses:
 - a. Bolt-in type.
 - b. 601-6,000 ampere rating.
 - c. 200,000 ampere interrupting capacity.
 - d. Time delay.
 - e. Use Bussman HI-CAP, KRP-C, or equal: 600 volt rating.
- B. Acceptable manufacturers:
1. Bussman.
 2. Littelfuse.
 3. Mersen.
 4. Or equal.

2.5 SURGE PROTECTION

- A. Design surge-protective device to protect AC secondary power line from line transients and other damaging voltage spikes.
- B. Provide surge-protective device with the following requirements:
1. Meets or exceeds the following standards:
 - a. ANSI/IEEE C62.41, C62.45 and C62.11.
 - b. UL 1449.
 2. Suitable for service entrance, Category C.
 3. Suitable for operation on 480Y/277 volt, 3 phase, 4 wire system, at 60 Hertz.
 4. Capable of repeated operations.
 5. 200,000 amperes per phase surge current capacity.
 6. Monitoring of normal operation, protection event and protection reduced through indication lamps.
 7. Suitable for mounting in service entrance equipment.
- C. Acceptable manufacturers:
1. Square D EMA series.
 2. MCG Electronics, Inc.
 3. LEA International.
 4. Or equal.

2.6 PUSHBUTTONS, SELECTOR SWITCHES, AND PILOT LIGHTS

A. General:

1. Provide oil-tight, heavy duty NEMA 4 rated pushbutton switches, selector switches, and pilot lights.
2. Provide all devices with legend plates.
 - a. Material: Non-tarnish metal or laminated plastic.
 - b. Use white or black letters on background of opposite color for laminated plastic.
3. Use two-circuit contact blocks (one N.O. and one N.C. contact set) for pushbutton switches and selector switches.

B. Pushbutton Switches

1. Stop pushbuttons:
 - a. Provide non-illuminated momentary operation type operators.
 - b. Use red color button.
2. Start pushbuttons:
 - a. Provide non-illuminated momentary operation type operators.
 - b. Use black color button.

C. Selector Switches

1. Provide selector switches including the operating knob, operating cam and contact block(s).
2. Use black color operating knob.
3. Select operating cam and contact block combination to provide operating sequence as required.

D. Pilot Lights

1. Provide pilot lights with colored plastic lens.
2. Provide 120 volt or 24 Vdc, push-to-test type with LED lamp.

END OF SECTION

CONSULTANTS

MILESTONE

| NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |
| | | |
| | | |
| | | |

* - REFER TO EQUIPMENT MANUFACTURER'S SHOP DRAWING

- PLAN SHEET DESIGNATION
- G - GENERAL
 - C - CIVIL
 - L - LANDSCAPE
 - I - INSTRUMENTATION
 - T - TELECOMMUNICATIONS
 - S - STRUCTURAL
 - A - ARCHITECTURAL
 - M - MECHANICAL
 - P - PLUMBING
 - H - HVAC
 - F - FIRE PROTECTION
 - E - ELECTRICAL
 - R - RESOURCE
 - Q - EQUIPMENT
 - D - DEMOLITION

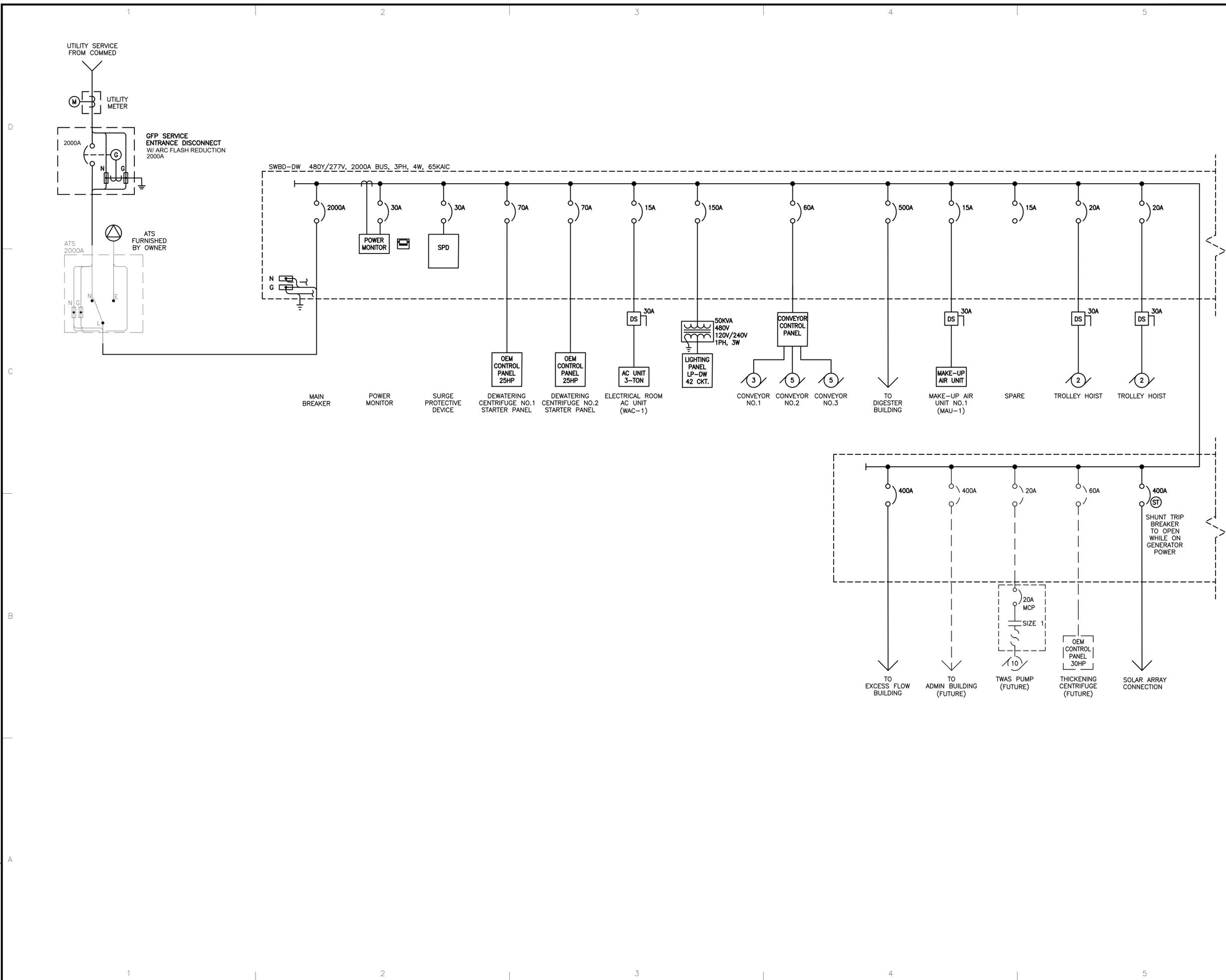
PROJECT NO: 2325939.02
SCALE: AS NOTED
DATE: 05/09/2025
DESIGNED BY: MVG
DRAWN BY: MS
CHECKED BY: MVG

