

SECTION 00 91 10

ADDENDUM NUMBER 1

PARTICULARS

- 1.01 DATE: October 12,2023**
- 1.02 PROJECT: ELMORE GYM ELECTRICAL SERVICE REPLACEMENT**
- 1.03 PROJECT NUMBER: 26239.0, DCM/BC NO. 2023098, PSCA NO. 2082**
- 1.04 OWNER: ALABAMA A&M UNIVERSITY**
- 1.05 ARCHITECT: HYDE ENGINEERING, INC.**

TO PROSPECTIVE BIDDERS

- 2.01 THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND MODIFIES THE BIDDING DOCUMENTS DATED SEPTEMBER 29, 2023, WITH AMENDMENTS AND ADDITIONS NOTED BELOW.**
- 2.02 ACKNOWLEDGE RECEIPT OF THIS ADDENDUM IN THE SPACE PROVIDED IN THE PROPOSAL FORM. FAILURE TO DO SO MAY DISQUALIFY THE BIDDER.**
- 2.03 THIS ADDENDUM CONSISTS OF 5 - 8.5x11 PAGES and 6 full size sheets.**

CLARIFICATIONS:

- 3.01 Pre-Bid sign in sheet and agenda are attached.**

CHANGES TO THE PROJECT MANUAL: N/A

CHANGES TO THE DRAWINGS:

- 4.01 SHEET E0.1 – LEGEND, AND NOTES**
 - A. Special Construction Notes E and F were added.
- 4.02 SHEET E1.1 – DEMOLITION PLAN – ELECTRICAL**
 - A. Demolition Note #3 updated.
 - B. Existing North Wall of Electrical Room leader updated.
- 4.03 SHEET E2.1 – PRIMARY RISER, NOTES, AND TRANSFORMER DETAILS**
 - A. Feeder schedule updated.
- 4.04 SHEET E2.2 – RISER DIAGRAMS**
 - A. Riser Diagram – Main Electrical Room Note #5 added.
 - B. Additive Alternate #1 Rider Note #3 added.
 - C. Riser Diagram – Pool Electrical Room feeder added to the diagram.
 - D. Riser Diagram – Pool Electrical Room Note #2, #3, and #4 updated.
 - E. Riser Diagram – Pool Electrical Room Note #5 added.
- 4.05 SHEET E3.1 – GROUND FLOOR PLAN – ELECTRICAL**

A. Ground Floor Plan, pool switchgear leader updated.

4.06 SHEET E3.2 – SECOND FLOOR PLAN AND ENLARGED PLANS

A. Upper Enlarged Plan, Note #2 added.

B. Lower Enlarged Plan, Note #1 added. Fire alarm circuit shall be routed to panel RPA. Breaker shall have a red lock on device and be labeled as fire alarm control panel.

END OF ADDENDUM NUMBER 1

New Electrical Service For Elmore Gym PRE-BID CONFERENCE

October 12, 2023

9:00 am

AGENDA

Introduction

- Morgan Reyes, Hyde Engineering, Electrical Engineer
- Jerry Latham, Alabama A&M Representative

Sign-In Sheet: See attached

Bid Date, Location and Procedures

- Include all properly executed form for Accounting of Sales Tax
- Do not qualify bids.
- Bid date is October 26 at 2pm in University Services office conference room. 453 Buchanan Way

Project Funding Source: PSCA funded

Tax Exempt Status

- Sales tax is NOT to be included in bid
- The accounting of Sales Tax Form shall be included with the bid.

Alternates

- Additive alternate #1 – Additional panels and transformers to be replaced.

Contract Schedule

- Work may begin after notice-to-proceed.
 - o Substantial Completion: See spec section 01 10 00 – June 30, 2025
- Proposed schedule: Contractor may have a building shut down from mid May 2025 through Mid June 2025. A maximum of 30 days of building shut down.

Liquidated Damages

- Liquidated Damages: Noted in Appendix C – Supplementary Conditions of the Contract

Permit Requirements

- Alabama Building Commission is reviewing the project
- Alabama Building Commission Permit & Fees
- No City of Huntsville building permit is required.

Contract Considerations

- Project is PSCA funded. All State requirements for PSCA funded projects will be in place.
- E-Verify Program
- Project Schedule Submission and Update Requirements – Section 01 32 16
- CAD files of architectural base floor plans are available for submittal purposes.
- It is the contractor's responsible to incorporate addenda items into the hard copy and any electronic files of the construction documents.
- Full-time superintendent – Noted in Section 01 10 00.1.09. – required when working.
- Substitutions must meet design intent, with burden of proof and coordination on the Contractor and his supplier to ensure that adequate space, clearance, and accessibility is available within the design for a properly functioning system.
- Subcontractors are required to be familiar with requirements of all documents, not just documents specific to their trade

Site Conditions

- Contractor shall coordinate the building shut down exact dates with the owner and engineer at least 30 days prior to power shut down.
- Working hours during building shut down shall be at the contractors discretion but do not disturb the dorm building located next door. Working hours while the building is occupied is 7 am to 7 pm.
- Work Limits / Parking
- Existing Utilities shall remain in place until all new equipment comes in and is ready to install.
- Firearms and tobacco (including electronic and chewing) are strictly prohibited on campus.
- Contractor may use existing toilet facilities. Contractor shall maintain the facility they use in the clean manner.

Up-coming Addenda

- Addendum #1 – Will be published on Friday 10/20. Please get all questions for clarification in as soon as possible. Items that will be included at the moment:
 - o Pre-Bid meeting minutes/sign in sheet.

Questions – Submit all questions by 48 hours before the bid.

Send to Hyde Engineering:

- Morgan Reyes – morgan@hyde-egr.com

Notes from meeting:

1. Reminders from owner:
 - a. Do not engage with students. If there is any problem the contractor is to walk away and call engineer or owner immediately. The local DPS will handle the situation.
 - b. Contractor may bring in a Conex or other type storage container to store materials as they come in.

RECEPTACLES

- ⊕ GFI WALL OUTLET: DUPLEX RECEPTACLE, NEMA 5-20R.
- ⊕ WP WALL OUTLET: SINGLE RECEPTACLE, NEMA 5-20R.

POWER

- CEILING EXHAUST FAN.
- ⊠ NON-FUSED DISCONNECT SWITCH.
- ⊠ FUSED DISCONNECT SWITCH.
- ⊠ CIRCUIT BREAKER.
- ⊠ AUTOMATIC TRANSFER SWITCH.
- ⊠ ELECTRICAL PANEL: SEE SCHEDULE AND SPECIFICATIONS.
- ⊠ TRANSFORMER
- ⊠ FUSED DISCONNECT SWITCH WITH CONNECTION TO EQUIPMENT.
- ⊠ MANUAL MOTOR STARTER THERMAL SWITCH. WALL MOUNT 5"-6"H. OR AT MOTOR AS SHOWN.

ABBREVIATIONS

A	ABOVE COUNTER	IG	ISOLATED GROUND
AFG	ABOVE FINISH GRADE	NL	NIGHT LIGHT
AFF	ABOVE FINISH FLOOR	MCB	MAIN CIRCUIT BREAKER
AIC	AVAILABLE INTERRUPT CURRENT	MLO	MAIN LUGS ONLY
AL	ALUMINUM	RR	REMOVE AND REPLACE WITH NEW
AWG	AMERICAN WIRE GAUGE	TBB	TELEPHONE BACK BOARD
C	CONDUIT RACEWAY	TP	TAMPER PROOF
CB	CIRCUIT BREAKER	TV	TELEVISION
CU	COPPER	TYP	TYPICAL
DISC	DISCONNECT	UC	UNDER COUNTER
EM	EMERGENCY	UG	UNDER GROUND
EMT	ELECTRICAL METALLIC TUBING	WAP	WIRELESS ACCESS POINT
EP	EXPLOSION PROOF	WP	WEATHERPROOF, NEMA 3R.
EX	EXISTING	XR	EXISTING - REMOVE
F	FUSE	XRR	EXISTING - REMOVE AND RELOCATE
G, GRD	GROUND	XRL	EXISTING - RELOCATED
GFI	GROUND FAULT INTERRUPTING		

NOTES

1. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL ORDINANCES. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS.
2. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL DETAILS OF THE WORK AND ALL EXISTING FIELD CONDITIONS.
3. CONTRACTOR SHALL PROVIDE A COMPLETE ELECTRICAL INSTALLATION INCLUDING ALL WORK CUSTOMARILY INCLUDED EVEN IF NOT SPECIFICALLY CALLED OUT.
4. THE ELECTRICAL CONTRACTOR SHALL CAREFULLY COORDINATE HIS WORK WITH OTHER CONTRACTORS THROUGH THE GENERAL CONTRACTOR FOR SPACE REQUIREMENTS, ETC.
5. CONTRACTOR SHALL VERIFY ALL MECHANICAL EQUIPMENT NAMEPLATE DATA BEFORE ANY WORK IS DONE AND MAKE ANY ADJUSTMENTS IN BREAKER AND WIRE SIZE AS MAY BE REQUIRED.
6. SHOULD THE CONTRACTOR FIND DISCREPANCIES OR OMISSIONS IN THE CONTRACT DOCUMENTS OR BE IN DOUBT AS TO INTENT, HE SHALL IMMEDIATELY OBTAIN CLARIFICATION FROM THE ARCHITECT OR ENGINEER.
7. THE ELECTRICAL DRAWINGS ARE SCHEMATIC AND ARE NOT INTENDED TO SHOW THE EXACT LOCATION OF CONDUITS, OUTLETS, ETC. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL, AND PLUMBING DRAWINGS AND SHALL FIT HIS WORK TO CONFORM WITH THE BUILDING CONSTRUCTION AND WITH THE OTHER TRADES.
8. ATTENTION IS CALLED TO THE FACT THAT THIS IS A RENOVATION OF AN EXISTING BUILDING. WHEN THE WORK IS FINISHED, THE ELECTRICAL SHALL BE COMPLETE IN EVERY RESPECT, COMPLETELY INTEGRATED WITH ALL THE EXISTING ELECTRICAL SYSTEMS. ELECTRICAL SERVICE TO THE EXISTING BUILDING SHALL NOT BE INTERRUPTED AT ANY TIME. PROVIDE ALL THE NECESSARY TIES AND TEMPORARY SERVICE TO ACHIEVE THIS CONDITION.
9. RENOVATION/ADDITION SHALL BE MADE TO TIE INTO EXISTING IN A UNIFORM MANNER. SIMILAR ITEMS IN NEW BUILDING SHALL BE CHECKED AGAINST EXISTING BUILDING AS FOR TYPE, MOUNTING, MOUNTING HEIGHTS, ETC. ANY ITEMS SHOWN IN NEW ADDITION AT VARIANCE FROM ABOVE SHALL BE REFERRED TO ARCHITECT FOR DECISION BEFORE ROUGHING IN.
10. SHOULD ANY ELECTRICAL POWER, LIGHT OR AUXILIARY, CIRCUITS, FEEDERS OR EQUIPMENT BE SEVERED, DISCONNECTED OR DELETED IN THE PROCESS OF CONSTRUCTION OR REMODELING WHICH IS NOTED A RESULT OF CONTRACT PLANS AND SPECIFICATIONS, AND UNLESS IT IS SPECIFICALLY DESIGNATED BY THE DRAWINGS TO BE DELETED, THEN SAID CIRCUIT OR FEEDER SHALL BE RESTORED TO FIRST CLASS WORKING CONDITION. THE RESTORATION SHALL INCLUDE ANY RE-ROUTING, RELOCATIONS OR REPLACEMENT AS MAY BE NECESSITATED BY THE ARCHITECTURAL AND STRUCTURAL CONSTRUCTION. ANY SUCH WORK REQUIRED SHALL BE INCLUDED IN THE ELECTRICAL CONTRACT AND NO EXTRA COMPENSATION WILL BE GRANTED.
11. THE ELECTRICAL CONTRACTOR SHALL DO ALL CUTTING, PATCHING AND REPAIRING REQUIRED TO DO THIS WORK. REPAIRING OF WORK SHALL BE COMPARABLE TO WORK CUT. PAINT TO MATCH ADJACENT SURFACES OR AS DIRECTED BY ARCHITECT. COORDINATE WITH GENERAL CONTRACTOR.
12. ALL CONDUITS CROSSING EXPANSION JOINTS SHALL HAVE EXPANSION TYPE FITTINGS.
13. THE ATTACHED DRAWINGS WERE DEVELOPED FROM RECORD DRAWINGS AND INFORMATION PROVIDED BY OTHERS WHICH MAY NOT REFLECT ACTUAL FIELD CONDITIONS. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE FIELD BEFORE PROCEEDING WITH SUBSEQUENT WORK. THE DESIGN TEAM SHALL BE NOTIFIED OF ANY DISCREPANCIES OR CONFLICTS WITH DRAWINGS FOR CLARIFICATION PRIOR TO PROCEEDING WITH WORK.
14. QUESTIONS REGARDING THESE DRAWINGS SHALL BE ADDRESSED TO ENGINEER PRIOR TO AWARDING OF CONTRACT. OTHERWISE THE ENGINEER'S INTERPRETATION OF THE MEANING AND INTENT OF DRAWINGS SHALL BE FINAL.
15. PROVIDE ARC FLASH WARNING LABELS ON EXISTING AND NEW PANELS THAT COMPLY WITH NEC110.16.
16. LABEL PANELS PER NEC110.24.

DO NOT SCALE DIMENSIONS FROM DRAWINGS. CONSULT OWNER/ARCHITECT FOR EXACT DIMENSIONAL DATA.

