

**GENERAL NOTES:**

- THE ELECTRICAL CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE DRAWINGS OF ALL OTHER TRADES ON THE PROJECT. ELECTRICAL OR SYSTEMS CONNECTIONS INDICATED ON ARCHITECTURAL, MECHANICAL, CIVIL, STRUCTURAL, KITCHEN AND ALL OTHER DRAWINGS WHICH ARE PART OF THIS PROJECT, SHALL BE CONSIDERED A PART OF THIS CONTRACT AND SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AT NO EXTRA COST TO THE OWNER.
- THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN NATURE AND AS SUCH SHALL NOT BE SCALED. REFER TO THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF DEVICES AND EQUIPMENT AND DIMENSIONAL INFORMATION PRIOR TO ROUGH-IN. COORDINATE LOCATIONS OF MECHANICAL EQUIPMENT WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN OF SERVICE EQUIPMENT AND WIRING.
- COORDINATE MOUNTING HEIGHTS OF ALL DEVICES WITH ARCHITECTURAL PLANS, SECTIONS, ELEVATIONS AND CASEWORK DRAWINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT ROUTING OF WIRING AND CONDUITS AND SHALL BE RESPONSIBLE FOR SIZING ALL BRANCH CIRCUIT WIRING TO LIMIT VOLTAGE DROP TO 3%. CONTRACTOR SHALL SIZE CONDUIT TO ACCOMMODATE WIRING PER NEC. 20 AMPERE CIRCUITS SHALL BE SIZED AS FOLLOWS:

20 AMPERE CIRCUITS				
120 VOLT		277 VOLT		MINIMUM CONDUIT SIZE
WIRING LENGTH	WIRE SIZE	WIRING LENGTH	WIRE SIZE	
0' - 60'	#12	0' - 130'	#12	3/4"
60' - 100'	#10	130' - 210'	#10	3/4"
100' - 150'	#8	210' - 340'	#8	3/4"
150' - 240'	#6	340' - 540'	#6	3/4"
OVER 240'	#4	OVER 540'	#4	1"

NOTES:  
BRANCH CIRCUITS IN PANELBOARDS WITH 200% RATED NEUTRAL BUS AND ALL DIMMED LIGHTING CIRCUITS & ECM MOTORS SHALL HAVE DEDICATED NEUTRAL CONDUCTORS.

- WIRING AND CONDUIT SIZES INDICATED IN PANEL SCHEDULES ARE MINIMUM ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXACT WIRING AND CONDUIT SIZES. CONTRACTOR SHALL PROVIDE SPLICE BLOCKS AND REDUCING PINS AS REQUIRED TO TERMINATE WIRING AND MAKE FINAL CONNECTIONS.
- ELECTRICAL BOXES IN FIRE RATED PARTITIONS SHALL NOT EXCEED 16 SQUARE INCHES IN AREA (IF 4"x4"). SHALL BE MADE OF STEEL, AND SHALL BE SUCH THAT THE CUMULATIVE AREA OF BOX "CUTOUTS" IN THE FIREWALL DOES NOT EXCEED 100 SQUARE INCHES PER 100 SQUARE FEET OF WALL AREA. ELECTRICAL BOXES ON OPPOSITE SIDES OF THE SAME FIREWALL SHALL BE SEPARATED BY A HORIZONTAL AND VERTICAL DISTANCE OF NOT LESS THAN 24 INCHES. THE ELECTRICAL CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS, AS NECESSARY, TO ELECTRICAL BOX LOCATIONS TO ENSURE COMPLIANCE WITH THIS REQUIREMENT SINCE BOX LOCATIONS ARE TYPICALLY NOT DIMENSIONED ON THE DRAWINGS. CONSULT ARCHITECT IF CLARIFICATION IS REQUIRED.
  - NEW WALLS ARE SHADED ON THE FLOOR PLANS, EXISTING WALLS ARE NOT SHADED. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING MOUNTING OF DEVICES WITH WALL TYPE.

**DEMOLITION NOTES:**

- DEMOLITION DRAWINGS ARE DIAGRAMMATIC IN NATURE; NO ATTEMPT HAS BEEN MADE TO SHOW ALL EXISTING ELECTRICAL WORK IN AREAS INDICATED TO BE RENOVATED. ALL EXISTING ELECTRICAL WORK IS TO BE REMOVED UNLESS OTHERWISE NOTED. WHEN AN ITEM TO BE REMOVED, REMOVE ALL ASSOCIATED ELECTRICAL WORK BACK TO POINT-OF-SOURCE.
- WHERE WORK PASSES THROUGH THE RENOVATION AREA TO SERVE OTHER PORTIONS OF THE BUILDING, OR WORK IN THE RENOVATION AREA INDICATED TO BE REMAIN, IT SHALL BE SUITABLY RELOCATED AND THE SYSTEMS RESTORED TO NORMAL. COORDINATE ANY OUTAGES WITH OWNER 7 DAYS IN ADVANCE.
- WORK INDICATED TO REMAIN SHALL BE SUITABLY PROTECTED AGAINST DAMAGE.
- TURN OVER ALL CIRCUIT BREAKERS, LIGHTING AND APPLIANCE PANELBOARD COVERS, CONTACTORS, MOTOR STARTERS, TIME CLOCKS, BATTERY PACKS, CLOCKS, SPEAKERS, ETC THAT ARE IN GOOD CONDITION TO OWNER. CONTACT OWNER FOR VERIFICATION IF ITEMS ARE IN QUESTIONABLE CONDITION.
- COORDINATE ALL DEMOLITION AND CONSTRUCTION ACTIVITIES WITH THE OWNER TO MINIMIZE DISRUPTION OF THE NORMAL DAILY FUNCTIONING OF THE OWNERS OCCUPIED AREAS.
- REMOVE AND REINSTALL ALL EXISTING CEILING MOUNTED DEVICES INDICATED TO REMAIN AS REQUIRED TO SUIT NEW CEILING INSTALLATION.
- ALL REMOVED DEVICE WALL PENETRATIONS SHALL BE PATCHED AND PAINTED TO MATCH EXISTING WALL COLOR OR WALL COLOR PER ARCHITECT'S DIRECTION.

**ELECTRICAL LEGEND:**  
(MOUNTING HEIGHTS ARE TO CENTERLINE OF DEVICE UON)

**CONDUIT**

HOMERUN TO PANELBOARD; REFER TO PANEL SCHEDULES FOR MINIMUM WIRE AND CONDUIT SIZES

BRANCH CIRCUIT CONDUIT AND WIRING CONCEALED IN CEILING OR WALL SPACE, OR SURFACE MOUNTED WHERE NO CEILING OR WALL SPACE EXISTS; REFER TO PANEL SCHEDULES FOR MINIMUM WIRE AND CONDUIT SIZES

BRANCH CIRCUIT CONDUIT AND WIRING IN SLAB, UNDER FLOOR OR UNDERGROUND; REFER TO PANEL SCHEDULES FOR MINIMUM WIRE AND CONDUIT SIZES

**POWER**

DISTRIBUTION PANELBOARD, SURFACE MOUNTED AT 6'-6" AFF TO TOP OF PANEL.

PANELBOARD; RECESSED, SURFACE MOUNTED; MOUNT AT 6'-6" AFF TO TOP OF PANEL.

PANELBOARD; RECESSED, SURFACE MOUNTED; MOUNT AT 5'-6" AFF TO TOP OF PANEL.

PANELBOARD; RECESSED, SURFACE MOUNTED; MOUNT AT 5'-6" AFF TO TOP OF PANEL.

S SINGLE POLE MANUAL MOTOR STARTING SWITCH WITH HOA SWITCH; MOUNT AT 48" AFF IN NEMA 1 ENCLOSURE UON

MOTOR; AS NOTED

UNIT HEATER

SAFETY DISCONNECT SWITCH; FUSED, NONFUSED IN NEMA 1 ENCLOSURE UON; MOUNT AT 48" AFF UON; RATING AND FUSING AS NOTED

ENCLOSED CIRCUIT BREAKER IN NEMA 1 ENCLOSURE UON; MOUNT AT 5'-6" TO TOP AFF UON; SIZE AS NOTED

COMBINATION TYPE MOTOR STARTER; FVNR WITH CONTROL XFMR, RED AND GREEN INDICATING LIGHTS; HOA SELECTOR SWITCH AND CIRCUIT BREAKER DISCONNECT SWITCH IN NEMA 1 ENCLOSURE UON; MOUNT AT 5'-6" TO TOP AFF UON

JUNCTION BOX; CEILING, WALL MOUNTED

TO GROUND

EPO PUSHBUTTON, UON; MOUNT 48" AFF AS INDICATED

ELECTRICAL METER

SURGE PROTECTION DEVICE

VARIABLE FREQUENCY DRIVE FURNISHED UNDER DIVISION 15, INSTALLED UNDER DIVISION 16

TRANSFORMER

**MISCELLANEOUS**

REFERENCE TO DRAWING NOTE

DETAIL REFERENCE: DETAIL NUMBER/DRAWING NUMBER

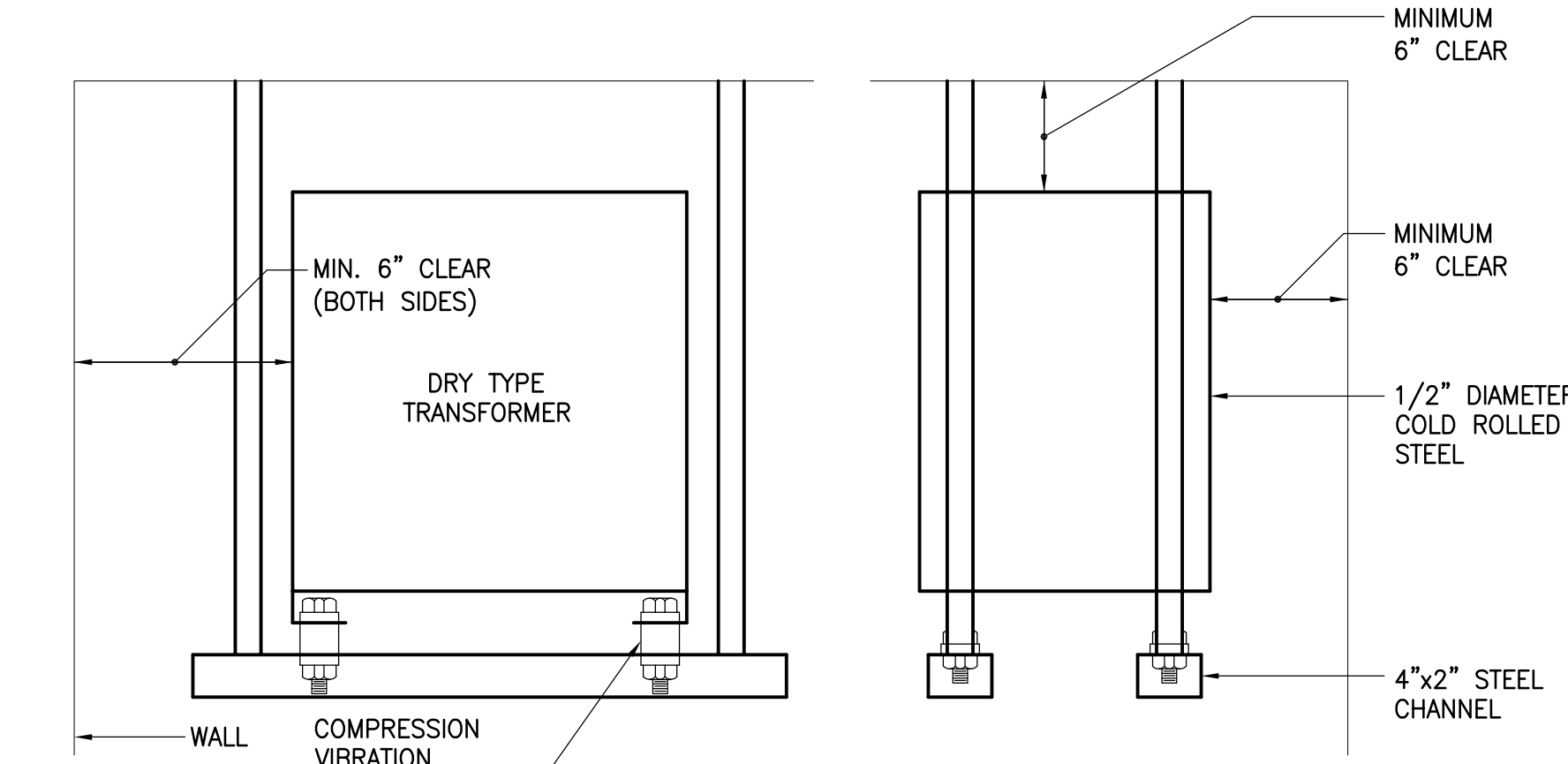
ITEMS SHOWN DASHED/HEAVY ARE TO BE REMOVED

