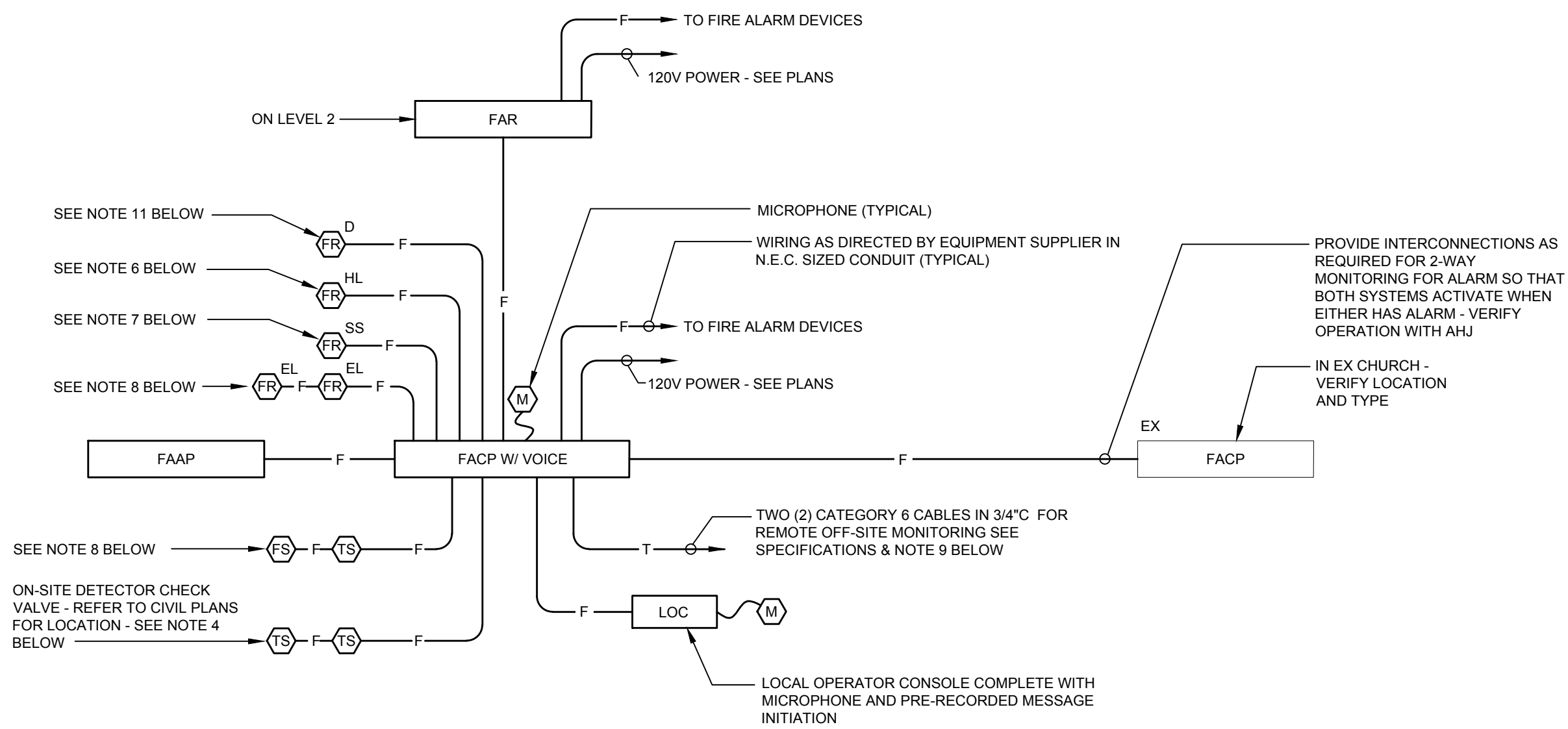
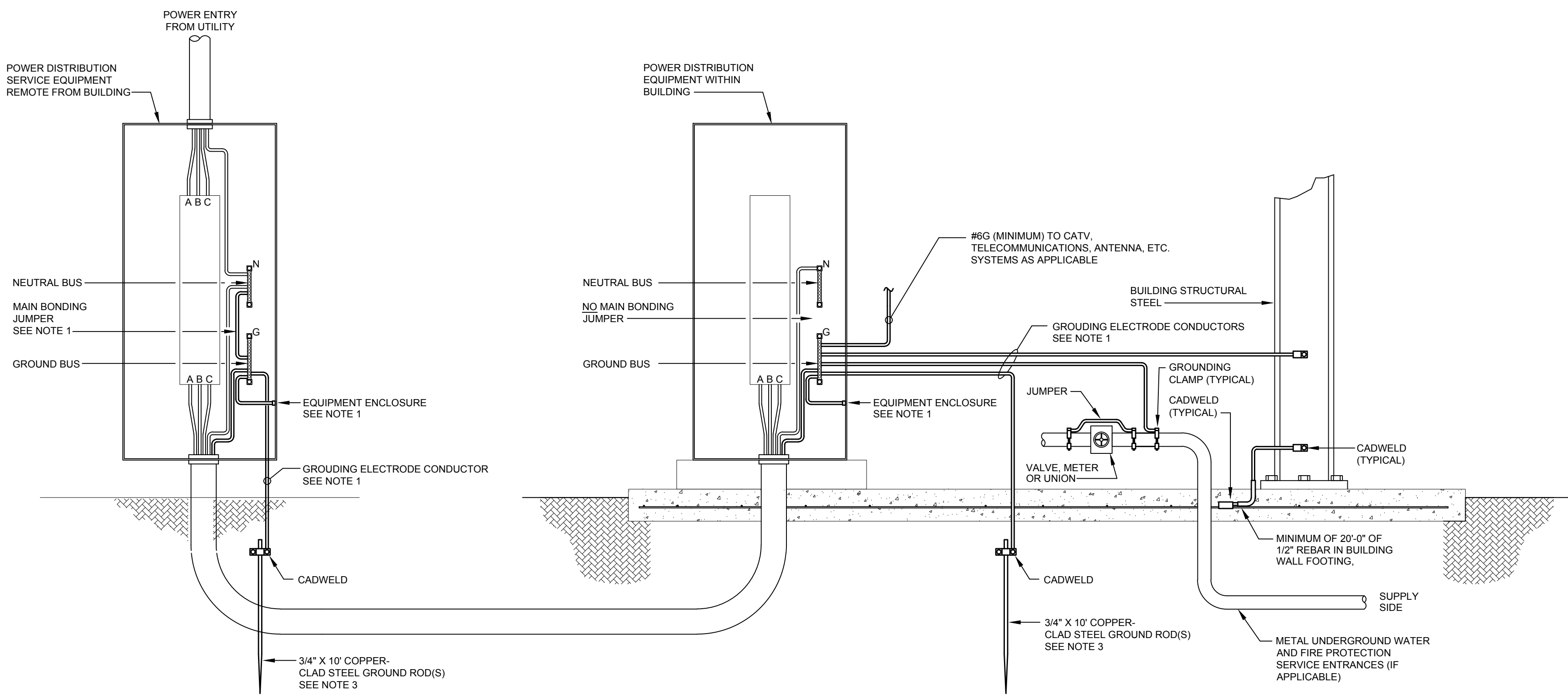




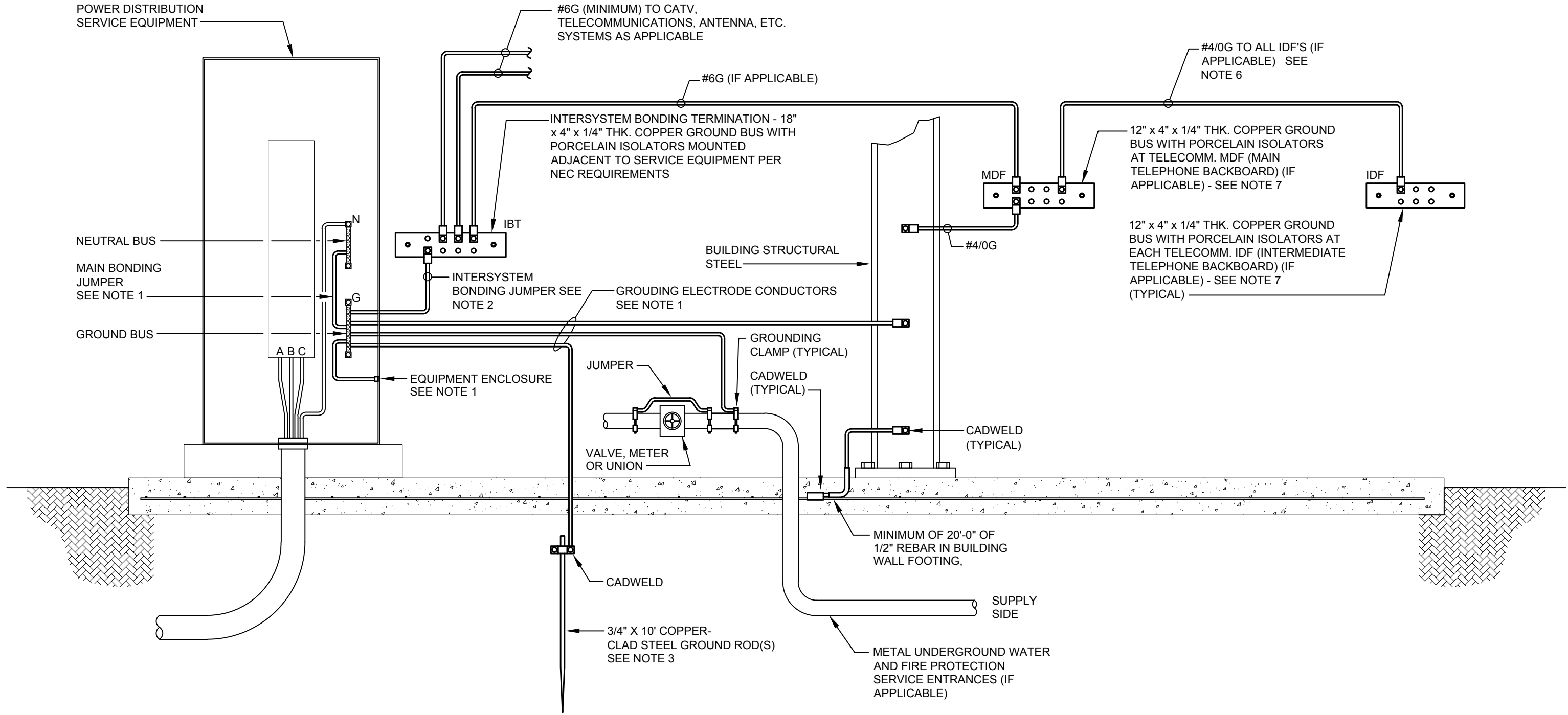
FIRE ALARM RISER DIAGRAM
SCALE : NONE

FIRE ALARM SYSTEM NOTES
- ALL FIRE ALARM WIRING SHALL BE INSTALLED IN CONDUIT, NO EXCEPTIONS - FIRE ALARM EQUIPMENT SUPPLIER SHALL PROVIDE A COMPLETE SET OF ENGINEERED FIRE ALARM EQUIPMENT SHOP DRAWINGS TO LOCAL FIRE MARSHALL FOR HIS APPROVAL. - INSTALL DUCT MOUNTED SMOKE DETECTOR(S) AND CONTROL RELAY AT EACH MECHANICAL UNIT WHERE REQUIRED FOR UNIT SHUTDOWN WHETHER SPECIFICALLY SHOWN ON DRAWINGS OR NOT. THIS SHALL BE INCLUSIVE OF ALL UNITS WHERE SHUTDOWN IS REQUIRED BY CODE. COORDINATE ALL WORK REQUIRED WITH MECHANICAL. CONTRACTOR SHALL REVIEW MECHANICAL PLANS TO CONFIRM UNIT LOCATIONS