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ELECTRICAL FIXTURE SYMBOL LEGEND

PLAN SYMBOL	NAME	DESCRIPTION
	FLOOR BOX - POWER	GENERAL: PROVIDE FLOOR BOX AS DESCRIBED IN THESE GENERAL NOTES. REFER TO PLANS FOR FLOOR BOX DESIGNATION. COORDINATE REQUIREMENTS WITH FLOOR BOX MANUFACTURER. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION, INCLUDING BUT NOT LIMITED TO: BRACKETS, BLANK COVER ASSEMBLIES, MOUNTING FRAMES, ADAPTERS, AND CONCRETE FLOOR ACCESSORIES/OPTIONS. COORDINATE EXACT FINAL LOCATION WITH ARCHITECT. OWNER, OWNERS FINAL FINISHES, AND FLOORING SELECTIONS. PROVIDE ONE (1) 3/4" CONDUIT TO ELECTRICAL SERVICE PER ONE (1) 20A 120V BRANCH CIRCUIT. PROVIDE TO FLOOR PLANS FOR BRANCH CIRCUIT DESIGNATION. TYPE 1B1: ONBELOW GRADE CAST-IRON POWER FLOOR BOX: PROVIDE WIREMOLD RATCHET-PRO MODEL RSPS-0G FLOOR BOX WITH MODEL RPCTCO ROUND COVER KIT (OR PRIOR APPROVED EQUIVALENT). PROVIDE COVER AND FLANGE WITH BRUSHED ALUMINUM FINISH. PROVIDE ONE (1) DUPLEX RECEPTACLE MOUNTED ON FACE OF FLOOR BOX. PROVIDE ONE (1) 3/4" CONDUIT TO ELECTRICAL SERVICE PER ONE (1) 20A 120V BRANCH CIRCUIT. PROVIDE TO FLOOR PLANS FOR BRANCH CIRCUIT DESIGNATION.
	GROUND BAR	PROVIDE LENGTH AS REQUIRED TO ACCOMMODATE TERMINATIONS. MINIMUM 2" IN LENGTH FOR ELECTRICAL GROUND BARS AND MINIMUM 10" IN LENGTH FOR TELECOMMUNICATIONS GROUND BARS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
	JUNCTION BOX - CEILING	GENERAL: PROVIDE JUNCTION BOX AS DESCRIBED IN THESE GENERAL NOTES AND NOTES BELOW FOR EACH JUNCTION BOX TYPE. REFER TO FLOOR PLANS FOR JUNCTION BOX DESIGNATION. PROVIDE ONE (1) 4" SQUARE, 2-1/8" DEEP JUNCTION BOX WITH SINGLE GANG TRIM RING AND BLANK WALL PLATE WITH ONE (1) 1" CONDUIT TO ABOVE ACCESSIBLE CEILING WHERE NOT INSTALLED IN LOCATION PER MANUFACTURER'S REQUIREMENTS. PROVIDE ONE (1) 20A 120V BRANCH CIRCUIT TO SOURCE. REFER TO FLOOR PLANS FOR BRANCH CIRCUIT DESIGNATION. TYPE LIGHT: CEILING PROCEDURE LIGHT PROVIDE 20A 120V BRANCH CIRCUIT TO OWNER FURNISHED CEILING PROCEDURE LIGHT AT APPROXIMATE LOCATION INDICATED. COORDINATE FINAL CONNECTION WITH FINAL EQUIPMENT SELECTION. TYPE SHADE: MOTORIZED SHADE PROVIDE 20A 120V BRANCH CIRCUIT TO JUNCTION BOX. MOUNTED IN ACCESSIBLE LOCATION ABOVE CEILING WITH 9/16" OF MOTORIZED SHADE MOTOR LOCATION. PROVIDE CONNECTION TO MANUFACTURER FURNISHED JUNCTION BOX LEADS AND MOTOR LEADS. PROVIDE ONE (1) 1" CONDUIT FROM MOTOR LOCATION TO ACCESSIBLE CEILING LOCATION FOR LOW VOLTAGE CONNECTION TO MOTORIZED SHADE CONTROLLER AND ANY APPLICABLE SPLITTERS. MOUNT SPLITTERS IN LOCATION PER MANUFACTURER REQUIREMENTS. COORDINATE WITH FINAL EQUIPMENT SELECTION. TYPE EWC-1: ELECTRIC WATER COOLER, REMOTE CHILLER: PROVIDE 20A 120V BRANCH CIRCUIT TO REMOTE CHILLER. MOUNTED ABOVE FINISHED CEILING. PROVIDE WITH TOGGLE SWITCH DISCONNECTING MEANS. COORDINATE WITH FINAL EQUIPMENT SELECTION.
	JUNCTION BOX - WALL	GENERAL: PROVIDE JUNCTION BOX AS DESCRIBED IN THESE GENERAL NOTES AND NOTES BELOW FOR EACH JUNCTION BOX TYPE. REFER TO PLANS FOR JUNCTION BOX DESIGNATION. PROVIDE ONE (1) 4" SQUARE, 2-1/8" DEEP JUNCTION BOX WITH SINGLE GANG TRIM RING AND BLANK WALL PLATE WITH ONE (1) 1" CONDUIT TO ABOVE FINISHED CEILING WHERE NOT INDICATED OTHERWISE. WHERE SHOWN ADJACENT TO RECEPTACLES ON FLOOR PLANS, PROVIDE MAXIMUM 12" BETWEEN BACK BOXES. WHERE SHOWN AS PART OF BRANCH CIRCUIT, PROVIDE CONDUCTORS WITHIN CONDUIT TO SOURCE INDICATED ON FLOOR PLANS. TYPE EWC-1: ELECTRIC WATER COOLER: PROVIDE JUNCTION BOX AT APPROXIMATE LOCATION INDICATED. MOUNT AT 24" AFF. COORDINATE EXACT MOUNTING LOCATION WITH ADA REQUIREMENTS, FINAL PLUMBING FIXTURE SELECTION, AND PLUMBING CONTRACTOR INSTALLATION LOCATION TO CONCEAL BEHIND EQUIPMENT PANEL. TYPE LIGHT: CEILING PROCEDURE LIGHT WALL-MOUNTED CONTROLLER: PROVIDE ROUGH-IN FOR CEILING PROCEDURE LIGHT WALL-MOUNTED CONTROLLER. FURNISHED BY PROCEDURE LIGHT MANUFACTURER. MOUNT BACK BOX AT 48" AFF. COORDINATE ROUGH-IN REQUIREMENTS WITH FINAL EQUIPMENT SELECTION. TYPE SIGN: INTERNALLY ILLUMINATED BUILDING MOUNTED SIGNAGE: OWNER PROVIDED. OWNER PROVIDED INTERNALLY ILLUMINATED EXTERIOR BUILDING MOUNTED SIGNAGE: PROVIDE 20A 120V BRANCH CIRCUIT TO INTERNALLY ILLUMINATED SIGN. COORDINATE ROUGH-IN, INCLUDING QUANTITY AND LOCATION OF PENETRATIONS, AND ELECTRICAL CONNECTION WITH FINAL SIGN SELECTION, SIGNAGE VENDOR, AND ARCHITECT. PROVIDE LIGHTING CONTROLS CONNECTION PER LIGHTING CONTROL, LIGHT LIGHTING CONTROL COMPONENTS SHALL BE LOCATED WITHIN ACCESSIBLE LOCATION AT INTERIOR OF BUILDING. PROVIDE ONE (1) EMPTY 1" CONDUIT FOR FUTURE COMMUNICATIONS CONNECTION. PROVIDE WITH PULL CORD. STUD CONDUIT TO ABOVE ACCESSIBLE CEILING FOR FUTURE CONNECTION. TYPE SCRUB: SCRUB SINK: OWNER PROVIDED SCRUB SINK: PROVIDE 20A 120V BRANCH CIRCUIT TO SCRUB SINK AT APPROXIMATE LOCATION INDICATED. MOUNT AT 18" AFF. COORDINATE EXACT MOUNTING LOCATION WITH OWNER EQUIPMENT SELECTION AND ARCHITECT DRAWINGS.
	POWER POLE	GENERAL: PROVIDE POWER POLE AS DESCRIBED IN THESE GENERAL NOTES. REFER TO PLANS FOR POWER POLE DESIGNATION. COORDINATE POWER HEIGHT WITH FINAL CEILING INSTALLED HEIGHT. ROUTE POWER CONDUCTORS IN POWER RACEWAY OF VERTICAL POWER POLE. PROVIDE DIVERGE RACEWAY TO SEPARATE 120V CIRCUITS FROM LOW VOLTAGE CABLES. REFER TO FLOOR PLANS FOR QUANTITIES OF NETWORK VOICEDATA CABLES TO BE PROVIDED TO POWER POLE. COORDINATE CABLE LENGTHS WITH FIELD VERIFIED FINAL TERMINATION LOCATIONS. PROVIDE NETWORK VOICEDATA CABLES, JACKS, INSERTS, AND FACEDATES WITHIN POWER POLE PER SPECIFICATION SECTION 7100. PROVIDE ALL ACCESSORIES FOR A COMPLETE INSTALLATION, INCLUDING BUT NOT LIMITED TO DEVICE COVERS, CEILING TRIM PLATE, UTILITY BOX, FLOOR SUPPORT PLATE, FACEDATES, AND NOTICES, AND SUPPORTS CONCEAL SOURCE CONNECTION. SUBMIT SHOP DRAWINGS FOR APPROVAL. TYPE P1: PROVIDE WIREMOLD N9800 SERIES VERTICAL POWER AND COMMUNICATIONS POLE (OR PRIOR APPROVED EQUIVALENT) IN ANODIZED ALUMINUM FINISH. PROVIDE ONE (1) 20A 120V BRANCH CIRCUIT. WITH TWO (2) DUPLEX HOSPITAL GRADE RECEPTACLES PROVIDE ONE (1) 3/4" CONDUIT FROM POWER POLE TO ABOVE ACCESSIBLE CORRIDOR CEILING FOR CATERING POWER DATA CABLEING. PROVIDE WITH PULL STRING. RECEPTACLE - CATALO G 1 USB30X34" COMBINATION HOSPITAL GRADE TAMPER RESISTANT DUPLEX RECEPTACLE, ONE (1) USB TYPE-B, CATALO G 1 USB TYPE-A, CATALO G 1 USB TYPE-C, CATALO G 1 USB TYPE-D, CATALO G 1 USB TYPE-E, CATALO G 1 USB TYPE-F, CATALO G 1 USB TYPE-G, CATALO G 1 USB TYPE-H, CATALO G 1 USB TYPE-I, CATALO G 1 USB TYPE-J, CATALO G 1 USB TYPE-K, CATALO G 1 USB TYPE-L, CATALO G 1 USB TYPE-M, CATALO G 1 USB TYPE-N, CATALO G 1 USB TYPE-O, CATALO G 1 USB TYPE-P, CATALO G 1 USB TYPE-Q, CATALO G 1 USB TYPE-R, CATALO G 1 USB TYPE-S, CATALO G 1 USB TYPE-T, CATALO G 1 USB TYPE-U, CATALO G 1 USB TYPE-V, CATALO G 1 USB TYPE-W, CATALO G 1 USB TYPE-X, CATALO G 1 USB TYPE-Y, CATALO G 1 USB TYPE-Z, CATALO G 1 USB TYPE-AA, CATALO G 1 USB TYPE-AB, CATALO G 1 USB TYPE-AC, CATALO G 1 USB TYPE-AD, CATALO G 1 USB TYPE-AE, CATALO G 1 USB TYPE-AF, CATALO G 1 USB TYPE-AG, CATALO G 1 USB TYPE-AH, CATALO G 1 USB TYPE-AI, CATALO G 1 USB TYPE-AJ, CATALO G 1 USB TYPE-AL, CATALO G 1 USB TYPE-AM, CATALO G 1 USB TYPE-AN, CATALO G 1 USB TYPE-AO, CATALO G 1 USB TYPE-AP, CATALO G 1 USB TYPE-AQ, CATALO G 1 USB TYPE-AR, CATALO G 1 USB TYPE-AS, CATALO G 1 USB TYPE-AT, CATALO G 1 USB TYPE-AU, CATALO G 1 USB TYPE-AV, CATALO G 1 USB TYPE-AW, CATALO G 1 USB TYPE-AX, CATALO G 1 USB TYPE-AY, CATALO G 1 USB TYPE-AZ, CATALO G 1 USB TYPE-BA, CATALO G 1 USB TYPE-BB, CATALO G 1 USB TYPE-BC, CATALO G 1 USB TYPE-BD, CATALO G 1 USB TYPE-BE, CATALO G 1 USB TYPE-BF, CATALO G 1 USB TYPE-BG, CATALO G 1 USB TYPE-BH, CATALO G 1 USB TYPE-BI, CATALO G 1 USB TYPE-BJ, CATALO G 1 USB TYPE-BL, CATALO G 1 USB TYPE-BM, CATALO G 1 USB TYPE-BN, CATALO G 1 USB TYPE-BO, CATALO G 1 USB TYPE-BP, CATALO G 1 USB TYPE-BQ, CATALO G 1 USB TYPE-BR, CATALO G 1 USB TYPE-BS, CATALO G 1 USB TYPE-BT, CATALO G 1 USB TYPE-BU, CATALO G 1 USB TYPE-BV, CATALO G 1 USB TYPE-BW, CATALO G 1 USB TYPE-BX, CATALO G 1 USB TYPE-BY, CATALO G 1 USB TYPE-BZ, CATALO G 1 USB TYPE-CA, CATALO G 1 USB TYPE-CB, CATALO G 1 USB TYPE-CC, CATALO G 1 USB TYPE-CD, CATALO G 1 USB TYPE-CE, CATALO G 1 USB TYPE-CF, CATALO G 1 USB TYPE-CG, CATALO G 1 USB TYPE-CH, CATALO G 1 USB TYPE-CI, CATALO G 1 USB TYPE-CJ, CATALO G 1 USB TYPE-CL, CATALO G 1 USB TYPE-CM, CATALO G 1 USB TYPE-CN, CATALO G 1 USB TYPE-CO, CATALO G 1 USB TYPE-CP, CATALO G 1 USB TYPE-CQ, CATALO G 1 USB TYPE-CR, CATALO G 1 USB TYPE-CS, CATALO G 1 USB TYPE-CT, CATALO G 1 USB TYPE-CU, CATALO G 1 USB TYPE-CV, CATALO G 1 USB TYPE-CW, CATALO G 1 USB TYPE-CX, CATALO G 1 USB TYPE-CY, CATALO G 1 USB TYPE-CZ, CATALO G 1 USB TYPE-DA, CATALO G 1 USB TYPE-DB, CATALO G 1 USB TYPE-DC, CATALO G 1 USB TYPE-DD, CATALO G 1 USB TYPE-DE, CATALO G 1 USB TYPE-DF, CATALO G 1 USB TYPE-DG, CATALO G 1 USB TYPE-DH, CATALO G 1 USB TYPE-DI, CATALO G 1 USB TYPE-DJ, CATALO G 1 USB TYPE-DL, CATALO G 1 USB TYPE-DM, CATALO G 1 USB TYPE-DN, CATALO G 1 USB TYPE-DO, CATALO G 1 USB TYPE-DP, CATALO G 1 USB TYPE-DQ, CATALO G 1 USB TYPE-DR, CATALO G 1 USB TYPE-DS, CATALO G 1 USB TYPE-DT, CATALO G 1 USB TYPE-DU, CATALO G 1 USB TYPE-DV, CATALO G 1 USB TYPE-DW, CATALO G 1 USB TYPE-DX, CATALO G 1 USB TYPE-DY, CATALO G 1 USB TYPE-DZ, CATALO G 1 USB TYPE-EA, CATALO G 1 USB TYPE-EB, CATALO G 1 USB TYPE-EC, CATALO G 1 USB TYPE-ED, CATALO G 1 USB TYPE-EE, CATALO G 1 USB TYPE-EF, CATALO G 1 USB TYPE-EG, CATALO G 1 USB TYPE-EH, CATALO G 1 USB TYPE-EI, CATALO G 1 USB TYPE-EJ, CATALO G 1 USB TYPE-EL, CATALO G 1 USB TYPE-EM, CATALO G 1 USB TYPE-EN, CATALO G 1 USB TYPE-EO, CATALO G 1 USB TYPE-EP, CATALO G 1 USB TYPE-EQ, CATALO G 1 USB TYPE-ER, CATALO G 1 USB TYPE-ES, CATALO G 1 USB TYPE-ET, CATALO G 1 USB TYPE-EU, CATALO G 1 USB TYPE-EV, CATALO G 1 USB TYPE-EW, CATALO G 1 USB TYPE-EX, CATALO G 1 USB TYPE-EY, CATALO G 1 USB TYPE-EZ, CATALO G 1 USB TYPE-FA, CATALO G 1 USB TYPE-FB, CATALO G 1 USB TYPE-FC, CATALO G 1 USB TYPE-FD, CATALO G 1 USB TYPE-FE, CATALO G 1 USB TYPE-FG, CATALO G 1 USB TYPE-FH,

ELECTRICAL FIXTURE SYMBOL LEGEND		
PLAN SYMBOL	NAME	DESCRIPTION
	EMERGENCY POWER OFF SWITCH	GENERAL: PROVIDE EMERGENCY POWER OFF (EPO) SWITCH AS DESCRIBED IN THESE GENERAL NOTES AND NOTES BELOW FOR EACH TYPE. AT APPROXIMATE LOCATIONS INDICATED ON PLANS. REFER TO PLANS FOR EPO SWITCH DESIGNATION MOUNT AT 48" HFT. UNLESS OTHERWISE INDICATED. PROVIDE ELECTRICAL COMPONENTS FOR A COMPLETE SYSTEM, INCLUDING ALL NECESSARY RELAYS, TRANSFORMERS, AND SHUNTING DEVICES. COORDINATE BACK BOX AND CONDUIT REQUIREMENTS WITH MANUFACTURER.
	EPO	TYPE EPO BLT, EMERGENCY POWER OFF SWITCH - BOLLER MODEL: PROVIDE 311 (SAFETY TECHNOLOGY INTERNATIONAL, INC. MODEL 882-271) PO-EN SURFACE MOUNT EPO SWITCH AND PROTECTIVE COVER, OR PRIOR APPROVED EQUIVALENT. PROVIDE 3/8" OR 4" x 4" MINIMUM PLaque AT EPO SWITCH WITH ENGRAVED LABEL, COORDINATE LABEL WITH OWNER. PROVIDE EPO SWITCH INSIDE OF ROOM ONLY IF NORMALLY UNLOCKED. IF ROOM MUST BE LOCKED, PLaque OUTSIDE ROOM MUST INDICATE HOW TO GAIN ACCESS TO ROOM. IF EPO SWITCH IS LOCATED INSIDE ROOM, PROVIDE PLaque OF SAME SIZE OUTSIDE ROOM INDICATING EPO SWITCH LOCATION. PROVIDE EPO SWITCH AND PLaque AT EVERY EXIT FROM ROOM. TYPE EPO GEN, EMERGENCY POWER OFF SWITCH - GENERATOR: PROVIDE GENERATOR REMOTE SHUTDOWN SWITCH AT APPROXIMATE LOCATION INDICATED. REFER TO SPECIFICATION SECTION 282313 FOR ADDITIONAL REQUIREMENTS.

ELECTRICAL MISC SYMBOL LEGEND		
PLAN SYMBOL	NAME	DESCRIPTION
 	CABLE TRAY	PROVIDE CABLE TRAY AT LOCATIONS INDICATED ON PLANS. REFER TO FLOOR PLANS FOR TYPE DESIGNATION. COORDINATE MOUNTING WITH OTHER TRADES AND REQUIREMENTS IN SPECIFICATION. TYPE: WIDTH x DEPTH; WIRE BASKET CABLE TRAY; PROVIDE CABLE TRAY IN DIMENSION INDICATED ON FLOOR PLANS. TYPE: WIDTH LADDER; LADDER CABLE TRAY; PROVIDE CABLE TRAY IN DIMENSION INDICATED ON FLOOR PLANS.
	LIGHTING CONTROL TAG	REFER TO LIGHTING CONTROL SCHEDULE FOR ADDITIONAL INFORMATION.

LIGHTING DEVICE SYMBOL LEGEND		
PLAN SYMBOL	NAME	DESCRIPTION
	PUSH BUTTON	REFER TO LIGHTING CONTROL WALL DEVICE SCHEDULE FOR KEYPAD ID, DESCRIPTION, REQUIRED BUTTON FUNCTIONS, AND ADDITIONAL REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
		

FIRE ALARM SYMBOL LEGEND		
PLAN SYMBOL	NAME	DESCRIPTION
	FIRE ALARM CONTROL PANEL - SURFACE MOUNT	CIRCUIT CONTROL PANEL TO 20A (12V) BRANCH CIRCUIT IN ASSOCIATED LIFE SAFETY BRANCH PANEL (INSTALL CIRCUIT BREAKER LOCK ON BRANCH BREAKER). REFER TO FLOOR PLANS FOR BRANCH CIRCUIT DESIGNATION. PROVIDE SYSTEM SMOKE DETECTOR AT CEILING WITHIN 5 FEET OF PANEL UNLESS SHOWN WITH ROOM DETECTION COVERAGE ON PLAN). PROVIDE TWO (2) VOICE CONNECTIONS TO FACP.
	SMOKE DAMPER OR FIRE/SMOKE DAMPER	CIRCUIT FIRE AND FIRE/SMOKE DAMPERS PROVIDED BY MECHANICAL CONTRACTOR TO 20A (12V) BRANCH CIRCUITS IN ASSOCIATED LIFE SAFETY BRANCH PANEL (INSTALL CIRCUIT BREAKER LOCK ON BRANCH BREAKERS). EACH BRANCH CIRCUIT SHALL SERVE A MAXIMUM OF 20 DAMPERS. PROVIDE INDIVIDUAL CIRCUITS FOR EACH AIR HANDLING UNIT ZONE. REFER TO MECHANICAL PLANS FOR ASSOCIATED ZONES. CONTROL EACH DAMPER INDIVIDUALLY WITH ADDRESSABLE CONTROL MODULES FROM FIRE ALARM SYSTEM LABELS. EACH RELAY WITH THE NAME OF THE AIR HANDLING UNIT SERVING THE SMOKE ZONE AND WITH THE WORDS "SMOKE DAMPER CONTROL". PROVIDE SYSTEM DUCT SMOKE DETECTOR IN ACCESSIBLE LOCATION WITHIN 5 FEET OF THE DAMPER TO CONTROL DAMPER. DUCT DETECTOR MAY BE OMITTED WHERE THE DAMPER IS INSTALLED IN A CORRIDOR WALL OR CEILING AND IS CONTROLLED BY AN AREA SMOKE DETECTOR SYSTEM INSTALLED IN THE CORRIDOR [CONTROL DAMPER BY ACTIVATION OF ANY SMOKE DETECTOR WITHIN AIR HANDLING UNIT ZONE]. PROVIDE REMOTE STATUS INDICATOR AND TEST STATION WITH REMOTE AND COORDINATE ASSOCIATED MOUNTING LOCATION WITH OWNER. REFER TO [LIGHTING] [LOW VOLTAGE] FLOOR PLANS FOR DAMPER LOCATIONS.

