INTERNATIONAL TRADE CENTER
GENERATOR REPLACEMENT

IN

the City of
Mobile, Alabama

250 N Water St #129
Mobile, Alabama 36602

BY

dell consulting
Electrical Engineering
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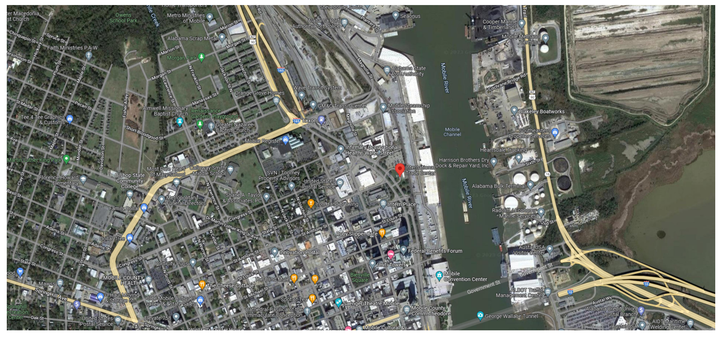
Dell Consulting project: 23-007



N

1 OVERALL SITE MAP
NOT TO SCALE

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SUMMARY OF WORK -
THE SCOPE OF THIS PROJECT CONSISTS OF:

THE EXISTING GENERATOR PROVIDING EMERGENCY STAND-BY POWER FOR THE INTERNATIONAL TRADE CENTER IS TO BE REPLACED NEW. THE GENERATOR HAS BEEN PROVIDED, INSTALLED ON A NEW PLATFORM, AND TESTED BY THE OWNER. THE ELECTRICAL CONTRACTOR IS TO MODIFY THE EXISTING ELECTRICAL DISTRIBUTION AS SHOWN ON THESE PLAN DOCUMENTS; INCLUDING INSTALLING NEW DISTRIBUTION EQUIPMENT AND MODIFYING THE SERVICE FEEDERS.

APA
PROJECT #11210

ALABAMA
PORT AUTHORITY
PORT OF MOBILE

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ALABAMA LICENSED PROFESSIONAL ENGINEER
No. 25105
12-31-2024
ANDREW W. MAURIN

NUMBER REVISION	REVISION DESCRIPTION

INTERNATIONAL TRADE CENTER GENERATOR REPLACEMENT (PROJECT #11210)
MOBILE ALABAMA

DESIGNED BY:
TMM

DRAWN BY:
TMM

CHECKED BY:
AWM

DATE:
12-31-2024

SHEET TITLE:
ELECTRICAL
TITLE SHEET

SHEET:
T1.1

ELECTRICAL LEGEND

DISTRIBUTION & POWER EQUIPMENT:

- PANELBOARD. MOUNT AS INDICATED. SEE PANELBOARD SCHEDULES.
- T — TRANSFORMER. MOUNT AS INDICATED. SEE XFMR SCHEDULE FOR SIZE AND TYPE.
- AUTOMATIC TRANSFER SWITCH.
- DUPLEX RECEPTACLE NEMA 5-20R. MOUNT 18" AFF UNLESS NOTED OTHERWISE. VERIFY DUPLEX MOUNTING REQUIREMENTS WITH ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN. SUBSCRIPT INDICATES AS FOLLOWS:
  - WP - GFI DEVICE WITH DIECAST WEATHERPROOF BACKBOX & DIECAST WEATHERPROOF (IN-USE) COVERPLATE. IN EXTERIOR LOCATIONS MOUNT 30" AFG. WEATHERPROOF OUTLET BOX HOODS ARE TO BE LISTED AND IDENTIFIED AS "EXTRA-DUTY".

OTHER:

- (1) — SHEET NOTE TAG.
- (4LP1) — PANELBOARD, SWITCHBOARD, TRANSFORMER & ELECTRICAL EQUIPMENT IDENTIFICATION TAG.
- LEADERS.

ELECTRICAL SPECIFICATIONS

1. GENERAL ELECTRICAL:
   - 1.1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE ELECTRICAL SYSTEM AS INDICATED WITHIN THESE DRAWINGS. ALL WORK SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES AND WITH MANUFACTURER'S RECOMMENDATIONS.
   - 1.2. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND MECHANICAL DRAWINGS PRIOR TO SUBMITTING HIS BID. THE CONTRACTOR WILL BE REQUIRED TO FURNISH, INSTALL AND CONNECT ALL ITEMS AS INDICATED ON THE DRAWINGS.
   - 1.3. THE ARCHITECT SHALL BE NOTIFIED OF ANY CONFLICTS, OR INTERFERENCES THAT OCCUR BETWEEN INDIVIDUAL DRAWINGS.
   - 1.4. ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED IN A NEAT, FIRST CLASS, WORKMANLIKE MANNER, TO THE APPROVAL OF THE ARCHITECT/ENGINEER AND GOVERNING AUTHORITIES.
   - 1.5. IN ADDITION TO THE MANUFACTURERS STANDARD GUARANTEES, THE CONTRACTOR SHALL GUARANTEE ALL MATERIALS, EQUIPMENT AND WORKMANSHIP AGAINST DEFECTS FOR TWO YEARS FROM THE DATE OF FINAL ACCEPTANCE, AND SHALL CORRECT ANY DEFECTS AT NO ADDITIONAL COST TO THE OWNER. ALL LAMPS SHALL BE GUARANTEED FOR 30 DAYS AFTER ACCEPTANCE.
   - 1.6. THE LOADS SHOWN FOR APPLIANCES AND EQUIPMENT ARE BASED ON DESIGN INFORMATION. THE CONTRACTOR SHALL VERIFY ALL APPLIANCE LOADS PRIOR TO RUNNING THE CIRCUIT. THE MINIMUM CIRCUIT REQUIREMENTS SHALL BE BASED ON THE APPLIANCE NAMEPLATE VALUE OR CODE REQUIREMENTS, WHICHEVER IS MORE STRINGENT. ADDITIONAL COMPENSATION SHALL NOT BE ALLOWED FOR APPLIANCE MODIFICATIONS BY THE CONTRACTOR.
   - 1.7. PRIOR APPROVAL: PRIOR APPROVAL SHALL BE REQUIRED FOR ANY MANUFACTURER OTHER THAN THOSE LISTED FOR ALL SPECIFIED ITEMS IN THESE DRAWINGS. SUBMIT ALL REQUESTS FOR PRIOR APPROVAL 2 WEEKS PRIOR TO BID OPENING. ENGINEER'S APPROVAL WILL BE IN THE FORM OF AN ADDENDUM.

2. CODES & STANDARDS:
   - 2.1. INSTALLATION AND MATERIALS SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF THE FOLLOWING CODES & STANDARDS:
     - 2.1.1. NATIONAL ELECTRICAL CODE.
     - 2.1.2. NFPA 72. NATIONAL FIRE PROTECTION CODE.
     - 2.1.3. INTERNATIONAL BUILDING CODE.
     - 2.1.4. INTERNATIONAL ENERGY CONSERVATION CODE.
     - 2.1.5. NFPA 101.
     - 2.1.6. ADA .
     - 2.1.7. ANSI.
     - 2.1.8. NEMA.
     - 2.1.9. OSHA.
     - 2.1.10. UL.

3. ALTERATIONS & ADDITIONS TO EXISTING WORK:
   - 3.1. PROVIDE ALL NECESSARY ADDITIONS AND ALTERATIONS TO EXISTING WORK AS REQUIRED TO PROVIDE AND MAINTAIN A COMPLETE AND PROPER ELECTRICAL INSTALLATION.
   - 3.2. AS NECESSARY, RELOCATE EXISTING ELECTRICAL WORK SO OTHER TRADES CAN PURSUE THEIR WORK.
   - 3.3. MAINTAIN POWER TO EXISTING PORTIONS OF BUILDINGS FED FROM OR THROUGH AREA IN SCOPE OF THIS CONTRACT.
   - 3.4. COORDINATE ALL REQUIRED OUTAGES WITH OWNER.

4. BASIC MATERIALS & METHODS:
   - 4.1. ALL POWER AND DISTRIBUTION CABLING SHALL BE COPPER TYPE THWN/THHN.
   - 4.2. ALL ELECTRICAL EQUIPMENT, DEVICES, ETC. LOCATED OUTDOORS SHALL BE WEATHERPROOF.
   - 4.3. CONDUIT ROUTINGS AND DEVICE/EQUIPMENT LOCATIONS SHOWN ARE DIAGRAMMATIC ONLY, CONTRACTOR SHALL FIELD ROUTE AND LOCATE AS REQUIRED. CONDUIT ROUTINGS SHALL BE PARALLEL OR PERPENDICULAR TO BUILDING LINES.
   - 4.4. COORDINATE ALL ELECTRICAL WORK WITH OTHER TRADES AND STRUCTURAL COMPONENTS.
   - 4.5. THE CONDUIT MATERIAL SHALL BE AS FOLLOWS:
     - 4.5.1. RISER FROM 36" BELOW GRADE - PVC-COATED RGS.
     - 4.5.2. ABOVE GRADE SUBJECT TO PHYSICAL ABUSE - PVC-COATED RGS.
   - 4.6. CONDUIT FITTINGS SHALL BE AS FOLLOWS:
     - 4.6.1. RGS - THREADED PVC-COATED GALVANIZED STEEL.
     - 4.6.2. PVC - PVC APPROVED FOR THE USE.
   - 4.7. ALL SIDEWALKS AND PARKING LOT ASPHALT AREAS THAT ARE CUT DUE TO NEW ELECTRICAL SERVICES SHALL BE REPAIRED TO MATCH EXISTING.
   - 4.8. ALL DIMENSIONS TO DEVICES AFF SHALL BE TO CENTERLINE UNLESS NOTED OTHERWISE.
   - 4.9. COORDINATE LOCATIONS OF ELECTRICAL EQUIPMENT, DEVICES, OUTLETS, FIXTURES, ETC., WITH ELECTRICAL PLANS.

5. GROUNDING & BONDING:
   - 5.1. PROVIDE AN INSULATED EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS.
   - 5.2. GROUND RODS SHALL BE 3/4"X20' COPPERCLAD STEEL.
   - 5.3. BELOW GRADE CONNECTIONS SHALL BE EXOTHERMIC TYPE.
   - 5.4. ALL CABLES SHALL BE COPPER, ALL BOLTED CONNECTIONS SHALL BE BRONZE.
   - 5.5. PROVIDE A #6AWG MINIMUM GROUND IN EMT FROM EACH TELCOM BACKBOARD TO THE MAIN ELECTRICAL SERVICE GROUND.
   - 5.6. WHERE AVAILABLE, BOND TO BUILDING STRUCTURAL STEEL, BUILDING FOUNDATION STEEL, METAL WATER SERVICE PIPING.
   - 5.7. PROVIDE THREE 20' GROUND RODS IN TRIANGLE ARRANGEMENT ON 20' CENTERS FOR MADE ELECTRODE SYSTEM. MEASURE RESISTANCE AND ENSURE <25 OHMS.

