ADDENDUM NO. 2

RFB #8496 Outfall Switchgear Replacement Project

RECEIPT OF THIS ADDENDUM MUST BE ACKNOWLEDGED IN THE SPACE PROVIDED IN THE REQUEST FOR BID (RFB) APPENDIX F.

Date: 01/28/2026

DocuSigned by:
Ron Baptista
74763152D287457...

Ronald Baptista, PE
Project Engineer
EchoWater Operations Department

Signed by:
William Yu
D432B6D55629454...

William Yu, PE
Engineering Manager
EchoWater Operations Department

Signed by:
C.N. Lunde
1C33FE8AE2DC4BE...

Sonny Lunde, PE
Director
EchoWater Operations Department

This Addendum No. 2 shall be incorporated into and made part of the above referenced contract documents for RFB #8496.

NOTICE TO BIDDERS

THE BID DUE DATE HAS BEEN EXTENDED TO THURSDAY, 02/19/2026 AT 3:00 PM PST

Addendum Item	Section and Page or Drawing No.	Location and Description of Change
2.01	**Key Action Dates**	Key Action Dates – Delete the KEY ACTION DATES page (as revised by Addendum No. 1) in its entirety and replace it with the KEY ACTION DATES page attached to this Addendum No. 2, which extends the Bid Due Date to Thursday, 02/19/2026 at 3:00 PM PST and provides updated dates for all other listed milestones.
2.02	**Specification Section 01.79.10**	Add Specification Section 01.79.10 TRAINING
2.03	**Specification Section 05 10 00**	Add Specification Section 05 10 00 STRUCTURAL METAL FRAMING
2.04	**Specification Section 26 24 13**	Replace Specification Section 26 24 13 SWITCHBOARDS in its entirety with Specification Section 26 24 13 – SWITCHBOARDS
2.05	**Specification Section 26 23 00**	Delete Paragraph 2.02.A.1 in its entirety and replace with the following: Switchgear shall be factory assembled and metal-enclosed with NEMA ICS 6 type 1 rating. The complete assembly shall be furnished in a NEMA ICS 6 Type 3R outdoor, weather-resistant, walk-in type housing. The outer housing shall provide a sheltered aisle at the front of the switchgear lineup with sufficient workspace for operation and maintenance. The complete assembly shall be suitable for 600V, 3-phase service with a minimum short circuit rating of 65,000 amps rms symmetrical at 480 volts.

2.06	**Specification Section 26 23 00**	Add new paragraph 2.09.L after existing paragraph 2.09.K (LOCKOUT) with the following: The switchgear manufacturer shall provide complete PLC and HMI application programming by factory-trained personnel to implement all automatic transfer control functions specified herein. All programming software and source code files shall be provided to the Owner.
2.07	**General Requirements**	Portable (temporary) generator shall be contractor furnished, minimum 250 kW, 480/277V, 3P, 4W. Coordinate with Owner for location and refueling access.
2.08	**E2**	Correct breaker number shown in MCC bucket elevation on Drawing E2
2.09	**E2**	Breaker Tagging Corrections: On all switchgear elevation details and schedules, change all breaker device tag prefixes from 'BRK' to 'BKR'. Main Breaker B designation is changed from 'BRK9Z2' to 'BKR9Z1' and Generator Breaker B designation is changed from 'BRK9Y2' to 'BKR9Z2'.
2.10	**E4**	Reissued with Addendum No. 2
2.11	**E5**	Reissued with Addendum No. 2
2.12	**E6**	Reissued with Addendum No. 2
2.13	**E7**	Reissued with Addendum No. 2
2.14	**E9**	Reissued with Addendum No. 2
2.15	**Prebid Questions and Answers**	Prebid Questions and Answers – Addendum No. 2, attached to this Addendum No. 2.

KEY ACTION DATES

Bid Issue:	November 10, 2025
RFB Advertisement: 2025	November 10, 2025 and November 17th,
Mandatory Pre-Bid Meeting	December 14, 2025 at 10AM 8335 Freeport Blvd, Sacramento, CA 95832
Question Due Date:	December 18, 2025
DIR Registration Due:	February 18, 2026. Bids from Contractors not registered on the department of Industrial Relations website by this date will not be opened.
Bid Due Date:	February 19, 2026
Intent to Award:	February 26, 2026
Provide Required Insurance and Bonds	March 5, 2026
Vet Bonds	March 10, 2026
Contract Award:	March 19, 2026 (tentative)
Notice to Proceed:	March/April 2026 (tentative)

SECTION 01 79 10

TRAINING

PART 1 - GENERAL

1. Where specified for individual pieces of equipment or systems, the Contractor shall make available experienced factory-employed representatives of the manufacturers to provide training for the District's personnel in the operation and maintenance thereof.

2. The manufacturer representatives for training shall be factory-trained, have experience with the installation, operation, and maintenance of the supplied equipment, and shall be qualified to provide instruction based on the manufacturer's O&M manuals and standard practices.

3. Vendor training shall consist of classroom only sessions. Hands-on field training, multi-day sessions, or commissioning-related training are not required unless otherwise requested by the District.

PART 2 – SUBMITTALS

1. The Contractor shall submit a brief training agenda at least 21 calendar days prior to the scheduled training session, including the proposed date, presenter qualifications, and a list of topics to be covered. Formal lesson plans are not required

2. Within 7 calendar days after completion of training, provide electronic copies of presentation materials and handouts to the District.

PART 3 – COORDINATION

1. Coordination and scheduling of the training sessions with District staff shall be initiated no later than 60 days prior to the scheduled equipment delivery. The Contractor shall coordinate the training sessions with District personnel and the manufacturers' representatives.

2. At least 7 calendar days' notice shall be given to the District Representative if the Contractor must postpone any training.

PART 4 - FORMAT AND CONTENT

Training sessions shall be classroom-based and conducted at the EchoWater Resource Recovery Facility unless otherwise directed by the District.

At a minimum, the following topics shall be covered for each item of equipment or system:

FAMILIARIZATION

1. Provide an introduction to the equipment, including its location and purpose within the EchoWater Facility.

2. Review catalog sheets, parts lists, and drawings previously provided in the O&M manuals.

SAFETY

1. Discuss equipment-specific safety considerations, including lock-out/tag-out and arc-flash awareness where applicable.

OPERATION

1. Provide a working knowledge of the operating theory and normal modes of operation.

2. Explain system integration and electrical interlocks, if any.

MAINTENANCE

1. Review recommended preventive maintenance activities and intervals from the manufacturer's O&M manual.

2. Discuss known wear parts and spare parts recommendations.

3. Provide contact information for local service representatives and emergency support.

PART 4 – DURATION

1. Unless otherwise specified in the technical sections, provide 2 to 4 hours of classroom training per equipment type or system, as coordinated with the District.

PART 5 - ACCEPTANCE

1. Upon completion of the training, provide a simple attendance sign-in sheet and brief completion statement to the District Representative within 7 calendar days.

END OF SECTION

SECTION 05 10 00

STRUCTURAL METAL FRAMING

PART 1 -- GENERAL

1.01 DESCRIPTION

A. SCOPE:

1. This section specifies structural metals consisting of standard shapes, fasteners, rods and plates that are used in structural framing, supports, bracing members, and connections.

2. Work under this section includes modification of the existing steel canopy at the X09 Outfall Switchgear, including temporary removal and re-installing of structural framing and replacement of roof deck to allow crane access for switchgear replacement.

B. QUALITY ASSURANCE:

1. The use of salvaged, reprocessed or scrap materials shall not be permitted.

1.02 REFERENCES

A. REFERENCE STANDARDS: The publications referred to hereinafter form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only. The latest edition of referenced publications in effect at the time of the bid shall govern, except where a specific date or edition is given below. In case of conflict between the requirements of this section and the listed standards, the requirements of this section shall prevail.

Reference	Title
CBC	California Building Code, 2010 edition
AISC 341-10	Seismic Provisions for Structural Steel Buildings Including Supplement #1
AISC 360-10	Specification for Structural Steel Building
AISC Manual	American Institute of Steel Construction, of Steel Manual of Steel Construction
ASTM A6	General Requirements for Rolled Structural Steel Bars, Plates, Shapes, and Sheet Piling
ASTM	Structural Steel

Reference	Title
A36	
ASTM A53	Pipe, Steel, Black and Hot-Dipped, Zinc- Coated Welded and Seamless
ASTM A193	Alloy-Steel and Stainless Steel Bolting Materials for High Temperature or High Pressure Service and Other Special Purpose Applications
ASTM A194	Carbon and Alloy Steel Nuts for Bolts for High Pressure or High Temperature Service
ASTM A307	Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength
ASTM A320	Alloy Steel Bolting Materials for Low-Temperature Service
ASTM A325	Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength
ASTM A490	Structural Bolts, Alloy Steel, Heat Treated, 150 ksi Minimum Tensile Strength
ASTM A500	Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
ASTM A563	Carbon and Alloy Steel Nuts
ASTM A992	Steel for Structural Shapes for Use in Buildings
ASTM F436	Standard Specification for Hardened Steel Washers
AWS B3.0	Welding Procedure and Performance Qualifications
AWS Dl.1	Structural Welding Code - Steel

1.03 SUBMITTALS

A. The following submittals shall be submitted for review in accordance with the SUBMITTALS PROCEDURES Section (01 33 00):

1. A copy of this specification section, with addenda updates, with each paragraph check marked to show specification compliance or marked to show deviations.