ELECTRICAL MISC SYMBOLS	
PLAN SYMBOL	NAME
	BRANCH CIRCUIT CONCEALED IN CEILING OR WALL
	BRANCH CIRCUIT CONCEALED IN FLOOR OR BELOW GRADE
	CLEARANCE SPACE
	CONDUIT BREAK
	CONDUIT DOWN
	CONDUIT STUB-OUT
	CONDUIT UP
	HOMERUN TO PANEL S = GFCI CIRCUIT (PART) = PARTIAL CIRCUIT
	SWITCHED RECEPTACLE

FIRE ALARM SYMBOLS	
PLAN SYMBOL	NAME
 W	BELL - WALL
	DETECTOR - SYSTEM SMOKE - CEILING
 FAA	FIRE ALARM REMOTE ANNUNCIATOR
	HORN AND STROBE COMBINATION - CEILING
 W	HORN AND STROBE COMBINATION - WALL

ELECTRICAL FIXTURE SYMBOLS	
PLAN SYMBOL	NAME
	GENERATOR ANNUNCIATOR
	JUNCTION BOX - FLOOR
	RECEPTACLE - DOUBLE DUPLEX - CONV
	RECEPTACLE - DOUBLE DUPLEX - EMERGENCY (RED) - CONV
	RECEPTACLE - DUPLEX - CONV
	RECEPTACLE - DUPLEX - CONV - GFCI
	RECEPTACLE - DUPLEX - EMERGENCY (RED) - CONV
	RECEPTACLE - DUPLEX - EMERGENCY (RED) - CONV - GFCI
	RECEPTACLE - DUPLEX - EMERGENCY (RED) - KNOWN LOAD
	RECEPTACLE - DUPLEX - EMERGENCY (RED) - KNOWN LOAD - GFCI
	RECEPTACLE - DUPLEX - KNOWN LOAD
	RECEPTACLE - DUPLEX - KNOWN LOAD - GFCI

FIRE ALARM SYMBOLS	
PLAN SYMBOL	NAME
	MANUAL PULL STATION
	STROBE - CEILING
	STROBE - WALL

LOW VOLTAGE COORDINATION LEGEND				
SYSTEMS	ROUGH-INS & PATHWAYS	CABLING & TERMINATIONS	DEVICES & EQUIPMENT	REMARKS
ACCESS CONTROL	CF / CI	OF / OI	OF / OI	-
AUDIO / VIDEO INTERCOM	CF / CI	OF / OI	OF / OI	-
AUDIO / VISUAL	CF / CI	OF / OI	OF / OI	-
BACKGROUND MUSIC	CF / CI	OF / OI	OF / OI	3
BURGERS	CF / CI	OF / OI	OF / OI	-
FIRE ALARM	CF / CI	CF / CI	CF / CI	-
INTRUSION DETECTION	CF / CI	OF / OI	OF / OI	-
MED GAS ALARM	CF / CI	OF / OI	OF / OI	1
NURSE CALL	CF / CI	OF / OI	OF / OI	-
PATIENT MONITORING/TELEMETRY	CF / CI	OF / OI	OF / OI	-
PUBLIC ADDRESS	CF / CI	OF / OI	OF / OI	-
REFRIGERATOR/FREEZER ALARM	CF / CI	OF / OI	OF / OI	2
SECURITY SURVEILLANCE (CCTV)	CF / CI	OF / OI	OF / OI	-
STAFF TIME CLOCK	CF / CI	OF / OI	OF / OI	-
TELEVISION (CATV)	CF / CI	CF / CI	OF / OI	-
TEMPERATURE MONITORING	CF / CI	OF / OI	OF / OI	-
VIDEO SURVEILLANCE	CF / CI	OF / OI	OF / OI	-
VOICE / DATA	CF / CI	OF / OI	OF / OI	-
WIRELESS ACCESS POINTS	CF / CI	OF / OI	OF / OI	-

LEGEND: (LOW VOLTAGE COORDINATION LEGEND)
 CF: CONTRACTOR FURNISHED
 CI: CONTRACTOR INSTALLED
 OF: OWNER FURNISHED
 OI: OWNER INSTALLED

REMARKS: (LOW VOLTAGE COORDINATION LEGEND)

1. MEDICAL GAS ALARM PANELS TO BE PROVIDED BY MECHANICAL CONTRACTOR.
2. REFRIGERATOR/FREEZER ALARM SYSTEM IS A WIRELESS SENSORS/SCIENCE SYSTEM. PROVIDE RECEPTACLE ADJACENT TO MONITORED EQUIPMENT AS INDICATED ON THE FLOOR PLANS.
3. BACKGROUND MUSIC SYSTEM TO UTILIZE PUBLIC ADDRESS SYSTEM SPEAKERS.

GENERAL NOTES: (LOW VOLTAGE COORDINATION LEGEND)

- A. REFER TO SYMBOL LEGENDS AND SPECIFICATIONS FOR SPECIFIC REQUIREMENTS.
- B. COORDINATE ROUGH-IN REQUIREMENTS WITH FINAL EQUIPMENT SELECTION FOR ALL SYSTEMS.
- C. COORDINATE ROUGH-IN REQUIREMENTS WITH OWNER FOR OWNER FURNISHED SYSTEMS.
- D. CONDUITS SHALL ROUTE CONCEALED INSIDE WALL TO ABOVE NEAREST ACCESSIBLE CORRIDOR CEILING SPACE, UNLESS OTHERWISE INDICATED.

ELECTRICAL GENERAL NOTES:
(GENERAL NOTES SHALL APPLY TO ALL SHEETS)

- A. BRANCH CIRCUITS WITH A TOTAL LENGTH LONGER THAN 75' SHALL UTILIZE 1/0 AWG CONDUCTORS.
RECEPTACLE BRANCH CIRCUITS WITH A TOTAL LENGTH LONGER THAN 150' SHALL REQUIRE 1/0 AWG CONDUCTORS.
- B. FOR ALL CONDUIT AND OTHER ITEMS PENETRATING A FIRE RATED WALL, PROVIDE UL LISTED THROUGH PENETRATION FIRE STOPPING SYSTEM THAT IS SPECIFIC TO THE WALL CONSTRUCTION ASSEMBLY AND PENETRATING ITEM. ITEM SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE FIRE STOPPING MANUFACTURER'S UL APPROVED METHOD. WHERE EXISTING WALLS ARE BEING UPGRADED TO FIRE RATED WALLS OR THE FIRE RATING IS BEING MODIFIED, PROVIDE UL LISTED THROUGH PENETRATION FIRE STOPPING SYSTEM THAT IS SPECIFIC TO THE WALL CONSTRUCTION ASSEMBLY AND PENETRATING ITEM. PROVIDE SAFETY PLANS FOR LOCATIONS OF FIRE RATED WALLS.
- C. NEW ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH EXISTING BUILDING LIGHTNING PROTECTION SYSTEM IF ONE EXISTS. PROVIDE AIR TERMINALS ON TOP OF EQUIPMENT AND BOND TO EXISTING SYSTEM PER NFPA 70B AND UL 98A REQUIREMENTS. PROVIDE UL INSULATION AND/OR LPI SYSTEM INSPECTION AS REQUIRED TO MEET THE UL 98A MASTER LABEL, RECEPTICIZATION, UL MASTER LABEL, AND/OR LPI SYSTEM CERTIFICATE.
- D. ANY ITEMS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- E. NEW WIRING DEVICES AND ASSOCIATED COVERPLATES SHALL MATCH EXISTING FINISH OF SIMILAR INSTALLED DEVICES.
- F. THE RATING OF EQUIPMENT ARC RATINGS ARE BASED ON THE IMPEDANCES FOR CONDUCTORS AND TRANSFORMERS USED IN THE CALCULATIONS. IF DIFFERENT EQUIPMENT OR DIFFERENT CONFIGURATIONS ARE INSTALLED, THE CONTRACTOR SHALL PROVIDE A NEW CALCULATION TO THE OWNER TO VERIFY THAT THE EQUIPMENT RATING THAT MEETS APPLICABLE SELECTIVE COORDINATION REQUIREMENTS AND PROVIDES SIMILAR INCIDENT ENERGY RISK OF ARC FLASH HAZARDS.
- G. THE CONTRACTOR SHALL PROVIDE A NEW CALCULATION TO THE OWNER IF SMALLER THAN #10, TO BOND ALL NORMAL AND ESSENTIAL ELECTRICAL SYSTEM PANELBOARDS TOGETHER THAT SERVE THE SAME INDIVIDUAL PATIENT WING AS DEFINED IN SEC 511.14.
- H. ALL NEW LIFE SAFETY LIGHTING SHALL BE INSTALLED IN ACCORDANCE WITH ALL LIFE SAFETY RECEPTACLES, SHALL BE MECHANICALLY PROTECTED PER NEC 517.3(C)(3), NON-FLAME RACEWAY SHALL BE USED FOR CRITICAL AND LIFE SAFETY BRANCH CIRCUITS, SUCH THAT THE FINAL CONNECTION TO VIBRATING ELECTRICAL SYSTEMS SHALL BE SECURED TO THE RACEWAY. THE RACEWAY IS TO EXPOSED TO ACCESS THE ENTIRE LENGTH CIRCUIT.
- I. PROVIDE ADDITIONAL SUPPORTS TO THE EXISTING SUPPORTS TO SUPPORT THE REMAINING CABLEING.

ABBREVIATION	DESCRIPTION
#"	MOUNTING HEIGHT TO CENTERLINE (ABOVE FINISHED FLOOR)
A	AMPERE
AF	AMPERE FRAME
AFF	ABOVE FINISHED FLOOR
AL	ALUMINUM
AT	AMPERE TRIP
C	CEILING
CB	CIRCUIT BREAKER
CCT	CORRELATED COLOR TEMPERATURE
CU	COPPER
D	DATA (WHEN APPLIED TO COMMUNICATIONS OUTLET)
D	DEMO (WHEN APPLIED TO EXISTING/DEMO ITEMS)
E	EXISTING
EO	ELECTRICALLY OPERATED
ERMS	ENERGY REDUCING MAINTENANCE SWITCH
F	FUSE
FLA	FULL LOAD AMPS
G, GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFA	GROUND FAULT ALARM
GFP	GROUND FAULT PROTECTION
HP	HORSEPOWER
KAIC	KILOAMPERE INTERRUPTING CAPACITY
KVA	KILOVOLT AMPERE
KW	KILOWATT
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MO	MANUALLY OPERATED
NC	NORMALLY CLOSED
NF	NON-FUSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
P	POLES
PART	PARTIAL
R	RELOCATE
SCCR	SHORT CIRCUIT CURRENT RATING
SPD	SURGE PROTECTIVE DEVICE
ST	SHUNT TRIP
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VOICE
W	WALL PHONE
W	WIRE
WR	WEATHER RESISTANT
XFMR	TRANSFORMER
ZSI	ZONE SELECTIVE INTERLOCKING
REFER TO OTHER SCHEDULES AND NOTES FOR ADDITIONAL ABBREVIATIONS.	

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Novant ASC Leland

SHEET NAME

ELECTRICAL SYMBOLS
AND ABBREVIATIONS

SHEET NUMBER

E00C

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DATA SYMBOL LEGEND			
PLAN SYMBOL	NAME	DESCRIPTION	
	COMMUNICATIONS OUTLET - WALL	GENERAL: PROVIDE COMMUNICATIONS OUTLET AS DESCRIBED IN THESE GENERAL NOTES AND NOTES BELOW FOR EACH OUTLET TYPE. REFER TO PLANS FOR OUTLET DESIGNATION AND QUANTITIES OF NETWORK VOICEDATA CABLES TO BE PROVIDED TO OUTLET FROM ASSOCIATED NEAREST COMMUNICATIONS DISTRIBUTION ROOM. PROVIDE ROUGH-IN PER COMMUNICATIONS OUTLET DETAIL. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE SYSTEM PER SPECIFICATION SECTION 271200 INCLUDING, BUT NOT LIMITED TO INSTALLATION, CONFIGURATION, DEVICES, JACKS, INSERTS, FACEPLATES, AND CABLING. SUBMIT SHOP DRAWINGS FOR APPROVAL. COORDINATE EXACT FINAL LOCATION WITH ARCHITECTURAL INTERIOR ELEVATIONS PRIOR TO INSTALLATION. PROVIDE CABLING AS LISTED BELOW. OUTLETS WITH NO CABLING DESIGNATION SHALL BE EMPTY WITH A BLANK WALL PLATE. CABLING DESIGNATIONS ARE TYPICAL FOR ALL WALL, FLOOR, AND CEILING COMMUNICATIONS DEVICES. REFER TO SPECIFICATIONS FOR CABLING REQUIREMENTS FOR EACH TYPE. A = ONE (1) ANALOG VOICE CABLE V = ONE (1) VOICE CABLE D = ONE (1) DATA CABLE TYPE 'H': HORIZONTAL: PROVIDE COMMUNICATIONS OUTLET DESCRIBED ABOVE, MOUNTED HORIZONTALLY TO ACCOMMODATE BUILDING CONSTRAINTS. TYPE 'W': WALL PHONE: PROVIDE ONE (1) NETWORK (ANALOG VOICE) [VOICE] [DATA] CABLE, MOUNTED IN WALL PHONE MOUNTING BRACKET FACEPLATE, MOUNTED AT 48" AFF. COORDINATE MOUNTING LOCATION WITH OTHER TRADES AND FINAL EQUIPMENT SELECTION. TYPE 'FF': MODULAR FURNITURE FEED VOICEDATA CONNECTION: PROVIDE ONE (1) 4" SQUARE, 2 1/8" DEEP; 4 11/16" SQUARE, 2 1/8" DEEP; RACO 259; 4 11/16" SQUARE, 3 1/2" DEEP; RACO 260; JUNCTION BOX WITH TWO GANG TRIM RING AND BLANK FACEPLATE WITH 1 1/2" CASHEDED GROMMET AT APPROXIMATE LOCATION INDICATED. PROVIDE ONE (1) 1" [1 1/4"] [2"] CONDUIT (TO ABOVE FINISHED CEILING) (TO ABOVE FINISHED CORRIDOR CEILING) (TO NEAREST CORRIDOR CABLE TRAY) PER COMMUNICATIONS OUTLET DETAIL. CABLING SHALL PASS THROUGH JUNCTION BOX AND ROUTE THROUGH MODULAR FURNITURE COMMUNICATIONS RACEWAY. CABLES SHALL TERMINATE TO DEVICES MOUNTED WITHIN MODULAR FURNITURE. COORDINATE CABLE LENGTHS WITH FIELD VERIFIED FINAL TERMINATION LOCATIONS. COORDINATE REQUIREMENTS WITH MODULAR FURNITURE MANUFACTURER. PROVIDE VOICEDATA FURNITURE FEED ADJACENT TO POWER FURNITURE FEED PER PLANS. PROVIDE MAXIMUM 12" BETWEEN BACK BOXES. COORDINATE EXACT MOUNTING LOCATION WITH ARCHITECT AND MODULAR FURNITURE FINAL LOCATION.	
	TELEVISION OUTLET AND WALL BOX	GENERAL: PROVIDE TELEVISION, ROUGH IN DATA CONNECTIONS AS DESCRIBED IN THESE GENERAL NOTES. REFER TO PLANS FOR TELEVISION OUTLET/ WALL BOX DESIGNATION. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH ARCHITECT AND INTERIOR ELEVATIONS. SUBMIT PRODUCT DATA FOR APPROVAL. NO TYPE, DATA TELEVISION OUTLET: PROVIDE ROUGH-IN PER COMMUNICATIONS OUTLET DETAIL. PROVIDE ONE (1) BACK BOX WITH SINGLE GANG TRIM RING AND ONE (1) 3/4" CONDUIT TO ABOVE ACCESSIBLE CORRIDOR CEILING FOR OWNER PROVIDE DATA CABLING. PROVIDE WITH FULL STRING. PROVIDE DUPLEX RECEPTACLE MOUNTED ADJACENT TO TELEVISION OUTLET PER PLANS. RECEPTACLE SHALL BE MOUNTED WITHIN 12".	

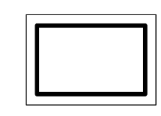
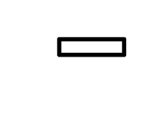
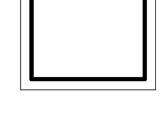
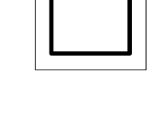
NURSE CALL SYMBOL LEGEND				
PLAN SYMBOL	NAME	DEFAULT MOUNTING HEIGHT	ROUGH-IN	DESCRIPTION
	NURSE CALL CONTROL CABINET - SURFACE	48"	--	CIRCUIT CONTROL CABINET TO 20A 120V BRANCH CIRCUIT IN LOCAL (CRITICAL) [NORMAL] BRANCH PANEL OF THE ASSOCIATED CONSTRUCTION PHASE. REFER TO FLOOR PLANS FOR BRANCH CIRCUIT DESIGNATIONS. COORDINATE CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SELECTION AND PROVIDE NEMA 5-20 RECEPTACLE OR HARD-WIRED CONNECTION TO CABINET AS REQUIRED.

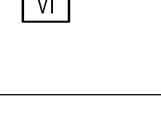
NURSE CALL SYMBOLS				
PLAN SYMBOL	NAME	DEFAULT MOUNTING HEIGHT	ROUGH-IN	
	ROUGH-IN CODE BLUE STATION	48"	COORDINATE	
	ROUGH-IN DOME - CEILING	CEILING	COORDINATE	
	ROUGH-IN DOME LIGHT - WALL	80"	COORDINATE	
	ROUGH-IN TOILET STATION	36"	COORDINATE	

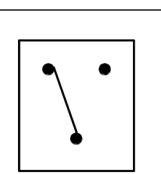
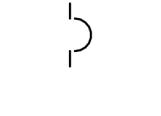
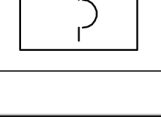
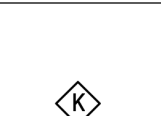
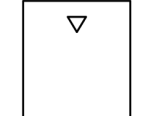
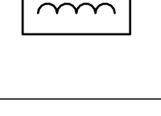
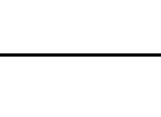
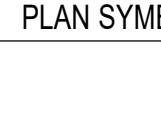
SECURITY SYMBOL LEGEND		
PLAN SYMBOL	NAME	DESCRIPTION
	ACCESS CONTROL PANEL	CIRCUIT CONTROL PANEL TO 20A 120V BRANCH CIRCUIT IN LOCAL [EQUIPMENT] [NORMAL] BRANCH PANEL OF THE ASSOCIATED CONSTRUCTION PHASE. REFER TO FLOOR PLANS FOR BRANCH CIRCUIT DESIGNATIONS. COORDINATE CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SELECTION AND PROVIDE NEMA 5-20 RECEPTACLE OR HARD-WIRED CONNECTION TO CABINET AS REQUIRED.
	DOOR OPERATOR	PROVIDE 20A 120V LIFE SAFETY BRANCH CIRCUIT TO DOOR OPERATOR. REFER TO FLOOR PLANS FOR BRANCH CIRCUIT DESIGNATIONS. COORDINATE REQUIRED ROUGH-IN TO DOOR FRAME FOR PUSH PLATE OR HAND WAVE ACTUATOR CABLING WITH DOOR HARDWARE CONTRACTOR. INCLUDE INTERLOCKS WITH OTHER DOOR HARDWARE COMPONENTS REQUIRED BY THE DOOR HARDWARE SPECIFICATION INCLUDING BUT NOT LIMITED TO CARD READER, ELECTRIC STRIKE, ELECTRIFIED HINGES, MAGNETIC LOCK, REQUEST TO EXIT, MOTION SAFETY CONTROLS, KEY SWITCH, AND POWER SUPPLY. WHERE DOOR IS ALSO SPECIFIED/SHOWN TO UTILIZE ACCESS CONTROL, PROVIDE INTERLOCK TO ALLOW AUTOMATIC DOOR OPENING FROM THE ACCESS CONTROL SYSTEM UPON SUCCESSFUL CARD READ. PROVIDE FIRE ALARM SYSTEM CONNECTION FOR OPERATOR DISABLING UPON ALARM. INTEGRATE DOOR OPERATOR WITH FIRE ALARM, ACCESS CONTROL, INTERCOM, AND DOOR HARDWARE. REFER TO PUSH PLATE OR HAND WAVE ACTUATOR SYMBOL LEGEND DESCRIPTION FOR ADDITIONAL REQUIREMENTS. COORDINATE INSTALLATION WITH DOOR HARDWARE CONTRACTOR.
	INTRUSION DETECTION SYSTEM - CONTROL PANEL	CIRCUIT CONTROL PANEL TO 20A 120V BRANCH CIRCUIT IN LOCAL LIFE SAFETY BRANCH PANEL OF THE ASSOCIATED CONSTRUCTION PHASE. REFER TO FLOOR PLANS FOR BRANCH CIRCUIT DESIGNATIONS. COORDINATE CONNECTION REQUIREMENTS WITH FINAL EQUIPMENT SELECTION AND PROVIDE NEMA 5-20 RECEPTACLE OR HARD-WIRED CONNECTION TO CONTROL PANEL AS REQUIRED. PROVIDE ONE (1) NETWORK DATA CABLE FROM ASSOCIATED COMMUNICATIONS DISTRIBUTION ROOM. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE SYSTEM PER SPECIFICATION SECTION 281600 INCLUDING BUT NOT LIMITED TO INSTALLATION, CONFIGURATION, DEVICES, ROUGH-INS, AND CABLING. SUBMIT SHOP DRAWINGS FOR APPROVAL. COORDINATE EXACT LOCATION OF KEYPAD WITH ENGINEER, ARCHITECT, AND ARCHITECTURAL INTERIOR ELEVATIONS.

