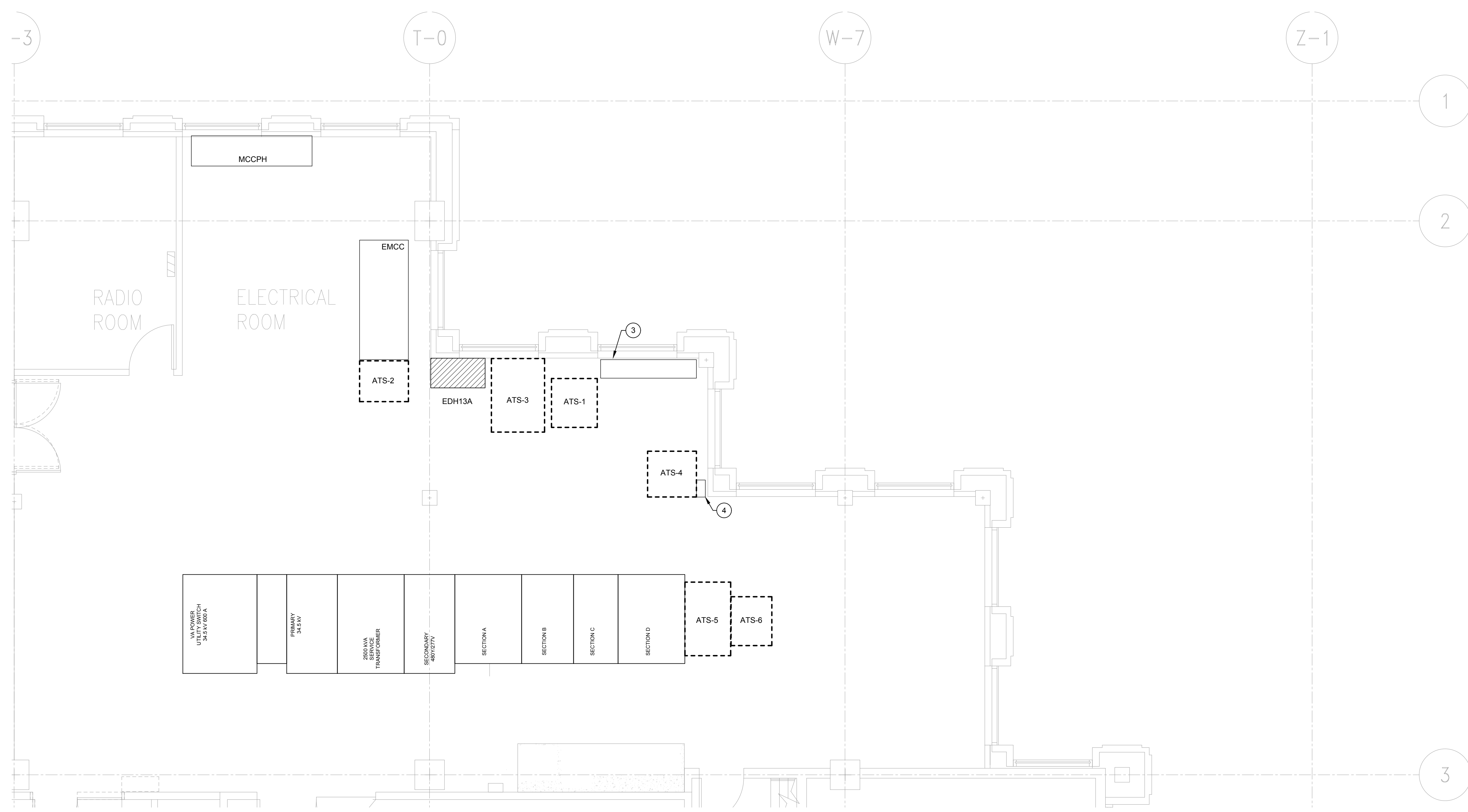
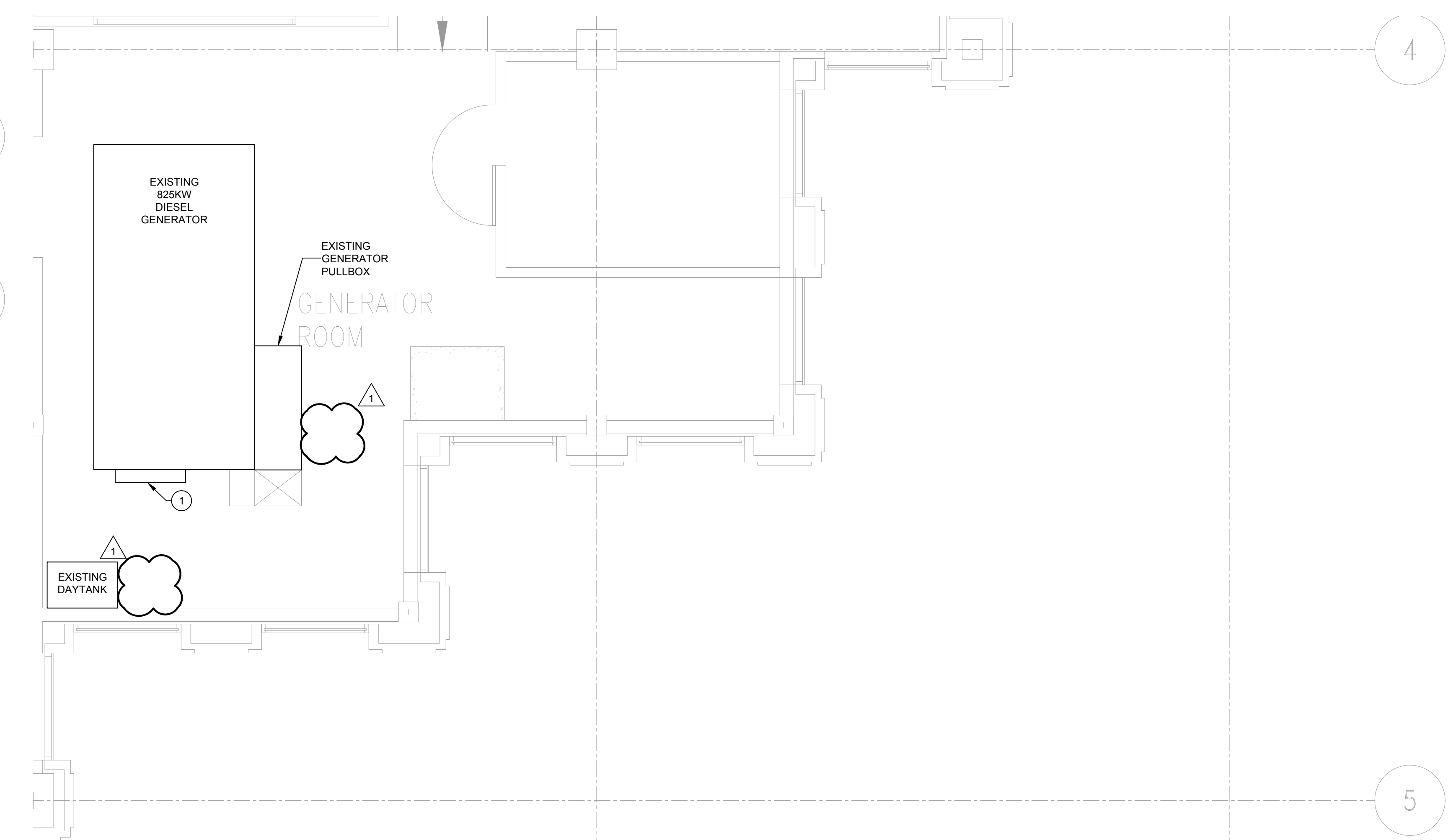


