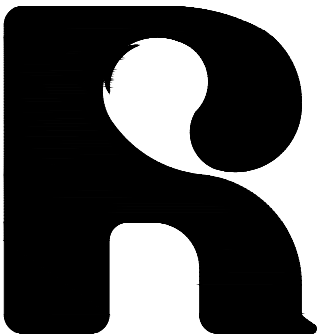
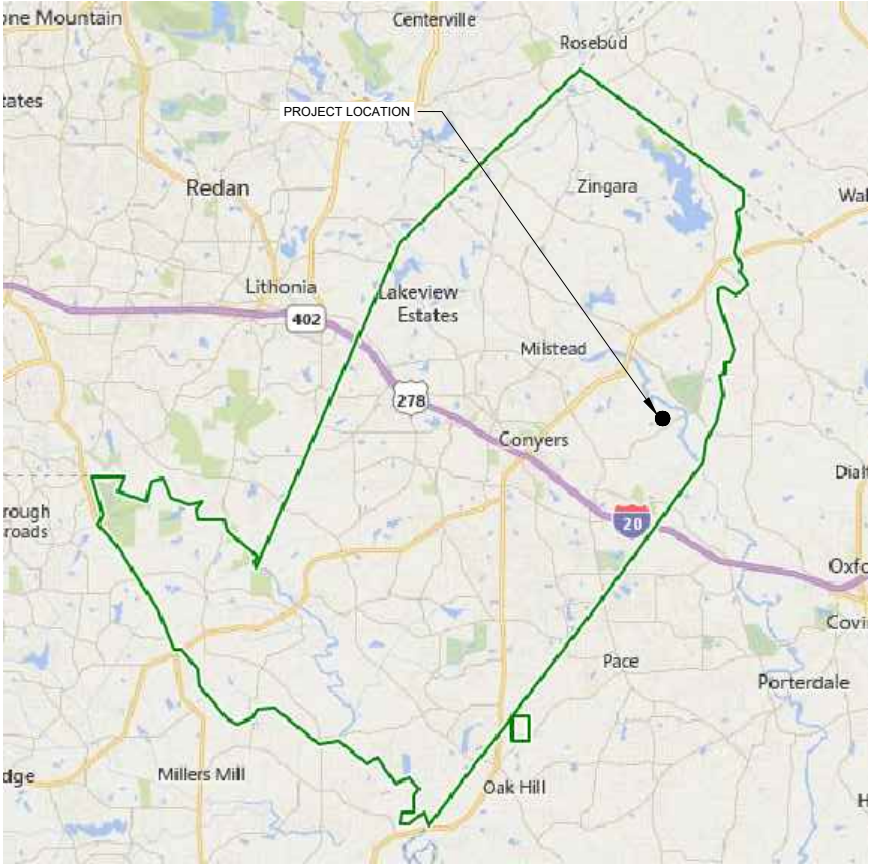


CONSTRUCTION PLANS FOR:
ROCKDALE WATER RESOURCES



ROCKDALE WATER RESOURCES



PROJECT VICINITY MAP



PROJECT LOCATION MAP

PROJECT:
**GEEES MILL WTP OZONE GENERATOR
REPLACEMENT**

CONSULTING ENGINEER:

ESI
ENGINEERING STRATEGIES, INC.

3855 SHALLOWFORD ROAD, SUITE 525
MARIETTA, GA 30062
(770) 429-0001

Phone: (770) 429-0001

MARCH 2025



<u>TELEPHONE</u> <u>POLE</u>	
<u>LIGHT POLE</u>	
<u>TELEPHONE BOX</u>	
<u>TV BOX</u>	

CONCRETE	
ASPHALT	
EARTH	
DEMO	

SHEET INDEX	
SHEET NO.	SHEET TITLE
--	COVER
1	GENERAL NOTES, LEGEND, ABBREVIATIONS AND SHEET INDEX
2	OVERALL SITE PLAN
3	EXISTING GENERATOR ROOM PLAN AND SECTION
4	EXISTING CONTACT CHAMBER PLAN
5	PROPOSED GENERATOR ROOM PLAN AND SECTION
6	PROPOSED CONTACT CHAMBER PLAN
7	OZONE GENERATOR P&ID
E-1	ELECTRICAL LEGENDS AND NOTES
E-2	MATERIAL SCHEDULE
E-3	ONE LINE DIAGRAM
E-4	ELECTRICAL PLAN
E-5	INTERCONNECTION WIRING DIAGRAM
E-6	INSTALLATION AND GROUNDING DETAILS

BID SET



NOTES:
1. CONTRACTOR SHALL COORDINATE WITH THE FACILITY OPERATION AND MAINTENANCE PERSONNEL FOR THE EXACT LOCATION FOR STORING MATERIALS AND EQUIPMENT FOR THE EXECUTION OF THE WORK. THE CONTRACTOR'S OPERATIONS SHALL NOT INTERFERE WITH THE OPERATION OF THE WATER TREATMENT PLANT.

ROCKDALE WATER RESOURCES
GEES MILL WTP OZONE GENERATOR REPLACEMENT

OVERALL SITE PLAN

DESIGNED BY: BDL
DRAWN BY: BDL
REVIEWED BY: JRF

PROJECT NUMBER: ----
PROJECT DATE: MARCH 2025

BAR BELOW IS 1" LONG FOR SCALES SHOWN ON THIS SHEET. IF NO SCALE SHOWN ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

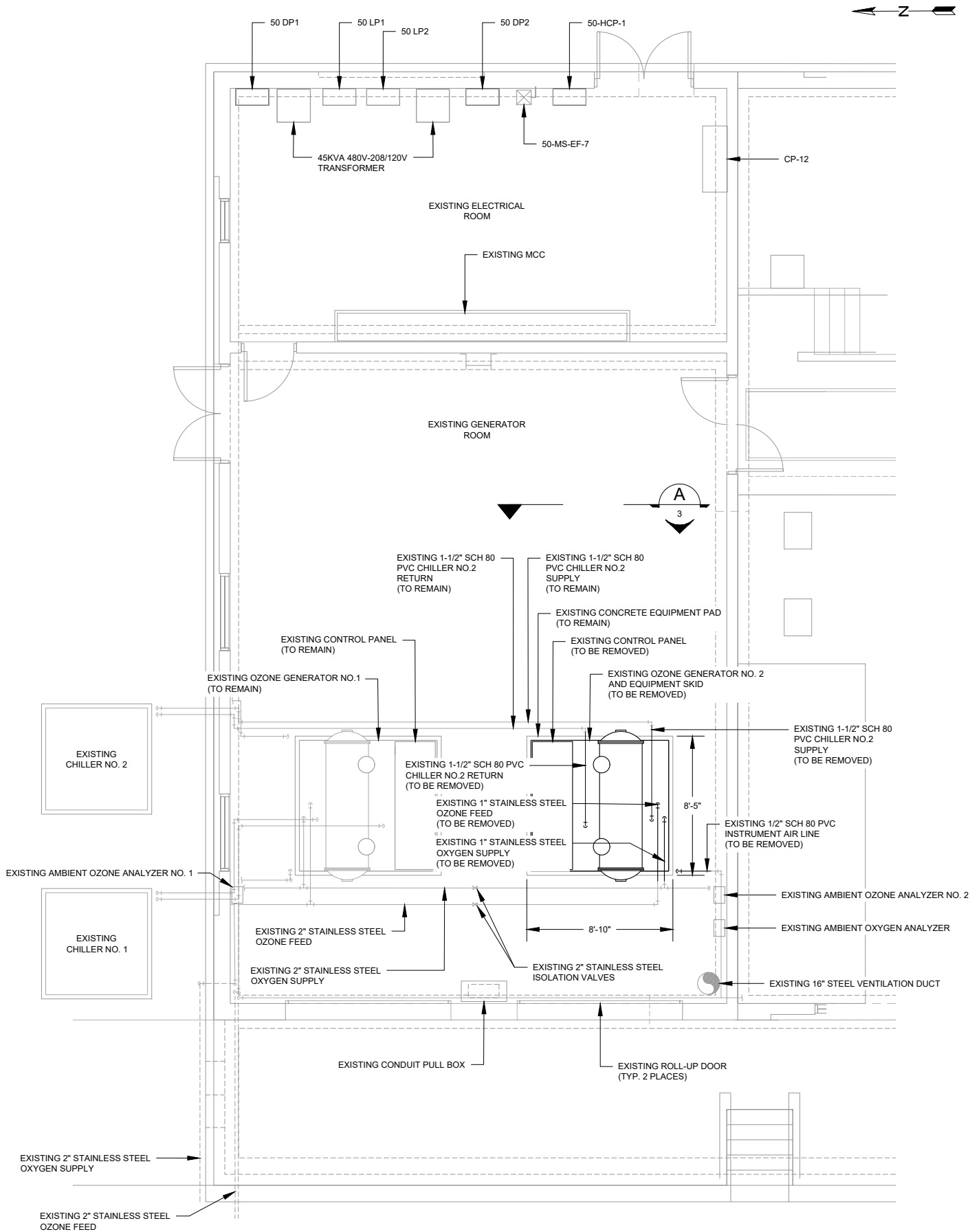
0 1'

