



To: All Plan Holders of Record

From: CT Consultants, Inc.
For the Owner

Re: *Addendum No. 4*
Roaming Shores WWTP Headworks Design
Village of Roaming Shores

Date: May 20, 2024

This Addendum forms a part of the contract documents and modifies the original bidding documents dated May 2024 and all previous addenda, if any. Acknowledge receipt of this addendum in the space provided in the bid forms. Failure to do so may subject the bidder to disqualification.

PLANS

Add the enclosed plan sheet 6A to the Plan Set.

GC/TL:mep

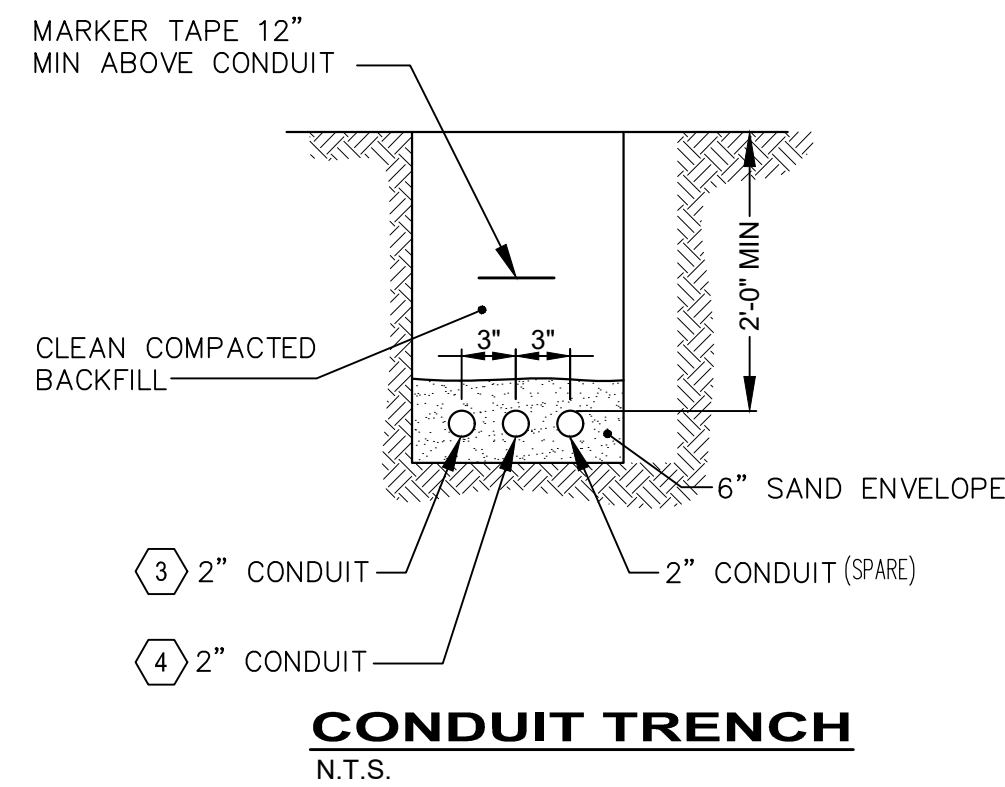
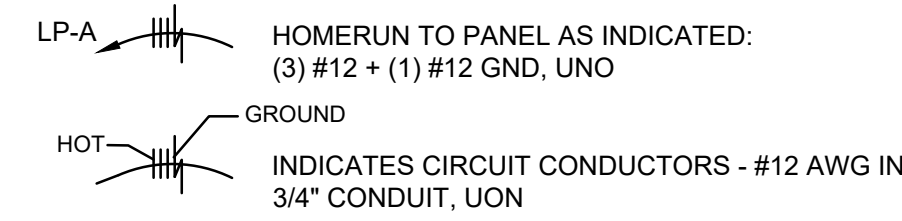
Enclosure