SPECIAL CONSTRUCTION NOTES

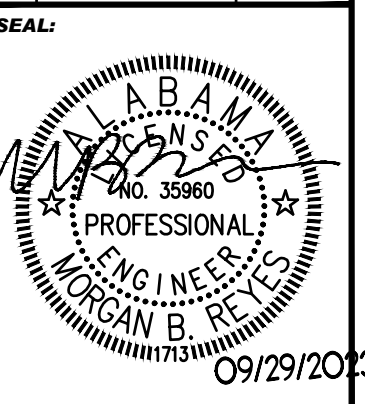
- A. THE SHUT DOWN TO THIS BUILDING SHALL BE KEPT TO A MINIMUM. THE PROPOSED SCHEDULE IS FOR THE BUILDING TO BE SHUT DOWN FROM MID MAY 2025: TO MID JUNE 2025, A MAXIMUM OF 30 DAYS OF SHUT DOWN. THIS SHOULD ALLOW TIME FOR ALL EQUIPMENT TO ARRIVE. ANY WORK POSSIBLE MAY BE COMPLETED DURING OTHER SCHOOL BREAKS IN 2024.
- B. ONCE THE NEW TRANSFORMER AND PRIMARY ARE INSTALLED THE OLD SHALL BE REMOVED.
- C. CONTRACTOR SHALL REUSE EXISTING POLE MOUNTED PRIMARY SWITCHES.
- D. ANY CEILING TILES BROKEN DURING CONSTRUCTION SHALL BE REPLACED WITH THE SAME TYPE CEILING TILES.
- E. PRIMARY POWER ON THIS PROJECT IS OWNED BY AAMU. ALL SHUT OFFS AND RECONNECTIONS ARE BY CONTRACTOR WITH ENGINEER, OWNER, AND STATE OBSERVATIONS/INSPECTIONS.
- F. BUILDING SHUT DOWN SHALL BE COORDINATED 30 DAYS IN ADVANCE WITH OWNER.



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Alabama A&M University
 Elmore Gym Electrical Service Replacement
 Normal, Alabama

NO.	REVISION	DATE
1	ADDENDUM #1	10/12/2023



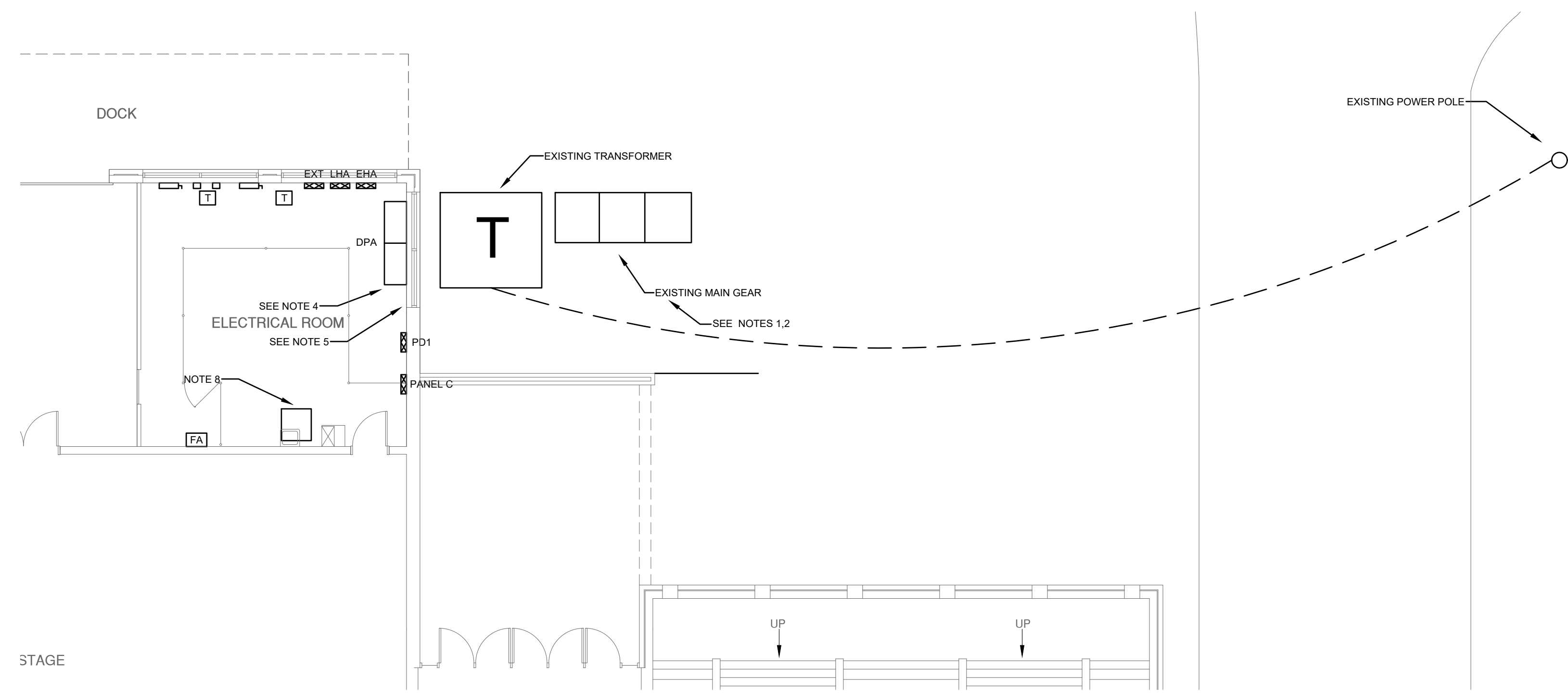
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 CHECKED BY: MBR

DRAWING TITLE:
LEGEND, AND NOTES

DRAWING NO.
E0.1



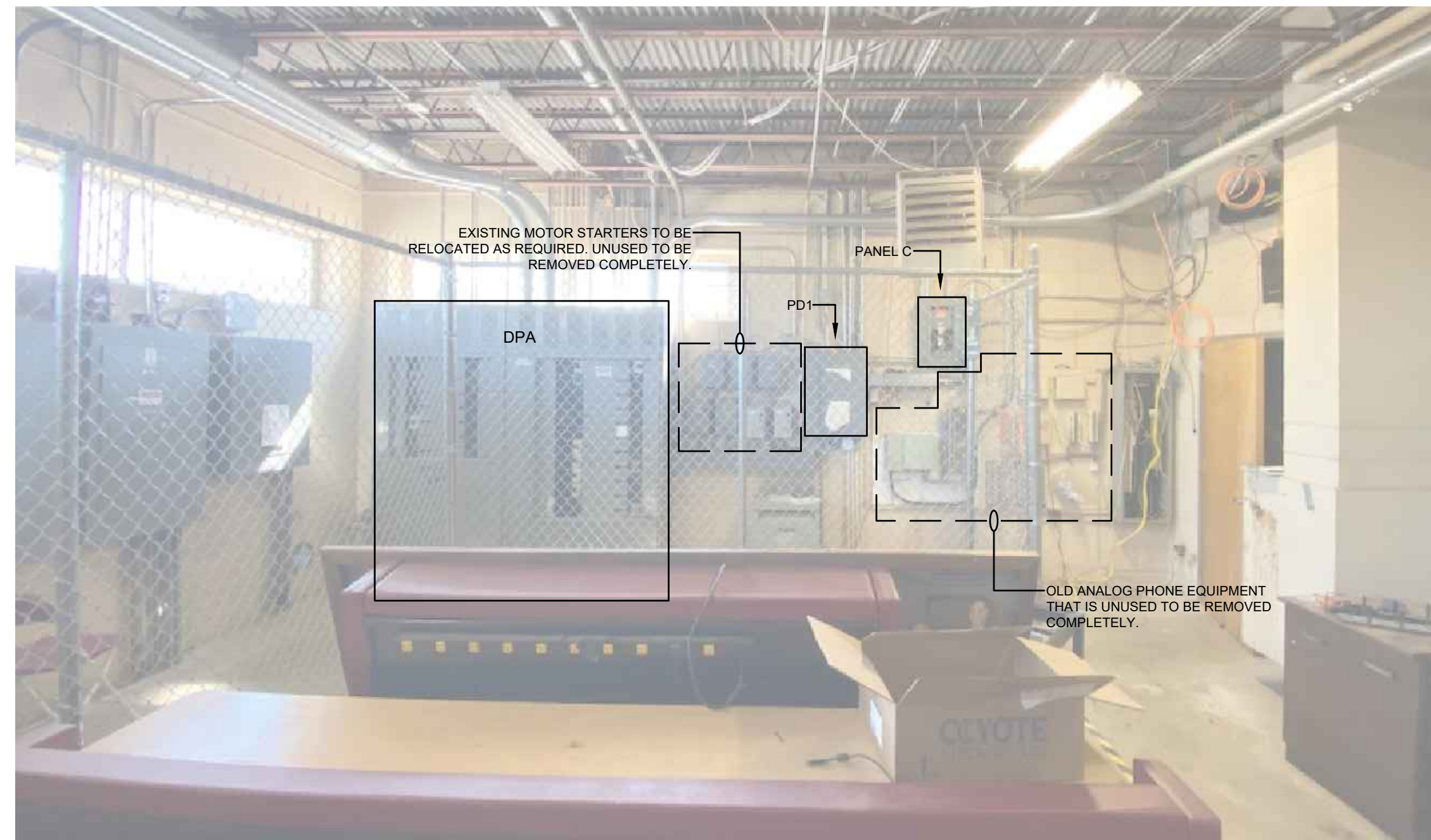
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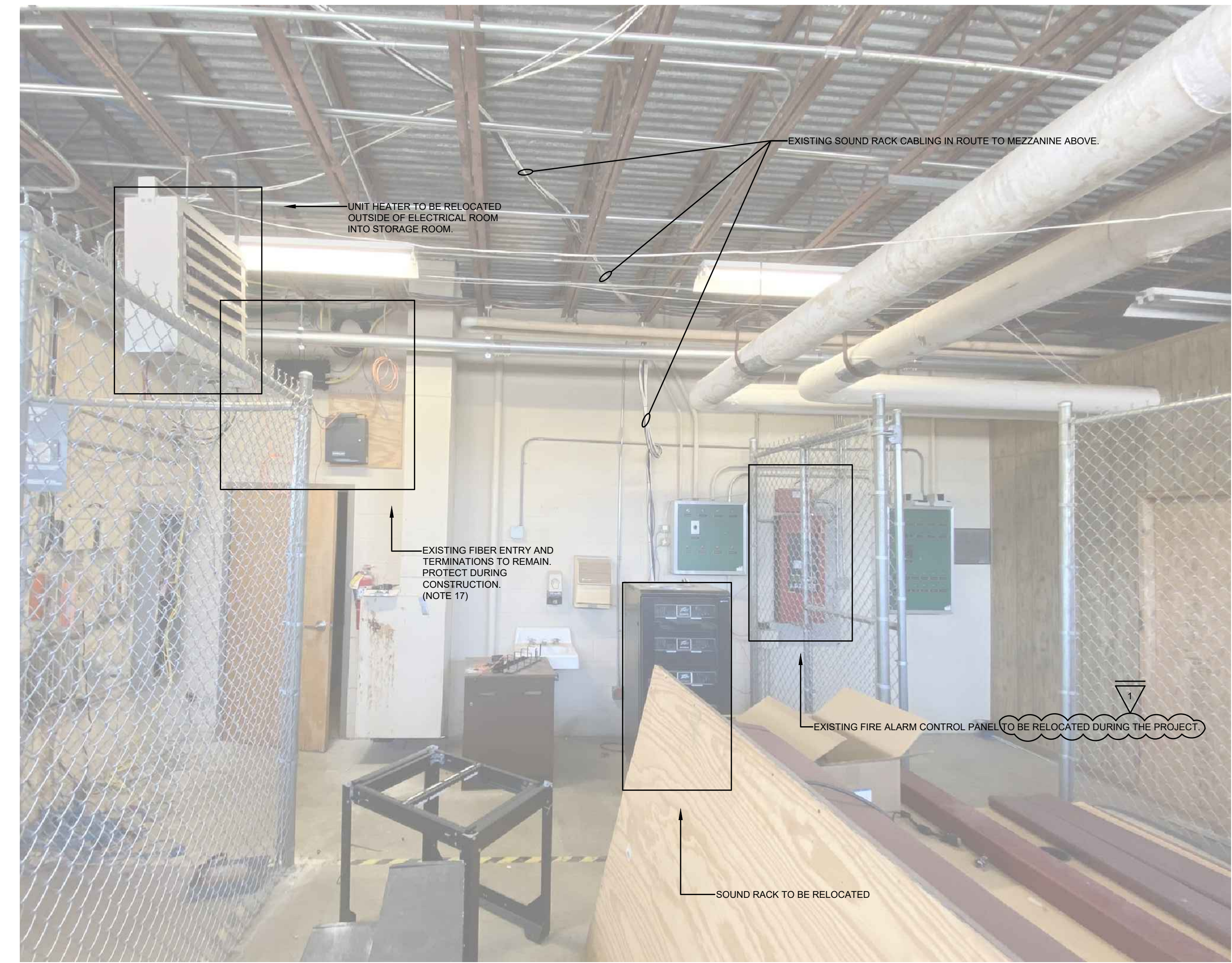
ENLARGED PLAN
ELECTRICAL - EXISTING - DEMOLITION
 SCALE 1/8"=1'0"

DEMOLITION NOTES:

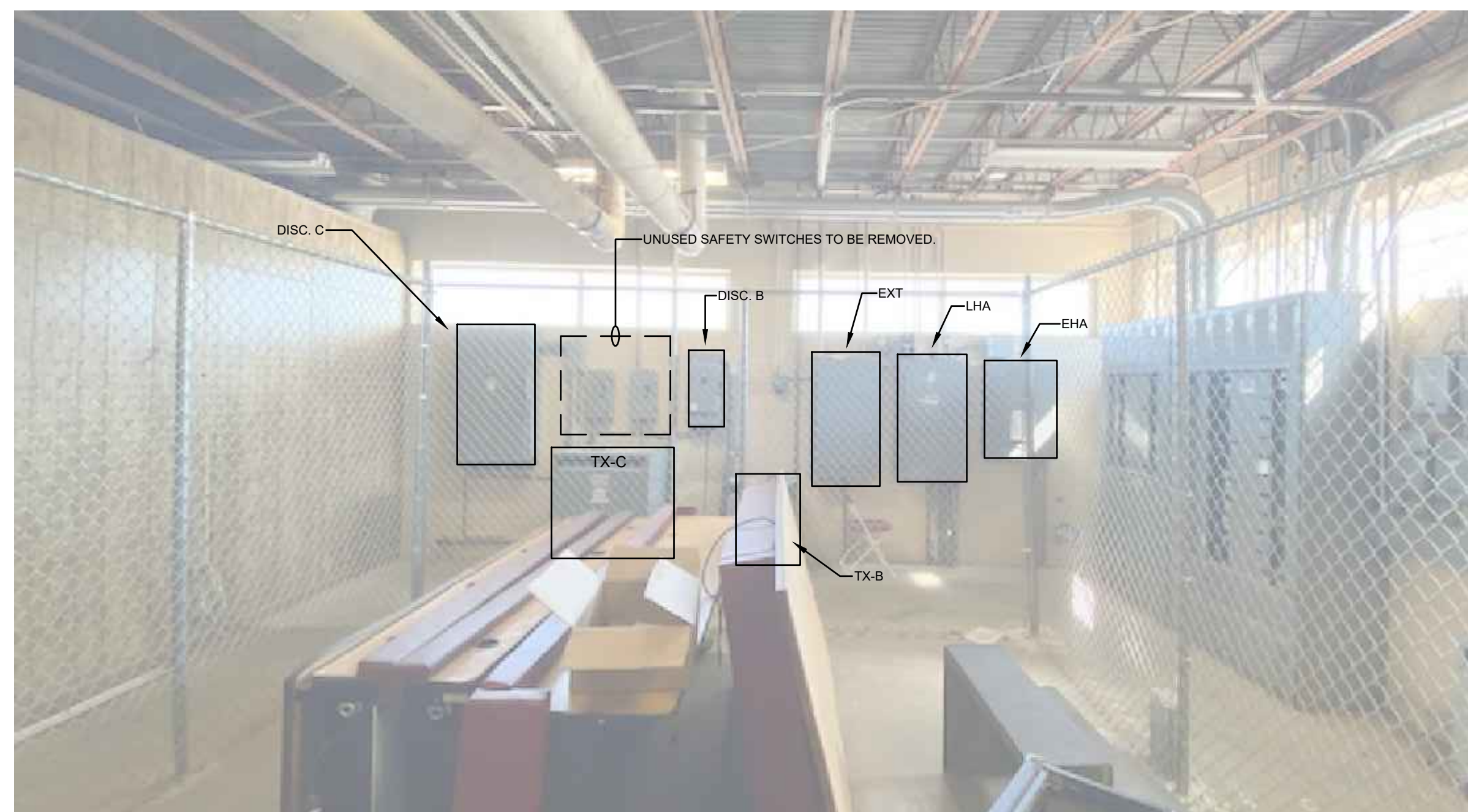
1. EXTERIOR TRANSFORMER AND EXTERIOR MAIN GEAR TO BE REMOVED.
2. EXTERIOR MAIN GEAR FEEDS THE FOLLOWING PANELS: SWBD MDP (POOL), SWBD DPA (GYM), EHA, LHA, LHB, DH, BH AND AN UNKNOWN PANEL (70A).
3. ALL PANEL FEEDERS WILL BE RE-FED FROM NEW SWITCHBOARD WITHIN ELECTRICAL ROOM. SEE NEW RISER.
4. EXISTING PANEL DPA AND EXTERIOR MAIN GEAR WILL BE REPLACED WITH NEW MBP AS SHOWN ON RISER.
5. EXISTING EQUIPMENT STARTERS THAT ARE STILL IN USE SHALL BE RELOCATED AND RECONNECTED. ANY STARTERS THAT ARE NO LONGER IN USE SHALL BE REMOVED COMPLETELY AND THE CONDUIT AND WIRE REMOVED BACK TO THE PANEL.
6. PANEL PD1 AND PANEL C WILL BE REPLACED WITH NEW PANEL RPA
7. PANEL LHA AND PANEL EHA WILL BE REPLACED WITH NEW PANEL LPA. CONTRACTOR TO INSTALL A JUNCTION BOX ON THE UNDERGROUND CONDUITS LEAVING EHA AND EXTEND CIRCUITS TO NEW PANEL LPA. LPA SHALL BE LOCATED IN THE SAME APPROXIMATE LOCATION AS PANEL LHA.
8. SOUND SYSTEM EQUIPMENT RACK SHALL BE RELOCATED TO MEZZANINE ABOVE. WIRING ALREADY ROUTES UP THROUGH MEZZANINE FLOOR. CONTRACTOR SHALL LABEL AND TEMPORARY DISCONNECT EXISTING CABLING. MOVE RACK UP TO MEZZANINE AND RECONNECT EXISTING CABLE. COIL UP EXCESS CABLING AT RACK. PROVIDE A 120V/20A RECEPTACLE ROUTED TO A SPARE 20/1 BREAKER IN PANEL RPA.
9. PANEL FEEDER FOR BH SHALL BE NEW AS PART OF BASE BID. PANEL BH SHALL BE REPLACED AS PART OF ADDITIVE ALTERNATE #1.
10. PANEL BL AND TRANSFORMER TX-BL SHALL BE REPLACED AS PART OF ADDITIVE ALTERNATE #1.
11. PANEL FEEDER FOR DH SHALL BE NEW AS PART OF BASE BID. PANEL DH SHALL BE REPLACED AS PART OF ADDITIVE ALTERNATE #1.
12. PANEL DL AND TRANSFORMER TX-DL SHALL BE REPLACED AS PART OF ADDITIVE ALTERNATE #1.
13. A NEW 2000 AMP FEEDER SHALL BE ROUTED TO THE NEW POOL SWITCHBOARD, DPB.
14. PANEL LP-N1 SHALL HAVE A NEW PANEL FEEDER PULLED INTO THE EXISTING CONDUIT. SEE RISER.
15. PANEL CL AND TRANSFORMER TX-CL SHALL BE REPLACED AS PART OF ADDITIVE ALTERNATE #1.
16. PANEL LHB WILL HAVE A NEW PANEL FEEDER. PANEL WILL NOT BE REPLACED.
17. PANEL EL AND TX-EL SHALL BE REPLACED AS PART OF ADDITIVE ALTERNATE #1.
18. A NEW HARD CEILING WILL BE INSTALLED IN NEW ELECTRICAL ROOM. ANY JUNCTION BOXES OR CABLING WILL NEED TO BE RELOCATED TO BELOW THE NEW CEILING. CONTRACTOR SHALL FIRE CAULK ALL PENETRATIONS.
19. UNIT HEATER SHALL BE RELOCATED CLEAR OF ELECTRICAL ROOM.



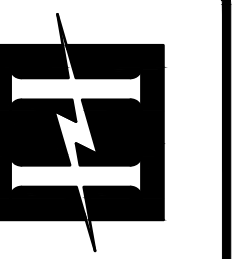
EXISTING EAST WALL OF ELECTRICAL ROOM
 SCALE 1/8"=1'0"



EXISTING NORTH WALL OF ELECTRICAL ROOM
 SCALE 1/8"=1'0"



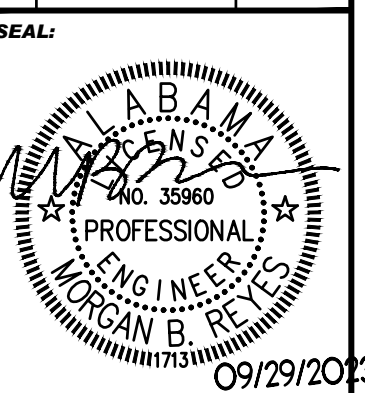
EXISTING NORTH WALL OF ELECTRICAL ROOM
 SCALE 1/8"=1'0"



