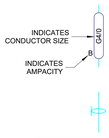
GROUNDING LEGEND



MATERIAL LEGEND:

B BARE STRANDED NOT IN CONDUIT

C INSULATED STRANDED IN CONDUIT

PVC BARE STRANDED IN PVC-40

EQUIPMENT GROUNDING CONDUCTOR IN CONDUIT. SIZED PER FEEDER SCHEDULE.

COPPER GROUNDING SCHEDULE

CODE	GROUND	CONDUIT
G4/0	(1) #4/0	1- 1/4"

BELOW GRADE FEEDER SCHEDULE NOTES:

1. ALL GROUNDING CONDUCTORS SHALL BE MULTI-STRANDED COPPER CONDUCTORS. PROVIDE GREEN INSULATED CONDUCTORS WHEN IN CONDUIT.
2. WHERE GROUND CONDUCTORS ARE ROUTED THROUGH CONDUIT, BOND GROUND CONDUCTOR AT BOTH ENDS OF CONDUIT USING LISTED GROUNDING CONNECTIONS ORBUSHINGS.

KEYED NOTES

1. PROVIDE 3/4" X 10' COPPER CLAD STEEL GROUND RODS AT 40' ON CENTER, CONNECTED TO THE BUILDING GROUND RING. THE MAXIMUM IMPEDANCE TO GROUND OF THE ENTIRE GROUNDING SYSTEM SHALL BE 2.5 OHMS.
2. GROUND RING SHALL BE #4/0 BARE STRANDED COPPER WIRE. GROUND RING CONNECTIONS, AND FITTINGS SHALL BE UL LISTED FOR THIS PURPOSE.

GENERAL NOTES

A. THESE REQUIREMENTS ARE IN ADDITION TO SPECIFICATIONS SECTION 260526 "GROUNDING & BONDING".

B. CONTACT SURFACES SHALL BE CLEANED OF CONTAMINANTS SUCH THAT DIRECT METAL TO METAL CONTACT IS MADE.

C. GROUNDING CONDUCTORS, LUGS, CONNECTORS, ETC SHALL BE COPPER, TINNED COPPER OR SILVER PLATED COPPER FOR GROUND BARS.

D. MOUNTING HARDWARE SHALL BE TORQUED PER MANUFACTURER'S SPECIFICATIONS. SHOW TORQUE MARKS AND LOG ALL TORQUE VALUES.

E. LUGS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. USE ONLY SPECIFIC TOOL AND DIE ONLY. NO UNIVERSAL CRIMPING TOOLS ALLOWED.

F. THREADED PRESSURE CONNECTORS SHALL NOT BE USED.

G. CONDUCTORS SHALL BE EQUIPPED WITH A PRINTED DESTINATION TAG. REFER TO DETAILS.

H. MULTIPLE CONNECTORS SHALL NOT BE SECURED BY THE SAME BOLT ASSEMBLY.

I. SECURE CONDUIT WITH NONMETALLIC CLAMPS TO ELIMINATE GROUND "CHOKES".

J. SUPPORT BARE COPPER GROUND CONDUCTORS EVERY 12".

K. BENDING RADIUS OF GROUNDING CONDUCTORS SHALL BE GREATER THAN 12" AND NO CASE SHALL THE INCLUDED BENDING ANGLE BE LESS THAN 90 DEGREES.

L. CONTRACTOR SHALL APPLY A "NO-OX" COATING BETWEEN ALL CONNECTIONS.

M. GROUND LUGS SHALL HAVE SHRINK WRAP INSULATION 2" BEYOND THE END OF LUG.

N. CABLE INSULATION SHALL NOT BE MORE THAN 0.2" FROM THE LUG.

O. LABEL ALL GROUND BARS WITH PERMANENTLY ENGRAVED NAMEPLATES.

P. GROUND BAR CONDUCTORS SHALL NOT SHARE CONDUIT OR PULL BOXES WITH CONDUCTORS OF OTHER SYSTEMS.

Q. GROUND CABLES TO INCLUDE COUNTERPOISE CABLES SHALL BE BURIED IN UNDISTURBED EARTH.

R. COORDINATE LIGHTNING PROTECTION SYSTEM DOWN LEADS WITH GROUND COUNTERPOISE AND PRECAST PANELS. DOWN LEADS SHALL BE INSTALLED BETWEEN PRECAST PANELS. PROVIDE ACCESS FOR LIGHTNING PROTECTION CONTRACTOR TO TERMINATE DOWN LEADS ON GROUND RING. UNDER NO CIRCUMSTANCES SHALL BUILDING COLUMNS BE USED AS DOWN CONDUCTORS.