- ### GENERAL NOTES
- ELECTRICAL CONTRACTOR SHALL SUBMIT ATSS REPLACEMENT SEQUENCE REPORT AS INDICATED ON THE DIV 26 SPECIFICATIONS AND COVERSHEET.
  - REFER TO ONE-LINES ON SHEETS E-500 THROUGH E-504 FOR PROPOSED SEQUENCE OF REPLACEMENT FOR EACH ATSS AND ADDITIONAL INFORMATION.
  - ELECTRICAL CONTRACTOR SHALL COORDINATE ALL SHUTDOWNS WITH OWNER PRIOR TO PROCEEDING WITH THE WORK.
  - ELECTRICAL CONTRACTOR SHALL MINIMIZE THE NUMBER AND LENGTH OF SHUTDOWNS TO MINIMIZE NORMAL POWER DOWNTIME.
  - REFER TO COVERSHEET FOR SCHEDULE OF EXISTING ATSS.
- ### KEY NOTES
- EXISTING CATERPILLAR GENERATOR CONTROLLER, BASLER DGC-2020, SERIAL NUMBER EDZ795176, EXISTING CONTROLLER IS EQUIPPED WITH MODUBS.
  - NOT USED.
  - LIFE-SAFETY WIRE-WAY TO REMAIN.
  - EXISTING ATSS-4 LOAD-SIDE PULLBOX TO REMAIN.
  - EXISTING BMS WITH BACNET COMMUNICATION PROTOCOL. VERIFY FINAL LOCATION IN THE FIELD.
  - NOT USED.
  - TEMPORARILY DISCONNECT EXISTING FEEDER FROM PUMP P-9 SAFETY SWITCH AND REFEED PUMP P-9 FROM PANEL CHP LOCATED IN THE MECHANICAL ROOM. REFER TO ONE-LINE ON SHEET E501 FOR ADDITIONAL INFORMATION.
  - PROVIDE A 480V/30A/3P CIRCUIT BREAKER TO TEMPORARILY FEED PUMP P-9. REFER TO ONE-LINE ON SHEET E501 FOR ADDITIONAL INFORMATION.

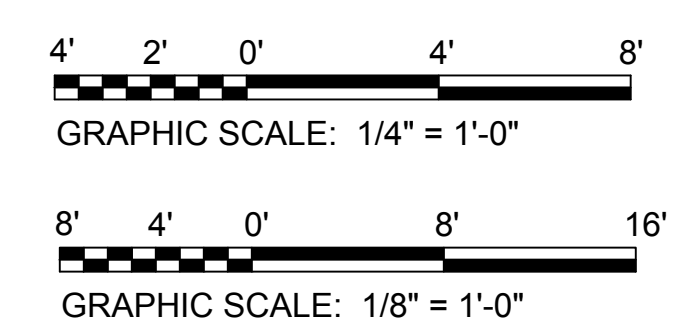
**DEMOLITION PLAN - ELECTRICAL**  
SCALE: 1/8" = 1'-0"



