

TRANSIT SHED NO. 4 - COLD ROOM

2202 BURNETT BOULEVARD WILMINGTON, NC



DESIGNER

CLARK NEXSEN

1111 METROPOLITAN AVE., SUITE 333 CHARLOTTE, NORTH CAROLINA 28204 704-377-8800

CLARK NEXSEN LICENSE NUMBER: C-1028 PROFESSIONAL SEAL

NOT FOR CONSTRUCTION

SUBMITTAL FEBRUARY 26, 2021 PROGRESS CONSTRUCTION DOCUMENTS

Table with 2 columns: REVISIONS, KEY PLAN

SHEET ELECTRICAL LEGEND, NOTES AND ABBREVIATIONS

E-001

DESIGN: WAZ DRAWN: JAR REVIEW: WAZ

CN 9372

ELECTRICAL LEGEND

Table with columns: SYMBOL, DESCRIPTION. Includes sections for LIGHTING, POWER DEVICES, EQUIPMENT CONNECTIONS, and PUSH BUTTON CONTROL PANEL.

ELECTRICAL ABBREVIATIONS

Table with columns: SYMBOL, DESCRIPTION. Lists abbreviations for AMPERE, AIR CONDITIONING, AIR CONDITIONING FRAME, etc.

GENERAL NOTES

- A. ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 70-2017 EDITION WITH NORTH CAROLINA AMENDMENTS AND ALL FEDERAL, STATE, AND LOCAL CODES AND STANDARDS. DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF DEVICES ONLY.

LEGEND NOTES

- 1. WIRE AND CONDUIT FOR MOTOR AND EQUIPMENT LOADS SHALL BE CONTINUOUS IN SIZE AND COUNT FROM SOURCE TO FINAL CONNECTION. SIZE AND COUNT AS INDICATED ON THE CIRCUIT HOMERUN UNLESS OTHERWISE NOTED.

PERFORMANCE REQUIREMENTS

- A. SEISMIC-RESTRAINT LOADING: 1. SITE CLASS AS DEFINED IN THE IBC AS INDICATED ON STRUCTURAL DRAWING S001. 2. ASSIGNED SEISMIC USE GROUP OR BUILDING CATEGORY AS DEFINED IN THE IBC AS INDICATED ON STRUCTURAL DRAWING S001.

DESIGN FLOOD ELEVATION

- A. FLOODPLAIN DEVELOPMENT: DEVELOPMENT WHICH WILL TAKE PLACE WITHIN THE LIMITS OF THE 100-YEAR FLOODPLAIN AT ELEVATION 9.0 IS DESIGNED IN ACCORDANCE WITH THE REQUIREMENT OF EXECUTIVE ORDER NO. 123 - "UNIFORM FLOODPLAIN MANAGEMENT POLICY".

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REVISIONS

KEY PLAN

SHEET  
ELECTRICAL DEMOLITION PLAN

## ED101

DESIGN: WAZ  
DRAWN: JAR  
REVIEW: WAZ

CN 9372

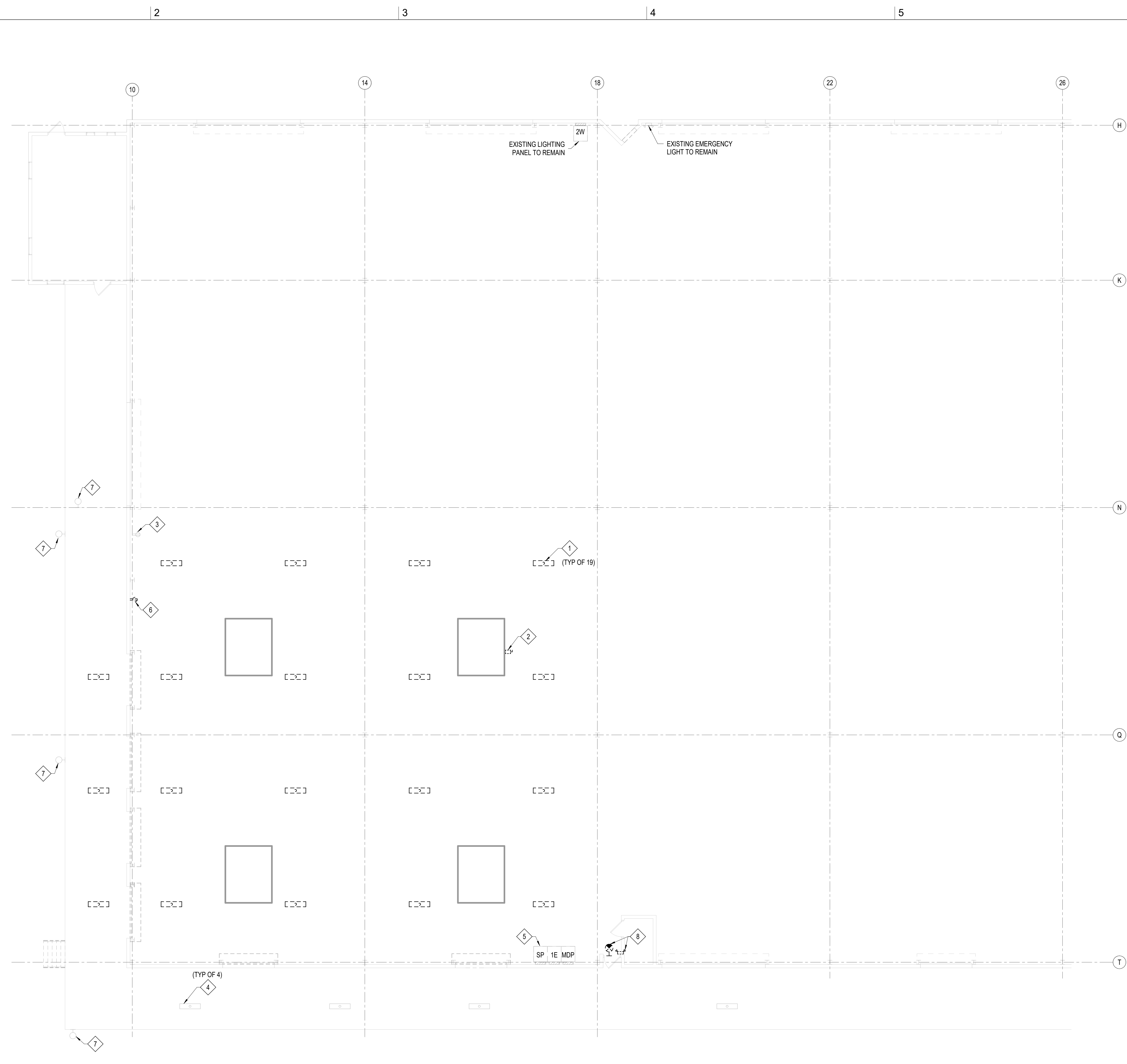
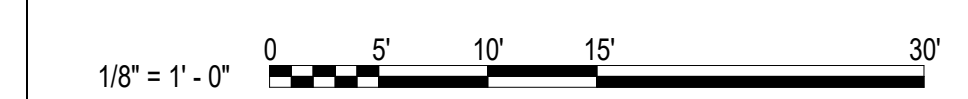
### GENERAL NOTES

- JUNCTION BOXES, WIRE, CONDUIT, AND ALL APPURTENANCES ASSOCIATED WITH DEVICES SCHEDULED TO BE REMOVED MUST BE REMOVED BACK TO LAST ACTIVE JUNCTION BOX OR PANELBOARD, UNLESS THE CIRCUIT REMAINS ACTIVE FOR DEVICES TO REMAIN. IF OTHER DEVICES ON THAT CIRCUIT ARE REMOVED BETWEEN THEM AND THE BRANCH CIRCUIT PANELBOARD, IF CIRCUIT BREAKER IS SPARE, SHUT OFF BREAKER AND REVISE CIRCUIT DIRECTORY.
- EXERCISE CARE IN REMOVING DEMOLITION ITEMS AND REPAIR OR REPLACE ANY DAMAGE CAUSED TO EXISTING CONSTRUCTION AND EQUIPMENT TO REMAIN.
- IF SUSPECTED HAZARDOUS MATERIALS ARE ENCOUNTERED DURING DEMOLITION, DO NOT DISTURB. IMMEDIATELY NOTIFY THE ARCHITECT AND OWNER. SUSPECTED HAZARDOUS, OR OTHERWISE REGULATED, MATERIALS ENCOUNTERED DURING DEMOLITION SHOULD BE HANDLED AND TRANSPORTED IN ACCORDANCE WITH APPLICABLE REGULATIONS OR RECYCLED OR REUSED IF APPROPRIATE. THESE MATERIALS SHOULD BE HANDLED, DISPOSED OF OR RECYCLED ACCORDING TO ALL APPROPRIATE LOCAL, STATE AND FEDERAL GUIDELINES FOR SUCH MATERIALS. THESE MATERIALS CAN INCLUDE, BUT ARE NOT LIMITED TO, PCB-CONTAINING LIGHT BALLASTS, FLUORESCENT LIGHT TUBES, POTENTIAL CFC-CONTAINING MATERIALS, POTENTIAL RADIOACTIVE MATERIALS AND VARIOUS TYPES OF BATTERIES.
- DASHED DEVICES ARE TO BE DEMOLISHED BACK TO LAST ACTIVE DEVICE. IF CIRCUIT IS INACTIVE, DEMOLISH CONDUIT, WIRING, AND DEVICE BACK TO SOURCE. IF CIRCUIT BREAKER IS SPARE, SHUT OFF BREAKER AND REVISE CIRCUIT DIRECTORY.
- THE DRAWINGS PREPARED BY CLARK NEXSEN ARE BASED ON DOCUMENTS PROVIDED TO CLARK NEXSEN BY THE OWNER, AND NON-INVASIVE VISUAL INSPECTIONS. PRIOR TO ANY DEMOLITION, THE CONTRACTOR SHALL VISIT THE SITE TO VERIFY THAT CONDITIONS IN THE FIELD ARE AS SHOWN IN THE DOCUMENTS. CONTRACTOR SHALL NOTIFY CLARK NEXSEN IMMEDIATELY IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE DOCUMENTS.
- ALL DEVICES AND FIXTURES THAT ARE REMOVED DURING DEMOLITION (AND NOT TO BE RELOCATED) ARE TO BE OFFERED TO THE OWNER. ANY ITEM THAT THE OWNER REFUSES WILL BECOME THE PROPERTY OF THE CONTRACTOR AND IS TO BE REMOVED COMPLETELY FROM THE SITE AND DISPOSED OF PROPERLY AT THE CONTRACTOR'S EXPENSE.
- FOR DEVICES AND EQUIPMENT TO BE REMOVED AND NOT REINSTALLED, JUNCTION BOXES, WIRE, CONDUIT AND ASSOCIATED APPURTENANCES SHALL BE REMOVED. ALL SURFACES ARE TO BE PATCHED/PAINTED BY CONTRACTOR TO MATCH ADJACENT SURFACES.
- EXISTING CONDUITS MAY BE REUSED WHERE PRACTICAL AND PROPERLY SIZED.
- COORDINATE REQUIRED ELECTRICAL SHUTDOWNS WITH THE OWNER AT LEAST FOURTEEN (14) DAYS IN ADVANCE.
- EXISTING CONDUITS TO REMAIN WHICH CONFLICT WITH NEW BUILDING ELEMENTS, INCLUDING BUT NOT LIMITED TO MECHANICAL DUCTWORK, PIPING, EQUIPMENT, OR DROP CEILINGS SHALL BE REWORKED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- PROTECT EXISTING ELECTRICAL PANELS, MOTOR CONTROLLERS, AND OTHER ELECTRICAL EQUIPMENT FROM PHYSICAL DAMAGE AND CONSTRUCTION DUST.