ITEMS SHOWN SOLID/LIGHT ARE EXISTING TO REMAIN

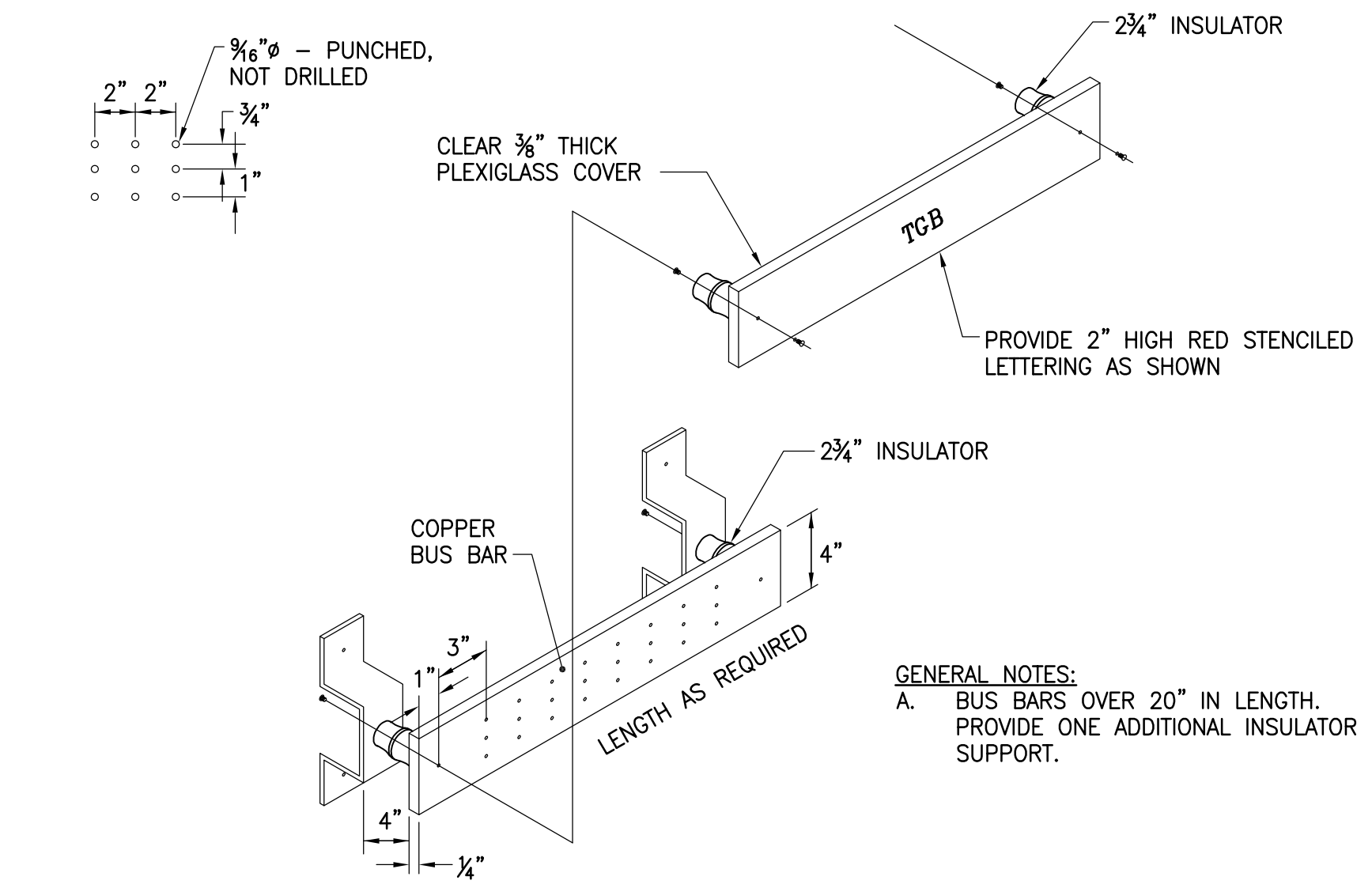
ITEMS SHOWN DASHED-DOTTED/LIGHT ARE TO OCCUR IN FUTURE PHASES

**ABBREVIATIONS:**

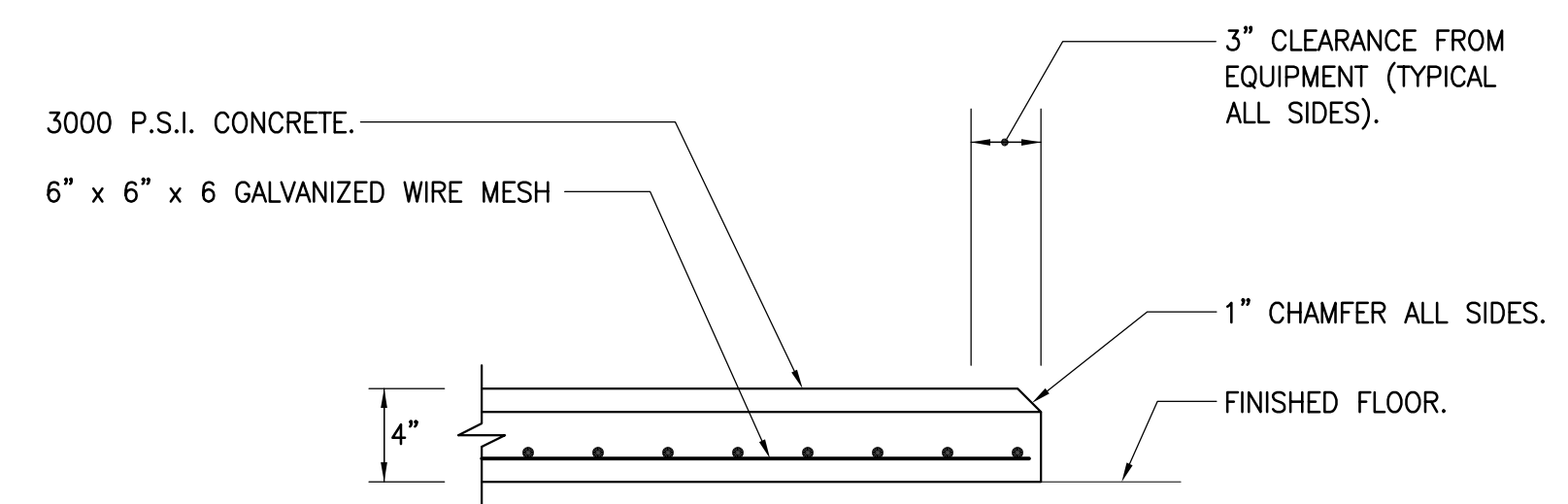
A AMPERE, AMPERES  
AFF ABOVE FINISHED FLOOR  
AHU AIR HANDLING UNIT  
AIC AMPERE INTERRUPTING CAPACITY  
ATS AUTOMATIC TRANSFER SWITCH  
AWG AMERICAN WIRE GAUGE  
CATV CABLE TELEVISION  
CCTV CLOSED CIRCUIT TELEVISION  
C CONDUIT  
CB CIRCUIT BREAKER  
DWG DRAWING  
ECB ENCLOSED CIRCUIT BREAKER  
EF EXHAUST FAN  
EPO EMERGENCY POWER OFF  
ETR EXISTING TO REMAIN  
EWC ELECTRIC WATER COOLER  
EX EXISTING  
FAAP FIRE ALARM ANNUNCIATOR PANEL  
FACP FIRE ALARM CONTROL PANEL  
FLA FULL LOAD AMPERES  
FSS FUSED SAFETY SWITCH  
G GROUND  
GFEP GROUND FAULT EQUIPMENT PROTECTION  
GFI GROUND FAULT INTERRUPTING  
HOA HAND-OFF-AUTOMATIC  
HP HORSEPOWER  
HWH HOT WATER HEATER GENERATOR  
IDF INTERMEDIATE DISTRIBUTION FRAME  
IMC INTERMEDIATE METAL CONDUIT  
KCMIL THOUSAND CIRCULAR MILS  
KVA KILOWATT-AMPERES  
KW KILOWATT  
LRA LOCKED ROTOR AMPERES  
MCA MINIMUM CIRCUIT AMPERES  
MCB MAIN CIRCUIT BREAKER  
MDF MAIN DISTRIBUTION FRAME  
MLO MAIN LUGS ONLY  
MPOP MAIN POINT OF PRESENCE  
MSB MAIN SWITCHBOARD  
MTO MOUNTED  
MH MOUNTING HEIGHT/MANHOLE  
NEC NATIONAL ELECTRICAL CODE  
NEMA NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION  
NF/SS NONFUSED SAFETY SWITCH  
NO NUMBER  
OC ON CENTERS  
P POLE, POLES  
Ø PHASE  
PNL PANEL  
PVC POLYVINYL CHLORIDE  
RAF RETURN AIR FAN  
RGS RIGID GALVANIZED STEEL  
RX REMOVE EXISTING  
TYP TYPICAL  
TVSS TRANSIENT VOLTAGE SURGE SUPPRESSOR  
UH UNIT HEATER  
V VOLT, VOLTS  
VR VANDALL RESISTANT  
WP WEATHERPROOF  
W WATTS, WIRE, WIRES  
XFMR TRANSFORMER  
TTB TELEPHONE TERMINAL BOARD  
UTP UNSHIELDED TWISTED PAIR  
UON UNLESS OTHERWISE NOTED



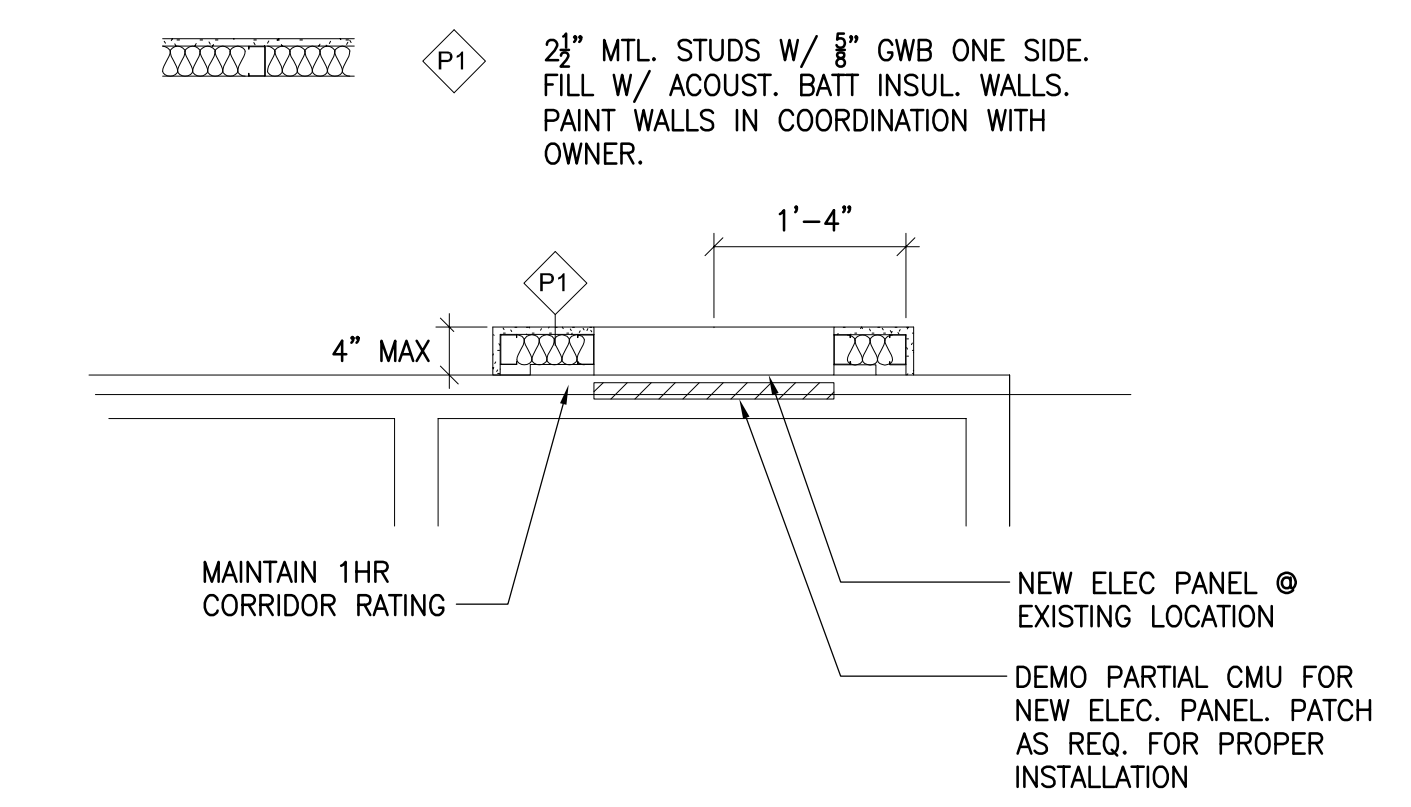
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E001  
DETAIL - SUSPENDED MOUNTING OF DRY TYPE TRANSFORMER