COMMUNICATION SYMBOL LEGEND		
PLAN SYMBOL	NAME	DESCRIPTION
	COMMUNICATIONS FIRE RATED PATHWAY - WALL	PROVIDE ST1 FIRESTOP EZ-PATH COMMUNICATIONS FIRE RATED PATHWAY AT LOCATIONS INDICATED ON FLOORPLANS. MOUNT PATHWAYS ABOVE ACCESSIBLE CEILING SPACES. COORDINATE MOUNTING HEIGHT WITH CABLE TRAY, TELECOMMUNICATION RACK HEIGHTS, CEILING, AND OTHER TRADES. INSTALL PER MANUFACTURERS RECOMMENDATIONS. COORDINATE REQUIRED WALL OPENING WITH STUD SPACING. REFER TO FLOOR PLANS FOR PATHWAY TYPE AND QUANTITIES. PROVIDE PATHWAY TYPES AS INDICATED BELOW: (A1) - FULL KIT CATALOG # EZDP133QWK (1-3"x3" PATHWAY) (A2) - FULL KIT CATALOG # EZDP333QK (3-3"x3" PATHWAYS) (A3) - FULL KIT CATALOG # EZDP333QK (3-3"x3" PATHWAYS) (A4) - FULL KIT CATALOG # EZDP433QK (4-3"x3" PATHWAYS) (A7) - FULL KIT CATALOG # EZDP133QK (1-3"x3" PATHWAYS) (A8) - TWO (2) FULL KIT CATALOG # EZDP433QK (3-3"x3" PATHWAYS) (STACKED) (B1) - FULL KIT CATALOG # EZD32 (1-2"x2" PATHWAY) (C1) - FULL KIT CATALOG # EZDP44S2 (1-4"x4" PATHWAY) (C2) - TWO (2) MODULE CATALOG # EZD44S2 & ONE (1) EZP544W (3-4"x4" PATHWAYS) (C3) - THREE (3) CATALOG # EZD44S2 & ONE (1) EZP544W (3-4"x4" PATHWAYS) (C4) - FOUR (4) CATALOG # EZD44S2 & ONE (1) EZP544W (4-4"x4" PATHWAYS) (REQUIRES 16" STUD SPACING) (C5) - FIVE (5) CATALOG # EZD44S2 & ONE (1) EZP544W (5-4"x4" PATHWAYS) (REQUIRES 24" STUD SPACING) PROVIDE ST1 FIRESTOP EZ-PATH CABLE SPILLWAY AT LOCATIONS INDICATED ON FLOORPLANS WITH SUBSCRIPT 'S'. PROVIDE ONE (1) SPILLWAY PER SLEEVE. REFER TO FLOORPLANS FOR SPILLWAY TYPE AND QUANTITIES. (A/S) - CATALOG NO. RCM33 (C/S) - CATALOG NO. EZD3M4MS PROVIDE ST1 FIRESTOP EZ-PATH EXTENSION MODULES AT LOCATIONS INDICATED ON PLANS WITH SUBSCRIPT 'E'. PROVIDE ONE (1) EXTENSION MODULE PER SLEEVE. WHERE PATHWAY IS INDICATED WITH SUBSCRIPT 'EE', PROVIDE ONE (1) EXTENSION MODULES ON EACH END. REFER TO FLOORPLANS FOR EXTENSION MODULE TYPE AND QUANTITIES. (A/E) - CATALOG NO. EZD3SE (C/E) - CATALOG NO. EZD4MES
	PLYWOOD BACKBOARD	PROVIDE 3/4" THICK X 4' WIDE X 8' HIGH A/C GRADE FIRE RETARDANT TREATED PLYWOOD BACKBOARD AT APPROXIMATE LOCATION INDICATED. REFER TO FLOORPLANS FOR WIDTHS. CUT ADDITIONAL PLYWOOD TO FIT APPROXIMATE WIDTH INDICATED ON FLOORPLANS. MOUNT PLYWOOD VERTICALLY. BUTT ADJACENT SHEETS TIGHTLY, AND FORM SMOOTH GAP-FREE CORNERS AND JOINTS. PROVIDE WITH TWO (2) COATS OF WHITE PAINT ON ALL FACES AND EDGES. PROVIDE WITH LABEL ON EACH SHEET OF PLYWOOD WITH FIRE RATINGS, VISIBLE AFTER PAINTING. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

ELECTRICAL EQUIPMENT SYMBOL LEGEND		
PLAN SYMBOL	NAME	DESCRIPTION
	GENERATOR DOCKING STATION	PROVIDE TRYSTAR, INC. DUAL-PURPOSE GENERATOR/LOADBANK DOCKING STATION (OR PRIOR APPROVED EQUIVALENT) WITH VOLTAGE AND CURRENT RATINGS TO MATCH GENERATOR OUTPUT CIRCUIT BREAKER. PROVIDE ENCLOSURE WITH NEMA 3R CONSTRUCTION. PROVIDE WITH INTEGRAL CIRCUIT BREAKER SERVED FROM PERMANENT GENERATOR SOURCE KIRK KEY INTERLOCKED WITH ACCESS DOOR PROTECTING PORTABLE GENERATOR MALE 16 SERIES PANEL, MOUNTS (CAMELOKS). PROVIDE LOAD BANK FEMALE 16 SERIES PANEL, MOUNTS (CAMELOKS). PROVIDE WITH THE FOLLOWING OPTIONS: 1) WIRE-AUTO START, BATTERY CHARGER NEMA 5-20 (GFI) RECEPTACLE AND BLOCK HEATER NEMA 15-30 RECEPTACLE. PROVIDE SEPARATE ELECTRICAL CONNECTIONS FROM PANEL 1LSL1, CIRCUITS 2 AND 4/6 TO SERVE BATTERY CHARGER AND BLOCK HEATER RECEPTACLES. PROVIDE SIGN ON FRONT OF CABINET STATING THE FOLLOWING: MAXIMUM GENERATOR CIRCUIT BREAKER SIZE: 600 AMPS GENERATOR SYSTEM IS A SEPARATELY DERIVED SYSTEM. BOND GENERATOR NEUTRAL AND GROUND

ELECTRICAL EQUIPMENT SYMBOLS	
PLAN SYMBOL	NAME
	AUTOMATIC TRANSFER SWITCH
	ENCLOSED CIRCUIT BREAKER - RECESSED
	ENCLOSED DISCONNECT SWITCH - FUSED
	GENERATOR
	GENERATOR CONNECTION BOX
	LOW VOLTAGE PANEL - SURFACE
	PANELBOARD - ISOLATED POWER
	PANELBOARD - SURFACE
	SWITCHBOARD
	TRANSFORMER - DRY TYPE

SECURITY SYMBOLS	
PLAN SYMBOL	NAME
	INTRUSION DETECTION SYSTEM - KEYPAD
	ROUGH-IN ACCESS CONTROL CREDENTIAL CARD READER
	ROUGH-IN ACCESS CONTROL KEYPAD
	ROUGH-IN DOOR OPERATOR HAND WAVE ACTUATOR
	ROUGH-IN INTERCOM - VIDEO MASTER STATION
	ROUGH-IN INTERCOM - VIDEO WALL STATION
	ROUGH-IN SECURITY SURVEILLANCE CAMERA - CEILING
	ROUGH-IN SECURITY SURVEILLANCE CAMERA - WALL

ONE LINE SYMBOL	
PLAN SYMBOL	NAME
	AUTOMATIC TRANSFER SWITCH
	CIRCUIT BREAKER
	CONTINUATION
	DIGITAL METER
	GENERATOR
	GENERATOR CONNECTION BOX
	GROUND BAR
	GROUNDING ELECTRODE
	KEY INTERLOCK
	PANEL BOARD
	SURGE PROTECTIVE DEVICE
	SWITCHBOARD/SWITCHGEAR
	THREE-WAY MOTOR-OPERATED CONTROL VALVE
	TRANSFORMER
	TWO-WAY MOTOR-OPERATED CONTROL VALVE
	UTILITY METER

COMMUNICATION SYMBOLS	
PLAN SYMBOL	NAME
	ROUGH-IN CEILING SPEAKER

DATA SYMBOLS	
PLAN SYMBOL	NAME
	ROUGH-IN COMMUNICATIONS OUTLET - WALL
	ROUGH-IN WIRELESS ACCESS POINT - CEILING

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ISSUE FOR:
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REVISIONS:		
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ISSUE: 09/15/23
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A/E # : 22354

Novant ASC Leland

SHEET NAME
ELECTRICAL SYMBOLS AND ABBREVIATIONS

SHEET NUMBER
E001

CONSTRUCTION DOCUMENTS

Novant ASC Leland

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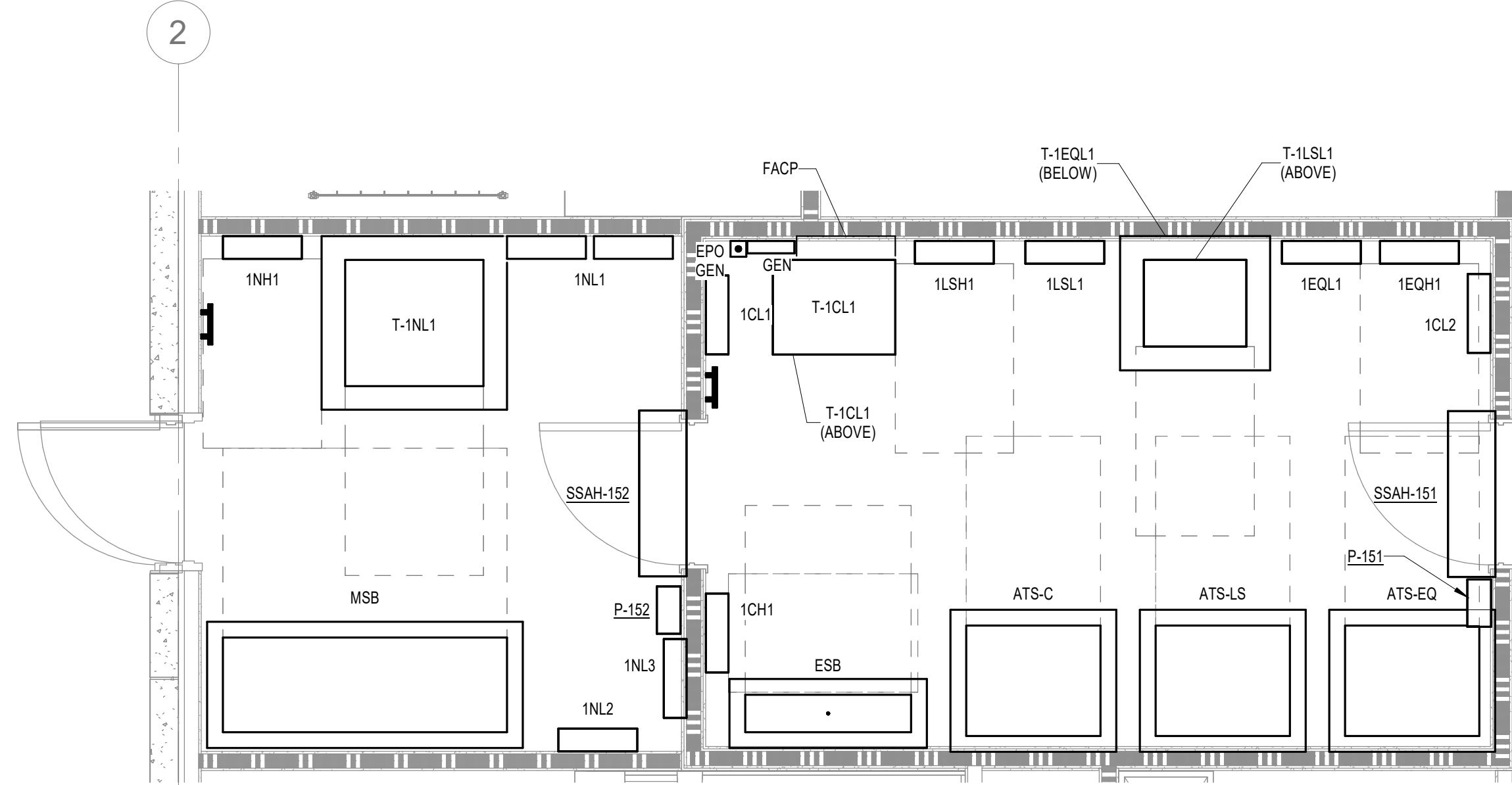
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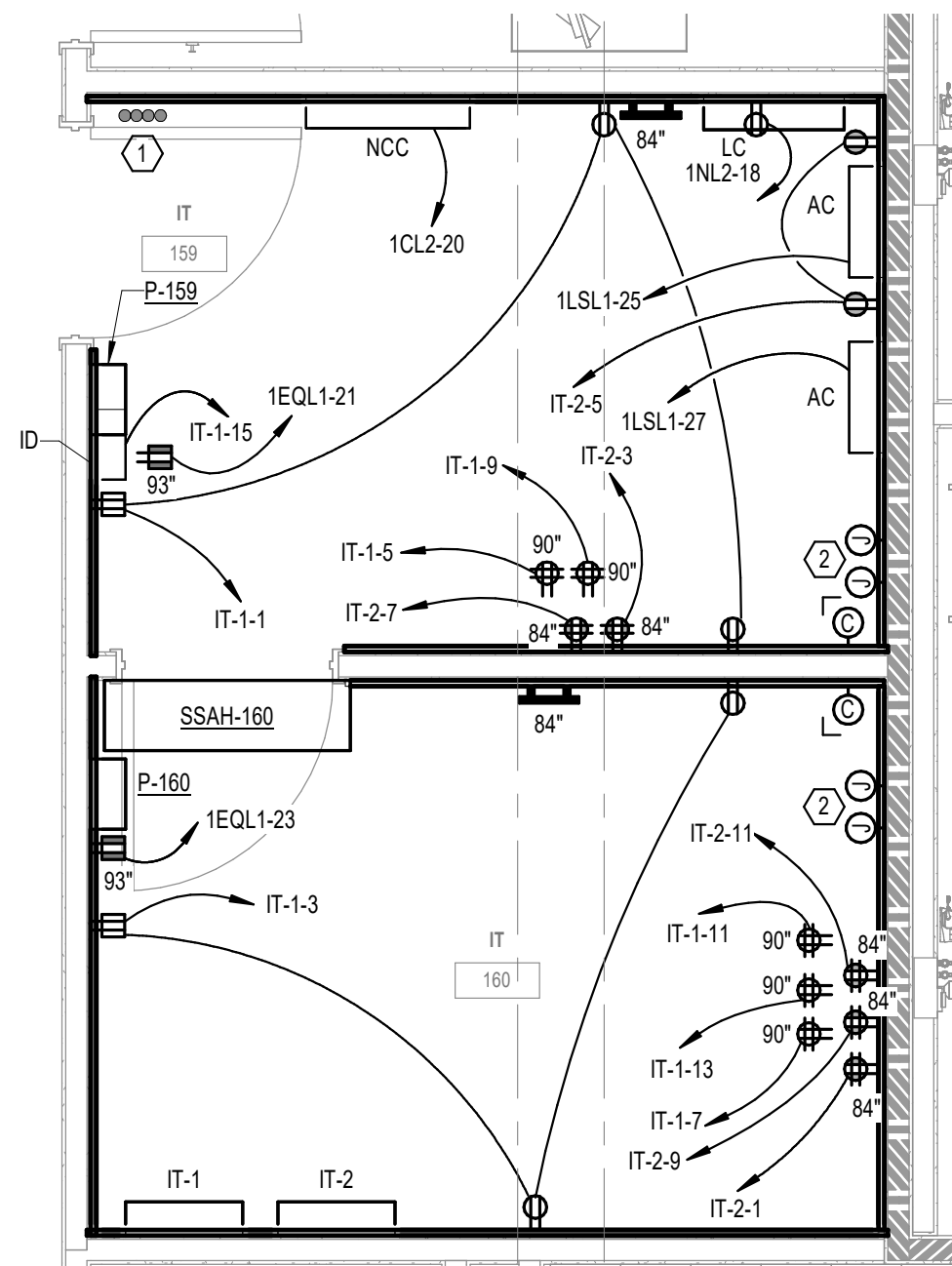
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C1 ENLARGED PLAN - ELECTRICAL/EMERGENCY ELECTRICAL - POWER & LOW VOLTAGE
3/8" = 1'-0"

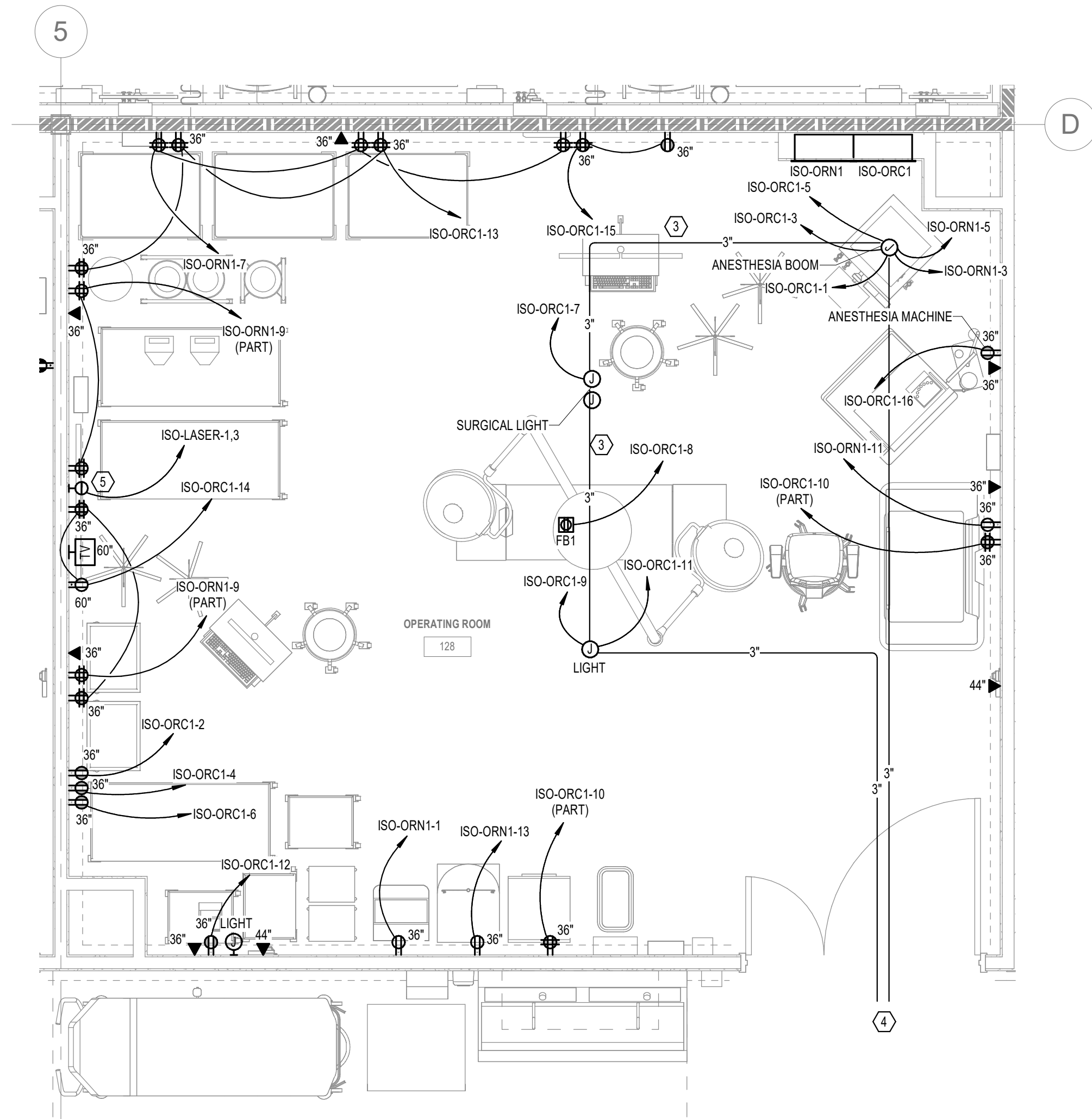
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C3 ENLARGED PLAN - IT - POWER & LOW VOLTAGE
3/8" = 1'-0"

C

B



A1 ENLARGED PLAN - OPERATING ROOM - POWER & LOW VOLTAGE
3/8" = 1'-0"

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SHEET NOTES:

1. TELECOMMUNICATIONS ENTRANCE CONDUITS. REFER TO SHEET ES001 FOR CONTINUATION.
2. PROVIDE ONE (1) BACK BOX AND ONE (1) 3/4" CONDUIT TO ELECTRICAL PANEL IT-1 AND IT-2 FOR FUTURE RECEPTACLES. PROVIDE WITH PULL STRING.
3. PROVIDE (1) 3" CONDUIT BETWEEN EACH OF THE TWO LIGHTING BOOMS AND THE ANESTHESIA COLUMN TO FORM AN INTERCONNECTED RACEWAY SYSTEM BETWEEN ALL BOOM AND COLUMN JUNCTION BOXES.
4. PROVIDE (2) 3" CONDUITS FROM THE JUNCTION BOX CONDUIT SYSTEM TO ABOVE ADJACENT, ACCESSIBLE CORRIDOR CEILING FOR FUTURE CABLING. GROUP SPARE CONDUIT CORRIDOR PENETRATIONS.
5. PROVIDE FLUSH MOUNT, ISOLATED POWER LASER POWER RECEPTACLE SYSTEM WITH STAINLESS STEEL FACEPLATE, REMOTE LINE ISOLATION MONITOR INDICATOR, IN-USE LIGHT, DOOR INTERLOCK TO ALLOW USE OF A SINGLE LASER, AND NEMA LS-50 RECEPTACLE. CONFIRM EXACT RECEPTACLE CONFIGURATION WITH NOVANT HEALTH PRIOR TO ORDERING EQUIPMENT.

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SHEET NAME
ENLARGED PLANS

SHEET NUMBER

E300

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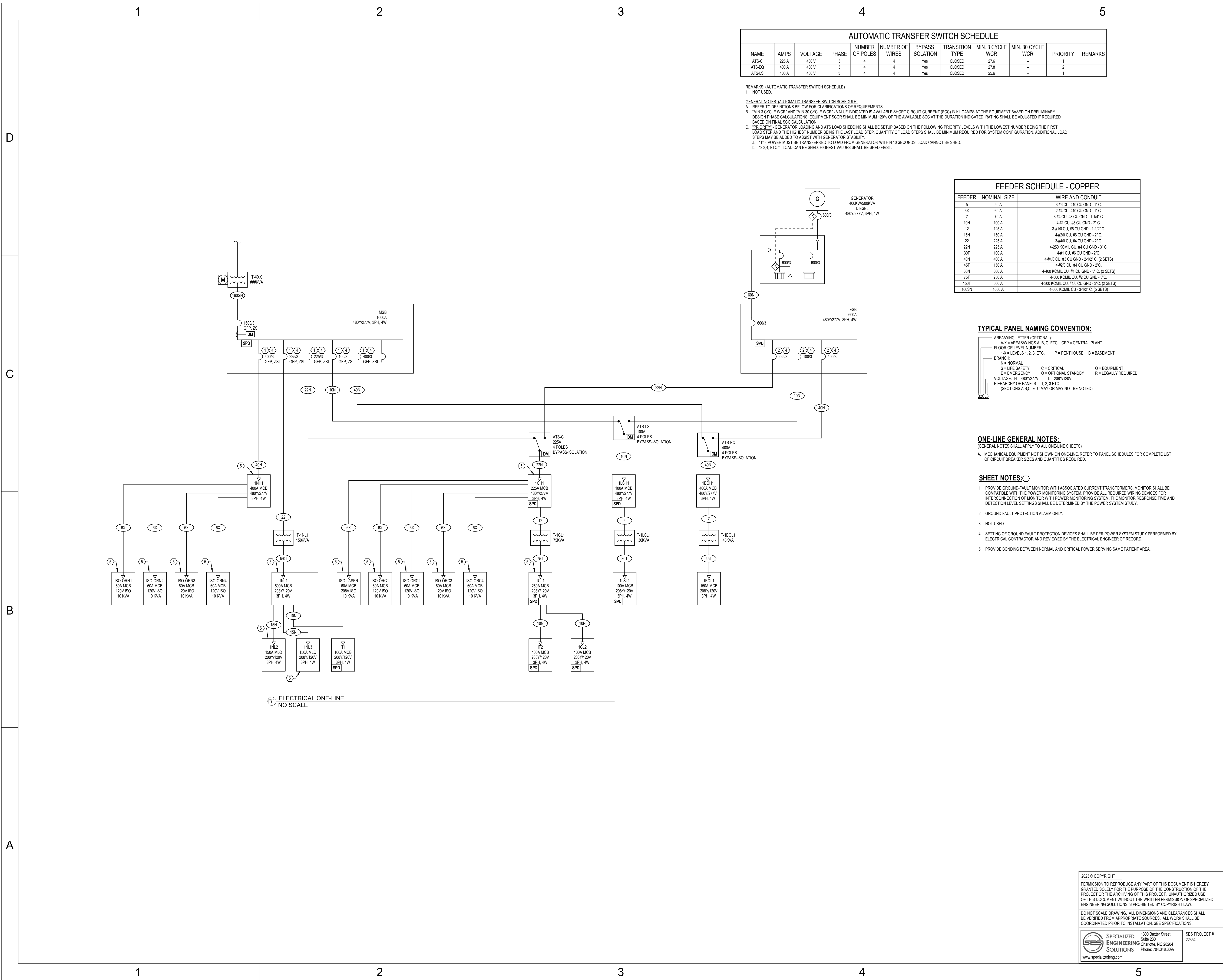
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Suite 230
Charlotte, NC 28204
Phone: 704.348.3197

SES PROJECT #
22354

INSTALL GREEN INSULATED GROUND WIRE WITH LIGHTING, RECEPTACLE AND EQUIPMENT BRANCH CIRCUITS.