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ELECTRICAL SPECIFICATIONS

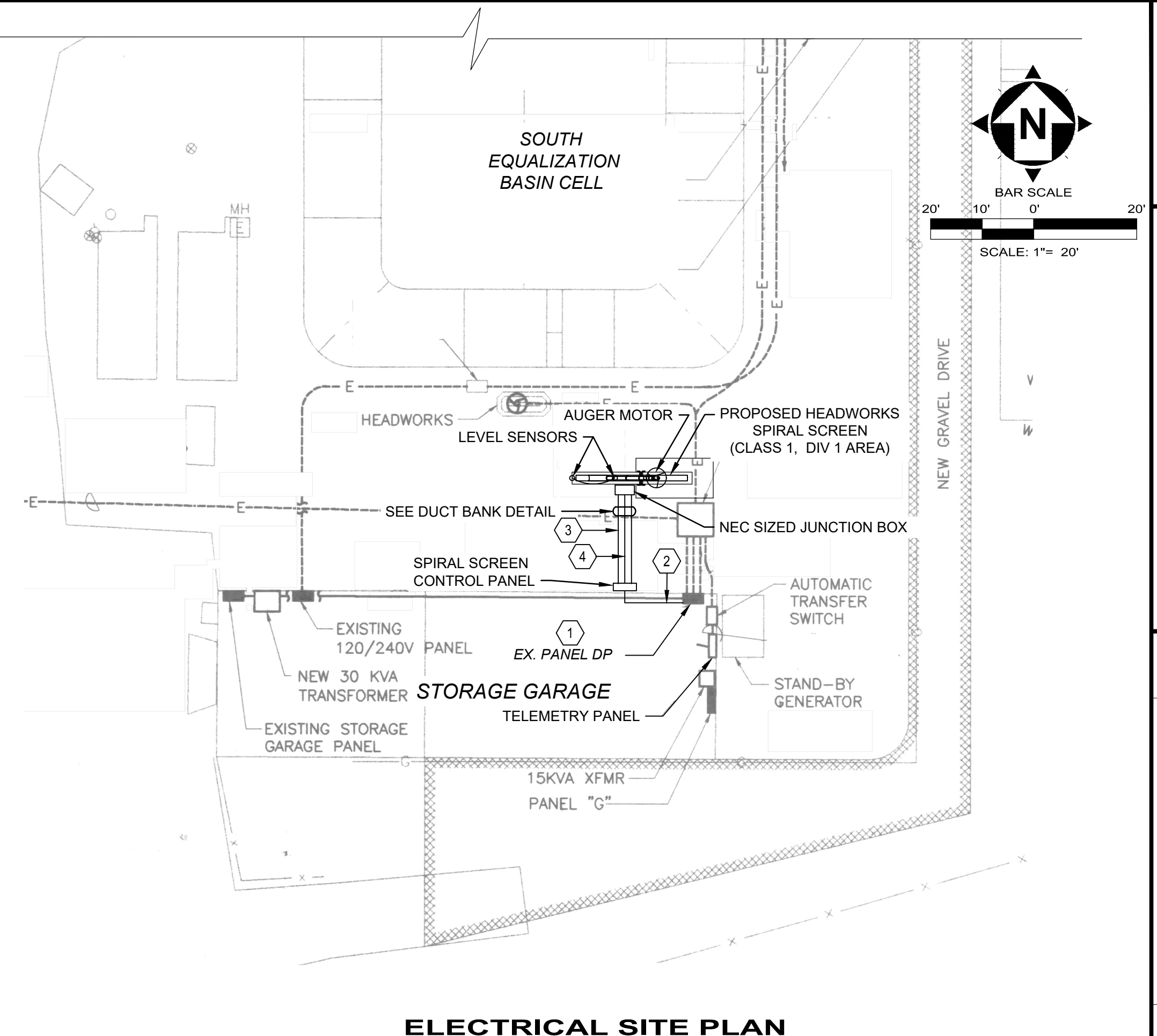
- THE ELECTRICAL CONTRACTOR SHALL APPLY FOR AND SECURE ALL COSTS AND CHARGES FOR PERMITS, CONSTRUCTION, AND MISCELLANEOUS WORK ASSOCIATED WITH AND REQUIRED FOR THE COMPLETION OF THE PROJECT ELECTRICAL WORK.
- THE ELECTRICAL CONTRACTOR SHALL ARRANGE FOR ALL INSPECTIONS OF ELECTRICAL WORK BY ALL INSPECTION AUTHORITIES HAVING JURISDICTION. COPIES OF INSPECTION REPORTS SHALL BE MADE AVAILABLE TO THE OWNER UPON REQUEST, AND THREE (3) COPIES OF THE APPROVED FINAL INSPECTION REPORT SHALL ACCOMPANY THE REQUEST FOR FINAL PAYMENT.
- ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, OHIO BUILDING CODE, LOCAL CODES AND ORDINANCES WHERE APPLICABLE, AND REQUIREMENTS OF O.S.H.A.
- ALL MATERIALS AND EQUIPMENT FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR SHALL BE NEW, U.L. LISTED OR LABELED, AND CONFORM TO NEMA AND ANSI STANDARD WHERE APPLICABLE.
- THE CONTRACTOR SHALL VISIT THE SITE AND FULLY FAMILIARIZE HIMSELF WITH ALL CONDITIONS WHICH AFFECT HIS WORK PRIOR TO BID. COORDINATE AND SCHEDULE WORK WITH OTHER TRADES TO ENSURE SATISFACTORY PERFORMANCE, AVOID DELAYS AND DUPLICATIONS AND MEET THE OWNER'S COMPLETION SCHEDULE FOR THE USE OF THE SITE.
- ALL WORK SHALL BE INSTALLED BY WORKMEN FULLY SKILLED IN THE WORK TO BE PERFORMED. REPAIR OR REPLACE EXISTING EQUIPMENT OR PROPERTY OF THE OWNER DAMAGED BY ELECTRICAL TRADES WORKMEN.
- THE ELECTRICAL CONTRACTOR SHALL GUARANTEE MATERIALS AND WORKMANSHIP PROVIDED BY HIM FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF OWNER'S FINAL ACCEPTANCE. REPAIR OR REPLACE ANY DEFECTIVE MATERIALS OR EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER WITHIN THE GUARANTEE PERIOD.
- ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT. CONDUIT SHALL BE EMT, INTERMEDIATE, OR RIGID GALVANIZED IN ACCORDANCE WITH AND AS PERMITTED BY THE NATIONAL ELECTRICAL CODE OR LOCAL/STATE CODES AS APPLICABLE. UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, 1" MINIMUM.
