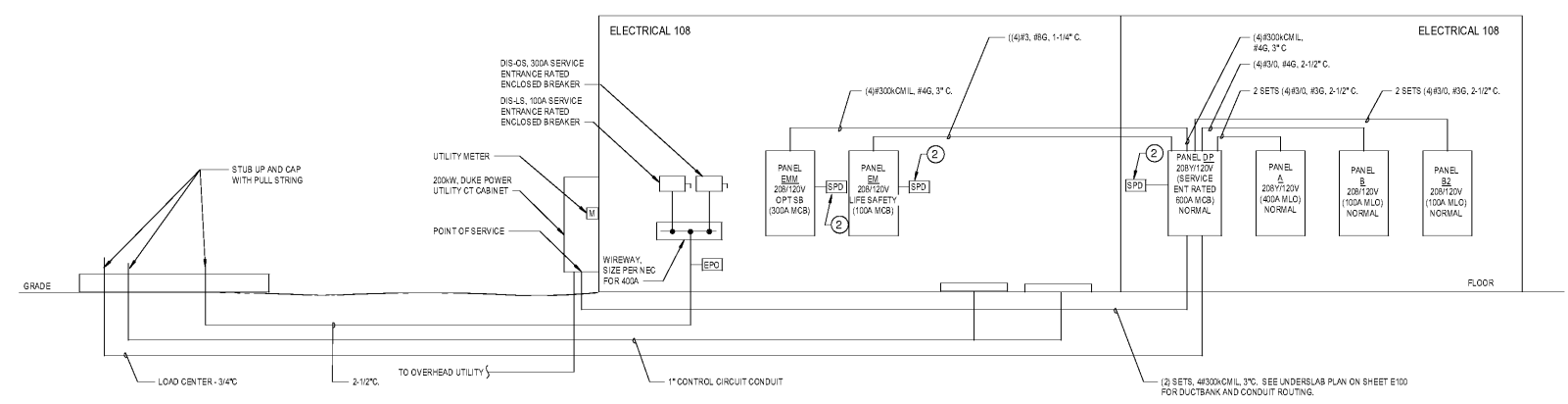
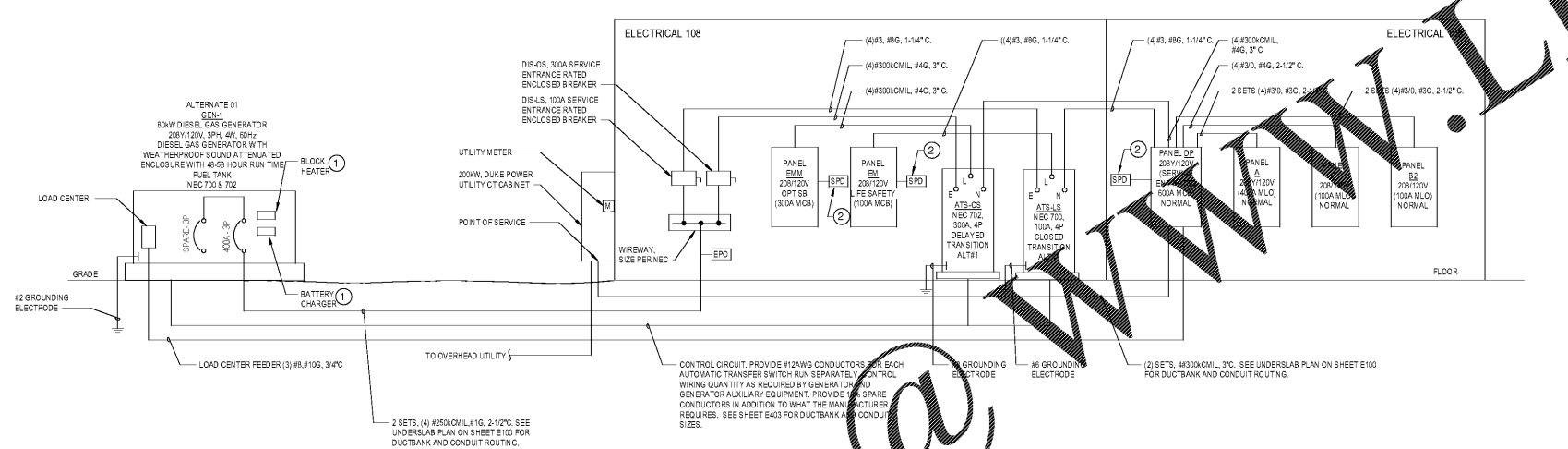