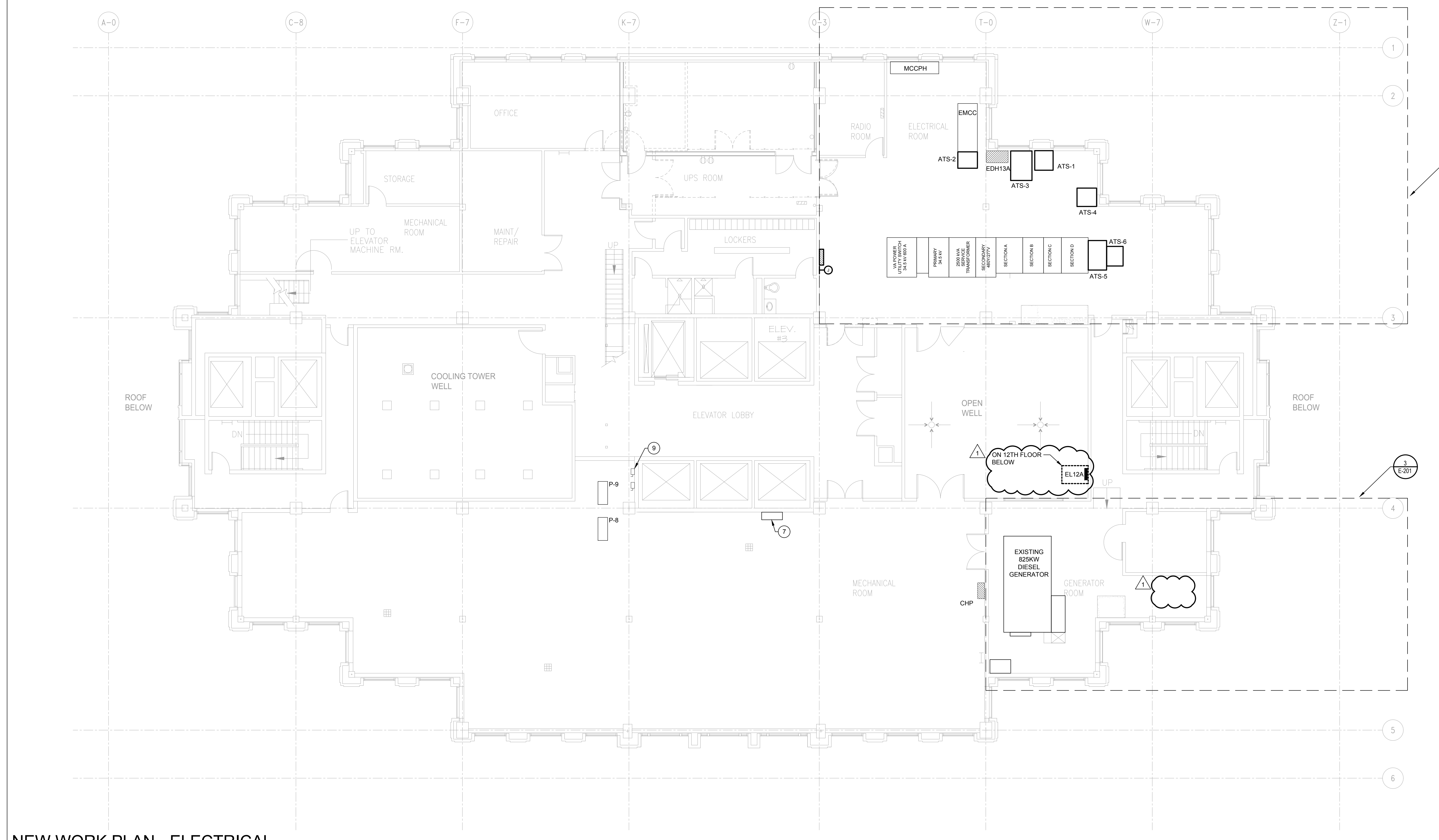
**2 ELECTRICAL ROOM - ENLARGED PLAN**  
SCALE: 1/4" = 1'-0"



**3 GENERATOR ROOM - ENLARGED PLAN**  
SCALE: 1/4" = 1'-0"



ISSUE	DESCRIPTION	REV#	DATE
	50% CONSTRUCTION DOCUMENTS		3/15/21
	100% CONSTRUCTION DOCUMENTS		5/31/21
	PERMIT SET		7/09/21
	ISSUE FOR BID		9/30/22
	ADDENDUM 1		1/24/23



**NEW WORK PLAN - ELECTRICAL**

SCALE: 1/8" = 1'-0"