6. IDENTIFICATION:
   - 6.1. PROVIDE ENGRAVED 1"X3" PHENOLIC LABELS FOR ALL PANELBOARDS, SAFETY SWITCHES, TRANSFORMERS, TRANSFER SWITCHES, CABINETS, ETC.

ABBREVIATIONS

A	AMPS	MCE	MAIN COMMUNICATIONS EQUIPMENT ROOM
AC	ABOVE COUNTER	MCM	THOUSAND CIRCULAR MILS
AF	AMP FRAME	MH	MANHOLE
AFF	ABOVE FINISHED FLOOR	MIN	MINIMUM
AFG	ABOVE FINISHED GRADE	MISC	MISCELLANEOUS
AHU	AIR HANDLING UNIT	MLO	MAIN LUGS ONLY
AL	ALUMINUM	MNT	MOUNTING HEIGHT
ARCH	ARCHITECT OR ARCHITECTURAL	MTG	MOUNTING
AT	AMP TRIP	MTS	MANUAL TRANSFER SWITCH
ATS	AUTOMATIC TRANSFER SWITCH	MV	MEDIUM VOLTAGE
ATU	AIR TERMINAL UNIT	N1	NEMA 1
AWG	AMERICAN WIRE GAUGE	N3R	NEMA 3R
BAS	BUILDING AUTOMATION SYSTEM	N/A	NOT APPLICABLE
BFG	BELOW FINISHED GRADE	NA	NOT APPLICABLE
BJ	BONDING JUMPER	NEC	NATIONAL ELECTRICAL CODE
BKR	CIRCUIT BREAKER	NESC	NATIONAL ELECTRICAL SAFETY CODE
BLDG	BUILDING	NEU	NEUTRAL
BOD	BASIS OF DESIGN	OCPD	OVERCURRENT PROTECTION DEVICE
C	CONDUIT	OFOI	OWNER FURNISHED OWNER INSTALLED
C/B	CIRCUIT BREAKER	OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
CL	CURRENT LIMITING	OH	OVERHEAD
C/L	CENTERLINE	OHE	OVERHEAD ELECTRIC
CLG	CEILING	OHP	OVERHEAD PRIMARY
CKT	CIRCUIT	OHS	OVERHEAD SECONDARY
CT	CURRENT TRANSFORMER	PBD	PANELBOARD
CU	COPPER	PF	POWER FACTOR
DDC	DIRECT DIGITAL CONTROL	PNL	PANELBOARD
DEMO	DEMOLISH	PT	POTENTIAL TRANSFORMER
EC	ELECTRICAL CONTRACTOR	PWR	POWER
EGC	EQUIPMENT GROUNDING CONDUCTOR	REC	RECEPTACLE
ELEC	ELECTRICAL	REQD	REQUIRED
EMGB	ELECTRICAL MAIN GROUNDING BUSBAR	RM	ROOM
EF	EXHAUST FAN	RGS	RIGID GALVANIZED STEEL CONDUIT
EX	EXISTING TO REMAIN	RNC	RIGID NON-METALLIC CONDUIT
EXT	EXTERIOR	RVSS	REDUCED VOLTAGE SOLID STATE
EWC	ELECTRIC WATER COOLER	SA	SURGE ARRESTER
EMT	ELECTRICAL METALLIC TUBING	SCA	SHORT CIRCUIT AMPS
EQUIP	EQUIPMENT	SF	SUPPLY FAN
FMC	FLEXIBLE METAL CONDUIT	SPEC	SPECIFICATION
FACP	FIRE ALARM SYSTEM CONTROL PANEL	SWBD	SWITCHBOARD
FU	FUSE	SWGR	SWITCHGEAR
F/A	FIRE ALARM	TBB	TELECOMMUNICATIONS BONDING BACKBONE
FLA	FULL LOAD AMPS	TR	TELECOMMUNICATIONS ROOM
FLR	FLOOR	TGB	TELECOMMUNICATIONS GROUNDING BUSBAR
FVNR	FULL VOLTAGE NON-REVERSING	TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
GFI	GROUND FAULT INTERRUPTER	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
G	GROUND (OR GFI FOR RECEPTACLE SUBSCRIPT)	TYP	TYPICAL
GC	GENERAL CONTRACTOR	UFR	UNDERFLOOR RACEWAY
GND	GROUND	UG	UNDERGROUND
GEC	GROUNDING ELECTRODE CONDUCTOR	UGE	UNDERGROUND ELECTRIC
HH	HANDHOLE	UGP	UNDERGROUND PRIMARY
HOA	HAND-OFF-AUTOMATIC	UGS	UNDERGROUND SECONDARY
HP	HEAT PUMP OR HORSEPOWER	UL	UNDERWRITERS' LABORATORIES
HVAC	HEATING, VENTILATION & AIR-CONDITIONING	UNO	UNLESS NOTED OTHERWISE
IG	ISOLATED GROUND	UPS	UNINTERRUPTIBLE POWER SUPPLY
IMC	INTERMEDIATE METAL CONDUIT	V	VOLT
JB	JUNCTION BOX	VA	VOLT-AMPERES
k	KILO	VAR	VOLT-AMPERES REACTIVE
kAIC	KILO-AMPERE INTERRUPTING CAPABILITY	VAV	VARIABLE AIR VOLUME UNIT
kCMIL	THOUSAND CIRCULAR MILS	W	WATTS
LCP	LIGHTING CONTROL PANEL	WAO	WORK AREA OUTLET
LTG	LIGHTING	WP	WEATHERPROOF
LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT	WSR	WITHSTAND RATING
LV	LOW VOLTAGE	XFMR	TRANSFORMER
MAX	MAXIMUM	XP	EXPLOSION PROOF
MCA	MINIMUM CIRCUIT AMPACITY	ϕ	PHASE
MCC	MOTOR CONTROL CENTER	72°	DEGREES
		Δ	DELTA
		Ω	OHMS

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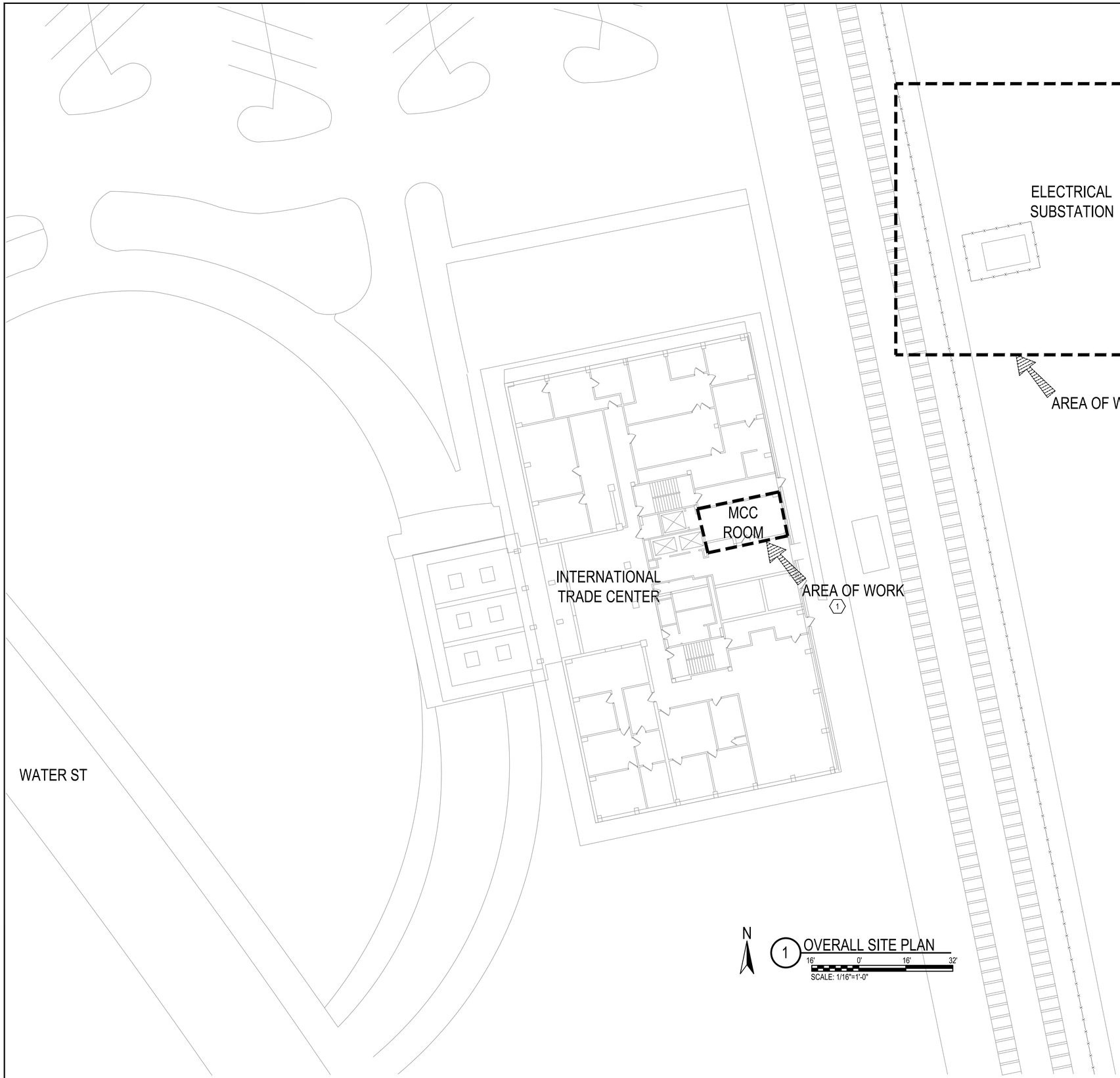
DRAWN BY: TMM
CHECKED BY: AWM
DATE: 12-31-2024

SHEET TITLE: ELECTRICAL LEGEND & SPECIFICATIONS

SHEET: E1.1



SHEET NOTES

1. LOCATION OF THE INTERIOR ELECTRICAL ROOM. THE EXISTING 1200A BUILDING MOTOR CONTROL CENTER IS LOCATED IN THIS SPACE.

WORK SEQUENCE

PRE-OUTAGE:

1. INSTALL ALL ELECTRICAL EQUIPMENT ON THE NEW PLATFORM.
2. POSITION RENTAL GENERATOR (200kW 480Y/277V DIESEL GENERATOR) ON THE NORTH SIDE OF THE INTERNATIONAL TRADE CENTER AND PREPARE FOR TEMPORARY CONNECTION TO THE MAIN MOTOR CONTROL CENTER.