REVISION	DATE

GEORGIA REGISTERED PROFESSIONAL ENGINEER
NO. 24157
JOHN R. FLECK

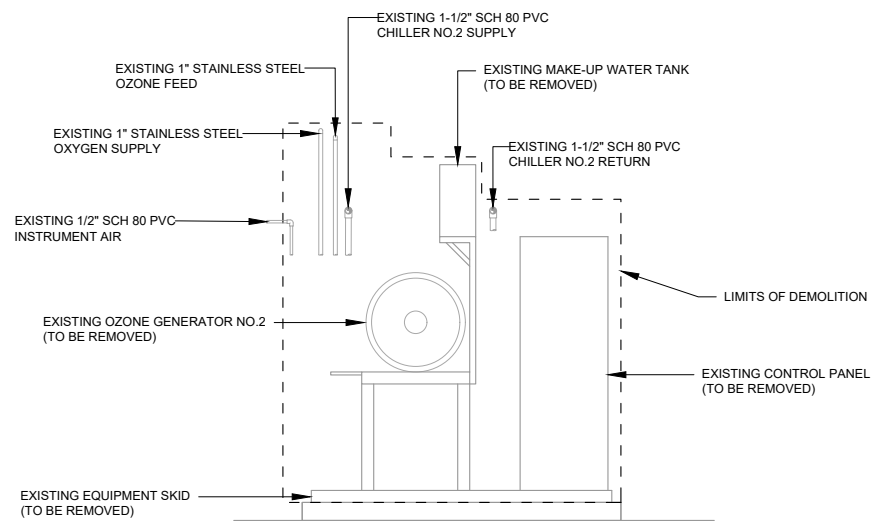
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2



GENERATOR ROOM PLAN

1/4" = 1'-0"



GENERATOR SECTION A

SCALE: 3/8" = 1'-0"

NOTES:

- OZONE GENERATOR NO. 1 SHALL REMAIN IN SERVICE FOR THE DURATION OF THE INSTALLATION OF PROPOSED GENERATOR. CONTRACTOR SHALL DEMOLISH ALL EXISTING CONNECTIONS IN A WAY THAT SHALL MINIMIZE THE REQUIRED SHUT DOWN TIME FOR GENERATOR NO. 1. CONTRACTOR SHALL COORDINATE ALL SHUTDOWNS OF GENERATOR NO.1 WITH ROCKDALE COUNTY WITH A MINIMUM OF 14 DAYS NOTICE.
- PRIOR TO REMOVAL OF OZONE GENERATOR NO. 2, THE CONTRACTOR SHALL CONFIRM ALL ISOLATION VALVES ON THE COMMON PIPING BETWEEN THE TWO OZONE GENERATORS ARE CLOSED SO NO PROCESS FLUIDS ESCAPE THE SYSTEM WHEN THE GENERATOR IS REMOVED AND THE PIPING IS DISCONNECTED.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY DURING THE DEMOLITION WHEN CUTTING PIPING AND OTHER MATERIALS THAT MAY CAUSE SPARKS TO ENSURE THERE IS NO HIGH OXYGEN OR OZONE CONCENTRATIONS PRESENT, WHICH MAY IGNITE FROM THE CUTTING WORK.
- CONTRACTOR SHALL COORDINATE WITH ROCKDALE WATER RESOURCES ON THE ITEMS OF EQUIPMENT THEY WANT TO KEEP FROM THE EXISTING OZONE GENERATOR. ALL EQUIPMENT IDENTIFIED TO BE KEPT, SHALL BE CAREFULLY REMOVED AND PROVIDED TO THE PLANT OPERATIONS PERSONNEL. ALL OTHER DEMOLISHED MATERIALS AND EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OF IN A LEGAL MANNER.



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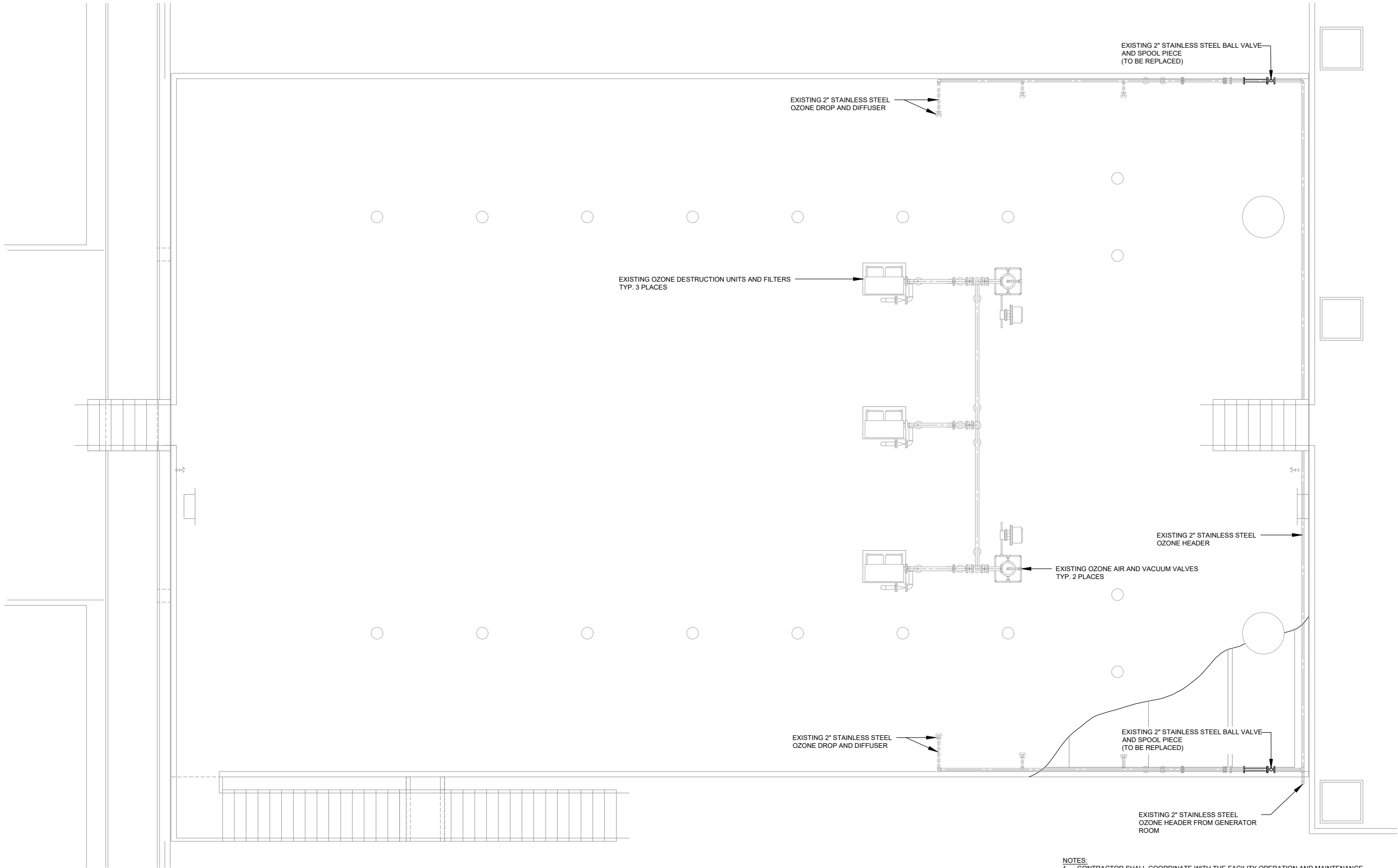
PROJECT NUMBER: ---
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DESIGNED BY: BDL
DRAWN BY: BDL
REVIEWED BY: JRF