### DEMO KEY NOTES

- ALL LUMINAIRES ARE TO BE REPLACED WITH NEW LUMINAIRES AS SHOWN ON NEW WORK PLAN. SEE SHEET EL101 FOR ADDITIONAL INFORMATION.
- EXISTING ROOF EXHAUST FAN TO BE REMOVED. REMOVE DISCONNECT, CONDUIT, WIRING, AND STARTER. LABEL CIRCUIT SP-1.3.5 SPARE.
- EXISTING RECEPTACLE TO REMAIN. REMOVE EXISTING RECEPTACLE, ADD EXTENSION BOX, AND PROVIDE NEW GFI RECEPTACLE. SEE DRAWING EP101 FOR ADDITIONAL INFORMATION.
- EXISTING LUMINAIRES TO REMAIN.
- EXISTING ELECTRICAL PANELS (MDP, 1E, SP) TO REMAIN. EQUIPMENT SHALL BE PROTECTED FROM PHYSICAL DAMAGE AND CONSTRUCTION DUST.
- EXISTING RECEPTACLE TO BE REMOVED.
- EXISTING FLOOD LIGHTS TO REMAIN.
- EXISTING LUMINAIRE TO BE REMOVED.

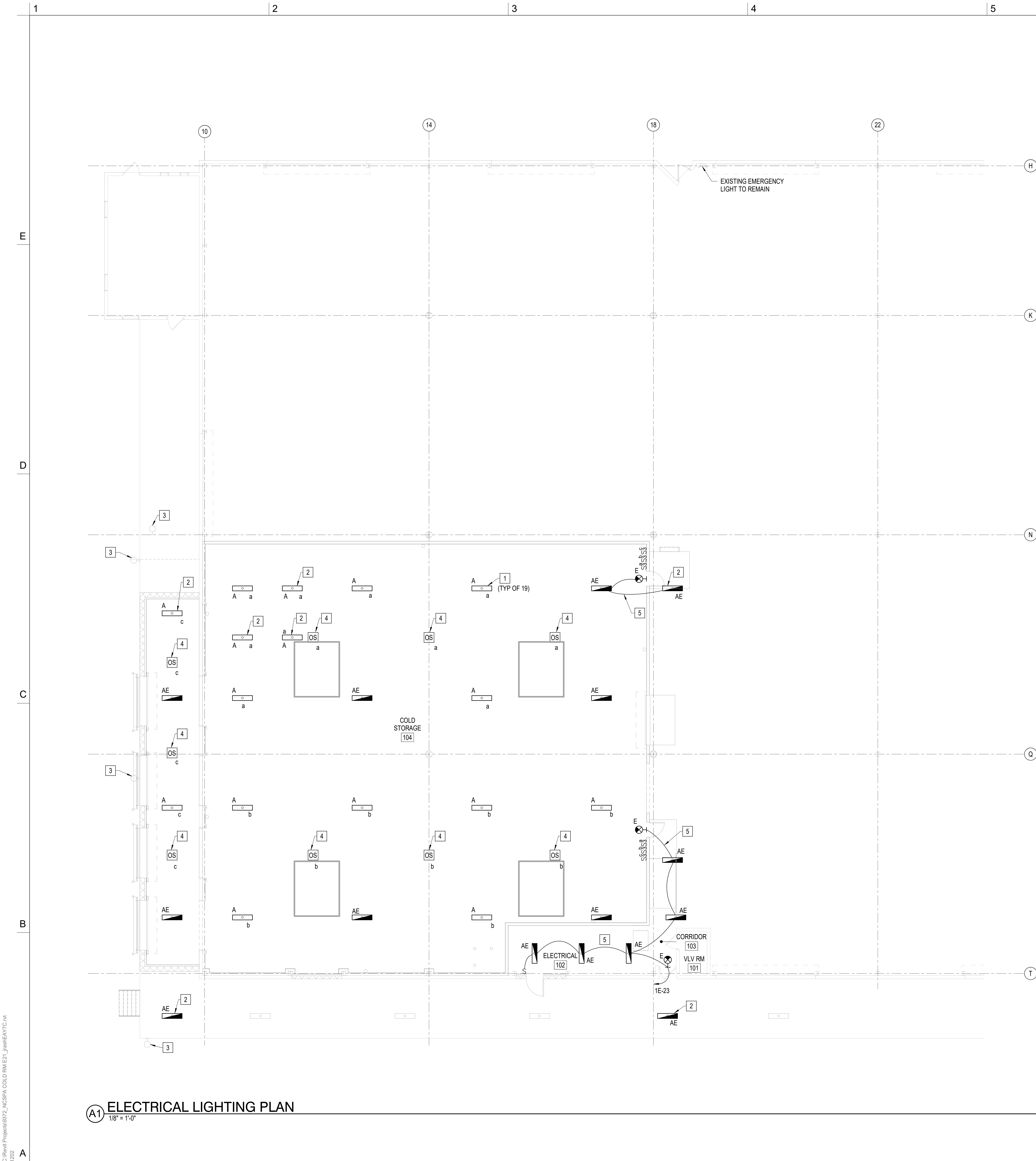
### GRAPHIC SCALE(S)



## A1 ELECTRICAL DEMOLITION PLAN

1/8" = 1'-0"

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1202



**A1 ELECTRICAL LIGHTING PLAN**  
1/8" = 1'-0"

**GENERAL NOTES**

1. REFER TO DRAWING E-001 GENERAL NOTES.
2. ALL FIXTURES TO BE MOUNTED TO BOTTOM OF BEAM.
3. OCCUPANCY SENSORS IN THE COLD STORAGE AREAS TO CONTROL THE NON-EMERGENCY LUMINAIRES ONLY. EMERGENCY LUMINAIRES TO REMAIN ON AS NIGHT-LIGHTS AND SHALL NOT BE CONTROLLED.

**KEY NOTES**

1. NEW LUMINAIRE ARE A ONE FOR ONE REPLACEMENT IN SAME LOCATION AS DEMOLISHED LUMINAIRE. REMOVE EXISTING RECEPTACLE FOR THE LUMINAIRE CONNECTION. PROVIDE EXTENSION BOX, AND PROVIDE DIRECT CONNECTION TO NEW LUMINAIRE. RECONNECT LUMINAIRE TO THE EXISTING CIRCUIT. PROVIDE NEW SWITCHES FOR THE AREA AS INDICATED.
2. NEW LUMINAIRE TO BE INSTALLED AT LOCATIONS SHOWN AND CONNECTED TO EXISTING CIRCUIT.
3. EXISTING FLOODLIGHTS TO REMAIN.
4. DUAL TECHNOLOGY OCCUPANCY SENSORS SHALL PROVIDE 90 DEGREES, HIGH BAY COVERAGE, AND SHALL BE SUITABLE FOR THE COLD STORAGE ENVIRONMENT.
5. NEW AND EXISTING RACEWAYS FEEDING POWER AND LIGHTING THAT ARE SUBJECT TO DIFFERENT TEMPERATURES SHALL BE FILLED WITH AN APPROVED MATERIAL TO PREVENT THE CIRCULATION OF WARM AIR TO A COLDER SECTION OF THE RACEWAY. SEAL RACEWAYS WITH A SUITABLE PLIABLE COMPOUND AT A CONDUIT BODY OR JUNCTION BOX INSTALLED IN THE RACEWAY BEFORE IT ENTERS THE COLDER SECTION. SEALING RACEWAYS AT PANELBOARDS ARE NOT ACCEPTABLE. SEE GENERAL NOTES ON DRAWING E-001 FOR ADDITIONAL INFORMATION.

NORTH CAROLINA STATE PORTS AUTHORITY

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REVISIONS

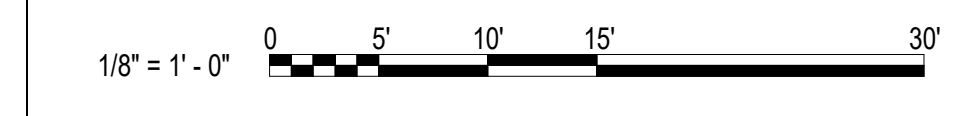
NO.	DATE	DESCRIPTION

KEY PLAN

SHEET  
**ELECTRICAL LIGHTING PLAN**

**EL101**

GRAPHIC SCALE(S)



DESIGN: WIAZ  
DRAWN: JARS  
REVIEW: WIAZ  
CN 9372

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SUBMITTAL  
 FEBRUARY 26, 2021  
**PROGRESS CONSTRUCTION DOCUMENTS**