NOTE: ONCE THE TEMPORARY GENERATOR IS IN PLACE, DE-ENERGIZE AND DISCONNECT CONDUCTORS SERVING THE INTERNATIONAL TRADE CENTER MAIN MOTOR CONTROL CENTER IN THE EXISTING MAIN SWITCHBOARD. THE CONDUCTORS ARE TO BE COILED, SECURED, AND TAPED FOR RECONNECTION TO NEW EQUIPMENT. RE-ENERGIZE THE ITC MAIN MCC BY TERMINATING THE TEMPORARY GENERATOR CABLING ON THE MAIN BREAKER PRIMARY LUGS.

OUTAGE:

MEDIUM VOLTAGE:

1. DISCONNECT EXISTING MEDIUM VOLTAGE CABLING FROM THE EXISTING MEDIUM VOLTAGE SWITCH, PULL BACK CONDUCTORS THROUGH CONDUIT, AND TEMPORARILY SPLICE IN THE EXISTING ELECTRICAL MANHOLE.

LOW VOLTAGE:

1. DEMOLISH EXISTING ELECTRICAL EQUIPMENT AND ASSOCIATED CONCRETE PAD.
2. INSTALL A NEW ELECTRICAL VAULT AND IN-GROUND JUNCTION BOX.
3. FORM NEW DUCTBANKS WITH CONDUITS AS SHOWN ON THE PLAN DRAWINGS.
4. INSTALL ALL CONDUIT AND WIRING REQUIRED TO RE-ENERGIZE THE INTERNATIONAL TRADE CENTER.

MEDIUM VOLTAGE:

1. REMOVE TEMPORARY SPLICES FROM MEDIUM VOLTAGE CABLING IN ELECTRICAL MANHOLE.
2. EXTEND, MODIFY, AND/OR RE-ROUTE CONDUCTORS TO THE NEW ELECTRICAL VAULT.
3. SPLICE MEDIUM VOLTAGE CONDUCTORS AND EXTEND THROUGH THE NEW DUCTBANK AND CONTINUE TO THE NEW MEDIUM VOLTAGE SWITCH ON THE NEW PLATFORM.

ENERGIZE ELECTRICAL SYSTEM:

NOTE: UPON INSTALLATION OF THE LOW VOLTAGE AND MEDIUM VOLTAGE SYSTEM COMPONENTS AND WIRING, THE ELECTRICAL CONTRACTOR IS TO REMOVE THE INTERNATIONAL TRADE CENTER FROM GENERATOR POWER AND RETURN TO NORMAL OPERATION.

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ALABAMA LICENSED PROFESSIONAL ENGINEER ANDREW W. MAURIN NO. 25105
12-31-2024

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MOBILE ALABAMA

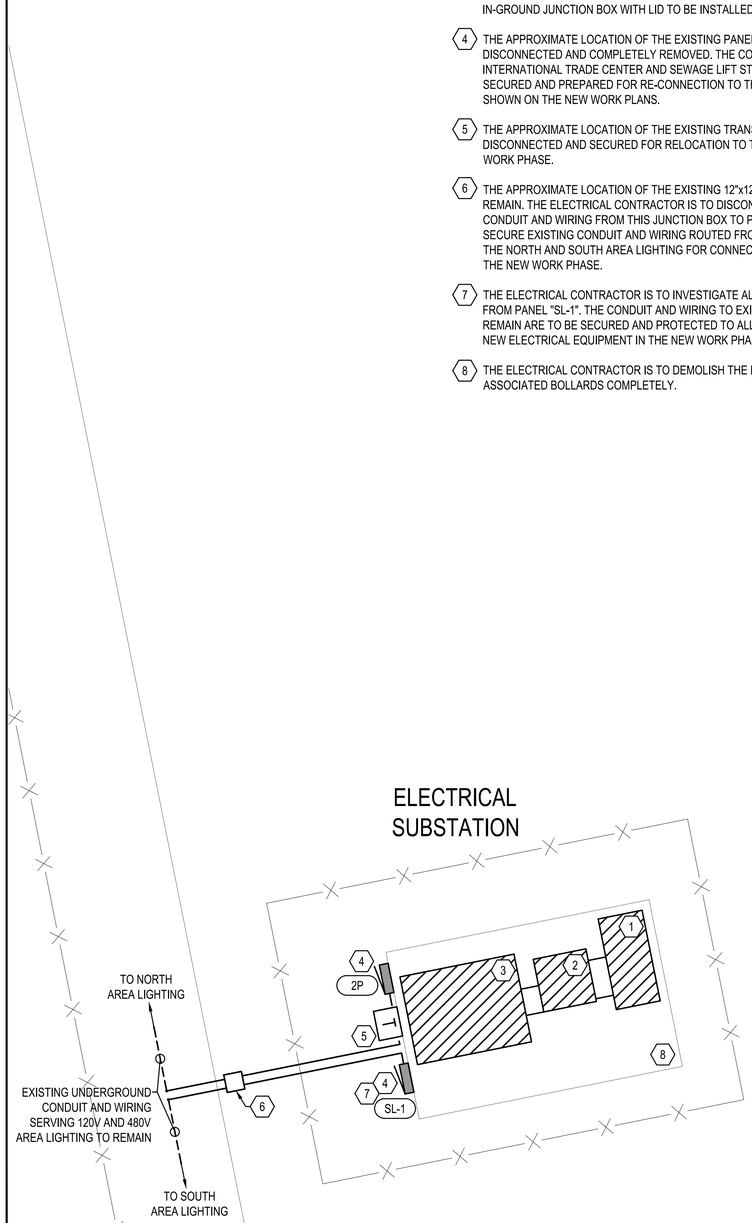
DESIGNED BY: TMM
DRAWN BY: TMM
CHECKED BY: AWM
DATE: 12-31-2024

SHEET TITLE: ELECTRICAL OVERALL SITE PLAN

SHEET: E2.1

DEMOLITION SHEET NOTES

1. THE APPROXIMATE LOCATION OF THE EXISTING MEDIUM VOLTAGE SWITCH CABINET TO BE DISCONNECTED AND REMOVED.
2. THE APPROXIMATE LOCATION OF THE EXISTING 4160-480Y/277V UTILITY TRANSFORMER TO BE DISCONNECTED AND REMOVED.
3. THE APPROXIMATE LOCATION OF THE EXISTING 1200A 480Y/277V SWITCHBOARD TO BE DISCONNECTED AND REMOVED. THE ELECTRICAL CONTRACTOR IS TO EXCAVATE TO A DEPTH OF 3' BELOW THE EXISTING GRADE TO ALLOW THE NEW IN-GROUND JUNCTION BOX WITH LID TO BE INSTALLED WITH THE TOP AT GRADE.
4. THE APPROXIMATE LOCATION OF THE EXISTING PANELBOARD TO BE DISCONNECTED AND COMPLETELY REMOVED. THE CONDUCTORS TO THE INTERNATIONAL TRADE CENTER AND SEWAGE LIFT STATION #5 ARE TO BE SECURED AND PREPARED FOR RE-CONNECTION TO THE NEW DISTRIBUTION AS SHOWN ON THE NEW WORK PLANS.
5. THE APPROXIMATE LOCATION OF THE EXISTING TRANSFORMER TO BE DISCONNECTED AND SECURED FOR RELOCATION TO THE PLATFORM IN THE NEW WORK PHASE.
6. THE APPROXIMATE LOCATION OF THE EXISTING 12"x12" PVC JUNCTION BOX TO REMAIN. THE ELECTRICAL CONTRACTOR IS TO DISCONNECT AND REMOVE THE CONDUIT AND WIRING FROM THIS JUNCTION BOX TO PANELS "2P" AND "SL-1". SECURE EXISTING CONDUIT AND WIRING ROUTED FROM THE JUNCTION BOX TO THE NORTH AND SOUTH AREA LIGHTING FOR CONNECTION TO NEW CIRCUITS IN THE NEW WORK PHASE.
7. THE ELECTRICAL CONTRACTOR IS TO INVESTIGATE ALL EXISTING CIRCUITS FED FROM PANEL "SL-1". THE CONDUIT AND WIRING TO EXISTING ELECTRICAL LOADS TO REMAIN ARE TO BE SECURED AND PROTECTED TO ALLOW FOR CONNECTION TO NEW ELECTRICAL EQUIPMENT IN THE NEW WORK PHASE.
8. THE ELECTRICAL CONTRACTOR IS TO DEMOLISH THE EXISTING FENCE, SLAB, AND ASSOCIATED BOLLARDS COMPLETELY.