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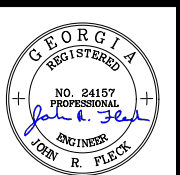
ROCKDALE WATER RESOURCES
GEES MILL WTP OZONE GENERATOR REPLACEMENT

EXISTING GENERATOR ROOM PLAN AND SECTION



UPPER CONTACT CHAMBER PLAN
1/4" = 1'-0"

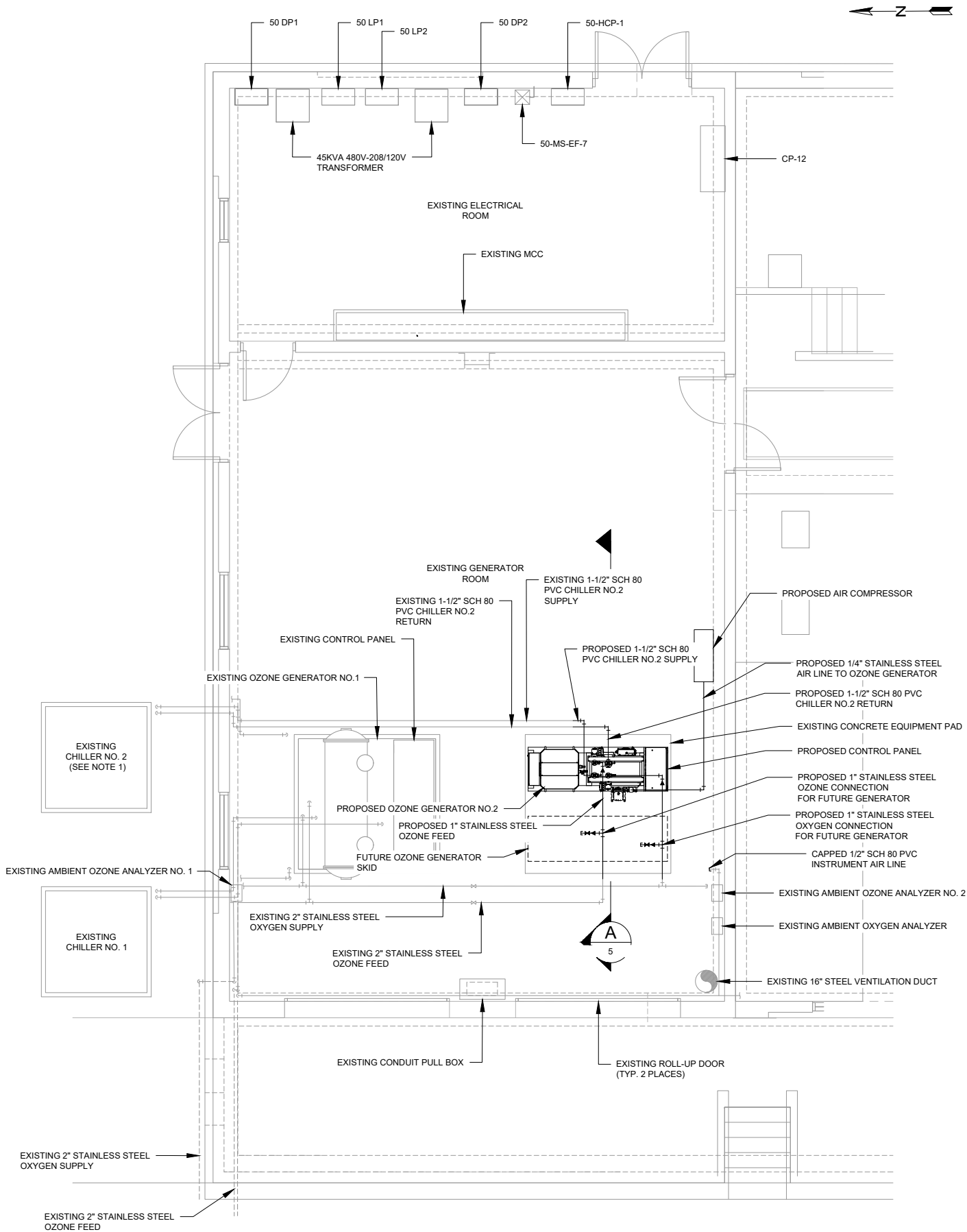
- NOTES:
- CONTRACTOR SHALL COORDINATE WITH THE FACILITY OPERATION AND MAINTENANCE PERSONNEL FOR ISOLATING THE NECESSARY PORTIONS OF THE OZONE CONTACT CHAMBER FOR THE REMOVAL AND REPLACEMENT OF THE EXISTING BALL VALVES.
 - CONTRACTOR SHALL FIELD VERIFY THE REQUIRED COMPONENTS FOR REPLACEMENT OF THE EXISTING BALL VALVES PRIOR TO ORDERING MATERIALS. IT IS ACCEPTABLE TO ELIMINATE THE NEW SPOOL PIECE IF IT IS NOT REQUIRED FOR COMPLETING THE VALVE REPLACEMENT.



PROJECT NUMBER: -		PROJECT DATE: MARCH 2025	
DESIGNED BY:	BDL	REVISION	DATE
DRAWN BY:	BDL		
REVIEWED BY:	JRF		
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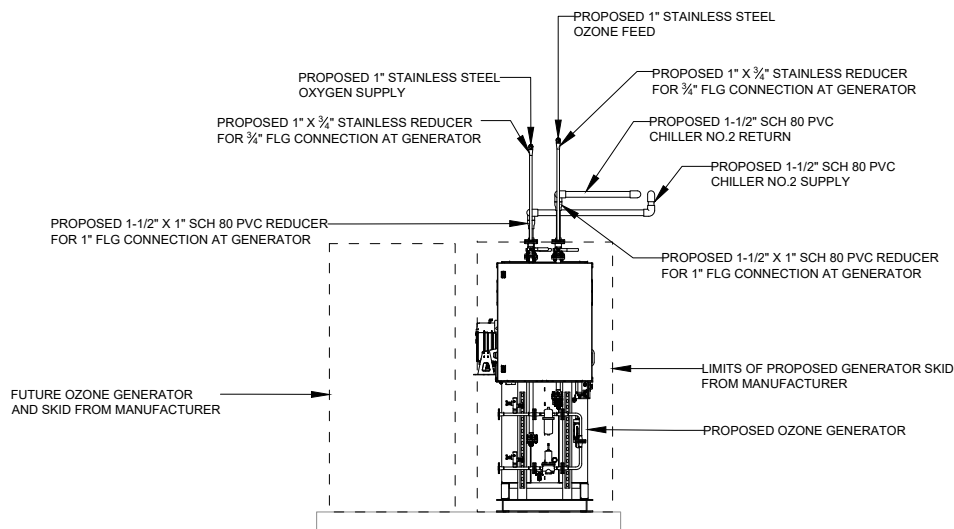
DESIGNED BY:	BDL
DRAWN BY:	BDL
REVIEWED BY:	JRF

ROCKDALE WATER RESOURCES	EXISTING CONTACT CHAMBER PLAN
GEES MILL WTP OZONE GENERATOR REPLACEMENT	



GENERATOR ROOM PLAN

1/4" = 1'-0"



GENERATOR SECTION A

SCALE: 3/8" = 1'-0"

A
5

NOTES:

- CONTRACTOR SHALL INSPECT BOTH CHILLERS AND THE ENTIRE CHILLED WATER CIRCULATION SYSTEM TO IDENTIFY ANY FERROUS METAL MATERIALS WHICH ARE IN CONTACT WITH THE CHILLED WATER. ALL MATERIALS IDENTIFIED AS CONTAINING FERROUS METAL SHALL BE REMOVED AND REPLACED WITH TYPE 316 STAINLESS STEEL COMPONENTS, INCLUDING PUMPS, PIPING, FITTINGS, AND VALVES. COOLING WATER CIRCULATION PUMP SHALL BE REMOVED AND REPLACED WITH A TYPE 316 STAINLESS STEEL CIRCULATION PUMP PER MANUFACTURER RECOMMENDATIONS. COSTS FOR LABOR, MATERIALS AND EQUIPMENT FOR THIS WORK SHALL BE COVERED BY THE ASSOCIATED ALLOWANCE ITEM.
- FINAL CONNECTIONS TO THE OZONE GENERATOR AND VALVE TREE SHALL BE PERFORMED BY THE MANUFACTURER. CONTRACTOR SHALL COORDINATE FINAL CONNECTIONS WITH THE MANUFACTURER WITH A MINIMUM OF 30 DAYS NOTICE.
- ALL UTILITIES SHOWN ARE DRAWN TO THE BEST APPROXIMATE LOCATION. THE CONTRACTOR SHALL VERIFY LOCATIONS BEFORE BEGINNING WORK AND FIELD ROUTE ALL CONNECTIONS TO THE PROPOSED GENERATOR AND VALVE TREE.
- PROPOSED EXTENSIONS OF CHILLER SUPPLY AND RETURN PIPING SHALL BE FIELD ROUTED IN THE GENERAL ARRANGEMENT SHOWN. CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, VALVES, AND PIPE SUPPORTS REQUIRED FOR PROPER INSTALLATION AND OPERATION IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS AND THE SPECIFICATIONS.
- PROPOSED EXTENSIONS OF OXYGEN SUPPLY AND OZONE FEED PIPING SHALL BE FIELD ROUTED IN THE GENERAL ARRANGEMENT SHOWN. CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, VALVES, AND PIPE SUPPORTS REQUIRED FOR PROPER INSTALLATION AND OPERATION IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS AND THE SPECIFICATIONS.
- CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING ALL PIPING AND VALVES BETWEEN THE PROPOSED VALVE ASSEMBLY AND THE EXISTING PIPING.
- CONTRACTOR SHALL PROVIDE INSULATION ON CHILLED WATER SUPPLY AND RETURN PIPING MATCHING THE EXISTING INSULATION.

GEORGIA
REGISTERED
PROFESSIONAL
ENGINEER
JOHN R. FLECK

NO. 24157

ESI

ENGINEERING STRATEGIES, INC.

PROJECT NUMBER: ---

PROJECT DATE: MARCH 2025

DESIGNED BY: BDL

DRAWN BY: BDL

REVIEWED BY: JRF

REVISION

DATE

ROCKDALE WATER RESOURCES

GEES MILL WTP OZONE GENERATOR REPLACEMENT

PROPOSED GENERATOR ROOM PLAN AND SECTION

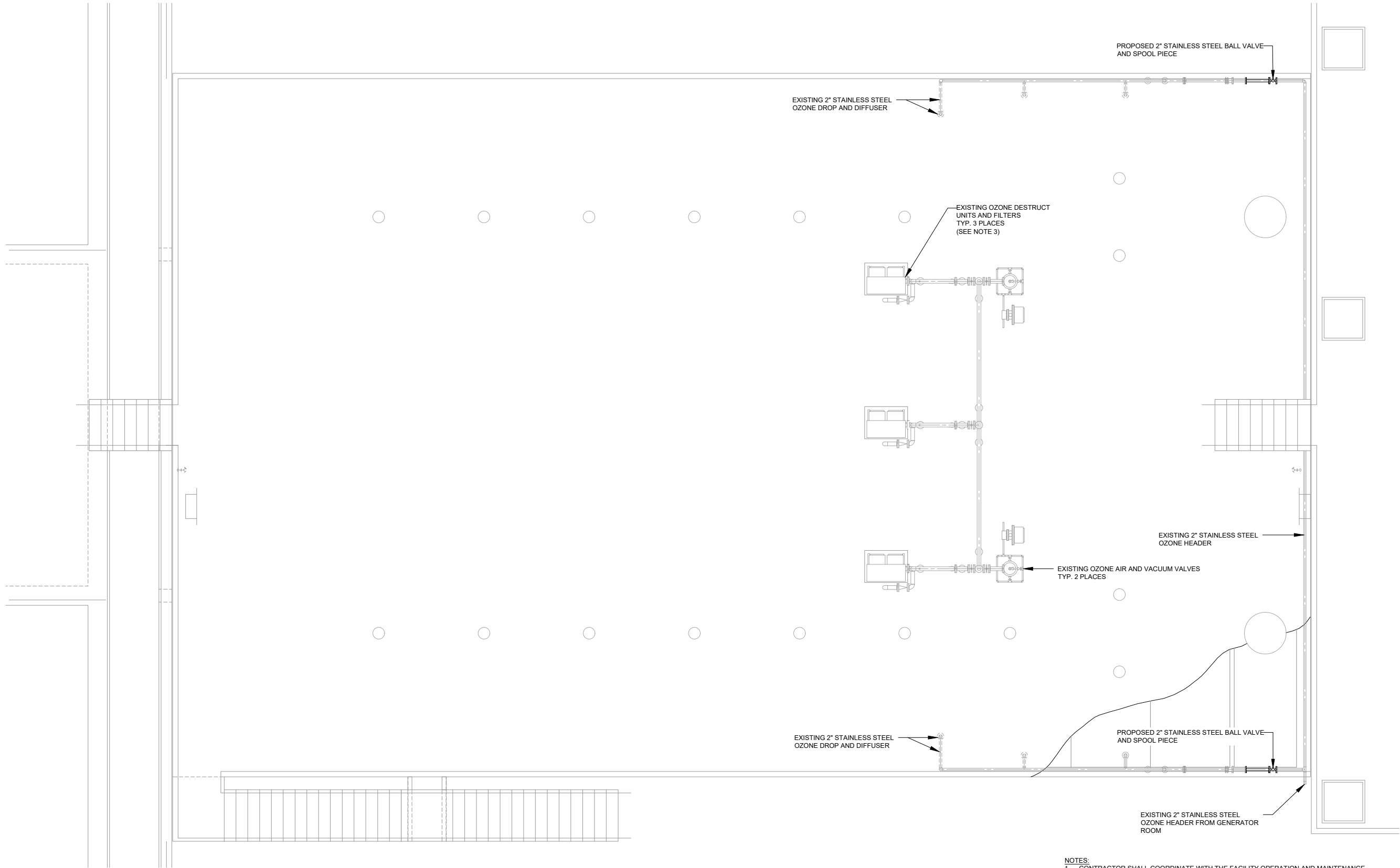
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BAR BELOW IS 1" LONG FOR SCALE. SHOWN ON THIS SHEET IF NOT SHOWN ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

1"

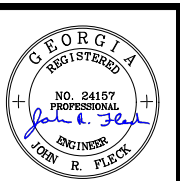
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L:\Rockdale County\Gees Mill Ozone Generator Replacement\Drawings\MS-PROPOSED GENERATOR PLAN AND SECTION.dwg - 3/18/2025 7:18 PM BY: JFLECK



UPPER CONTACT CHAMBER PLAN
1/4" = 1'-0"

- NOTES:
- CONTRACTOR SHALL COORDINATE WITH THE FACILITY OPERATION AND MAINTENANCE PERSONNEL FOR ISOLATING THE NECESSARY PORTIONS OF THE OZONE CONTACT CHAMBER FOR THE REMOVAL AND REPLACEMENT OF THE EXISTING BALL VALVES.
 - CONTRACTOR SHALL FIELD VERIFY THE REQUIRED COMPONENTS FOR REPLACEMENT OF THE EXISTING BALL VALVES PRIOR TO ORDERING MATERIALS. IT IS ACCEPTABLE TO ELIMINATE THE NEW SPOOL PIECE IF IT IS NOT REQUIRED FOR COMPLETING THE VALVE REPLACEMENT.
 - CONTRACTOR SHALL REMOVE AND REPLACE THE FILTER MEDIA IN THE FILTER CHAMBERS ON THE THREE OZONE DESTRUCT UNITS. NEW MEDIA SHALL MEET THE MANUFACTURERS SPECIFICATIONS.