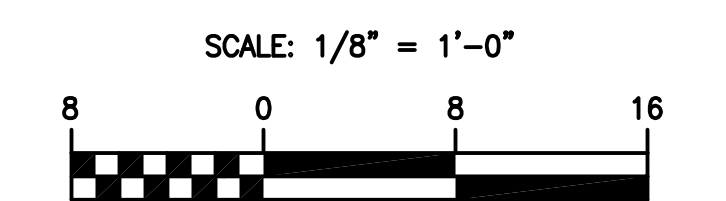
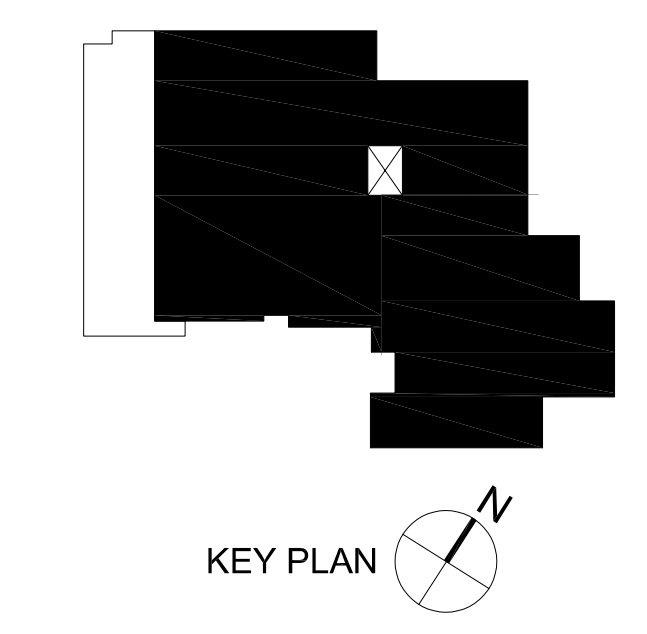
2  
E001  
DETAIL-GROUNDING BUS BAR



3  
E001  
DETAIL - CONCRETE HOUSEKEEPING PAD



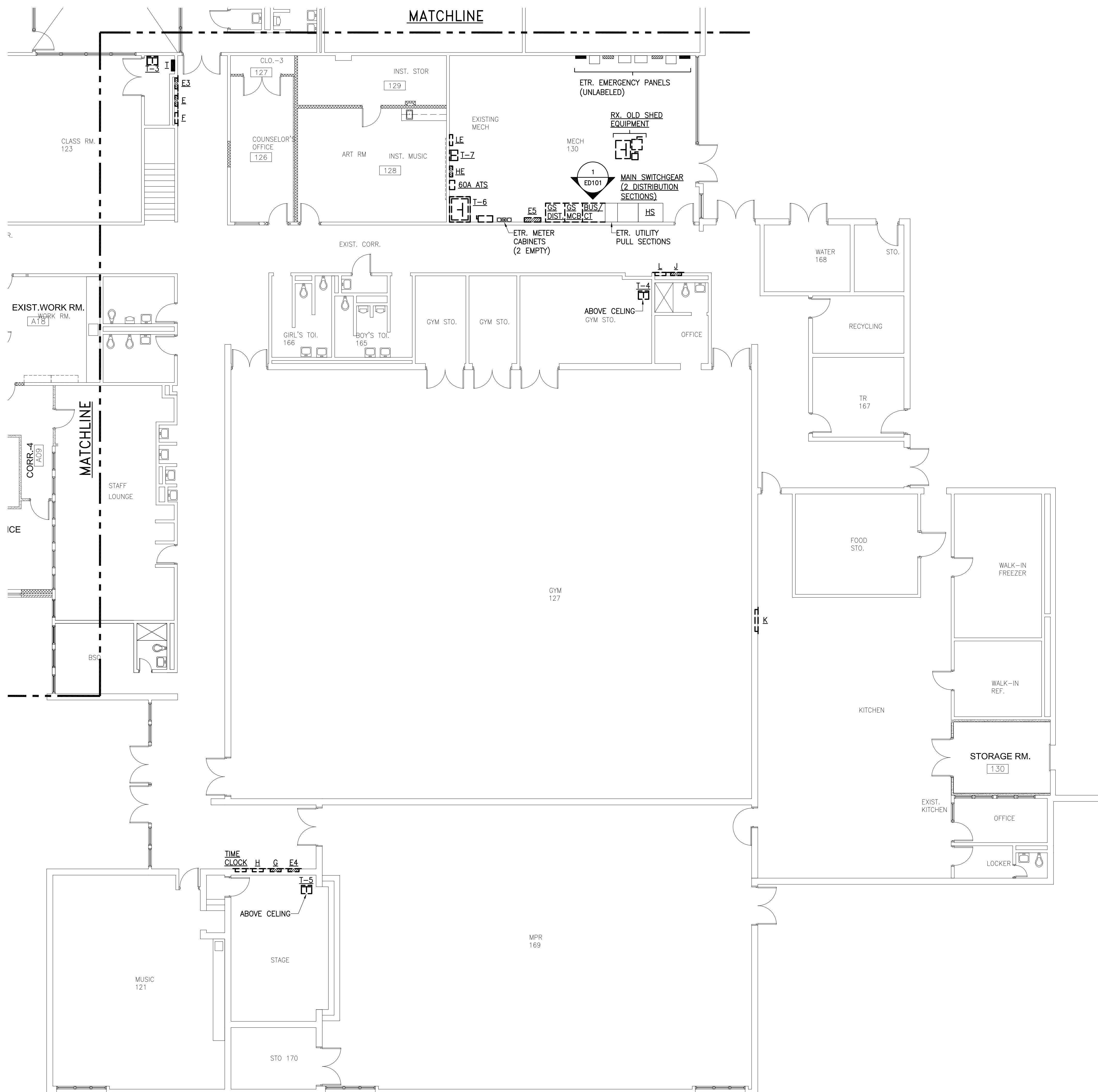
4  
E001  
DETAIL - ELECTRICAL PANEL CHASE



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<p><b>ELECTRICAL LEGENDS, CONVENTIONS, AND ABBREVIATIONS</b> SHERWOOD ES - FEDERAL PACIFIC GEAR REPLACEMENT SANDY SPRING, MD 20860</p>			
PN#	22021		
PROJECT MANAGER	SE		
DESIGNER	BSF		
<p><b>E001</b></p> <p>BID SET 04-08-2022</p>			

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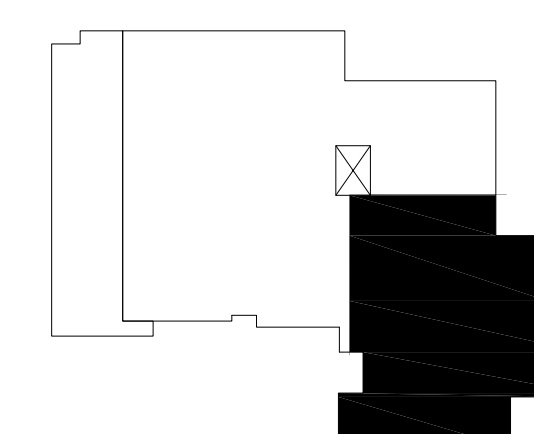
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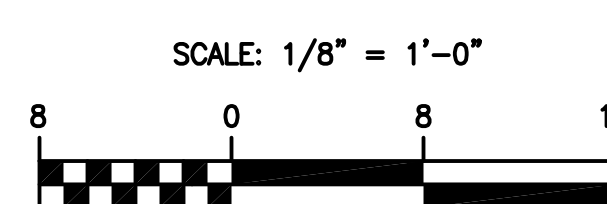
**FIRST FLOOR PLAN NORTH - DEMOLITION**  
SCALE: 1/8" = 1'-0"



**1**  
**ED101** **BUSSING**  
SCALE: 1/8" = 1'-0"



KEY PLAN



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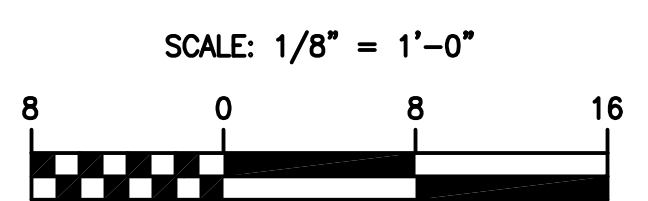
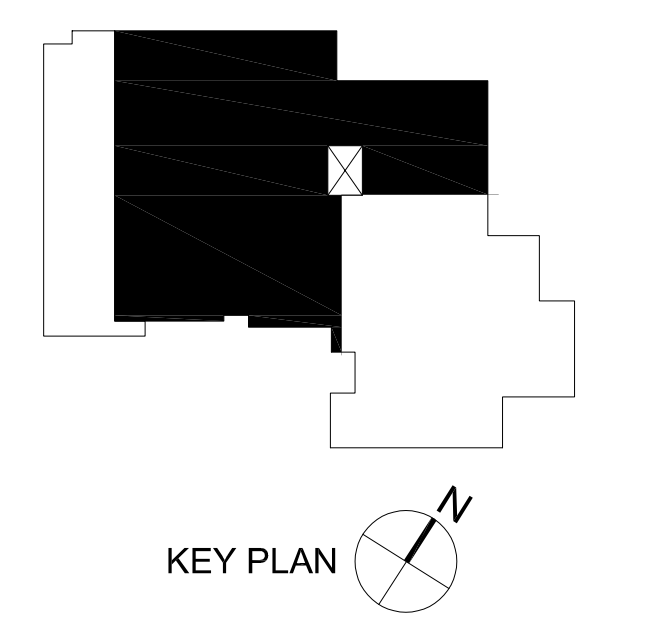
**ED101**

**GENERAL NOTES:**

1. VERIFY TRANSFORMER MOUNTING, SIZES, AND LOCATIONS PRIOR TO PURCHASE OF NEW TRANSFORMERS.



**FIRST FLOOR PLAN SOUTH – DEMOLITION**  
SCALE: 1/8" = 1'-0"



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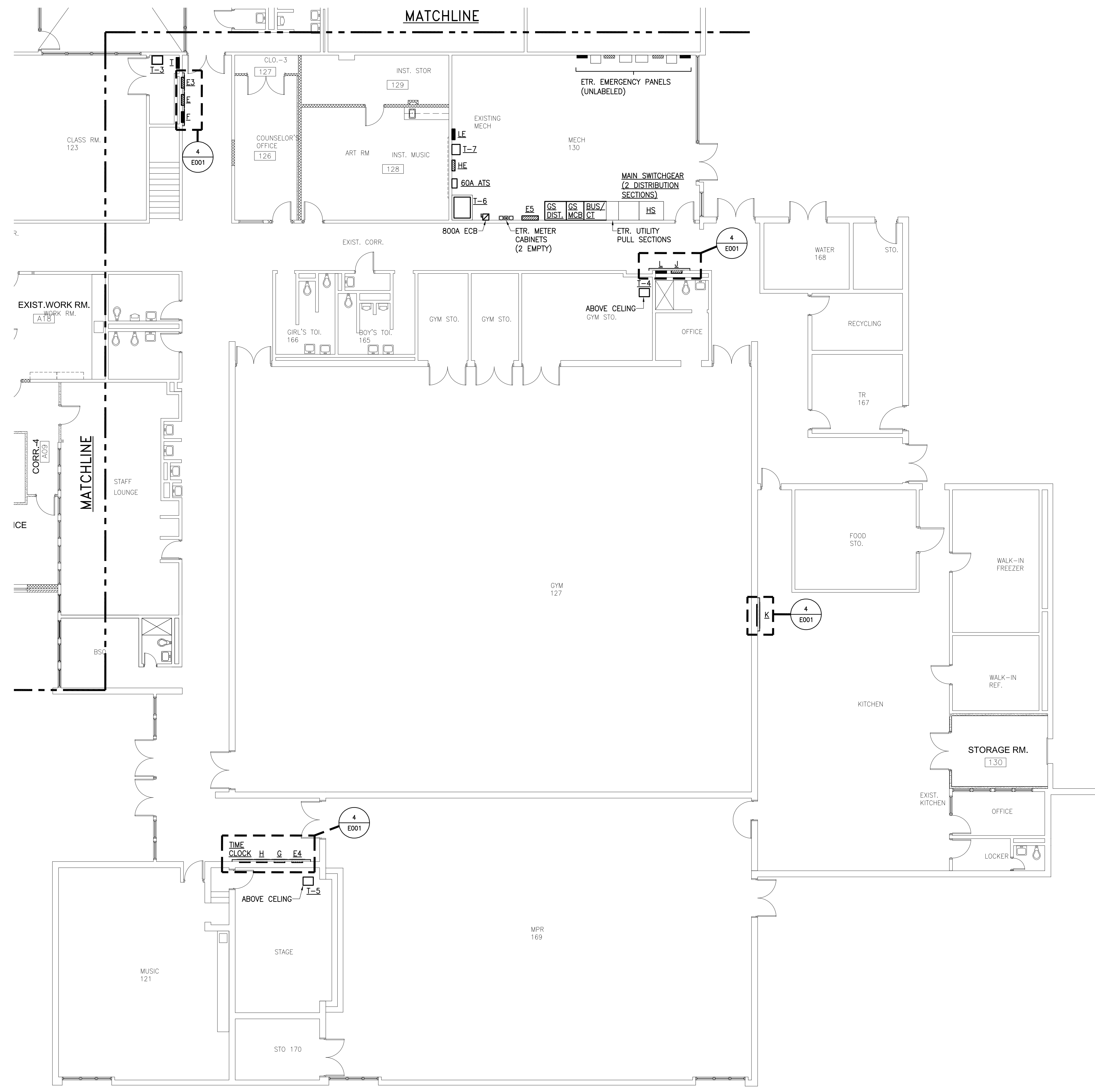
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**FIRST FLOOR PLAN SOUTH – DEMOLITION**  
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SANDY SPRING, MD 20860

PN# 22021  
PROJECT MANAGER SE  
DESIGNER BSF



FIRST FLOOR PLAN NORTH - ELECTRICAL  
 SCALE: 1/8" = 1'-0"

- GENERAL NOTES:**
1. VERIFY TRANSFORMER MOUNTING, SIZES, AND LOCATIONS PRIOR TO PURCHASE OF NEW TRANSFORMERS.
  2. VERIFY IF NEW PANEL WILL FIT IN EXISTING SPACE. IF NEW PANEL CAN FIT IN EXISTING SPACE AND BE FLUSH WITH THE WALL, ELECTRICAL PANEL CHASE IS NOT REQUIRED. BID PRICING SHALL INCLUDE ALL INDICATED LOCATIONS.