CLIENT
WHEATON SANITARY DISTRICT

BIOSOLIDS DEWATERING IMPROVEMENTS

SHEET TITLE
**DEWATERING BUILDING
SINGLE LINE DIAGRAM
2000A SERVICE OPTION**

08-E-100B



P:\WHSD\1\2325939-BIOSOLIDS DEWATERING\CAD\01_CIVIL_3D\01_SHTS-PLANS\01_ELECTRICAL\ SINGLE LINE DIAGRAMS.DWG SWBD-DW2000
 Plotted: 03/18/25 By: MGRYN
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BID FORM

West Branch Water Reclamation District
1 S 649 Shaffner Road
Wheaton, IL 60189

FROM: _____

Phone No: _____

E-Mail: _____

1. The undersigned hereby proposes to supply **Electrical Equipment** at the West Branch Water Reclamation District in accordance with the General Conditions
2. In submitting this Bid, the undersigned declares that the only persons or parties interested in the Bid as principals are those named herein, and that the Bid is made without collusion with any other person, firm or corporation.
3. The undersigned declares that he has carefully examined the Bid and General Conditions and understands that, in making this Bid, he waives all right to claim any misunderstanding regarding the same.
4. The undersigned further understands and agrees that, if this Bid is accepted, he is to furnish and provide all necessary equipment.

BID FORM

Page 2 of 2

ITEM: Electrical Equipment

Total Lump Sum BID-price: _____

Prices stated in this Bid are guaranteed for forty-five (45) days from the date hereof. If awarded the Work, we agree to supply equipment at the above price.

Dated this _____ day of _____, 2026

Respectfully submitted

(Company Name)

By: _____
(Signature)

(Typed or Printed Name and Title)

AGREEMENT

(Electrical Equipment)

THIS AGREEMENT is made this _____ day of _____, 2026 by and between the West Branch Water Reclamation District "(the Owner)" and _____ ("the Vendor").

The Owner and the Vendor agree as follows:

1. Vendor agrees to provide Electrical Equipment as described in the General Conditions 1.0 Specifications.
2. The CONTRACT Documents, copies attached, include the following:
 - A. Invitation to Bid
 - B. Instructions to Bidders
 - C. General Conditions
 - E. Bid Form
 - F. Agreement
 - G. Addenda's (if any)
3. Payment Terms
 - A. Submittal Received by Owner – 10 percent
 - B. Submittal Approved by Owner – 20 percent
 - C. Equipment Delivered to Owner – 60 percent
 - D. Equipment Start-up Complete – 10 percent.
4. The District will pay the Vendor \$XXX.
5. If at any time during the term of this AGREEMENT, either party, in their sole discretion, determines that the other party has failed to perform the services required, the non-breaching party may, after seven (7) days written notice, terminate this AGREEMENT.
6. RESPONSIBILITIES/LIABILITIES.

The responsibilities/liabilities of the Seller/Vendor and the Buyer/Owner and their consultants, agents and employees and any concomitant damages and/or consequential damages caused by Seller/Vendor and/or the Buyer/Owner and their consultants, agents and employees shall be determined in such amount and to such extent as provided by Illinois law, insurance coverage, caps or limitations notwithstanding. By way of this provision, the parties intend that any limitations in the contract documents of the amounts or types of damages available to the parties shall be given no effect.

7. In the event of any conflict between the provisions of this Agreement and any other provisions of the Contract Documents, this Agreement controls.

OWNER

By: _____

Executive Director & District Engineer

Date signed _____

VENDOR

By: _____

Company Name, President

Date signed _____