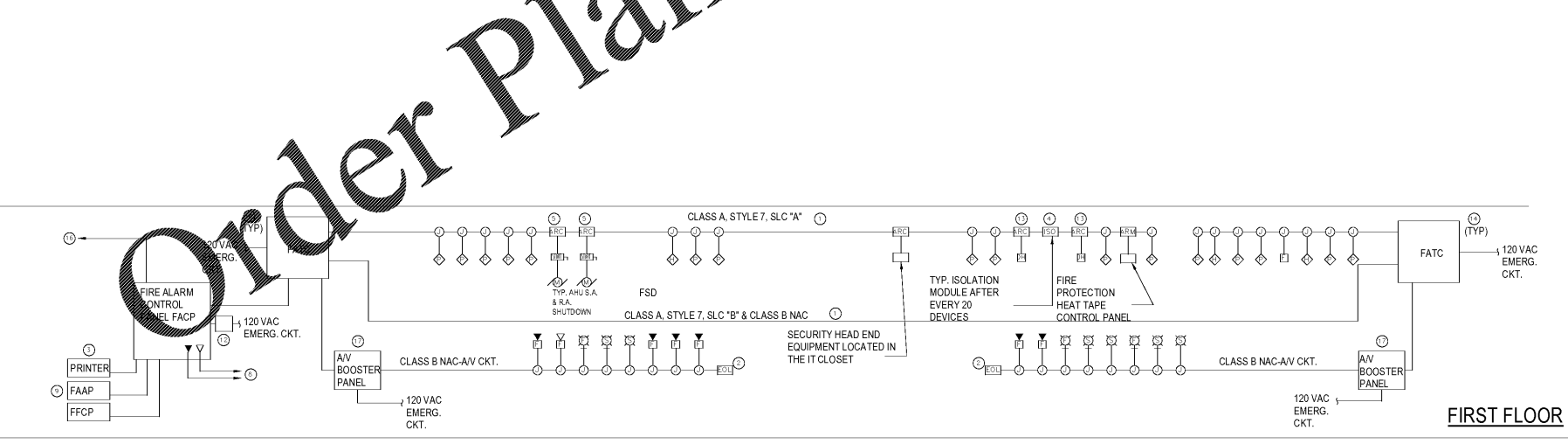
JACKSON COUNTY
ANIMAL RESCUE CENTER AND GREEN ENERGY
PARK
DILLSBORO, NORTH CAROLINA



1 POWER RISER DIAGRAM (BASE)
SCALE: 1/2" = 1'-0"



2 POWER RISER DIAGRAM (WITH ALTERNATE 1)
SCALE: N.T.S.



3 FIRE ALARM RISER DIAGRAM
SCALE: 1/2" = 1'-0"

GENERAL NOTES

- A. BASE BID SHALL INCLUDE BATTERY BACKUP FOR EGRESS LIGHTING AND FIRE ALARM SYSTEM. EQUIPMENT PADS FOR GENERATOR AND AUTOMATIC TRANSFER SWITCHES, RACEWAYS, WIRE TRAYS, DISCONNECTS, AND SURGE PROTECTORS. ALTERNATE #1 SHALL INCLUDE GENERATOR, AUTOMATIC TRANSFER SWITCHES AND CONDUCTORS.

DRAWING NOTES

- 1 PROVIDE 2#12, 1#12 GROUND IN 3/4" CONDUIT TO GENERATOR LOAD CENTER. SEE SCHEDULE FOR GENERATOR LOAD SUMMARY SHEET #E003 FOR ADDITIONAL INFORMATION.
- 2 DUAL U.L. LISTED SURGE PROTECTORS AND SECONDARY CONDUCTORS. REFER IEEE CATEGORY C. DESIGN MAKE IS CURRENT TECHNOLOGY.

FIRE ALARM GENERAL NOTES:

- A. REFER TO PLANS FOR EXACT QUANTITIES AND LOCATIONS FOR ALL DEVICES.
- B. REFER TO FIRE ALARM MATRIX ON THIS DRAWING FOR ADDITIONAL INFORMATION.
- C. DO NOT COMBINE LOOPS AT FACP INTO COMMON LOOP(S). EACH LOOP SHALL BE A DEDICATED LOOP FOR A DESIGNATED FLOOR.
- D. PROVIDE A SEPARATE CLASS A, ADDRESSABLE SLC LOOP (SIGNALING LINE CIRCUIT) FOR EACH FLOOR DIVIDED INTO 88-LOOP 'A' & SUB-LOOP 'B' PER FLOOR.
- E. DUCT MOUNTED SMOKE DETECTOR(S) SHALL BE INSTALLED AS INDICATED ON MECHANICAL DRAWINGS. SAMPLING TUBES SHALL BE INSTALLED FACING AIR STREAMS WITH STOPPER ON OPPOSITE END. TUBES EXCEEDING 36" SHALL BE SUPPORTED AT THE NEAR BY EXTENDING THROUGH THE DUCT WALL AND SEALING.
- F. PROVIDE ISOLATION MODULES FOR THE OUTGOING AND INCOMING LOOPS AT THE FIRE ALARM CONTROL PANEL. TYPICAL FOR EACH FLOOR AND EACH FACP.
- G. 120 VAC EMERGENCY CIRCUIT SHALL BE DEDICATED CIRCUITS TO EACH PANEL OR POWER SUPPLY. PROVIDE LOCK-ON DEVICE ON CIRCUIT BREAKER MEETING NEC REQUIREMENTS.
- H. A SMOKE DETECTOR IS REQUIRED WITHIN 15 FEET OF THE FACP, RAAP, BOOSTER POWER SUPPLIES AND ALL OTHER CONTROL EQUIPMENT.