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DESIGNED BY:	BDL
DRAWN BY:	BDL
REVIEWED BY:	JRF

ROCKDALE WATER RESOURCES
GEES MILL WTP OZONE GENERATOR
REPLACEMENT
PROPOSED CONTACT CHAMBER PLAN

SCHEMATIC DIAGRAM SYMBOLS		ONE LINE DIAGRAM SYMBOLS		GENERAL ABBREVIATIONS		GENERAL NOTES:		
XX TERMINAL POINT FOR OUTGOING CONDUCTORS, WITH IDENTIFICATION. "XX" DENOTES CONTRACTOR ASSIGNED. MCPXXX-XX XXA MAGNETIC-ONLY CIRCUIT BREAKER (MCP), WITH CURRENT RATING CBXXX-XX XXA CIRCUIT BREAKER, THERMAL-MAGNETIC UNLESS OTHERWISE NOTED, WITH FRAME SIZE AND TRIP RATING FUXXX-XX XXA FUSE WITH SIZE AND OPTIONAL IDENTIFICATION. DSXXX-XX XXXX DISCONNECT SWITCH. RATING OPTIONAL. 30 AMP, 600V RATED MINIMUM UNLESS OTHERWISE NOTED. FUXXX-XX XXA FUSE DISCONNECT SWITCH. RATING OPTIONAL. 30 AMP, 600V MINIMUM UNLESS OTHERWISE NOTED. XX M-XXX MOTOR (HP AS SHOWN, PHASES AS REQUIRED) MSR-XXX XX XX MOTOR STARTER COIL OL-XXX THERMAL MOTOR OVERLOAD M-XXX MOTOR CONTACT LSXXX-XX LSXXX-XX LIMIT SWITCH NORMALLY CLOSED AND NORMALLY OPEN PSXXX-XX PSXXX-XX PRESSURE SWITCH NORMALLY CLOSED AND NORMALLY OPEN TSXXX-XX TSXXX-XX TEMPERATURE SWITCH NORMALLY CLOSED AND NORMALLY OPEN FSXXX-XX FSXXX-XX FLOW SWITCH NORMALLY CLOSED AND NORMALLY OPEN FLTXXX-XX FLTXXX-XX LEVEL SWITCH NORMALLY CLOSED AND NORMALLY OPEN PRSXXX-XX PRSXXX-XX PROXIMITY SWITCH NORMALLY CLOSED AND NORMALLY OPEN PCSXXX-XX PCSXXX-XX PULLCORD SWITCH NORMALLY CLOSED AND NORMALLY OPEN SVXXX-XX SOLENOID VALVE PBXXX-XX PBXXX-XX MOMENTARY PUSHBUTTON NORMALLY CLOSED AND NORMALLY OPEN SSXXX-XX SSXXX-XX SELECTOR SWITCH NORMALLY NORMALLY CLOSED AND NORMALLY OPEN LTXXX-XX X PILOT LIGHT X = LENS COLOR CRXXX-XX CRXXX-XX CONTROL RELAY CRXXX-XX CRXXX-XX CONTROL RELAY CONTACT NORMALLY CLOSED AND NORMALLY OPEN ALXXX-XX ALARM LIGHT AHXXX-XX ALARM HORN H1 H2 TFRXXX-XX X1 X2 CONTROL POWER TRANSFORMER, PRIMARY AND SECONDARY VOLTAGE SHOWN. SIZE AS SHOWN OR SPECIFIED. C.T. CTXXX-XX CURRENT TRANSFORMER. PRIMARY/SECONDARY TURNS RATIO AS SHOWN.	CB-XXX LOW VOLTAGE POWER CIRCUIT AND BREAKER DRAWOUT TYPE, FRAME TRIP SHOWN CB-XXX MOLDED CASE CIRCUIT BREAKER, FRAME AND TRIP ID SHOWN LIGHTNING ARRESTOR AND GROUND DS-XXX DISCONNECT OR ISOLATING SWITCH: CONTINUOUS RATING SHOWN MCP-XXX MAGNETIC-ONLY CIRCUIT BREAKER (MCP), DRAWOUT TYPE, WITH CURRENT RATING FS-XXX FUSED SWITCH: FUSE AND SWITCH CONTINUOUS RATINGS SHOWN TFR-XXX POWER TRANSFORMER: PRIMARY & SECONDARY VOLTAGES, %Z, SIZE SHOWN XS CURRENT TRANSFORMER: RATIO SHOWN (3 INDICATES NO. OF CT'S) METER SWITCH, xS: AS - AMMETER SWITCH VS - VOLTMETER SWITCH FS - FREQUENCY SWITCH PT POTENTIAL TRANSFORMER PRIMARY & SECONDARY VOLTAGES & WINDINGS SHOWN. (x) UNITS METER METER: A - AMMETER W - WATTMETER KWH - WATT-HOUR METER F - FREQUENCY METER VAR - VAR METER V - VOLTMETER FVNR SIZE X FULL VOLTAGE, NON-REVERSING MAGNETIC MOTOR STARTER. NEMA SIZE INDICATED FVR SIZE X FULL VOLTAGE, REVERSING MAGNETIC MOTOR STARTER. NEMA SIZE INDICATED XXHP VFD-XXX VARIABLE FREQUENCY DRIVE. NEMA SIZE INDICATED XXHP RVSS-XXX REDUCED VOLTAGE SOLID STATE DRIVE (SOFT START). NEMA SIZE INDICATED XX MOTOR (HP AS SHOWN, PHASES AS REQUIRED) M-XXX GENERATOR RECEPTACLE MTS-XXX MANUAL TRANSFER SWITCH P-XXX-X CABLE TAG: P - POWER CABLE C - CONTROL CABLE S - SHIELDED SIGNAL CABLE Gx GENERATOR TAG: G - EQUIPMENT TO RUN OFF GENERATOR X - STEP NUMBER FOR EQUIPMENT STARTING OFF THE GENERATOR	AR ALARM RELAY AS AMMETER SELECTOR SWITCH A, AMP AMP(S), AMPERE(S) AC ALTERNATING CURRENT AF ABOVE FINISHED FLOOR AHAP AS HIGH AS POSSIBLE AIC AMPS INTERRUPTING CAPACITY, SYMM. AL ALUMINUM AT AMPERE TRIP AF AMPERE FRAME AUTO AUTOMATIC AUX AUXILIARY AWG AMERICAN WIRE GAUGE BC BARE COPPER CONDUCTOR BKR BREAKER C CONDUCTOR/CONTACTOR CB CIRCUIT BREAKER CJB CIRCUIT JUNCTION BOX CR CIRCUIT CLG CEILING CR CONTROL RELAY CON CONDUIT CONC CONCRETE CS CONTROL SWITCH CONT CONTROL CPT CONTROL POWER TRANSFORMER CT CURRENT TRANSFORMER CU COPPER D DIAMETER DB DUCT BANK DC DIRECT CURRENT DET DETAIL DIAG DIAGRAM DPSH DIFFERENTIAL PRESSURE SWITCH DS DISCONNECT SWITCH DWG DRAWING EA EACH EC ELECTRICAL CONTRACTOR EF EXHAUST FAN ELEV ELEVATION ELEC ELECTRIC(AL) EMER EMERGENCY ENCL ENCLOSURE/ENCLOSED EP EXPLOSION PROOF EQUIP. EXIST EXISTING F FURNISHED WITH EQUIPMENT FDR FEEDER FLA FULL LOAD AMPS FPP FIBER OPTIC DISTRIBUTION PANEL FS FLOW SWITCH FU FUSE FUT FUTURE FVNR FULL VOLTAGE NON-REVERSING FVR FULL VOLTAGE REVERSING GALV GALVANIZED GEN GENERATOR GFR GROUND FAULT RELAY GRD GROUND GRS GALVANIZED RIGID STEEL H HIGH HGT HEIGHT HH HANDHOLE HID HIGH INTENSITY DISCHARGE HP HORSEPOWER HS HAND STATION (SWITCH) HVAC HEATING, VENTILATION AND AIR CONDITIONING HZ HERTZ (CYCLES PER SECOND) HOA HAND/OFF/AUTO HOR HAND/OFF/REVERSE HMH HIGH VOLTAGE MANHOLE ID INSIDE DIAMETER IMC INDIVIDUAL MOTOR CONTROLLER INTLK INTERLOCK INST INSTANTANEOUS INSTR INSTRUMENT I/O INPUT-OUTPUT JB JUNCTION BOX KV KILOVOLT KVA KILOVOLT-AMPERE KVAR KILOVOLT-AMPERE REACTIVE KW KILOWATT KWH KILOWATT-HOUR KAIC KILO AMPERE INTERRUPTING CURRENT L-0-R LOCAL-OFF-REMOTE L LONG LC LIGHTING CONTACTOR LOC LOCAL CONTROL