INSTALL INDIVIDUAL (DEDICATED) NEUTRAL CONDUCTORS FOR EACH 120V OR 277V PHASE CONDUCTOR SERVED FROM A SINGLE POLE CIRCUIT BREAKER.

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NOVANT HEALTH

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Professional Engineer Seal:
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Professional Engineer
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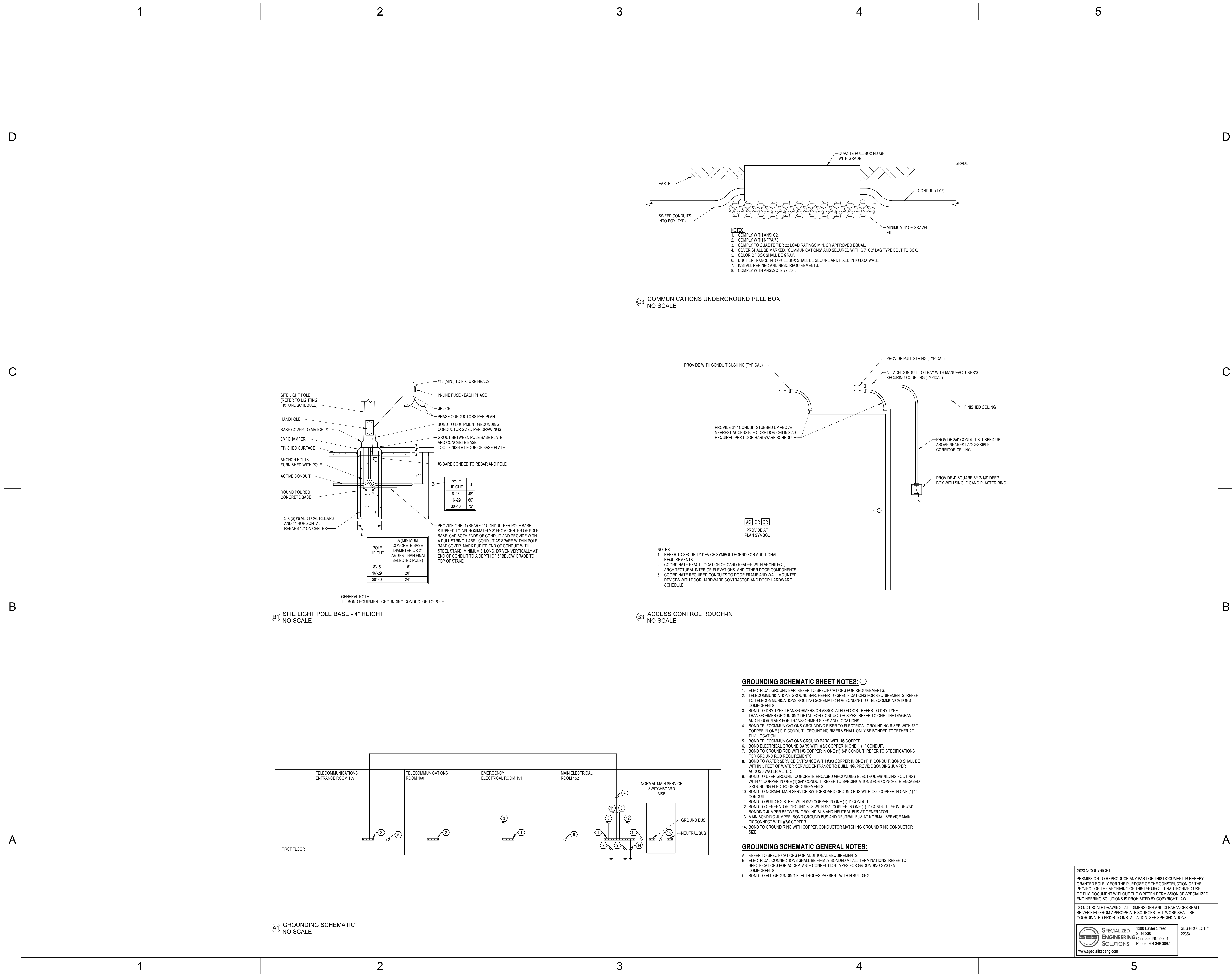
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SHEET NAME
ONE-LINE DIAGRAM

SHEET NUMBER
E500

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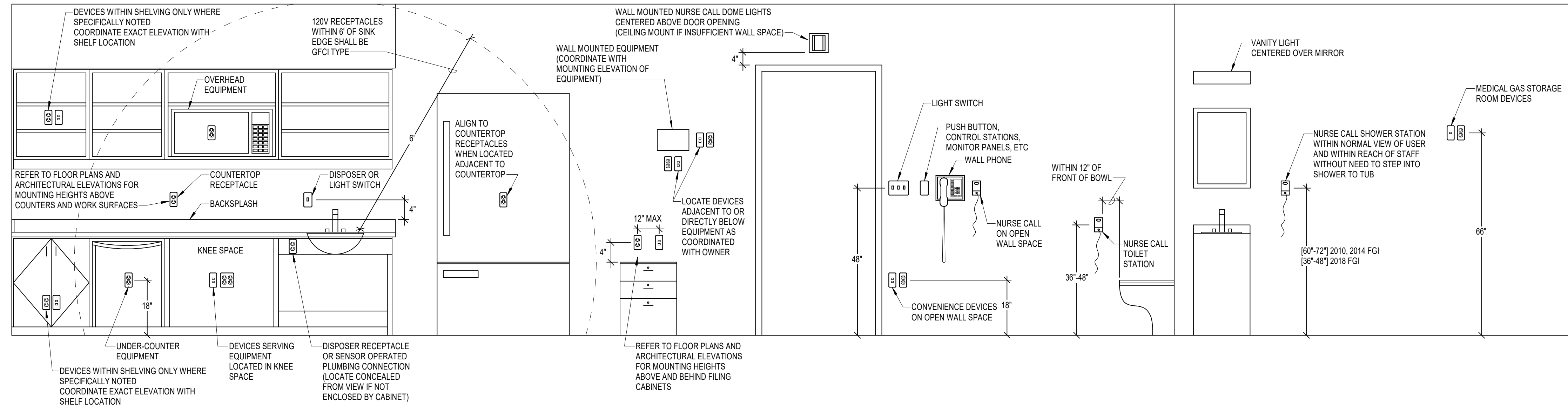
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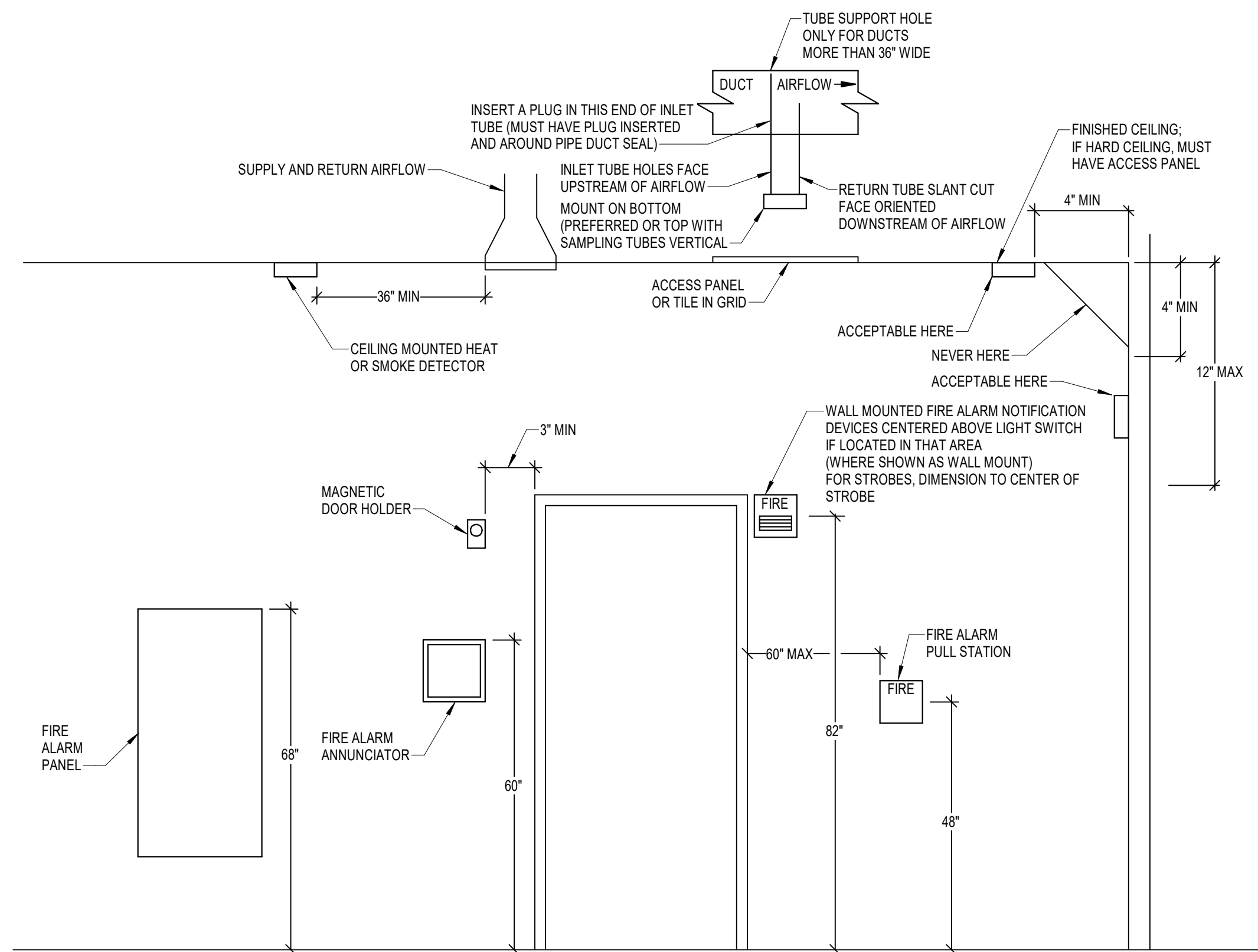
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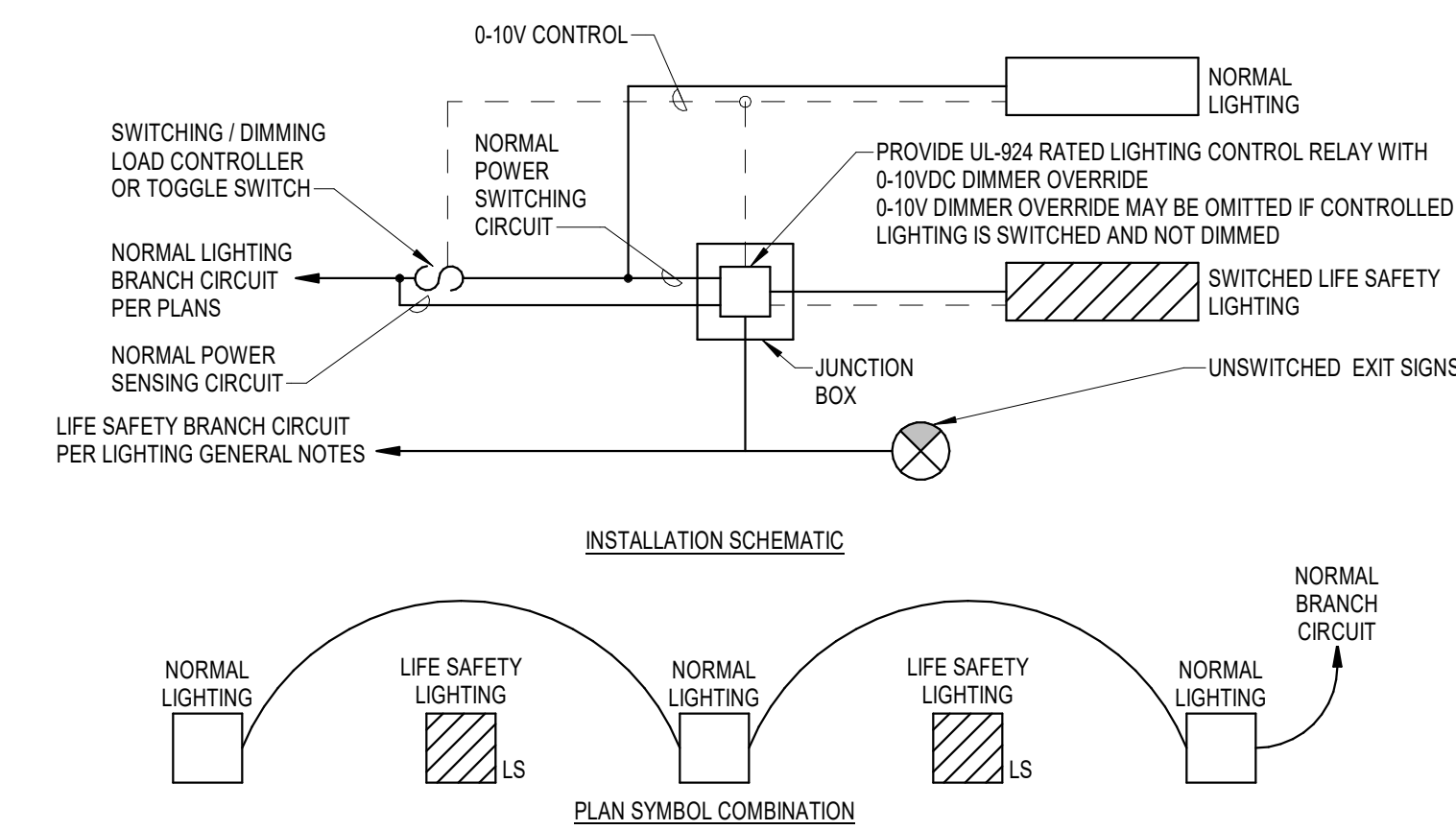
- NOTES:
- COORDINATE DEVICE MOUNTING HEIGHTS WITH ARCHITECT AND ARCHITECTURAL DETAILS. MOUNTING HEIGHTS INDICATED ABOVE ARE TO BE UTILIZED FOR DEVICES NOT DETAILED BY ARCHITECT.
 - ELEVATIONS SHOWN ARE FROM FINISHED FLOOR OR SURFACE TO CENTER LINE OF DEVICE. (EXCEPT WHERE INDICATED OTHERWISE)
 - WHERE DEVICES SHOWN ON PLAN ARE NOTED WITH AN EQUIPMENT TAG, COORDINATE EXACT LOCATION AND ELEVATION TO DIRECTLY SERVE EQUIPMENT.
 - WHERE DEVICES SERVE MOVEABLE EQUIPMENT, MOUNT DEVICES BEHIND EQUIPMENT. DEVICES SERVING FIXED EQUIPMENT SHALL BE LOCATED ADJACENT TO EQUIPMENT OR BEHIND EQUIPMENT WHERE ACCESS FOR DISCONNECTION CAN BE MAINTAINED.
 - IF DEVICES ARE SHOWN TO EXCEED 44" AFF AT COUNTERS AND WORK SURFACES, NOTIFY ARCHITECT REGARDING ADA REQUIREMENTS PRIOR TO INSTALLATION.
 - COORDINATE DEVICE LOCATIONS TO NOT BE DIRECTLY ABOVE OR BELOW ALCOHOL ANTISEPTIC DISPENSERS. VERIFY DISPENSER LOCATIONS WITH OWNER.
 - COORDINATE DEVICES ON PATIENT HEADWALLS WITH ARCHITECTURAL ELEVATIONS.

B3 TYPICAL ELECTRICAL DEVICE MOUNTING HEIGHTS
NO SCALE



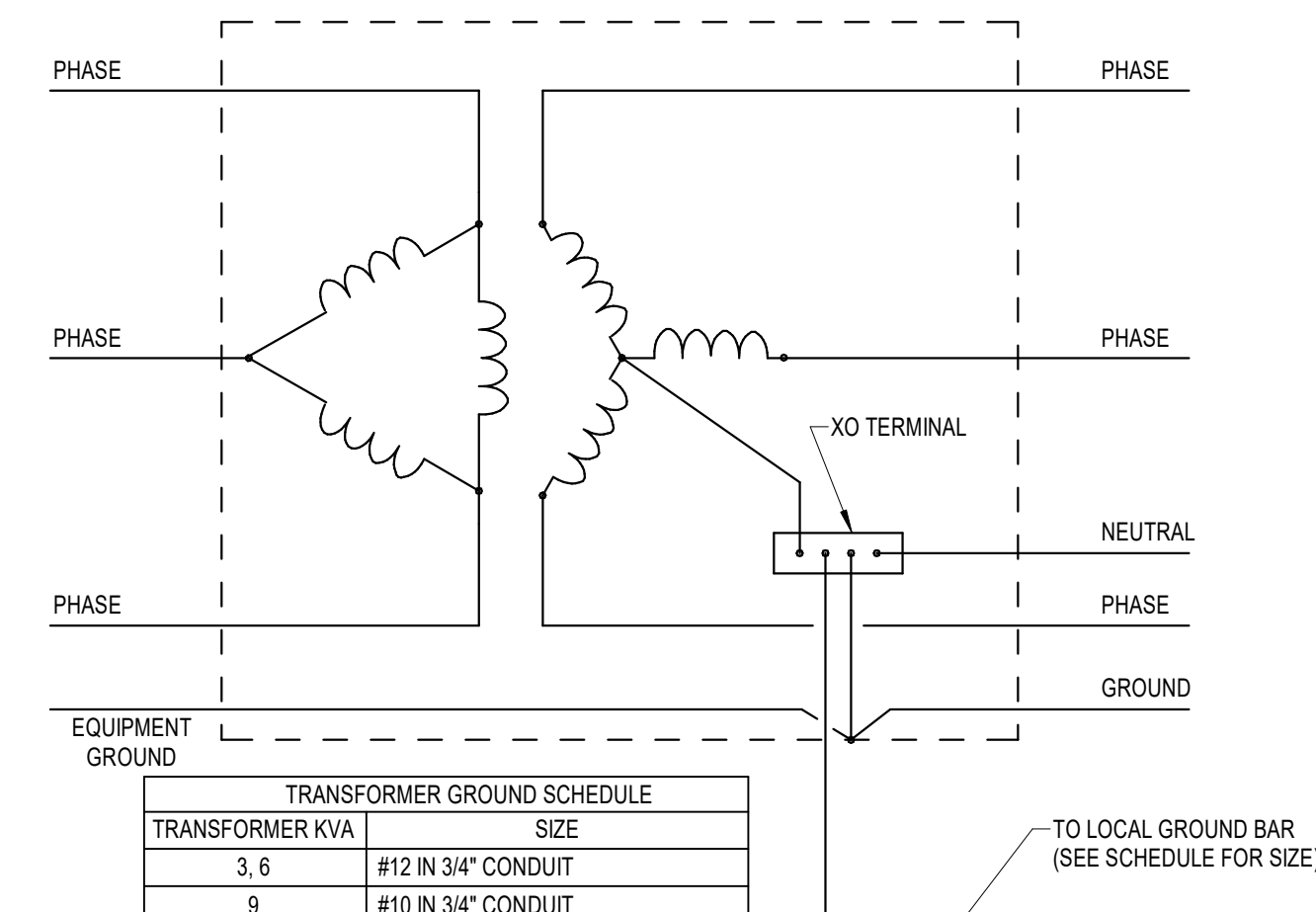
- NOTES:
- COORDINATE DEVICE MOUNTING HEIGHTS WITH ARCHITECT AND ARCHITECTURAL DETAILS. MOUNTING HEIGHTS INDICATED ABOVE ARE TO BE UTILIZED FOR DEVICES NOT DETAILED BY ARCHITECT.
 - WHERE DEVICES SHOWN ON PLAN ARE NOTED WITH AN EQUIPMENT TAG, COORDINATE EXACT LOCATION AND ELEVATION TO DIRECTLY SERVE EQUIPMENT.
 - COORDINATE DEVICE LOCATIONS TO BE 12" MINIMUM FROM ALCOHOL ANTISEPTIC DISPENSERS.
 - COORDINATE DEVICES ON PATIENT HEADWALLS WITH ARCHITECTURAL ELEVATIONS.

A1 TYPICAL FIRE ALARM MOUNTING HEIGHTS
NO SCALE



- NOTES:
- PROVIDE (1) UL-924 RATED LIGHTING CONTROL RELAY FOR EVERY CONTROLLED LIGHTING ZONE WHERE SWITCHED LIGHTING IS INDICATED TO BE FED FROM AN ALTERNATE POWER SOURCE.
 - SEE MANUFACTURER'S WIRING DIAGRAMS FOR WIRING UL-924 LIGHTING CONTROL RELAY AS A CONTROL DEVICE.
 - REFER TO LIGHTING GENERAL NOTES FOR LIFE SAFETY BRANCH CIRCUIT INFORMATION.
 - DURING NORMAL POWER CONDITIONS, IDENTIFIED LIFE SAFETY LIGHTING SHALL BE CONTROLLED WITH NORMAL LIGHTING.
 - UPON NORMAL POWER LOSS UL-924 DEVICE SHALL OVERRIDE LIFE SAFETY LIGHTING TO FULL BRIGHTNESS REGARDLESS OF LIGHTING CONTROL STATE.
 - INTEGRATE UL-924 DEVICE WITH FIRE ALARM SYSTEM. IN THE EVENT OF AN ALARM, UL-924 DEVICE SHALL OVERRIDE CONTROLLED LIGHTING TO FULL BRIGHTNESS.