2. Complete shop drawings, including erection plans, member and connection details, steel materials, coatings, etc. as required to fully delineate this portion of the work.

3. Certified mill test reports for structural steel and high-strength bolts and nuts.

PART 2 -- PRODUCTS

2.01 MATERIALS

A. STEEL:

1. Materials for steel shall be as specified in Table A.

Table A, Steel Materials

Material	Specification
Standard rolled steel wide flange sections (and WTs)	ASTM A992
Structural steel S-shapes, channels, angles and plates	ASTM A36
Pipe sections for posts, guardrails and handrails	ASTM A53, Type E or S, Grade B
Hollow Structural Steel (HSS)	ASTM A500, Grade B (Fy = 46 ksi)
Stainless steel bolts (used at stainless steel and aluminum framing unless noted otherwise)	ASTM A193, Grade B8M Class 1, AISI 316 or ASTM A320, Grade B8M Class 1, AISI 316
Stainless steel nuts and washers (used at stainless steel and aluminum framing unless noted otherwise)	ASTM A194 Grade 8M, SS316
High strength steel bolts (used at galvanized and painted steel framing)	Galvanized ASTM A325 (Type 1), shear/bearing application using snug-tightened or pretensioned joints.
Nuts and washers for high strength bolts	Galvanized and lubricated nuts ASTM A563 and galvanized washers ASTM F436

2.

B. BITUMASTIC COATING:

1. Material shall be Kop-coat, bitumastic black solution; Porter, Tarmastic No. 100, Tnemec 499 heavy-duty black; or equal.

2.02 FABRICATION

A. Fabrication shall be in accordance with the AISC Manual of Steel Construction.

2.3 CANOPY ROOF DECK

A. Provide new Type B galvanized steel roof deck to replace existing deck removed at the X09 Outfall Switchgear canopy.

B. Deck profile and steel gage shall match the existing deck being removed. Contractor shall verify existing deck gage in the field prior to ordering replacement material and shall not reduce gage.

C. Deck shall be hot-dip galvanized in accordance with ASTM A653, with coating equal to or better than existing.

D. Attach deck to existing steel framing using self-drilling, self-tapping screws or other mechanical fasteners; welding of deck is not required. Fastener spacing shall be no less than the existing installation or the deck manufacturer’s minimum requirement, whichever is more conservative.

PART 3 -- EXECUTION

3.01 GENERAL

A. Measurements shall be verified at the job.

B. Holes shall be punched 1/16 inch larger than the nominal size of the bolts, unless otherwise specified. Whenever needed, because of the thickness of the metal, holes shall be subpunched and reamed or drilled. No drifting of bolts nor enlargement of holes will be allowed to correct misalignment. Mismatched holes shall be corrected with new material.

C. Dissimilar metals shall be protected from galvanic corrosion by means of pressure tapes, coatings or isolators.

D. Carefully unbolt and remove existing canopy roof deck and only those framing members required to provide crane access for switchgear removal and installation, as shown on the Drawings.

E. Store removed framing members in a secure, dry area; protect from damage so they can be re-used. Replace any members damaged during removal with new steel matching existing size and material.

F. After new switchgear installation, re-erect framing in original locations using existing bolt holes and connection details.

G. Install new roof deck in place of removed deck, aligned with existing ribs. Fasten deck to framing in accordance with Article 2.3.D.

H. Clean and touch up damaged galvanized surfaces, bolt heads, and cut edges with galvanizing repair paint to restore continuous corrosion protection

3.02 INSTALLATION

A. BOLTED CONNECTIONS:

1. Bolted connections shall conform to AISC Framed Beam Connections, unless shown otherwise on the drawings, and shall be bearing type connections with threads excluded from shear planes. Bolts shall be fully tensioned unless connecting HSS shapes or indicated on the Drawings to be snug-tightened.

****END OF SECTION****

SECTION 26 24 13

SWITCHBOARDS

PART 1 -- GENERAL

1.01 GENERAL REQUIREMENTS

A. SCOPE:

1. This section specifies a 600-volt switchboard furnished and installed by the Contractor for temporary service during replacement, testing, and commissioning of the permanent switchgear.

2. The District will retain ownership of the switchboard upon acceptance, superseding any previous discussions or statements made during the prebid meeting. The Contractor shall have no right to retain, salvage, or dispose of the switchboard. After successful cutover and acceptance of the permanent switchgear, the Contractor shall de-energize and disconnect the switchboard, remove temporary feeders/supports/cabling associated with the temporary installation, and deliver the switchboard with all accessories, O&M manuals, and test documentation to an on-site District-designated turnover location.

1.02 REFERENCES

A. REFERENCE STANDARDS: The publications referred to hereinafter form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only. The latest edition of referenced publications in effect at the time of the bid shall govern. In case of conflict between the requirements of this section and the listed references, the requirements of this section shall prevail.

Reference	Title
ANSI C57.13	Requirements for Instrument Transformers
NEMA ICS-6	Industrial Controls and Systems
NEMA PB 2	Deadfront Distribution Switchboards
NFPA 70	National Electrical Code (NEC)
UL 891	Deadfront Switchboards

B. DEFINITIONS: (Not Used)

1.03 SUBMITTALS

A. The following information shall be submitted for review in accordance with the SUBMITTAL PROCEDURES Section (01 33 00):

1. A copy of this specification section, with addenda updates, with each paragraph check marked to show specification compliance or marked to show deviations.

2. Electrical elementary diagrams and internal connection diagrams.

3. Switchboard arrangement drawings.

4. Installation instructions.

5. Dimensional or outline drawings. Arrangement and layout drawings of the switchboard enclosures indicating equipment and bus arrangement and dimensions including areas of permissible cable entries. A bill of material and components shall accompany the layout drawings.

6. Manufacturer's certification that interrupting, withstand, and continuous current ratings of all relevant equipment and components meet or exceed the specified short circuit conditions.

7. Catalog data and instruction manuals on all electrical devices and components mounted on or within the switchboard. Quantity and rating of circuit breakers provided with each switchboard.

8. Temporary Labeling.

9. Time-current curves for line and ground fault for each type of tripping device.

10. A copy of the contract document single-line diagrams that apply to the equipment in this section marked to show specific changes necessary for the supplied equipment. If no changes are required, the drawings shall be marked "No Changes Required."

B. 1.04 SAFETY AND OPERATIONS GUIDE

1. The Contractor shall provide Safety and Operations Guide for the interim switchboard.

2. Content Requirements:

   a. Key Interlock Procedure: Detailed step-by-step instructions for switching between Utility and Generator power using the keyed breakers.

   b. Breaker Operations.

   c. Emergency Shutdown.

PART 2 -- --PRODUCTS

2.01 ACCEPTABLE PRODUCTS

A. Switchboards shall be provided in accordance with UL 891, NEMAPB2, and as specified herein. Switchboards shall be Eaton Pow-R-Line with Magnum SB insulated case circuit breakers or General Electric Co. Spectraseries with Power Break II insulated case breakers.

2.02 SWITCHBOARD CONSTRUCTION

A. ENCLOSURE:

1. Switchboard shall be factory assembled and metal enclosed with NEMA type 3R rating. Each unit shall consist of a stationary structure assembly, molded case circuit breakers, bus bars, cable terminations, controls, instrumentation, and other equipment shown on the drawings and specified herein. Interconnections, instrumentation, and control wiring shall be completed in the factory so that site work is limited to bolting shipping sections together and connecting cable assemblies. Switchboard shall be suitable for 480v, 3 phase, 4 wire service with a minimum short circuit rating of 65,000 amps rms symmetrical at 480 volts.

B. STRUCTURE:

1. Switchboards shall be free standing, dead front, front access, metal enclosed, self-supporting unit. Frame structure shall be manufacture standard. Switchboards shall be constructed with vertical sections bolted together to form a single metal enclosed unit. The sides and rear shall be covered with removable bolt-on covers. All edges of the front covers or hinged front panels shall be formed. A front hinged door shall be provided for each breaker and metering compartment.

2. Switchboards shall be provided with adequate lifting eyes and shall be capable of being lifted or rolled into position

3. Group mounted circuit breakers.

C. FINISH:

1. Manufacturer’s standard.

2.03 BUS BARS

A. GENERAL:

1. Buses shall be constructed of tin-plated copper.

B. BUS:

1. The continuous current ratings shall be limited to temperature rise criteria of 65°C over a 40°C ambient. Buses shall be braced to withstand short circuit stresses up to 65,000 RMS amperes symmetrical minimum and shall have the continuous capacity rating at least equal to the main circuit breaker frame size. Horizontal bus shall extend through all sections of the switchboard with vertical connections to circuit breakers in each section. Vertical buses shall be held rigid in short-circuit support structure of molded glass reinforced polyester bases to inhibit the spread of arcing faults. Bus joints shall be tin-plated and bolted using through bolts and conical spring type washers.

C. GROUND BUS:

1. A ground bus having a momentary rating at least equal to the highest momentary rating of any circuit breaker in the assembly shall extend the full length of the bottom of the switchboard. Each end of the ground bus shall be drilled for standard NEMA two hole lugs suitable for No.4/0 bare copper grounding conductors.