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1 EXISTING ELECTRICAL SUBSTATION POWER PLAN

4' 0' 4' 8'

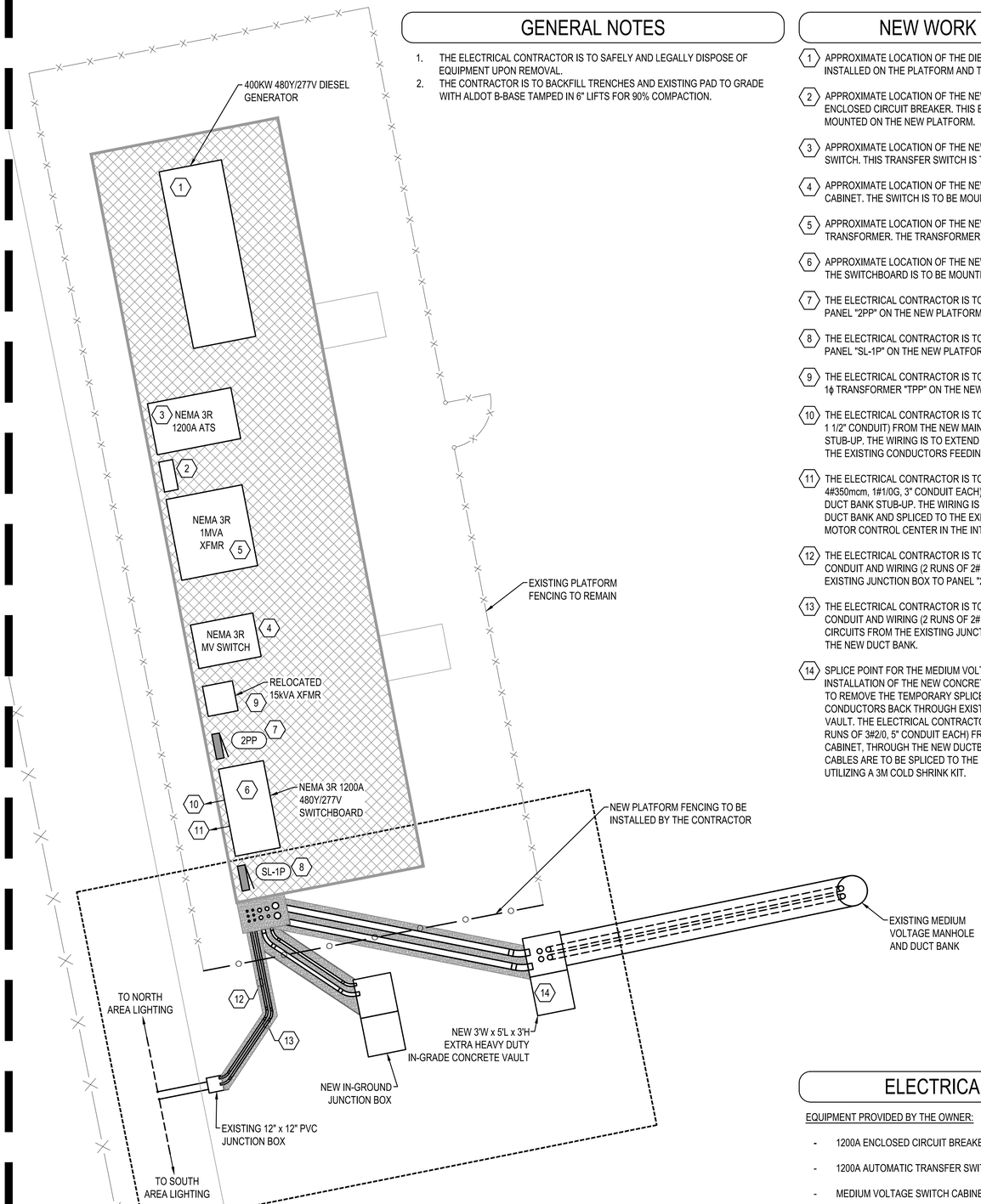
SCALE: 1/4"=1'-0"

GENERAL NOTES

1. THE ELECTRICAL CONTRACTOR IS TO SAFELY AND LEGALLY DISPOSE OF EQUIPMENT UPON REMOVAL.
2. THE CONTRACTOR IS TO BACKFILL TRENCHES AND EXISTING PAD TO GRADE WITH ALDOT B-BASE TAMPED IN 6" LIFTS FOR 90% COMPACTION.

NEW WORK SHEET NOTES

1. APPROXIMATE LOCATION OF THE DIESEL GENERATOR. THE GENERATOR HAS BEEN INSTALLED ON THE PLATFORM AND TESTED BY THE OWNER.
2. APPROXIMATE LOCATION OF THE NEW NEMA 3R 1200A SERVICE ENTRANCE RATED ENCLOSED CIRCUIT BREAKER. THIS ENCLOSED CIRCUIT BREAKER IS TO BE MOUNTED ON THE NEW PLATFORM.
3. APPROXIMATE LOCATION OF THE NEW NEMA 3R 1200A AUTOMATIC TRANSFER SWITCH. THIS TRANSFER SWITCH IS TO BE MOUNTED ON THE PLATFORM.
4. APPROXIMATE LOCATION OF THE NEW NEMA 3R 600A MEDIUM VOLTAGE SWITCH CABINET. THE SWITCH IS TO BE MOUNTED ON THE NEW PLATFORM.
5. APPROXIMATE LOCATION OF THE NEW NEMA 3R 1MVA 4160-480Y/277V UTILITY TRANSFORMER. THE TRANSFORMER IS TO BE MOUNTED ON THE NEW PLATFORM.
6. APPROXIMATE LOCATION OF THE NEW NEMA 3R 1200A 480Y/277V 3ϕ SWITCHBOARD. THE SWITCHBOARD IS TO BE MOUNTED ON THE NEW PLATFORM.
7. THE ELECTRICAL CONTRACTOR IS TO INSTALL A NEW NEMA 3R 60A 120/240V 1ϕ PANEL "2PP" ON THE NEW PLATFORM.
8. THE ELECTRICAL CONTRACTOR IS TO INSTALL A NEW NEMA 3R 100A 480Y/277V 3ϕ PANEL "SL-1P" ON THE NEW PLATFORM.
9. THE ELECTRICAL CONTRACTOR IS TO MOUNT THE RELOCATED 15kVA 480-120/240V 1ϕ TRANSFORMER "TPP" ON THE NEW PLATFORM.
10. THE ELECTRICAL CONTRACTOR IS TO ROUTE NEW CONDUIT AND WIRING (4#2, 1#6G, 1 1/2" CONDUIT) FROM THE NEW MAIN SWITCHBOARD TO THE NEW DUCT BANK STUB-UP. THE WIRING IS TO EXTEND THROUGH THE DUCT BANK AND SPLICED TO THE EXISTING CONDUCTORS FEEDING THE EXISTING SEWAGE LIFT STATION #5.
11. THE ELECTRICAL CONTRACTOR IS TO ROUTE CONDUIT AND WIRING (3 RUNS OF 4#350mcm, 1#1/0G, 3" CONDUIT EACH) FROM THE MAIN SWITCHBOARD TO THE NEW DUCT BANK STUB-UP. THE WIRING IS TO EXTEND THROUGH THE UNDERGROUND DUCT BANK AND SPLICED TO THE EXISTING CONDUCTORS FEEDING THE EXISTING MOTOR CONTROL CENTER IN THE INTERNATIONAL TRADE CENTER.
12. THE ELECTRICAL CONTRACTOR IS TO EXTEND, MODIFY, AND/OR RE-ROUTE CONDUIT AND WIRING (2 RUNS OF 2#10, 1#10G, 1 1/2" CONDUIT EACH) FROM THE EXISTING JUNCTION BOX TO PANEL "2PP" ROUTED THROUGH THE NEW DUCT BANK.
13. THE ELECTRICAL CONTRACTOR IS TO EXTEND, MODIFY, AND/OR RE-ROUTE CONDUIT AND WIRING (2 RUNS OF 2#10, 1#10G, 1 1/2" CONDUIT EACH) FOR LIGHTING CIRCUITS FROM THE EXISTING JUNCTION BOX TO PANEL "SL-1P" ROUTED THROUGH THE NEW DUCT BANK.
14. SPLICE POINT FOR THE MEDIUM VOLTAGE CABLING. UPON COMPLETION OF THE INSTALLATION OF THE NEW CONCRETE VAULT, THE ELECTRICAL CONTRACTOR IS TO REMOVE THE TEMPORARY SPLICES IN THE ELECTRICAL MANHOLE AND PULL CONDUCTORS BACK THROUGH EXISTING CONDUITS TO THE NEW ELECTRICAL VAULT. THE ELECTRICAL CONTRACTOR IS TO ROUTE NEW CONDUIT AND WIRING (2 RUNS OF 3#2/0, 5" CONDUIT EACH) FROM THE NEW MEDIUM VOLTAGE SWITCH CABINET, THROUGH THE NEW DUCTBANK TO THE IN-GRADE CONCRETE VAULT. THE CABLES ARE TO BE SPLICED TO THE EXISTING CONDUCTORS FROM THE MANHOLE UTILIZING A 3M COLD SHRINK KIT.



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2 NEW WORK ELECTRICAL SUBSTATION POWER PLAN

4' 0' 4' 8'

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

ELECTRICAL EQUIPMENT

EQUIPMENT PROVIDED BY THE OWNER:

- 1200A ENCLOSED CIRCUIT BREAKER (SERVICE ENTRANCE RATED)
- 1200A AUTOMATIC TRANSFER SWITCH
- MEDIUM VOLTAGE SWITCH CABINET
- 4160-480Y/277V UTILITY TRANSFORMER
- 1200A MAIN SWITCHBOARD "MSB"
- 60A 480Y/277V PANEL "SL-1P"
- 100A 120-240V PANEL "2PP"
- 700 FEET OF #350kcmil WIRE
- 100 FEET OF #3/0 WIRE

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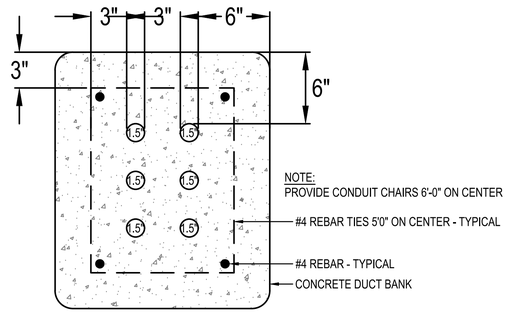
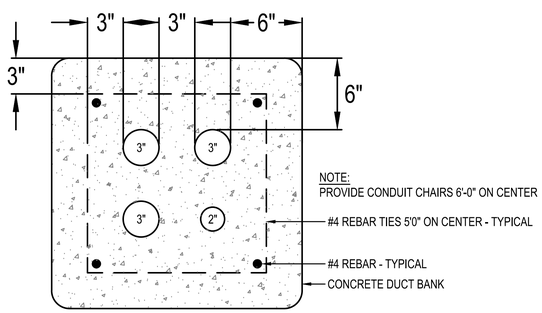
SHEET TITLE: ELECTRICAL EXISTING SUBSTATION POWER PLAN

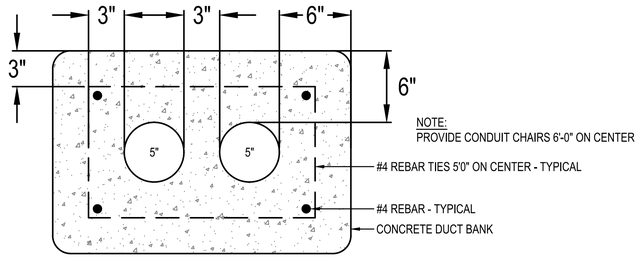
SHEET: E3.1



A LIGHTING DUCT BANK DETAIL
NOT TO SCALE



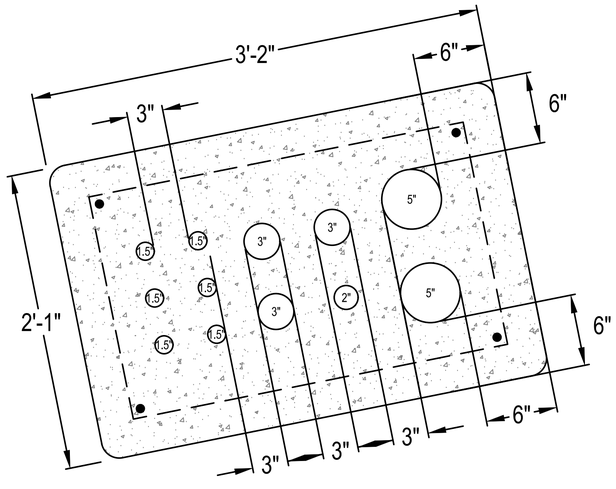
B ITC/LIFT STATION DUCT BANK DETAIL
NOT TO SCALE