PANEL LP LIGHTING PANEL LOS LOCK-OUT STOP LSIG LONG, SHORT, INSTANTANEOUS TRIP SETTING AND GROUND FAULT PROTECTION LSL LEVEL SWITCH LOW LSO LIMIT SWITCH OPEN LSC LIMIT SWITCH CLOSED LITG LIGHTING LV LOW VOLTAGE LSH LEVEL SWITCH HIGH	M MOTOR CONNECTION MOTOR STARTER, INDIVIDUAL -- NOT LOCATED IN AN MCC OR SIMILAR GROUP ASSEMBLY COMBINATION MOTOR STARTER/DISCONNECT INDIVIDUAL -- NOT LOCATED IN AN MCC OR SIMILAR GROUP ASSEMBLY DISCONNECT SWITCH. DISCONNECT SWITCHES ARE HEAVY DUTY, SINGLE THROW, WITH NEMA 4X ENCLOSURE UNLESS OTHERWISE NOTED. MOUNT AT 4'-8" TO CENTER OF DISCONNECT. FUSED DISCONNECT, NON-FUSED. PROVISION FOR CLASS R FUSES. FIELD INSTRUMENT CONNECTION START/STOP HAND STATION MOUNTED TO HANDRAIL (NEMA 4X UNLESS OTHERWISE NOTED) 120V, 20A, 1P TOGGLE SWITCH [BLANK] = 1P TOGGLE SWITCH 2 = 2P TOGGLE SWITCH 3 = 3P TOGGLE SWITCH D = SLIDE DIMMER M = MOTOR RATED S = TOGGLE WITH OCCUPANCY SENSOR DUPLEX 120V RECEPTACLE, 120V, 20A, 1P. MOUNT 6" ABOVE COUNTER, DESK, OR CABINET. GFCI DUPLEX 120V RECEPTACLE, 120V, 20A, 1P. MOUNT 6" ABOVE COUNTER, DESK, OR CABINET. QUADRAPLEX 120V RECEPTACLE, 120V, 20A, 1P. MOUNT 6" ABOVE COUNTER, DESK, OR CABINET. TELEPHONE BOX. MOUNT 18" A.F.F., INSTALL A 1/2" CONDUIT FROM BOX TO 6" ABOVE CEILING. PROVIDE PULL CORD FOR FUTURE CONNECTIONS AS REQUIRED. DUPLEX ETHERNET CAT-6 BOX FOR DATA AND VOIP SERVICE. MOUNT 18" A.F.F., INSTALL A 1/2" CONDUIT FROM BOX TO 6" ABOVE CEILING. PROVIDE PULL CORD FOR FUTURE CONNECTIONS AS REQUIRED. JUNCTION BOX RECESSED FLOOR JUNCTION BOX 60A, 480V, 3PH WELDING RECEPTACLE WITH INTERLOCKED 60A (NEMA 4X FUSED DISCONNECT SWITCH UNLESS OTHERWISE NOTED) EXHAUST FAN CCTV CAMERA	NOTES: 1. SCOPE: A. FURNISH ALL LABOR, MATERIAL, EQUIPMENT AND TOOLS REQUIRED TO COMPLETE INSTALLATION OF THE ELECTRICAL SYSTEM INCLUDING BUT NOT LIMITED TO WIRING, BOXES, LIGHT FIXTURES, PANELS, SWITCHES, RECEPTACLES, DISCONNECTS, STARTERS, AND ALL OTHER WORK INDICATED ON THE DRAWINGS OR AS SPECIFIED HEREIN. B. OBTAIN ALL PERMITS, INSPECTIONS, AND APPROVALS AS REQUIRED BY THE LOCAL AUTHORITIES HAVING JURISDICTION AND DELIVER CERTIFICATE OF APPROVAL TO THE GENERAL CONTRACTOR. ALL ASSOCIATED FEES SHALL BE PAID BY THE CONTRACTOR. C. ALL MATERIALS AND EQUIPMENT OF THE ELECTRICAL SYSTEM NECESSARY FOR ITS PROPER AND SAFE OPERATION OR OTHERWISE REQUIRED BY CODE, BUT NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS, SHALL BE FURNISHED AND INSTALLED WITHOUT ADDITIONAL CHARGE. D. WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF NATIONAL ELECTRICAL CODE, THE LATEST STANDARD BUILDING CODE, ANY OTHER LOCALLY ADOPTED CODES AND LOCAL AUTHORITIES HAVING JURISDICTION. 2. ALL SUBSTITUTIONS FOR EQUIPMENT AND MATERIAL SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO PURCHASING. 3. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL OTHER TRADES. IT IS THE RESPONSIBILITY OF CONTRACTOR TO VERIFY THE ACTUAL LOCATION OF EQUIPMENT, DUCTWORK, PIPING, ETC. AND COORDINATED THE INSTALLATION ACCORDINGLY. THE EQUIPMENT WIRING SHALL INCLUDE ALL NECESSARY CABLES AND CONDUIT REQUIRED FOR THE PROPER AND SAFE EQUIPMENT OPERATION. 4. THE CONTRACTOR SHALL CONFIRM ALL DIMENSIONS AND DISTANCES IN THE FIELD. IN CASE OF DISCREPANCY, CONTRACTOR SHALL INCLUDE A MORE EXPENSIVE OPTION. 5. ALL MATERIALS SELECTION SHALL BE AS PER THE SCHEDULE SHOWN ON DWG. E-2, UNLESS NOTED OTHERWISE ON THE DRAWINGS. 6. ALL ITEMS DESIGNED TO BE REMOVED SHALL BECOME THE PROPERTY OF CONTRACTOR, WITH THE EXCEPTION OF THE ITEMS IDENTIFIED BY THE ROCKDALE WATER RESOURCES DURING THE CONSTRUCTION. 7. FOR NEW CONSTRUCTION, INSTALLATION AND/OR DEMOLITION THAT INTERRUPTS ANY POWER, CONTROL OR SIGNAL WIRING TO EXISTING EQUIPMENT OR DEVICES THAT SHALL REMAIN IN OPERATION. CONTRACTOR SHALL INCLUDE ALL REQUIRED BREAKERS, CABLES/CONDUITS AND/OR ANY OTHER EQUIPMENT AS REQUIRED TO KEEP THE EXISTING SYSTEM FUNCTIONAL. 8. ALL ELECTRICAL, INSTRUMENTATION AND CONTROL SYSTEM COMPONENTS LOCATIONS SHALL BE ADJUSTED TO PROVIDE NEC REQUIRED WORKING CLEARANCES.	PLAN DRAWING SYMBOLS M MOTOR CONNECTION MOTOR STARTER, INDIVIDUAL -- NOT LOCATED IN AN MCC OR SIMILAR GROUP ASSEMBLY COMBINATION MOTOR STARTER/DISCONNECT INDIVIDUAL -- NOT LOCATED IN AN MCC OR SIMILAR GROUP ASSEMBLY DISCONNECT SWITCH. DISCONNECT SWITCHES ARE HEAVY DUTY, SINGLE THROW, WITH NEMA 4X ENCLOSURE UNLESS OTHERWISE NOTED. MOUNT AT 4'-8" TO CENTER OF DISCONNECT. FUSED DISCONNECT, NON-FUSED. PROVISION FOR CLASS R FUSES. FIELD INSTRUMENT CONNECTION START/STOP HAND STATION MOUNTED TO HANDRAIL (NEMA 4X UNLESS OTHERWISE NOTED) 120V, 20A, 1P TOGGLE SWITCH [BLANK] = 1P TOGGLE SWITCH 2 = 2P TOGGLE SWITCH 3 = 3P TOGGLE SWITCH D = SLIDE DIMMER M = MOTOR RATED S = TOGGLE WITH OCCUPANCY SENSOR DUPLEX 120V RECEPTACLE, 120V, 20A, 1P. MOUNT 6" ABOVE COUNTER, DESK, OR CABINET. GFCI DUPLEX 120V RECEPTACLE, 120V, 20A, 1P. MOUNT 6" ABOVE COUNTER, DESK, OR CABINET. QUADRAPLEX 120V RECEPTACLE, 120V, 20A, 1P. MOUNT 6" ABOVE COUNTER, DESK, OR CABINET. TELEPHONE BOX. 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DATE	REVISION