2.04 CIRCUIT BREAKERS

A. GENERAL:

1. Circuit breakers and motor circuit protectors shall be manufactured by Eaton Cutler-Hammer, Square D, G.E., Siemens, or equal.

2. Circuit breakers shall be the bolt-on type.

3. Multiple pole circuit breakers shall be designed so that an overload on one pole automatically causes all poles to open. The use of tandem or dual circuit breakers in a normal single pole space to provide the number of poles or spaces specified are not acceptable.

4. Molded case circuit breakers shall be operated by a single toggle-type handle and shall have a quick-make, quick-break switching mechanism. An automatic trip of the breaker shall be clearly indicated by the handle position. Contacts shall be non-welding silver alloy and have flash reduction arc chutes. A push-to-trip button on the front of the circuit breaker shall provide a local manual means to exercise the trip mechanism.

5. Minimum interrupting capacity:

   a. 480 volt circuit breaker shall have a minimum interrupting capacity of 65,000.

   b. 120 or 208 or 240 volt breaker shall have a minimum interrupting capacity of 22,000 amperes

6. Circuit breakers shall be UL listed for series application.

7. Where indicated circuit breakers shall be current limiting.

8. Where indicated on Drawings, provide UL listed circuit breakers for continuous duty at 100% of their ampere rating in the intended enclosure.

9. Furnish add-on features such as auxiliary position status contacts, trip indication contacts, zone interlocking, shunt trip coils, etc, as shown in the drawings.

B. Trip Unit – Molded Case Circuit Breakers

1. Trip Units:

a. Breakers 400A and larger shall have electronic trip units with adjustable Long-time, Short-time, Instantaneous, and Ground-fault (LSIG) settings.

b. Breakers 300A and smaller shall have thermal-magnetic (fixed) trip units.

2. System coordination shall be provided by the following microprocessor-based time-current curve shaping adjustments:

a. Adjustable long-time setting (set by adjusting the trip setting dial to an amount not to exceed rating plug)

b. Adjustable short-time setting and delay with selective flat or I2t curve shaping,

c. Adjustable instantaneous setting

d. Adjustable ground fault setting and delay with selective flat or I2t curve shaping.

3. The microprocessor-based trip unit shall have both powered and unpowered thermal memory to provide protection against cumulative overheating should a number of overload conditions occur in quick succession.

4. Furnish internal ground fault protection with adjustable settings. Provide neutral ground fault sensor for four-wire loads. Bypass neutral sensor for 3 wire loads.

5. Breakers shall have built-in test points for testing the long-time delay, instantaneous, and ground fault functions of the breaker by means of a test set.

2.05 INSTRUMENT TRANSFORMERS

A. GENERAL:

1. Instrument transformers shall be molded dry-type in accordance with ANSI C57.13. Transformer volt-ampere rating shall be suitable for carrying the specified load without overheating or exceeding the permissible accuracy for the transformer based upon the application.

B. POTENTIAL TRANSFORMERS:

1. Potential transformers shall have an ANSI accuracy class of 0.3 w, x, y with 120-volt secondary. They shall be equipped with current limiting fuses. Potential transformers for power quality monitoring shall have an accuracy of 0.2% or better. Potential transformers shall be General Electric JVM series, or equal.

C. CURRENT TRANSFORMERS:

1. Current transformers (CTs) shall be furnished with the ratios shown on the drawings. The accuracy shall conform to IEEEC57.13. Current transformers for power quality monitoring shall have an accuracy of 0.2% or better. Current transformers shall be General Electric JAD series, or equal.

2.06 ACCESSORIES

A. Space Heaters:

1. Outdoor rated switchgear shall be provided with 120 volts AC thermostatically controlled space heaters. Heater wiring shall be to terminal blocks for connection to external power source. One heater shall be provided in each vertical breaker section. Heaters shall have guards to prevent accidental contact with power or control wiring.

B. Key Interlocks:

1. Key interlocks shall be provided as shown on the drawings. The switchgear manufacturer shall be responsible for coordinating interlocks for switchgear main circuit breakers interlocked with generator circuit breakers. Key interlocks shall be as manufactured by Kirk Key Interlock Company, or equal.

C. Surge Protective Device (SPD)

1. SPD shall be suitable Service entrance location per ANSI/IEEE C62.41, IEEE C62.45, and UL1449 3rd edition and tested according to IEEE C62.44 as Secondary Surge Arrestor.

2. Unit shall be sealed and not allow vapors from entering the switchboard enclosure after a voltage surge event.

3. Modes of protection – Line to Line, Line to Ground, Line to Neutral (as applicable). Voltage, phase and neutral connections per one-line diagram. Current surge capacity shall be as shown in the drawings or, if not shown, 100,000 amps per mode minimum

4. The SPD shall be factory installed inside the switchboard during assembly by the original equipment manufacturer. The OEM design shall be integral to the design of the switchgear with special paneling and cutouts specifically designed for unit mounting.

5. The SPD connections shall be located as close as possible to the load side of main disconnect device and ground/neutral bar.

6. The SPD shall have integral 30-amp disconnect and fuses. Service of the SPD assembly, fuses or other serviceable components shall be from front access of the switchboard and shall not require disassembly of switchboard panels to repair or replace parts.

7. SPD shall be Cutler-Hammer Clipper, Current Technology TransGuard or equal.

2.07 NAMEPLATES

A. In addition to the manufacturer's identification, switchboards shall be provided with phenolic nameplates indicating switchboard, main breaker, and feeder breaker designations as shown on the drawings. Nameplates shall meet the requirements of the ELECTRICAL CONTROLS AND RELAYS Section (26 09 16).

2.08 TERMINAL BLOCKS, WIRING AND CONDUCTOR MARKERS

A. WIRING:

1. Internal switchboard wiring shall consist of single conductor 90 degree C copper wire rated SIS or MTW. The wire shall be sized to suit load requirements. Minimum size shall be No.14 AWG.

B. CONDUCTOR MARKERS:

1. Conductor markers shall comply with the requirements of ELECTRICAL CONTROLS AND RELAYS Section (26 09 16).

C. SHORT-CIRCUITING TERMINAL BLOCKS:

1. Short circuiting terminal blocks shall be base mounted, rated 600V AC, 50ampere. The terminal block shall provide shorting screw that will short two terminals to allow for current meter removal or meter calibration. Terminal block shall be Eaton Type CHDB, or equal.

2.09 KEY INTERLOCK

A. The key interlock shall consist of two identically keyed brass bolt locks to provide interlock between utility and generator feeds.

2.10 METERING MODULE

A. Power quality meters with dual integrated Ethernet ports and Embedded Web Server shall be self-contained, door-mounted device designed to both monitor and display electrical parameters. Power quality meter shall be provided for incoming bus main feeder.

1. Electrical parameters to be monitored with remote monitoring via the PCCS network shall be: Amps, Volts, watts, and total harmonic distortion.

2. Electrical parameters to be monitored with selectable display and remote monitoring via the maintenance network shall be all available parameters including but not limited to:

    a. Power Quality Waveform recorder, Waveform Scope *(not required on display)*

    b. Harmonics to the 40th Order *(not required on display)*

    c. Line and Phase Voltage (Inst, Min, Max)

    d. Current Phase and Neutral (Inst, Avg, Min, Max)

    e. WATT, VAR, VA, PF (Inst, Avg, Min, Max, A, B, C, Tot.)

    f. Watt-Hour, VAR-Hour, VA-Hour (Inst,, A, B, C, Tot.)

    g. Frequency (Inst, Min, Max)

    h. Voltage and Current angles

    i. %THD, THD

B. The device shall provide a minimum of two 10/100Base-T Ethernet ports supporting Modbus TCP/IP, with independent IP and MAC address assignment for each port to allow simultaneous connection to the PCCS and maintenance networks. In addition, the meter shall be supplied as standard with an optical IrDA port and a standard RS485 port supporting Modbus RTU and DNP 3.0 protocols.

C. Meters shall have an embedded WebServer and high-capacity onboard non-volatile memory for historical trend, event, and waveform data logging. The device shall provide 0.2% Class revenue-certifiable energy and demand metering, support open protocol Modbus TCP, and be fully compatible with the District's existing Electro Industries Communicator-EXT software and ODBC-compliant database structure. Devices shall be Electro Industries model Shark 250 equipped with the Advanced Power Quality and Data Logging (V2 or higher) feature set.

2.11 TEST SET

A. One test device for static trip units shall be provided. Test device shall be suitable for 120Vac power source.

2.12 FACTORY TESTS

A. After assembly, switchboards shall be tested for operation at the specified voltage and current ratings.

B. The main circuits shall be given a dielectric test of 2200 volts for 1 minute between live parts and ground, and between opposite polarities. The wiring and control circuits shall be given a dielectric test of 1500 volts for 1 minute between live parts and ground

C. Instrument transformers shall have ratio and phase angle tests made in conformance with ANSI C57.13.

PART 3 -- EXECUTION

3.01 GENERAL (NOT USED)

3.02 INSTALLATION

A. The equipment shall be installed in accordance with the manufacturer's instructions and as shown on the drawings.

3.03 PROTECTIVE DEVICE SETTINGS

A. The protective devices shall be adjusted to the settings specified in the coordination study in OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY Section (26 05 73) prior to energizing the switchboard.