A3 EMERGENCY LIGHTING CONTROL (PER ZONE)
NO SCALE



TRANSFORMER GROUND SCHEDULE		
TRANSFORMER KVA	SIZE	
3, 6	#12 IN 3/4" CONDUIT	
9	#10 IN 3/4" CONDUIT	
15	#8 IN 3/4" CONDUIT	
30	#6 IN 3/4" CONDUIT	
45	#4 IN 3/4" CONDUIT	
75	#2 IN 3/4" CONDUIT	
112.5, 150	#10 IN 3/4" CONDUIT	
225	#20 IN 3/4" CONDUIT	
300	#40 IN 1" CONDUIT	
500	350 IN 1-1/4" CONDUIT	
750, 1000	600 IN 1-1/2" CONDUIT	

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Novant ASC Leland

SHEET NAME
ELECTRICAL DETAILS

SHEET NUMBER

E601

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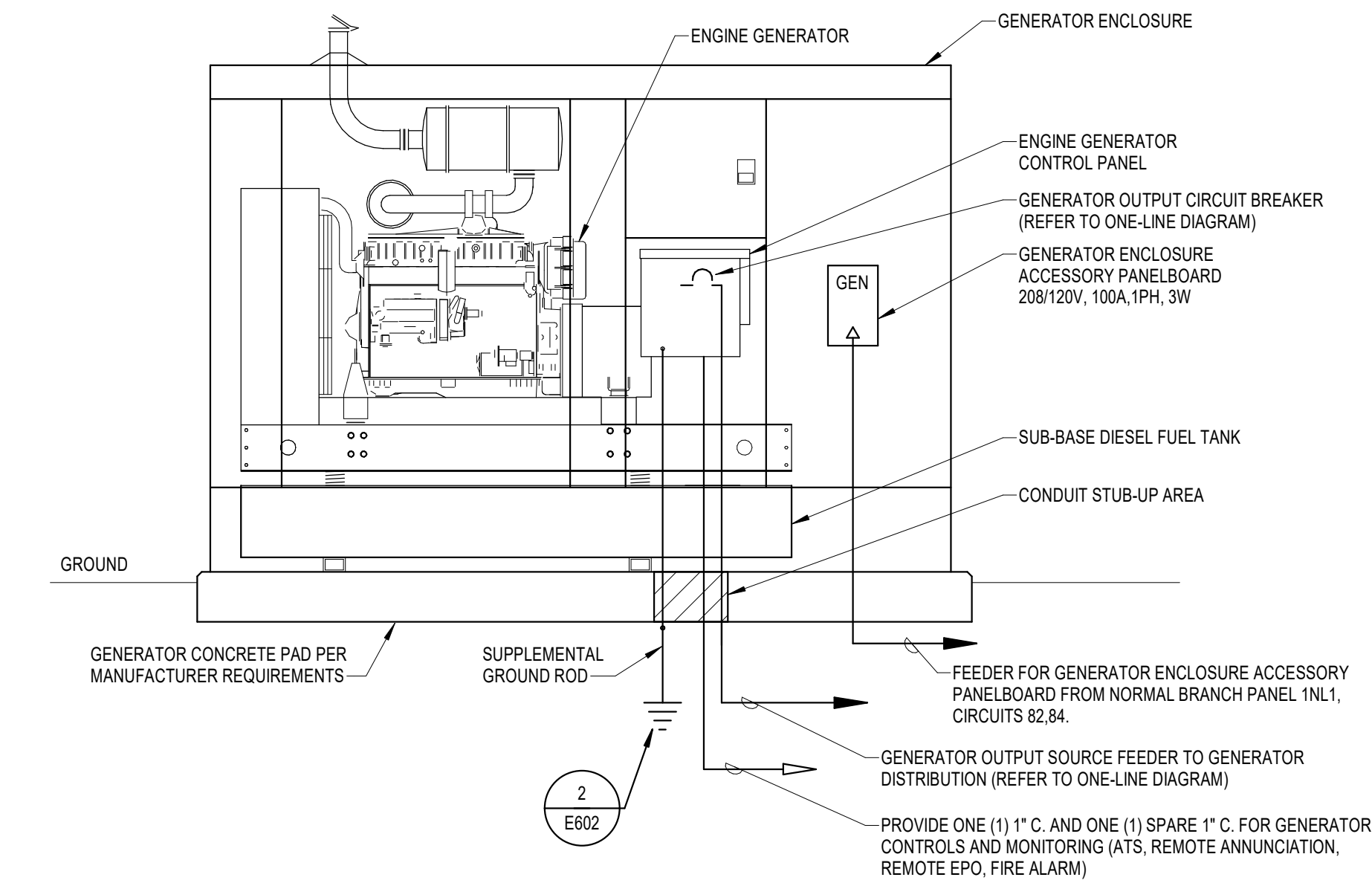
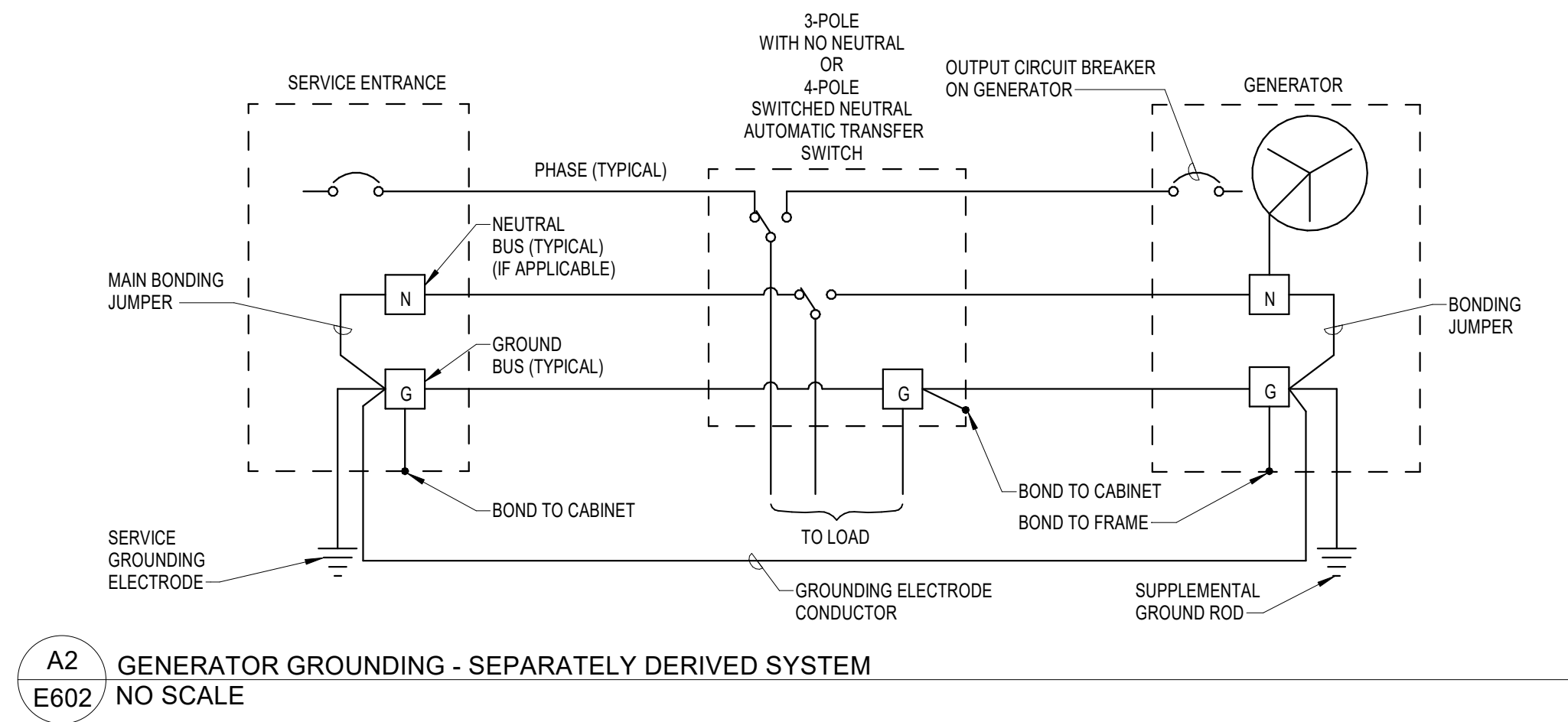
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SHEET NAME
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E602

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FIRE ALARM SYSTEMS - SEQUENCE OF OPERATION

1. ELEVATOR RECALL SHALL BE INITIATED ONLY BY SMOKE DETECTORS WITHIN ELEVATOR LOBBIES OR THE MACHINE ROOM. NO OTHER FIRE ALARM INITIATING DEVICE SHALL INITIATE RECALL.
2. A SMOKE DETECTOR IN THE ELEVATOR LOBBY ON THE PRIMARY DISCHARGE FLOOR SHALL INITIATE ELEVATOR RECALL TO THE ALTERNATE FLOOR. SMOKE DETECTORS ON OTHER ELEVATOR LOBBIES, OR THE MACHINE ROOM SHALL INITIATE RECALL TO THE PRIMARY FLOOR.
3. FOR INFORMATION REGARDING FIRE ALARM SYSTEM INTERFACE WITH AND SEQUENCE OF OPERATION FOR FIRE SUPPRESSION SYSTEM CONTROL PANEL, REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS.
4. EVACUATION TONE FOR NEW WORK SHALL BE VOICE.
5. POWER SMOKE SHUTTERS WILL ACTIVATE ON ZONED ALARM. SEE NOTES BELOW.

SYSTEM INPUTS

1. MANUAL FIRE ALARM PULL STATION
2. SMOKE DETECTOR
3. THERMAL DETECTOR
4. TWO OR MORE DETECTORS IN A SMOKE COMPARTMENT
5. SUPPLY DUCT DETECTOR
6. RETURN DUCT DETECTOR

13. SPRINKLER WATER FLOW
14. SPRINKLER VALVE TAMPER
15. PREACTION / DRY PIPE
16. BACK FLOW VALVE TAMPER SWITCH
17. FIRE PUMP RUN
18. FIRE PUMP POWER FAIL
19. FIRE PUMP PHASE REVERSAL
20. FIRE PUMP CONTROLLER TROUBLE
21. FIRE SUPPRESSION HOOD
22. FIRE SUPPRESSION PANEL ALARM
23. FIRE SUPPRESSION PANEL SUPERVISORY
24. FIRE SUPPRESSION PANEL TROUBLE
25. FACP / TRANSponder LOW BATTERY
26. FACP / TRANSponder A/C FAIL
27. FACP / TRANSponder NETWORK COMMUNICATION LOSS
28. FACP / PHONE LINE NO.1 LOSS
29. FACP / PHONE LINE NO.2 LOSS
30. FACP / COMMUNICATION FAIL
31. FACP / PROGRAMMING MODE
32. SIGNALING LINE CIRCUIT OPEN/SHORT
33. NOTIFICATION APPLIANCE CIRCUIT OPEN/SHORT
34. FIRE ALARM NETWORK CIRCUIT OPEN/SHORT
35. MISSING DEVICE
36. SYSTEM GROUND FAULT

SYSTEM OUTPUTS

1. ACTIVATE STROBES FLOOR OF ALARMS FLOOR ABOVE ALARM FLOOR BELOW ALARM
2. ACTIVATE EVACUATION TONE & PRE-RECORDED FIRE ALARM EVACUATION MESSAGE FLOOR OF ALARM FLOOR ABOVE ALARM FLOOR BELOW ALARM
3. RELEASE MAGNETIC DOOR HOLDERS FLOOR OF ALARMS FLOOR ABOVE ALARMS FLOOR BELOW ALARMS
4. UNLOCK ACCESS CONTROLS DOORS IN PATH OF EGRESS FLOOR OF ALARMS FLOOR ABOVE ALARMS FLOOR BELOW ALARMS
5. CLOSE SMOKE DAMPERS SMOKE SHUTTERS IN ASSOCIATED SMOKE COMPARTMENT
6. CLOSE SMOKE DAMPERS SMOKE SHUTTERS IN ASSOCIATED SMOKE COMPARTMENT
7. SHUT DOWN ASSOCIATED AIR HANDLER UNIT(S) OR OPERATE TO SUPPORT AHU FUNCTION DURING FIRE ALARM CONDITION
8. RECALL ELEVATOR TO PRIMARY FLOOR
9. RECALL ELEVATOR TO SECONDARY FLOOR
10. ACTIVATE ELEVATOR FIRE FIGHTER HAT LIGHT
11. ACTIVATE ELEVATOR SHUNT TRIP AFTER 60 DELAY
12. FACP: ACTIVATE BUZZER, FIRE ALARM LED AND DISPLAY FIRE ALARM MESSAGE
13. FACP: ACTIVATE BUZZER, SUPERVISORY ALARM LED AND DISPLAY SUPERVISORY ALARM
14. FACP: ACTIVATE BUZZER, TROUBLE LED AND DISPLAY TROUBLE MESSAGE
15. SEND FIRE ALARM SIGNAL TO UL LISTED MONITORING STATION
16. SEND SUPERVISORY ALARM SIGNAL TO UL LISTED MONITORING STATION
17. SEND TROUBLE SIGNAL TO UL LISTED MONITORING STATION

NEW FIRE ALARM SYSTEM NOTES:

1. SYSTEM SHOWN IS A CLASS A SYSTEM, DESIGNED IN ACCORDANCE WITH THE STATE BUILDING CODE IN WHICH THE PROJECT IS LOCATED AND NFPA 72.
2. REFER TO FLOOR PLANS FOR EXACT QUANTITIES AND LOCATIONS OF DEVICES.
3. PROVIDE WIRING AS DIRECTED BY FIRE ALARM SYSTEM MANUFACTURER.
4. CONDUIT IS REQUIRED: MINIMUM SIZE 3/4" OR AS REQUIRED TO MEET CODES.
5. PROVIDE REMOTE LAMPS FOR DUCT DETECTORS LOCATED IN INACCESSIBLE AREAS, LABEL PER SPECIFICATIONS.
6. CONTROL MODULES MUST BE LOCATED WITHIN 3'-0" OF DEVICE OR EQUIPMENT THEY ARE CONTROLLING.
7. PROVIDE A PHOTOELECTRIC SMOKE DETECTOR PER NFPA 72 AT EACH POWER SUPPLY LOCATION.
8. COORDINATE WITH FIRE SPRINKLER CONTRACTOR ON EXACT QUANTITIES AND LOCATIONS OF FLOW AND TAMPER SWITCHES.
9. ALL STROBE DEVICES TO BE SYNCHRONIZED ON EACH FLOOR.
10. COORDINATE DUCT DETECTOR AND ASSOCIATED FAN SHUT DOWN WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.
11. THE CONTRACTOR SHALL OBTAIN THE STAMP AND SEAL OF AN ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED ON THE FIRE ALARM SHOP DRAWINGS. THE ENGINEER OF RECORD FOR THESE DOCUMENTS WILL NOT SEAL THE SHOP DRAWINGS. PROVIDE FIRE ALARM DEVICES ON A DESIGN-BUILD BASIS AS REQUIRED. CONNECT EQUIPMENT TO FIRE ALARM ZONES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PROVIDE ADDITIONAL POWER SUPPLIES AS NECESSARY FOR NEW DEVICES. AFTER THE INSTALLATION IS COMPLETE, THE FIRE ALARM SYSTEM SHALL BE TESTED IN THE PRESENCE OF THE FIRE DEPARTMENT REPRESENTATIVES AND THE OWNER'S REPRESENTATIVE FOR SYSTEM INTEGRITY AND OPERATION. COORDINATE EXACT FIRE ALARM REQUIREMENTS WITH FIRE DEPARTMENT PRIOR TO BIDS. MAKE NECESSARY CHANGES TO DESIGN-BUILD DOCUMENTS AS DESIGNED PER FIRE DEPARTMENT COMMENTS. PROVIDE SHOP DRAWINGS FOR APPROVAL, REVISE AND RE-SUBMIT AS REQUIRED FOR FIRE DEPARTMENT APPROVAL AND OBTAINING APPLICABLE PERMITS.
12. THE ELEVATOR SHALL BE PROVIDED WITH COMPLETE ELEVATOR RECALL SYSTEM PER NFPA 72 REQUIREMENTS.
13. SOUND LEVEL FOR AUDIBLE DEVICES SHALL MEET NFPA 72 PUBLIC MODE REQUIREMENTS.
- ELEVATOR RECALL SYSTEM SHALL BE AS FOLLOWS:
- A. ANY BUILDING SMOKE DETECTOR GOES INTO ALARM, WILL ACTIVATE BUILDING GENERAL ALARM AND INITIATING ELEVATOR RECALL.
- B. ANY THERMAL DETECTOR LOCATED IN ELEVATOR MACHINE ROOM GOES INTO ALARM, WILL ACTIVATE SHUNT-TRIP ON ELEVATOR MACHINERY TO TRIP AFTER RECALL IS COMPLETE, THUS DISCONNECTING POWER TO THE ELEVATOR. THIS CIRCUIT SHALL BE ROUTED VIA THE ELEVATOR CONTROLLER CONTACT WHICH VERIFY THAT RECALL IS COMPLETE. INTENT IS TO DISCONNECT POWER ONLY AFTER ELEVATORS HAVE RECALLED TO ASSIGNED FLOOR, BUT BEFORE WATER FLOWS.
- C. SPRINKLER HEAD FUSIBLE LINKS MELTS, DISPERSING WATER TO EXTINGUISH FLAMES.
- D. UPON LOSS OF UTILITY POWER, ELEVATOR SHALL BE TRANSFERRED TO EMERGENCY POWER. WHEN ON EMERGENCY POWER, ONLY (1) ELEVATOR SHALL RECALL AT A TIME, AND SELECTOR SWITCH SHALL ALLOW CONTROL OF ONLY (1) ELEVATOR AT A TIME.

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A/E # 22354

Novant ASC Leland

SHEET NAME

ELECTRICAL FIRE ALARM DETAILS

SHEET NUMBER

E603

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EQUIPMENT CONNECTION SCHEDULE																							
MARK	HIDE	DESCRIPTION	ROOM NAME	ROOM #	HP	KW	FLA	MCA	MOCP	VOLTS	PHASE	POLES	LOAD [VA]	CONTROL TYPE	DISCONNECT BY	DISCONNECT TYPE	FEEDER	PANEL	CIRCUIT NUMBER	SCCR	GEN	REMARKS	
AHL-0R	MEQ-NC	AIR HANDLER - ELECTRICAL PANEL					64	66	70	480	3	3	53209	DDC, FA STOP	ELECTRICAL	VFD	(7N) (70A) 4-44 CU, #6 CU GND - 1/4"	1EQH1	2.4, 6	9	Yes		
AP-1	MEQ-NC	MED GAS ALARM PANEL	OR CHARGE + RAD TECH	137					20	120	1	1	100	N/A	ELECTRICAL	HW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1LSL1	13	5	Yes		
AP-2	MEQ-NC	MED GAS ALARM PANEL	NURSE STATION	176					20	120	1	1	100	N/A	ELECTRICAL	HW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1LSL1	15	5	Yes		
AP-3	MEQ-NC	MED GAS ALARM PANEL	NURSE STATION	176					20	120	1	1	100	N/A	ELECTRICAL	HW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1LSL1	17	5	Yes		
AP-4	MEQ-NC	MED GAS ALARM PANEL	PREPACK	140					20	120	1	1	100	N/A	ELECTRICAL	HW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1LSL1	19	5	Yes		
CH-1	MEQ-NC	CHILLER - SCROLL			81.3		107		225	480	3	3	111073	DDC	MANUFACTURER	VFD	(22) (225A) 3-440 CU, #4 CU GND - 2"	MSB	7	18.5	No		
DI-1	MTR	PUMP - DEIONIZED WATER	DI WATER / BOILER / VACUUM PUMP	146			10	12.5	20	120	1	1	1200	INT	ELECTRICAL	REC/SW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1N1.3	31	5	Yes		
EF-1	MTR	EXHAUST FAN	Space	191	0.25		2.9	4	15	120	1	1	384	DDC	MANUFACTURER	REC/SW	(1M1) (16 - 1" HP) 120V 2-412 CU, #12 CU GND - 3/4"	1N1.3	1	5	No		
EF-2	MTR	EXHAUST FAN			0.5		6.4	8	15	120	1	1	788	DDC	MANUFACTURER	REC/SW	(1M1) (16 - 1" HP) 120V 2-412 CU, #12 CU GND - 3/4"	1N1.3	3	5	No		
EF-3	MTR	EXHAUST FAN			1		8.8	10.1	25	208	1	2	1830	DDC	MANUFACTURER	REC/SW	(2M2) (16 - 2" HP) 208V 2-412 CU, #12 CU GND - 3/4"	1N1.3	5.7	5	No		
EF-4	MTR	EXHAUST FAN			0.1		1.4	2	15	120	1	1	192	DDC	MANUFACTURER	REC/SW	(1M1) (16 - 1" HP) 120V 2-412 CU, #12 CU GND - 3/4"	1N1.3	9	5	No		
EH-1	MEQ-NC	BOILER - HOT WATER	DI WATER / BOILER / VACUUM PUMP	146			120	144	180	200	480	3	3	120000	DDC	MANUFACTURER	INT	(20) (200A) 3-493 CU, #6 CU GND - 2"	MSB	6	22	No	
ET-1	PWR-NC	TANK EXPANSION WATER METER	DI WATER / BOILER / VACUUM PUMP	146			0.8	1	20	120	1	1	100	DDC	ELECTRICAL	REC/SW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1N1.3	23	5	No		
HUM-1		HUMIDIFIER				0.7	4.8			208	1	2	998	DDC	ELECTRICAL	F 202	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1EQH1	4.6	5	Yes		
HUM-CONTROL		HUMIDIFIER CONTROL PANEL				0.5	2.2			208	1	2	500	DDC	ELECTRICAL	HW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1EQH1	8.10	5	Yes		
IAC-1	MTR	COMPRESSOR - MEDICAL AIR	DI WATER / BOILER / VACUUM PUMP	146	5		15.2	17.1	30	480	3	3	12637	INT	MANUFACTURER	INT	(3) (30A) 3-410 CU, #10 CU GND - 3/4"	1E0H1	13.15,17	5	Yes		
MA-1	MEQ-NC	MED GAS MANIFOLD - MEDICAL AIR	MED GAS	148			0.8	1	20	120	1	1	100	INT	ELECTRICAL	HW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1E0H1	13	5	Yes		
MAP-1	MEQ-NC	MED GAS MASTER ALARM PANEL	CHECK-IN	105			0.8	1	20	120	1	1	100	N/A	ELECTRICAL	HW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1LSL1	21	5	Yes		
MAP-2	MEQ-NC	MED GAS MASTER ALARM PANEL	SUPERVISOR OFFICE	164			0.8	1	20	120	1	1	100	N/A	ELECTRICAL	HW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1LSL1	23	5	Yes		
MVP-1	MTR	PUMP - MEDICAL VACUUM	DI WATER / BOILER / VACUUM PUMP	146	5		13.7	17.1	30	480	3	3	11390	INT	MANUFACTURER	INT	(3) (30A) 3-410 CU, #10 CU GND - 3/4"	1E0H1	7.8,11	5	Yes		
O-1	MEQ-NC	MED GAS MANIFOLD - OXYGEN	MED GAS	148						120	1	1	100	INT	ELECTRICAL	HW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1E0L1	5	5	Yes		
P-1	MTR	PUMP - HEATING WATER PRIMARY	DI WATER / BOILER / VACUUM PUMP	146	0.5		2.4	3	15	208	3	3	865	DDC	MECHANICAL	VFD	(2) (20A) 3-412 CU, #12 CU GND - 3/4"	1N1.3	2.6	5	No		
P-2	MTR	PUMP - HEATING WATER SECONDARY	DI WATER / BOILER / VACUUM PUMP	146	1		4.6	5.8	15	208	3	3	1657	DDC	MECHANICAL	VFD	(2) (20A) 3-412 CU, #12 CU GND - 3/4"	1N1.3	8,10,12	5	No		
P-3	MTR	PUMP - HEATING WATER SECONDARY	DI WATER / BOILER / VACUUM PUMP	146	1		4.6	5.8	15	208	3	3	1657	DDC	MECHANICAL	VFD	(2) (20A) 3-412 CU, #12 CU GND - 3/4"	1N1.3	14,16,18	5	No		
P-4	MTR	PUMP - OR HEATING WATER CIRC			1.5		6.6	8.3	15	208	3	3	2378	DDC	ELECTRICAL	MAG	(2) (20A) 3-412 CU, #12 CU GND - 3/4"	1N1.3	20,22,24	5	No		
P-7	MTR	PUMP - PACU HEATING WATER CIRC			1.5		6.6	8.3	15	208	3	3	2378	DDC	ELECTRICAL	MAG	(2) (20A) 3-412 CU, #12 CU GND - 3/4"	1N1.3	26,28,30	5	No		
P-146	MTR	PUMP - RE-CIRCULATING PUMP	DI WATER / BOILER / VACUUM PUMP	146		0.2	1.5	1.9	20	120	1	1	180	INT	ELECTRICAL	REC/SW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1N1.3	33	5	No		
P-148	MTR	PUMP - RE-CIRCULATING PUMP	MED GAS	148		0.2	1.5	1.9	20	120	1	1	180	INT	ELECTRICAL	REC/SW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1N1.3	35	5	No		
P-151	MTR	PUMP - RE-CIRCULATING PUMP	EMERGENCY ELECTRICAL	151		0.2	1.5	1.9	20	120	1	1	180	INT	ELECTRICAL	REC/SW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1E0L1	19	5	Yes		
P-152	MTR	PUMP - RE-CIRCULATING PUMP	ELECTRICAL	152		0.2	1.5	1.9	20	120	1	1	180	INT	ELECTRICAL	REC/SW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1N1.3	37	5	No		
P-159	MTR	PUMP - RE-CIRCULATING PUMP	IT	159		0.2	1.5	1.9	20	120	1	1	180	INT	ELECTRICAL	REC/SW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1E0L1	21	5	Yes		
P-160	MTR	PUMP - RE-CIRCULATING PUMP	IT	160		0.2	1.5	1.9	20	120	1	1	180	INT	ELECTRICAL	REC/SW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1E0L1	23	5	Yes		
RC-1	MTR	PUMP - RE-CIRCULATING PUMP			0.2	1.5	1.9	20	120	1	1	180	DDC	ELECTRICAL	REC/SW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1E0L1	2	5	Yes			
RF-PACU		FAN - RETURN AIR				27.9	40		480	3	3	23196	DDC, FA STOP	MANUFACTURER	VFD	(4) (40A) 3-48 CU, #10 CU GND - 3/4"	1EQH1	25,27,29	5	Yes			
SF-PACU		FAN - SUPPLY				37.1	50		480	3	3	33844	DDC, FA STOP	MANUFACTURER	VFD	(5) (50A) 3-48 CU, #10 CU GND - 1"	1EQH1	31,33,35	5	Yes			
SSAH-146	MEQ-NC	SPLIT SYSTEM AIR HANDLER	DI WATER / BOILER / VACUUM PUMP	146		0.6	1	25	208	1	2	75	DDC	ELECTRICAL	NF 202	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1N1.3	32,34	5	No			
SSAH-148	MEQ-NC	SPLIT SYSTEM AIR HANDLER	MED GAS	148		0.4	1	15	208	1	2	69	DDC	ELECTRICAL	NF 202	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1N1.3	36,38	5	No			
SSAH-151	MEQ-NC	SPLIT SYSTEM AIR HANDLER	EMERGENCY ELECTRICAL	151		0.4	1	15	208	1	2	69	DDC	ELECTRICAL	NF 202	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1E0L1	12,14	5	Yes			
SSAH-152	MEQ-NC	SPLIT SYSTEM AIR HANDLER	ELECTRICAL	152		0.4	1	15	208	1	2	69	DDC	ELECTRICAL	NF 202	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1N1.3	40,42	5	No			
SSAH-159	MEQ-NC	SPLIT SYSTEM AIR HANDLER	IT	159		0.4	1	15	208	1	2	69	DDC	ELECTRICAL	NF 202	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1E0L1	16,18	5	Yes			
SSAH-160	MEQ-NC	SPLIT SYSTEM AIR HANDLER	IT	160		0.4	1	15	208	1	2	69	DDC	ELECTRICAL	NF 202	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1E0L1	20,22	5	Yes			
SSCU-146	MEQ-NC	SPLIT SYSTEM CONDENSING UNIT			19		25		208	1	2	1312	DDC	ELECTRICAL	NF 202	(2X) (20A) 2-410 CU, #10 CU GND - 3/4"	1N1.3	11,13	5	No			
SSCU-148	MEQ-NC	SPLIT SYSTEM CONDENSING UNIT			11		15		208	1	2	1830	DDC	ELECTRICAL	NF 202	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1N1.3	15,17	5	No			
SSCU-151	MEQ-NC	SPLIT SYSTEM CONDENSING UNIT			11		15		208	1	2	1830	DDC	ELECTRICAL	NF 202	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1E0L1	1,3	5	Yes			
SSCU-152	MEQ-NC	SPLIT SYSTEM CONDENSING UNIT			11		15		208	1	2	1830	DDC	ELECTRICAL	NF 202	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1N1.3	19,21	5	No			
SSCU-159	MEQ-NC	SPLIT SYSTEM CONDENSING UNIT			11		15		208	1	2	1830	DDC	ELECTRICAL	NF 202	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1E0L1	5,7	5	Yes			
SSCU-160	MEQ-NC	SPLIT SYSTEM CONDENSING UNIT			11		15		208	1	2	1830	DDC	ELECTRICAL	NF 202	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1E0L1	9,11	5	Yes			
VAV CONTROL PANEL	MEQ-NC	VAV CONTROL PANEL	DI WATER / BOILER / VACUUM PUMP	146		1	1.3	20	120	1	1	120	N/A	ELECTRICAL	HW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1E0H1	17	5	Yes			
WH-1	MEQ-NC	HOT WATER HEATER TANK - ELECTRIC	DI WATER / BOILER / VACUUM PUMP	146		36	43.3	54.1	60	480	3	3	36000	DDC	ELECTRICAL	F 603	(6) (60A) 3-44 CU, #10 CU GND - 1"	1E0H1	19,21,23	11.9	Yes		
WS-1	MEQ-NC	WATER SOFTENER	DI WATER / BOILER / VACUUM PUMP	146		1	1.3	20	120	1	1	120	INT	ELECTRICAL	REC/SW	(2X) (20A) 2-412 CU, #12 CU GND - 3/4"	1N1.3	39	5	Yes			