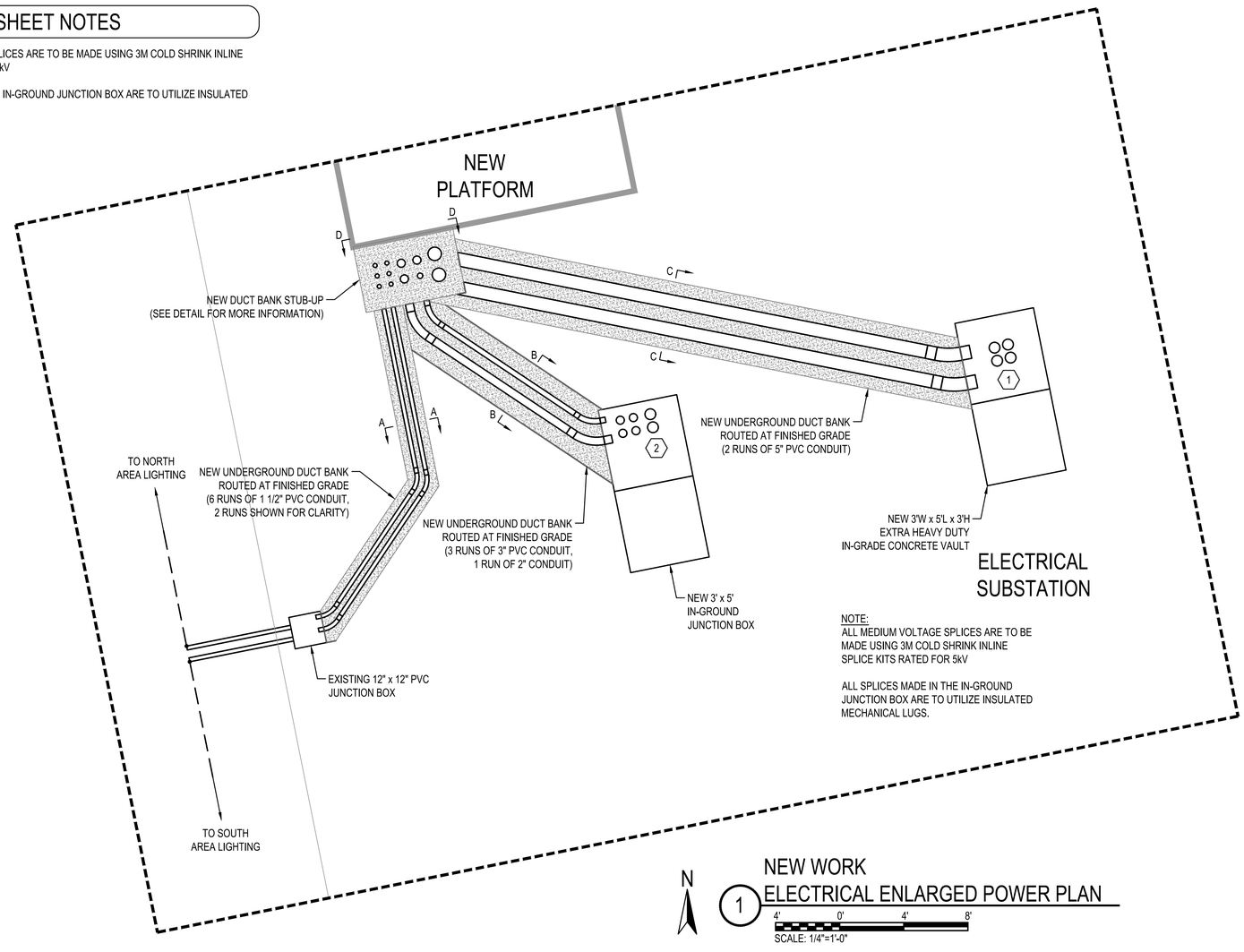
C MEDIUM VOLTAGE DUCT BANK DETAIL
NOT TO SCALE

SHEET NOTES

1. ALL MEDIUM VOLTAGE SPLICES ARE TO BE MADE USING 3M COLD SHRINK INLINE SPLICE KITS RATED FOR 5kV
2. ALL SPLICES MADE IN THE IN-GROUND JUNCTION BOX ARE TO UTILIZE INSULATED MECHANICAL LUGS.



D DUCT BANK STUB UP DETAIL
NOT TO SCALE



1 NEW WORK
ELECTRICAL ENLARGED POWER PLAN
4' 0' 4' 8'
SCALE: 1/4"=1'-0"

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DELL CONSULTING PROJECT: 23-007

ALABAMA LICENSED PROFESSIONAL ENGINEER
No. 25105
12-31-2024
ANDREW W. MAURIN

NUMBER REVISION	REVISION DESCRIPTION

INTERNATIONAL TRADE CENTER GENERATOR
REPLACEMENT (PROJECT #11210)
MOBILE ALABAMA

DESIGNED BY: TMM
DRAWN BY: TMM
CHECKED BY: AWM
DATE: 12-31-2024

SHEET TITLE: ELECTRICAL ENLARGED POWER PLAN

SHEET: E3.2

GENERAL NOTES

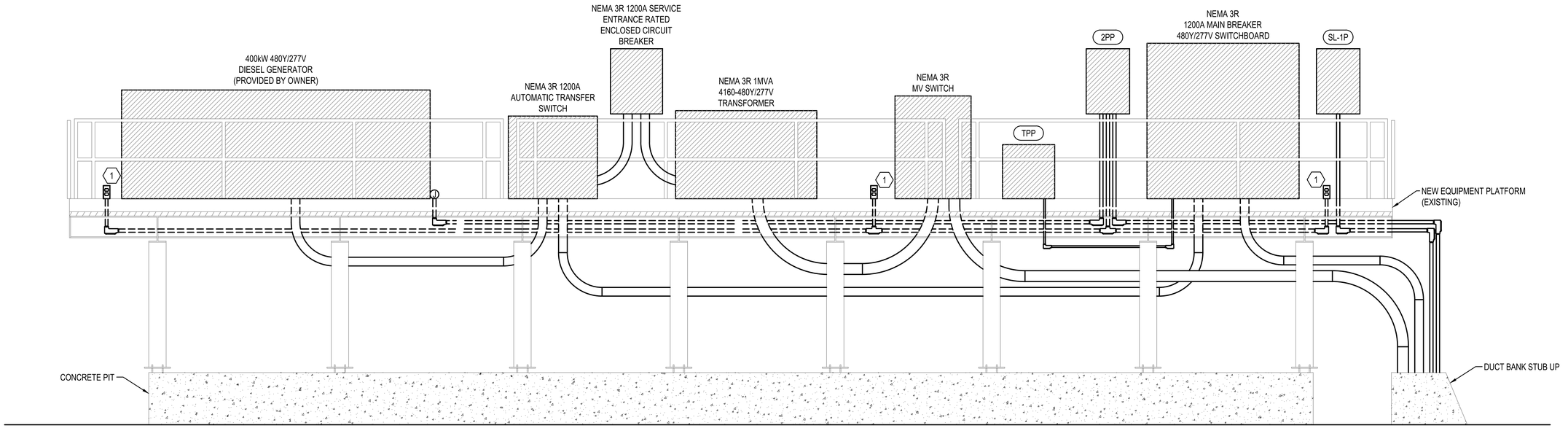
1. ALL CONDUIT AND CONDUIT FITTINGS ABOVE GROUND ARE TO BE PVC COATED AS INDICATED IN THE CABLE AND CONDUIT LEGEND.
2. ALL CONDUIT PENETRATIONS TO EQUIPMENT ON THE NEW PLATFORM ARE TO BE EQUIPPED WITH BONDING BUSHINGS.
3. ALL ELECTRICAL EQUIPMENT INSTALLED ON THE PLATFORM IS TO BE BONDED TO THE EXISTING PLATFORM GROUNDING ELECTRODE SYSTEM WITH #3/0 STRANDED BARE TINNED COPPER CONDUCTORS. CADWELD TO FRAME.

CABLE AND CONDUIT LEGEND

MV-105 CABLING:	#2/0 AWG PVC JACKET SHIELDED 133% INSULATION POWER CABLE 5kV (OKONITE OR APPROVED EQUAL)
CONDUIT:	PLASTIBOND X" PVC-COATED GALVANIZED RIGID CONDUIT (CATALOG#: PRHCONDUIT-X)
90° ELBOWS:	PLASTIBOND X" PVC-COATED GALVANIZED RIGID CONDUIT FITTINGS (CATALOG#: PRHELB-Xx90)
COUPLINGS	PLASTIBOND X" PVC-COATED GALVANIZED RIGID CONDUIT FITTINGS (CATALOG#: PRCPLG-X)
LB	PLASTIBOND 1" PVC-COATED GALVANIZED RIGID CONDUIT FITTINGS (CATALOG#: PRLB37)

SHEET NOTES

1. THE APPROXIMATE LOCATION OF A NEW WEATHERPROOF MAINTENANCE RECEPTACLE. THE ELECTRICAL CONTRACTOR IS TO ROUTE CONDUIT AND WIRING (2#12, 1#12G, 1" CONDUIT) FROM THE NEW NEMA 3R PANEL 2PP TO THE NEW RECEPTACLE MOUNTED ON THE NEW PLATFORM.