3.04 STORAGE

A. When equipment is delivered but cannot be installed, it shall be stored in accordance with the PRODUCT DELIVERY REQUIREMENTS Section (01 65 00) and the COMMON WORK RESULTS FOR ELECTRICAL Section (26 05 00).

3.05 TESTING

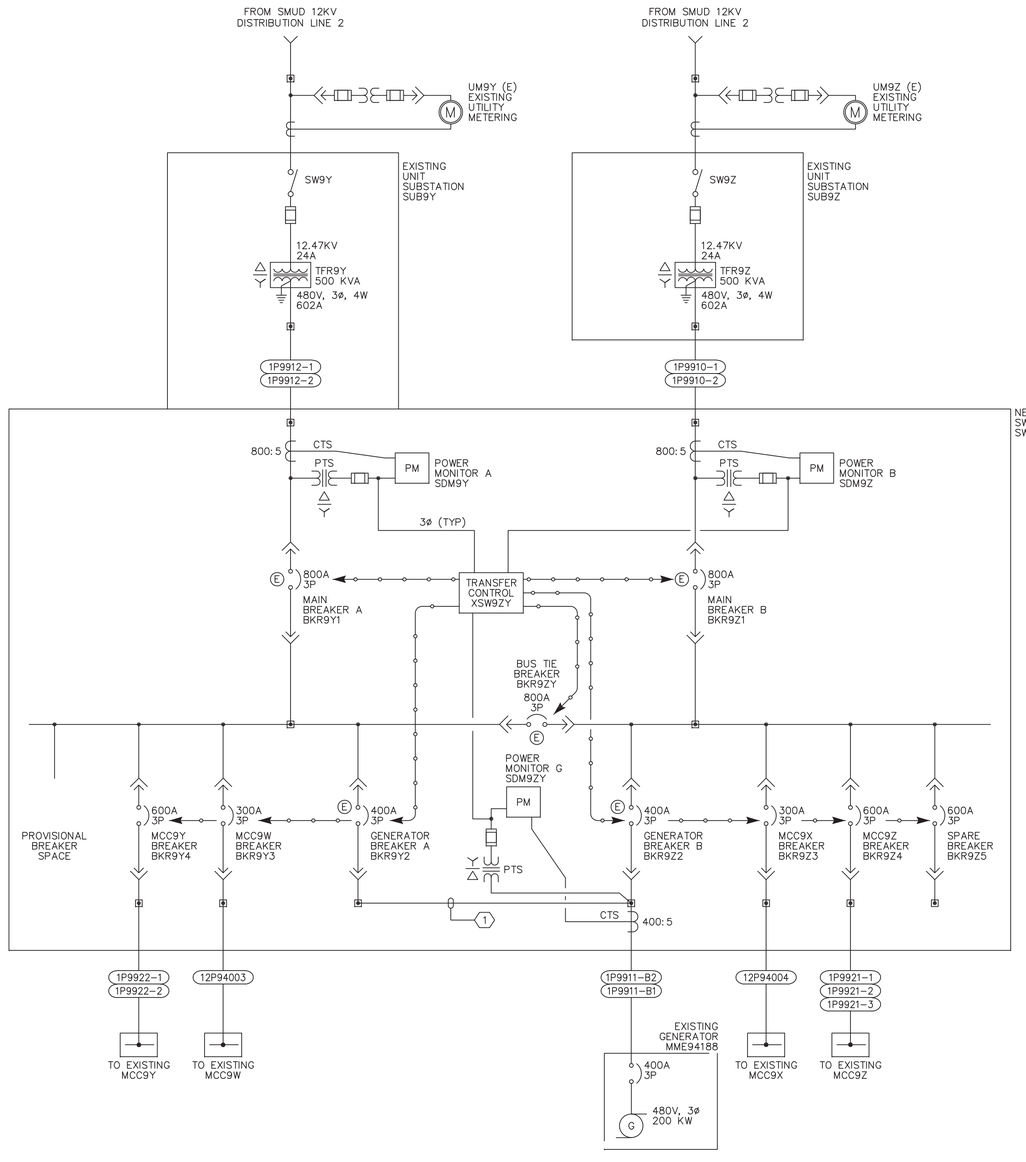
A. FIELD TEST:

1. The switchboard and breakers shall be adjusted and tested in accordance with the ACCEPTANCE TESTING OF ELECTRICAL SYSTEMS Section (26 08 10). The measurements shall be recorded on NETA compliant forms.

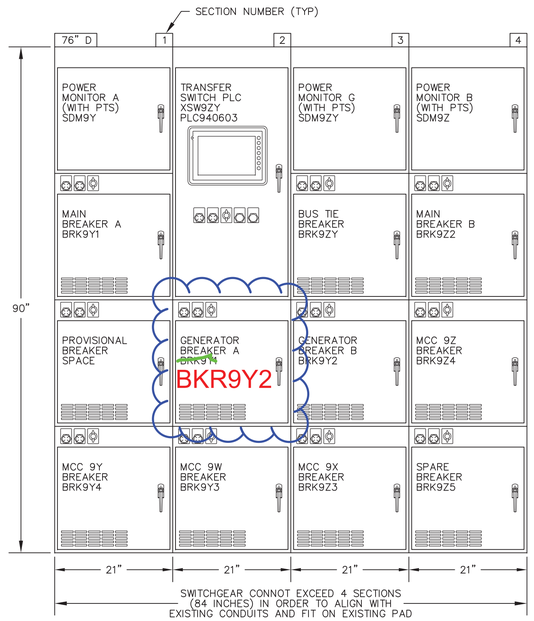
3.06 TRAINING

A. The switchboard manufacturer service representative shall provide 8 hours (two 4-hour sessions) of training. The training shall be in accordance with the requirements of the TRAINING Section (01 79 10).

****END OF SECTION****

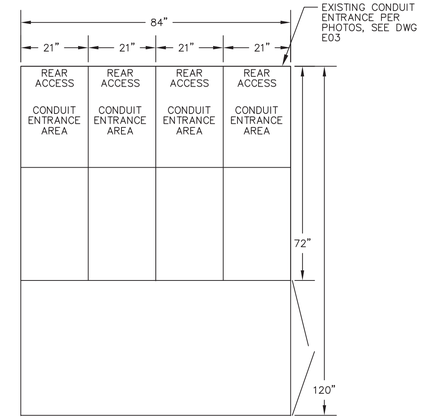


MAIN SWITCHGEAR SWR9Y/9Z ONE-LINE



SWITCHGEAR SWR9ZY ELEVATION

NEMA 3R, WALK-IN
ALL COMPONENTS ARE NEW



SWITCHGEAR WALK-IN ENCLOSURE PLAN

1. ALL DIMENSIONS ARE APPROXIMATE. ACTUAL DIMENSIONS SHALL BE PER MANUFACTURER APPROVED IN SUBMITTAL.

LEGEND:

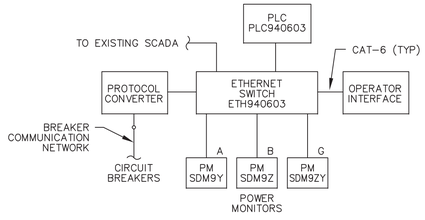
PTS — POTENTIAL TRANSFORMER WITH FUSE PROTECTION ON PRIMARY AND SECONDARY.

(E) — ELECTRICALLY OPERATED BREAKER IN TRANSFER CONTROL SCHEME.

CIRCUIT BREAKER COMMUNICATION NETWORK.

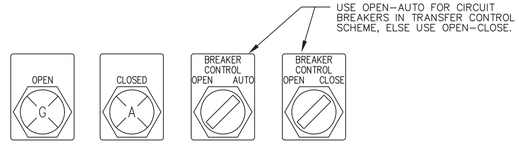
NOTES REFERENCED IN DRAWING:

(1) #500 CABLES SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR.