REMARKS: (EQUIPMENT CONNECTION SCHEDULE)
1. CONTROLS BETWEEN INDOOR AND OUTDOOR UNITS - INCLUDE CONTROL WIRING IN CONDUIT BETWEEN INDOOR AND OUTDOOR UNIT PER MANUFACTURER'S REQUIREMENTS.
2. EQUIPMENT UTILIZES A FAN ARRAY WITH MULTIPLE MOTOR CONNECTIONS. REFER TO MECHANICAL SCHEDULE FOR QUANTITY OF FANS.
3. PROVIDE ELECTRICAL CONNECTION TO CONDENSATE PUMP ASSOCIATED WITH THE (SPLIT SYSTEM) FAN COIL UNIT FROM THE SAME CIRCUIT FEEDING THE MECHANICAL EQUIPMENT. COORDINATE WITH MECHANICAL CONTRACTOR TO CONFIRM ELECTRICAL CONNECTION REQUIREMENTS. WHERE CONDENSATE PUMP CANNOT BE SERVED FROM THE SAME POWER SOURCE, PROVIDE DEDICATED 120V, 20A BRANCH CIRCUIT WITH TOGGLE SWITCH DISCONNECT FROM SAME PANEL SERVING ASSOCIATED EQUIPMENT.

GENERAL NOTES: (EQUIPMENT CONNECTION SCHEDULE)
A. EQUIPMENT LISTED MAY NOT BE UNIQUE. VERIFY QUANTITY WITH FLOOR PLANS. WHERE LOCATIONS ARE NOT INDICATED ON ELECTRICAL FLOOR PLANS, REFER TO MECHANICAL SHEETS. REFER TO DEFINITIONS BELOW FOR CLARIFICATIONS OF CONNECTION REQUIREMENTS.
B. PROVIDE WIRING AND EQUIPMENT CONNECTIONS FOR INTERNAL EQUIPMENT COMPONENTS AS REQUIRED. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR.
C. ITEMS NOTED AS "N/A" ARE NOT APPLICABLE TO THE CONNECTION.
D. "CONTROL TYPE" - PROVIDE CONTROL AND CONNECTIONS.
E. "INT" = CONTROL IS MANUFACTURED INTEGRAL TO THE EQUIPMENT (SELF-CONTAINED).
F. "CONT" = EQUIPMENT OPERATES CONTINUOUSLY (NO CONTROLS). FOR MOTORS WITHOUT INTERNAL OVERLOAD PROTECTION, PROVIDE SEPARATE OVERLOAD PROTECTION. OVERLOAD PROTECTION MAY BE PROVIDED AS PART OF A MANUAL MOTOR STARTER.
G. "DDC" = CONTROL SIGNAL FROM TEMPERATURE CONTROL SYSTEM PROVIDED BY MECHANICAL CONTRACTOR OR TEMPERATURE CONTROLS CONTRACTOR.
H. "TIME SW" = CONTROL SIGNAL FROM TIME SWITCH PROVIDED BY ELECTRICAL CONTRACTOR.
I. TIME SWITCH SHALL BE 7 DAY DIGITAL TYPE WITH AUTOMATIC DAYLIGHT SAVINGS ADJUSTMENTS AND BATTERY BACKUP. LOCATE TIMESWITCH IN NEAREST MECHANICAL OR ELECTRICAL UTILITY ROOM.
J. LABEL TIME SWITCH. COORDINATE TIME SCHEDULE WITH OWNER AND MECHANICAL ENGINEER.
K. "WALL SW" = CONTROL SIGNAL FROM WALL SWITCH PROVIDED BY ELECTRICAL CONTRACTOR.
L. COORDINATE LOCATION OF WALL SWITCH WITH OWNER. LABEL WALL SWITCH.
M. "FA STOP" = FANS WITH CM OF 200 OR GREATER AND FANS SERVING DUCTS CONTAINING SMOKE DAMPERS.
N. PROVIDE FIRE ALARM SYSTEM DUCT SMOKE DETECTORS AT RETURN-SIDE AND SUPPLY-SIDE OF FAN UNIT. PROVIDE MULTIPLE DETECTORS IF REQUIRED TO ACCOMMODATE MAN DUCT TAKE-OFFS WHERE A SINGLE DETECTOR CANNOT BE INSTALLED TO CAPTURE ALL AIRFLOW. FIRE ALARM SYSTEM SHALL SHUTDOWN FAN UPON DETECTION OF SMOKE IN DUCT OR SMOKE SERVED FROM THIS EQUIPMENT.
O. PROVIDE WITH INDIVIDUAL ADDRESSABLE CONTROL MODULE AND CONNECT TO SHUTDOWN FAN.
P. "WF STOP" = HIGH VOLUME LOW SPEED (HVL) FANS SHUT DOWN HVL FAN UPON WATERFLOW ALARM. PROVIDE WITH INDIVIDUAL FIRE ALARM SYSTEM ADDRESSABLE CONTROL MODULE AT MOTOR AND CONNECT TO SHUT DOWN FAN.
Q. "FA START" = FANS USED FOR SMOKE EVACUATION OR PRESSURIZATION.
R. FIRE ALARM SYSTEM SHALL START FAN UPON DETECTION OF SMOKE IN DUCT OR ROOMS SERVED FROM THIS EQUIPMENT. PROVIDE WITH INDIVIDUAL FIRE ALARM SYSTEM ADDRESSABLE CONTROL MODULE AT MOTOR CONTROLLER/STARTER AND CONNECT TO START FAN.
S. "DATA" = PROVIDE WITH DATA CONTROL PANEL AND NETWORK COMMUNICATIONS ROOM.
T. "CONDUIT" = PROVIDE EMPTY 3/4" CONDUITS CONDUIT BETWEEN INDOOR AND OUTDOOR UNIT TO ACCOMMODATE CONTROL CABLEING BY MECHANICAL OR TEMPERATURE CONTROLS CONTRACTOR.
U. "EPO" = PROVIDE EMERGENCY POWER OFF. REFER TO FLOOR PLANS FOR DEVICE LOCATION.
V. "DISCONNECT BY" -
W. "MECHANICAL" = DISCONNECT IS FURNISHED BY MECHANICAL CONTRACTOR OR PROVIDED WITH MECHANICAL EQUIPMENT.
X. ELECTRICAL CONTRACTOR SHALL PROVIDE MOUNTING AND ADDITIONAL CONNECTIONS REQUIRED FOR LOOSE DISCONNECTS FURNISHED BY THE MECHANICAL CONTRACTOR.
Y. "ELECTRICAL" = DISCONNECT IS FURNISHED BY ELECTRICAL CONTRACTOR. COORDINATE EXACT REQUIREMENTS FURNISHED BY MECHANICAL CONTRACTOR.
Z. "MANUFACTURER" = DISCONNECT IS FURNISHED BY EQUIPMENT MANUFACTURER. ELECTRICAL CONTRACTOR SHALL PROVIDE MOUNTING AND ADDITIONAL CONNECTIONS REQUIRED FOR LOOSE DISCONNECTS FURNISHED BY EQUIPMENT MANUFACTURER.
F. "DISCONNECT TYPE" - PROVIDE DISCONNECT/RECEPTACLE AT EQUIPMENT LOCATION AND ASSOCIATED CONNECTION TO EQUIPMENT AND BRANCH CIRCUIT.
G. "NEMA" - "I" = DUPLEX (17P) RECEPTACLE TO ACCOMMODATE CORD AND PLUG CONNECTION (CORD AND PLUG FURNISHED WITH EQUIPMENT UNLESS NOTED OTHERWISE).
H. "REC/SW" = PROVIDE 20A 120V RECEPTACLE OR 20A TOGGLE SWITCH DISCONNECT.
I. COORDINATE REQUIRED SELECTION WITH EQUIPMENT.
J. "NF" = NON-FUSED DISCONNECT. SIZE AND POLE QUANTITY AS INDICATED. 201" AND SMALLER SHALL BE TOGGLE SWITCH DISCONNECT.
K. "F" = FUSED DISCONNECT. SIZE AND POLE QUANTITY AS INDICATED.
L. FUSE PER MANUFACTURER'S RECOMMENDATIONS.
M. "FUSAT" = SWITCH AND FUSAT. FUSE SIZE PER EQUIPMENT MANUFACTURER.
N. LOCATE SWITCH IN CONCEALED ACCESSIBLE LOCATION.
O. "ENCL CB" = ENCLOSED CIRCUIT BREAKER DISCONNECT.
P. SIZE, POLE QUANTITY, AND FLUSH/SURFACE MOUNTING AS INDICATED.
Q. "ENCL MSCW" = ENCLOSED MOLDED CASE SWITCH DISCONNECT.
R. SIZE, POLE QUANTITY, AND FLUSH/SURFACE MOUNTING AS INDICATED.
S. "SHUNT ENCL CB" = SHUNT TRIP ENCLOSED CIRCUIT BREAKER DISCONNECT.
T. SIZE, POLE QUANTITY, AND FLUSH/SURFACE MOUNTING AS INDICATED. PROVIDE WITH INTEGRAL 120V CONTROL TRANSFORMER SERVED FROM LINE SOURCE WITH PRIMARY AND SECONDARY FUSING.
U. COORDINATE ENCLOSURE AND COVER SIZE TO ACCOMMODATE TRANSFORMER. PROVIDE WITH EQUIPMENT GROUND BAR AND SEPARATE INSULATED ISOLATED GROUND BAR. WHERE NEUTRAL CONDUCTOR IS UTILIZED, PROVIDE SOLID NEUTRAL BAR. CONNECT SHUNT TRIP VOLTAGE SOURCE AND ACTUATOR TO ASSOCIATED EMERGENCY POWER (EPO) SWITCHES. PROVIDE EPO AND COORDINATE LOCATION.
V. "LOCK CB" = CIRCUIT BREAKER CAPABLE OF BEING LOCKED IN THE OPEN POSITION, LOCATED IN THE SOURCE ELECTRICAL PANEL. THE PROVISIONS FOR LOCKING MUST REMAIN IN PLACE WITH OR WITHOUT THE LOCK INSTALLED.
W. "MAG" = COMBINATION MAGNETIC MOTOR STARTER WITH DISCONNECT (COORDINATE COIL VOLTAGE WITH CONTROL, SOURCE). LOCATE COMBINATION MAGNETIC MOTOR STARTER TO SERVE AS THE MOTOR DISCONNECT. WHERE STARTER SERVES OUTDOOR EQUIPMENT, LOCATE STARTER IN OUTDOOR LOCATION.
X. "MAY" = COMBINATION MANUAL MOTOR STARTER WITH DISCONNECT. LOCATE COMBINATION MANUAL MOTOR STARTER TO SERVE AS THE MOTOR DISCONNECT. WHERE STARTER SERVES OUTDOOR EQUIPMENT, LOCATE STARTER IN THE SOURCE ELECTRICAL ROOM.
Y. "VFD" = VARIABLE FREQUENCY DRIVE CONTROLLER. LOCATE VARIABLE FREQUENCY DRIVE CONTROL TO SERVE AS THE MOTOR DISCONNECT.
Z. "INT" = DISCONNECT IS MANUFACTURED INTEGRAL TO THE EQUIPMENT.
AA. "HW" = HARDWIRE DISCONNECT NOT REQUIRED.
AB. LOCATE DISCONNECT ADJACENT TO EQUIPMENT PER NEC - PROVIDE WITH STRUT MOUNTING AS REQUIRED.
AC. LOCATE RECEPTACLE OR JUNCTION BOX TO DIRECTLY SERVE EQUIPMENT.
AD. COORDINATE EXACT LOCATION WITH ARCHITECT, ARCHITECTURAL DETAILS, AND EQUIPMENT MANUFACTURER'S REQUIREMENTS.
AE. WHERE DISCONNECT SERVES OUTDOOR EQUIPMENT, PROVIDE AS NEMA-3R.
AF. PROVIDE DISCONNECT WITH EQUIPMENT GROUND KIT.
AG. WHERE FEEDER INDICATED UTILIZES A NEUTRAL, PROVID

NC LICENSE: C-4498

14					
15					
16					
17					
18					
19					
20					
				Total VA:	1022932 VA
				Total A:	1230 A

A. PANEL AIC (INTERRUPTING) RATING SHALL BE MINIMUM 120% OF THE AVAILABLE SCC (SHORT CIRCUIT CURRENT).

CONSTRUCTION DOCUMENTS

CKT	CIRCUIT DESCRIPTION	OPT	RATING	POLES	A		B		C		POLES	RATING	OPT	CIRCUIT DESCRIPTION	CKT
1	SSCU-151 EMERGENCY ELECTRICAL 151		15 A	2	915 VA	360 VA					1	20 A		RCP-1	2
3							915 VA	499 VA			2	20 A		HUM-1	4
5									915 VA	499 VA					6
7	SSCU-159 IT 159		15 A	2	915 VA	250 VA					2	20 A		HUMIDIFIER CONTROL PANEL	8
9							915 VA	250 VA							10
11	SSCU-160 IT 160		15 A	2					915 VA	35 VA					12
13	MA-1 MED GAS 148		20 A	1	100 VA	35 VA				2	15 A			SSAH-151 EMERGENCY ELECTRICAL 151	14
15	O2-1 MED GAS 148		20 A	1			100 VA	35 VA							16
17	VAV CONTROL PANEL DIL...		20 A	1					120 VA	35 VA	2	15 A		SSAH-159 IT 159	18
19	P-151 EMERGENCY...		20 A	1	360 VA	35 VA					2	15 A		SSAH-160 IT 160	20
21	P-159 IT 159		20 A	1			360 VA	35 VA							22
23	P-160 IT 160		20 A	1					360 VA	--	1	--	--	SPACE	24
25	HOT BOX SITE		20 A	1	600 VA	--					1	--	--	SPACE	26
27	HOT BOX SITE		20 A	1			600 VA	--			1	--	--	SPACE	28
29	BAC FLOW SITE		20 A	1				600 VA	--		1	--	--	SPACE	30
31	SPARE	--	20 A	1	0 VA	0 VA				1	20 A	--	--	SPARE	32
33	SPARE	--	20 A	1			0 VA	0 VA			1	20 A	--	SPARE	34
35	SPARE	--	20 A	1					0 VA	0 VA	1	20 A	--	SPARE	36
37	SPARE	--	20 A	1	0 VA	0 VA					1	20 A	--	SPARE	38
39	SPARE	--	20 A	1			0 VA	0 VA			1	20 A	--	SPARE	40
41	SPARE	--	20 A	1					0 VA	0 VA	1	20 A	--	SPARE	42

[illegible]

Revision

CIRCUIT BREAKER OPTIONS SUFFIX: 'S' OR 'ST' - PROVIDE SHUNT TRIP CIRCUIT BREAKER / 'G' OR 'GFCI' - PROVIDE GFCI CIRCUIT BREAKER / 'GFP' - PROVIDE GFP CIRCUIT BREAKER / 'ERMS' - ENERGY REDUCING MAINTENANCE SWITCH / 'ZSI' - ZONE SELECTIVE INTERLOCKING / 'L' - PROVIDE CIRCUIT BREAKER WITH LOCKING PROVISIONS / 'R' - PROVIDE CIRCUIT BREAKER WITH RED MARKING

GENERAL REMARKS:
A. PANEL AIC (INTERRUPTING) RATING SHALL BE MINIMUM 120% OF THE AVAILABLE SCC (SHORT CIRCUIT CURRENT).

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DO NOT SCALE DRAWING. ALL DIMENSIONS AND CLEARANCES SHALL BE VERIFIED FROM APPROPRIATE SOURCES. ALL WORK SHALL BE COORDINATED PRIOR TO INSTALLATION. SEE SPECIFICATIONS.

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SES PROJECT #
22354

D

C

B

A

PANEL: 1LSH1														
LOCATION: EMERGENCY ELECTRICAL...				VOLTS: 480/277 WYE				MAINS TYPE: MCB						
SUPPLY FROM: ATS-LS				PHASES: 3				MCB/MLO RATING: 100 A						
BRANCH: LIFE SAFETY				WIRES: 4				MCB OPTIONS: LSI						
SERVICE RATED: No				INTEGRAL SPD: Yes				SECTIONS: 1						
MOUNTING: SURFACE				AVAILABLE SCC (KA): 20.1				PANEL POLES: 42						
NEMA ENCLOSURE: NEMA 1														
CKT	CIRCUIT DESCRIPTION	OPT	RATING	POLES	A	B	C	POLES	RATING	OPT	CIRCUIT DESCRIPTION	CKT		
1	T-1LSL1	LSI	50 A	3	4240 VA	885 VA			1	20 A	LTG - EGRESS	2		
3						4900 VA	--		1	--	SPACE	4		
5							3900 VA	--	1	--	SPACE	6		
7	SPACE	--	--	1	--	--			1	--	SPACE	8		
9	SPACE	--	--	1		--	--		1	--	SPACE	10		
11	SPACE	--	--	1			--	--	1	--	SPACE	12		
13	SPACE	--	--	1	--	--			1	--	SPACE	14		
15	SPACE	--	--	1		--	--		1	--	SPACE	16		
17	SPACE	--	--	1			--	--	1	--	SPACE	18		
19	SPACE	--	--	1	--	--			1	--	SPACE	20		
21	SPACE	--	--	1		--	--		1	--	SPACE	22		
23	SPACE	--	--	1			--	--	1	--	SPACE	24		
25	SPACE	--	--	1	--	--			1	--	SPACE	26		
27	SPACE	--	--	1		--	--		1	--	SPACE	28		
29	SPARE	--	20 A	1			0 VA	--	1	--	SPACE	30		
31	SPARE	--	20 A	1	0 VA	0 VA			1	20 A	--	SPARE	32	
33	SPARE	--	20 A	1			0 VA	0 VA		1	20 A	--	SPARE	34
35	SPARE	--	20 A	1				0 VA	0 VA					36
37	SPARE	--	20 A	1	0 VA	0 VA				3	50 A	--	SPARE	38
39	SPARE	--	20 A	1			0 VA	0 VA						40
41	SPARE	--	20 A	1				0 VA	0 VA	1	20 A	--	SPARE	42
TOTAL LOAD:					5125 VA	4900 VA	3900 VA							
TOTAL AMPS:					19 A	18 A	14 A							
LOAD CLASSIFICATION				CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS							
MEG-NC				600 VA	100.00%	600 VA	CONNECTED LOAD: 13925 VA							
LTG				885 VA	125.00%	1107 VA	CONNECTED CURRENT: 17 A							
PWR-C				5000 VA	125.00%	6250 VA	DEMAND LOAD: 15397 VA							
Spare				6440 VA	100.00%	6440 VA	DEMAND CURRENT: 19 A							
PWR-NC				1000 VA	100.00%	1000 VA	CONSIDER 125% DEMAND: 19246 A							
							EQUIPMENT AMPS: 100 A							
							FEEDER AVAILABLE:							
							SPARE CAPACITY: 81 %							
							81 A							
OPTIONS:														
CIRCUIT BREAKER OPTIONS SUFFIX: 'S' OR 'ST' - PROVIDE SHUNT TRIP CIRCUIT BREAKER / 'G' OR 'GFCI' - PROVIDE GFCI CIRCUIT BREAKER / 'GFP' - PROVIDE GFP CIRCUIT BREAKER / 'ERMS' - ENERGY REDUCING MAINTENANCE SWITCH / 'ZSI' - ZONE SELECTIVE INTERLOCKING / 'L' - PROVIDE CIRCUIT BREAKER WITH LOCKING PROVISIONS / 'R' - PROVIDE CIRCUIT BREAKER WITH RED MARKING														
GENERAL REMARKS:														
A. PANEL AIC (INTERRUPTING) RATING SHALL BE MINIMUM 120% OF THE AVAILABLE SCC (SHORT CIRCUIT CURRENT).														