- FURNISH AND INSTALL PULL BOXES, JUNCTION, AND DEVICE BOXES OF SUITABLE CODE GAUGE AND SIZE. ALL TERMINATIONS IN IN-GROUND PULL BOXES SHALL BE LIQUID-TIGHT.
- ELECTRICAL WIRES SHALL BE MINIMUM #12 AWG, COPPER, 600 V RATED. #14 AWG COPPER SHALL BE PERMISSIBLE FOR CONTROL CIRCUITRY. AMPACITY RATINGS SHALL BE BASED UPON 75°C RATINGS.
 - #14, #12, AND #10 AWG CONDUCTORS SHALL BE "THHN/THWN".
 - #8 AND LARGER SHALL BE STRANDED "THHN/THWN".
- FLEXIBLE METAL CONDUIT INCLUDING LIQUIDTIGHT SHALL BE PERMITTED WHERE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND LOCAL CODE PROVISIONS. FLEXIBLE METAL CONDUIT SHALL CONTAIN A SEPARATE GROUNDING CONDUCTOR AND BE TERMINATED WITH APPROPRIATE FITTINGS.
- THE DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO DESCRIBE THE WORK REQUIRED. THE ELECTRICAL CONTRACTOR SHALL ACCURATELY FIELD MEASURE AND LAY OUT HIS WORK TO EFFECTIVELY ACHIEVE A STRUCTURALLY COORDINATED INSTALLATION WITH THE SITE LAYOUT AND OTHER TRADES.
- COORDINATE ALL SERVICE ENTRANCE REQUIREMENTS WITH THE LOCAL ELECTRIC UTILITY COMPANY TO ENSURE COMPLIANCE TO UTILITY COMPANY REQUIREMENTS. PROVIDE A COMPLETE GROUNDING SYSTEM.
- THE ELECTRICAL CONTRACTOR IS REQUIRED TO REVIEW THE SPECIFICATION PACKAGE AND COMPARE IT TO THE DRAWING PACKAGE. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THEIR BIDS, ALL REQUIREMENTS FOUND IN ALL SECTIONS OF SPECIFICATION DIVISIONS. IN THE EVENT OF A DISCREPANCY, THE CONTRACTOR SHALL PROVIDE THE BETTER QUALITY OR GREATER AMOUNT OF WORK IN THEIR BIDS. UPON AWARD OF THE CONTRACT, THE CONTRACTOR SHALL REQUEST GUIDANCE ON HOW TO PROCEED WITH CONSTRUCTION PRIOR TO ROUGH-IN.
- THIS PROJECT INVOLVES WORK AT AN INDUSTRIAL FACILITY AND THE CONTRACTOR IS EXPECTED TO PROVIDE CRAFTSMANSHIP REFLECTING THE NATURE OF THE FACILITY. CONDUITS IN PROCESS AREAS ARE TO BE SURFACE MOUNTED RIGID GALVANIZED STEEL (RGS). ALL CONDUITS ENTERING OR LEAVING A MOTOR CONTROL CENTER, CONTROL PANEL, VALVE ACTUATOR, INSTRUMENT, A BUILDING, OR A PANELBOARD SHALL BE MADE WATERTIGHT USING AN INFLATABLE SEALED BLADDER DUCT SEALING SYSTEM, RAYCHEM 'RAYFLATE' DUCT SEALING SYSTEM RDS OR APPROVED EQUAL. ALL HARDWARE IS TO BE STAINLESS STEEL UNLESS OTHERWISE DIRECTED.