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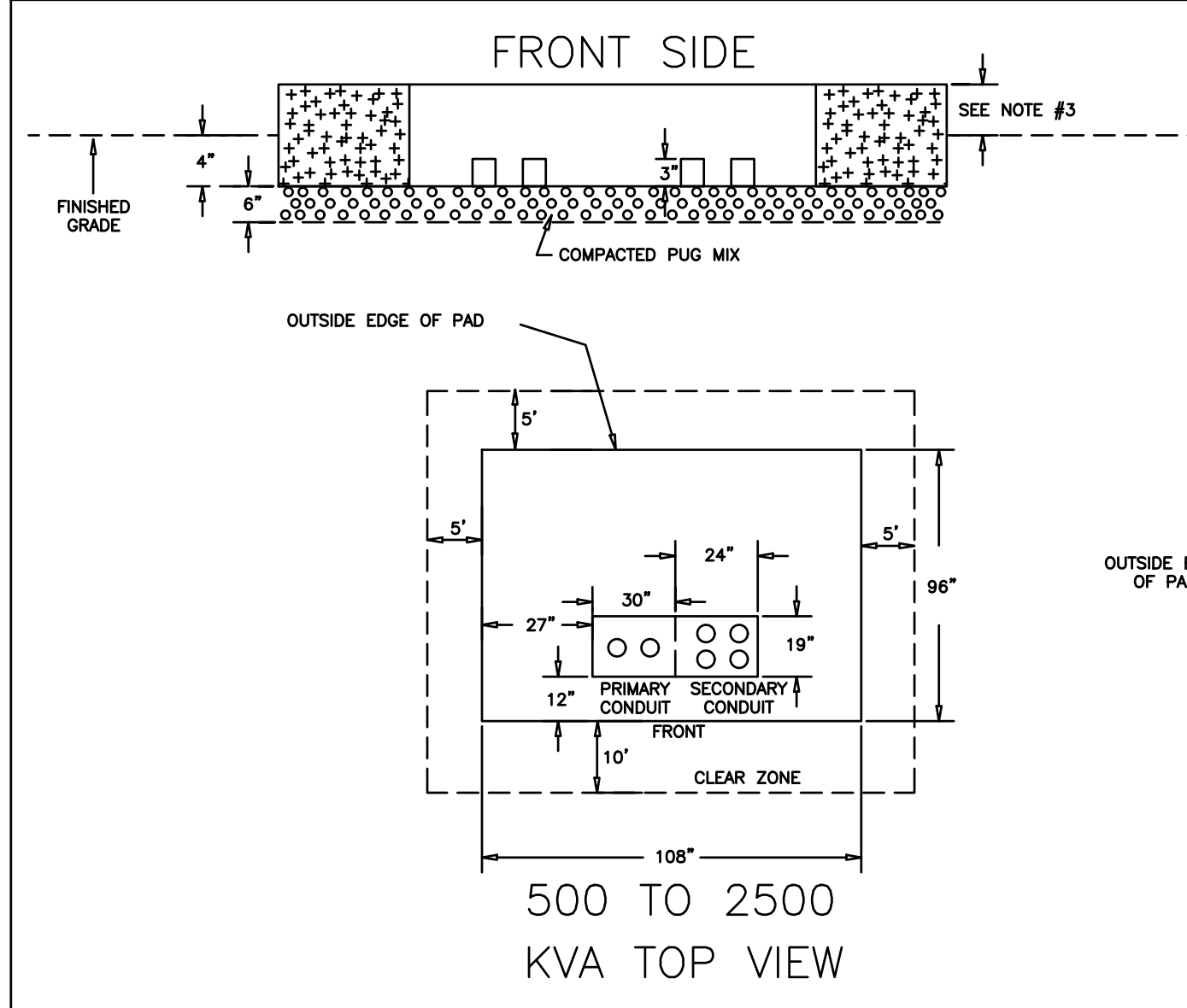
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DATE:	09/29/2023
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DRAWN BY:	BR
CHECKED BY:	MBR
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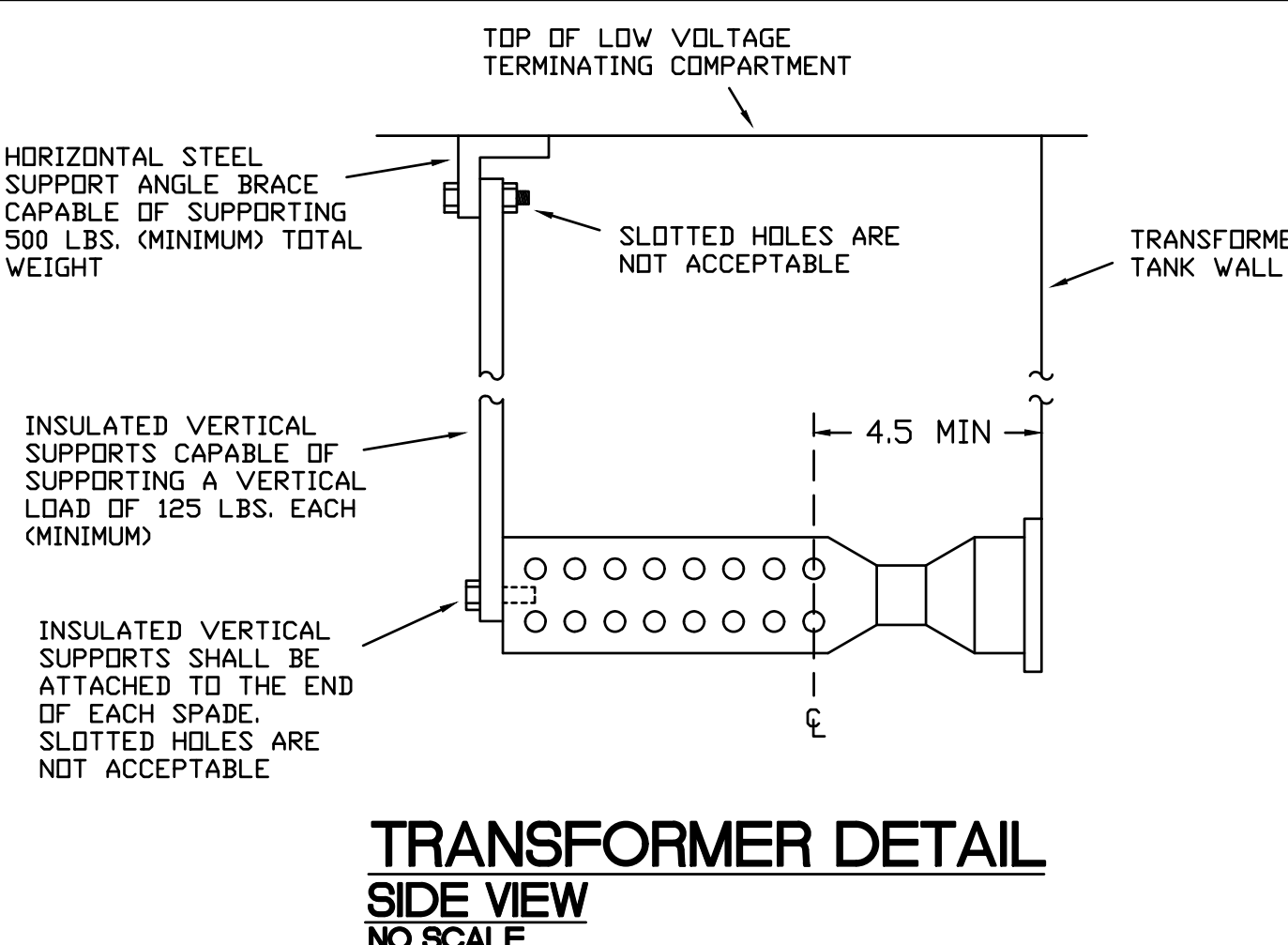
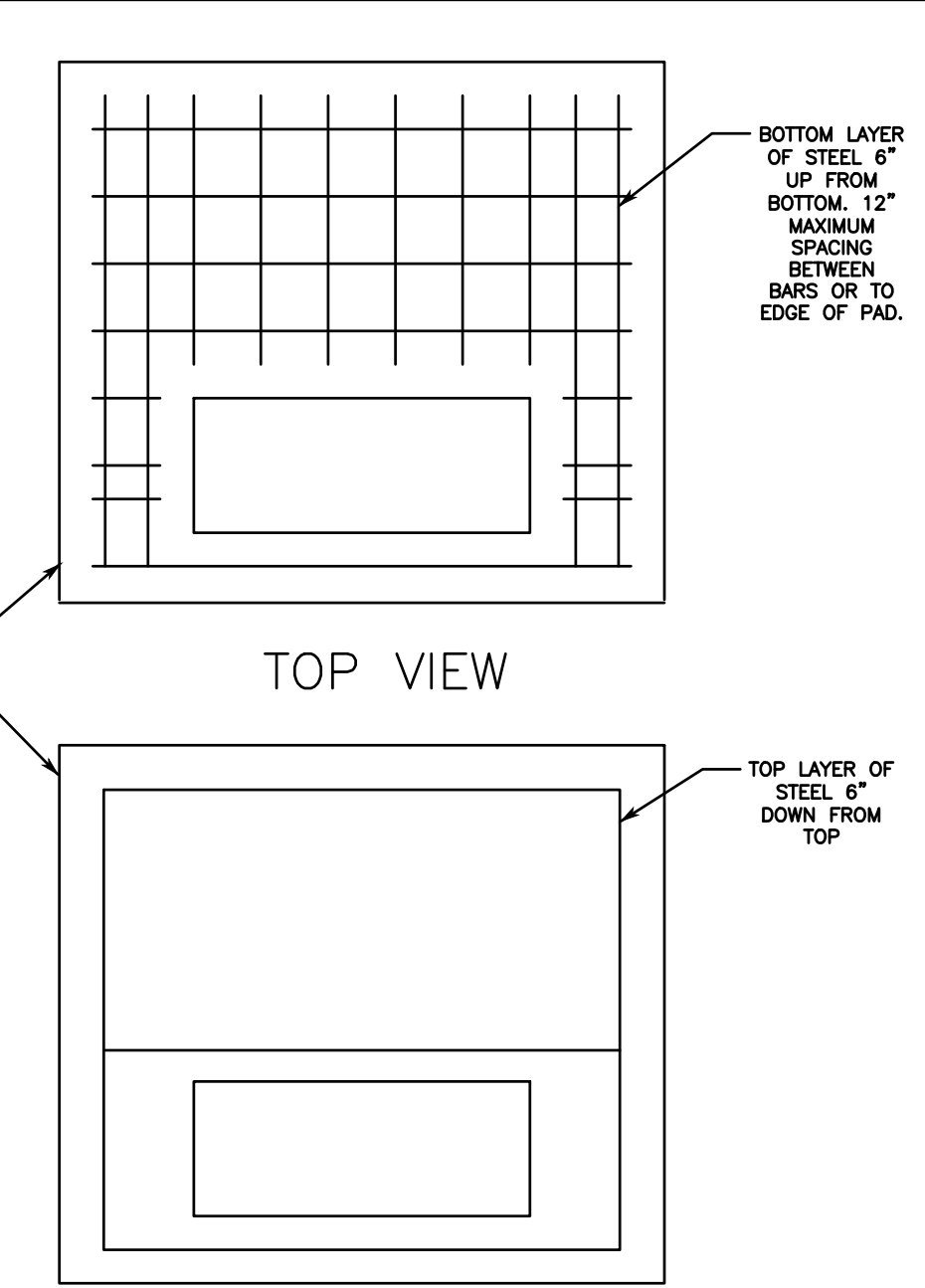
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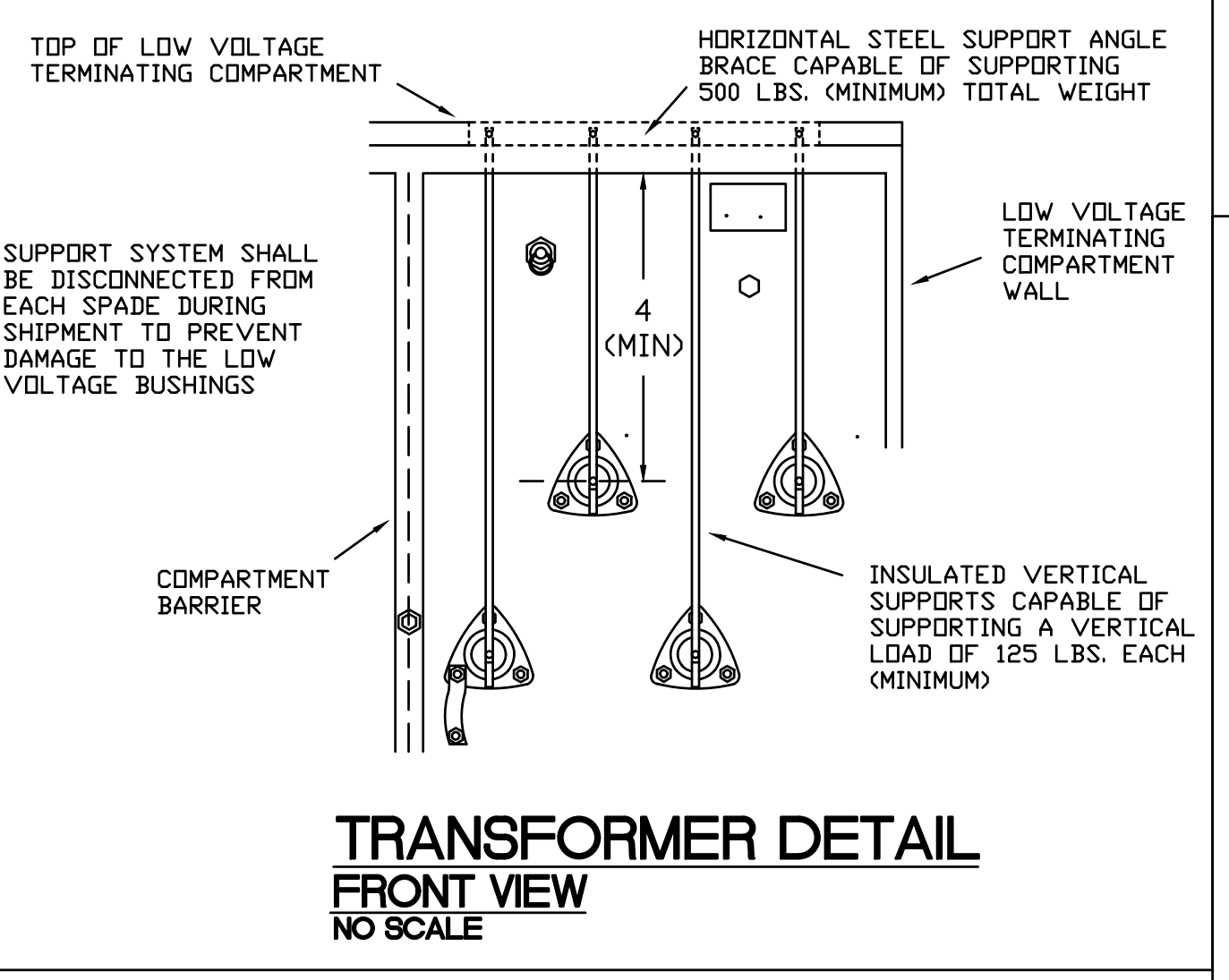


**TRANSFORMER DETAIL
CONCRETE TRANSFORMER PAD
NO SCALE**

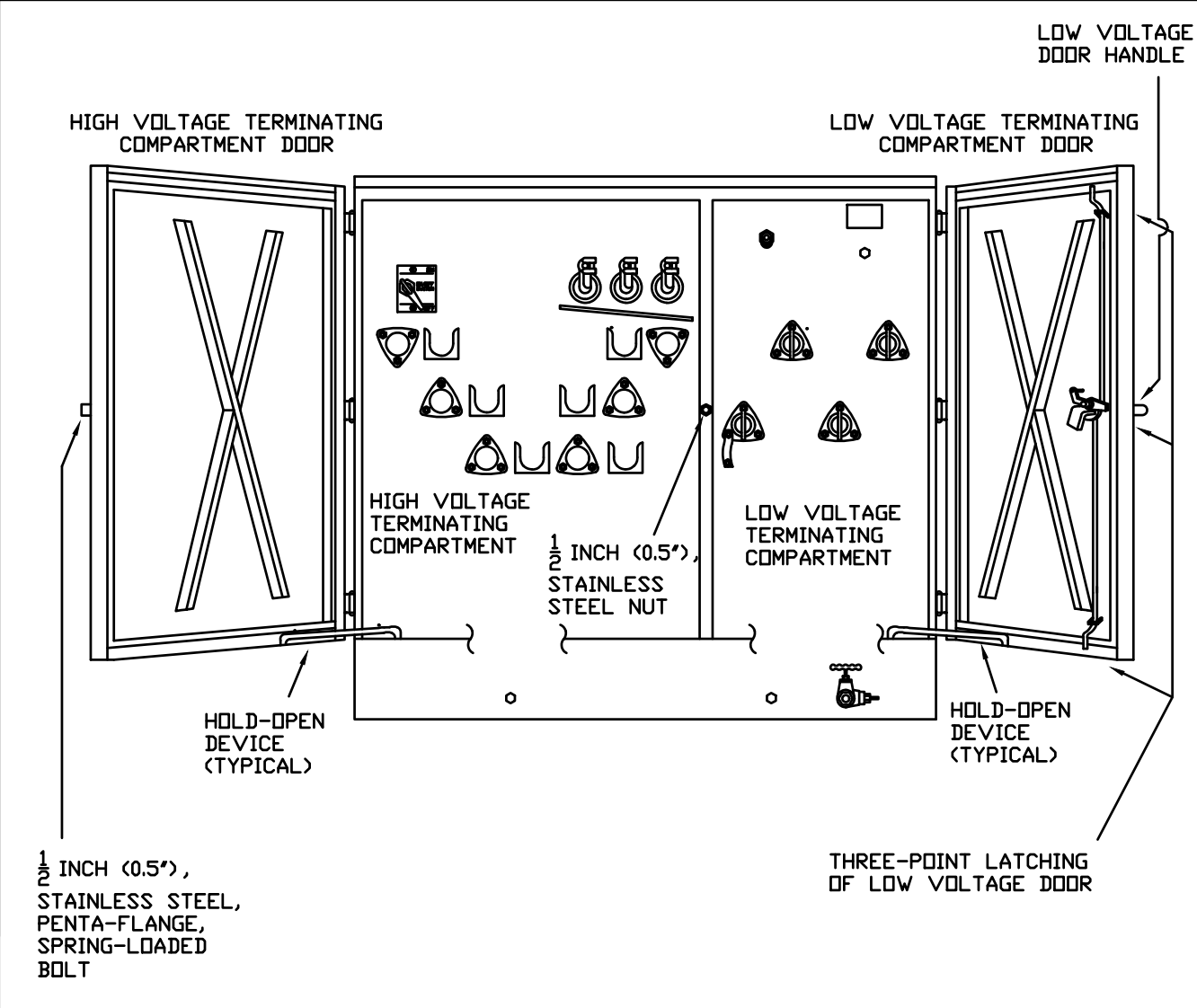
- NOTES
- FOR NUMBER AND SIZE OF PRIMARY CONDUITS, CONSULT JOB DRAWING. HUNTSVILLE UTILITIES.
 - PADS MUST HAVE A BRUSHED OUTSIDE FINISH.
 - HEIGHT OF PAD SHALL BE 12" ATG.
 - NO SECONDARY CABLES MAY BE PULLED UNTIL TRANSFORMER IS PLACED.
 - FROM OUTSIDE OF PRIM. TO OUTSIDE OF SEC. EQUALS 48".
 - MINIMUM THICKNESS OF CONCRETE PAD IS 24".
 - TWO LAYERS #4 (1/2") REBAR ARE REQUIRED.
 - IT IS NOT PERMISSIBLE TO FLOAT EITHER LAYER OF REBAR.
 - NO REBAR SHOULD BE WITHIN 6" OF ANY SURFACE OF THE PAD.
 - PAD FORM (WITH STEEL INSTALLED) MUST BE INSPECTED BEFORE POURING CONCRETE.