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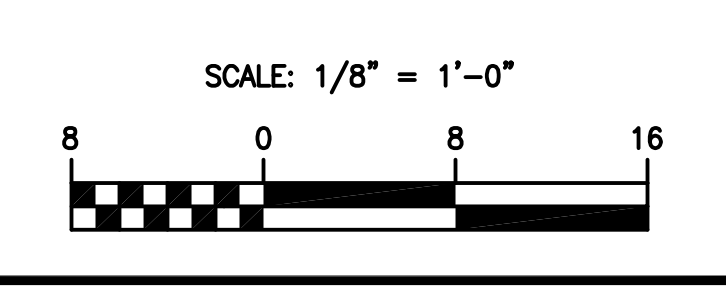
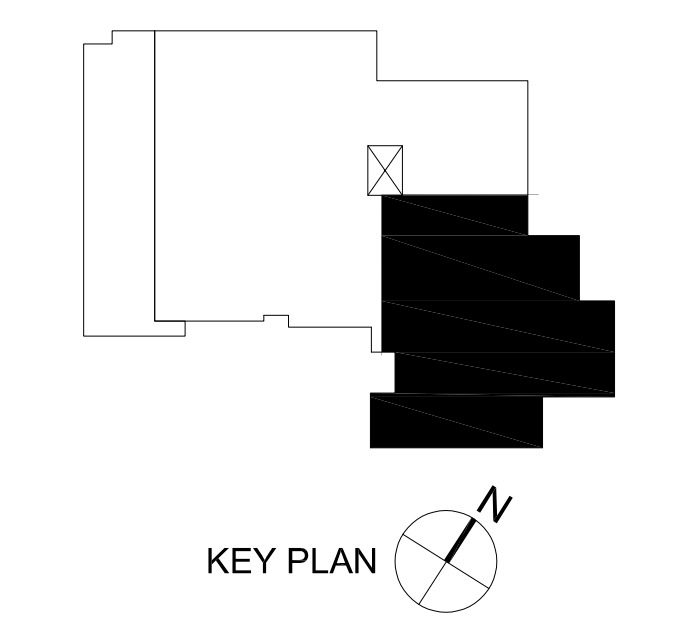
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PROJECT MANAGER	SF
DESIGNER	BSF





- GENERAL NOTES:**
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  2. VERIFY IF NEW PANEL WILL FIT IN EXISTING SPACE. IF PANEL CAN FIT IN EXISTING SPACE AND BE FLUSH WITH THE WALL, ELECTRICAL PANEL CHASE IS NOT REQUIRED. BID PRICING SHALL INCLUDE ALL INDICATED LOCATIONS.

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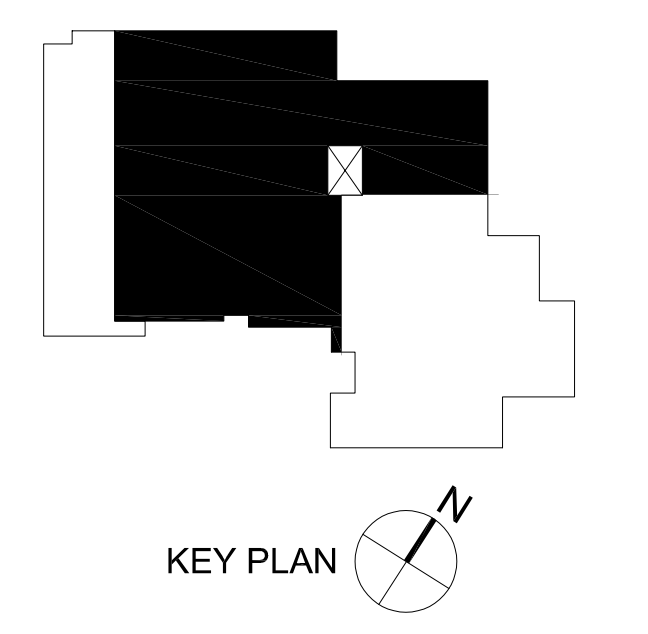
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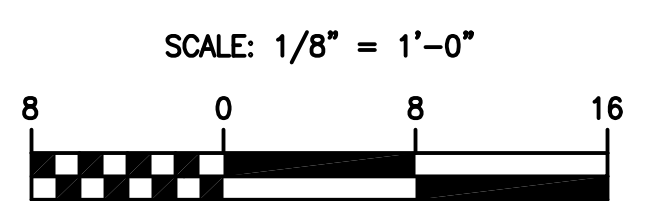
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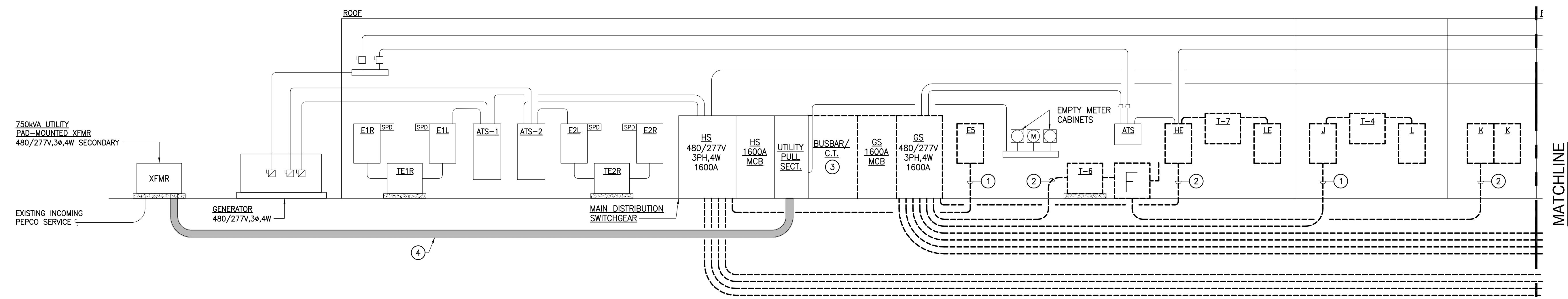


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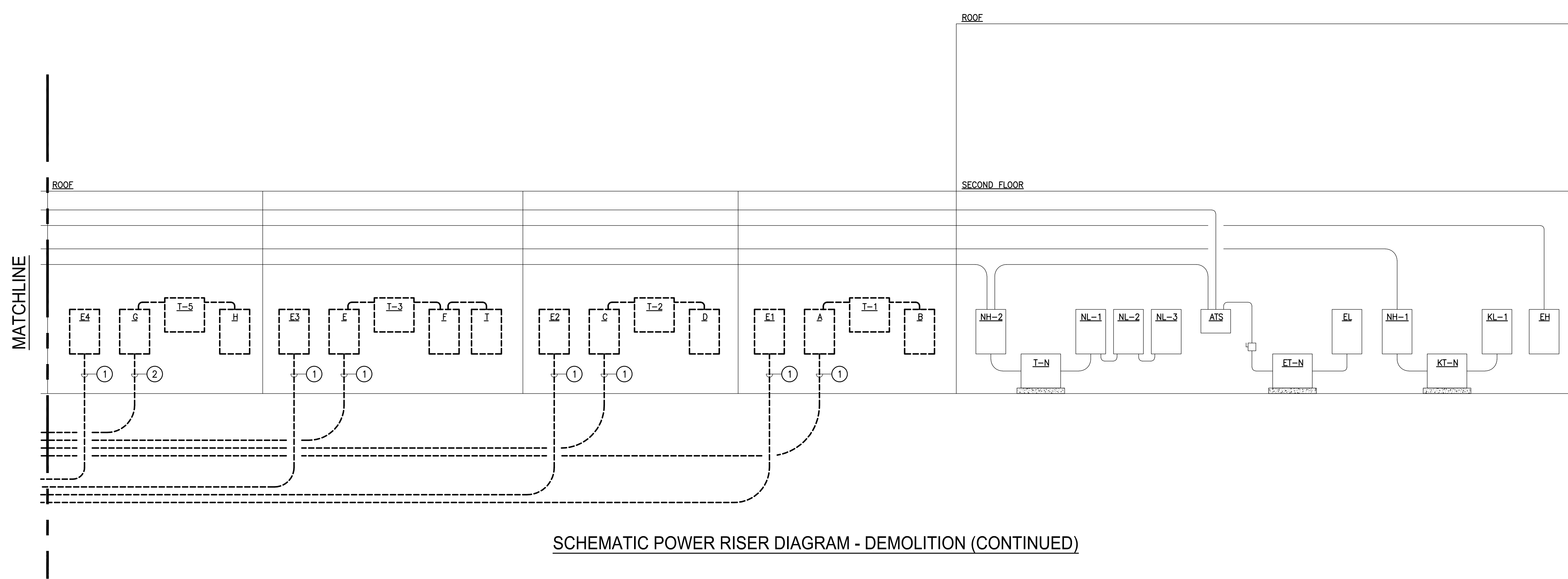
1. REFER TO PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
2. PROVIDE TRANSFORMER PRIMARY DISCONNECTS, WHERE INDICATED, SIZED TO MATCH (OR EXCEED) THE RATING OF THE PRIMARY CB INDICATED ON THE DRY TYPE TRANSFORMER SCHEDULE.
3. CONTRACTOR SHALL REDUCE FEEDER SIZE (IF REQUIRED) WITHIN 5'-0" OF EQUIPMENT TO ACCOMMODATE LUG SIZES.
4. PROVIDE PLACARD POSTING THE AVAILABLE FAULT CURRENT AT THE MAIN SERVICE.
5. PROVIDE POWER RISER DIAGRAM, LAMINATED AND FRAMED 30" x 42" ON MYLAR AND COORDINATE LOCATION WITH OWNER IN MAIN ELECTRICAL ROOM.
6. ALL PANELBOARDS WITH 84-POLES OR LESS SHALL BE IN A SINGLE INTERIOR BACKBOX.

**DRAWING NOTES:**

- ① REMOVE FEEDERS AND MAINTAIN CONDUIT FOR REUSE.
- ② REMOVE FEEDERS AND CAP CONDUIT.
- ③ COORDINATE CT REMOVAL WITH UTILITY. MAINTAIN CONDUIT AND CABLING OF UTILITY METER FOR RECONNECTION.
- ④ SECONDARY FEEDERS TO BE REMOVED BY UTILITY COMPANY. COORDINATE BUILDING SHUTDOWN WITH OWNER AND UTILITY COMPANY (PEPCO).