- ALL ENCLOSURES ARE TO BE RATED AS FOLLOWS:
 - OUTDOORS: NEMA 4X (STAINLESS STEEL)
 - CLASSIFIED AREAS: NEMA 7
 - INDOORS (CORROSIVE AREAS): NEMA 4X (STAINLESS STEEL), UNLESS OTHERWISE NOTED
 - INDOORS (CONTROLLED ENVIRONMENT) NEMA 12, UNLESS OTHERWISE NOTED
- ELECTRICAL CONTRACTOR SHALL REVIEW ALL OTHER TRADES' CONSTRUCTION DOCUMENTS AND/OR COORDINATE WITH OTHER TRADES AND VERIFY IF THERE ARE ANY ADDITIONAL ELECTRICAL REQUIREMENTS NOT SHOWN ON ELECTRICAL DRAWINGS. COST FOR WORK SHOWN ON OTHER TRADES' DRAWINGS SHALL BE INCLUDED IN BASE BID. ALL FIELD WIRING AND TERMINATIONS OF PROCESS EQUIPMENT AND INSTRUMENTATION AND CONTROLS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. ALL CABLES AND WIRES PROVIDED BY VENDORS SHALL BE INSTALLED AND TERMINATED BY THE ELECTRICAL CONTRACTOR. WIRE ALL MISCELLANEOUS POWER AND CONTROLS AS REQUIRED TO PROVIDE A COMPLETE FUNCTIONING SYSTEM.
- ALL ELECTRICAL EQUIPMENT, DEVICES, CONDUIT, AND WIRING SHOWN ON THE ELECTRICAL DRAWINGS IS NEW UNLESS CLEARLY CALLED OUT AS EXISTING. ALL EXISTING ELECTRICAL EQUIPMENT THAT IS CALLED OUT TO BE REUSED SHALL BE INSPECTED IN THE FIELD BY THE ELECTRICAL CONTRACTOR AND THE CONSTRUCTION MANAGER TO DETERMINE ITS CONDITION PRIOR TO STARTING ANY WORK. PROVIDE DOCUMENTATION TO OWNER INDICATING CONDITION OF THE EXISTING EQUIPMENT, AND REUSE EXISTING EQUIPMENT ONLY IF ALL PARTIES AGREE THE CONDITION IS ACCEPTABLE. ALL EXISTING EQUIPMENT DETERMINED TO BE UNUSABLE SHALL BE REPLACED WITH LIKE KIND AS DIRECTED BY THE OWNER. ANY OF THE OWNERS EQUIPMENT DETERMINED TO BE REUSED THAT IS DAMAGED BY ANY CONTRACTOR DURING SWITCHOVER SHALL BE REPLACED BY THAT CONTRACTOR. ALL EXISTING EQUIPMENT IS THE PROPERTY OF THE OWNER (NOT THE CONTRACTOR) AND SHALL BE TREATED ACCORDINGLY.
- THE ELECTRICAL CONTRACTOR SHALL BE HELD RESPONSIBLE TO ENSURE ALL CONTROLLERS TO BE INSTALLED ARE CAPABLE OF LOCKOUT / TAGOUT PRIOR TO INSTALLATION.