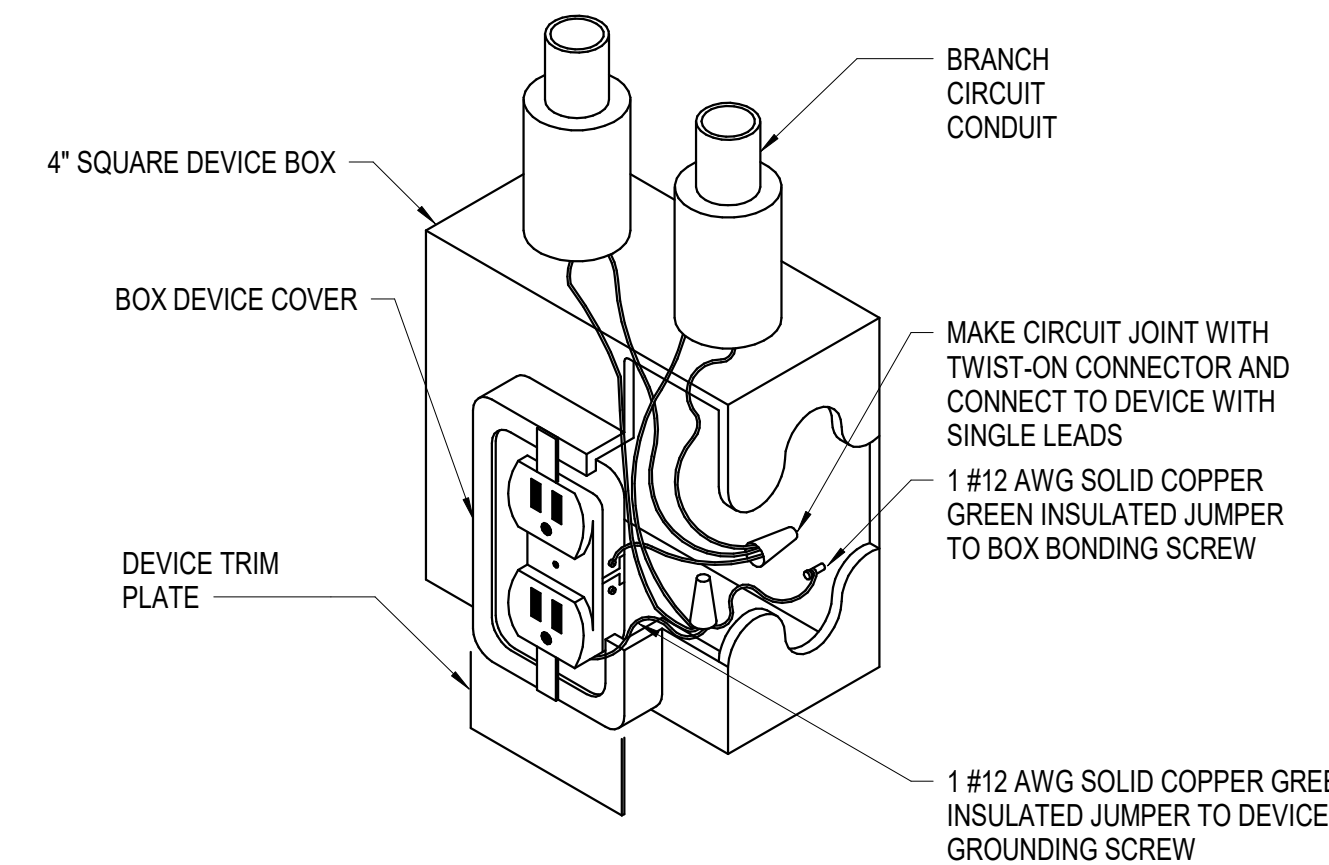
REVISIONS


KEY PLAN

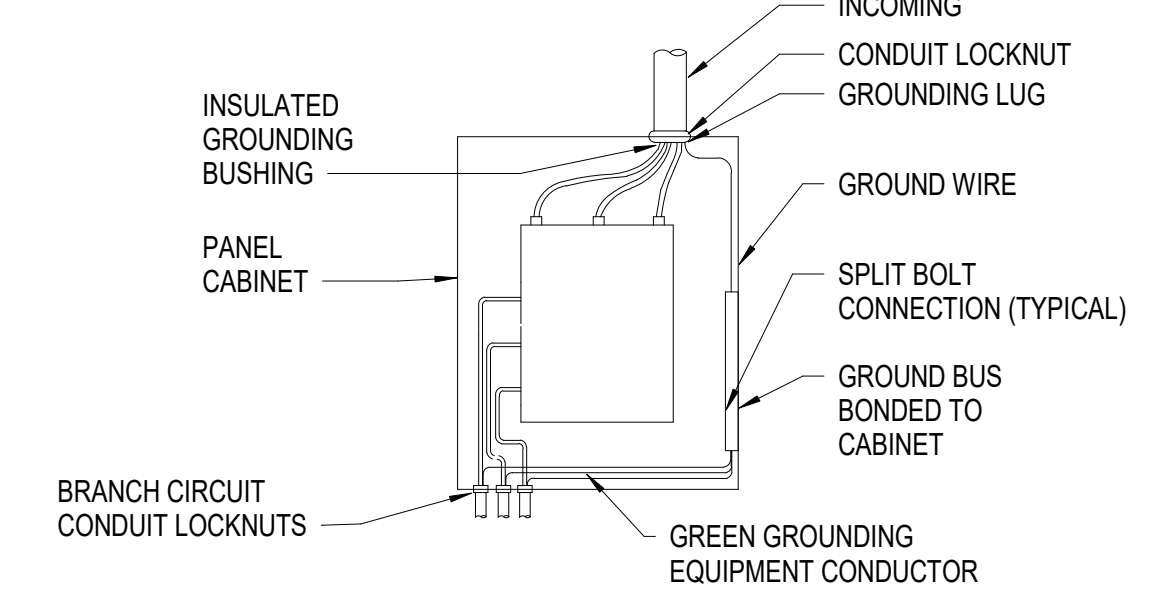
SHEET  
**ELECTRICAL DETAILS**

**EP501**

DESIGN: WJAZ  
 DRAWN: JARR  
 REVIEW: WJAZ  
**CN 9372**



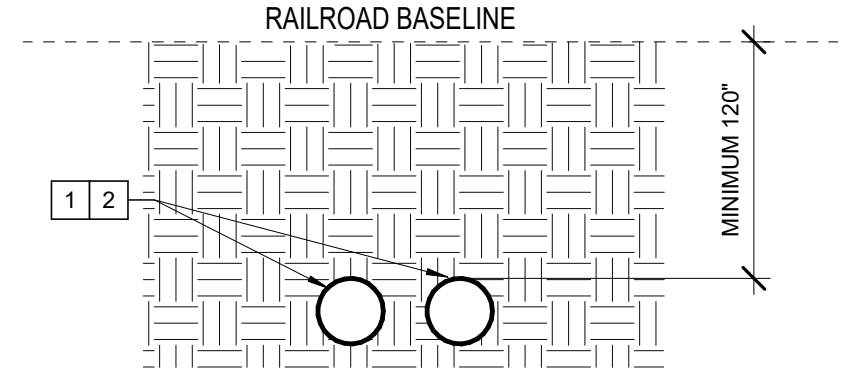
**E1 RECEPTACLE GROUNDING DETAIL**  
 NOT TO SCALE



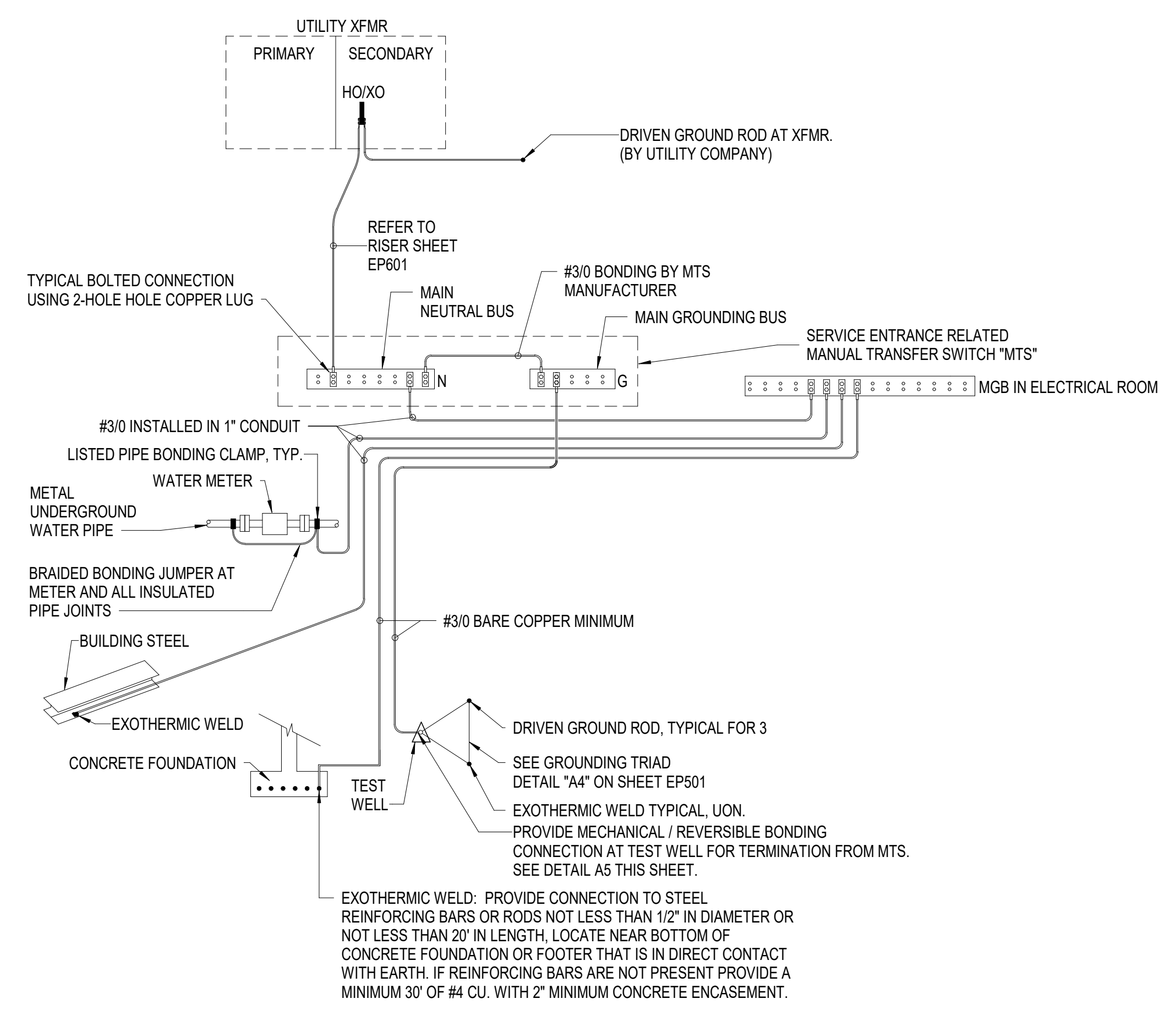
**E2 TYPICAL PANEL GROUNDING**  
 NOT TO SCALE

**DIRECTIONAL BORING NOTES**

- PROVIDE (2)-4 INCHES HIGH DENSITY POLYETHYLENE (HDPE) ELECTRICAL CONDUIT, SMOOTH WALL, SCHEDULE 80, ASTM F2160, NEMA TC 7.
- HDPE CONDUITS SHALL BE INSTALLED BELOW THE FROSTLINE AND AS SPECIFIED HEREIN.
  - DEPTH TO THE TOP OF THE CONDUIT SHALL NOT BE LESS THAN 120 INCHES BELOW BASE OF RAILROAD.
  - BORE PIT LOCATIONS SHALL BE OUTSIDE OF RAILROAD RIGHT-OF-WAY-LINES.