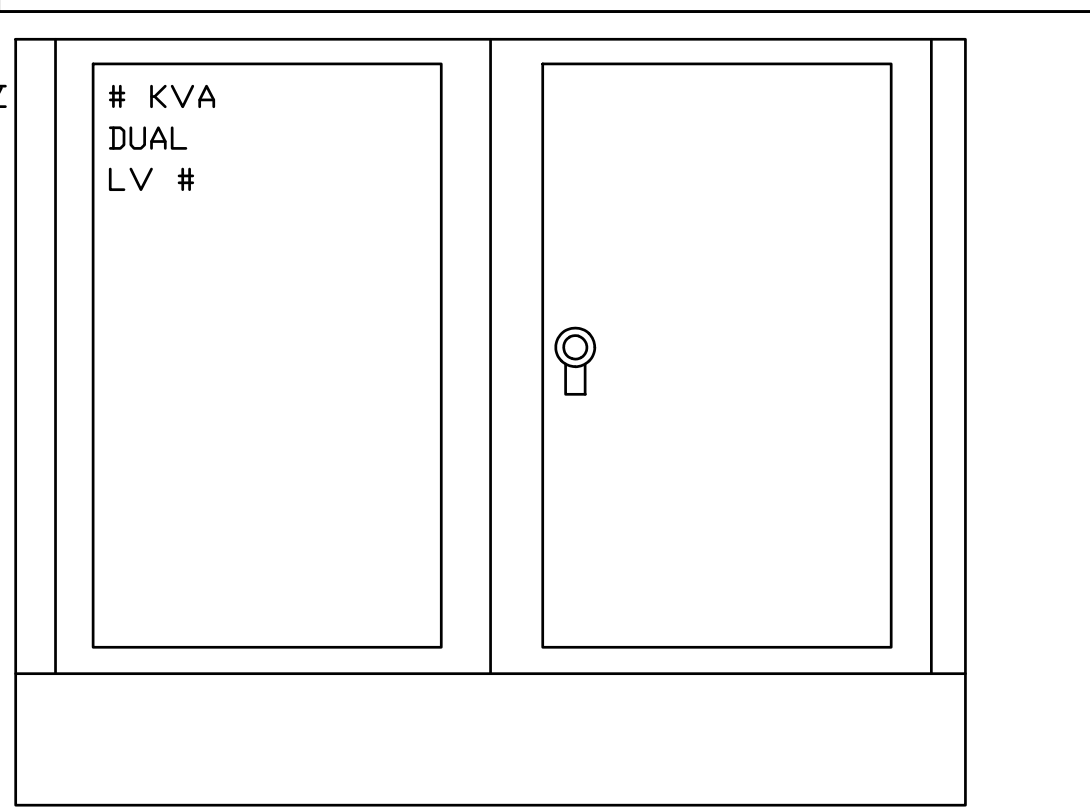
**TRANSFORMER DETAIL
SIDE VIEW
NO SCALE**



**TRANSFORMER DETAIL
FRONT VIEW
NO SCALE**

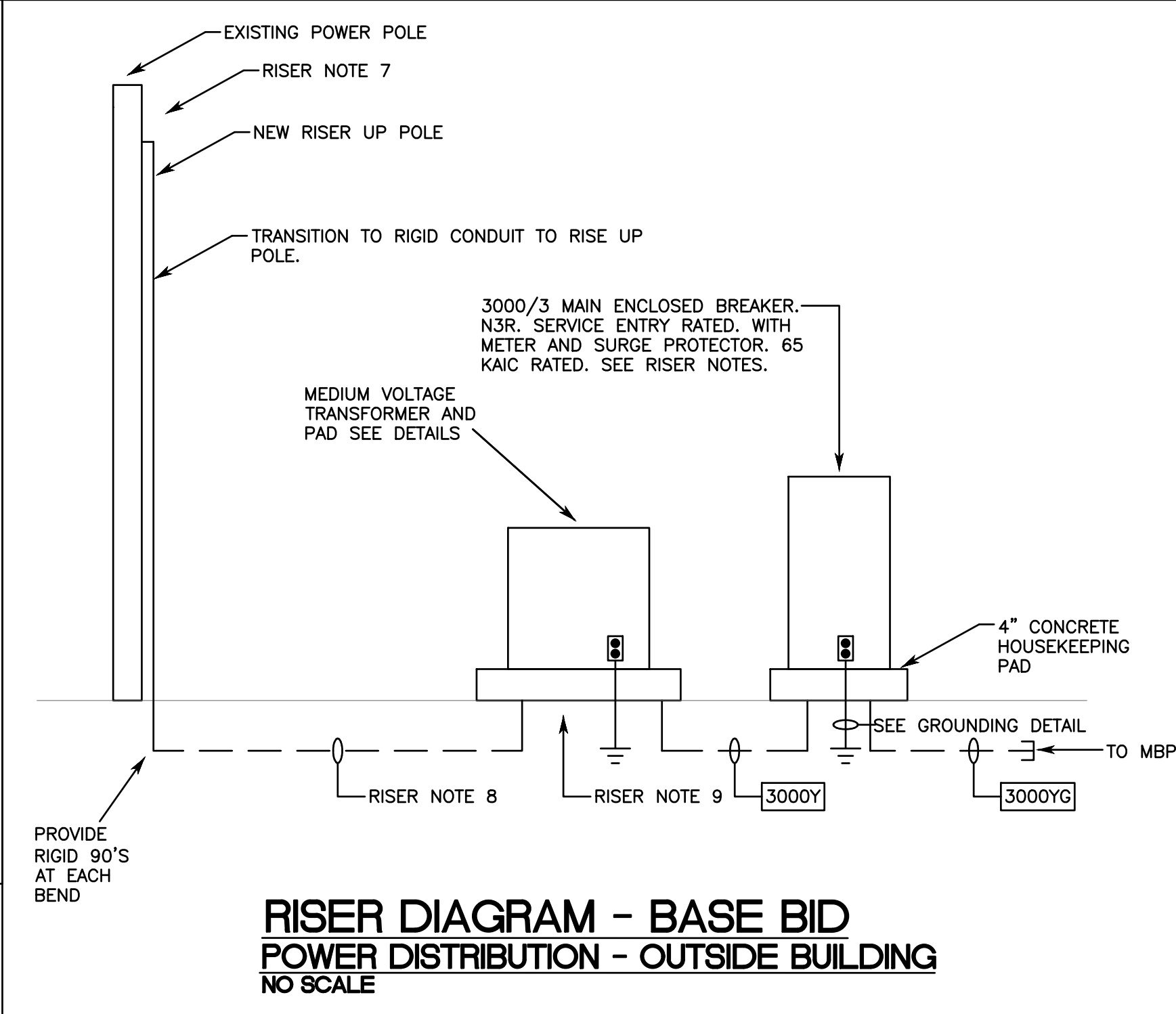


**TRANSFORMER DETAIL
FRONT ELEVATION
NO SCALE**



**TRANSFORMER DETAIL
OVERALL FRONT VIEW
NO SCALE**

- NOTES
- ALL LETTER AND NUMBER HEIGHT SHALL BE 3" MINIMUM HEIGHT REFER TO SPECIFICATION FOR COLOR.

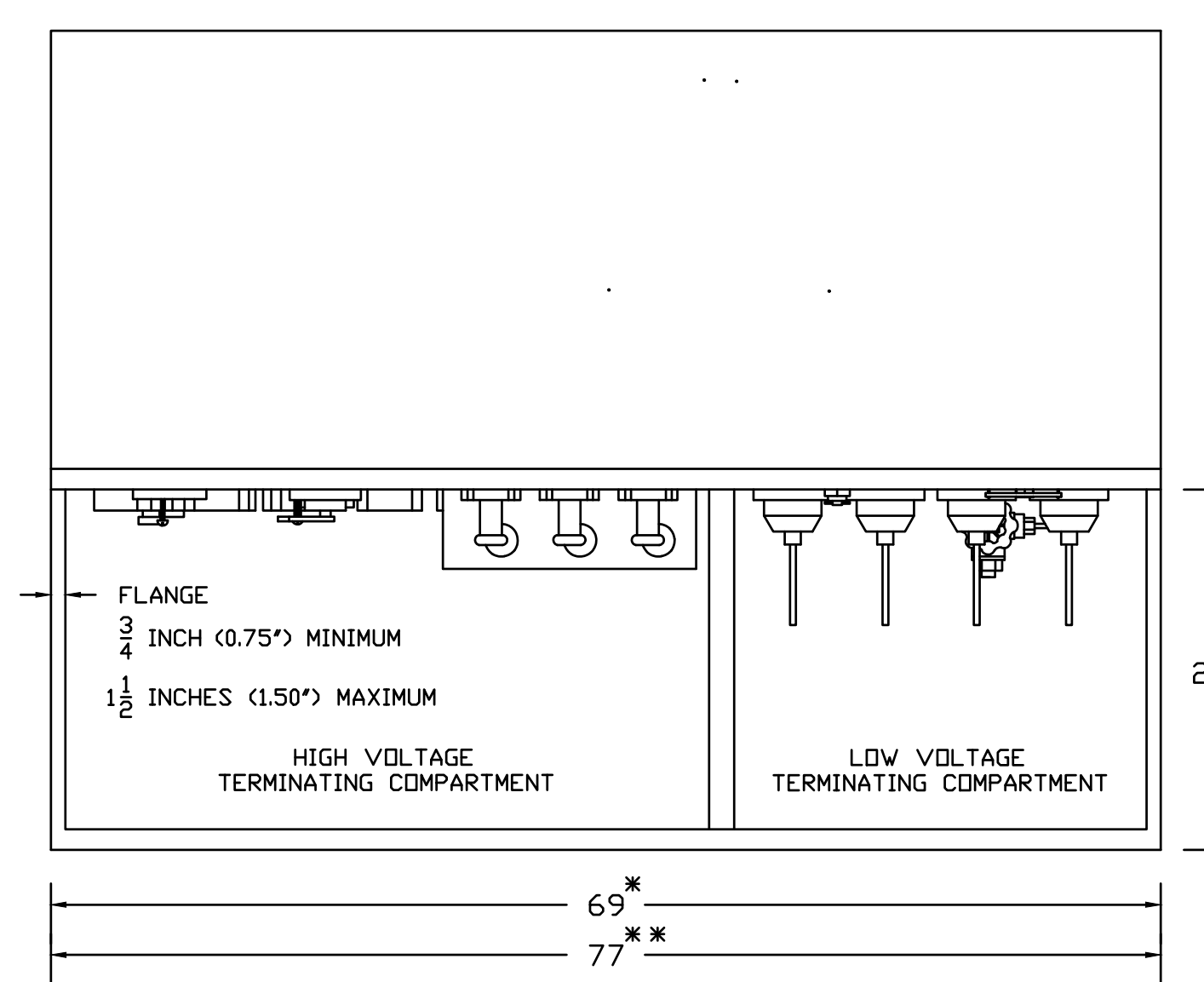


**RISER DIAGRAM - BASE BID
POWER DISTRIBUTION - OUTSIDE BUILDING
NO SCALE**

FEEDER SCHEDULE			
20SG	2#12 & 1#12G.-1/2".	25DG	3#10 & 1#10G.-3/4".
30DG	3#10 & 1#10G.-3/4".	40YG	4#8 & 1#10G.-3/4".
50DG	3#8 & 1#10G.-3/4".	50YG	4#8 & 1#10G.-3/4".
60DG	3#6 & 1#10G.-1 1/4".	60YG	4#6 & 1#10G.-1".
70YG	4#4 & 1#8G.-1 1/2".	80DG	3#4 & 1#8G.-1 1/2".
100YG	4#3 & 1#8G.-1 1/2".	125YG	4#1 & 1#6G.-2".
150DG	3#1/0 & 1#6G.-2".	150YG	4#1/0 & 1#6G.-2 1/2".
175DG	3#2/0 & 1#6G.-2 1/2".	200YG	4#3/0 & 1#6G.-3".
250YG	4#250MCM & 1#4G.-3".	300YG	4#350MCM & 1#4G.-3 1/2".
400YG	4#500MCM & 1#2G.-4".	420YG	4#600MCM & 1#2G.-4".
2000YG	6 SETS OF 4#500MCM & 1#4/0G.-4".	3000YG	8 SETS OF 4#500MCM & 1#4/0G.-4".
3000Y	8 SETS OF 4#500MCM-4".		