DESIGNED BY: VC	VC
DRAWN BY: VC	VC
REVIEWED BY: AZ	AZ



1 PARTIAL EXISTING MCC-4 ONE LINE DIAGRAM



- NOTES:**
1. THE CONTRACTOR SHALL DISCONNECT AND DEMOLISH ALL EXISTING ELECTRICAL EQUIPMENT AS NOTED AND ALL ASSOCIATED INSTALLATION HARDWARE, CABLES AND CONDUITS. ALL DEMOLISHED ELECTRICAL EQUIPMENT SHALL BE COORDINATED WITH THE OWNER FOR RE-USE OR DISPOSAL.
 2. THE CONTRACTOR SHALL SUPPLY AND INSTALL TWO(2) 70A, 3P, 480V CIRCUIT BREAKER BUCKET IN THE EXISTING MCC-4. THE BREAKER SHALL BE EATON TO MATCH THE EXISTING MCC. SEE EXISTING MCC NAMEPLATE ON THIS DRAWING.
 3. THE CONTRACTOR SHALL USE EXISTING 20A BREAKER IN THE PANELBOARD 50LP-2 CKT. 8 TO PROVIDE 120V POWER TO OZONE GENERATOR CONTROL PANEL MCCP. SEE DETAIL 2 ON THIS DRAWING.
 4. THE CONTRACTOR SHALL USE EXISTING 20A BREAKER IN THE PANELBOARD 50LP-2 CKT. 10 TO PROVIDE 120V POWER TO SUPPLEMENTAL NITROGEN AIR COMPRESSOR (SUPPLIED BY PUREFLOW)



ESI

ENGINEERING STRATEGIES, INC.

PROJECT NUMBER: PROJECT DATE: MARCH 2025	△	REVISION	DATE

DESIGNED BY:	VC
DRAWN BY:	VC
REVIEWED BY:	AZ

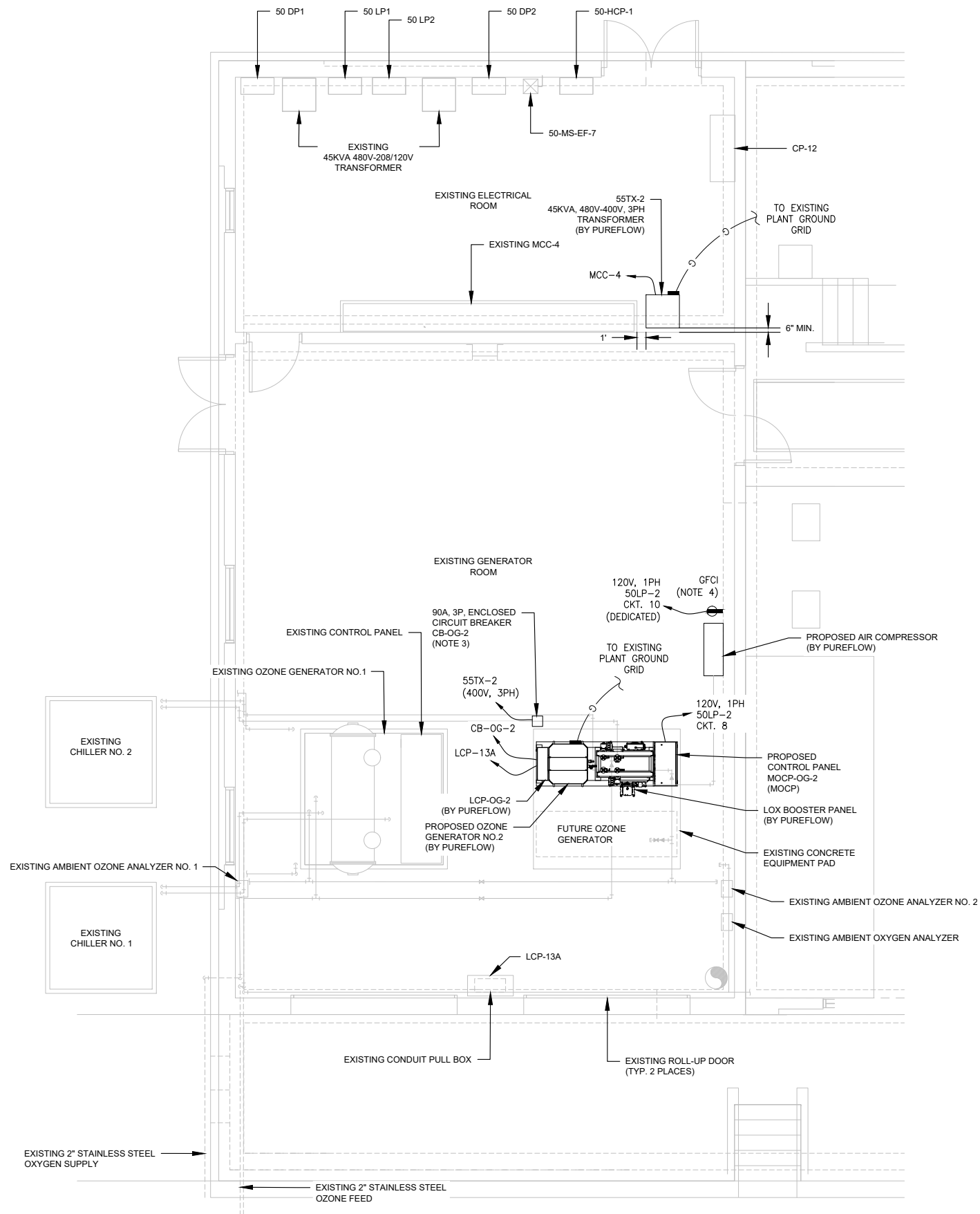
BAR BELOW IS 1" LONG FOR SCALES SHOWN ON THIS SHEET. IF NOT 1" LONG ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

ROCKDALE WATER RESOURCES
GEES MILL OZONE WTP GENERATOR
REPLACEMENT
ONE LINE DIAGRAM

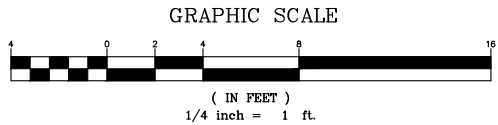
E-3



EDEC, INC.
4120 CHATTAHOOCHEE TRACE
SUITE A
DULUTH, GEORGIA 30097
TEL. (770) 493-8685



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



- NOTES:
1. THE CONTRACTOR SHALL GROUND ALL METAL STRUCTURES/SURFACES TO THE LOCAL GROUNDING SYSTEM.
 2. THE CONTRACTOR SHALL USE #2 AWG BARE COPPER GROUND WIRE FOR ALL THE REQUIRED GROUNDING CONNECTIONS TO THE NEW EQUIPMENT, STRUCTURES, ETC. AS REQUIRED BY NEC. SEE DETAIL DWG. E-6 FOR GROUND INSTALLATION DETAIL.
 3. THE CONTRACTOR SHALL INSTALL THE ENCLOSED CIRCUIT BREAKER NEMA 4X SS RATED ON THE UNI-STRUT RACK. SEE DETAIL DWG. E-6 FOR INSTALLATION DETAIL.
 4. THE CONTRACTOR SHALL PROVIDE 120V, 1P GFCI RECEPTACLE FOR THE SUPPLEMENTAL NITROGEN AIR COMPRESSOR. SEE DWG. E-3 FOR CONNECTION IN THE EXISTING PANELBOARD.