**SCHEMATIC POWER RISER DIAGRAM - DEMOLITION**



**SCHEMATIC POWER RISER DIAGRAM - DEMOLITION (CONTINUED)**

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**SCHEMATIC POWER RISER DIAGRAM - DEMOLITION**  
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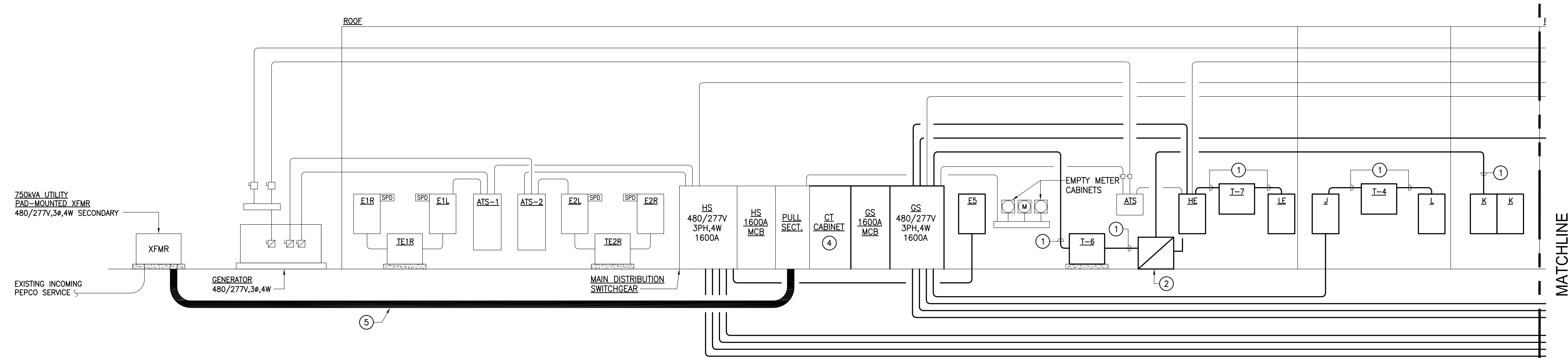
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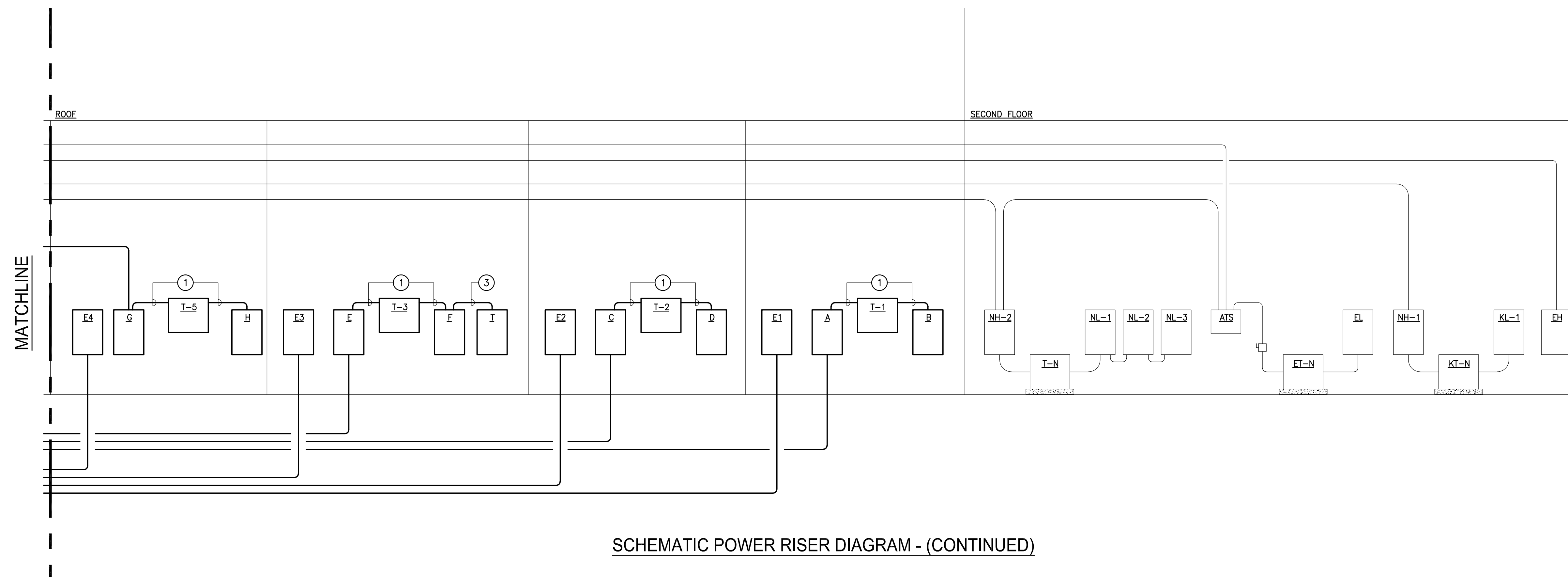
- REFER TO PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
- PROVIDE TRANSFORMER PRIMARY DISCONNECTS, WHERE INDICATED, SIZED TO MATCH (OR EXCEED) THE RATING OF THE PRIMARY CB INDICATED ON THE DRY TYPE TRANSFORMER SCHEDULE.
- PROVIDE TRANSFORMER SECONDARY ENCLOSED CIRCUIT BREAKERS, WHERE INDICATED, SIZED TO MATCH (OR EXCEED) THE RATING OF THE PRIMARY CB INDICATED ON THE DRY TYPE TRANSFORMER SCHEDULE.
- CONTRACTOR SHALL REDUCE FEEDER SIZE (IF REQUIRED) WITHIN 5'-0" OF EQUIPMENT TO ACCOMMODATE LUG SIZES.
- PROVIDE PLACARD POSTING THE AVAILABLE FAULT CURRENT AT THE MAIN SERVICE.
- PROVIDE POWER RISER DIAGRAM, LAMINATED AND FRAMED 30" x 42" ON MYLAR AND COORDINATE LOCATION WITH OWNER IN MAIN ELECTRICAL ROOM.
- ALL PANELBOARDS WITH 84-POLES OR LESS SHALL BE IN A SINGLE INTERIOR BACKBOX.
- PROVIDE PLACARD AT EACH NEW TRANSFORMER INDICATING WHERE IT IS FED FROM. BREAKER SERVING TRANSFORMERS SHALL BE LOCKABLE.

**DRAWING NOTES:**

- REFER TO DRY TYPE TRANSFORMER SCHEDULE FOR WIRE SIZES.
- 800A, 3Ø, 4W ENCLOSED CIRCUIT BREAKER.
- (4)#1 + #8GW - 1 1/2".
- COORDINATE REINSTALLATION OF CT AND METER WITH UTILITY COMPANY.
- NEW SECONDARY FEEDERS TO BE PULLED IN EXISTING CONDUIT BY UTILITY FROM EXISTING TRANSFORMER TO MAIN SWITCHGEAR. COORDINATE NEW FEEDER INSTALLATION WITH UTILITY COMPANY (PEPCO).



SCHEMATIC POWER RISER DIAGRAM



SCHEMATIC POWER RISER DIAGRAM - (CONTINUED)

DRY TYPE TRANSFORMER SCHEDULE										
XFMR	KVA	PRIMARY		PRIMARY WIRING	SECONDARY WIRING	SECONDARY		NEUTRAL/CASE GND	REMARKS	MOUNTING DISCRPTION
		VOLTAGE	# CB			VOLTAGE	# CB			
T-1	30	480	3	50	3#4-#10GW-1 1/2"	208/120	3	100	#6	FLOOR
T-2	45	480	3	90	3#2-#8GW-1 1/4"	208/120	3	200	#6	SUSPENDED
T-3	75	480	3	125	3#1/0-#6GW-2"	208/120	3	300	#2	SUSPENDED
T-4	15	480	3	30	3#1/0-#10GW-3/4"	208/120	3	60	#8	SUSPENDED
T-5	25	480	3	50	3#4-#10GW-1 1/2"	208/120	3	100	#6	SUSPENDED
T-6	225	480	3	350	2 SETS (3#3/0-#3GW-2")	208/120	3	800	#2/0	FLOOR
T-7	15	480	3	30	3#1/0-#10GW-3/4"	208/120	3	50	#8	SUSPENDED

NO.	DATE	REVISIONS	
		DESCRIPTION	

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**ALBAN ENGINEERING, INC.**  
 303 HUNTINGWOOD CIRCLE  
 HUNT VALLEY, MD 21080  
 www.albanengineering.com  
 410.842.6411

**SCHEMATIC POWER RISER DIAGRAM - NEW WORK**  
 SHERWOOD ES - FEDERAL PACIFIC GEAR REPLACEMENT  
 SANDY SPRING, MD 20860

PN# 22021  
 PROJECT MANAGER SF  
 DESIGNER BSF

**E501**  
 BID SET  
 04-08-2022

GENERAL NOTES:

- 1. MAINTAIN ALL BRANCH CIRCUITS AND RECONNECT TO NEW PANELS. MODIFY/EXTEND BRANCH CIRCUIT WIRING TO ACCOMMODATE NEW PANEL.

Table with columns: REVISIONS, NO., DATE, DESCRIPTION.

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PANEL SCHEDULES SHERWOOD ES - FEDERAL PACIFIC GEAR REPLACEMENT SANDY SPRING, MD 20860

PN# 22021 PROJECT MANAGER SF DESIGNER BSF

E601

MSB - HS MOUNTING: FREE STANDING A.I.C. RATING: 65,000 LOCATION: MAIN ELEC RM. DISTRIBUTION SECTION table with columns: FDR NO, SERVES, CIRCUIT BREAKER, WIRING, REMARKS, CONN KVA.

MSB - GS MOUNTING: FREE STANDING A.I.C. RATING: 65,000 LOCATION: MAIN ELEC RM. DISTRIBUTION SECTION table with columns: FDR NO, SERVES, CIRCUIT BREAKER, WIRING, REMARKS, CONN KVA.

PANEL E4 MOUNTING: RECESSED LOCATION: CORRIDOR. BOTTOM FEED table with columns: CONN KVA, CKT, DESCRIPTION, BREAKER, CIRCUIT WIRING.

PANEL G MOUNTING: RECESSED LOCATION: CORRIDOR. TOP FEED table with columns: CONN KVA, CKT, DESCRIPTION, BREAKER, CIRCUIT WIRING.

PANEL H MOUNTING: RECESSED LOCATION: CORRIDOR. TOP FEED table with columns: CONN KVA, CKT, DESCRIPTION, BREAKER, CIRCUIT WIRING.

PANEL HE MOUNTING: SURFACE LOCATION: MAIN ELECTRICAL ROOM. TOP FEED table with columns: CONN KVA, CKT, DESCRIPTION, BREAKER, CIRCUIT WIRING.

PANEL E5 MOUNTING: SURFACE LOCATION: MAIN ELECTRICAL ROOM. BOTTOM FEED table with columns: CONN KVA, CKT, DESCRIPTION, BREAKER, CIRCUIT WIRING.

PANEL E5 MOUNTING: SURFACE LOCATION: MAIN ELECTRICAL ROOM. BOTTOM FEED table with columns: CONN KVA, CKT, DESCRIPTION, BREAKER, CIRCUIT WIRING.

PANEL J MOUNTING: RECESSED LOCATION: CORRIDOR. BOTTOM FEED table with columns: CONN KVA, CKT, DESCRIPTION, BREAKER, CIRCUIT WIRING.

PANEL L MOUNTING: RECESSED LOCATION: CORRIDOR. TOP FEED table with columns: CONN KVA, CKT, DESCRIPTION, BREAKER, CIRCUIT WIRING.

PANEL LE MOUNTING: SURFACE LOCATION: MAIN ELECTRICAL ROOM. TOP FEED table with columns: CONN KVA, CKT, DESCRIPTION, BREAKER, CIRCUIT WIRING.

PANEL K MOUNTING: RECESSED LOCATION: KITCHEN. TOP FEED table with columns: CONN KVA, CKT, DESCRIPTION, BREAKER, CIRCUIT WIRING.

PANEL K MOUNTING: RECESSED LOCATION: KITCHEN. TOP FEED table with columns: CONN KVA, CKT, DESCRIPTION, BREAKER, CIRCUIT WIRING.



**GENERAL NOTES:**

1. MAINTAIN ALL BRANCH CIRCUITS AND RECONNECT TO NEW PANELS. MODIFY/EXTEND BRANCH CIRCUIT WIRING TO ACCOMMODATE NEW PANEL.