1 NEW WORK
PLATFORM SERVICE ELEVATION
NOT TO SCALE

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ALABAMA LICENSED PROFESSIONAL ENGINEER
No. 25105
ANDREW W. MAURIN
12-31-2024

NUMBER REVISION	REVISION DESCRIPTION

INTERNATIONAL TRADE CENTER GENERATOR REPLACEMENT (PROJECT #11210)
MOBILE ALABAMA

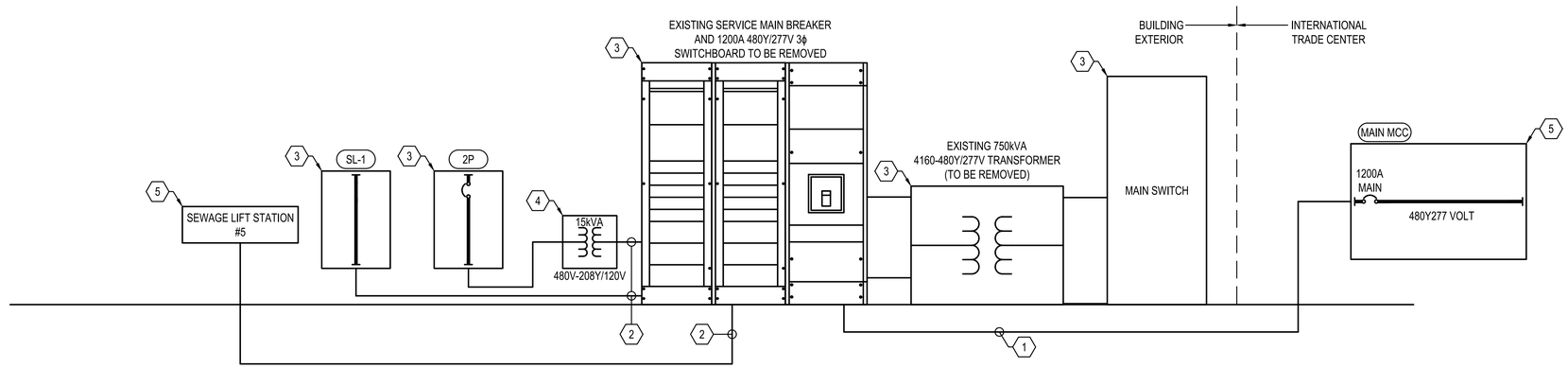
DESIGNED BY: TMM
DRAWN BY: TMM
CHECKED BY: AWM
DATE: 12-31-2024

SHEET TITLE: ELECTRICAL PLATFORM ELEVATION

SHEET: E3.3

EXISTING SINGLE LINE DIAGRAM NOTES

1. THE CONDUIT AND WIRING FROM THE EXISTING MAIN SWITCHBOARD TO THE MAIN MOTOR CONTROL CENTER LOCATED INSIDE THE INTERNATIONAL TRADE CENTER IS EXISTING TO REMAIN. THE ELECTRICAL CONTRACTOR IS TO DE-ENERGIZE AND DISCONNECT THE MAIN MCC. SECURE WIRING AND CONDUIT FOR MODIFICATION AND/OR EXTENSION IN THE NEW WORK PHASE.
2. THE ELECTRICAL CONTRACTOR IS TO DE-ENERGIZE AND DISCONNECT CONDUIT AND WIRING FOR BRANCH CIRCUITS FROM THE EXISTING MAIN SWITCHBOARD. THIS BRANCH CIRCUIT CONDUIT AND WIRING IS TO BE SECURED FOR CONNECTION TO NEW EQUIPMENT IN THE NEW WORK PHASE.
3. THIS ELECTRICAL EQUIPMENT IS TO BE DISCONNECTED, REMOVED, AND REPLACED NEW IN THE NEW WORK PHASE.
4. THIS TRANSFORMER IS TO BE DISCONNECTED AND SECURED FOR RE-LOCATION AND CONNECTION TO NEW EQUIPMENT IN THE NEW WORK PHASE.
5. THIS EQUIPMENT IS EXISTING TO REMAIN.



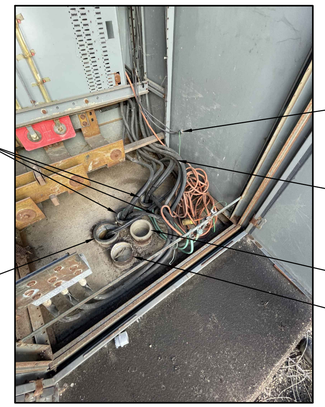
1 EXISTING SINGLE LINE DIAGRAM
NOT TO SCALE

EXISTING 4" CONDUITS AND WIRING ROUTED FROM THE EXISTING ELECTRICAL MANHOLE TO THE EXISTING MAIN MEDIUM VOLTAGE SWITCH. THE ELECTRICAL CONTRACTOR IS TO DISCONNECT ALL CONDUCTORS FROM THE EXISTING SWITCH. THESE CONDUCTORS ARE TO BE PULLED BACK TO THE EXISTING ELECTRICAL MANHOLE AND SPLICED TO ALLOW MEDIUM VOLTAGE LOOP TO REMAIN OPERATIONAL.

NOTE:
THE ELECTRICAL CONTRACTOR IS TO DISCONNECT AND REMOVE THIS SWITCH AND EXCAVATE THE AREA AROUND THESE CONDUITS TO ALLOW FOR THE INSTALLATION OF A NEW 3' W x 5' L x 2'-6"' D ELECTRICAL VAULT IN THE NEW WORK PHASE.

EXISTING SPARE 4" CONDUITS ROUTED FROM THE EXISTING ELECTRICAL MANHOLE TO THE EXISTING MAIN MEDIUM VOLTAGE SWITCH TO REMAIN

2 EXISTING CONDUIT PENETRATIONS MAIN MEDIUM VOLTAGE SWITCH
NOT TO SCALE



EXISTING 4" CONDUITS AND WIRING (3 RUNS OF 3#350mcm, 1#1/0G, 3" CONDUIT EACH) ROUTED FROM THE EXISTING MAIN SWITCHBOARD TO THE INTERNATIONAL TRADE CENTER MAIN MCC. THE CONDUCTORS ARE TO BE DISCONNECTED FROM THE MAIN SWITCHBOARD AND SECURED FOR CONNECTION TO NEW EQUIPMENT IN THE NEW WORK PHASE.

EXISTING 4" CONDUIT AND WIRING ROUTED FROM THE EXISTING MAIN SWITCHBOARD TO THE SEWAGE LIFT STATION #5. THE CONDUCTORS ARE TO BE DISCONNECTED FROM THE MAIN SWITCHBOARD AND SECURED FOR CONNECTION TO NEW EQUIPMENT IN THE NEW WORK PHASE.

NOTE:
THE ELECTRICAL CONTRACTOR IS TO DISCONNECT AND REMOVE THIS SWITCH AND EXCAVATE THE AREA AROUND THESE CONDUITS TO ALLOW FOR THE INSTALLATION OF A NEW 3' W x 5' L x 3' D QUAZITE JUNCTION BOX IN THE NEW WORK PHASE.

EXISTING 3/4" CONDUIT PENETRATION SERVING PANEL SL-1. THE CONDUIT AND WIRING IS TO BE DISCONNECTED AND REMOVED FROM THE MAIN SWITCHBOARD. THIS PANEL IS TO BE REPLACED NEW AND FED FROM NEW ELECTRICAL EQUIPMENT IN THE NEW WORK PHASE.

EXISTING 3/4" CONDUIT PENETRATION TO THE TRANSFORMER SERVING PANEL 2P. THE CONDUIT AND WIRING IS TO BE DISCONNECTED AND REMOVED FROM THE MAIN SWITCHBOARD. THIS PANEL IS TO BE REPLACED NEW AND FED FROM NEW ELECTRICAL EQUIPMENT IN THE NEW WORK PHASE.

EXISTING SPARE 3" CONDUIT. THIS CONDUIT IS TO BE CAPPED FOR FUTURE USE.

EXISTING SPARE 4" CONDUIT. THIS CONDUIT IS TO BE CAPPED FOR FUTURE USE.

3 EXISTING CONDUIT PENETRATIONS MAIN LOW VOLTAGE SWITCHBOARD
NOT TO SCALE

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DELL CONSULTING PROJECT: 23-007