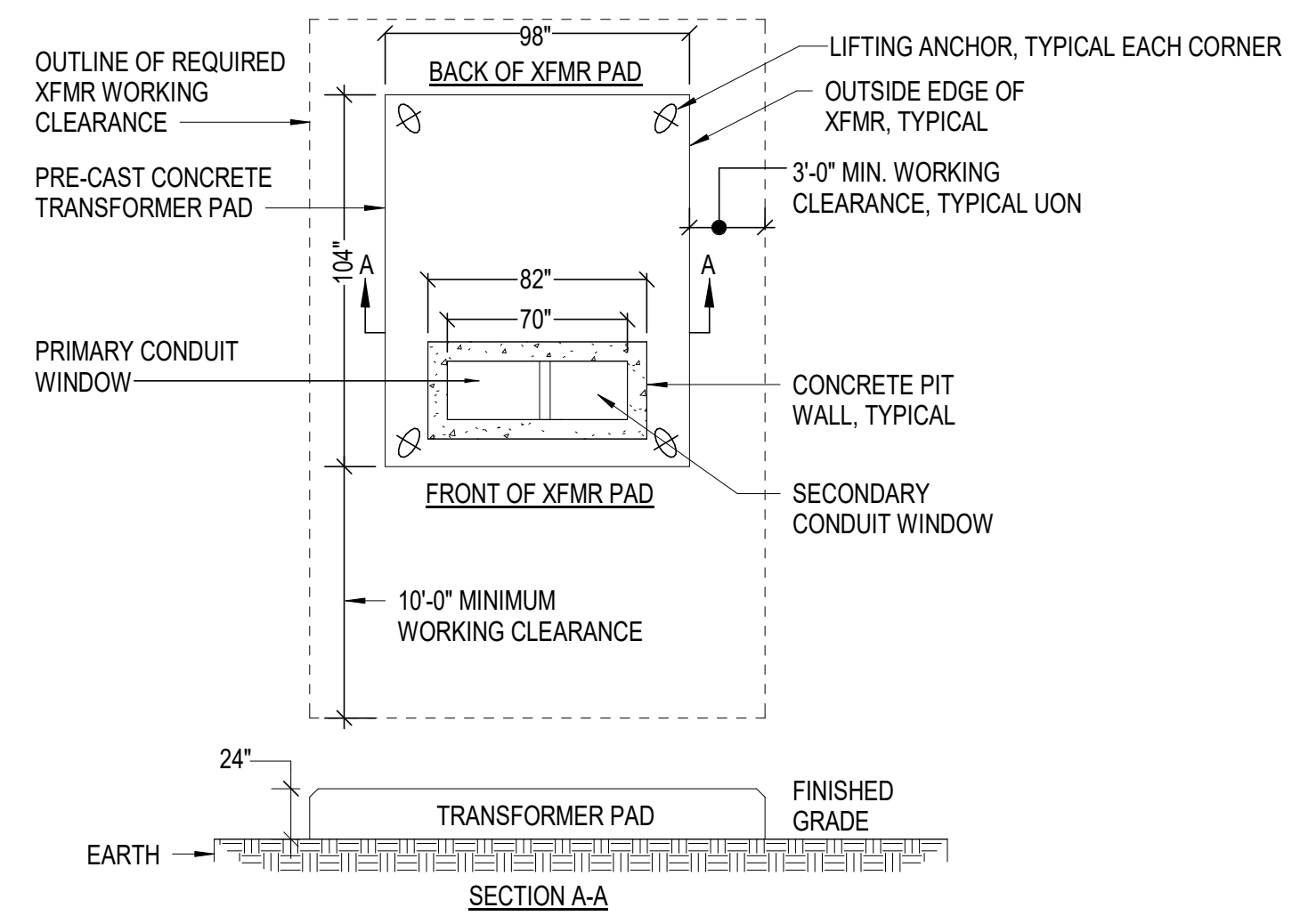
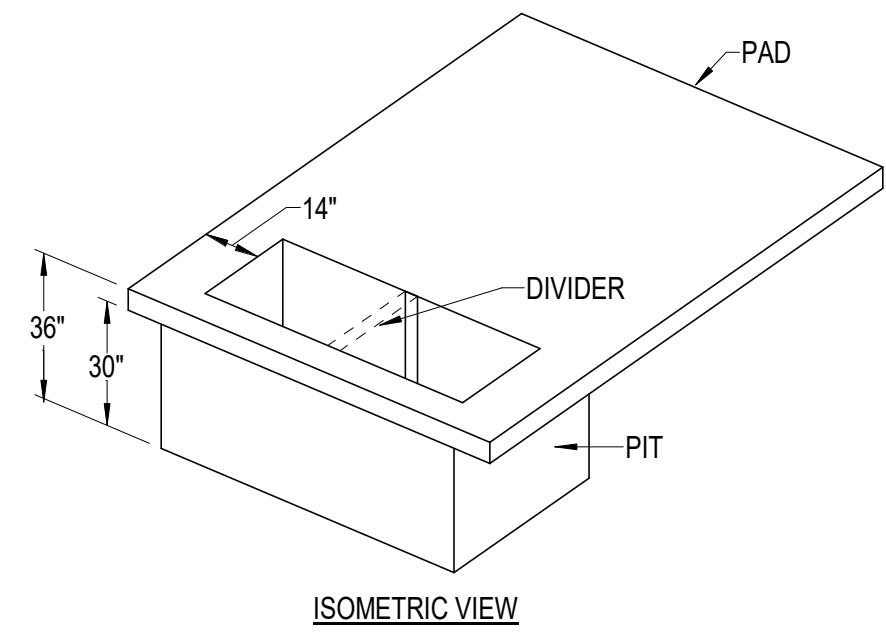


**E4 DIRECTIONAL BORING SECTION (XFMR PRIMARY)**  
 NOT TO SCALE



**C1 GROUNDING ELECTRODE SYSTEM**  
 NOT TO SCALE

NOTE: GROUNDING ELECTRODE SYSTEM SHALL CONFORM TO NEC ARTICLE 250.

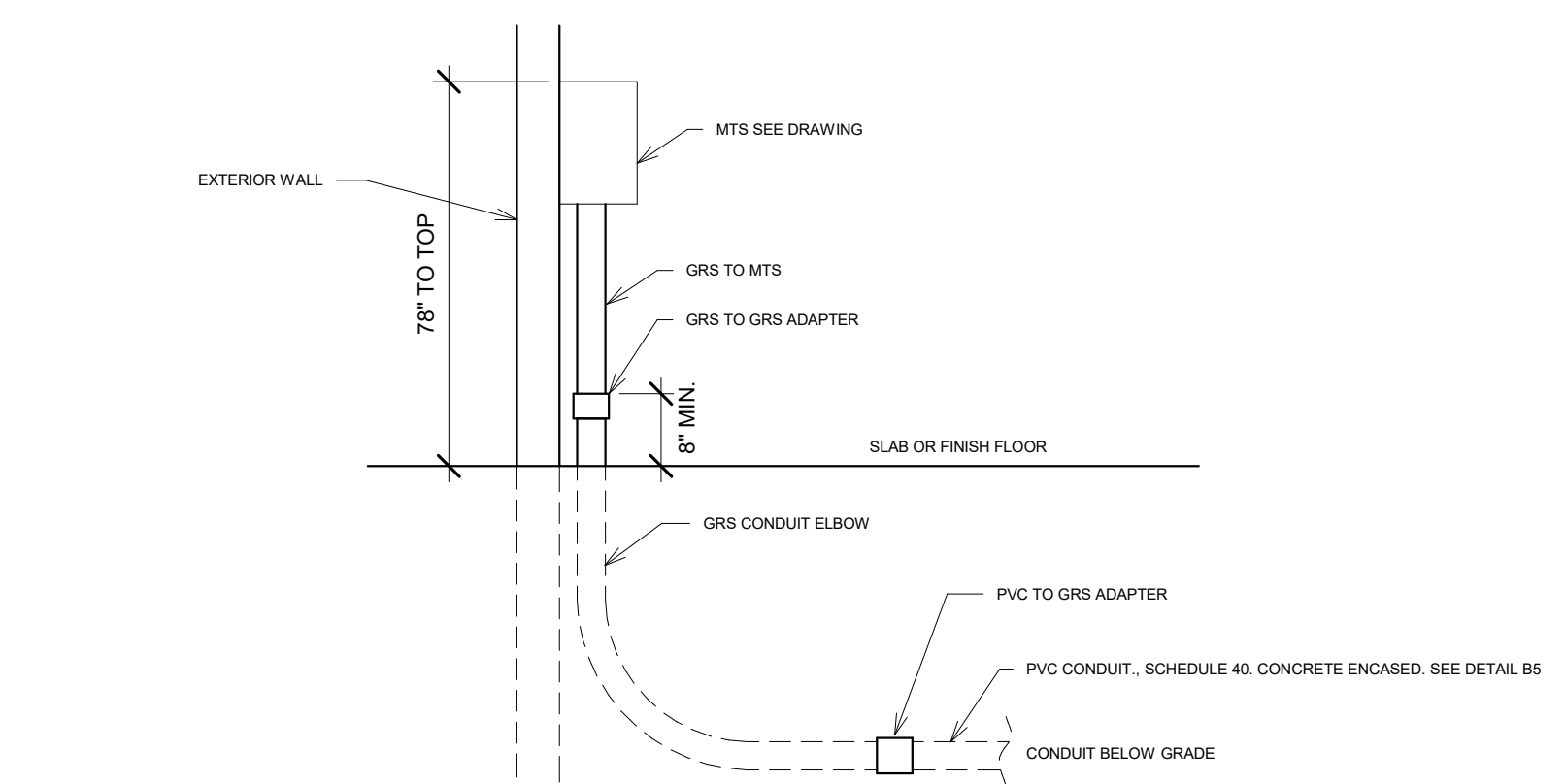


**B3 TRANSFORMER PAD INSTALLATION GENERAL NOTES**  
 NOT TO SCALE

**SERVICE TRANSFORMER PAD DETAIL PLAN AND SECTION**

- PROVIDE THREE-PHASE PIT PAD APPROVED FOR USE BY DUKE ENERGY. DETAIL IS DIAGRAMMATIC ONLY TO CONVEY GENERAL CONSTRUCTION REQUIREMENTS. COORDINATE WITH DUKE ENERGY FOR PAD REQUIREMENT PRIOR TO CONSTRUCTION.
- TRANSFORMER PADS SHALL BE INSTALLED IN A LOCATION TO REMAIN READILY ACCESSIBLE FOR LINE TRUCKS.
- SOIL UNDERNEATH PADS SHALL BE FREE OF ROOTS AND OTHER ORGANIC MATERIAL AND BE THOROUGHLY TAMPED TO PREVENT WASHING. EXERCISE CARE IN BACKFILLING AND GRADING AROUND PAD.
- SERVICE CONDUIT SHALL BE LOCATED IN THE EXTREME RIGHT SIDE OF THE SECONDARY COMPARTMENT.
- FOR SPECIAL CIRCUMSTANCES CONTACT THE LOCAL UTILITY.
- ACTUAL PAD DIMENSIONS VARY BY MANUFACTURER. CONTRACTOR SHALL COORDINATE REQUIRED PAD DIMENSIONS WITH DUKE ENERGY PRIOR TO CONSTRUCTION.
- PAD SHALL EXTEND 6\"/>