**GENERAL NOTES**

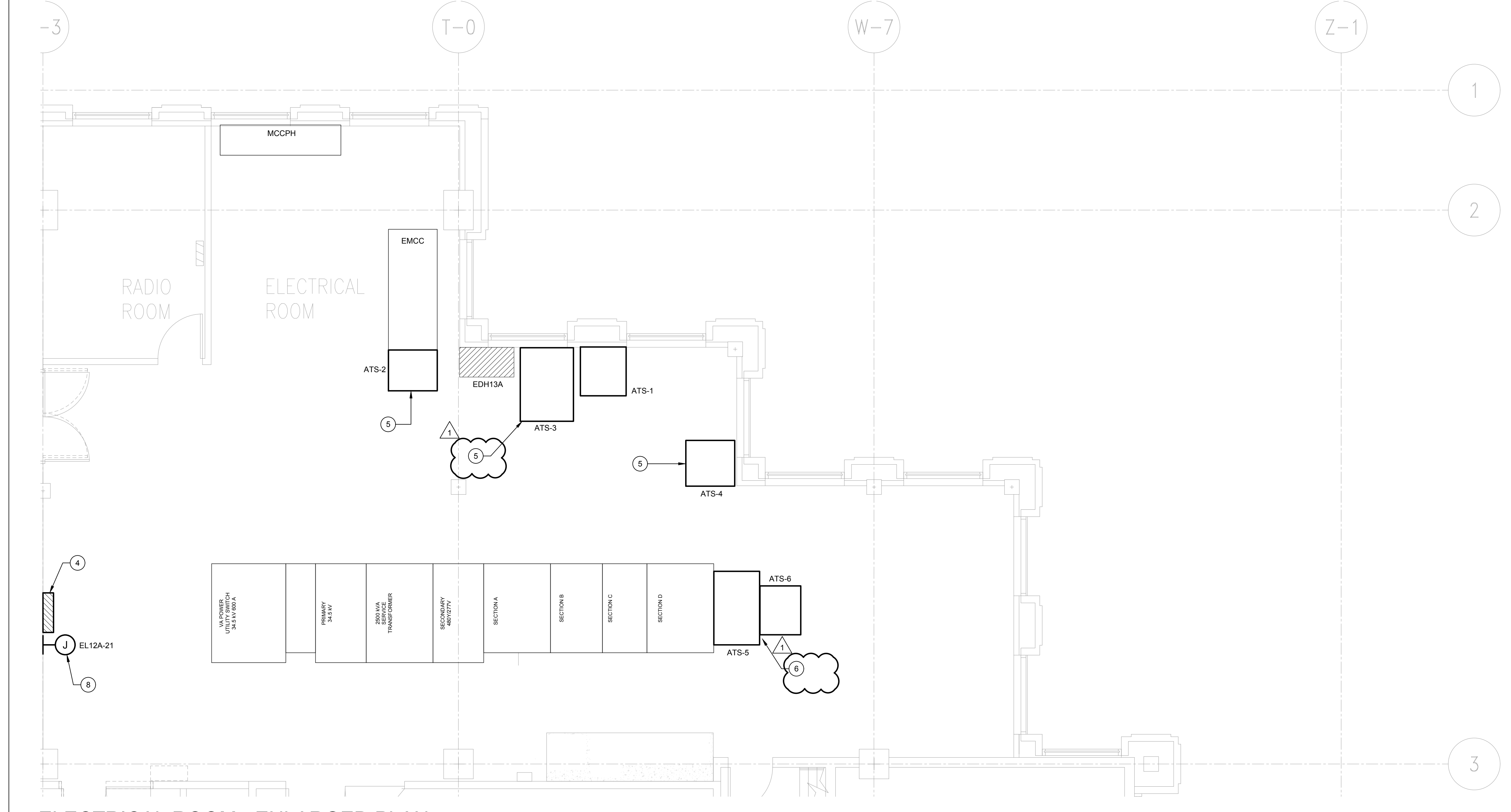
1. ELECTRICAL CONTRACTOR SHALL SUBMIT AT'S REPLACEMENT SEQUENCE REPORT AS INDICATED ON THE DWG 26 SPECIFICATIONS AND COVERSHEET.
2. REFER TO ONE LINES ON SHEETS E-200 THROUGH E-204 FOR PROPOSED SEQUENCE OF REPLACEMENT FOR EACH AT'S AND ADDITIONAL INFORMATION.
3. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL SHUTDOWNS WITH OWNER PRIOR TO PROCEEDING WITH THE WORK.
4. ELECTRICAL CONTRACTOR SHALL MINIMIZE THE NUMBER AND LENGTH OF SHUTDOWNS TO MINIMIZE NORMAL POWER DOWNTIME.
5. REFER TO COVERSHEET FOR SCHEDULE OF NEW AT'S.
6. ELECTRICAL CONTRACTOR SHALL INCLUDE IN BID ALL REQUIRED PROGRAMMING TO THE DAY-TANK, GENERATOR CONTROLLER, AND AT'S REMOTE ANNUNCIATOR TO EXISTING (BMS).
7. FOR EACH NEW AT'S, PROVIDE A DEDICATED 3/4-INCH CONDUIT AND COMMUNICATION CABLE BETWEEN EACH AT'S AND NEW AT'S REMOTE ANNUNCIATOR. COORDINATE WITH MANUFACTURER ALL FINAL REQUIREMENTS.
8. COORDINATE LOCATION OF TEMPORARY AT'S IN THE FIELD.

**KEY NOTES**

1. FURNISH AND INSTALL A 3/4-INCH CONDUIT AND COMMUNICATION CABLE FROM EXISTING GENERATOR CONTROLLER TO EXISTING BUILDING MANAGEMENT SYSTEM (BMS). PROVIDE A MOBILE TO RACK CONVERTER ADJACENT TO GENERATOR CONTROLLER. COORDINATE WITH EXISTING GENERATOR CONTROLLER MANUFACTURER AND OWNER FOR FINAL REQUIREMENTS. CIRCUIT CONVERTER TO EL12A-23 AS SHOWN ON PLAN.
2. NOT USED.
3. NOT USED.
4. NEW AT'S REMOTE ANNUNCIATOR WITH BMS/NET COMMUNICATION PROTOCOL. PROVIDE A 3/4-INCH CONDUIT OR PER MANUFACTURER RECOMMENDATIONS, AND COMMUNICATION CABLE BETWEEN AT'S REMOTE ANNUNCIATOR AND BUILDING MANAGEMENT SYSTEM (BMS). COORDINATE WITH AT'S MANUFACTURER AND OWNER FOR FINAL REQUIREMENTS.
5. EXPAND EXISTING 4-INCH CONCRETE PAD AS REQUIRED TO ACCOMMODATE NEW AT'S. COORDINATE EXACT REQUIREMENTS PRIOR TO INSTALLATION. CONCRETE PAD SHALL BE PAINTED TO MATCH EXISTING CONDITIONS. SEE HOUSING PAD EXTENSION NOTES ON THIS SHEET.
6. NOT USED.
7. EXPAND EXISTING 12-INCH CONCRETE PAD AS REQUIRED TO ACCOMMODATE NEW AT'S. COORDINATE EXACT REQUIREMENTS PRIOR TO INSTALLATION. CONCRETE PAD SHALL BE PAINTED TO MATCH EXISTING CONDITIONS. SEE HOUSING PAD EXTENSION NOTES ON THIS SHEET.
8. EXISTING BUILDING MANAGEMENT SYSTEM (BMS). COORDINATE FINAL LOCATION AND REQUIREMENTS WITH OWNER.
9. JUNCTION BOX FOR NEW AT'S REMOTE ANNUNCIATOR. PROVIDE A 120V/20A DEDICATED CIRCUIT FROM LIFE SAFETY PANEL, EL12A, LOCATED ON LEVEL 12. REFER TO FLOOR PLAN ON THIS SHEET FOR APPROXIMATE LOCATION OF PANEL EL12A.
10. AFTER THE COMPLETE INSTALLATION OF AT'S-2, RECONNECT EXISTING FEEDER TO EXISTING PUMP P-9 SAFETY SWITCH. REFER TO ONE LINE ON SHEET E001 FOR ADDITIONAL INFORMATION.
11. RETROFIT EXISTING 'GE ZENITH ZTG' 1600A, 480/277V MTS WITH ADDITIONAL SET OF LUGS AT THE LOAD SIDE TO ALLOW FOR FUTURE LOAD BANK TESTING. EXISTING MTS MODEL NUMBER: 'ZTG000MM1P' AND SERIAL NUMBER: '15032666-740-1'.