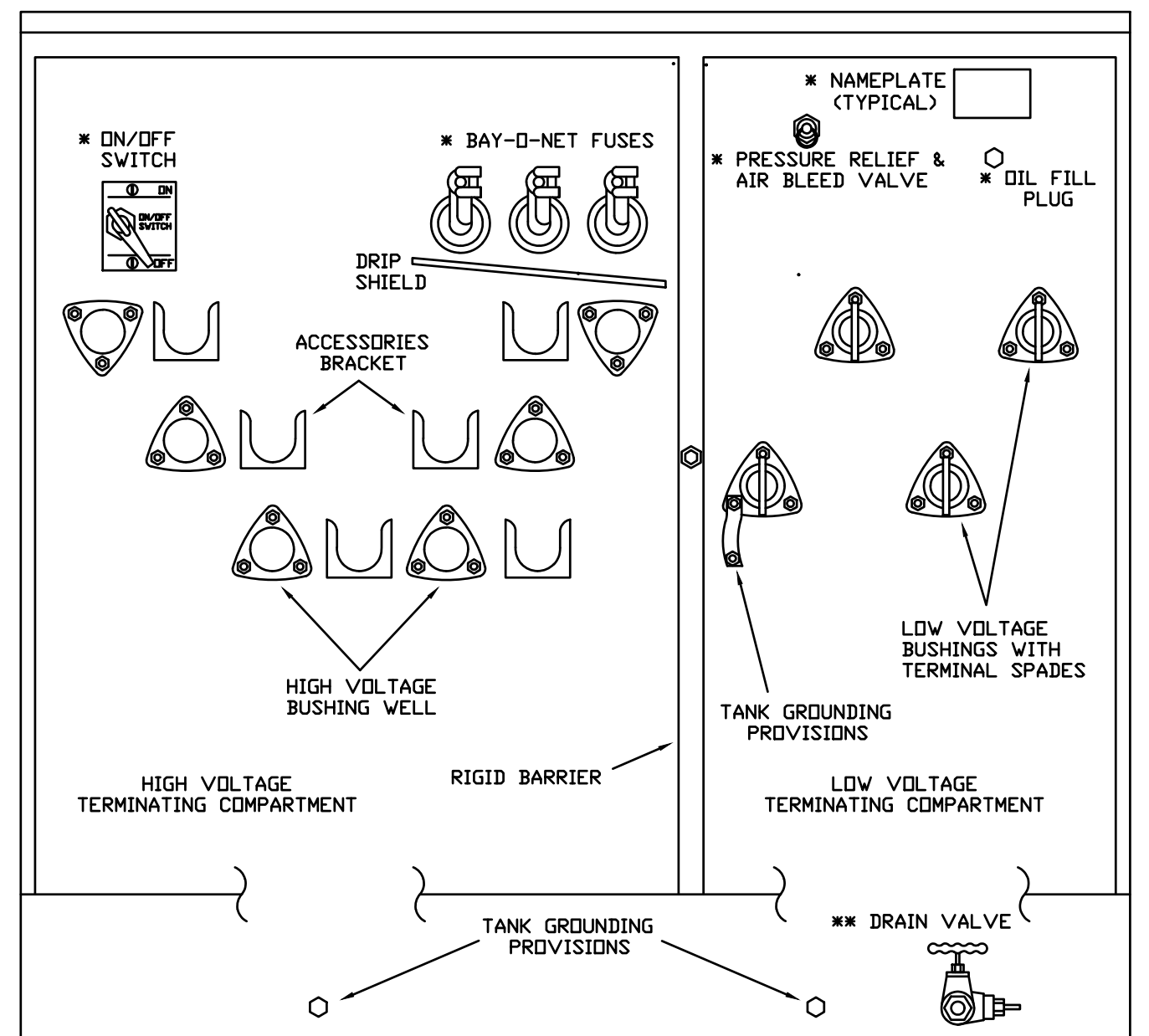
- SERVICE NOTES:
- THE SECONDARY SERVICE: 277/480V, 3#, 4W., GROUNDED NEUTRAL, WYE CONNECTED AS SHOWN ON SINGLE LINE DIAGRAM.
- RISER NOTES:
- INDUSTRY AVERAGE EQUIPMENT SIZES WERE USED TO DETERMINE FIT AND WORKING CLEARANCES. E.C. IS TO VERIFY FIT AND WORKING CLEARANCES BASED ON ACTUAL EQUIPMENT CONSIDERED.
 - FOR 277/480 VOLT SYSTEMS 1000A. & OVER, PROVIDE GFI PROTECTION FOR EACH PROTECTIVE DEVICE RATED 1000A. OR MORE. FIELD TEST PER NEC 230.95(C).
 - PROTECTIVE DEVICES RATED 800A & GREATER SHALL BE STATIC TRIP TYPE WITH LSI SETTINGS.
 - PROTECTIVE DEVICES RATED 1200A & GREATER SHALL HAVE ENERGY REDUCING MAINTENANCE SWITCHING WITH LOCAL STATUS INDICATOR OR ARC-FLASH ENERGY REDUCTION SCHEME/METHOD APPROVED BY ENGINEER.
 - SEE FLOOR PLANS FOR PLACEMENT OF EQUIPMENT.
 - ALL EXTERIOR EQUIPMENT TO BE IN NEMA 3R ENCLOSURES.
 - FURNISH AND INSTALL A NEW TRIMOUNT BRACKET WITH 3 EACH OUTDOOR TERMINATORS FOR NEW PRIMARY CABLING. THIS CONTRACTOR IS RESPONSIBLE FOR TERMINATING THE PRIMARY CABLE ON THE AAMU OWNED PRIMARY. CONTRACTOR MAY REUSE EXISTING SWITCHES ON POWER POLE.
 - FURNISH AND INSTALL 3 EACH #4/0-1C-15KV TAPE SHIELD 133% INSULATION EPR CONDUCTORS IN A NEW 4" PVC CONDUIT. CONTRACTOR WILL NEED TO BORE UNDER EXISTING ROAD. TERMINATE CABLES AT EACH END.
 - FURNISH AND INSTALL EXTERIOR 1500 KVA 12470 DELTA-480Y/277 PAD MOUNTED TRANSFORMER. TRANSFORMER TO BE DEAD FRONT, +/- 2.5% TAPS, 95KV BIL. (HIGHSIDE), 30 KV BIL. (LOWSIDE), MINERAL OIL FILLED, 3 PHASE 60 HZ. SEE SPECIFICATIONS AND DETAILS.
 - CONTRACTOR SHALL FURNISH AND INSTALL REBAR ENFORCED CONCRETE PAD PER DETAILS PROVIDED.
 - PRIMARY AND TRANSFORMER PAD SHALL BE INSPECTED BY ENGINEER PRIOR TO COVER UP.

- SHORT CIRCUIT, COORDINATION, AND ARC FLASH:
- ACTUAL AVAILABLE FAULT CURRENT DATA WAS NOT OBTAINED FROM THE POWER COMPANY. E.C. IS TO OBTAIN FAULT CURRENT DATA FROM POWER COMPANY.
 - E.C. TO PROVIDE SHORT CIRCUIT, COORDINATION, AND ARC FLASH STUDIES FOR ALL NEW EQUIPMENT AS WELL AS EXISTING UPSTREAM EQUIPMENT.
 - STUDIES ARE TO START AT UTILITY SOURCE AND/OR GENERATOR AND INCLUDE ALL EXISTING UPSTREAM EQUIPMENT.
 - E.C. IS RESPONSIBLE FOR COLLECTING ALL DATA NECESSARY TO COMPLETE STUDY.
 - STUDIES ARE TO BE PERFORMED USING SKM POWERWARE, EASYPower, OR ETAP SOFTWARE UNDER THE SUPERVISION OF A REGISTERED ENGINEER. ARC FLASH STUDIES SHALL BE CONSISTENT WITH IEEE 1584.
 - PROVIDE PRELIMINARY STUDY REPORT AT TIME OF POWER EQUIPMENT SUBMITTALS. POWER EQUIPMENT SUBMITTALS WILL BE REJECTED WITHOUT PRELIMINARY STUDY.
 - USE RESULTS OF STUDY TO SELECT AIC RATINGS, BREAKER TYPES, ETC. FOR POWER EQUIPMENT PRIOR TO ORDERING EQUIPMENT.
 - MARK EQUIPMENT PER BOTH NFPA 70 AND 70E TO INCLUDE, BUT NOT LIMITED TO, ARC FLASH LABELS.
 - PROVIDE FINAL STUDY REPORT AS PART OF CLOSE-OUT DOCUMENTATION (BOTH HARD COPY AND ELECTRONIC PDF FORM).



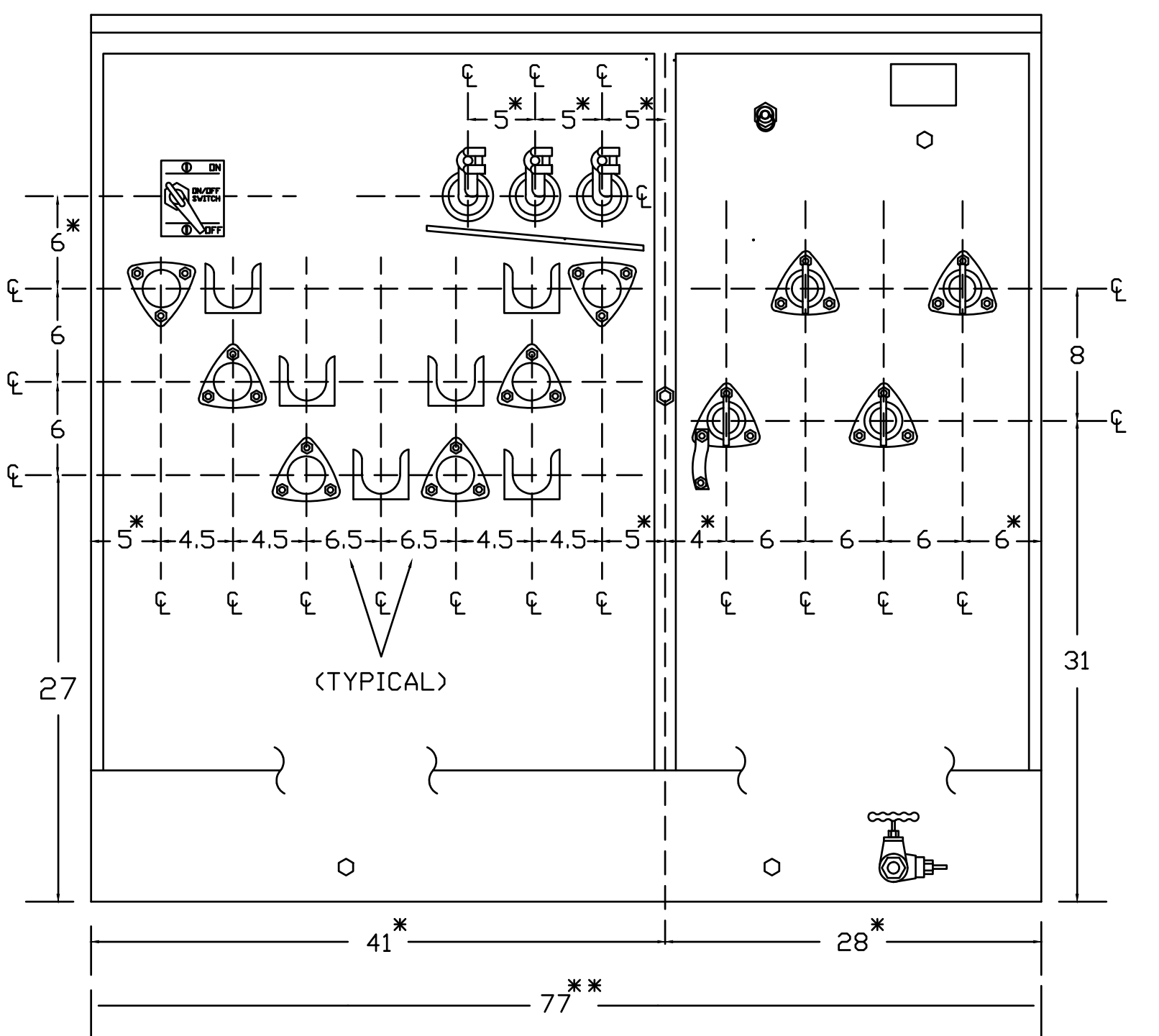
**TRANSFORMER DETAIL
HIGH/LOW VOLTAGE COMPARTMENT - NO DOORS
NO SCALE**

- NOTES
- VALUES WITH AN ASTERISK (*) DENOTE MINIMUM DIMENSIONS. VALUES WITH AN ASTERISK (**) DENOTE MAXIMUM DIMENSIONS. ALL OTHER DIMENSIONS HAVE A TOLERANCE OF +/- 1/4 INCH (+/- 0.25").
 - TANK SHOWN WITHOUT COOLING FINS OR RADIATORS.
 - ALL DIMENSIONS ARE IN INCHES.



**TRANSFORMER DETAIL
FRONT ELEVATION - NO DOORS
NO SCALE**

- NOTES
- ACCESSORIES DENOTED WITH A SINGLE ASTERISK (*) SHALL BE LOCATED PER THE MANUFACTURER'S DISCRETION (WITHIN THE DIMENSIONAL RESTRICTIONS SPECIFIED ON SHEET #3)
 - DOUBLE ASTERISKS (**): TRANSFORMERS RATED 750-2500KVA - ONE INCH (1") NPT DRAIN VALVE WITH BUILT-IN SAMPLING DEVICE (BUILT-IN SAMPLING DEVICE OPTIONAL).



**TRANSFORMER DETAIL
FRONT ELEVATION - NO DOORS
NO SCALE**

- NOTES
- VALUES WITH AN ASTERISK (*) DENOTE MINIMUM DIMENSIONS. VALUES WITH AN ASTERISK (**) DENOTE MAXIMUM DIMENSIONS. ALL OTHER DIMENSIONS HAVE A TOLERANCE OF +/- 1/4 INCH (+/- 0.25").
 - ALL DIMENSIONS ARE IN INCHES.