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PROJECT DATE: MARCH 2025	
REVISION	DATE

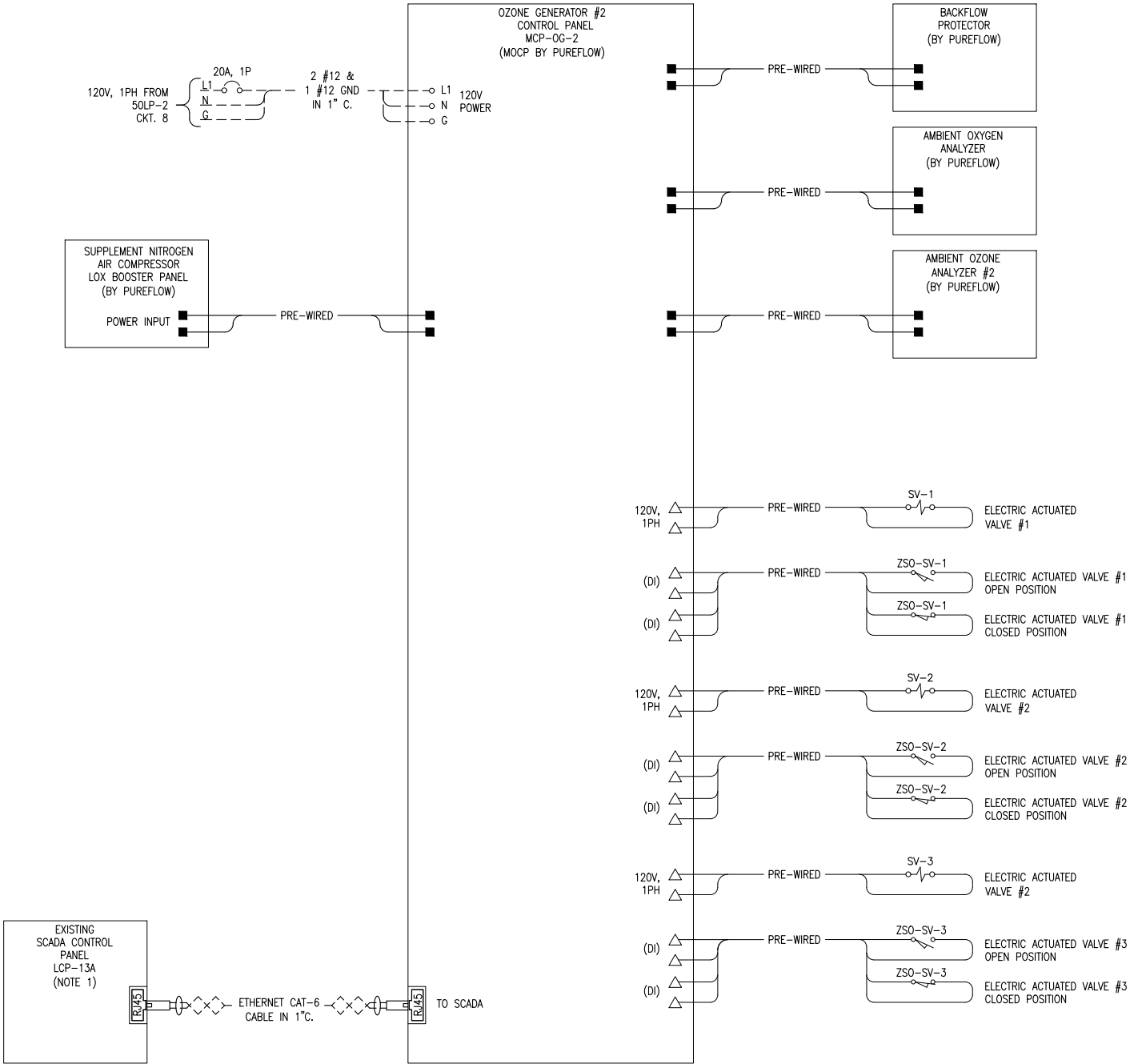
DESIGNED BY:	VC
DRAWN BY:	VC
REVIEWED BY:	AZ

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ROCKDALE WATER RESOURCES
**GEES MILL OZONE WTP GENERATOR
REPLACEMENT**
ELECTRICAL PLAN



EDEC, INC.
4120 CHATTAHOOCHEE TRACE
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DULUTH, GEORGIA 30097
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- NOTES:
- SCADA SYSTEM INTEGRATOR SHALL MODIFY THE EXISTING SCADA PANEL TO ACCOMMODATE ETHERNET COMM LINK, ADD/MODIFY HMI SCREENS AND PROGRAM PLC AS REQUIRED FOR CONTROL AND MONITORING OF NEW OZONE GENERATOR SYSTEM.



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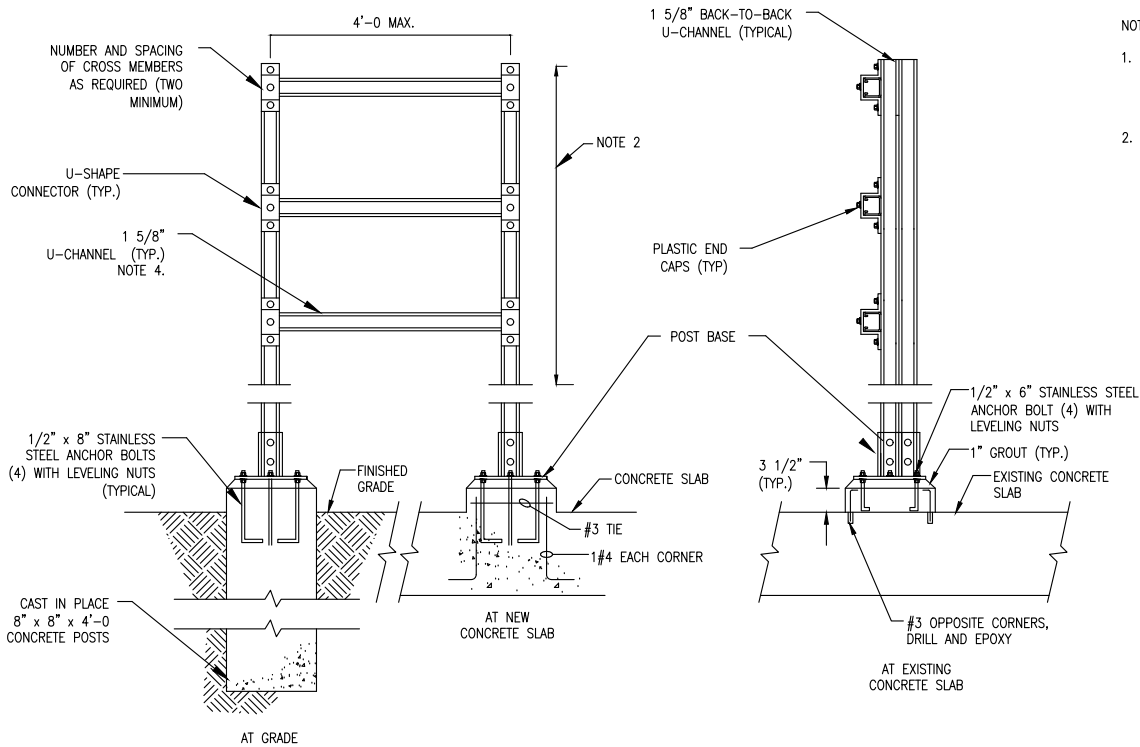
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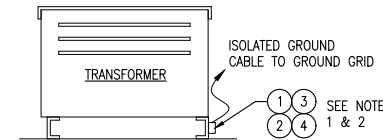
ROCKDALE WATER RESOURCES
GEES MILL OZONE WTP GENERATOR
REPLACEMENT
INTERCONNECTION WIRING DIAGRAM



EDEC, INC.
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1 TYPICAL UNI-STRUT INSTALLATION DETAL

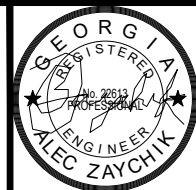


EQUIPMENT GROUNDING NOTES:

1. DRILL AND TAP (2) 3/8" U.N.C. HOLES IN EQUIPMENT OR USE NUT AND STAR WASHER ON INSIDE OF EQUIPMENT FRAME WHEN THICKNESS OF FRAME IS LESS THAN 3/8".
2. EQUIPMENT SURFACE MUST BE CLEANED TO BARE METAL AND CROUSE-HINDS TYPE STL CONDUCTING GREASE APPLIED PRIOR TO LUG ATTACHMENT

BILL OF MATERIAL			
ITEM	QTY	DESCRIPTION	REMARKS
1	1	COMPRESSION LUG, 2 HOLE	
2	2	BOLT, HEX HD 3/8" UNC X 3/4" LONG	
3	2-4	WASHER STAR LOCK 3/8"	
4	0-2	NUT, HEX 3/8" UNC	

2 FLOOR MOUNTED TRANSFORMER GROUNDING



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ROCKDALE WATER RESOURCES
GEES MILL OZONE WTP GENERATOR
REPLACEMENT
INSTALLATION AND GROUNDING DETAILS



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