PANEL E3											
VOLTAGE: 480/277V, 3ø, 4W						MOUNTING: RECESSED					
225 AMPERE BUS						42,000 A.I.C.					
BOTTOM FEED						100% RATED NEUTRAL BUS					
CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C	CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C
	1	HEAT - ASSIST PRIN.	1	20			2	SPARE	1	20	
	3	HEAT - COMM. CENTER	1	20			4	SPARE	1	20	
	5	HEAT - CONF. ROOM	1	20			6	UH-6 ART ROOM 53	1	20	
	7	HEAT - PRIN. OFFICE	1	20			8	UH-8 IN GEN OFFICE	1	20	
	9	UH-9	1	20			10	SPARE (OFF)	1	20	
	11	HEAT - TEACHER LOUNGE	1	50			12	SPARE (OFF)	1	20	
	13						14	AIR HANDLER ROOM EXHAUST FAN (OFF)	3	15	
	15	CONVECTORS ART	3	15			16				
	17						18				
	19						20				
	21	AIR CAMP IN AIR HANDLER ROOM	3	15			22	COOLING TOWER (OFF)	3	20	
	23						24				
	25						26	AC FAN COIL MOTOR ON ROOF (OFF)	3	20	
	27	UH-11 AIR HANDLER ROOM	3	20			28				
	29						30				
	31						32	RETURN AIR FAN IN AIR HANDLER ROOM (OFF)	3	30	
	33	CONVECTORS LIBRARY	3	20			34				
	35						36				
	37						38				
	39	CONVECTORS LIBRARY	3	20			40	CONVECTORS READING/SPEECH	3	20	
	41						42				
TOTAL CONNECTED LOAD						0.0 KVA					
KVA PER PHASE:						A 0.0 B 0.0 C 0.0					

PANEL E											
VOLTAGE: 480/277V, 3ø, 4W						MOUNTING: RECESSED					
225 AMPERE BUS						42,000 A.I.C.					
BOTTOM FEED						100% RATED NEUTRAL BUS					
CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C	CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C
	1	LIGHTS - RM 61,66,70	1	20			2	LIGHTS - RM 48,49	1	20	
	3	LIGHTS - RM 62,63,64	1	20			4	LIGHTS - COM. UNIT	1	20	
	5	SPARE	1	20			6	LIGHTS - ART ROOM	1	20	
	7	LIGHTS - CORR 38	1	20			8	SPARE	1	20	
	9	LIGHTS - FAC LOUNGE	1	20			10	SPARE	1	20	
	11	SPARE	1	20			12	SPARE	1	20	
	13	SPARE	1	20			14				
	15						16				
	17						18				
TOTAL CONNECTED LOAD						0.0 KVA					
KVA PER PHASE:						A 0.0 B 0.0 C 0.0					

PANEL F											
VOLTAGE: 208/120V, 3ø, 4W						MOUNTING: RECESSED					
300 AMPERE BUS						10,000 A.I.C.					
TOP FEED						100% RATED NEUTRAL BUS					
CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C	CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C
	1	EXISTING CIRCUIT	1	20			2	EXISTING CIRCUIT	1	20	
	3	EXISTING CIRCUIT	1	20			4	EXISTING CIRCUIT	1	20	
	5	EXISTING CIRCUIT	1	20			6	EXISTING CIRCUIT	1	20	
	7	EXISTING CIRCUIT	1	20			8	EXISTING CIRCUIT	1	20	
	9	EXISTING CIRCUIT	1	20			10	EXISTING CIRCUIT	1	20	
	11	EXISTING CIRCUIT	1	20			12	EXISTING CIRCUIT	1	20	
	13	EXISTING CIRCUIT	1	20			14	EXISTING CIRCUIT	1	20	
	15	EXISTING CIRCUIT	1	20			16	EXISTING CIRCUIT	1	20	
	17	EXISTING CIRCUIT	1	20			18	EXISTING CIRCUIT	1	20	
	19	EXISTING CIRCUIT	1	20			20	EXISTING CIRCUIT	1	20	
	21	EXISTING CIRCUIT	1	20			22	EXISTING CIRCUIT	1	20	
	23	EXISTING CIRCUIT	1	20			24	EXISTING CIRCUIT	1	20	
	25	EXISTING CIRCUIT	1	20			26	EXISTING CIRCUIT	1	20	
	27	EXISTING CIRCUIT	1	20			28	EXISTING CIRCUIT	2	20	
	29	EXISTING CIRCUIT	1	20			30				
	31	EXISTING CIRCUIT	1	20			32	EXISTING CIRCUIT	1	20	
	33						34	EXISTING CIRCUIT	1	20	
	35	EXISTING CIRCUIT	1	20			36	EXISTING CIRCUIT	2	20	
	37	EXISTING CIRCUIT	1	20			38				
	39	EXISTING CIRCUIT	1	20			40	EXISTING CIRCUIT	1	20	
	41						42	EXISTING CIRCUIT	1	20	
TOTAL CONNECTED LOAD						0.0 KVA					
KVA PER PHASE:						A 0.0 B 0.0 C 0.0					

PANEL T											
VOLTAGE: 208/120V, 3ø, 4W						MOUNTING: SURFACE					
100 AMPERE BUS						10,000 A.I.C.					
TOP FEED						100% RATED NEUTRAL BUS					
CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C	CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C
	1	EXISTING CIRCUIT	1	20			2	EXISTING CIRCUIT	1	20	
	3	EXISTING CIRCUIT	1	20			4	EXISTING CIRCUIT	1	20	
	5	EXISTING CIRCUIT	1	20			6	EXISTING CIRCUIT	1	20	
	7	EXISTING CIRCUIT	1	20			8	EXISTING CIRCUIT	1	20	
	9	EXISTING CIRCUIT	1	20			10	EXISTING CIRCUIT	1	20	
	11	EXISTING CIRCUIT	1	20			12	EXISTING CIRCUIT	1	20	
	13	EXISTING CIRCUIT	1	20			14	EXISTING CIRCUIT	1	20	
	15	EXISTING CIRCUIT	1	20			16	EXISTING CIRCUIT	1	20	
	17	EXISTING CIRCUIT	1	20			18	EXISTING CIRCUIT	1	20	
	19	EXISTING CIRCUIT	1	20			20	EXISTING CIRCUIT	1	20	
	21	EXISTING CIRCUIT	1	20			22	EXISTING CIRCUIT	1	20	
	23	EXISTING CIRCUIT	1	20			24	EXISTING CIRCUIT	1	20	
	25	EXISTING CIRCUIT	1	20			26	EXISTING CIRCUIT	1	20	
	27	EXISTING CIRCUIT	1	20			28	EXISTING CIRCUIT	1	20	
	29	EXISTING CIRCUIT	1	20			30	EXISTING CIRCUIT	1	20	
	31	EXISTING CIRCUIT	1	20			32	EXISTING CIRCUIT	1	20	
	33	EXISTING CIRCUIT	1	20			34	EXISTING CIRCUIT	1	20	
	35	EXISTING CIRCUIT	1	20			36	EXISTING CIRCUIT	1	20	
	37						38				
	39						40				
	41						42				
TOTAL CONNECTED LOAD						0.0 KVA					
KVA PER PHASE:						A 0.0 B 0.0 C 0.0					

PANEL E2											
VOLTAGE: 480/277V, 3ø, 4W						MOUNTING: RECESSED					
225 AMPERE BUS						42,000 A.I.C.					
BOTTOM FEED						100% RATED NEUTRAL BUS					
CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C	CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C
	1	SPECIAL ED RM 14	1	30			2	MC HEATER	1	20	
	3	SPECIAL ED RM 13	1	20			4	HEATER ROOM 15	1	30	
	5	HEATER ROOM 17	1	30			6	HEATER ROOM 18	1	30	
	7	UNIT HEATER #4	1	20			8	HEATER ROOM 16	1	30	
	9	CLASSROOM #42	1	20			10	SPARE	1	20	
	11	UH-7	1	20			12	UH-5	1	20	
	13	SHOP ROOM #7	1	20			14	HEATER T.P.C. 26	1	20	
	15	HALL HEATER	1	30			16	UNIT HEATER	1	40	
	17	HALL HEATER	1	40			18	SPARE	1	30	
	19	SPARE	1	50			20	SPARE	1	60	
	21						22				
	23	CONVECTORS	3	20			24	CONVECTORS	3	20	
	25						26				
	27						28				
	29						30				
TOTAL CONNECTED LOAD						0.0 KVA					
KVA PER PHASE:						A 0.0 B 0.0 C 0.0					

PANEL C											
VOLTAGE: 480/277V, 3ø, 4W						MOUNTING: RECESSED					
225 AMPERE BUS						42,000 A.I.C.					
BOTTOM FEED						100% RATED NEUTRAL BUS					
CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C	CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C
	1	LIGHTS - SPEC ED	1	20			2	EXISTING CIRCUIT	1	20	
	3	LIGHTS - CLASSRM 10	1	20			4	LIGHTS - CLASSRM 15	1	20	
	5	LIGHTS - CLASSRM 17	1	20			6	LIGHTS - CORRIDOR 13	1	20	
	7	LIGHTS - CLASSRM 18	1	20			8	HEATER - ROOM 20	1	20	
	9	LIGHTS - CLASSRM 16	1	20			10	LIGHTS - CORRIDOR 25	1	20	
	11						12	LIGHTS - IMC ROOM	1	20	
	13	PANEL NP (VIA XFMR)	3	50			14	LIGHTS - IMC ROOM	1	20	
	15						16	LIGHTS - IMC ROOM	1	20	
	17						18	LIGHTS - CLASSRM 42	1	20	
	19	PANEL D (VIA XFMR T-2)	3	90			20	SPARE	1	20	
	21						22	LIGHTS - CLASSRM 40A	1	20	
	23						24	SPARE	1	20	
TOTAL CONNECTED LOAD						0.0 KVA					
KVA PER PHASE:						A 0.0 B 0.0 C 0.0					

PANEL D											
VOLTAGE: 208/120V, 3ø, 4W						MOUNTING: RECESSED					
200 AMPERE BUS						10,000 A.I.C.					
TOP FEED						100% RATED NEUTRAL BUS					
CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C	CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C
	1	PLUGS	1	20			2	PLUGS	1	20	
	3	PLUGS	1	20			4	PLUGS	1	20	
	5	PLUGS	1	20			6	PLUGS	1	20	
	7	PLUGS	1	20			8	PLUGS	1	20	
	9	PLUGS	1	20			10	PLUGS	1	20	
	11	PLUGS	1	20			12	DISHWASHER	1	20	
	13	PLUG - SEC RECPT	1	20			14	COURTYARD LIGHT	1	20	
	15	PLUGS	1	20			16	SPARE	1	20	
	17	PLUGS	1	20			18	PLUGS	1	20	
	19	EXISTING CIRCUIT	1	20			20	WASHING MACHINE	1	20	
	21	WASHING MACHINE	1	20			22	RM 132 PROMET. BOARD	1	20	
	23	REFRIGERATOR	1	20			24	PLUGS	1	20	
	25	RECPT - CLASS NEW WALLS	1	20			26	PLUGS	1	20	
	27	SPARE	1	20			28	RM 132 TEACHER DROP	1	20	
	29	PLUGS	1	20			30	SPARE	1	20	
	31	PLUGS	1	20			32	RM 17, 18 - PLUGS	1	20	
	33	HEATER RESOURCE RM	1	20			34	RM 17, 18 - PLUGS	1	20	
	35	HEATER RESOURCE RM	1	20			36				
	37	SPARE	1	20			38	CLOTHES DRYER	2	30	
	39	RM132 BATH GFCCI	1	20			40				
	41	RM132 REFRIGERATOR	1	20			42	RANGE	2	50	
TOTAL CONNECTED LOAD						0.0 KVA					
KVA PER PHASE:						A 0.0 B 0.0 C 0.0					

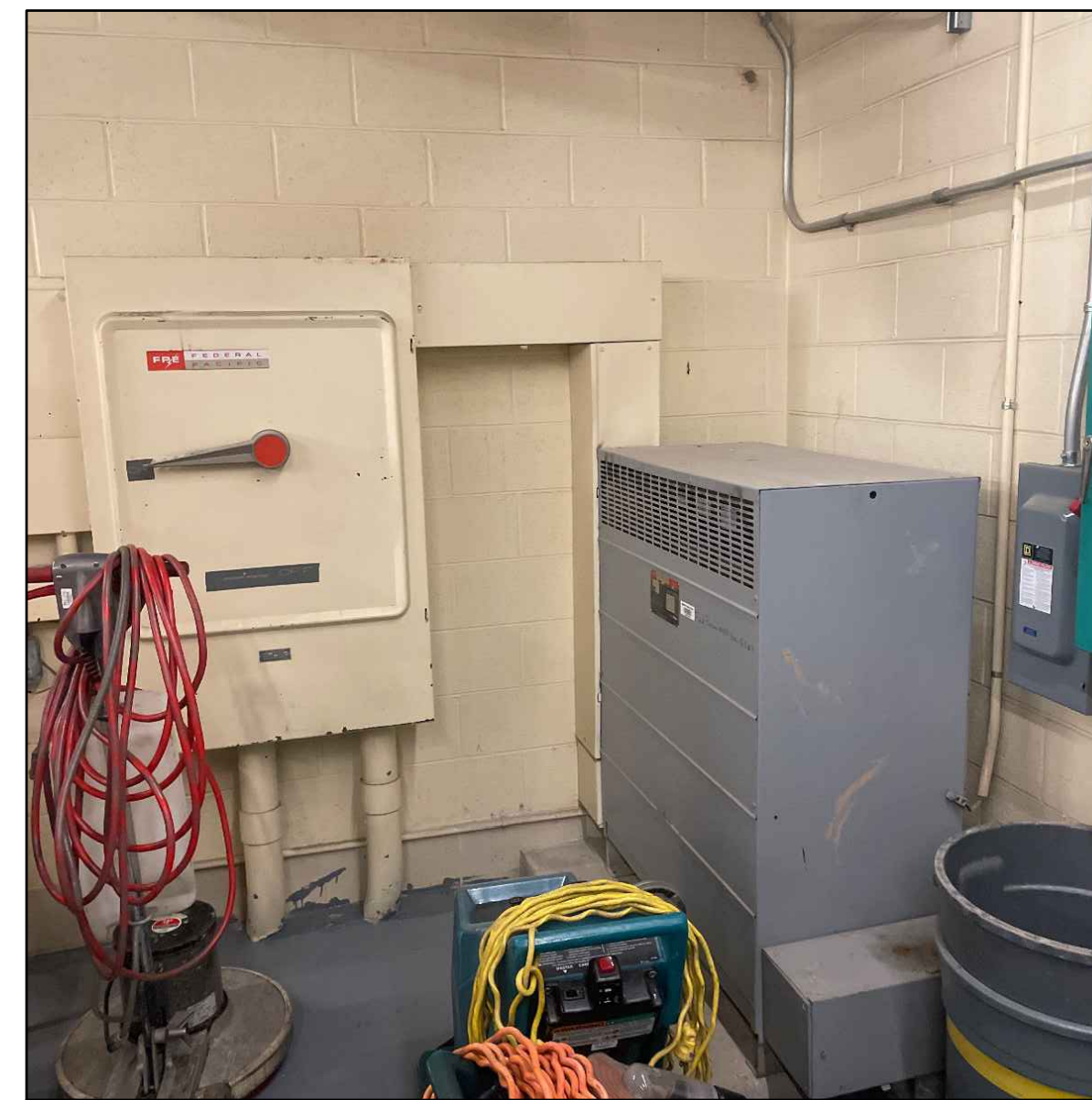
PANEL E1											
VOLTAGE: 480/277V, 3ø, 4W						MOUNTING: RECESSED					
225 AMPERE BUS						42,000 A.I.C.					
BOTTOM FEED						100% RATED NEUTRAL BUS					
CONN KVA	CKT	DESCRIPTION	BREAKER P	AMPS	CIRCUIT WIRING NO SIZE GND C	CONN KVA					