NO.	REVISION	DATE
1	ADDENDUM #1	10/12/2023

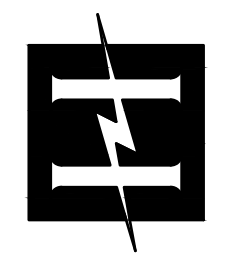
SEAL

DATE: 09/29/2023
JOB NUMBER: 23238.0
DRAWN BY: BR
CHECKED BY: MBR

DRAWING TITLE: **PRIMARY RISER, NOTES, AND TRANSFORMER DETAILS**

DRAWING NO. **E2.1**

09/29/2023

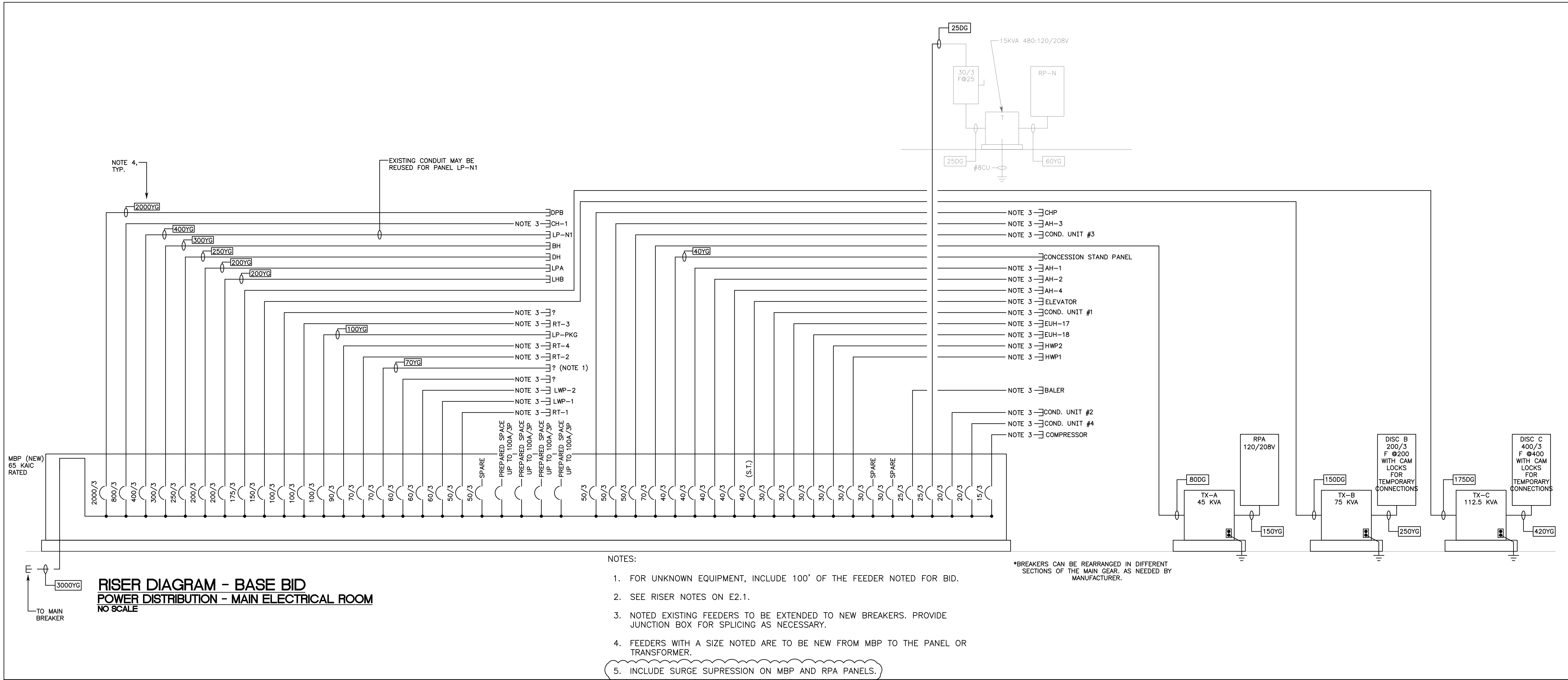


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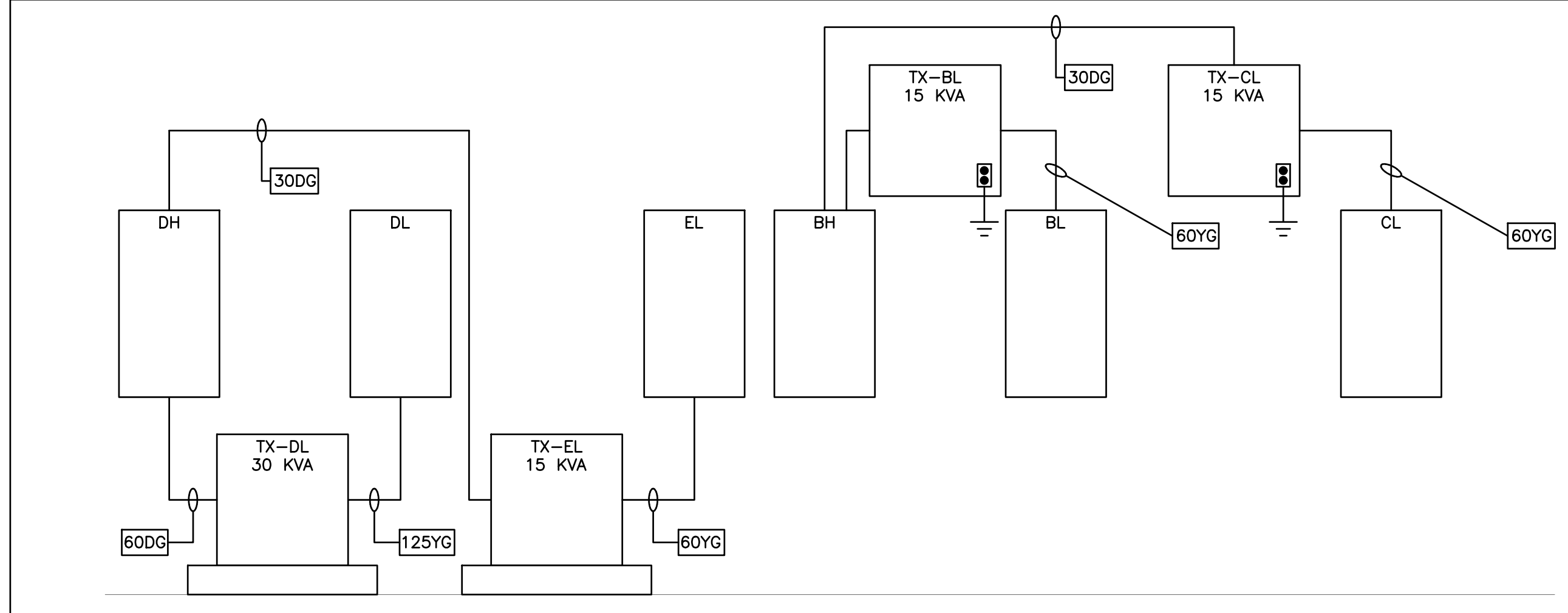
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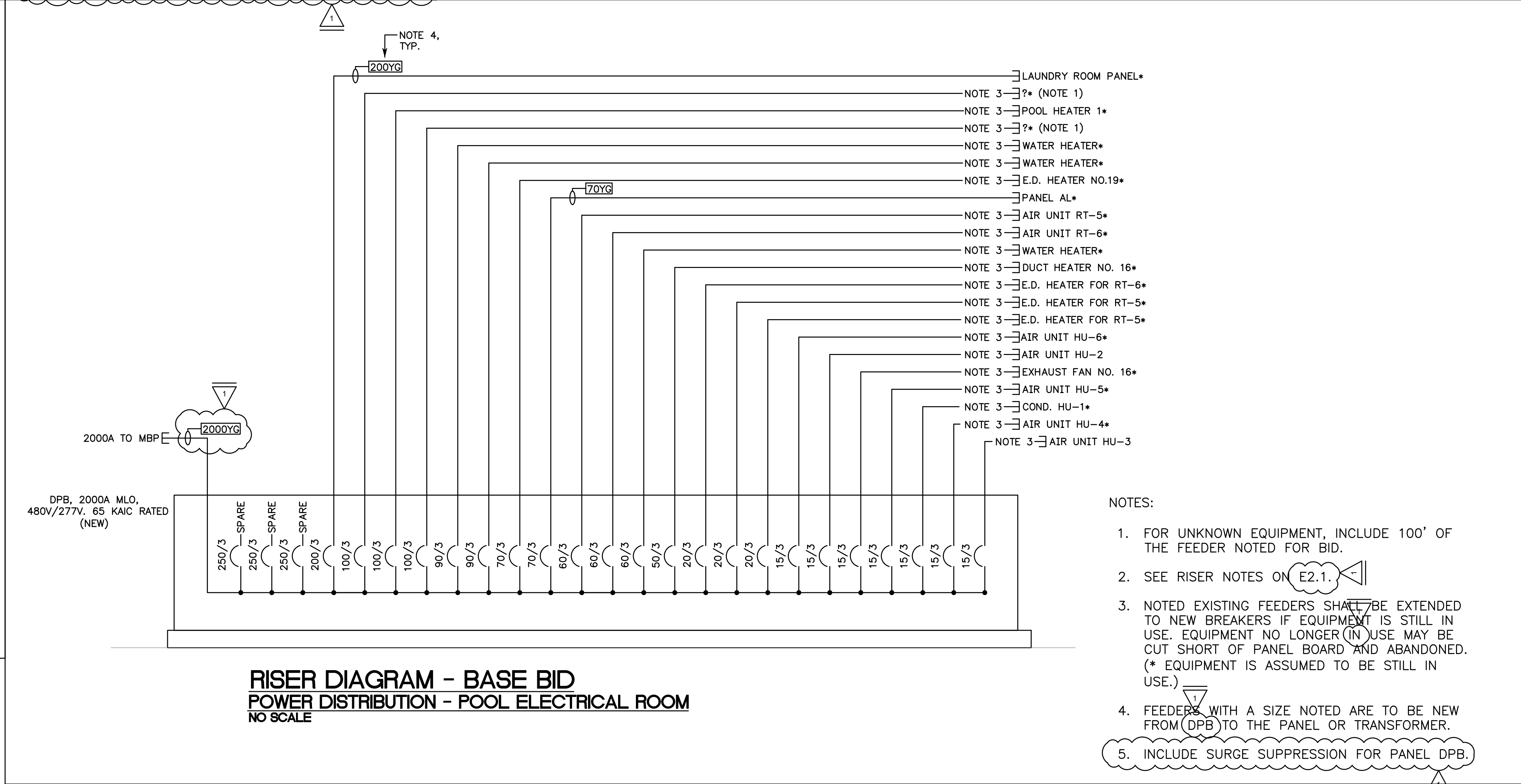


**RISER DIAGRAM - BASE BID
 POWER DISTRIBUTION - MAIN ELECTRICAL ROOM
 NO SCALE**



**ADDITIVE ALTERNATE #1 RISER
 POWER DISTRIBUTION
 NO SCALE**

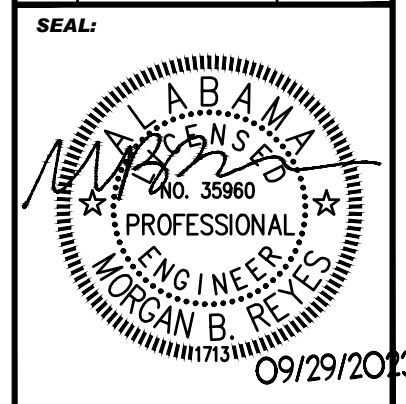
- NOTES:
- FOR ADDITIVE ALTERNATE REPLACE THE PANELS, TRANSFORMERS, AND FEEDERS FROM MBP SHOWN. SEE PANEL SCHEDULES. RECONNECT ALL EXISTING LOADS TO NEW PANEL. PANEL FEEDER FOR DH AND BH ARE IN THE BASE BID. IT IS ASSUMED THAT TX-BL AND TX-CL ARE SUSPENDED ABOVE THE CORRIDOR CEILING CURRENTLY AND SHOULD BE REPLACED IN THE SAME LOCATION.
 - SEE RISER NOTES ON E2.1.
 - INCLUDE SURGE SUPPRESSION FOR DH AND BH PANELS.



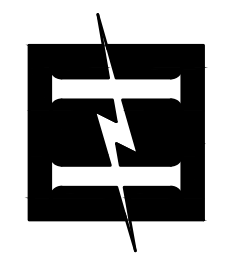
**RISER DIAGRAM - BASE BID
 POWER DISTRIBUTION - POOL ELECTRICAL ROOM
 NO SCALE**

- NOTES:
- FOR UNKNOWN EQUIPMENT, INCLUDE 100' OF THE FEEDER NOTED FOR BID.
 - SEE RISER NOTES ON E2.1.
 - NOTED EXISTING FEEDERS SHALL BE EXTENDED TO NEW BREAKERS IF EQUIPMENT IS STILL IN USE. EQUIPMENT NO LONGER IN USE MAY BE CUT SHORT OF PANEL BOARD AND ABANDONED. (*EQUIPMENT IS ASSUMED TO BE STILL IN USE.)
 - FEEDERS WITH A SIZE NOTED ARE TO BE NEW FROM (DPB) TO THE PANEL OR TRANSFORMER.
 - INCLUDE SURGE SUPPRESSION FOR PANEL DPB.

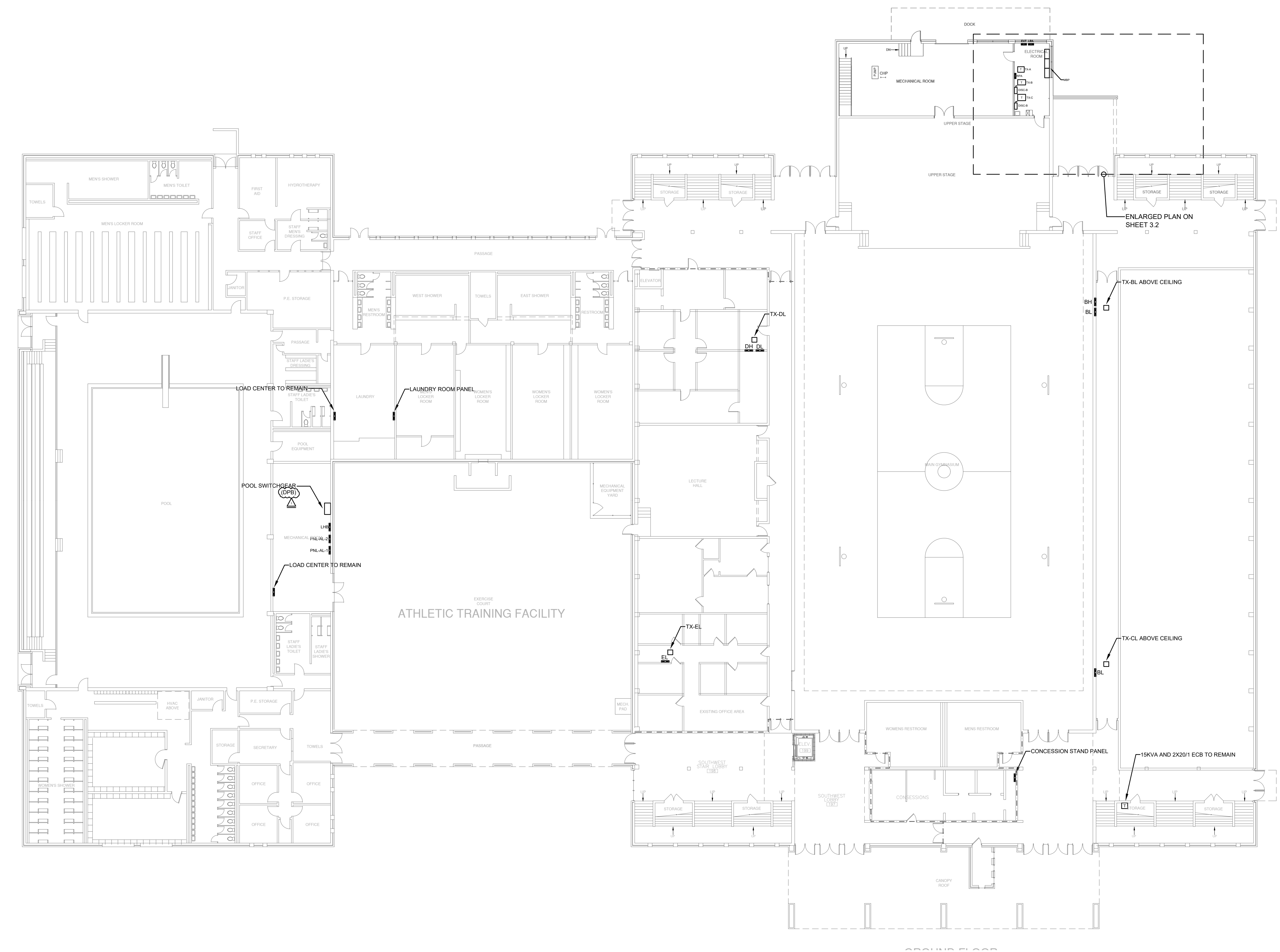
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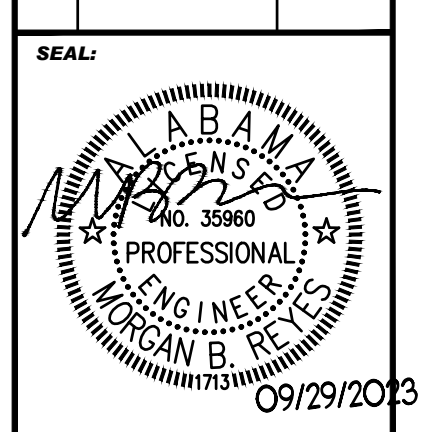
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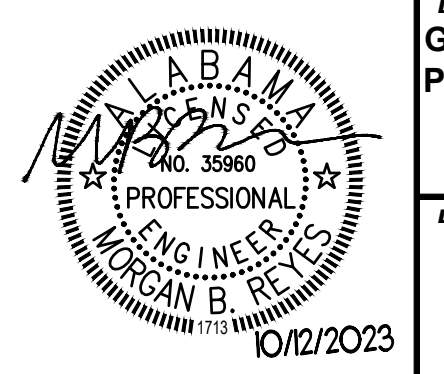
GROUND FLOOR PLAN
ELECTRICAL
 SCALE 1/16"=1'0"