AND THAT QUANTITY OF REQUIRED DUCT DETECTORS AND CONTROL RELAYS MATCH THOSE SHOWN ON ELECTRICAL PLANS. - PROVIDE SURGE PROTECTION DEVICES ON EACH END OF ALL COPPER FIRE ALARM CIRCUITS WITH ANY PORTION LOCATED OUTSIDE OF BUILDINGS. - FIRE ALARM CIRCUIT DISCONNECTING MEANS SHALL HAVE A RED MARKING, SHALL BE ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL, AND SHALL BE IDENTIFIED AS "FIRE ALARM CIRCUIT", AND SHALL BE MECHANICALLY PROTECTED. NFPA 72 4.4.1.4.2 - FURNISH ALL MATERIAL AND LABOR REQUIRED TO INTERLOCK SANCTUARY HOUSE LIGHTING WITH FIRE ALARM SYSTEM. UPON ACTIVATION OF FIRE ALARM SYSTEM THE SELECTED HOUSE LIGHTS SHALL TURN ON. - FURNISH ALL MATERIAL AND LABOR REQUIRED TO INTERLOCK WORSHIP SOUND SYSTEMS AS DIRECTED BY A/V SUPPLIER. UPON FIRE ALARM SYSTEM ACTIVATION, CONTACT SHALL OPEN IN ORDER TO DISCONNECT POWER TO SOUND SYSTEMS. - THIS CONTRACTOR SHALL VERIFY EXACT QUANTITY AND LOCATION OF ALL SPRINKLER SYSTEM FLOW SWITCHES AND TAMPER SWITCHES FROM FIRE PROTECTION SYSTEM PLANS AND SPECIFICATIONS PRIOR TO BID AND FURNISH ALL MATERIAL AND LABOR REQUIRED TO CONNECT EACH AS A SEPARATELY ZONED DEVICE. COORDINATE ALL WORK REQUIRED WITH FIRE PROTECTION SYSTEM SUB-CONTRACTOR. - FURNISH ALL MATERIAL AND LABOR REQUIRED TO ACCOMPLISH ELEVATOR CAR RETURN AND SHUNTING OF MAIN LINE POWER TO ELEVATOR CONTROLLERS IN ACCORDANCE WITH REQUIREMENTS OF ANSI A17.1 ELEVATOR CODE. THIS SHALL INCLUDE ALL POWER AND CONTROL WIRING REQUIREMENTS AND ALL REQUIRED INTERCONNECTIONS BETWEEN ELEVATOR CONTROLLERS AND ELEVATOR CONTROL PANELS. PROVIDE ALL MATERIAL AND LABOR REQUIRED TO MONITOR POWER CIRCUIT FOR SHUNTING OF MAIN LINE POWER TO ELEVATOR CONTROLLERS FOR INTERITY. - COORDINATE WITH OWNER IN REGARD TO ACQUISITION OF DEDICATED PHONE LINES FROM UTILITY OR REQUIREMENTS FOR OTHER, OFF-SITE MONITORING COMMUNICATION TECHNOLOGY. EXACT/ADDITIONAL COMMUNICATION TECHNOLOGY SHALL BE AS REQUIRED BY APPLICABLE CODE AND AHJ. OFF-SITE MONITORING SERVICE SHALL BE IN OPERATION PRIOR TO ACCEPTANCE TEST. - FIRE ALARM SYSTEM SHALL BE DUAL LISTED AS A MASS NOTIFICATION SYSTEM. NOTIFICATION DEVICES SHALL BE IDENTIFIED WITH "ALERT". - PROVIDE RELAY AND INTERCONNECTIONS TO DOOR ACCESS CONTROL SYSTEM AS REQUIRED TO UNLOCK ALL APPLICABLE DOORS UPON INITIATION OF FIRE ALARM SYSTEM.