ALABAMA LICENSED PROFESSIONAL ENGINEER ANDREW W. MAURIN No. 25105
12-31-2024

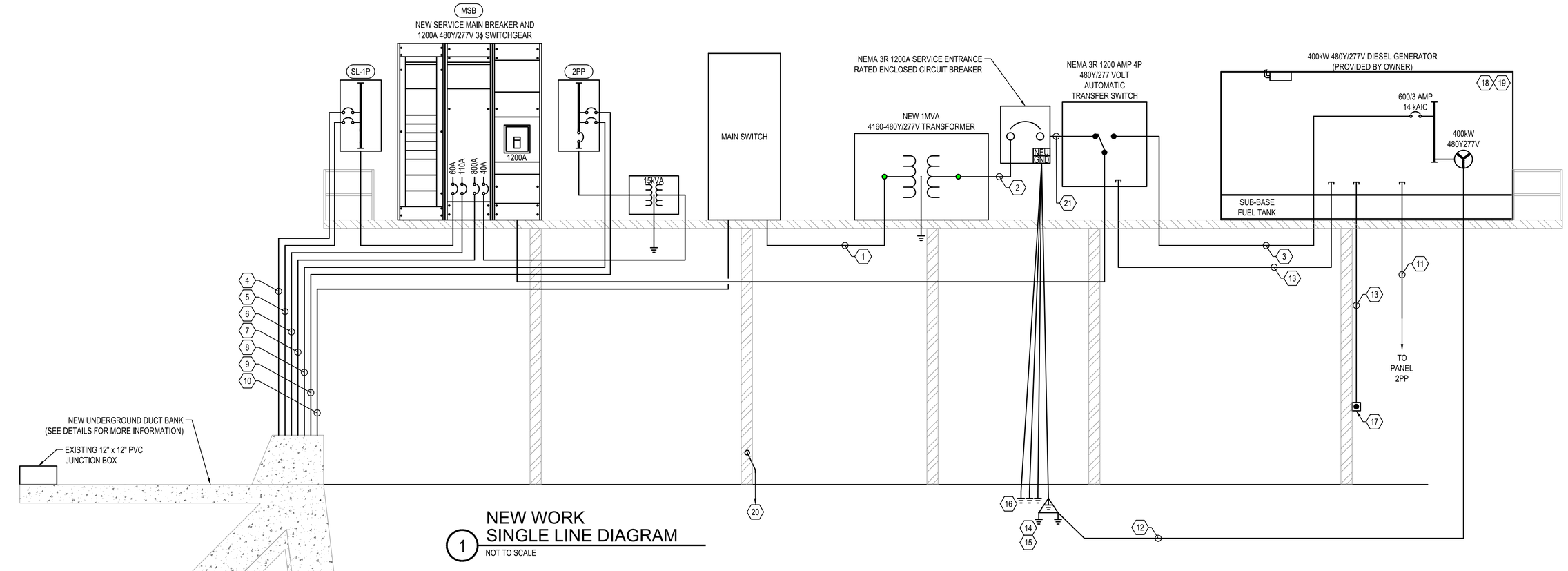
NUMBER REVISION	REVISION DESCRIPTION

INTERNATIONAL TRADE CENTER GENERATOR REPLACEMENT (PROJECT #11210)
MOBILE ALABAMA

DESIGNED BY: TMM
DRAWN BY: TMM
CHECKED BY: AWM
DATE: 12-31-2024

SHEET TITLE: ELECTRICAL EXISTING RISER DIAGRAM

SHEET: E4.1



1 NEW WORK SINGLE LINE DIAGRAM

NOT TO SCALE

NEW WORK SINGLE LINE DIAGRAM NOTES

1. THE ELECTRICAL CONTRACTOR IS TO ROUTE CONDUIT AND WIRING (3#2/0, 5" CONDUIT) FROM THE NEW MAIN SWITCH TO THE NEW UTILITY TRANSFORMER.
2. THE ELECTRICAL CONTRACTOR IS TO ROUTE CONDUIT AND WIRING (4 RUNS OF 4#350kcmil, 1#3/0G, 4" CONDUIT EACH) FROM THE NEW UTILITY TRANSFORMER TO THE NEW NEMA 3R 1200A SERVICE ENTRANCE RATED ENCLOSED CIRCUIT BREAKER.
3. THE ELECTRICAL CONTRACTOR IS TO ROUTE CONDUIT AND WIRING (2 RUNS OF 4#350kcmil, 1#3/0G, 4" CONDUIT EACH) FROM THE OWNER-PROVIDED DIESEL GENERATOR TO THE NEW AUTOMATIC TRANSFER SWITCH.
4. THE ELECTRICAL CONTRACTOR IS TO ROUTE CONDUIT AND WIRING (2#10, 1#10G, 1" CONDUIT) FROM PANEL SL-1P TO THE NEW DUCT BANK STUB-UP. THE WIRING IS TO EXTEND THROUGH THE UNDERGROUND DUCT BANK AND SPLICED TO THE EXISTING CONDUCTORS IN THE EXISTING 12" x 12" PVC JUNCTION BOX FEEDING THE NORTH AREA LIGHTING.
5. THE ELECTRICAL CONTRACTOR IS TO ROUTE CONDUIT AND WIRING (2#10, 1#10G, 1" CONDUIT) FROM PANEL SL-1P TO THE NEW DUCT BANK STUB-UP. THE WIRING IS TO EXTEND THROUGH THE UNDERGROUND DUCT BANK AND SPLICED TO THE EXISTING CONDUCTORS IN THE EXISTING 12" x 12" PVC JUNCTION BOX FEEDING THE SOUTH AREA LIGHTING.
6. THE ELECTRICAL CONTRACTOR IS TO ROUTE CONDUIT AND WIRING (4#2, 1#6G, 1 1/2" CONDUIT) FROM THE NEW MAIN SWITCHBOARD TO THE NEW DUCT BANK STUB-UP. THE WIRING IS TO EXTEND THROUGH THE UNDERGROUND DUCT BANK AND SPLICED TO THE EXISTING CONDUCTORS FEEDING THE EXISTING SEWAGE LIFT STATION #5.
7. THE ELECTRICAL CONTRACTOR IS TO ROUTE CONDUIT AND WIRING (3 RUNS OF 4#350mcm, 1#1/0G, 3" CONDUIT EACH) FROM THE MAIN SWITCHBOARD TO THE NEW DUCT BANK STUB-UP. THE WIRING IS TO EXTEND THROUGH THE UNDERGROUND DUCT BANK AND SPLICED TO THE EXISTING CONDUCTORS FEEDING THE EXISTING MOTOR CONTROL CENTER IN THE INTERNATIONAL TRADE CENTER.
8. THE ELECTRICAL CONTRACTOR IS TO ROUTE CONDUIT AND WIRING (2#10, 1#10G, 1" CONDUIT) FROM PANEL 2PP TO THE NEW DUCT BANK STUB-UP. THE WIRING IS TO EXTEND THROUGH THE UNDERGROUND DUCT BANK AND SPLICED TO THE EXISTING CONDUCTORS IN THE EXISTING 12" x 12" PVC JUNCTION BOX FEEDING THE NORTH AREA SECURITY CAMERAS.
9. THE ELECTRICAL CONTRACTOR IS TO ROUTE CONDUIT AND WIRING (2#10, 1#10G, 1" CONDUIT) FROM PANEL 2PP TO THE NEW DUCT BANK STUB-UP. THE WIRING IS TO EXTEND THROUGH THE UNDERGROUND DUCT BANK AND SPLICED TO THE EXISTING CONDUCTORS IN THE EXISTING 12" x 12" PVC JUNCTION BOX FEEDING THE SOUTH AREA SECURITY CAMERAS.
10. THE ELECTRICAL CONTRACTOR IS TO ROUTE CONDUIT AND WIRING (2 RUNS OF 3#2/0, 5" CONDUIT EACH) FROM THE DUCT BANK STUB UP TO THE NEW MAIN SWITCH.
11. THE ELECTRICAL CONTRACTOR SHALL ROUTE 1" CONDUIT FROM PANEL 2P FOR GENERATOR BLOCK HEATER AND BATTERY CHARGER CIRCUITS. 4#10. 1#10G, 1" CONDUIT. UNDERGROUND CONDUIT IS TO BE SCHEDULE 80 PVC. EXTERIOR CONDUIT IS TO BE GALVANIZED RIGID CONDUIT.
12. THE ELECTRICAL CONTRACTOR IS TO CONNECT GROUNDING ROD ELECTRODE CONDUCTOR TO GENERATOR GROUND LUG. BOND NEUTRAL TO GROUND.
13. THE ELECTRICAL CONTRACTOR IS TO INSTALL 1" CONDUIT AND WIRING AS SPECIFIED BY THE MANUFACTURER.
14. PROVIDE THREE 20' GROUND RODS IN TRIANGLE ARRANGEMENT ON 20' CENTERS FOR MADE ELECTRODE SYSTEM. MEASURE RESISTANCE AND ENSURE <25 OHMS.
15. THE ELECTRICAL CONTRACTOR SHALL BOND NEW COPPER CLAD GROUND RODS WITH #3/0 TINNED STRANDED BARE COPPER CONDUCTOR.
16. CONNECT #3/0 TINNED STRANDED BARE COPPER CONDUCTOR TO THE GROUND ELECTRODE SYSTEM, STRUCTURAL STEEL, GROUND RODS.
17. MAINTAINED OPERATOR PUSHBUTTON STATION. RED BUTTON IN STEEL NEMA 3R LOCKABLE BOX. LABEL WITH A RED MYCARTA PLACARD WITH 1" WHITE LETTERING: "GENERATOR EMERGENCY STOP"
18. THE SUB-BASE FUEL TANK MUST HAVE ATMOSPHERIC PIPING A MINIMUM OF 10 FEET ABOVE THE TANK AND BE EQUIPPED WITH SPILL CONTAINMENT BUCKET.
19. THE ELECTRICAL CONTRACTOR SHALL ASSIGN A 2A10BC FIRE EXTINGUISHER WITHIN 10 FEET (BOTH ACCESSIBLE AND VISIBLE) FROM THE GENERATOR AND AUTOMATIC TRANSFER SWITCH.
20. BOND NEW PLATFORM TO THE GROUNDING ELECTRODE SYSTEM.
21. THE ELECTRICAL CONTRACTOR IS TO ROUTE CONDUIT AND WIRING (4 RUNS OF 4#350kcmil, 1#3/0G, 4" CONDUIT EACH) FROM THE NEW AUTOMATIC TRANSFER SWITCH TO THE NEW NEMA 3R 1200A SERVICE ENTRANCE RATED ENCLOSED CIRCUIT BREAKER.

GENERAL NOTES

1. ALL CONDUIT AND CONDUIT FITTINGS ABOVE GROUND ARE TO BE PVC COATED AS INDICATED IN THE CABLE AND CONDUIT LEGEND.
2. ALL CONDUIT PENETRATIONS TO EQUIPMENT ON THE NEW PLATFORM ARE TO BE EQUIPPED WITH BONDING BUSHINGS.
3. ALL ELECTRICAL EQUIPMENT INSTALLED ON THE PLATFORM IS TO BE BONDED TO THE PLATFORM GROUNDING ELECTRODE SYSTEM WITH #3/0 STRANDED BARE TINNED COPPER CONDUCTORS. CADWELD TO FRAME.

CABLE AND CONDUIT LEGEND

MV-105 CABLING:	#2/0 AWG PVC JACKET SHIELDED 133% INSULATION POWER CABLE 5kV (OKONITE OR APPROVED EQUAL)
CONDUIT:	PLASTIBOND X" PVC-COATED GALVANIZED RIGID CONDUIT (CATALOG#: PRHCONDUIT-X)
90° ELBOWS:	PLASTIBOND X" PVC-COATED GALVANIZED RIGID CONDUIT FITTINGS (CATALOG#: PRHELB-Xx90)
COUPLINGS	PLASTIBOND X" PVC-COATED GALVANIZED RIGID CONDUIT FITTINGS (CATALOG#: PRCPLG-X)
LB	PLASTIBOND 1" PVC-COATED GALVANIZED RIGID CONDUIT FITTINGS (CATALOG#: PRLB37)

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P: 251-316-0015 F: 850-332-6629
DELL CONSULTING PROJECT: 23-007

ALABAMA LICENSED PROFESSIONAL ENGINEER ANDREW W. MAURIN NO. 25105 12-31-2024

NUMBER	REVISION DESCRIPTION

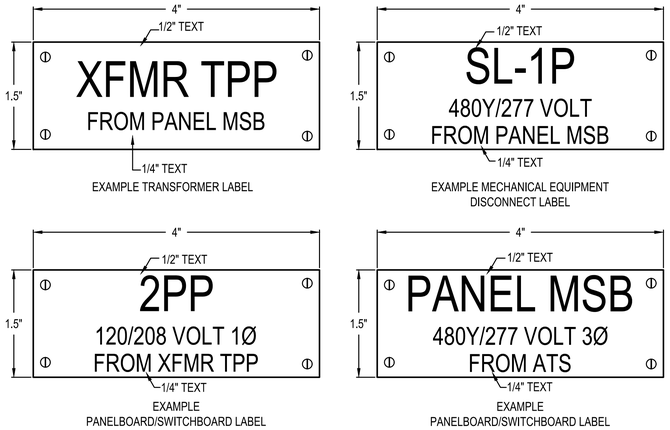
INTERNATIONAL TRADE CENTER GENERATOR REPLACEMENT (PROJECT #11210)

MOBILE ALABAMA

DESIGNED BY: TMM
DRAWN BY: TMM
CHECKED BY: AWM
DATE: 12-31-2024

SHEET TITLE: ELECTRICAL NEW WORK RISER DIAGRAM

SHEET: E5.1



ENGRAVED PLASTIC TAG WITH BLACK LETTERS ON WHITE BACKGROUND (RED BACKGROUND FOR EMERGENCY EQUIPMENT). TAG SHALL HAVE ALL EDGES BEVELED AND SMOOTH. SECURE TAG WITH 4 CHROME (STAINLESS STEEL FOR WET OR DAMP LOCATIONS) SCREWS. ADHESIVE BACKING, TAPE, ETC IS NOT ALLOWED. DIMENSIONS ARE MINIMUM, TAG SHALL BE LARGER AS REQUIRED TO FIT APPROPRIATE TEXT.