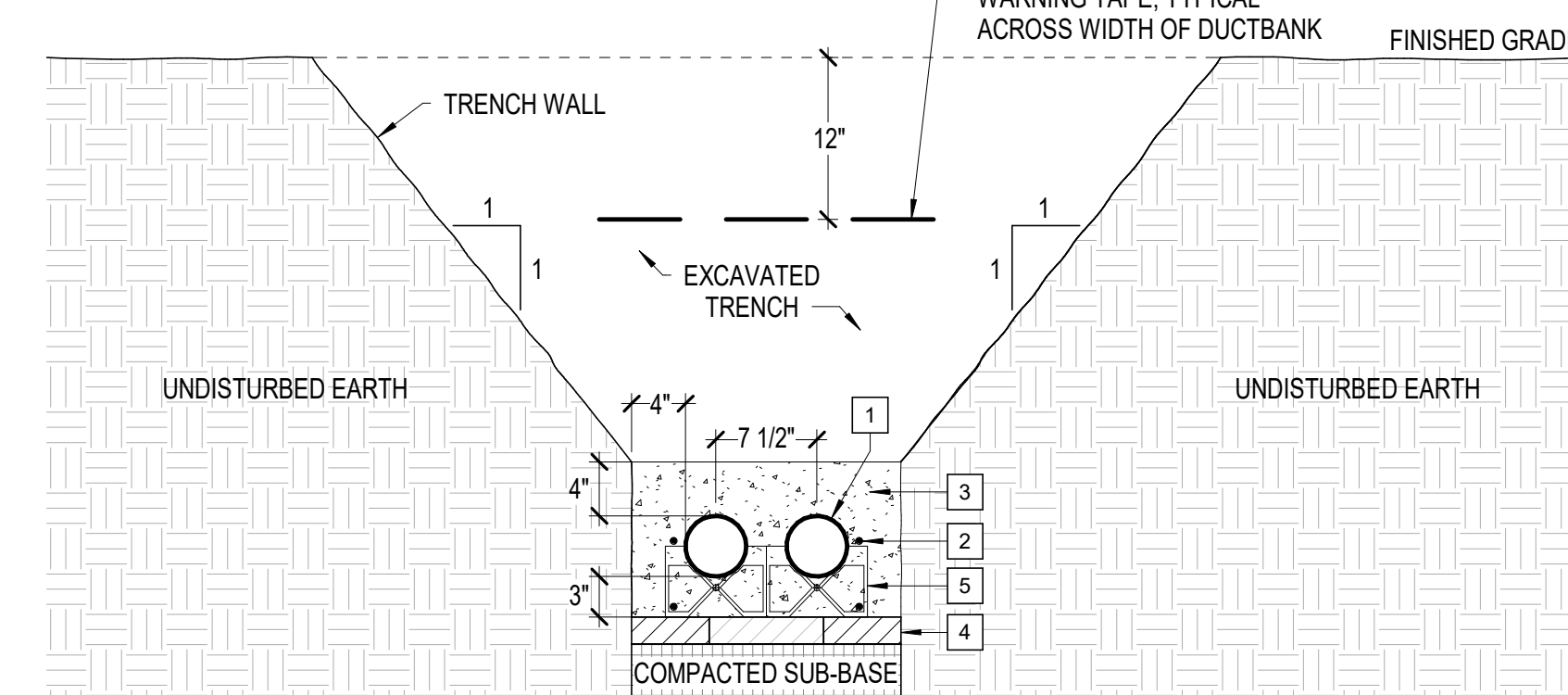
**B3 SERVICE TRANSFORMER PAD DETAIL PLAN AND SECTION**  
 NOT TO SCALE



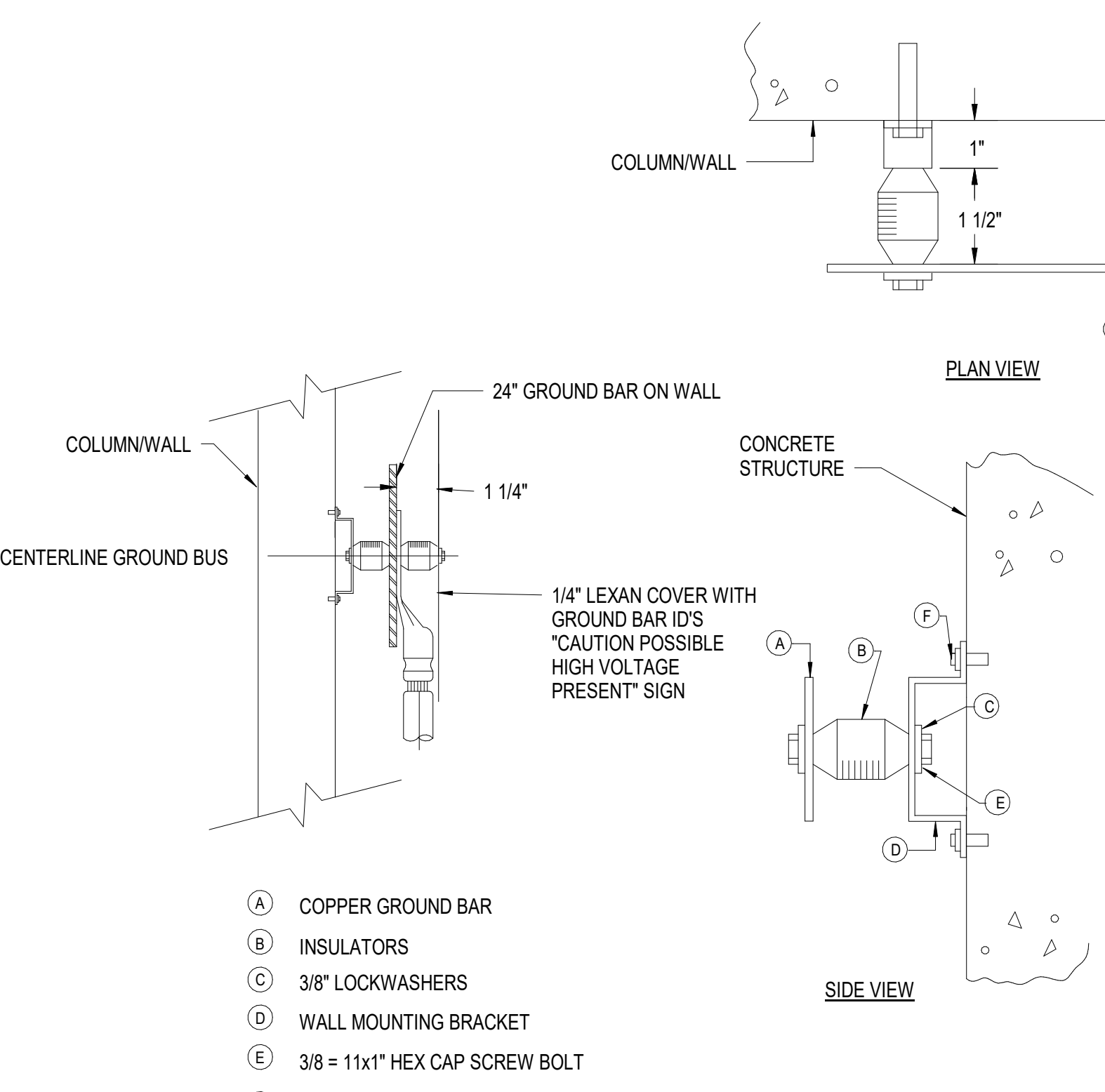
**D5 CONDUIT TRANSITION DETAIL (THROUGH SLAB)**  
 NOT TO SCALE

**DUCTBANK TAGGED NOTES**

- RACEWAY, ONE PER DUCTBANK SPACER UNLESS OTHERWISE NOTED. REFER TO DRAWING EP601 FOR SERVICE CONDUITS QUANTITY AND SIZE.
- PROVIDE #4 REBAR AT CORNERS. LOCATE MINIMUM OF THREE (3) INCHES FROM CORNER. INSTALL ONE (1) AT EACH CORNER ROUTED LENGTHWISE WITH DUCTBANK. PROVIDE AT ROADWAY CROSSINGS, SIDEWALKS AND BENEATH UTILITY YARD PAVEMENT.
- 3000 PSI CONCRETE ENCASUREMENT WITH THICKNESS AS INDICATED. TYPICAL ALL SIDES.
- 2-INCH MASONRY LEVELING BLOCKS INSTALLED TO PROVIDE LEVEL BASE FOR PLACING DUCTBANK SPACER.
- BASE SPACER.