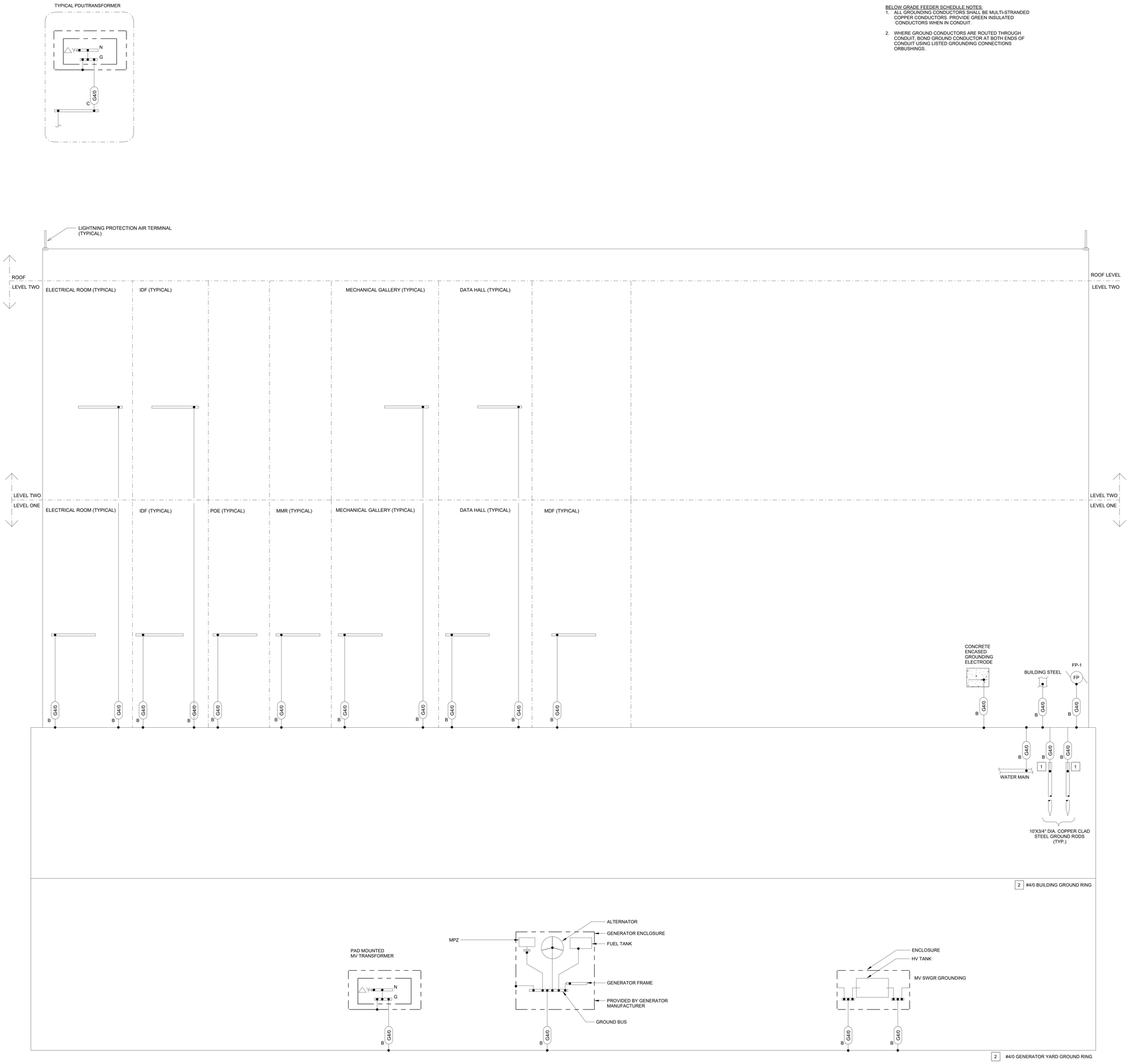
S. BURIED AND INACCESSIBLE CONNECTIONS SHALL BE MADE VIA EXOTHERMIC WELDS, OR HIGH PRESSURE IRREVERSIBLE CRIMPS.

T. ALL GROUNDING CONDUCTORS SHALL BE #4/0 BARE COPPER UNLESS OTHERWISE INDICATED.

U. REFER TO GROUNDING DETAILS FOR ADDITIONAL INFORMATION.

V. REFER TO LIGHTNING PROTECTION PLANS FOR ADDITIONAL GROUNDING REQUIREMENTS.

W. GROUNDING RISER IS DIAGRAMATIC ONLY. REFER TO PLANS FOR QUANTITIES.



serverfarm

CORGAN

TGRWA STRUCTURAL ENGINEERS

kW Mission Critical Engineering Member of WSP

EP ENGINEERING PLUS

Kimley»Horn

ISSUES		
1	11/12/2025	CONCEPTUAL DESIGN
2	12/12/2025	SCHEMATIC DESIGN
3	12/17/2025	STEEL MILL ORDER
4	1/23/2026	DESIGN DEVELOPMENT

REVISIONS

kW Mission Critical Engineering
Contact: David Adams Phone: 703.926.0715
Engineer: Matthew Fagert
License #: 123456 Exp. Date: 00/00/0000

NOT FOR CONSTRUCTION

Date: 00/00/0000

SERVERFARM

Clarksville, AR

GROUNDING RISER DIAGRAM

JOB US0049903.5614

SHEET

E03-00

1/23/2026 12:54:42 PM E03-00 GROUNDING RISER DIAGRAM