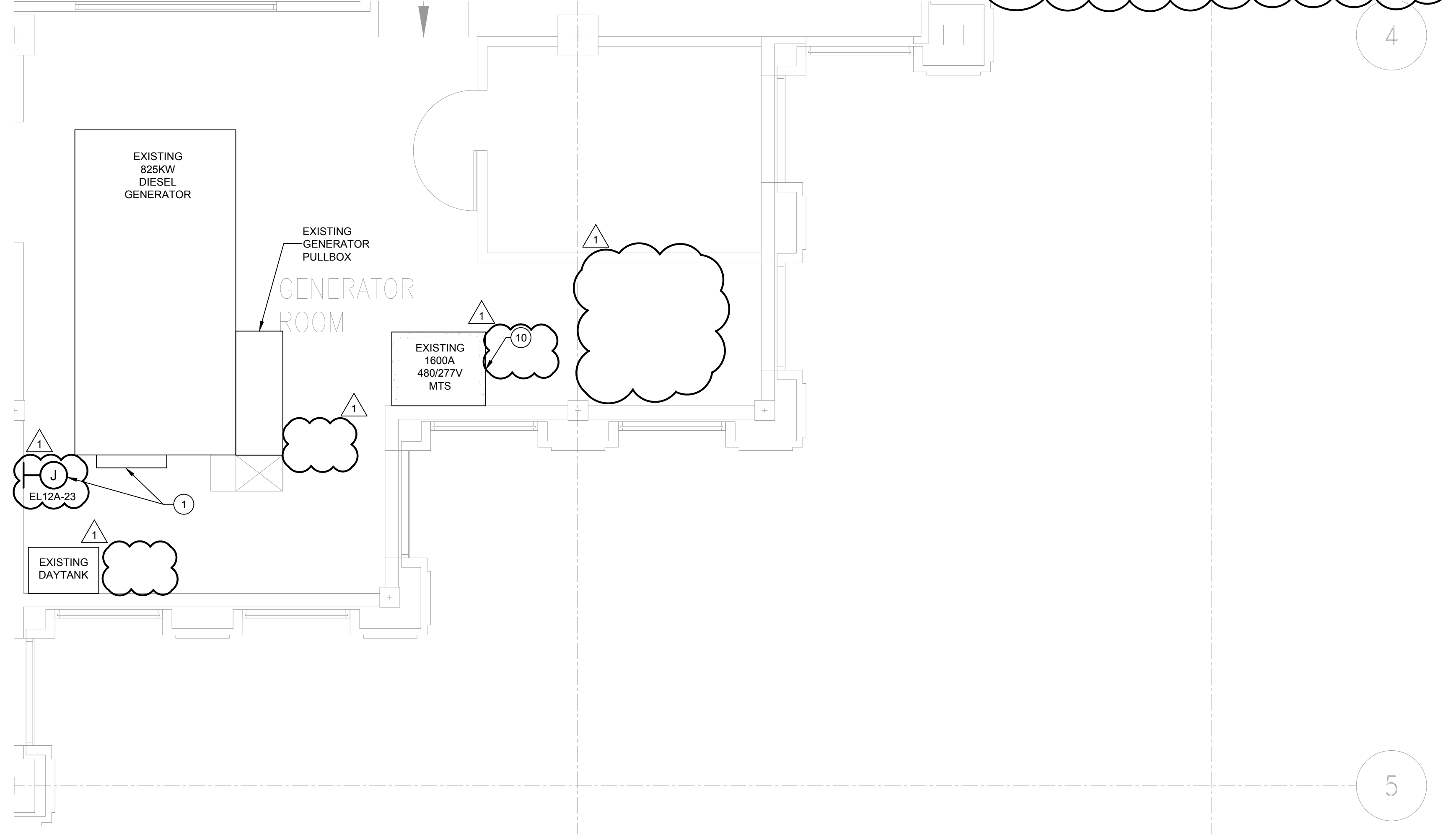
**HOUSEKEEPING PAD EXTENSION NOTES**

1. REMOVE ANY CONCRETE COATINGS IN THE AREAS FOR THE PAD EXTENSION.
2. MECHANICALLY SCRAP/ROUGHEN THE SURFACES.
3. DRILL/INSTALL 1/2" HILTI HWK BOLTS K8-T2Z.
4. PROVIDE THREE BOLTS IN THE VERTICAL FACE AT CENTER OF THE PAD. PROVIDE 3" CLEARANCE FROM THE OUTSIDE EDGE OF THE PAD AND PLACE ONE BOLT AT THE CENTER.
5. PROVIDE TWO BOLTS IN THE FLOOR-HORIZONTAL FACE. CENTER THESE ON THE EXTENSION, AND PROVIDE 3" FROM THE OUTSIDE EDGE.
  - a. EMBED 3" WITH A MINIMUM 2" PROJECTION. USE 4" PROJECTION FOR PADS THAT ARE 12" OR THICKER.
  - b. PROJECTION CAN BE ADJUSTED TO SUPPORT WW PANELS IF DESIRED.
6. BOLTS SHALL BE CARBON STEEL. GALVANIZED CAN BE SUBSTITUTED IF DESIRED.
7. USE WELDED WIRE FABRIC PANELS AT MID DEPTH OF PADS. 4 X 4 - W1.4 X W1.4. 1.5" CLEAR FROM EDGES.
8. APPLY SIKARMA TIC 110 EPOXY/CM BONDING AGENT TO ALL SURFACES VERTICAL AND HORIZONTAL TO RECEIVE THE PAD EXTENSION.
9. CONCRETE MIX