ETHERNET COMMUNICATION BLOCK DIAGRAM

ALL COMPONENTS ARE NEW



BUTTON LAYOUT

BREAKER CUBICLES

BUTTON LAYOUT

ATS CONTROL SECTION

EchoWater Facility Engineering Design

SUB CONSULTANT

FRISCH ENGINEERING, INC.
CONSULTING ELECTRICAL ENGINEERS
13405 FOLSOM BLVD, UNIT 600
FOLSOM, CA 95630
PH 916 353 1025
WWW.FRISCHENGINEERING.COM

FILE: 2308A-E01.DWG
DATE: SEP 17, 2024 TIME: 4:34:37PM

REGISTERED PROFESSIONAL ENGINEER — THOMAS P. FRISCH — No. E15761 — ELECTRICAL — STATE OF CALIFORNIA

SACRAMENTO AREA SEWER DISTRICT

EchoWater Resource Recovery Facility

X09 OUTFALL SWITCHGEAR REPLACEMENT PROJECT

MARK	DATE	DESCRIPTION
###	###	###
###	###	###
###	###	###
###	###	###
###	###	###

ISSUE BLOCK

DESIGNED T. FRISCH
DRAWN N.CONANT
CHECKED M.FRISCH
APPROVED ####
FILENAME ####
DESIGNER PROJECT NUMBER ###
CONTRACT NUMBER ###
CONTRACT SEQUENCE NUMBER ###
DISCIPLINE ELECTRICAL

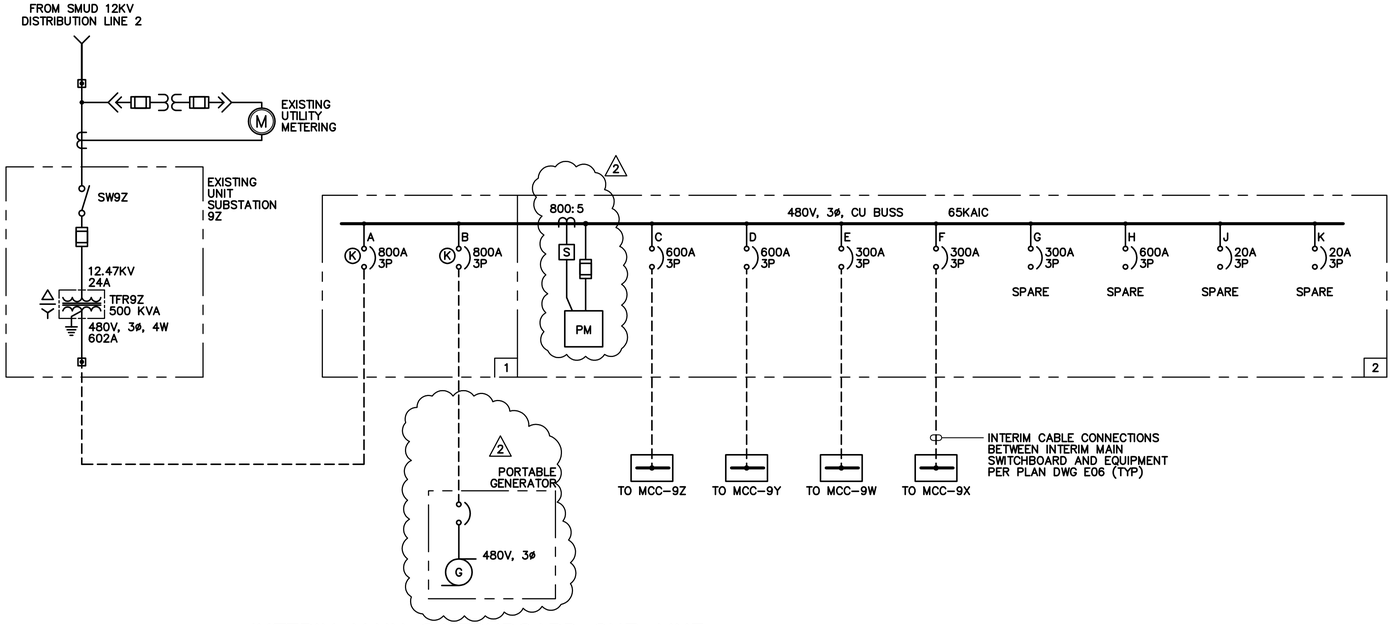
MAIN SWITCHGEAR SWR9ZY ONE-LINE AND ELEVATION

DRAWING NUMBER **E02**

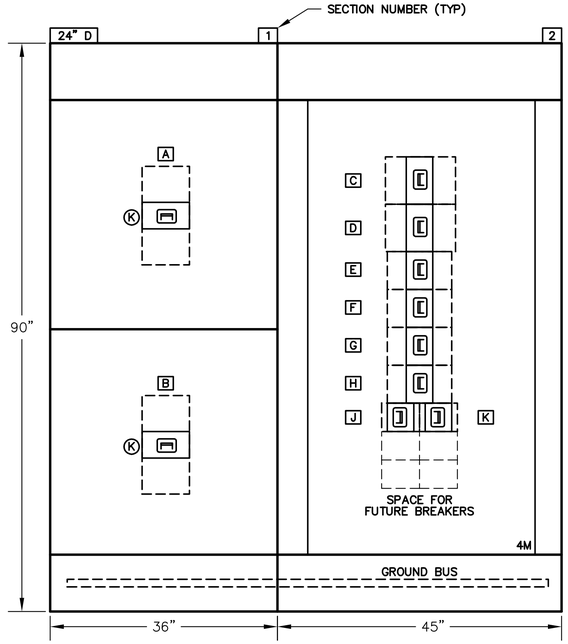
3 OF 11

SCALE IN INCHES 0 1/2 1 2 4 (IF SCALE BAR IS NOT 4", SCALE ACCORDINGLY)

Sheet Set Manager: TERTIARY FILTRATION FACILITIES BASIS OF DESIGN
Path: ---- Filename: Drawing2.dwg Plot Date: November 13, 2024 - 9:58 AM CADD User: Long, Brett

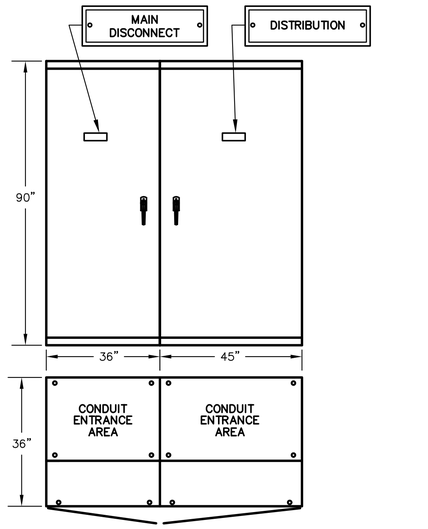


INTERIM MAIN SWITCHBOARD ONE-LINE



INTERIM MAIN SWITCHBOARD ELEVATION

NEMA 3R, OUTDOOR



INTERIM MAIN SWITCHBOARD WEATHERWRAP

1. ALL DIMENSIONS ARE APPROXIMATE. ACTUAL DIMENSIONS SHALL BE PER MANUFACTURER APPROVED IN SUBMITTAL.

DRAWING REFERENCED NOTES:

(1) PORTABLE (TEMPORARY) GENERATOR IS CONTACTOR FURNISHED TO SUPPORT FULL FACILITY OPERATION DURING TRANSITION PERIOD. ASSUME 250KW GENERATOR IS REQUIRED.

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FRISCH ENGINEERING, INC.
CONSULTING ELECTRICAL ENGINEERS
13405 FOLSOM BLVD, UNIT 600
FOLSOM, CA 95630
PH 916 353 1025
WWW.FRISCHENGINEERING.COM
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DATE: JAN 06, 2026 TIME: 6:09:52PM

REVISIONS

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	1	ADDENDUM 2	TF	12/25	RB

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"-SCALE ACCORDINGLY)