PANEL: 1LSL1													
LOCATION: EMERGENCY ELECTRICAL...						VOLTS: 208/120 WYE			MAINS TYPE: MCB				
SUPPLY FROM: T-1LSL1						PHASES: 3			MCB/MLO RATING: 100 A				
BRANCH: LIFE SAFETY						WIRES: 4			MCB OPTIONS: LSI				
SERVICE RATED: No						INTEGRAL SPD: Yes			SECTIONS: 1				
MOUNTING: SURFACE						AVAILABLE SCC (KA): 3.4			PANEL POLES: 42				
NEMA ENCLOSURE: NEMA 1													
CKT	CIRCUIT DESCRIPTION	OPT	RATING/POLES	A	B	C	POLES	RATING	OPT	CIRCUIT DESCRIPTION	CKT		
1	FACP EMER ELECTRICAL 151	R, L	20 A 1	1000 VA	1440 VA			1	20 A	--	PORTABLE GEN BATT ...	2	
3	AUTO DOOR VESTIBULE 100		20 A 1		600 VA	2500 VA					PORTABLE GEN BLOCK HEATER	4	
5	AUTO DOOR VESTIBULE 100		20 A 1				600 VA	2500 VA	2	30 A	--	6	
7	AUTO DOOR DISCHARGE...		20 A 1	600 VA	--				1	--	SPACE	8	
9	AUTO DOOR CORRIDOR 182		20 A 1		600 VA	--			1	--	SPACE	10	
11	AUTO DOOR CORRIDOR 124		20 A 1			600 VA	--	1	--	--	SPACE	12	
13	AP-1 OR CHARGE + RAD TEC...		20 A 1	100 VA	--			1	--	--	SPACE	14	
15	AP-2 NURSE STATION 176		20 A 1		100 VA	--		1	--	--	SPACE	16	
17	AP-3 NURSE STATION 176		20 A 1			100 VA	--	1	--	--	SPACE	18	
19	AP-4 PREP/PACK 140		20 A 1	100 VA	--			1	--	--	SPACE	20	
21	MAP-1 CHECK-IN 105		20 A 1		100 VA	--		1	--	--	SPACE	22	
23	MAP-2 SUPERVISOR OFFICE...		20 A 1			100 VA	--	1	--	--	SPACE	24	
25	AC IT 159		20 A 1	1000 VA	--			1	--	--	SPACE	26	
27	AC IT 159		20 A 1		1000 VA	--		1	--	--	SPACE	28	
29	SPARE	--	20 A 1				0 VA	--	1	--	--	SPACE	30
31	SPARE	--	20 A 1	0 VA	--			1	--	--	SPACE	32	
33	SPARE	--	20 A 1		0 VA	--		1	--	--	SPACE	34	
35	SPARE	--	20 A 1				0 VA	0 VA	2	30 A	--	36	
37	SPARE	--	20 A 1	0 VA	0 VA							38	
39	SPARE	--	20 A 1		0 VA	0 VA		1	20 A	--	SPARE	40	
41	SPARE	--	20 A 1			0 VA	0 VA	1	20 A	--	SPARE	42	
TOTAL LOAD:				4240 VA	4900 VA	3900 VA							
TOTAL AMPS:				36 A	41 A	33 A							
LOAD CLASSIFICATION				CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS						
MEG-NC				600 VA	100.00%	600 VA	CONNECTED LOAD: 13040 VA						
PWR-C				5000 VA	125.00%	6250 VA	CONNECTED CURRENT: 36 A						
Spare				6440 VA	100.00%	6440 VA	DEMAND LOAD: 14290 VA						
PWR-NC				1000 VA	100.00%	1000 VA	DEMAND CURRENT: 40 A						
							CONSIDER 125% DEMAND: 17863 A						
							EQUIPMENT AMPS: 100 A						
							FEEDER AVAILABLE:						
							80 %						
							SPARE CAPACITY:						
							60 A						
OPTIONS:													
CIRCUIT BREAKER OPTIONS SUFFIX: 'S' OR 'ST' - PROVIDE SHUNT TRIP CIRCUIT BREAKER / 'G' OR 'GFCI' - PROVIDE GFCI CIRCUIT BREAKER / 'GFP' - PROVIDE GFP CIRCUIT BREAKER / 'ERMS' - ENERGY REDUCING MAINTENANCE SWITCH / 'ZSI' - ZONE SELECTIVE INTERLOCKING / 'L' - PROVIDE CIRCUIT BREAKER WITH LOCKING PROVISIONS / 'R' - PROVIDE CIRCUIT BREAKER WITH RED MARKING													
GENERAL REMARKS:													
A. PANEL AIC (INTERRUPTING) RATING SHALL BE MINIMUM 120% OF THE AVAILABLE SCC (SHORT CIRCUIT CURRENT).													

PANEL: 1CH1											
LOCATION: EMERGENCY ELECTRICAL...						VOLTS: 480/277 WYE			MAINS TYPE: MCB		
SUPPLY FROM: ATS-C						PHASES: 3			MCB/MLO RATING: 225 A		
BRANCH: CRITICAL						WIRES: 4			MCB OPTIONS: LSI		
SERVICE RATED: No						INTEGRAL SPD: Yes			SECTIONS: 1		
MOUNTING: SURFACE						AVAILABLE SCC (kA): 25.4			PANEL POLES: 42		
NEMA ENCLOSURE: NEMA 1											
CKT	CIRCUIT DESCRIPTION	OPT	RATING/POLES	A	B	C	POLES	RATING	OPT	CIRCUIT DESCRIPTION	CKT
1	ISO-ORC1	--	60 A 2	5000 VA 17685...							2
3					5000 VA 20008...				3	125 A LSI T-1CL1	4
5	ISO-ORC2	--	60 A 2	5000 VA 0 VA		5000 VA 17892...			1	20 A -- SPARE	6
7					5000 VA 0 VA				1	20 A -- SPARE	8
9	ISO-ORC3	--	60 A 2			5000 VA 0 VA			1	20 A -- SPARE	10
11						5000 VA 0 VA			1	20 A -- SPARE	12
13	ISO-ORC4	--	60 A 2	5000 VA 0 VA		5000 VA 0 VA			1	20 A -- SPARE	14
15					5000 VA 0 VA				1	20 A -- SPARE	16
17	ISO-LASER	--	60 A 2	5000 VA 0 VA		5000 VA 0 VA			1	20 A -- SPARE	18
19									1	20 A -- SPARE	20
21	LTG - OPERATING ROOM 128		20 A 1		1323 VA 0 VA				1	20 A -- SPARE	22
23	LTG - OPERATING ROOM 131		20 A 1			1323 VA 0 VA			1	20 A -- SPARE	24
25	LTG - PROCEDURE ROOM 132		20 A 1	1323 VA 0 VA					1	20 A -- SPARE	26
27	LTG - PROCEDURE ROOM 135		20 A 1		1323 VA --				1	-- SPACE	28
29	LTG - STERILE PROCESSING		20 A 1			758 VA --			1	-- SPACE	30
31	LTG - SURGICAL SUPPORT		20 A 1	1005 VA --					1	-- SPACE	32
33	LTG - PRE/POST_PACU		20 A 1		1316 VA --				1	-- SPACE	34
35	LTG - NURSE STATION		20 A 1			650 VA --			1	-- SPACE	36
37	SPARE	--	20 A 1	0 VA 0 VA					2	60 A -- SPARE	38
39	SPARE	--	20 A 1		0 VA 0 VA						40
41	SPARE	--	20 A 1			0 VA 0 VA			1	20 A -- SPARE	42
TOTAL LOAD:				40013 VA	38970 VA	35623 VA					
TOTAL AMPS:				146 A	143 A	129 A					
LOAD CLASSIFICATION						PANEL TOTALS					
LTG		CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		CONNECTED LOAD:		11276 VA	
PWIR-C		1600 VA		125.00%		2000 VA		CONNECTED CURRENT:		138 A	
Spare		50000 VA		100.00%		50000 VA		DEMAND LOAD:		98244 VA	
REC		48033 VA		60.41%		29017 VA		DEMAND CURRENT:		118 A	
PWIR-NC		5952 VA		100.00%		5952 VA		CONSIDER 125% DEMAND:		122805 A	
								EQUIPMENT AMPS:		225 A	
								FEEDER AVAILABLE:			
								47 %			
								SPARE CAPACITY:		107 A	

D

C

PANEL: 1NH1															
LOCATION: ELECTRICAL 152					VOLTS: 480/277 WYE					MAINS TYPE: MCB					
SUPPLY FROM: MSB					PHASES: 3					MCB/MLO RATING: 400 A					
BRANCH: NORMAL					WIRES: 4					MCB OPTIONS: NONE					
SERVICE RATED: No					INTEGRAL SPD: No					SECTIONS: 1					
MOUNTING: SURFACE					AVAILABLE SCC (KA): 28.5					PANEL POLES: 42					
NEMA ENCLOSURE: NEMA 1															
CKT	CIRCUIT DESCRIPTION	OPT	RATING	POLES	A		B		C		POLES	RATING	OPT	CIRCUIT DESCRIPTION	CKT
1	ISO-ORN1	--	60 A	2	5000 VA	0 VA					1	20 A	--	SPARE	2
3							5000 VA	0 VA			1	20 A	--	SPARE	4
5	ISO-ORN2	--	60 A	2	5000 VA	997 VA			5000 VA	0 VA	1	20 A	--	SPARE	6
7							5000 VA	906 VA			1	20 A			8
9	ISO-ORN3	--	60 A	2					5000 VA	1284 VA	1	20 A		LTG - STAFF SPACES	10
11											1	20 A		LTG - OPERATING ROOMS	12
13	ISO-ORN4	--	60 A	2	5000 VA	1000 VA					1	20 A		LTG - NURSE STATION,...	14
15							5000 VA	427 VA			1	20 A			16
17									1937 VA	--	1	--	--	SPACE	18
19	09.2 /STERILIZERS 141		20 A	3	1937 VA	--					1	--	--	SPACE	20
21							1937 VA	--			1	--	--	SPACE	22
23	SPARE	--	20 A	1					0 VA	--	1	--	--	SPACE	24
25	SPARE	--	20 A	1	0 VA	--					1	--	--	SPACE	26
27	SPARE	--	20 A	1			0 VA	--			1	--	--	SPACE	28
29									1937 VA	--	1	--	--	SPACE	30
31	09.5 /STERILIZERS 141		20 A	3	1937 VA	--					1	--	--	SPACE	32
33							1937 VA	--			1	--	--	SPACE	34
35									3875 VA	0 VA					36
37	11.2 /STERILIZERS 141		20 A	3	3875 VA	0 VA					2	60 A	--	SPARE	38
39							3875 VA	0 VA							40
41	SPARE	--	20 A	1					0 VA	0 VA	2	20 A	--	SPARE	42
TOTAL LOAD:					24747 VA		24083 VA		19034 VA						
TOTAL AMPS:					92 A		90 A		69 A						
LOAD CLASSIFICATION															
					CONNECTED LOAD		DEMAND FACTOR		ESTIMATED DEMAND		PANEL TOTALS				
					4615 VA		125.00%		5769 VA		CONNECTED LOAD: 62051 VA				
PIWR-C					17436 VA		125.00%		21795 VA		CONNECTED CURRENT: 75 A				
Spare					40000 VA		100.00%		40000 VA		DEMAND LOAD: 67564 VA				
											DEMAND CURRENT: 81 A				
											CONSIDER 125% DEMAND: 84455 A				
											EQUIPMENT AMPS: 400 A				
											FEEDER AVAILABLE:				
											SPARE CAPACITY: 79 %				
											319 A				
OPTIONS:															
CIRCUIT BREAKER OPTIONS SUFFIX: 'S' OR 'ST' - PROVIDE SHUNT TRIP CIRCUIT BREAKER / 'G' OR 'GFCI' - PROVIDE GFCI CIRCUIT BREAKER / 'GFP' - PROVIDE GFP CIRCUIT BREAKER / 'ERMS' - ENERGY REDUCING MAINTENANCE SWITCH / 'ZSI' - ZONE SELECTIVE INTERLOCKING / 'L' - PROVIDE CIRCUIT BREAKER WITH LOCKING PROVISIONS / 'R' - PROVIDE CIRCUIT BREAKER WITH RED MARKING															
GENERAL REMARKS:															
A. PANEL AIC (INTERRUPTING) RATING SHALL BE MINIMUM 120% OF THE AVAILABLE SCC (SHORT CIRCUIT CURRENT).															

B

A

PANEL: 1NL3														
LOCATION: ELECTRICAL 152					VOLTS: 208/120 WYE					MAINS TYPE: MLO				
SUPPLY FROM: 1NL1					PHASES: 3					MCB/MLO RATING: 150 A				
BRANCH: NORMAL					WIRES: 4					MCB OPTIONS: N/A				
SERVICE RATED: No					INTEGRAL SPD: No					SECTIONS: 1				
MOUNTING: SURFACE					AVAILABLE SCC (KA): 8.9					PANEL POLES: 54				
NEMA ENCLOSURE: NEMA 1														
CKT	CIRCUIT DESCRIPTION	OPT	RATING	POLES	A	B	C	POLES	RATING	OPT	CIRCUIT DESCRIPTION	CKT		
1	EF-1 ROOF		15 A	1	384 VA	288 VA						2		
3	EF-2 ROOF		15 A	1		768 VA	288 VA			3	15 A	P-1	4	
5	EF-3 ROOF		25 A	2	915 VA	552 VA	915 VA	288 VA				6		
7												8		
9	EF-4 ROOF		15 A	1		192 VA	552 VA			3	15 A	P-2	10	
11	SSCU-146 WATER / BOILER / VACUUM PUMP 146		25 A	2	1581 VA	552 VA		1581 VA	552 VA			12		
13							915 VA	552 VA		3	15 A	P-3	14	
15	SSCU-148 MED GAS 148		15 A	2				915 VA	552 VA			16		
17												18		
19	SSCU-152 ELECTRICAL 152		15 A	2	915 VA	793 VA						20		
21						915 VA	793 VA			3	15 A	P-6	22	
23	ET-1 METER DI WATER /...		20 A	1			280 VA	793 VA				24		
25	DI LEAK DETECTOR DI WATE...		20 A	1	180 VA	793 VA						26		
27	DI MONITOR DI WATER /...		20 A	1		180 VA	793 VA			3	15 A	P-7	28	
29	REC DI WATER / BOILER /...		20 A	1			180 VA	793 VA				30		
31	DI DI WATER / BOILER /...		20 A	1	1380 VA	37 VA						32		
33	P-146 DI WATER / BOILER /...		20 A	1		360 VA	37 VA			2	15 A	SSAH-146 DI WATER / BOILER / VACUUM PUMP 146	34	
35	P-148 MED GAS 148		20 A	1			360 VA	34 VA				36		
37	P-152 ELECTRICAL 152		20 A	1	360 VA	34 VA						38		
39	WS-1		20 A	1		300 VA	35 VA			2	15 A	SSAH-152 ELECTRICAL 152	40	
41	SPARE	--	20 A	1			0 VA	35 VA				42		
43	SPARE	--	20 A	1	0 VA	0 VA			1	20 A	--	SPARE	44	
45	SPARE	--	20 A	1		0 VA	0 VA		1	20 A	--	SPARE	46	
47	SPARE	--	20 A	1				0 VA	0 VA	1	20 A	--	SPARE	48
49	SPARE	--	20 A	1	0 VA	0 VA			1	20 A	--	SPARE	50	
51	SPARE	--	20 A	1		0 VA	0 VA		1	20 A	--	SPARE	52	
53	SPARE	--	20 A	1			0 VA	0 VA	1	20 A	--	SPARE	54	
TOTAL LOAD:					8765 VA	6680 VA	7278 VA							
TOTAL AMPS:					74 A	56 A	61 A							
LOAD CLASSIFICATION														
CONNECTED LOAD					DEMAND FACTOR			ESTIMATED DEMAND			PANEL TOTALS			
MEQ-NC					7155 VA			100.00%			CONNECTED LOAD: 22724 VA			
REC					1620 VA			100.00%			CONNECTED CURRENT: 1620 VA			
MTR					13849 VA			104.29%			DEMAND LOAD: 23318 VA			
PWR-NC					100 VA			100.00%			DEMAND CURRENT: 65 A			
CONSIDER 125% DEMAND: 29148 A														
EQUIPMENT AMPS: 150 A														
FEEDER AVAILABLE:														
SPARE CAPACITY: 56 %														
54 A														

E704

1 High Impact (Tier 1)	2 Medium Impact (Tier 2)	3 Low Impact (Tier 3)
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Sharonne Brown - Electrical Designer	Sharonne Brown	09/15/2023
Name - Title	Signature	Date

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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
8.7.1 [F16]?	Furnished as built drawings for electric power systems within 30 days of system acceptance.	☐ Complies ☒ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
8.7.2 [F17]?	Furnished O&M Instructions for systems and equipment to the building owner or designated representative.	☐ Complies ☒ Does Not ☐ Not Observable ☐ Not Applicable	Requirement will be met.
9.2.2.3 [F18]?	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	☐ Complies ☒ Does Not ☐ Not Observable ☐ Not Applicable	See the interior Lighting fixture schedule for values.

1 High Impact (Tier 1)
2 Medium Impact (Tier 2)
3 Low Impact (Tier 3)

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Section # & Req. ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
8.4.2 [E110]	At least 50% of all 125 volt 15- and 20-amp receptacles are controlled by an automatic control device.	☐ Complies ☒ Does not ☐ Not Observable ☐ Not Applicable	
9.4.1.1 [E113]	Automatic control requirements prescribed in Table 9.4.1, for the appropriate space type, are installed. Manual lighting controls (labeled as 'REO') and optional choice controls (labeled as 'ADD1' and 'ADD2') are implemented.	☐ Complies ☒ Does not ☐ Not Observable ☐ Not Applicable	Requirement will be met. Location on plans/spec: E700 ELECTRICAL SCHEDULES/LIGHTING CONTROL SEQUENCE OF OPERATIONS
9.4.1.1 [E12]	Independent lighting controls installed per approved lighting plans and all manual controls readily accessible and visible to occupants.	☐ Complies ☒ Does not ☐ Not Observable ☐ Not Applicable	Requirement will be met. Location on plans/spec: E700 ELECTRICAL SCHEDULES
9.4.1.2 [E111]	Parking garage lighting is equipped with required lighting controls and daylight transition zone lighting.	☐ Complies ☒ Does not ☐ Not Observable ☐ Not Applicable	Location on plans/spec: NA
9.4.1.3f [E113]	Daylight areas under skylights and roof monitors that have more than 150 W combined input power for general lighting are controlled by photocontrols.	☐ Complies ☒ Does not ☐ Not Observable ☐ Not Applicable	Location on plans/spec: NA
9.4.1.3 [E4]	Separate lighting control devices for specific uses installed per approved lighting plans.	☐ Complies ☒ Does not ☐ Not Observable ☐ Not Applicable	Location on plans/spec: NA
9.6.2 [E18]	Additional interior lighting power is provided for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	☐ Complies ☒ Does not ☐ Not Observable ☐ Not Applicable	Location on plans/spec: NA

1 High Impact (Tier 1)
2 Medium Impact (Tier 2)
3 Low Impact (Tier 3)

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E800



LIGHTING CONTROL PLAN GENERAL NOTES:
(LIGHTING CONTROL GENERAL NOTES SHALL APPLY TO ALL SHEETS)

- A. LIGHTING CONTROL DEVICES ARE INDICATED WITHOUT CONNECTION TO FIXTURE(S) BEING CONTROLLED WITHIN EACH AREA. CONNECT CONTROL DEVICE TO SERVICE LIGHT FIXTURE(S) LOCATED WITHIN SAME AREA. WHERE LIGHT FIXTURES ARE INDICATED WITH A SUBSCRIPT LETTER IDENTIFYING INDIVIDUAL LIGHTING CONTROL ZONES. CONTROL DEVICE SERVING AREA WITH MATCHING SUBSCRIPT SHALL CONTROL CORRESPONDING LIGHT FIXTURES.
- B. LIGHTING CONTROL DEVICE MOUNTING HEIGHTS ARE NOT INDICATED ON ELECTRICAL FLOOR PLANS. CONTRACTOR SHALL COORDINATE EXACT DEVICE LOCATIONS AND MOUNTING HEIGHTS WITH ARCHITECTURAL INTERIOR ELEVATIONS. WHERE DEVICE MOUNTING HEIGHTS ARE NOT INDICATED PER ARCHITECT, MOUNT DEVICES AT HEIGHT INDICATED IN ELECTRICAL PROJECT SPECIFICATIONS.
- C. CONTRACTOR SHALL COORDINATE ALL LIGHTING CONTROL DEVICE ROUGH-IN LOCATIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS TO ASSURE COMPATIBILITY WITH FINISHES SPECIFIED ON THE ARCHITECTURAL DRAWINGS. COORDINATE ROUTING OF ALL ELECTRICAL BRANCH CIRCUITS AND CONDUIT WITH OTHER TRADES TO ALLOW FOR SERVICE AND MAINTENANCE AND TO MINIMIZE THE USE OF ACCESS PANELS. WHERE ACCESS PANELS CANNOT BE AVOIDED, WORK TO INSTALL PANELS IN LOCATIONS ACCEPTABLE TO ARCHITECT.
- D. WHERE DAYLIGHT HARVESTING ZONES (SIDEWALK ZONES AND/OR TOP/LIT ZONES) ARE INDICATED ON PLANS, PROVIDE PHOTOCELLS AND ANY OTHER EQUIPMENT NECESSARY TO ALLOW FOR DAYLIGHT HARVESTING WITHIN AREA. PROGRAM SYSTEM TO UTILIZE AVAILABLE DAYLIGHT AND DIM TO MAINTAIN THE INDICATED SET POINT VALUE. DAYLIGHT HARVESTING CONTROLS SHALL NOT SWITCH LUMINAIRES OFF BUT RATHER DIM TO MINIMUM DIM LEVEL.
- E. REFER TO DETAILS, SCHEDULES, AND SYMBOL LEGENDS FOR ADDITIONAL REQUIREMENTS.