  - a. 3000 PSI, 1/2" COARSE AGGREGATE, AIR-ENTRAINED - 4%.
  - b. -1% +/-2% SLUMP 3" MAX, W/C RATIO 0.46. CURE WITH WATER BASED CURING COMPOUND. MATCH ANY CHAMFER OF ORIGINAL CONCRETE PADS.
  - c. EXISTING CHAMFER AT SLAB JOINT TO BE FILLED WITH SIKAFLEX - 2C SL SEALANT. BLOCK ENDS AS REQUIRED TO CONTAIN SEALANT UNTIL IT ACHIEVES SET.
  - d. 5000PSI READY MIX CONCRETE EQUIVALENT TO SAKRETE AND MIXED ON SITE IN THE AREA OF WORK IS AN ACCEPTABLE ALTERNATIVE.



**2 ELECTRICAL ROOM - ENLARGED PLAN**

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



**3 MECHANICAL ROOM - ENLARGED PLAN**

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

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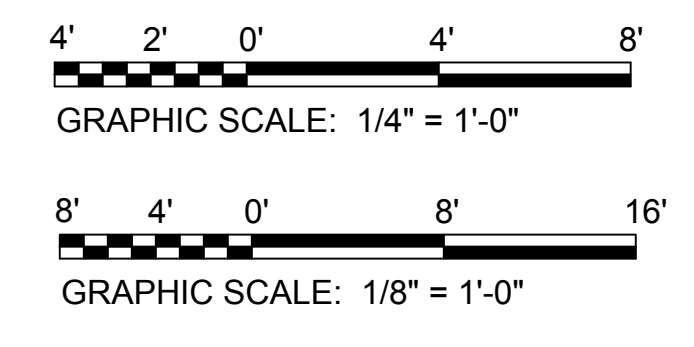
12950 Woodgate Drive  
Suite 100  
Herndon, VA 20170  
(703) 713-0200 Phone  
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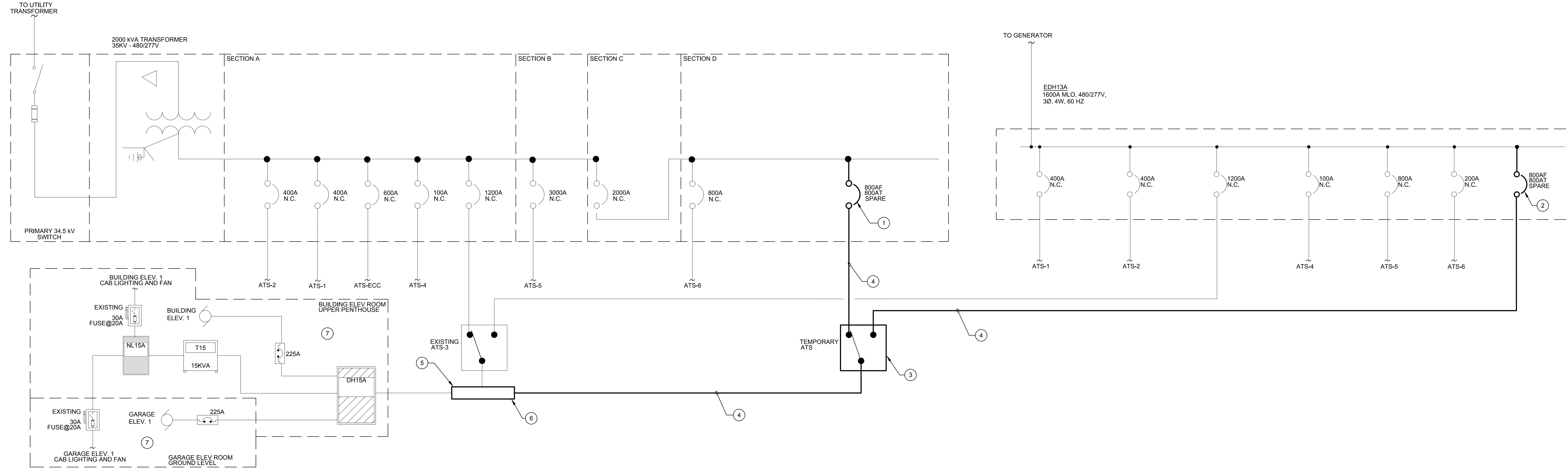
PROJECT:  
**ARLINGTON COUNTY GENERAL DISTRICT COURT AT'S REPLACEMENT**  
1425 NORTH COURTHOUSE ROAD ARLINGTON VA 22201