1 TYPICAL EQUIPMENT LABELING DETAIL

NOT TO SCALE

EMERGENCY
STOP FOR
GENERATOR

ENGRAVED PLASTIC TAG WITH 1" HIGH WHITE LETTERS ON RED BACKGROUND. TAG SHALL HAVE ALL EDGES BEVELED AND SMOOTH. SECURE TAG WITH 2 CHROME (STAINLESS STEEL FOR WET OR DAMP LOCATIONS) SCREWS, ADHESIVE BACKING, TAPE, ETC IS NOT ALLOWED. TAG SHALL BE SIZED AS REQUIRED TO FIT APPROPRIATE TEXT.

2 GENERATOR E-STOP LABEL DETAIL

NOT TO SCALE

PANELBOARD INFORMATION SCHEDULE

MARK	ENCLOSURE TYPE	MOUNTING STYLE	VOLTAGE	Ø	WIRE	MAIN BKR	IF MLO, SERVING BKR	SERVICE RATED	kAIC RATING	Ø BUS RATING (A)	N BUS RATING	FEEDER			NOTES
												CONDUCTORS	GROUND	CONDUIT	
MSB	NEMA 3R	FLOOR	480Y/277V	3	4	1200	N/A	NO	10	1200	100%	4 RUNS OF 4#350	#3/0	4"C EA	
MCC	NEMA 3R	FLOOR	480Y/277V	3	4	800	800	YES	10	800	100%	3 RUNS OF 4#350	NONE	3"C EA	1
SL-1P	NEMA 3R	SURFACE	480Y/277V	3	4	MLO	60	NO	10	60	100%	4#6	#8	1 1/4"C	
2PP	NEMA 3R	SURFACE	208Y/120	3	4	100	N/A	NO	10	100	100%	4#3	#6	1 1/2"C	
NOTES	ALL PANELBOARDS ARE TO BE EQUIPPED WITH ARC FLASH WARNING LABELS IN ACCORDANCE WITH NEC ARTICLE 110.16.														
	ALL PANELBOARDS ARE TO HAVE COPPER BUS.														
	1. THIS EQUIPMENT IS EXISTING. FEEDERS ARE TO BE INTERCEPTED AS DIRECTED ON THE PLAN DRAWINGS.														

TRANSFORMER SCHEDULE

MARK	PRIMARY VOLTAGE	SECONDARY VOLTAGE	Ø	WIRE	KVA	MNT	TYPE	PRIMARY FEEDER SIZE	SIZE GEC TO 3/4"X10' GND ROD	SIZE GEC TO FOUNDATION REBAR, WATER & BLDG STEEL
TPP*	480 DELTA	120-240	1	3	15	PLT	STD	3#10,#10G,3/4"C	#8	#8
TMSB	4160 DELTA	480Y/277	3	3	750	PLT	STD	3#2/0 MV-105, 5"C	#3/0	#3/0
MNT:	PLT=PLATFORM MOUNTED									
TYPE:	STD=STANDARD PER SPECIFICATIONS.									
*TRANSFORMER IS EXISTING TO BE RELOCATED										

PANELBOARD SCHEDULE

MARK: NEW PANEL 2PP

CKT #	LOAD DESCRIPTION	BREAKER P	BREAKER TRIP	PHASE (kVA) A	PHASE (kVA) B	PHASE (kVA) A	PHASE (kVA) B	BREAKER TRIP	BREAKER P	LOAD DESCRIPTION	CKT #
1	SOUTH SITE SECURITY CAMERAS	1	30					20	1	GENERATOR BLOCK HEATER	2
3	PLATFORM MAINT. REC.	1	20					20	1	GENERATOR BATTERY CHARGER	4
5	SPACE	1						30	1	NORTH SITE SECURITY CAMERAS	6
7	SPACE	1							1	SPACE	8
9	SPACE	1							1	SPACE	10
11	SPACE	1							1	SPACE	12
13	SPACE	1							1	SPACE	14
15	SPACE	1							1	SPACE	16

TOTAL (kVA) ØA _____ ØB _____ HIGH PHASE (AMPS) _____

TOTAL CONNECTED LOAD (kVA) _____ TOTAL LOAD (AMPS) _____

CREATE A DIRECTORY TO INDICATE LOAD TYPE (REC, LTG, AHU-1, ETC.) AND ROOM NUMBERS SERVED FOR EVERY BRANCH CIRCUIT.

PANELBOARD SCHEDULE

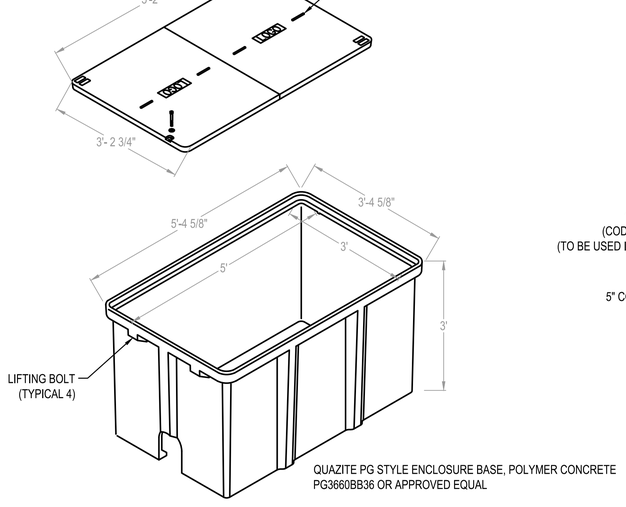
MARK: NEW PANEL SL-1P

CKT #	LOAD DESCRIPTION	BREAKER P	BREAKER TRIP	PHASE (kVA) A	PHASE (kVA) B	PHASE (kVA) C	PHASE (kVA) A	PHASE (kVA) B	PHASE (kVA) C	BREAKER TRIP	BREAKER P	LOAD DESCRIPTION	CKT #
1	SOUTH AREA LTG	2	20							20	2	NORTH AREA LTG	2
3													4
5	SPARE	2	20							20	2	SPARE	6
7													8
9	SPARE	1	20							20	1	SPARE	10
11	SPARE	1	20							20	1	SPARE	12
13	SPARE	1	20							20	1	SPARE	14
15	SPARE	1	20							20	1	SPARE	16
17	SPARE	1	20							20	1	SPARE	18
19	SPARE	1	20							20	1	SPARE	20
21	SPARE	1	20							20	1	SPARE	22
23	SPARE	1	20							20	1	SPARE	24
25	SPARE	1	20							20	1	SPARE	26
27	SPARE	1	20							20	1	SPARE	28
29	SPARE	1	20							20	1	SPARE	30

TOTAL (kVA) ØA _____ ØB _____ ØC _____ HIGH PHASE (AMPS) _____

TOTAL CONNECTED LOAD (kVA) _____ TOTAL LOAD (AMPS) _____

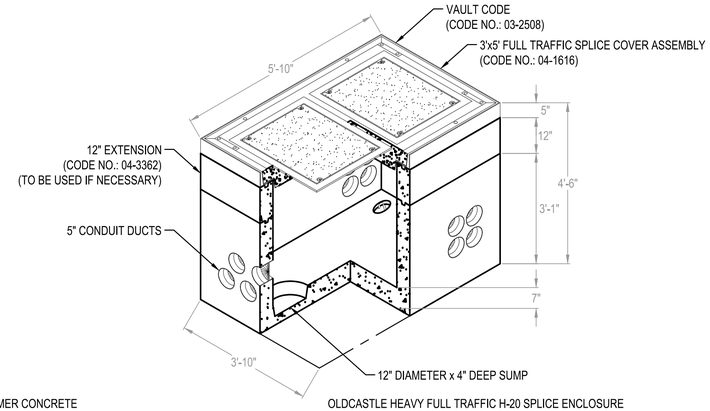
CREATE A DIRECTORY TO INDICATE INSTALLED LOADS. INDICATE LOAD TYPE (REC, LTG, AHU-1, ETC.) AND ROOM NUMBERS SERVED FOR EVERY BRANCH CIRCUIT.



QUAZITE PG STYLE ENCLOSURE BASE, POLYMER CONCRETE PG3660BB36 OR APPROVED EQUAL

3 NEW IN-GROUND JUNCTION BOX

NOT TO SCALE



OLDCASTLE HEAVY FULL TRAFFIC H-20 SPLICE ENCLOSURE 3'-0" x 5'-0" x 2'-6" (WEIGHT WITHOUT COVER: 6,000 LBS) (PG&E 352636HFT OR APPROVED EQUAL)

4 NEW IN-GROUND ELECTRICAL VAULT

NOT TO SCALE

dell consulting
MEP Engineering
Andrew W. Maurin 25105
Alabama Certificate Number CA-4146-E
813 Downtowner Blvd. Ste. D
Mobile, Alabama 36609
P: 251-316-0015 F: 850-332-6629
DELL CONSULTING PROJECT: 23-007

ALABAMA LICENSED PROFESSIONAL ENGINEER ANDREW W. MAURIN NO. 25105 12-31-2024

NUMBER	REVISION DESCRIPTION

INTERNATIONAL TRADE CENTER GENERATOR REPLACEMENT (PROJECT #11210)
MOBILE ALABAMA

DESIGNED BY: TMM
DRAWN BY: TMM
CHECKED BY: AWM
DATE: 12-31-2024

SHEET TITLE: ELECTRICAL SCHEDULES & DETAILS

SHEET: E5.2