ELECTRICAL PLAN SYMBOLS

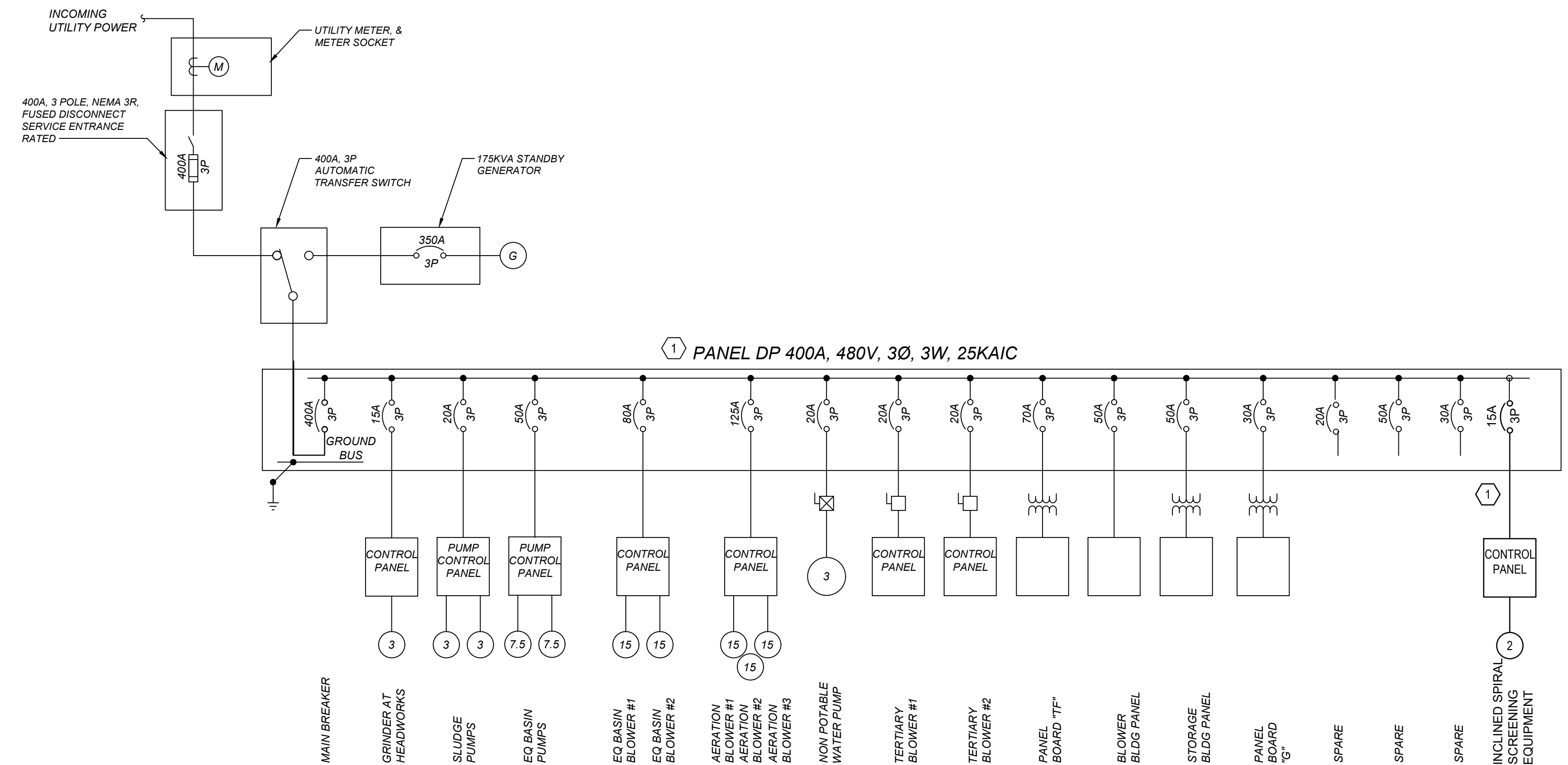


CODED NOTES:

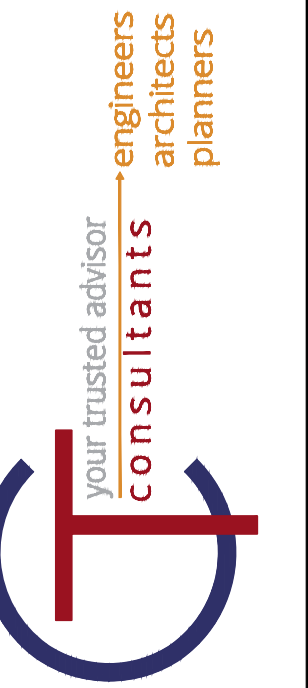
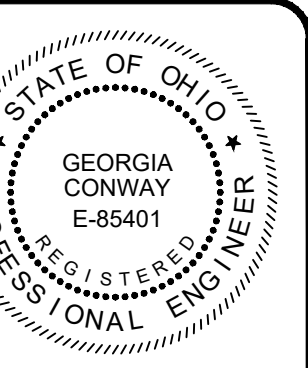
- EXISTING 400A, 480V, 3W PANEL DP PROVIDE NEW 15A, 3P BREAKER FOR NEW HEADWORK SPIRAL SCREEN CONTROL PANEL.
- 480V, 3PH, CIRCUIT FOR NEW HEADWORK SPIRAL SCREEN CONTROL PANEL FROM PANEL DP.
- 480V, 3PH CIRCUIT FOR NEW HEADWORK SPIRAL SCREEN MOTOR FROM SPIRAL SCREEN CONTROL PANEL. ROUT VIA CONDUIT TRENCH (SEE DETAIL THIS SHEET) BETWEEN SPIRAL SCREEN AND SPIRAL SCREEN CONTROL PANEL. PROVIDE CONDUIT SEALS AS REQUIRED BY THE NEC.
- LEVEL CONTROL (4 TO 20 mA) SIGNALS FROM (2) LEVEL SENSORS @ SPIRAL SCREEN TO SPIRAL SCREEN CONTROL PANEL. ROUT VIA CONDUIT TRENCH (SEE DETAIL THIS SHEET) BETWEEN SPIRAL SCREEN AND SPIRAL SCREEN CONTROL PANEL. PROVIDE CONDUIT SEALS AS REQUIRED BY THE NEC.



ELECTRICAL SITE PLAN



PANEL DP SINGLELINE DIAGRAM



NO	REVISION	DATE

ISSUED FOR:	BID SET	4-30-24
ISSUE DATE:	AS NOTED	TWL
SCALE:	DESIGNED BY:	JBB
DRAWN BY:	CHECKED BY:	GBC

ASHTABULA COUNTY
ROAMING SHORES WWTP HEADWORKS DESIGN
ASHTABULA COUNTY ROAMING SHORES, OHIO
 GENERAL - 00 SERIES
 ELECTRICAL SITE PLAN

PROJECT NO.	241188
DISCIPLINE	CIVIL
SHEET NAME	00G-06A
SHEET	OF
6A	14