ISSUE	DESCRIPTION	REV#	DATE
	50% CONSTRUCTION DOCUMENTS		3/15/21
	100% CONSTRUCTION DOCUMENTS		5/31/21
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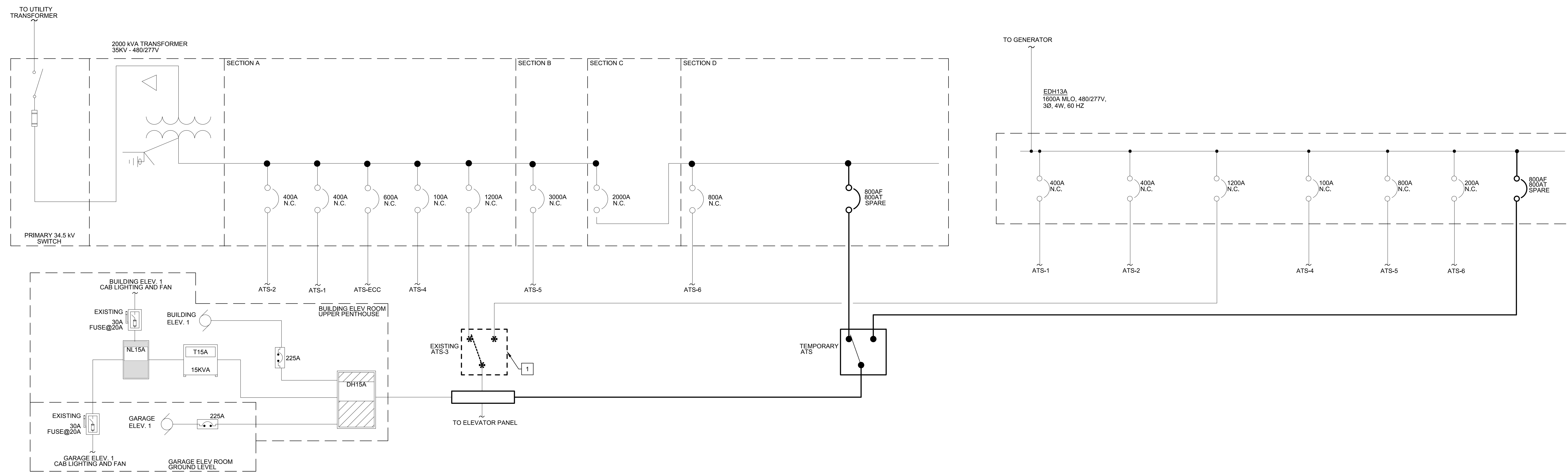
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Sheet Name:  
**NEW WORK PLAN - ELECTRICAL**

**E201**

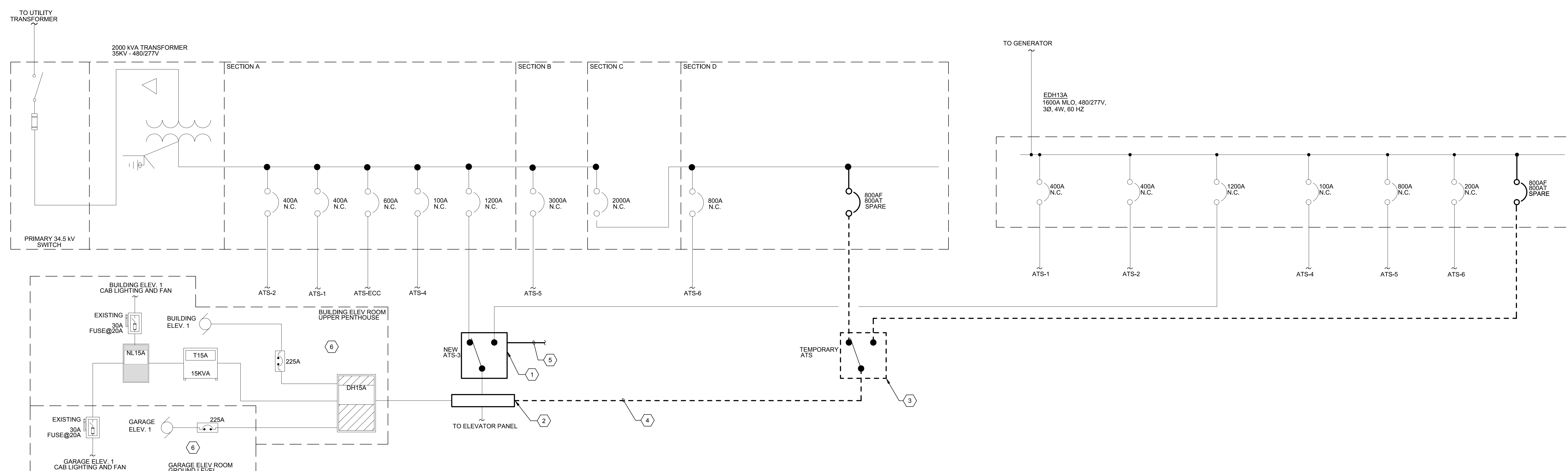




**ATS-3 - ONE-LINE DIAGRAM - TEMPORARY WORK**  
SCALE: NO SCALE



**ATS-3 - ONE-LINE DIAGRAM - DEMOLITION WORK**  
SCALE: NO SCALE



**ATS-3 - ONE-LINE DIAGRAM - NEW WORK**  
SCALE: NO SCALE

**GENERAL NOTES**

1. ELECTRICAL CONTRACTOR SHALL SUBMIT ATS REPLACEMENT SEQUENCE REPORT AS INDICATED ON THE DIV 26 SPECIFICATIONS AND COVERSHEET.
2. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL SHUTDOWNS WITH OWNER PRIOR TO PROCEEDING WITH THE WORK.
3. ELECTRICAL CONTRACTOR SHALL MINIMIZE THE NUMBER AND LENGTH OF SHUTDOWNS TO MINIMIZE NORMAL POWER DOWNTIME.
4. REFER TO COVERSHEET FOR SCHEDULE OF EXISTING TO BE REPLACED ATs.
5. ELECTRICAL CONTRACTOR SHALL ENSURE POWER IS ONLINE TO LOAD DOWNSTREAM OF ATs DURING THE TEMPORARY PHASE PRIOR TO PROCEEDING WITH THE NEW WORK.