FIRE ALARM DRAWING NOTES:

- 1 CLASS A STYLE 7 ADDRESSABLE LOOP, SIGNALING LINE CIRCUIT (SLC) PROVIDE MIN #16 SHIELDED TWISTED PAIR (STP) IN 3/4" EMT (MIN).
- 2 CLASS B NOTIFICATION APPLIANCE CIRCUIT (NAC) PROVIDE #14 CONDUCTORS IN 3/4" EMT (MIN). WIRE QUANTITIES TO BE DETERMINED BY THE INSTALLER. FOR INCREASED SURVIVABILITY, THE NAC DEVICES AND CIRCUITS ON EACH FLOOR SHALL BE DIVIDED IN HALF AND FED FROM SEPARATE RISERS FROM OPPOSITE ENDS OF THE FLOOR.
- 3 PROVIDE SYSTEM EVENT PRINTER MOUNTED ON SHELF ADJACENT TO FACP. SHELF SHALL HAVE METAL ADJUSTABLE WALL BRACKETS, METAL ARMS AND TWO (2) 3/4" X 18" WOODEN SHELVES. INSTALL PRINTER ON UPPER SHELF, PAPER ON LOWER.
- 4 PROVIDE ISOLATION MODULES (IOM) AS REQUIRED IN ACCORDANCE WITH SPECIFICATIONS. LOCATE IN CORRIDORS AT SAME HEIGHT AS ALL DEVICES (TYPICAL).
- 5 PROVIDE ADDRESSABLE RELAY CONTROL MODULE (ARC) AT MECHANICAL EQUIPMENT CONTROLLER. CONNECT SUCH THAT NOTED EQUIPMENT SHALL SHUT DOWN UPON RECEIPT OF ALARM. LOCATE WITHIN 3 FT OF EQUIPMENT CONTROLLER PER NFPA REQUIREMENTS.
- 6 SMOKE DAMPERS ASSOCIATED WITH MECHANICAL EQUIPMENT REQUIRED TO BE CLOSED DURING AN ALARM CONDITION SHALL BE CONNECTED SUCH THAT THEY CLOSE UPON RECEIPT OF AN ALARM.
- 7 PROVIDE REMOTE ALARM INDICATOR LAMP AND TEST SWITCH FOR EACH DUCT MOUNTED SMOKE DETECTOR. LOCATE IN NEAREST CORRIDOR OR PUBLIC AREA.
- 8 PROVIDE ONE (1) ANALOG TELEPHONE LINES (POTS) FOR OFFSITE MONITORING AND CELLULAR SERVICE AS THE ALTERNATE COMMUNICATION TECHNOLOGY. COORDINATE REQUIREMENT WITH OWNER, TELECOMMUNICATIONS CONTRACTOR AND RECEIVING STATION.
- 9 PROVIDE REMOTE FIRE ALARM ANNUNCIATOR PANEL (FAAP). COORDINATE EXACT AND FINAL LOCATION WITH AHI.
- 10 NOT USED.
- 11 NOT USED.
- 12 THIS FOR FACP IN SEPARATE ENCLOSURE LOCATED NEAR THE ELECTRICAL PANEL. SEE SPECIFICATIONS FOR MORE INFORMATION.
- 13 PROVIDE ADDRESSABLE RELAY CONTROL MODULE (ARC) AT DOOR HOLDER. CONNECT SUCH THAT NOTED DOOR SHALL SHUT CLOSE UPON RECEIPT OF ALARM.
- 14 PROVIDE (2) FIRE ALARM TERMINAL CABINETS FOR EACH FLOOR. CABINETS SHALL BE LOCATED AT OPPOSITE ENDS OF THE FLOOR FOR SURVIVABILITY.
- 15 WHERE INDICATED ON THE PLANS PROVIDE ADDRESSABLE RELAY CONTROL MODULE AT SECURITY DOORS. INTERLOCK WITH DOOR SOLENOID POWER CIRCUIT TO INTERRUPT CIRCUIT UPON GENERAL FIRE ALARM AS SHOWN IN THE FIRE ALARM CONTROL MATRIX.
- 16 PROVIDE MODULES, WIRING, RACEWAYS AND SUPPORTING HARDWARE FOR COMPLETE INTERCONNECTION OF BUILDING FIRE ALARM AND SIGNALING SYSTEM WITH CAMPUS MASS NOTIFICATION SYSTEM. COORDINATE EXACT REQUIREMENTS AND LOCATION OF MASS NOTIFICATION SYSTEM HEAD END EQUIPMENT WITH OWNER REPRESENTATIVE AND MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 17 BOOSTER PANEL SHALL BE INSTALLED WITHIN 15' OF A SMOKE DETECTOR.

| SHEET ISSUE NO. | DATE | DESCRIPTION | BY |
|-----------------|----------|-----------------------|-----|
| 1 | 09/22/20 | ISSUE FOR 90-D PERMIT | RMF |

PRINCIPAL IN CHARGE: ALM
PROJECT ENGINEER: CDC
DRAWN BY: TMW

SHEET TITLE:
ELECTRICAL RISER DIAGRAM

SHEET NO. E-501
PROJ. NO. 019216.00