FILE 2308A-E04.DWG
DRAWN N. CONANT
DESIGNED T. FRISCH
CHECKED M. FRISCH

ENGRS STAMP
REGISTERED PROFESSIONAL ENGINEER
THOMAS P. FRISCH
No. E15761
ELECTRICAL
STATE OF CALIFORNIA

SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT
X09 OUTFALL SWITCHGEAR REPLACEMENT PROJECT

####
CONTRACT NUMBER

ELECTRICAL

INTERIM MAIN SWITCHBOARD ONE-LINE AND ELEVATION

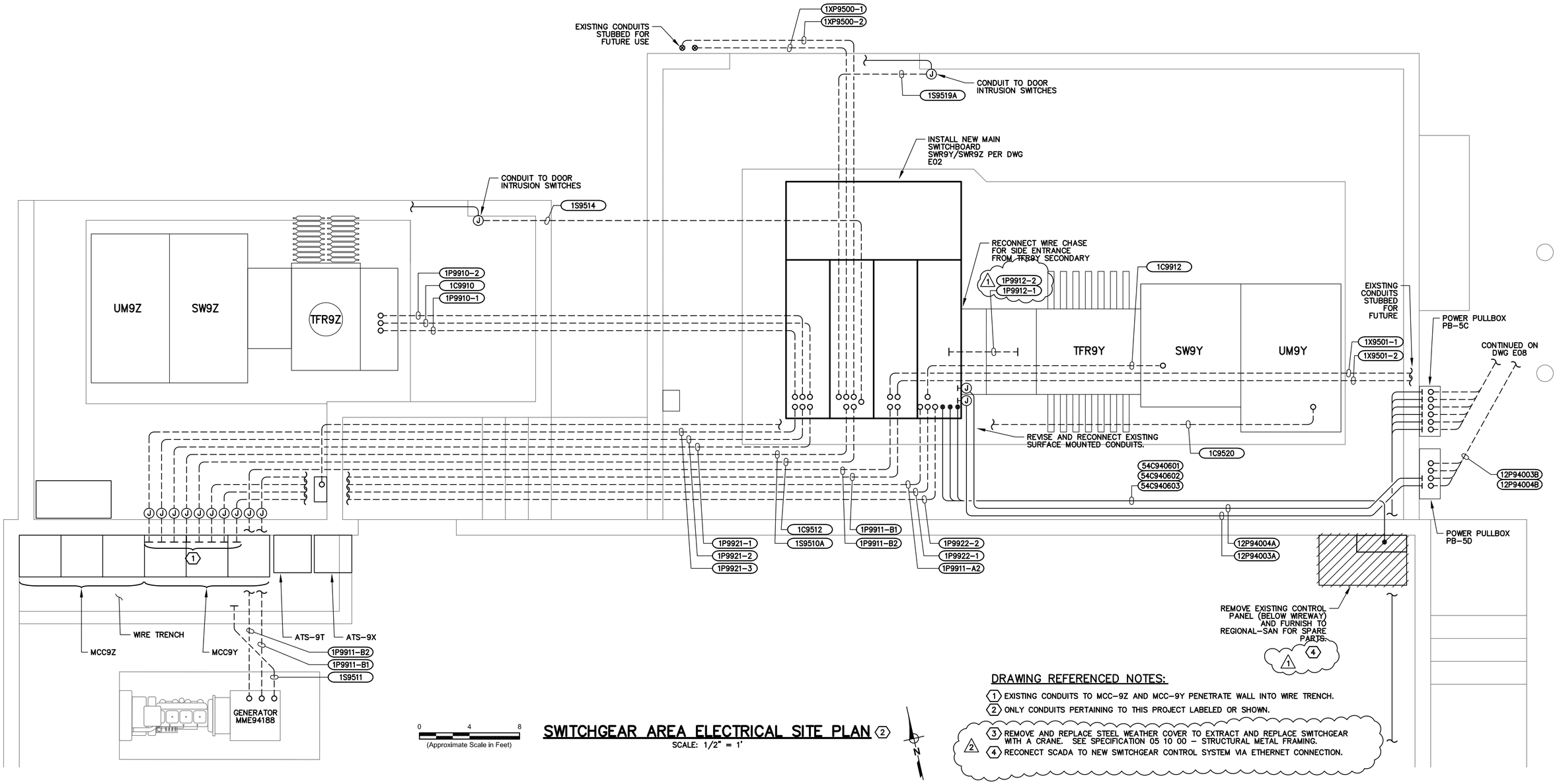
SCALE
NOT TO SCALE

DRAWING NUMBER
E04

SHEET NUMBER
##

ELECTRICAL PLAN NOTES:

1. SEE ELECTRICAL SYMBOLS AND ABBREVIATIONS DRAWING FOR SYMBOL DEFINITION.
2. ALL WORK SHALL CONFORM TO LOCAL CODES AND NATIONAL ELECTRIC CODE.
3. SITEPLAN ACCURATE FOR ELECTRICAL WORK ONLY. COORDINATE WITH OTHER DISCIPLINES.
4. CONDUITS SIZE, TYPE AND FILL DEFINED BY TAG NAME IN RACEWAY SCHEDULE.



0 4 8
(Approximate Scale in Feet)

SWITCHGEAR AREA ELECTRICAL SITE PLAN ②

SCALE: 1/2" = 1'

DRAWING REFERENCED NOTES:

1. EXISTING CONDUITS TO MCC-9Z AND MCC-9Y PENETRATE WALL INTO WIRE TRENCH.
2. ONLY CONDUITS PERTAINING TO THIS PROJECT LABELED OR SHOWN.
3. REMOVE AND REPLACE STEEL WEATHER COVER TO EXTRACT AND REPLACE SWITCHGEAR WITH A CRANE. SEE SPECIFICATION 05 10 00 – STRUCTURAL METAL FRAMING.
4. RECONECT SCADA TO NEW SWITCHGEAR CONTROL SYSTEM VIA ETHERNET CONNECTION.

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FRISCH ENGINEERING, INC.
CONSULTING ELECTRICAL ENGINEERS
13405 FOLSOM BLVD, UNIT 600
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PH 916 353 1025
WWW.FRISCHENGINEERING.COM
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	1	ADDENDUM 2	TF	12/25	RB

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"-SCALE ACCORDINGLY)

FILE 2308A-E05.DWG
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DESIGNED T. FRISCH
CHECKED M. FRISCH

ENGRS STAMP
REGISTERED PROFESSIONAL ENGINEER
THOMAS P. FRISCH
No. E15761
ELECTRICAL
STATE OF CALIFORNIA

SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT
X09 OUTFALL SWITCHGEAR REPLACEMENT PROJECT

####
CONTRACT NUMBER

ELECTRICAL

SWITCHGEAR AREA ELECTRICAL SITE PLAN

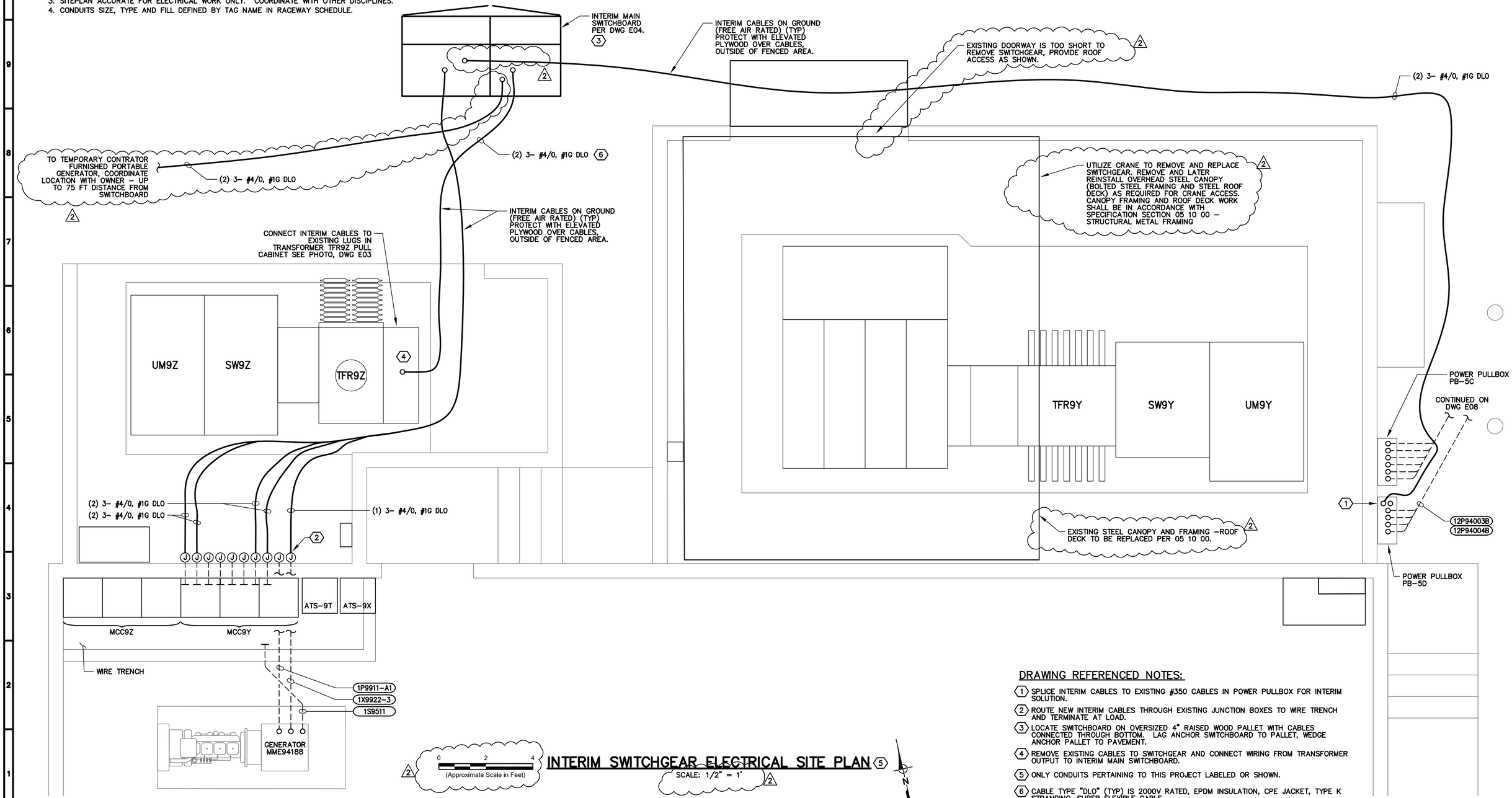
SCALE
NOT TO SCALE

DRAWING NUMBER
E05

SHEET NUMBER
##

ELECTRICAL PLAN NOTES:

1. SEE ELECTRICAL SYMBOLS AND ABBREVIATIONS DRAWING FOR SYMBOL DEFINITION.
2. ALL WORK SHALL CONFORM TO LOCAL CODES AND NATIONAL ELECTRIC CODE.
3. SITEPLAN ACCURATE FOR ELECTRICAL WORK ONLY. COORDINATE WITH OTHER DISCIPLINES.
4. CONDUITS SIZE, TYPE AND FILL DEFINED BY TAG NAME IN RACEWAY SCHEDULE.