**TEMPORARY WORK KEY NOTES**

- NOTE: NOTES BELOW ARE FOR REFERENCE ONLY. ELECTRICAL CONTRACTOR SHALL REUSE TEMPORARY ATs USED FOR THE REPLACEMENT OF ATs-1 AND ATs-2 TO COMPLETE THE REPLACEMENT OF ATs-3. REFER TO SHEET E500-E501 FOR ADDITIONAL INFORMATION.
1. SET TRIP SETTING OF EXISTING 800A/SP SPARE CIRCUIT BREAKER TO 800A.
  2. REUSE 800AF/400AT CIRCUIT BREAKER INSTALLED AS PART OF ATs-1 AND ATs-2 REPLACEMENT FOR THE REPLACEMENT OF ATs-3. SET TRIP SETTING TO 800A.
  3. INSTALL A TEMPORARY 800A, 480/277V, 4P OPEN TRANSITION AUTOMATIC TRANSFER SWITCH COORDINATE TEMPORARY LOCATION IN THE FIELD.
  4. INSTALL TEMPORARY CABLES TO POWER NORMAL, EMERGENCY AND LOAD SIDES OF TEMPORARY ATs. PROVIDE 2-SETS OF 4-#500KCMIL, 1-#30 AWG GROUND COPPER CABLES. TEMPORARY CABLES SHALL BE TYPE DLO, SE, OR APPROVED EQUAL.
  5. INSTALL A NEW PULL-BOX ABOVE EXISTING ATs-3. PULL-BOX SHALL BE SIZED PER NEC.
  6. SPlice TEMPORARY CABLES FROM LOAD SIDE OF TEMPORARY ATs TO EXISTING LOAD SIDE CABLES OF EXISTING ATs-3 AT NEW PULL-BOX. CONFIRM ATs-3 SHUTDOWN PRIOR TO PROCEEDING WITH THE SPlicing OF CABLES.
  7. ELECTRICAL CONTRACTOR SHALL MAINTAIN NO MORE THAN ONE BUILDING ELEVATOR, ONE GARAGE ELEVATOR, AND T15 TRANSFORMER AND ASSOCIATED DOWNSTREAM DISTRIBUTION PANEL OPERATIONAL DURING THE REPLACEMENT PROCESS. COORDINATE WITH OWNER THE TWO ELEVATORS THAT WILL REMAIN OPERATIONAL.

**DEMOLITION WORK KEY NOTES**

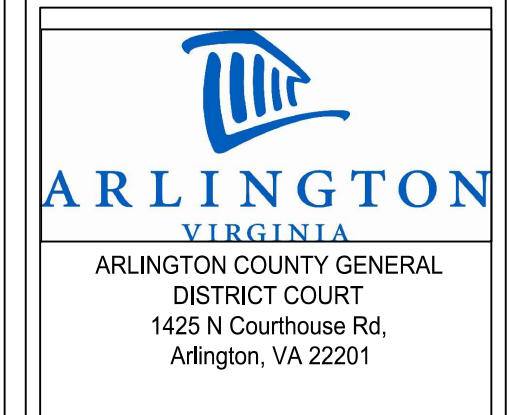
1. DEMOLISH EXISTING ATs-3. MAINTAIN EXISTING NORMAL, EMERGENCY, LOAD SIDE, AND ENGINE START CIRCUIT CABLES TO CONNECT TO NEW ATs.

**NEW WORK KEY NOTES**

1. INSTALL NEW ATs IN PLACE OF ATs-3. RECONNECT EXISTING NORMAL, EMERGENCY, LOAD, AND ENGINE STARTUP CABLES TO NEW ATs. EXTEND CABLES AS REQUIRED WITH SIZES AND TYPE THAT MATCH EXISTING CONDITIONS. EXTEND EXISTING CONCRETE PAD AS REQUIRED. REFER TO COVERSHEET FOR ATs RATING AND ADDITIONAL INFORMATION.
2. DISCONNECT TEMPORARY CABLES FROM NEW PULL-BOX AND RECONNECT EXISTING LOAD CABLES FROM EXISTING ATs-3.
3. DISCONNECT AND MAINTAIN TEMPORARY ATs TO BE USED IN THE REPLACEMENT OF ATs-4, ATs-5 AND ATs-6. REFER TO SHEETS E503, E504 AND E505 FOR ADDITIONAL INFORMATION.
4. DEMOLISH TEMPORARY CABLES ALL THE WAY BACK TO TEMPORARY CIRCUIT BREAKER. LABEL FREE CIRCUIT BREAKER AS SPARE.
5. PROVIDE A DEDICATED ETHERNET CABLE IN A 3" CONDUIT FOR REMOTE MONITORING. TERMINATE CONDUIT AT NEW ATs REMOTE ANNUNCIATOR PANEL. COORDINATE LOCATION AND FINAL ROUTING IN THE FIELD. CONFIRM FINAL REQUIREMENTS WITH MANUFACTURER PRIOR TO INSTALLATION.
6. RE-ENERGIZE ALL ELEVATORS, BUILDING AND GARAGE, AND CONFIRM THEIR OPERATION.

**ATS REPLACEMENT SEQUENCE**

1. ATs-1
2. ATs-2
3. ATs-3
4. ATs-5
5. ATs-6
6. ATs-4



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Scale: NONE  
 Drawn: MRR  
 Checked: ABE  
 Sheet Name:  
**ATs-3 ONE-LINE DIAGRAMS - ELECTRICAL**

**E502**