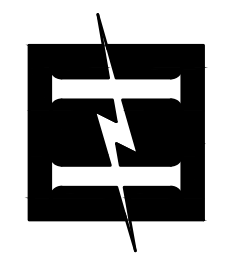
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NO.	REVISION	DATE
1	ADDENDUM #1	10/12/2023



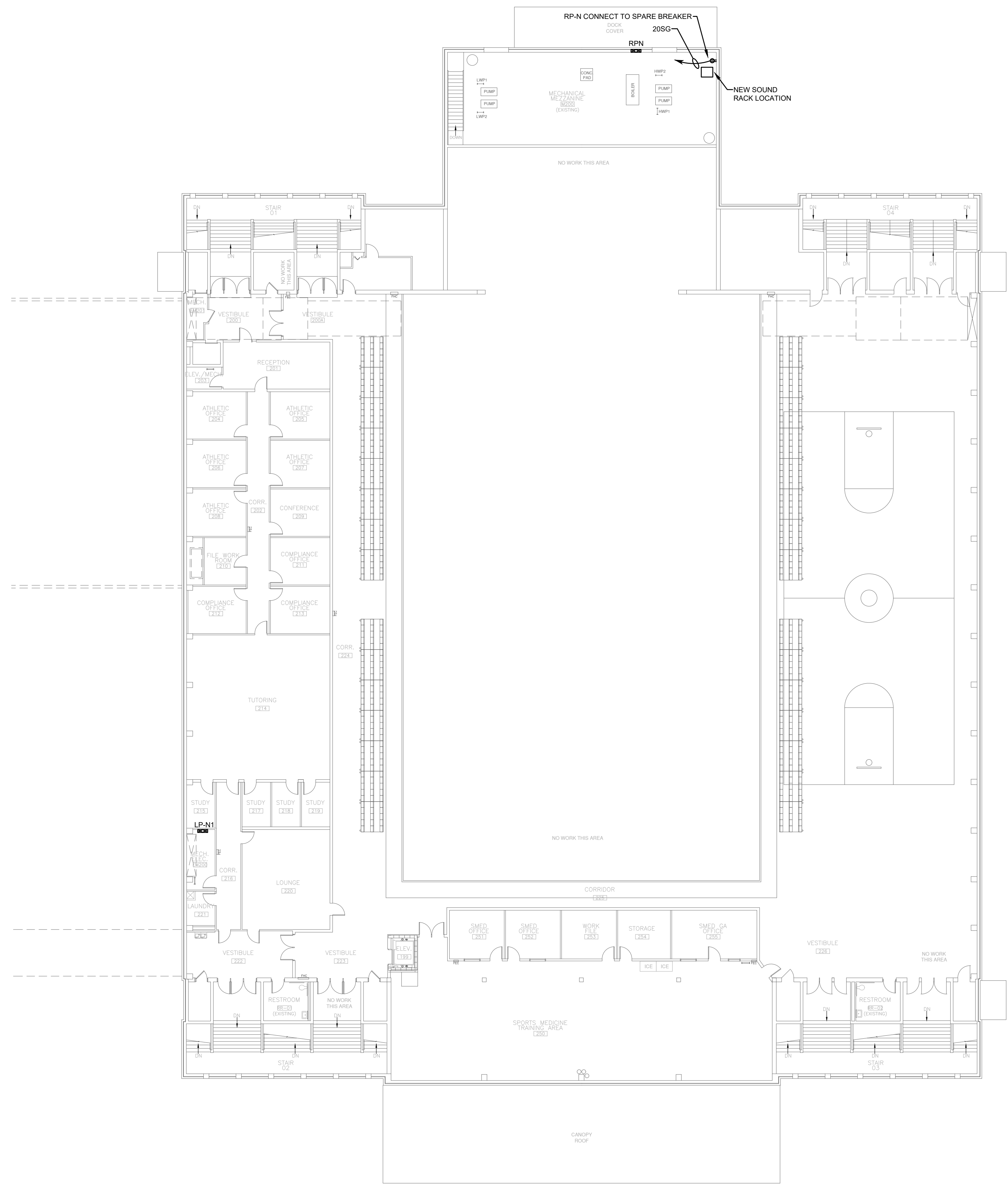
DATE:	09/29/2023
JOB NUMBER:	23239.0
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DRAWING TITLE:	GROUND FLOOR PLAN - ELECTRICAL
DRAWING NO.:	E3.1



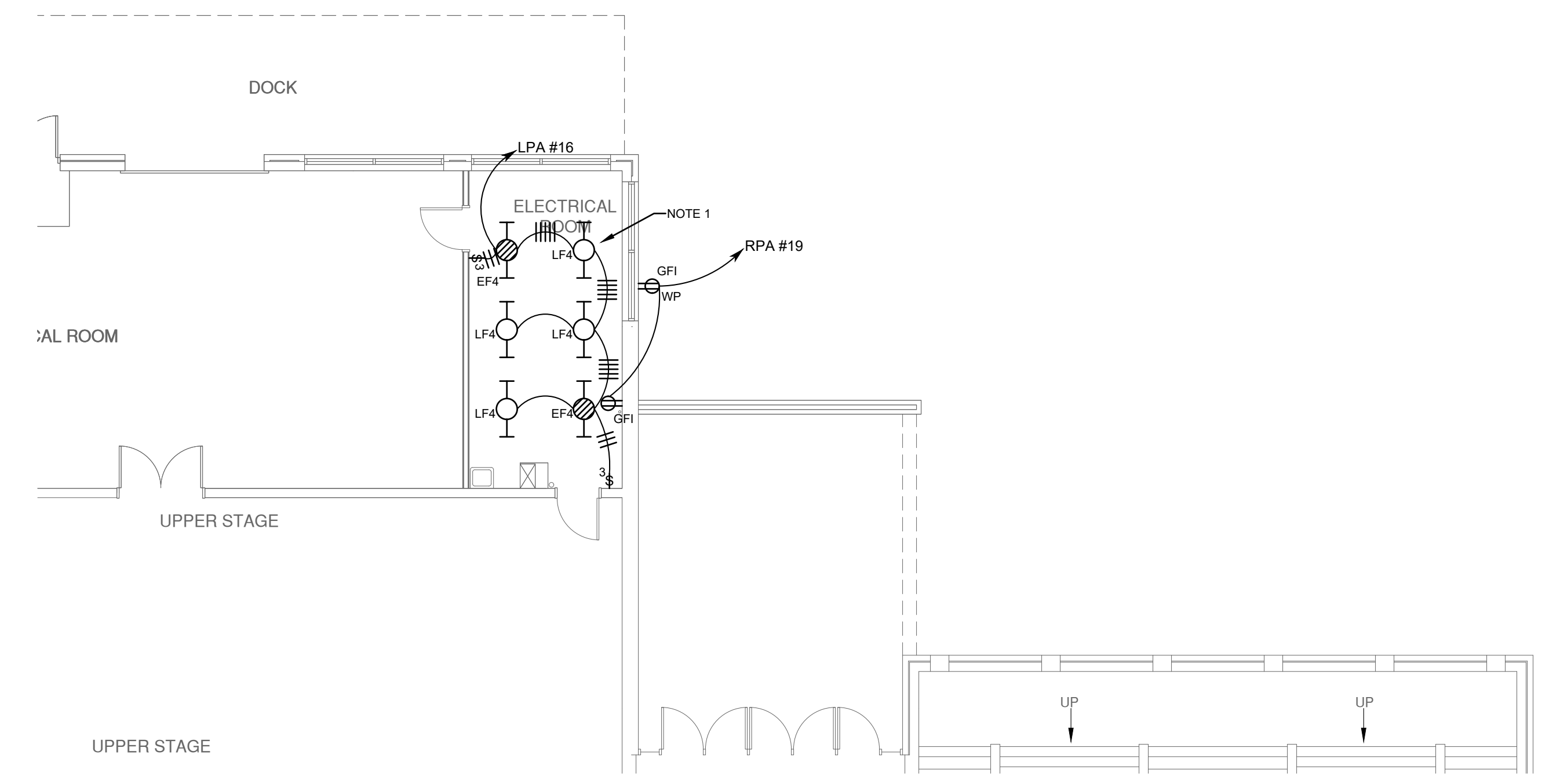


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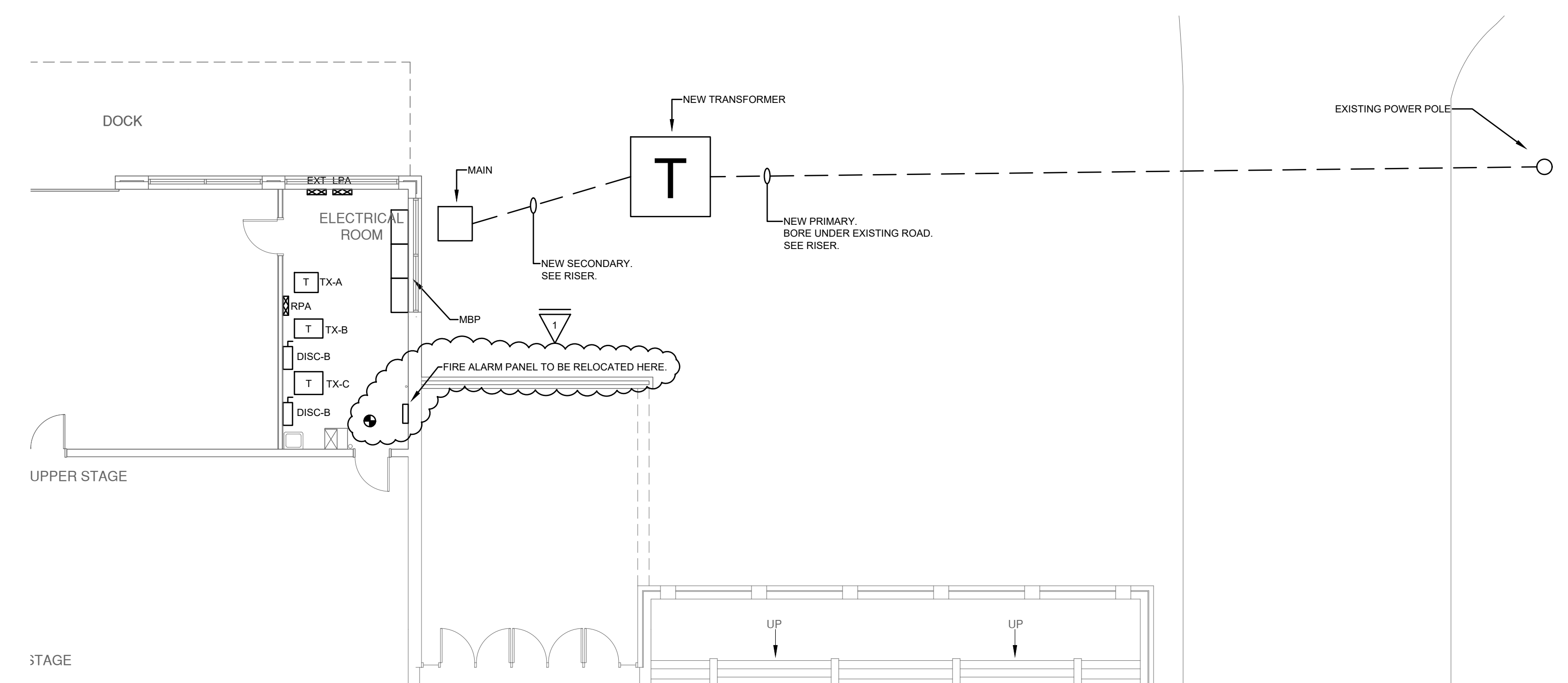


SECOND FLOOR PLAN
ELECTRICAL
 SCALE 1/16"=1'0"



ENLARGED PLAN
ELECTRICAL - NEW
 SCALE 1/8"=1'0"

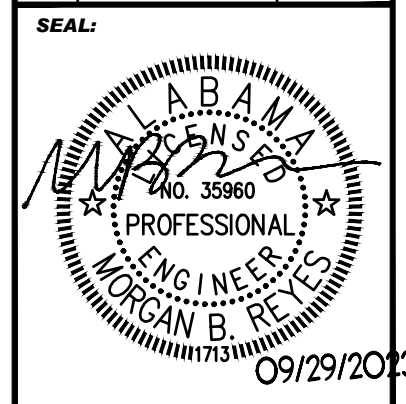
- NOTES:
- LF4/EF4 FIXTURES ARE 4' LED STRIP LIGHTS. THESE ARE TO BE EQUAL TO METALUX#4SNX-26SL-LN-UNV-CC83-CD-1-EL10W-U. EMERGENCY BATTERY WILL BE REQUIRED ONLY FOR EF4 FIXTURES.
 - PROVIDE NEUTRAL AT WIRED SWITCH LOCATIONS.



ENLARGED PLAN
ELECTRICAL - NEW
 SCALE 1/8"=1'0"

- NOTES:
- CONTRACTOR SHALL RECERTIFY SYSTEM ONCE PANEL IS RELOCATED. NOTIFY OWNER OF ANY TROUBLES PRIOR TO RELOCATING PANEL. FIRE ALARM CONTRACTOR SHALL BE LICENSED BY STATE FIRE MARSHALL'S OFFICE.

NO.	REVISION	DATE
1	ADDENDUM #1	10/12/2023



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DRAWING TITLE:
SECOND FLOOR PLAN AND ENLARGED PLANS

DRAWING NO.
E3.2