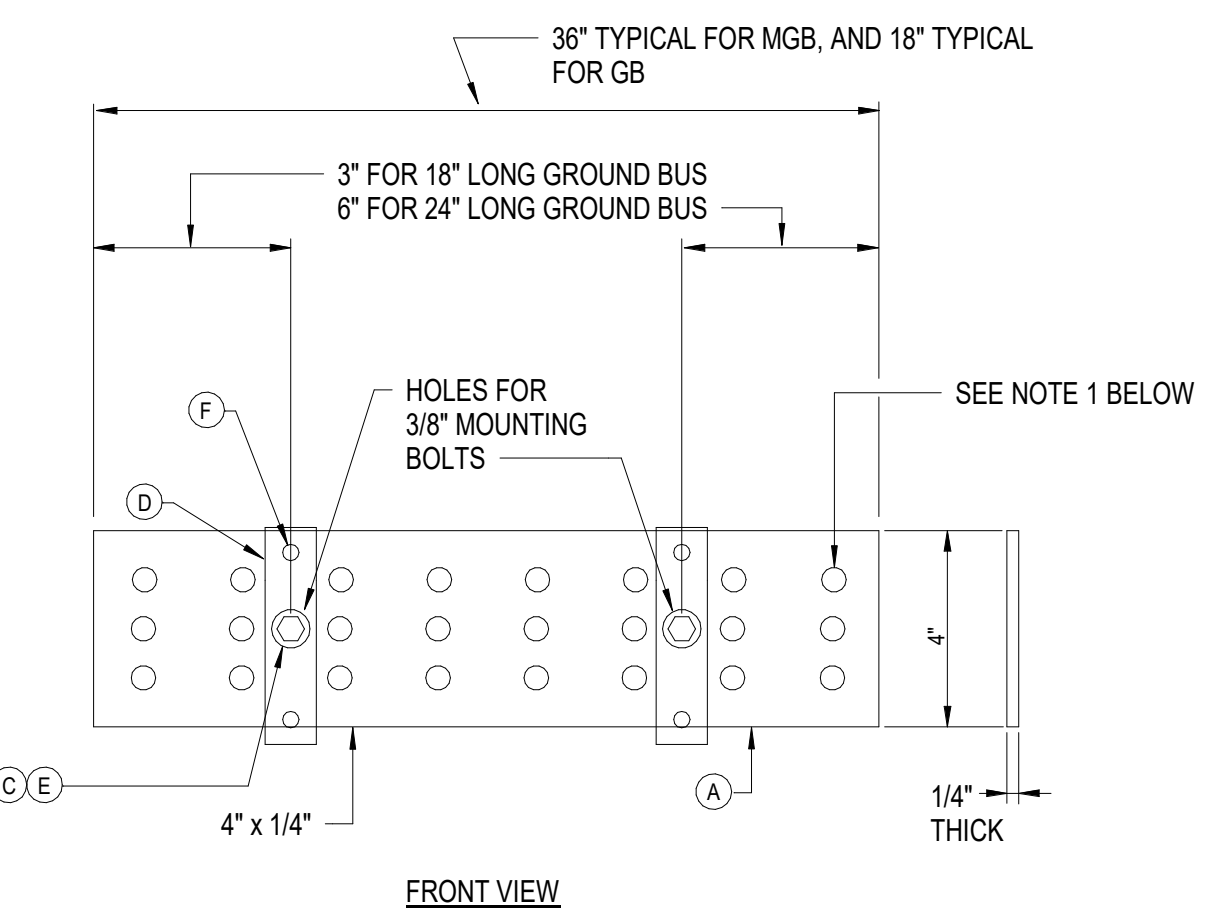


**B5 TYPICAL DUCTBANK SECTION (XFMR SECONDARY)**  
 NOT TO SCALE



**A1 ELECTRICAL GROUNDING BUSBAR DETAIL**  
 NOT TO SCALE

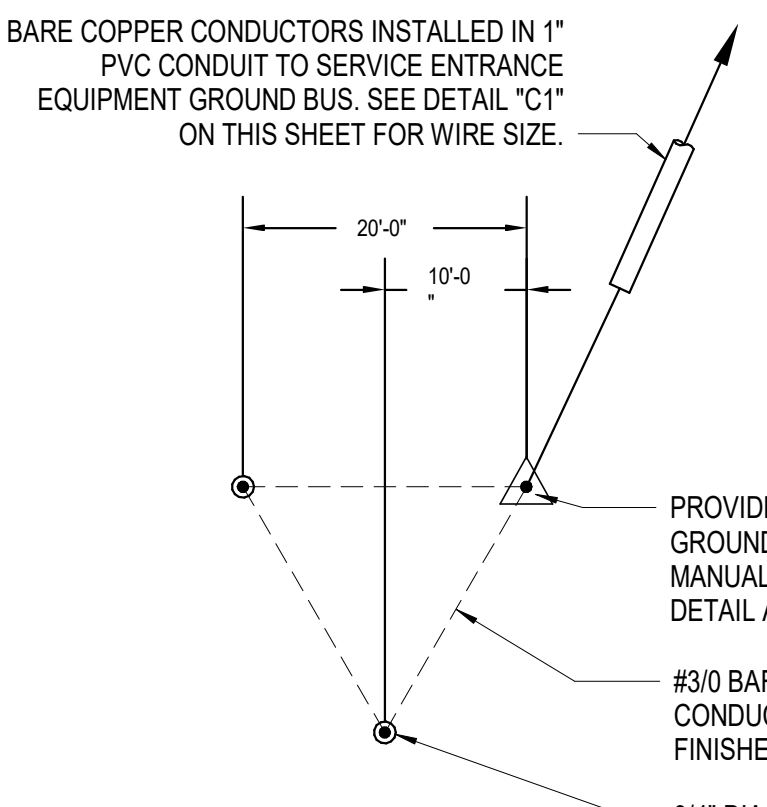
- A COPPER GROUND BAR
- B INSULATORS
- C 3/8\"/>



**A4 GROUNDING TRIAD**  
 NOT TO SCALE

**GENERAL NOTES:**

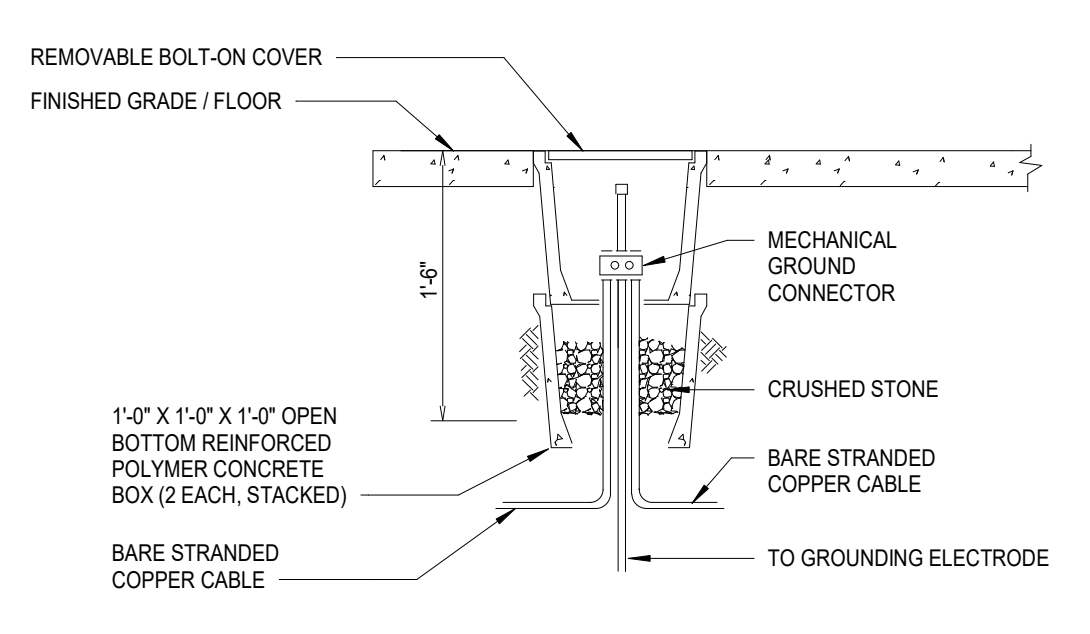
- PROVIDE THREE HOLES SUITABLE FOR NEMA SPACING FOR # 1/0 THROUGH 750 KCMIL 2 HOLE COMPRESSION CONNECTORS.
- PROVIDE 1/4\"/>



**A5 GROUNDING TEST WELL**  
 NOT TO SCALE

PROVIDE GROUND TEST WELL AT GROUNDING ELECTRODE NEAREST MANUAL TRANSFER SWITCH. SEE DETAIL AS THIS SHEET.

#3/0 BARE COPPER GROUNDING CONDUCTOR. INSTALL 30\"/>



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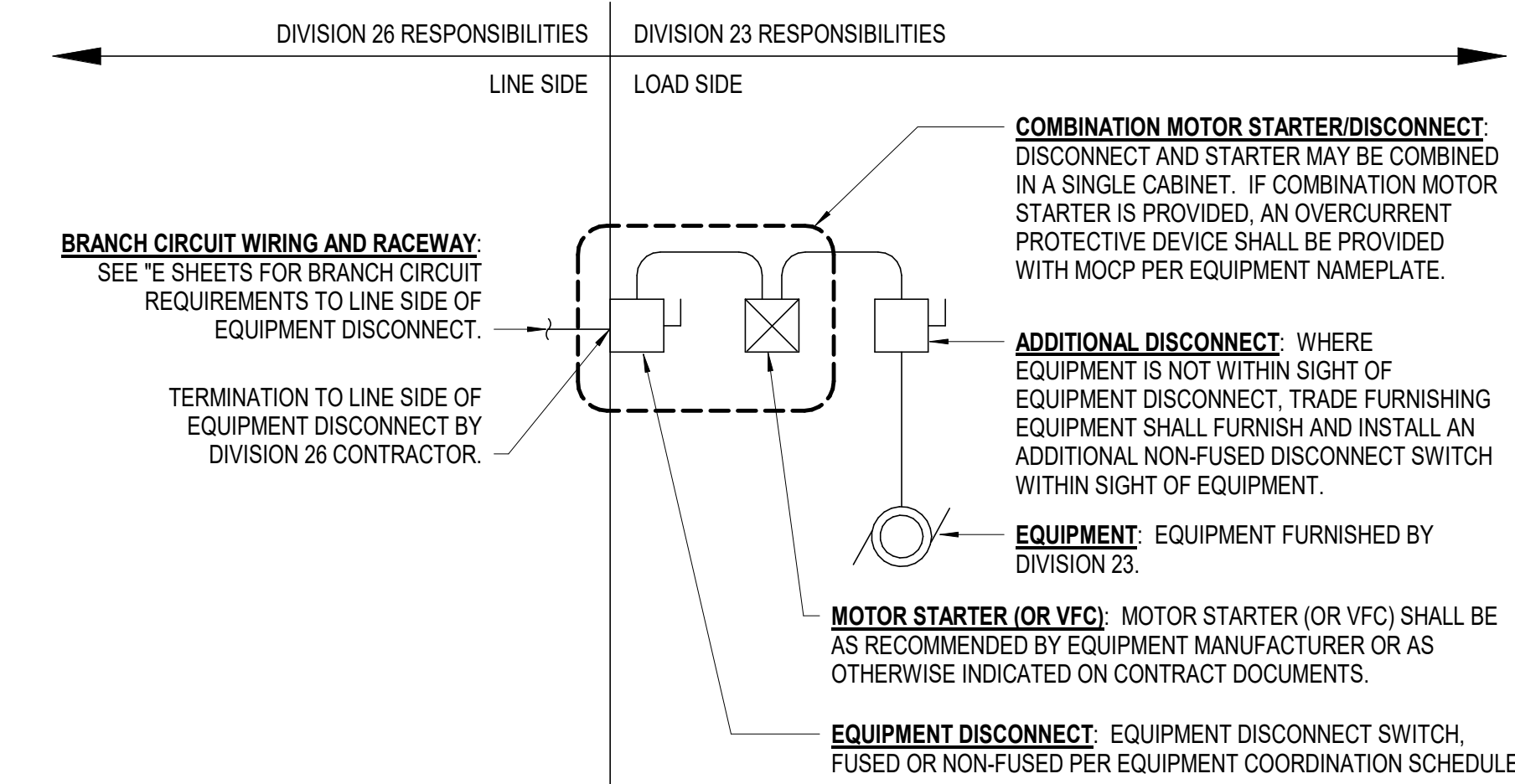
EQUIPMENT CONNECTION SCHEDULE															
EQUIPMENT DESIGNATION	DESCRIPTION	LOCATION	EQUIPMENT RATINGS				STARTER		DISCONNECT RATINGS			CONDUIT AND CONDUCTORS		REMARKS	
			LOAD RATING	VOLTS	PHASE	FLA	BY	TYPE	TYPE	RATING	OCPD	CONDUIT	CIRCUIT #		
ARU-1	AIR ROTATION UNIT	INDOOR	2 FANS @ 5HP EACH	480 V	3	15.2	DIV 23	VFD	FPN	30		3#10, 1#10G, 3/4" C	HE	7.9,11	SINGLE POINT CONNECTION
ARU-2	AIR ROTATION UNIT	INDOOR	2 FANS @ 5HP EACH	480 V	3	15.2	DIV 23	VFD	FPN	30		3#10, 1#10G, 3/4" C	HE	13,15,17	SINGLE POINT CONNECTION
CH-01	CHILLER	EXTERIOR	4 COMPRESSORS	480 V	3	73	DIV 23	VFD	FPN	200		3#1, #6G, 1-1/4" C	MDPH	1,3,5	MCA = 84A, MOCP = 90A
CH-02	CHILLER	EXTERIOR	4 COMPRESSORS	480 V	3	73	DIV 23	VFD	FPN	200		3#1, #6G, 1-1/4" C	MDPH	7,9,11	MCA = 84A, MOCP = 90A
CP-1	CONDENSATE PUMP	INDOOR	1/8 HP	120 V	1	3			MRS			2#12, 1#12G, 3/4" C	SP	25	
CP-2	CONDENSATE PUMP	INDOOR	1/8 HP	120 V	1	3			MRS			2#12, 1#12G, 3/4" C	SP	27	
CWP-1, CWP-2	CHILLER WATER PUMP PACKAGE	EXTERIOR	2 PUMPS @ 2HP EACH	480 V	3	6.8	DIV 23	VFD	FPN	30		3#10, #10G, 3/4" C	HE	1,3,5	SINGLE POINT CONNECTION
EUH-1	UNIT HEATER	INDOOR	7.5 KW	480 V	3	9			NF	30	MANUF	3#10, 1#10G, 3/4" C	HE	2,4,6	
EUH-2	UNIT HEATER	INDOOR	7.5 KW	480 V	3	9			NF	30	MANUF	3#10, 1#10G, 3/4" C	HE	8,10,12	
EUH-3	UNIT HEATER	INDOOR	7.5 KW	480 V	3	9			NF	30	MANUF	3#10, 1#10G, 3/4" C	HE	14,16,18	
EUH-4	UNIT HEATER	INDOOR	7.5 KW	480 V	3	9			NF	30	MANUF	3#10, 1#10G, 3/4" C	HE	20,22,24	
G5F-1	GLYCOL FEED SYSTEM	INDOOR	1/8 HP	120 V	1	3			MRS			2#12, 1#12G, 3/4" C	SP	29	
RO-1	OVERHEAD DOOR AND LEVELER	INDOOR	1 @ 1 HP, 1 @ 1/2 HP	480 V	3	3.2			FPN	30		3#10, 1#10G, 3/4" C	HE	19,21,23	SINGLE POINT CONNECTION
RO-2	OVERHEAD DOOR AND LEVELER	INDOOR	1 @ 1 HP, 1 @ 1/2 HP	480 V	3	3.2			FPN	30		3#10, 1#10G, 3/4" C	HE	25,27,29	SINGLE POINT CONNECTION
RO-3	OVERHEAD DOOR AND LEVELER	INDOOR	1 @ 1 HP, 1 @ 1/2 HP	480 V	3	3.2			FPN	30		3#10, 1#10G, 3/4" C	HE	31,33,35	SINGLE POINT CONNECTION
RO-4	OVERHEAD DOOR AND LEVELER	INDOOR	1 @ 1 HP, 1 @ 1/2 HP	480 V	3	3.2			FPN	30		3#10, 1#10G, 3/4" C	HE	37,39,41	SINGLE POINT CONNECTION
RO-5	OVERHEAD DOOR	INDOOR	1/2 HP	480 V	3	1.1			FPN	30		3#10, 1#10G, 3/4" C	HE	38,40,42	