2 (Approximate Scale in Feet) 0 2 4

INTERIM SWITCHGEAR ELECTRICAL SITE PLAN 5

SCALE: 1/2" = 1' 2

N

DRAWING REFERENCED NOTES:

1. SPLICE INTERIM CABLES TO EXISTING #350 CABLES IN POWER PULLBOX FOR INTERIM SOLUTION.
2. ROUTE NEW INTERIM CABLES THROUGH EXISTING JUNCTION BOXES TO WIRE TRENCH AND TERMINATE AT LOAD.
3. LOCATE SWITCHBOARD ON OVERSIZED 4" RAISED WOOD PALLET WITH CABLES CONNECTED THROUGH BOTTOM. LAG ANCHOR SWITCHBOARD TO PALLET, WEDGE ANCHOR PALLET TO PAVEMENT.
4. REMOVE EXISTING CABLES TO SWITCHGEAR AND CONNECT WIRING FROM TRANSFORMER OUTPUT TO INTERIM MAIN SWITCHBOARD.
5. ONLY CONDUITS PERTAINING TO THIS PROJECT LABELED OR SHOWN.
6. CABLE TYPE "DLO" (TYP) IS 2000V RATED, EPDM INSULATION, CPE JACKET, TYPE K STRANDING, SUPER FLEXIBLE CABLE.

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FRISCH ENGINEERING, INC.
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13405 FOLSOM BLVD, UNIT 600
FOLSOM, CA 95630
PH 916 353 1025
WWW.FRISCHENGINEERING.COM
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DATE: JAN 06, 2026 TIME: 6:10:12PM

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	1	ADDENDUM 2	TF	12/25	RB

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"-SCALE ACCORDINGLY)

FILE 2308A–E05.DWG
DRAWN N. CONANT
DESIGNED T. FRISCH
CHECKED M. FRISCH

ENGRS STAMP
REGISTERED PROFESSIONAL ENGINEER
THOMAS P. FRISCH
No. E15761
ELECTRICAL
STATE OF CALIFORNIA

SACRAMENTO REGIONAL WASTEWATER TREATMENT PLANT
X09 OUTFALL SWITCHGEAR REPLACEMENT PROJECT

####
CONTRACT NUMBER

ELECTRICAL

INTERIM SWITCHGEAR ELECTRICAL SITE PLAN

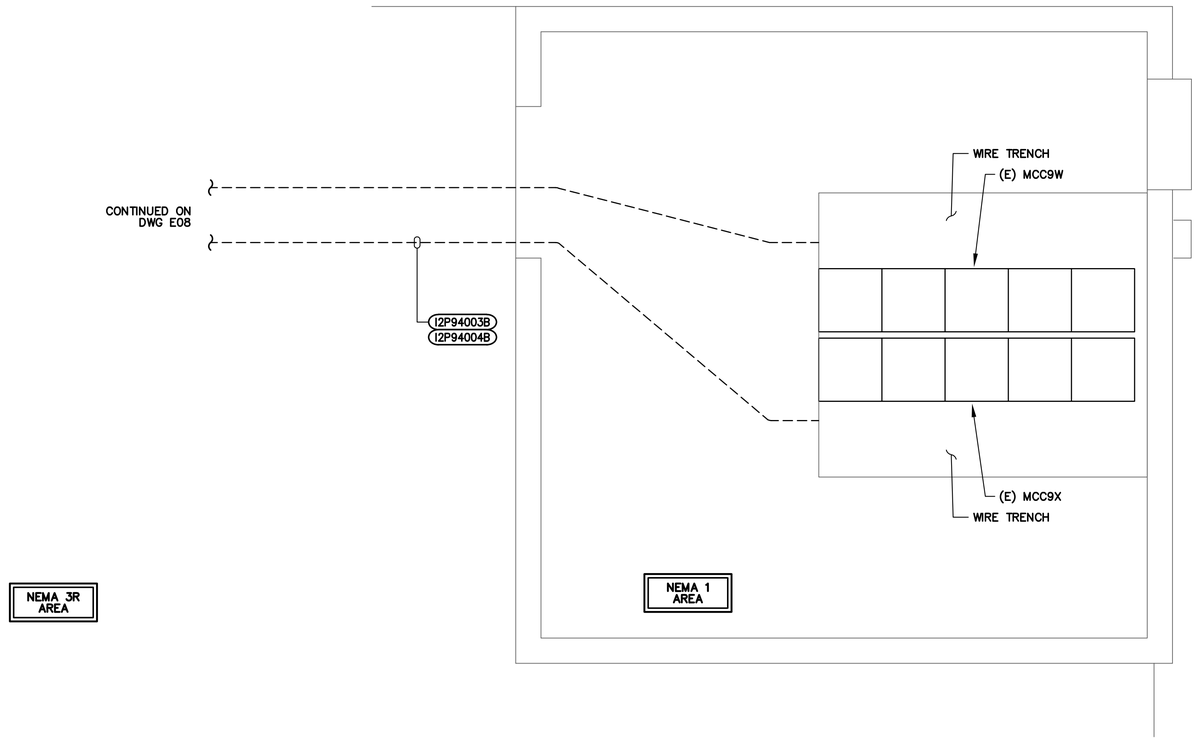
SCALE
NOT TO SCALE
DRAWING NUMBER
E06
SHEET NUMBER
##

ELECTRICAL PLAN NOTES:

1. SEE ELECTRICAL SYMBOLS AND ABBREVIATIONS DRAWING FOR SYMBOL DEFINITION.
2. ALL WORK SHALL CONFORM TO LOCAL CODES AND NATIONAL ELECTRIC CODE.
3. SITEPLAN ACCURATE FOR ELECTRICAL WORK ONLY. COORDINATE WITH OTHER DISCIPLINES.
4. CONDUITS SIZE, TYPE AND FILL DEFINED BY TAG NAME IN RACEWAY SCHEDULE.

DRAWING REFERENCED NOTES:

(1) ONLY CONDUITS PERTAINING TO THIS PROJECT LABELLED OR SHOWN.



(E) BISULFITE MCC ROOM ELECTRICAL PLAN (1)

SCALE: 1/2" = 1'

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CONSULTING ELECTRICAL ENGINEERS
13405 FOLSOM BLVD, UNIT 600
FOLSOM, CA 95630
PH 916 353 1025
WWW.FRISCHENGINEERING.COM
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LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"-SCALE ACCORDINGLY)

FILE 2308A-E05.DWG
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CHECKED M. FRISCH

ENGRS STAMP

REGISTERED PROFESSIONAL ENGINEER
THOMAS P. FRISCH
No. E15761
ELECTRICAL
STATE OF CALIFORNIA

SACRAMENTO REGIONAL
WASTEWATER TREATMENT PLANT
X09 OUTFALL SWITCHGEAR REPLACEMENT PROJECT

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CONTRACT NUMBER

ELECTRICAL

BISULFITE MCC BUILDING ELECTRICAL PLAN

SCALE
NOT TO SCALE

DRAWING NUMBER
E07

SHEET NUMBER
##

FURNISH AND INSTALL NEW WIRE IF SHOWN (2)

RACEWAY SCHEDULE

REV	DETAILS -- CONDUIT TAG NO.	FROM	TO	QTY	SIZE	TYPE	POWER WIRE QTY	POWER WIRE SIZE	CONTROL WIRE QTY	CONTROL WIRE SIZE	GROUND SIZE	NOTES
	12P94003-A, B	SWITCHGEAR SWR9ZY	MCC-9W	1	3"	(E)	3	#350	–	–	#1/0	VIA PB-50
	12P94004-A, B	SWITCHGEAR SWR9ZY	MCC-9X	1	3"	(E)	3	#350	–	–	#1/0	VIA PB-50
2	1C 9512	SWITCHGEAR SWR9ZY	MCC-9Y	1	3"	(E)	–	–	–	–	–	REMOVE WIRE NOT USED
2	1C 9520	UTILITY METERING UM9Y	JUNCTION BOX	1	1"	(E)	–	–	–	–	–	REMOVE WIRE NOT USED (2)
2	1C 9910	TRANSFORMER TFR9Z PULLBOX	SWITCHGEAR SWR9ZY	1	1"	(E)	–	–	–	–	–	REMOVE WIRE NOT USED
2	1C 9912	MV SWITCH SW9Y	SWITCHGEAR SWR9ZY	1	2"	(E)	–	–	–	–	–	REMOVE WIRE NOT USED
	1P 9910-1	TRANSFORMER TFR9Z PULLBOX	SWITCHGEAR SWR9ZY	1	3"	(E)	6	#250	–	–	#1/0	
	1P 9910-2	TRANSFORMER TFR9Z PULLBOX	SWITCHGEAR SWR9ZY	1	3"	(E)	6	#250	–	–	#1/0	
	1P 9911-B1	GENERATOR MME94188	SWITCHGEAR SWR9ZY	1	3"	(E)	3	#4/0	–	–	#1	
	1P 9911-B2	GENERATOR MME94188	SWITCHGEAR SWR9ZY	1	3"	(E)	3	#4/0	–	–	#1	
	1P 9912-1	TRANSFORMER TFR9Y	SWITCHGEAR SWR9ZY	1	–	–	3	#500	–	–	#1/0	ROUTE THRU (E) WIRE CHASE
	1P 9912-2	TRANSFORMER TFR9Y	SWITCHGEAR SWR9ZY	1	–	–	3	#500	–	–	#1/0	ROUTE THRU (E) WIRE CHASE
	1P 9921-1	SWITCHGEAR SWR9ZY	MCC-9Z	1	3"	(E)	3	#350	–	–	#1/0	
	1P 9921-2	SWITCHGEAR SWR9ZY	MCC-9Z	1	3"	(E)	3	#350	–	–	#1/0	
	1P 9921-3	SWITCHGEAR SWR9ZY	MCC-9Z	1	3"	(E)	–	–	–	–	–	PULL ROPE
	1P 9922-1	SWITCHGEAR SWR9ZY	MCC-9Y	1	3"	(E)	3	#350	–	–	#1/0	
	1P 9922-2	SWITCHGEAR SWR9ZY	MCC-9Y	1	3"	(E)	3	#350	–	–	#1/0	
2	1S 9510-A	SWITCHGEAR SWR9ZY	MCC-9Z	1	3"	(E)	–	–	–	–	–	DISASSEMBLE AND RECONNECT (E) CIRCUIT
2	1S 9514	SWITCHGEAR SWR9ZY	SW9Z AREA INTRUSION SWITCHES	1	1"	(E)	–	–	–	–	–	DISASSEMBLE AND RECONNECT (E) CIRCUIT (2)
2	1S 9519-A	SWITCHGEAR SWR9ZY	SWR9ZY AREA INTRUSION SWITCHES	1	3/4"	(E)	–	–	–	–	–	DISASSEMBLE AND RECONNECT (E) CIRCUIT
	1X 9922-3	SWITCHGEAR SWR9ZY	MCC-9Y	1	3"	(E)	–	–	–	–	–	FOR FUTURE USE
	IX 9500-1	SWITCHGEAR SWR9ZY	CAP OUTSIDE FENCE	1	3"	(E)	–	–	–	–	–	FOR FUTURE USE
	IX 9500-2	SWITCHGEAR SWR9ZY	CAP OUTSIDE FENCE	1	3"	(E)	–	–	–	–	–	FOR FUTURE USE
	54C 9406-01	SWITCHGEAR SWR9ZY	CONTROL PANEL CPNL940603	1	4"	(E)	–	–	–	–	–	REMOVE WIRE
	54C 9406-02	SWITCHGEAR SWR9ZY	CONTROL PANEL CPNL940603	1	2"	(E)	–	–	2	CAT-6	–	
	54C 9406-03	SWITCHGEAR SWR9ZY	CONTROL PANEL CPNL940603	1	2"	(E)	–	–	–	–	–	REMOVE WIRE
	IX 9501-1	SWITCHGEAR SWR9ZY	CAPPED OUTSIDE FENCE	1	3"	(E)	–	–	–	–	–	FOR FUTURE USE
	IX 9501-2	SWITCHGEAR SWR9ZY	CAPPED OUTSIDE FENCE	1	3"	(E)	–	–	–	–	–	FOR FUTURE USE