DETAIL "E-MSGR" MAIN SERVICE GROUNDING
SCALE : NONE

DETAIL NOTES
- ALL GROUNDING ELECTRODE CONDUCTORS AND MAIN BONDING JUMPERS SHALL BE INSULATED COPPER, SIZED IN ACCORDANCE WITH NEC TABLE 250.66 UNLESS NOTED OTHERWISE. - THE INTERSYSTEM BONDING JUMPER SHALL BE INSULATED COPPER, SIZED TO MATCH THE GROUNDING ELECTRODE CONDUCTOR OR #6AWG, WHICHEVER IS GREATER. - ADDITIONAL GROUND RODS SHALL BE INSTALLED A MINIMUM OF SIX (6) FEET APART AND CONNECTED BY GROUNDING ELECTRODE CONDUCTORS UNTIL THE GROUND RESISTANCE DOES NOT EXCEED FIVE (5) OHMS. - ALL GROUNDING CONDUCTORS SHALL BE INSTALLED IN CONDUIT (TYPE PER SPECIFICATION REQUIREMENTS) UNLESS SPECIFICALLY NOTED OTHERWISE. METAL CONDUITS SHALL BE GROUNDED PER NEC REQUIREMENTS. - REFER TO "GROUNDING" SPECIFICATIONS SECTION FOR ADDITIONAL GROUNDING REQUIREMENTS.



DETAIL "E-MSG" MAIN SERVICE GROUNDING
SCALE : NONE

DETAIL NOTES
- ALL GROUNDING ELECTRODE CONDUCTORS AND MAIN BONDING JUMPERS SHALL BE INSULATED COPPER, SIZED IN ACCORDANCE WITH NEC TABLE 250.66 UNLESS NOTED OTHERWISE. - THE INTERSYSTEM BONDING JUMPER SHALL BE INSULATED COPPER, SIZED TO MATCH THE GROUNDING ELECTRODE CONDUCTOR OR #6AWG, WHICHEVER IS GREATER. - ADDITIONAL GROUND RODS SHALL BE INSTALLED A MINIMUM OF SIX (6) FEET APART AND CONNECTED BY GROUNDING ELECTRODE CONDUCTORS UNTIL THE GROUND RESISTANCE DOES NOT EXCEED FIVE (5) OHMS. - ALL GROUNDING CONDUCTORS SHALL BE INSTALLED IN CONDUIT (TYPE PER SPECIFICATION REQUIREMENTS) UNLESS SPECIFICALLY NOTED OTHERWISE. METAL CONDUITS SHALL BE GROUNDED PER NEC REQUIREMENTS. - REFER TO "GROUNDING" SPECIFICATIONS SECTION FOR ADDITIONAL GROUNDING REQUIREMENTS. - THE CONTRACTOR MAY "DAISY-CHAIN" IDF'S TOGETHER WITH A #40G. THIS DETAIL IS NOT INTENDED TO REQUIRE A #40G FROM EACH IDF TO THE MDF. THE INTENT OF THIS DETAIL TO BOND TOGETHER THE SUPPLEMENTAL GROUND BUS IN THE MDF, ALL IDF'S, AND THE MAIN SERVICE GROUND WITH A #40G. - THE EQUIPMENT WITHIN EACH MDF AND IDF SHALL BE BONDED TO THE SUPPLEMENTAL GROUND BUS IN ACCORDANCE WITH THE STRUCTURED CABLING SPECIFICATIONS, EQUIPMENT SUPPLIER'S DIRECTION AND CODE REQUIREMENTS.