**EQUIPMENT CONNECTION SCHEDULE - NOTES**

- FOR DIVISION OF WORK BETWEEN TRADES CONCERNING ELECTRICAL CONNECTIONS TO EQUIPMENT, REFER TO THE PROJECT SPECIFICATION SECTION 260250 AND DIVISION OF WORK DETAIL C1 ON THIS SHEET.
- REFER TO EQUIPMENT CONNECTIONS SYMBOL LEGEND ON DRAWING E-001 FOR ADDITIONAL INFORMATION.
- COORDINATE DISCONNECT REQUIREMENT BETWEEN THE INDOOR UNIT AND THE OUTDOOR UNIT WITH UNIT'S MANUFACTURER. DISCONNECT SHALL COMPLY WITH MANUFACTURER RECOMMENDATION AND LISTING INSTRUCTIONS.

**EQUIPMENT CONNECTION SCHEDULE - ABBREVIATIONS**

- DIV 23 EQUIPMENT FURNISHED AND INSTALLED BY DIVISION 23 CONTRACTOR
- MANUF RATED PER MANUFACTURER'S RECOMMENDATION (PROVIDED BY DIVISION 23)
- MRS MOTOR RATED THERMAL SWITCH
- NF NON-FUSED DISCONNECT
- FPN FUSED-DISCONNECT, FUSE PER NAMEPLATE
- PLG PLUG



- GENERAL NOTES:**
- WIRING AND RACEWAY ON LOAD SIDE OF EQUIPMENT DISCONNECT SHALL BE FURNISHED AND INSTALLED BY DIVISION 23 AND SIZED IN ACCORDANCE WITH EQUIPMENT NAMEPLATE DATA AND THE NEC. PROVIDE SEPARATE GROUND WIRE SIZED PER NEC.
  - REQUIREMENTS FOR WIRING, MATERIALS, METHODS, AND COMPONENTS SHALL BE PER DIVISION 26 SPECIFICATIONS.

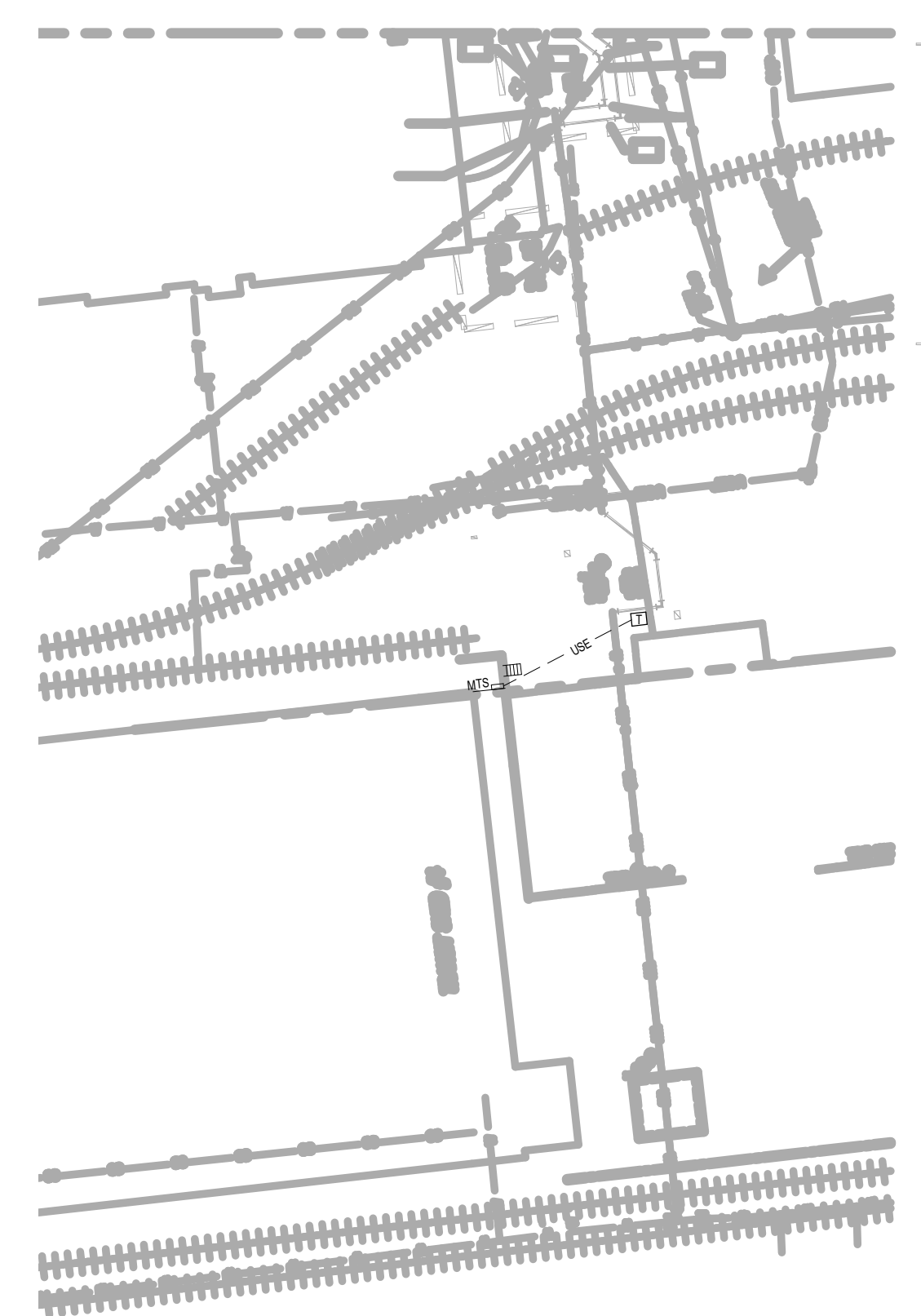
**C1 DIVISION OF WORK DETAIL**  
NOT TO SCALE

FEEDER SCHEDULE						
DESIGNATION	NO. OF SETS	CONDUCTORS			CONDUIT	NOTES
		PHASE	NEUTRAL	GROUND		
125VD	1	3#20	1#20	1#4	2"	WIRE UPSIZED DUE TO VOLTAGE DROP
225	1	3#40	1#40	1#4	2 1/2"	
600	2	3#350	1#350	1#1	3"	
600S	2	3#350	1#350	-	4"	SERVICE CONDUCTORS
EXST	1	EXST	EXST	EXST	EXST	