MAIN SWITCHGEAR  
SCALE: NONE



PANEL K  
SCALE: NONE



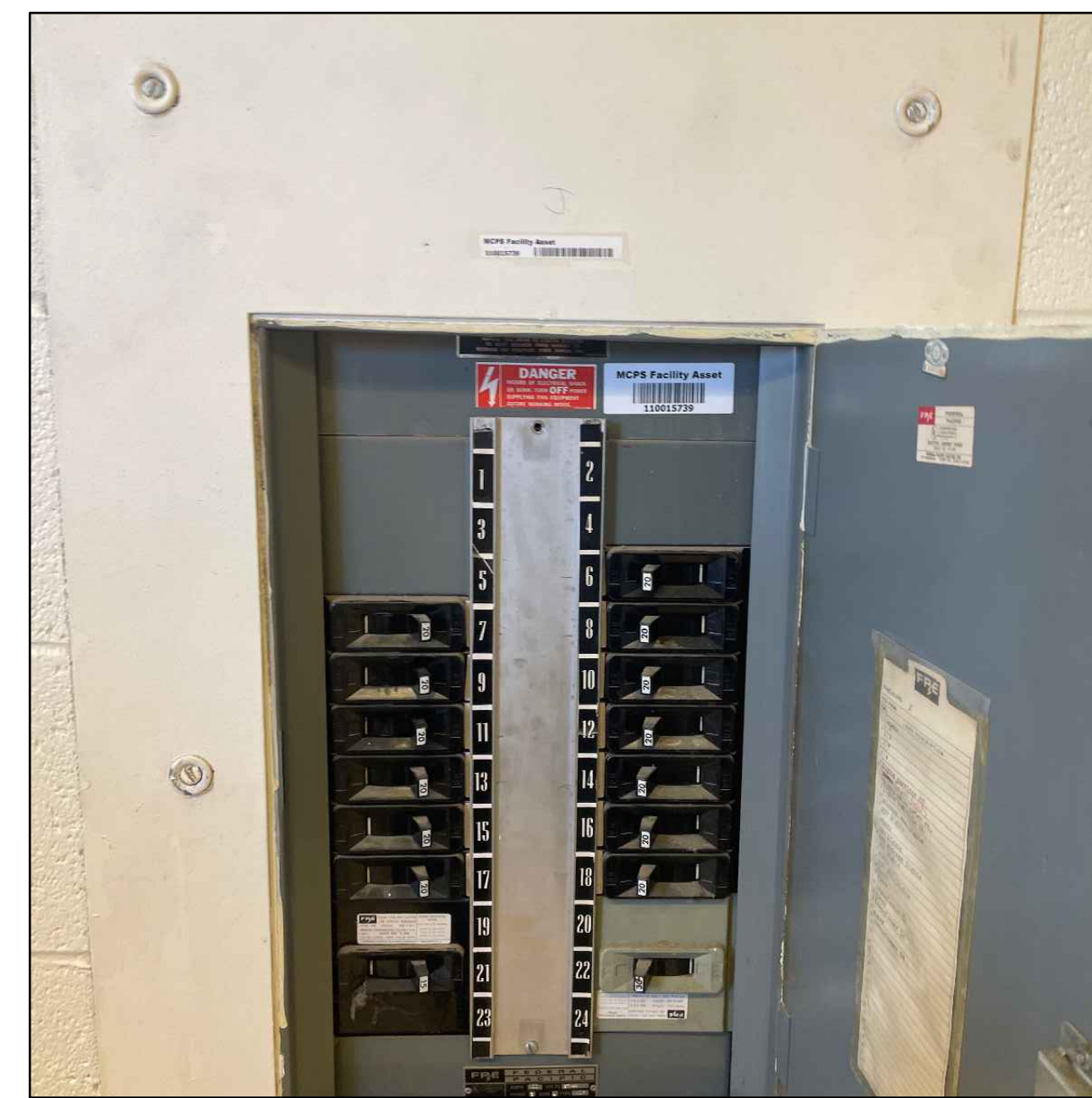
XFMR T-6  
SCALE: NONE



OLD SHED EQUIPMENT  
SCALE: NONE



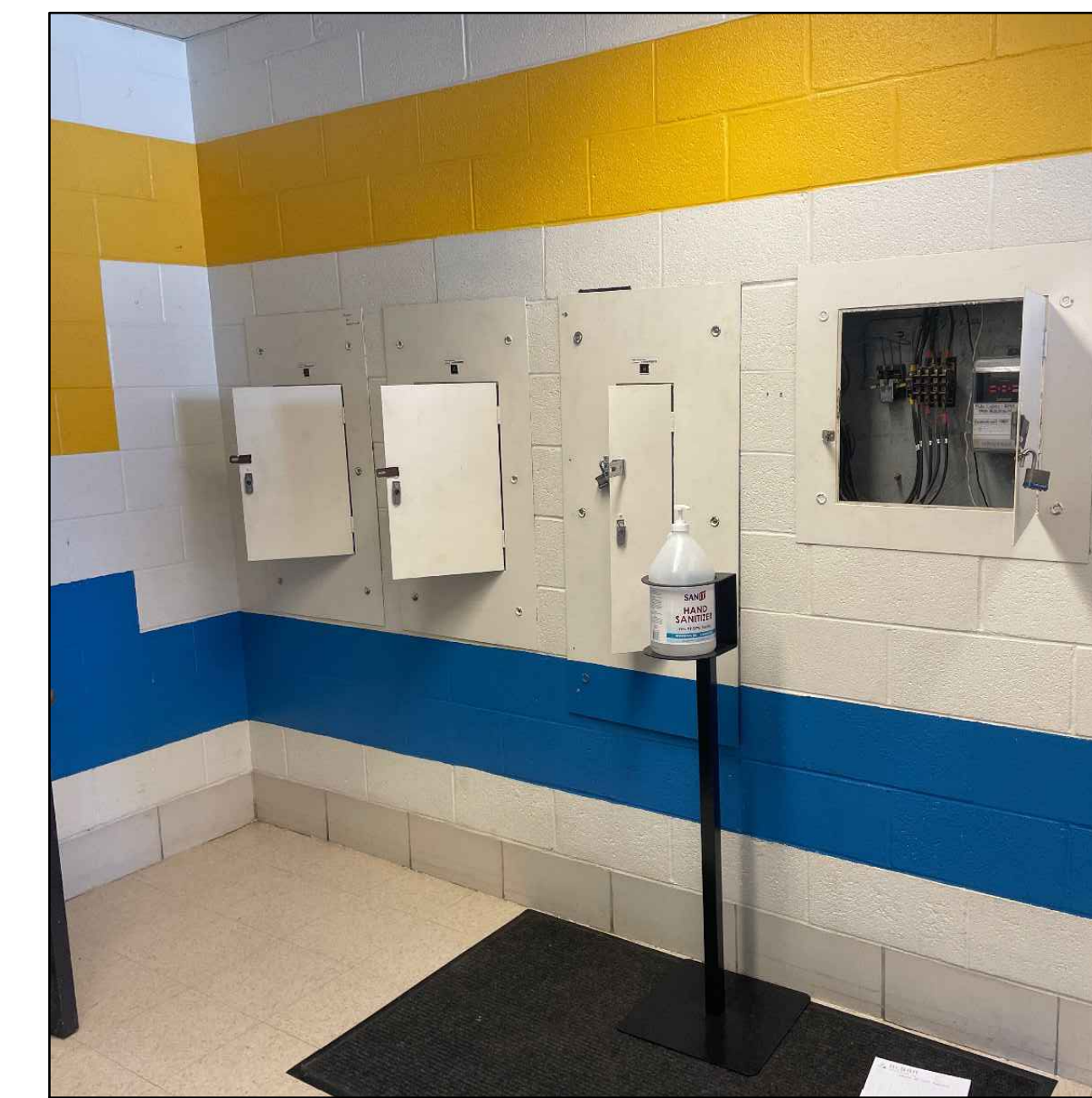
PANELS HE & LE  
SCALE: NONE



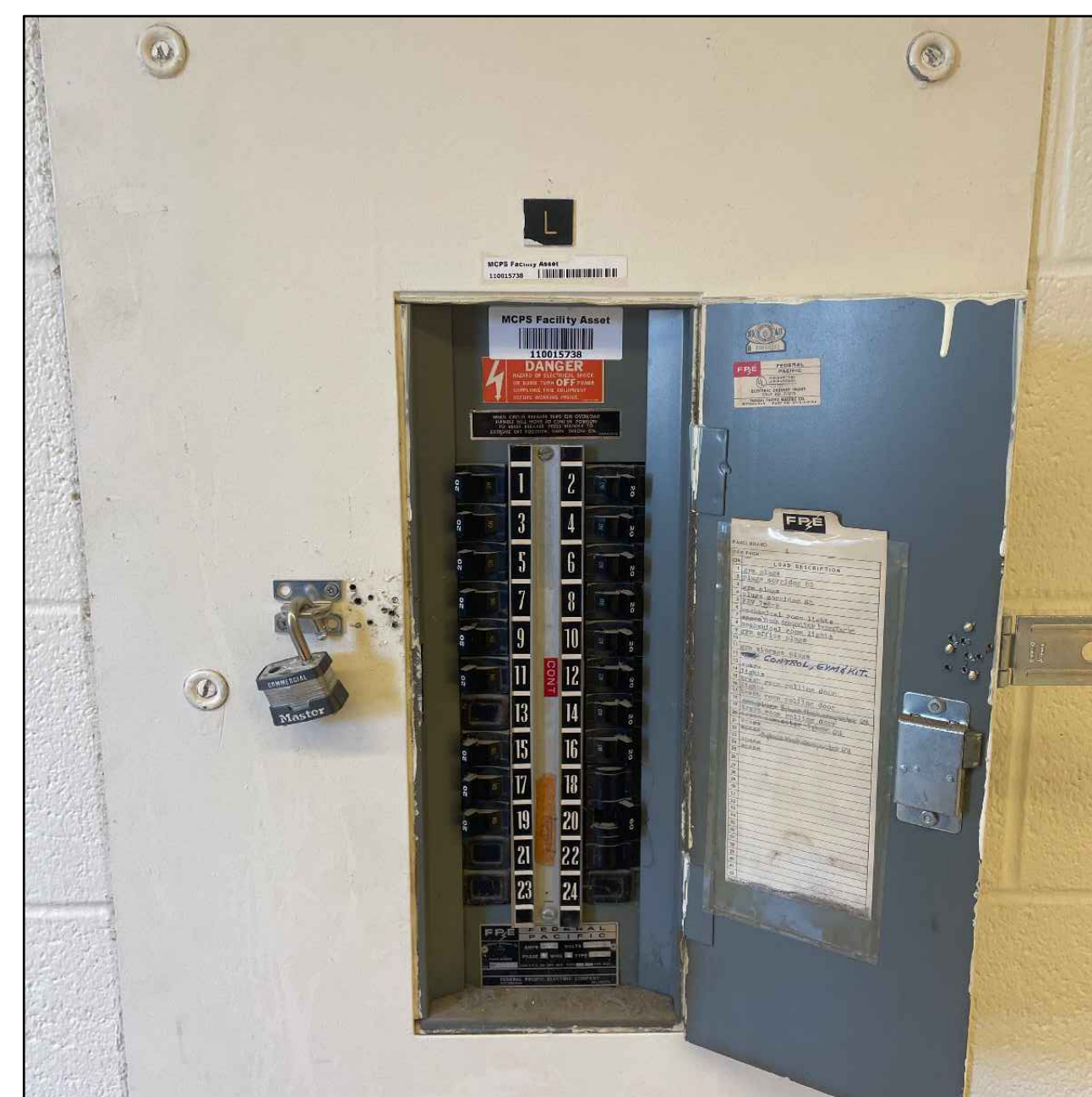
PANEL J  
SCALE: NONE



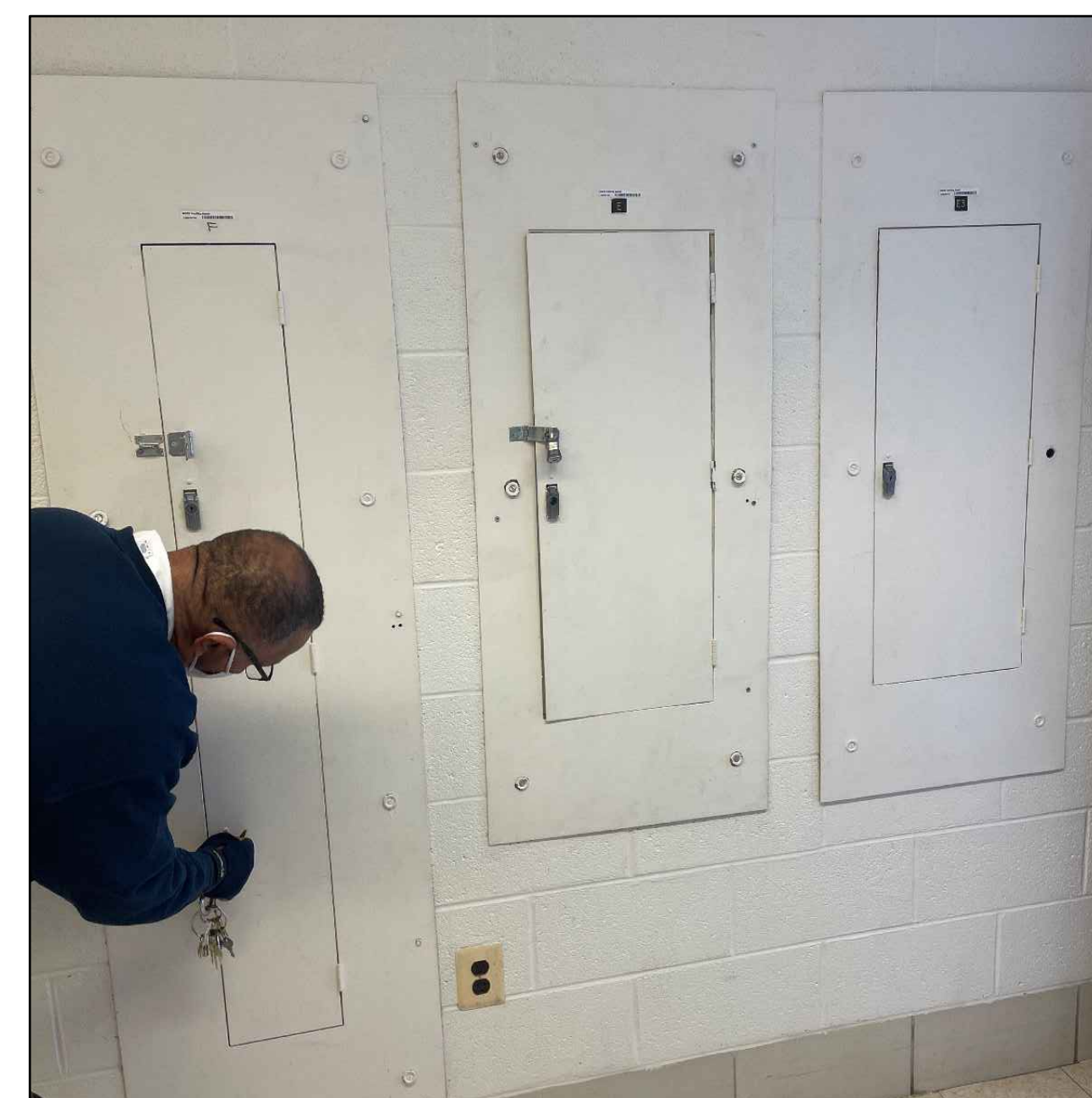
PANEL E5  
SCALE: NONE



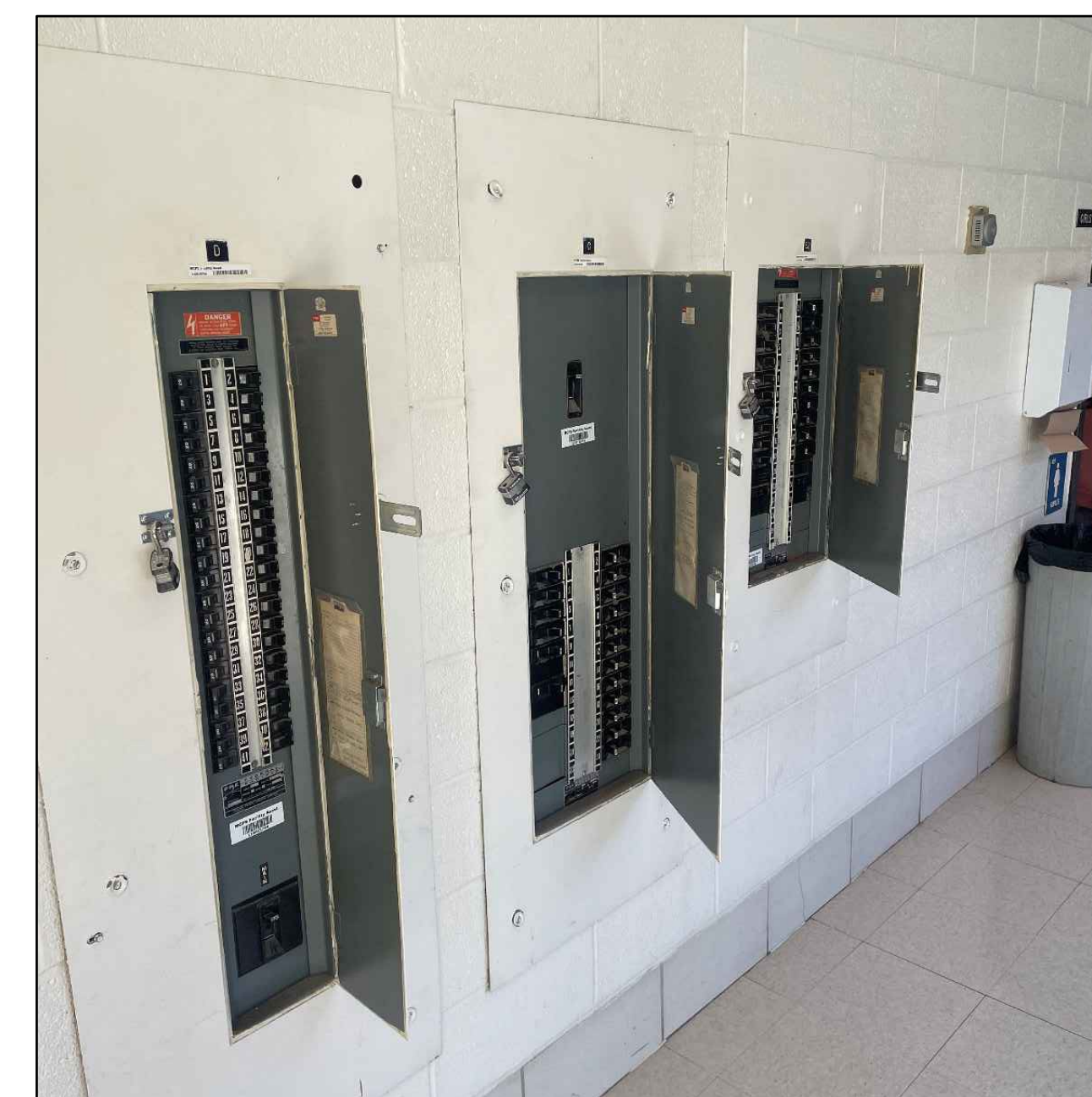
PANELS E4, G, & H  