LIGHTING CONTROL SYSTEM GENERAL NOTES:

- A. SUBMIT MANUFACTURER INTERCONNECTION DIAGRAMS INDICATING DEVICE QUANTITIES, LOCATIONS, AND ASSOCIATED CONTROLS CABLING FOR APPROVAL.
- B. WHERE TOTAL SYSTEM COST (INCLUDING INSTALLATION) OF A WIRELESS AND/OR LUMINAIRE LEVEL LIGHTING CONTROL SYSTEM IS LESSER THAN A WIRED SYSTEM WHILE PROVIDING THE SAME FUNCTIONALITY, THAT SYSTEM MAY BE PROVIDED.
- C. SUBMIT DOCUMENTATION CONFIRMING CONTROL SYSTEM'S ABILITY TO COMPLY WITH SPECIFIED LIGHTING CONTROL SEQUENCE OF OPERATIONS. CLEARLY IDENTIFY ANY CONTROL DEVIATIONS NECESSARY DUE TO SUBMITTED CONTROL SYSTEMS FUNCTIONALITY, ALONG WITH PROPOSED SEQUENCE OF OPERATIONS.
- D. DEVICE QUANTITIES NOT INDICATED. PROVIDE TYPE AND QUANTITY OF DEVICES AS REQUIRED TO PROVIDE COMPLETE COVERAGE OF SPACE AND INTENDED SYSTEM OPERATION.
- E. REFER TO LIGHTING CONTROL PLAN FOR WALL DEVICE TYPES, QUANTITIES, AND LOCATIONS. REFER TO LIGHTING CONTROL WALL DEVICE SCHEDULES FOR WALL DEVICE CONFIGURATION, OPERATION, AND LABELING.
- F. WHERE PHOTOCELLS ARE BEING UTILIZED FOR DAYLIGHT HARVESTING, PROVIDE ADDITIONAL COMPONENTS AS NEEDED TO CONTROL LIGHTING WITHIN DAYLIGHT ZONES INDEPENDENT OF GENERAL AREA LIGHTING WITHIN SPACE. PROVIDE MINIMUM OF 11 PHOTOCELL DEVICES PER DAYLIGHT ZONE.
- G. UNLESS NOTED OTHERWISE, LIGHTING SHALL UTILIZE CONTINUOUS DIMMING AND EXTERIOR LIGHTING SHALL UTILIZE MULTI-LEVEL STEP DIMMING. COORDINATE DIMMER TYPE (FORWARD PHASE, REVERSE PHASE, 0-10V) AND DIMMER COMPATIBILITY WITH SUBMITTED LUMINAIRE AND LIGHTING CONTROL MANUFACTURER.
- H. PROVIDE ALL 0-10V CONTROL WIRING AND SYSTEM PROGRAMMING NECESSARY FOR THE DIMMING AND CONTROL OF LUMINAIRES AS SPECIFIED IN THE LIGHTING CONTROL SEQUENCE OF OPERATIONS.
- I. UNDERCABINET LIGHTING SHALL BE SWITCHED SEPARATELY FROM MAIN ROOM LIGHTING. UNDERCABINET LIGHTING SHALL BE CONTROLLED BY THE AUTO OFF FUNCTION OF OCCUPANCY SENSORS.
- J. WHERE PHOTOCELLS ARE UTILIZED FOR DAYLIGHT HARVESTING, TARGET ILLUMINANCE LEVELS SHALL BE MEASURED AT WORK PLANE OF PRIMARY TASK IN SPACE.
- K. PROVIDE FUNCTIONAL TESTING OF LIGHTING CONTROLS THAT COMPLIES WITH IEC 2018 REQUIREMENTS. LIGHTING CONTROL FUNCTIONAL TESTING INCLUDES TESTING FOR PROPER CALIBRATION, ADJUSTMENT, PROGRAMMING AND WORKING CONDITION. TESTING INDIVIDUAL SHALL NOT BE INVOLVED WITH PROJECT DESIGN OR CONSTRUCTION AND MUST PROVIDE CERTIFYING DOCUMENT THAT LIGHTING CONTROLS MEET THE PERFORMANCE CRITERIA.

SHEET NOTES:

1. LOCATION RESERVED FOR LIGHTING CONTROL SYSTEM HEAD-END EQUIPMENT.

INSTALL GREEN INSULATED GROUND WIRE WITH LIGHTING, RECEPTACLE AND EQUIPMENT BRANCH CIRCUITS.

INSTALL INDIVIDUAL (DEDICATED) NEUTRAL CONDUCTORS FOR EACH 120V OR 277V PHASE CONDUCTOR SERVED FROM A SINGLE POLE CIRCUIT BREAKER

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Novant ASC Leland

SHEET NAME
FIRST FLOOR PLAN - LIGHTING CONTROL

SHEET NUMBER

EC201

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SHEET NOTES:
1. PROVIDE WEATHER RESISTANT, EXTERIOR NOTIFICATION DEVICE FOR FIRE SPRINKLER SERVICE. COORDINATE WITH FIRE SPRINKLER CONTRACTOR.

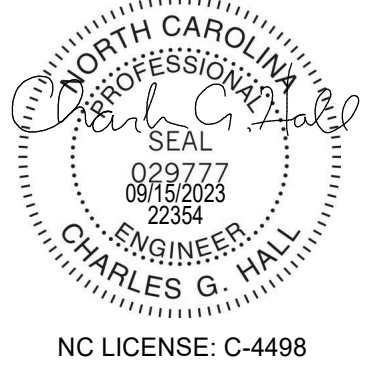
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Novant ASC Leland

SHEET NAME
FIRST FLOOR PLAN - FIRE ALARM

SHEET NUMBER

EF200

CONSTRUCTION DOCUMENTS

Novant ASC Leland

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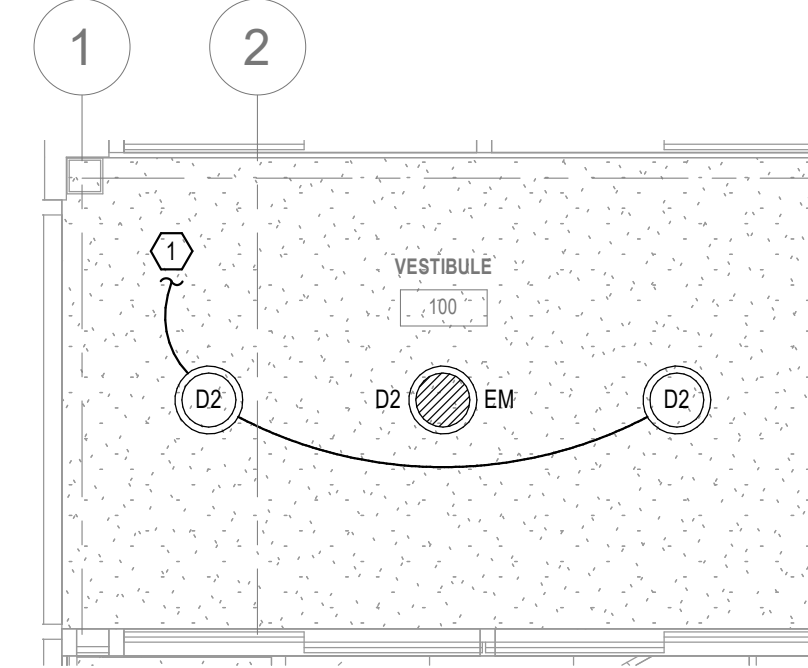
A1 FIRST LEVEL - LIGHTING
3/16" = 1'-0"

LIGHTING GENERAL NOTES:

- (LIGHTING GENERAL NOTES SHALL APPLY TO ALL SHEETS)
- A. REFER TO DETAILS, SCHEDULES, AND SYMBOL LEGENDS FOR ADDITIONAL REQUIREMENTS.
 - B. REFER TO LUMINAIRE SCHEDULE FOR LUMINAIRE DETAILS.
 - C. FIXTURES DESIGNATED EM AND EXIT LIGHTS SHALL BE SERVED FROM A COMMON 20A 277V LIFE SAFETY BRANCH CIRCUIT. EXIT LIGHTS SHALL BE ILLUMINATED 24 HOURS. FIXTURES DESIGNATED EM SHALL BE SWITCHED BY CONTROLS INDICATED. PROVIDE EMERGENCY LIGHTING CONTROL RELAYS PER SPECIFICATIONS FOR EMERGENCY LIGHTING OVERRIDE. REFER TO MANUFACTURER'S WIRING DIAGRAMS FOR INSTALLATION INSTRUCTIONS. SERVE ALL EGRESS AND EXIT LIGHTING FROM CIRCUIT 1L5H1-2.

SHEET NOTES:

- 1. SERVE NORMAL LIGHTING IN VESTIBULE 100 FROM NORMAL LIGHTING BRANCH CIRCUIT SERVING WAITING 101.
- 2. PROVIDE MULE LIGHTING MODEL CEPS41-3-W-1-52001 (OR EQUIVALENT 550W BATTERY INVERTER) TO SERVE SELECT LUMINAIRES WITHIN ADJACENT OPERATING/PROCEDURE ROOM. REFER TO SHEET NOTE 3 FOR LUMINAIRE SERVED. SERVE INVERTER FROM CRITICAL LIGHTING BRANCH CIRCUIT SERVING ADJACENT OPERATING/PROCEDURE ROOM. MOUNT INVERTER ON WALL ABOVE ACCESSIBLE CEILING.
- 3. SERVE TYPE H1 SURGICAL LUMINAIRE FROM BATTERY INVERTER LOCATED IN CORRIDOR. REFER TO SHEET NOTE 2 FOR ADDITIONAL DETAILS.



B5 ENLARGED PLAN - FIRST LEVEL - LIGHTING - VESTIBULE
3/8" = 1'-0"

INSTALL GREEN INSULATED GROUND WIRE WITH LIGHTING, RECEPTACLE AND EQUIPMENT BRANCH CIRCUITS.

INSTALL INDIVIDUAL (DEDICATED) NEUTRAL CONDUCTORS FOR EACH 120V OR 277V PHASE CONDUCTOR SERVED FROM A SINGLE POLE CIRCUIT BREAKER

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Novant ASC Leland

SHEET NAME
FIRST FLOOR PLAN - LIGHTING

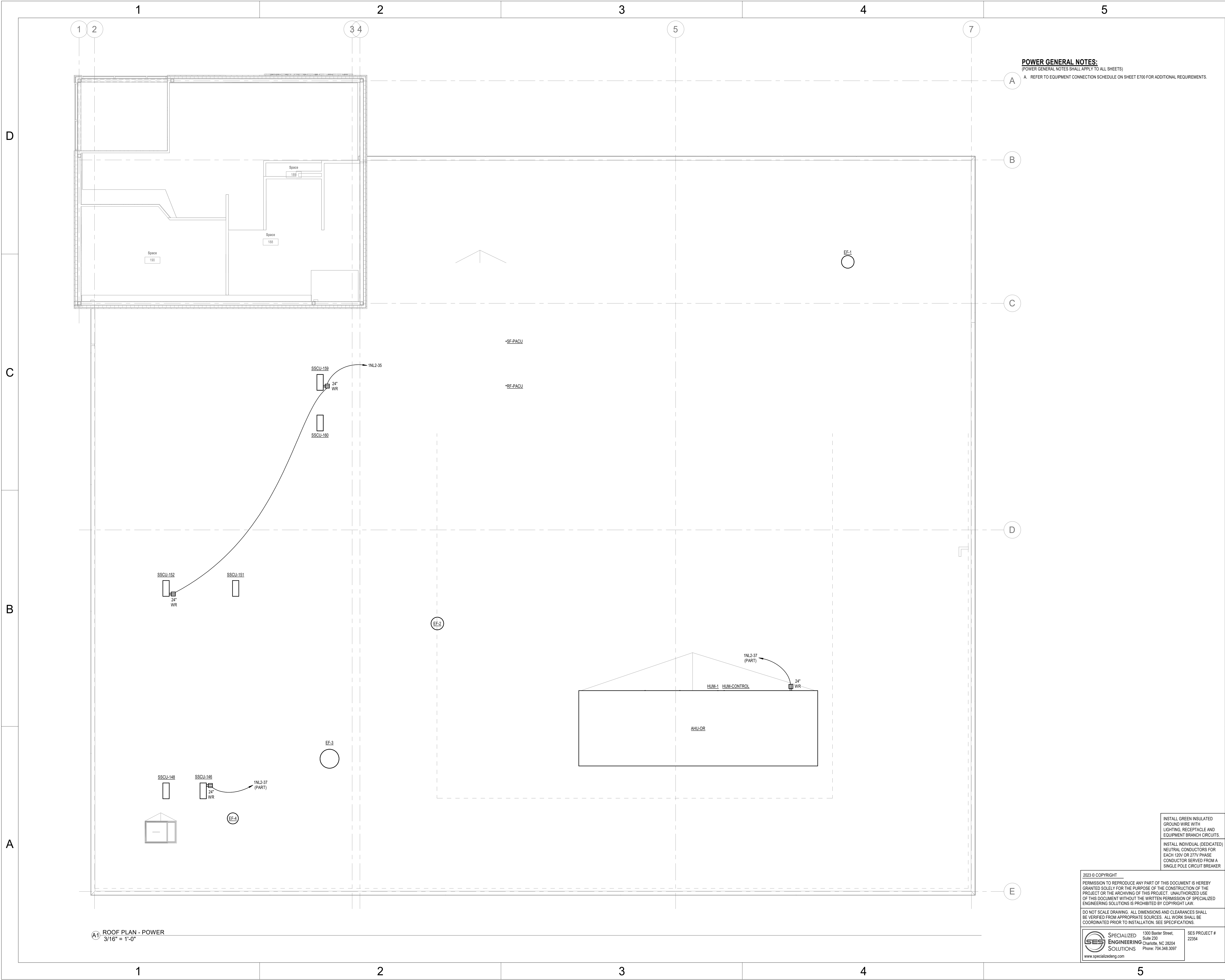
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ISSUE FOR:
CONSTRUCTION DOCUMENTS

REVISIONS:		
Revision Number	Revision Description	Revision Date

ISSUE: 09/15/23
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DRAWN BY: SUB

A/E # : 22354

Novant ASC Leland

SHEET NAME
ROOF PLAN - POWER

SHEET NUMBER

EP202

INSTALL GREEN INSULATED
GROUND WIRE WITH
LIGHTING, RECEPTACLE AND
EQUIPMENT BRANCH CIRCUITS.

INSTALL INDIVIDUAL (DEDICATED)
NEUTRAL CONDUCTORS FOR
EACH 120V OR 277V PHASE
CONDUCTOR SERVED FROM A
SINGLE POLE CIRCUIT BREAKER

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SES PROJECT #
22354

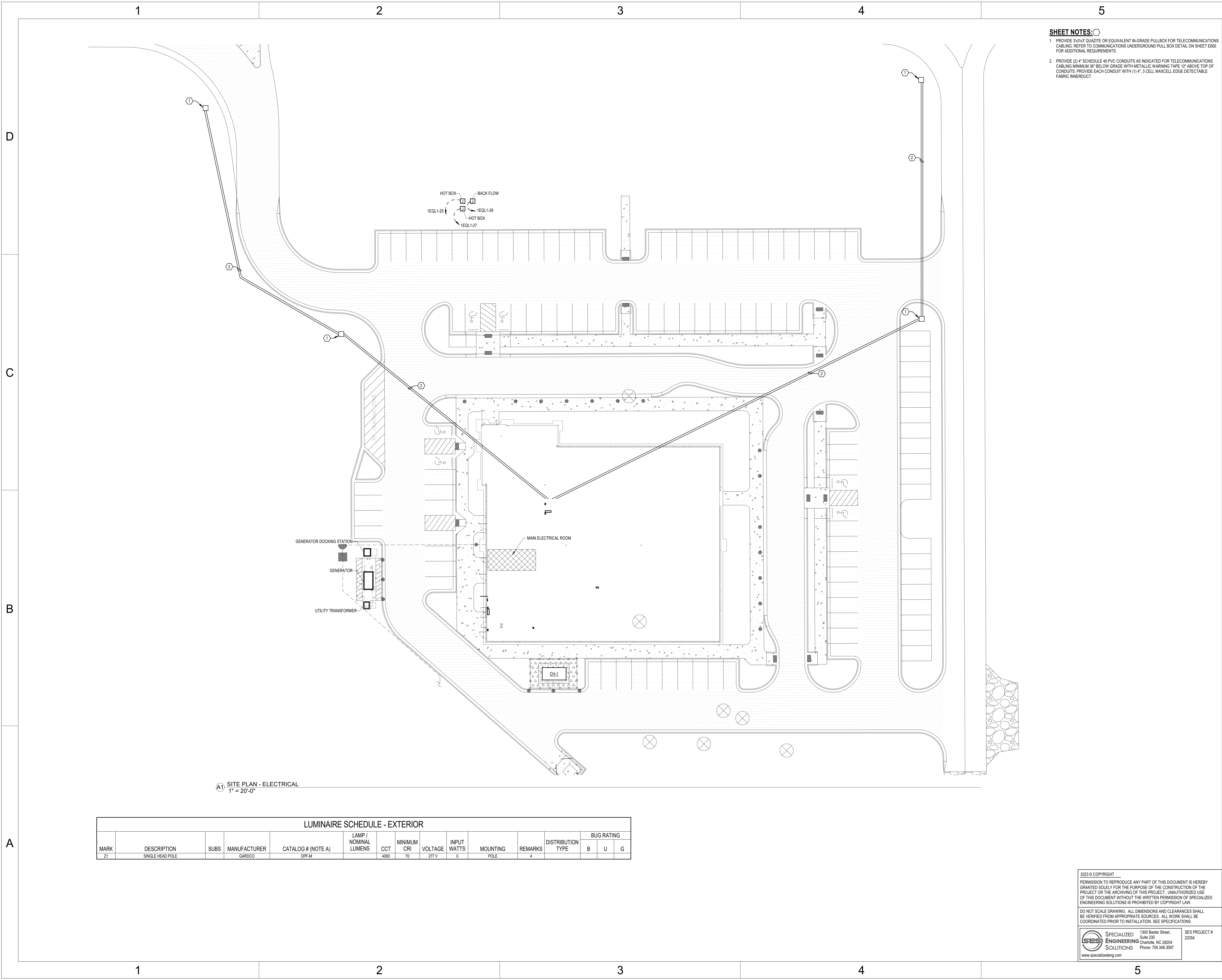
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A1 SITE PLAN - ELECTRICAL
1" = 20'-0"

LUMINAIRE SCHEDULE - EXTERIOR															
MARK	DESCRIPTION	SUBS	MANUFACTURER	CATALOG # (NOTE A)	LAMP / NOMINAL LUMENS	CCT	MINIMUM CRI	VOLTAGE	INPUT WATTS	MOUNTING	REMARKS	DISTRIBUTION TYPE	BUG RATING		
													B	U	G
Z1	SINGLE HEAD POLE		GARCOO	OFF-M		4000	70	277 V	0	POLE	4				

- SHEET NOTES:**
1. PROVIDE 3"x3"x3' QUARTZITE OR EQUIVALENT IN-GRADE PULLBOX FOR TELECOMMUNICATIONS CABLING. REFER TO COMMUNICATIONS UNDERGROUND PULL BOX DETAIL ON SHEET E600 FOR ADDITIONAL REQUIREMENTS.
 2. PROVIDE (2) 4" SCHEDULE 40 PVC CONDUITS AS INDICATED FOR TELECOMMUNICATIONS CABLING MINIMUM 36" BELOW GRADE WITH METALLIC WARNING TAPE 12" ABOVE TOP OF CONDUITS. PROVIDE EACH CONDUIT WITH (1) 4" 3 CELL MAXCELL EDGE DETECTABLE FABRIC INNERDUCT.



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SHEET NAME
ELECTRICAL SITE PLAN

SHEET NUMBER

ES001

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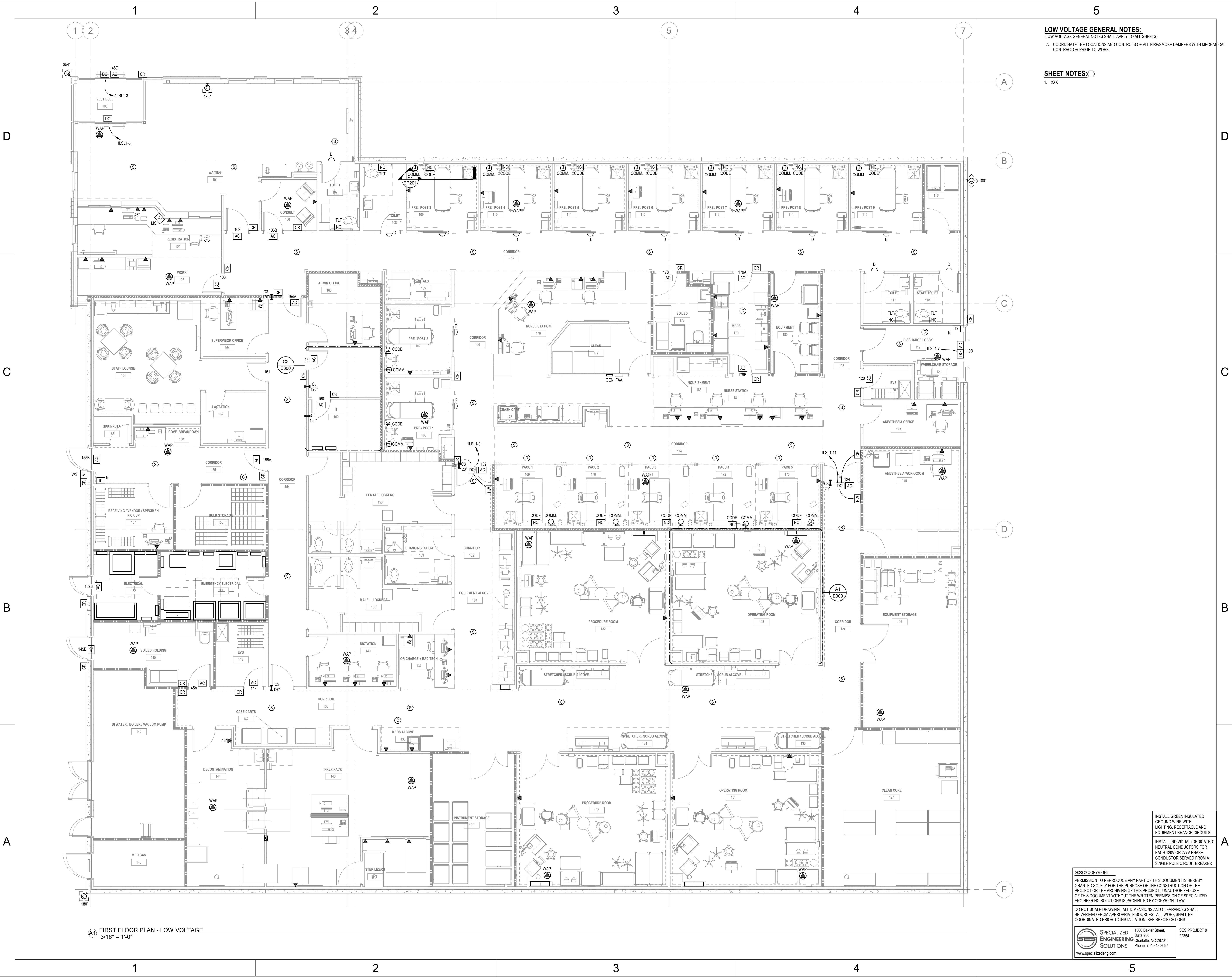
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LOW VOLTAGE GENERAL NOTES:
(LOW VOLTAGE GENERAL NOTES SHALL APPLY TO ALL SHEETS)
A. COORDINATE THE LOCATIONS AND CONTROLS OF ALL FIRE/SMOKE DAMPERS WITH MECHANICAL CONTRACTOR PRIOR TO WORK.

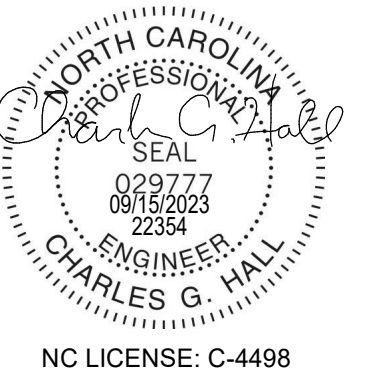
SHEET NOTES:
1. XXX

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Novant ASC Leland

SHEET NAME
FIRST FLOOR PLAN - LOW
VOLTAGE

SHEET NUMBER

EV201

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