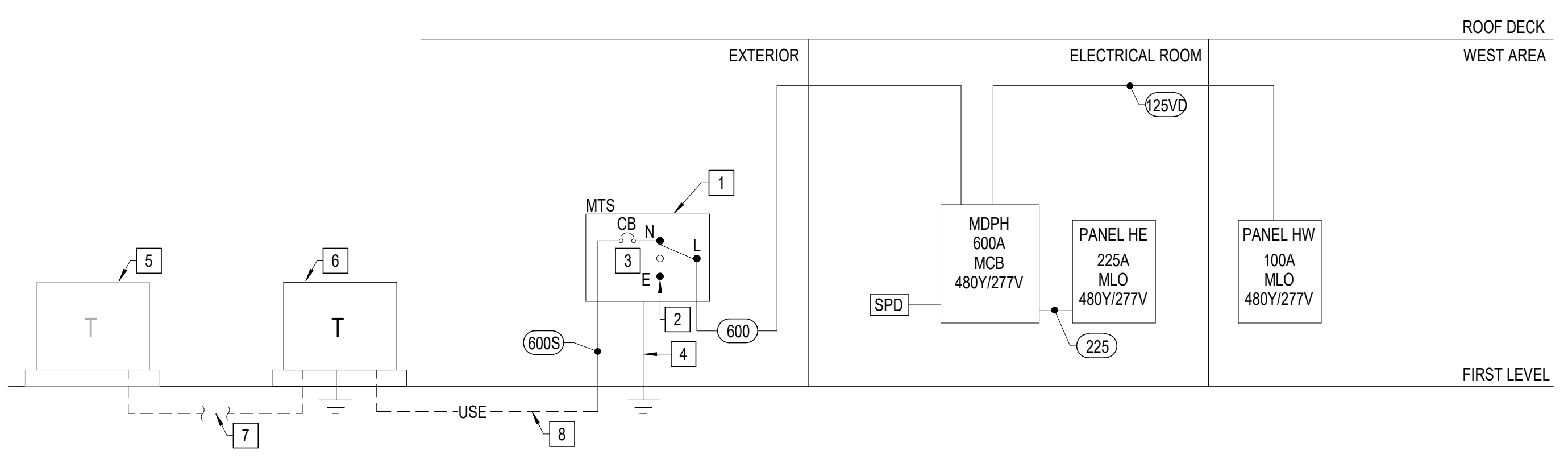
AIC RATINGS TABLE	
DEVICE NAME	MIN KAIR
MTS	35
MDPH	35
HE	35
HW	14

- GENERAL NOTES**
- REFER TO DRAWING E-001 GENERAL NOTES, PERFORMANCE REQUIREMENTS, AND DESIGN FLOOD ELEVATION.
  - FEEDER SIZES ARE BASED ON COPPER CONDUCTORS.
  - COORDINATE LOCATION OF PANELBOARDS WITH ELECTRICAL POWER SHEETS.

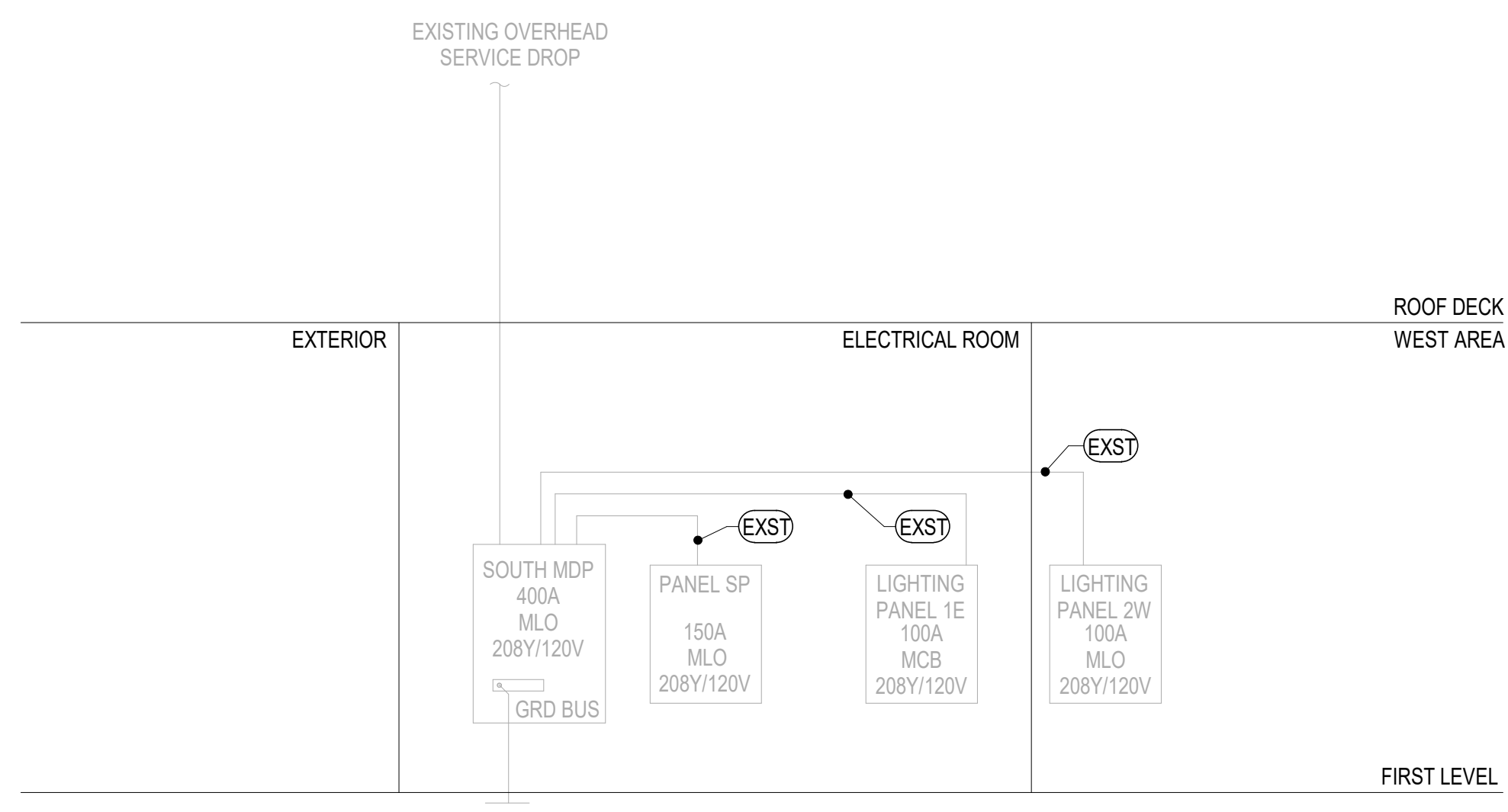
- KEY NOTES**
- MANUAL TRANSFER SWITCH "MTS"/DOCKING STATION, 600A, 480Y/277V, 3-PHASE, 4-WIRE, 4-POLE, SERVICE ENTRANCE RATED CIRCUIT BREAKER, SWITCHED NEUTRAL, AUXILIARY CONTACT, WALL MOUNT, TRANSFER SWITCH SHALL BE NEMA 4X CONSTRUCTION. PROVIDE WITH PHASE ROTATION MONITOR, AND SHALL BE UL1008 LISTED. MECHANICAL INTERLOCKING SHALL BE PROVIDED TO PREVENT INADVERTENT INTERCONNECTION OF POWER SOURCES. TRYSTAR, LLC PART # TMTS-065W-LLM-DIRS2W OR APPROVED EQUAL BY ESL POWER SYSTEMS OR ASCO POWER TECHNOLOGIES.
  - CONNECTION POINT FOR THE PORTABLE GENERATOR SHALL BE MARKED WITH THE PHASE ROTATION AND SYSTEM BONDING REQUIREMENTS. PROVIDE WITH COLOR-CODED SERIES 16 CAMLOCK STYLE MALE CONNECTORS.
  - 600A, 4-POLE CIRCUIT BREAKER, 35KAIC. BREAKER SHALL BE 100 PERCENT RATED, TYPE LI.
  - REFER TO DETAIL C1 ON DRAWING EP501 FOR GROUNDING ELECTRODE SYSTEM CONNECTIONS AND CONDUCTOR SIZES.
  - EXISTING UTILITY COMPANY LOOP-FEED TRANSFORMER (500KVA).
  - NEW PADMOUNT TRANSFORMER (500KVA, 480Y/277V, 3-PHASE) AND METERING EQUIPMENT BY UTILITY COMPANY. CONCRETE PAD BY CONTRACTOR. REFER TO DETAIL B3 ON DRAWING EP501 FOR DETAILS.
  - DIRECTIONAL BORING FROM EXISTING TRANSFORMER TO NEW TRANSFORMER SHALL BE PROVIDED BY CONTRACTOR. PROVIDE 2-4" HIGH DENSITY POLYETHYLENE (HDPE) ELECTRICAL CONDUITS, SMOOTH WALL, SCHEDULE 80, ASTM F2160, NEMA TC 7. REFER TO DETAIL E4 ON SHEET EP501 FOR ADDITIONAL DETAIL. COORDINATE INSTALLATION WITH UTILITY COMPANY (DUKE ENERGY) AND THE PORT PRIOR TO CONSTRUCTION. MEDIUM VOLTAGE CABLES AND TERMINATION BY UTILITY COMPANY.
  - TRANSFORMER SECONDARY DUCTBANK. SEE DETAIL B5 AND D5 FOR DUCTBANK DETAIL, CONDUITS TRANSITION AND TERMINATION.



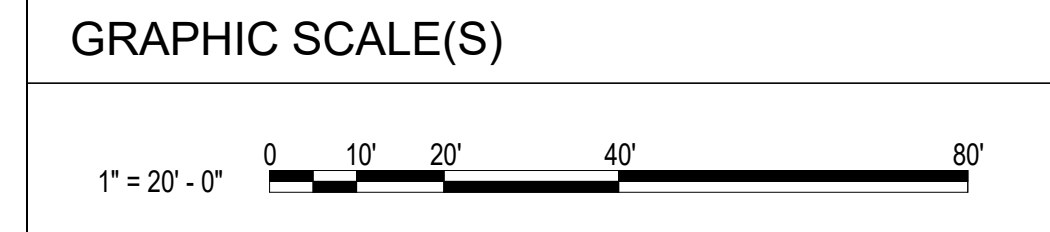
**C4 PARTIAL SITE PLAN**  
1" = 20'-0"



**A1 TRANSIT SHED #4 SOUTH COLD ROOM STORAGE POWER RISER DIAGRAM (NEW)**  
NOT TO SCALE



**A3 TRANSIT SHED #4 SOUTH POWER RISER DIAGRAM (EXISTING)**  
NOT TO SCALE



NORTH CAROLINA STATE PORTS AUTHORITY  
**TRANSIT SHED NO. 4 - COLD ROOM**  
2202 BURNETT BOULEVARD  
WILMINGTON, NC



DESIGNER  
**CLARK NEXSEN**  
1111 METROPOLITAN AVE., SUITE 333  
CHARLOTTE, NORTH CAROLINA 28204  
704-377-8800

CLARK NEXSEN LICENSE NUMBER: C-1028  
PROFESSIONAL SEAL

**NOT FOR CONSTRUCTION**

SUBMITTAL  
FEBRUARY 26, 2021  
**PROGRESS CONSTRUCTION DOCUMENTS**

REVISIONS


KEY PLAN

SHEET  
**POWER RISER DIAGRAMS AND EQUIPMENT CONNECTION SCHEDULE**

**EP601**

DESIGN: WAZ  
DRAWN: JAR  
REVIEW: WAZ  
CN 9372

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