SCALE: NONE



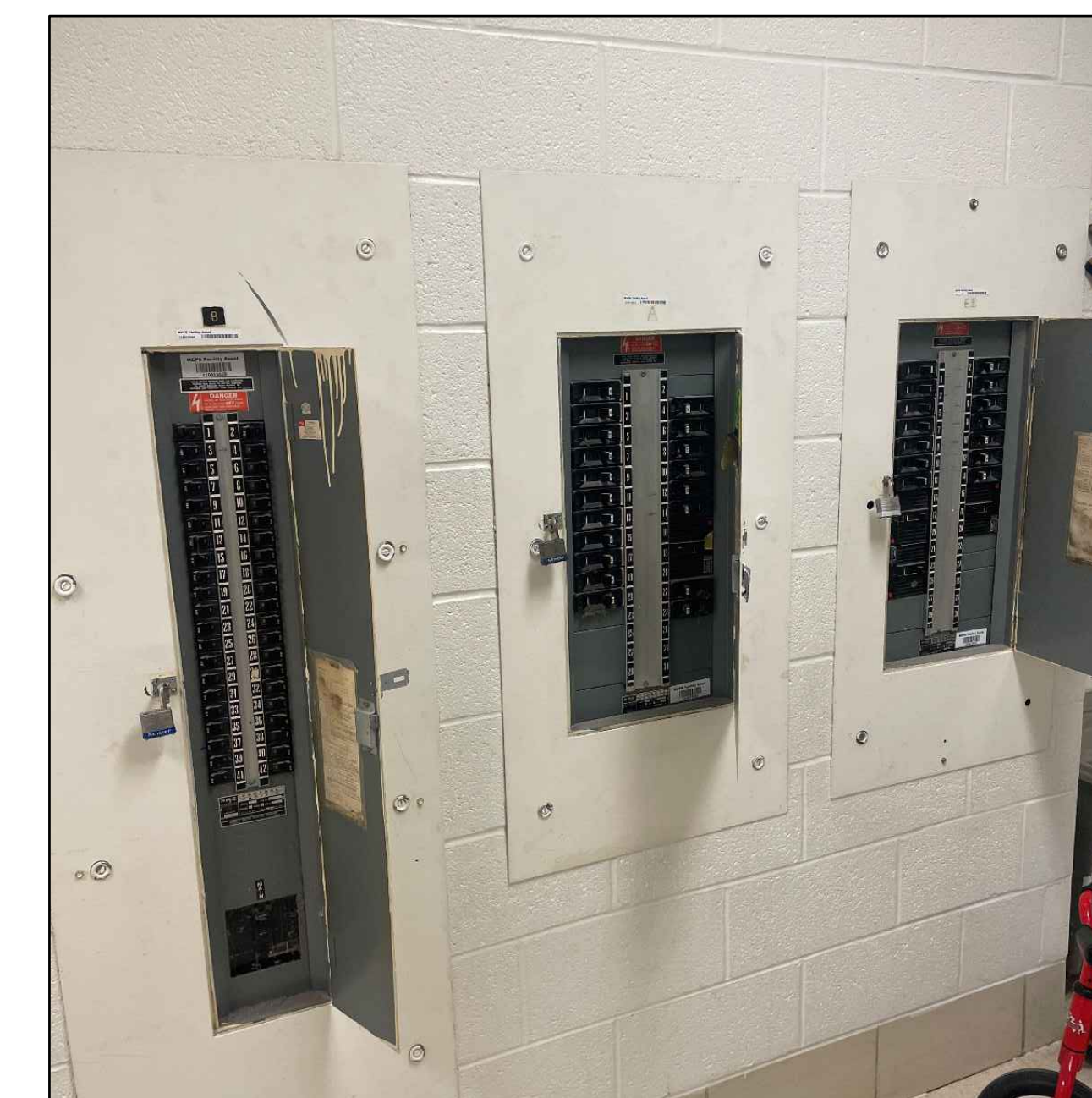
PANEL L  
SCALE: NONE



PANELS E3, E, & F  
SCALE: NONE



PANELS E2, C, & D  
SCALE: NONE



PANELS E1, A, & B  
SCALE: NONE

NO.	DATE	REVISIONS DESCRIPTION

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**EXISTING PANEL PICTURES**  
SHERWOOD ES - FEDERAL PACIFIC GEAR REPLACEMENT  
SANDY SPRING, MD 20860

PN#	22021
PROJECT MANAGER	SE
DESIGNER	BSF