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FRISCH ENGINEERING, INC.
CONSULTING ELECTRICAL ENGINEERS
13405 FOLSOM BLVD, UNIT 600
FOLSOM, CA 95630
PH 916 353 1025
WWW.FRISCHENGINEERING.COM
FILE: 2308A-E09.DWG
DATE: JAN 06, 2026 TIME: 6:11:08PM

REVISIONS

ZONE	REV.	DESCRIPTION	BY	DATE	APP.
	1	ADDENDUM 2	TF	12/25	RB

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2"-SCALE ACCORDINGLY)

FILE 2308A-E09.DWG
DRAWN N. CONANT
DESIGNED T. FRISCH
CHECKED M. FRISCH

ENGRS STAMP

REGISTERED PROFESSIONAL ENGINEER
THOMAS P. FRISCH
No. E15761
ELECTRICAL
STATE OF CALIFORNIA

SACRAMENTO REGIONAL
WASTEWATER TREATMENT PLANT
X09 OUTFALL SWITCHGEAR REPLACEMENT PROJECT

#####
CONTRACT NUMBER

ELECTRICAL

ELECTRICAL RACEWAY SCHEDULE

SCALE
NOT TO SCALE

DRAWING NUMBER
E09

SHEET NUMBER
##

RFB No. 8496 - X09 Outfall Switchgear Replacement Project

Questions and Answers

Question #1

Where can I get the plans for this project?

Answer #1
A copy of the RFB as well as the drawings and specifications can be found on the Sacramento Area Sewer District website. Here is link to the website.

Business Opportunities - Sacramento Area Sewer District

You will find information on what is required to bid and a list of postings for our projects. If you have questions regarding any of these projects, please send them to the contact listed on the project.

Question #2

Per The Raceway schedule on sheet E09. Conduit tags #'s 12P94003 A&B and 12P4004 A&B, are we removing and replacing conductors from new switchgear to MCC's 9W and 9X?

Answer #2
Yes. The conductors in conduit tags 12P94003 A&B and 12P4004 A&B will be replaced from the new switchgear to MCC-9W and MCC-9X,

Question #3

Where are the notes located that are referenced on drawing sheet E03?

Answer #3

Please reference the raceway schedule. Conduits 1P9912-1 and 1P9912-2 are through an existing wire chase. Only new wire is required as there is no conduit required for this run.

Question #4

Spec section 26-23-00 3.04 states the training shall conform to sec01-79-10. Please provide this spec section.

Answer #4
This will be provided via addendum for bidder reference.

Question #5

Who is responsible for providing the PLC programming for the automatic transfer control system?

Answer #5
The switchgear manufacturer shall furnish, develop, and fully test all PLC and HMI application programming required to implement the transfer, retransfer, and lockout functions described in Section 26 23 00.

Question #6

It appears that the scale of ½" =1' on drawing sheet E05 is incorrect. It should be ¼" =1'.

Answer #6
The scale is correct

Question #7

Is it the intent of the owner to keep the interim main switchboard after project is complete?

Answer #7
Yes. The Owner intends to keep the interim main switchboard in place after the project is complete. This supersedes any verbal discussion response on this topic from the pre-bid meeting.

Question #8

It looks like page E07 may be missing from the drawings. Can you please advise?

Answer #8
The omission will be corrected.

Question #9

Can I get the list of prebid attendees?

Answer #9
Bidders may obtain the prebid attendees list by emailing the Issuing Officer listed in the RFB.

Question #10

Will there be any requirement for plant programming outside of the programming and testing of breaker controlled transfer functions in the new switchgear?

Answer #10
Yes, there will be additional programming by district staff to integrate the switchgear PLC with our SCADA network. The contractor will not be responsible for this related programming or networking.

Question #11

Is the Owner open to any other Switchgear manufacturers other than the listed Eaton, Schneider Electric Square D, or General Electric?

Answer #11
Per Specification Section 26.23.00, Part 2.01.A, the District has standardized on Eaton Type Magnum DS or General Electric Type AKD-20 switchgear to maintain equipment interchangeability at the EchoWater Resource Recovery Facility. Products from other manufacturers will not be accepted for this project.

Question #12

During the pre-bid meeting on site there were comments made regarding feeders, and that all the MCC feeders were going to be new. The Electrical Raceway Schedule notes that some feeders are existing and to reconnect. Please clarify if all feeders are to be new.

Answer #12
All feeder power conductors from the new switchgear to MCC-9W, MCC-9X, MCC-9Y, and MCC-9Z are to be removed and replaced with new conductors for this contract.

Question #13

Please confirm there is no required manufacturer for the Interim Switchboard.

Answer #13
Per Spec Section 26.24.13 Part 1 - Products 1.01 ACCEPTABLE PRODUCTS "Switchboards shall be provided in accordance with UL 891, NEMA PB2, and as specified herein. Switchboards shall be Eaton Pow-R-Line with Magnum SB insulated case circuit breakers or General Electric Co. Spectraseries with Power Break II insulated case breakers."

Question #14

Is the Temp SWG intended to be a permanent item that is delivered to SAC SEWER when the project is complete? Or can we use a rental SWGR?

Answer #14
Yes. The temporary switchboard is intended to be a District-owned asset at the end of this project. The Contractor shall furnish a new interim switchboard in accordance with Section 26 24 13 and Drawing E04; rental switchgear is not acceptable. Upon successful cutover and acceptance of the permanent switchgear, the Contractor shall de-energize and disconnect the interim switchboard, remove all temporary feeders, supports, and associated temporary work, and deliver the switchboard with all accessories, O&M manuals, and test documentation to a District-designated on-site turnover location

Question #15

Please identify which conduits are to be new, and which ones are existing on sheet E05/E06. Currently everything on this sheet looks like it should be new. Notes are confusing at best.

Answer #15
The conduits shown on Sheets E05 and E06 are existing and are to remain in place. They continue to serve the existing electrical equipment and associated terminations. The contractor is to reuse these existing conduits and is not to install any new underground conduits. The only new work along these paths is pulling in and terminating new conductors to the new switchgear and providing the temporary surface run cables required for the interim configuration.

Question #16

Sheet e09 calls out two ea conduits to be new " 1p 9912-1 and 1p9912-2" please verify

Answer #16

We are not requiring any new conduit for those runs. The conduits for 1P9912 1 and 1P9912 2 already exist and will be reused; no new underground conduit is to be installed.

Question #17

Please confirm which cables shown on sheet E09 are to be new.

Answer #17

All power conductors associated with this project that are listed in the raceway schedule on Sheet E09 are to be installed new. For signal and control wiring, the scope varies: some cables are to be replaced with new wiring, while others are to be removed or reused. Please refer to the specific details in the raceway schedule to determine the requirement for each circuit.