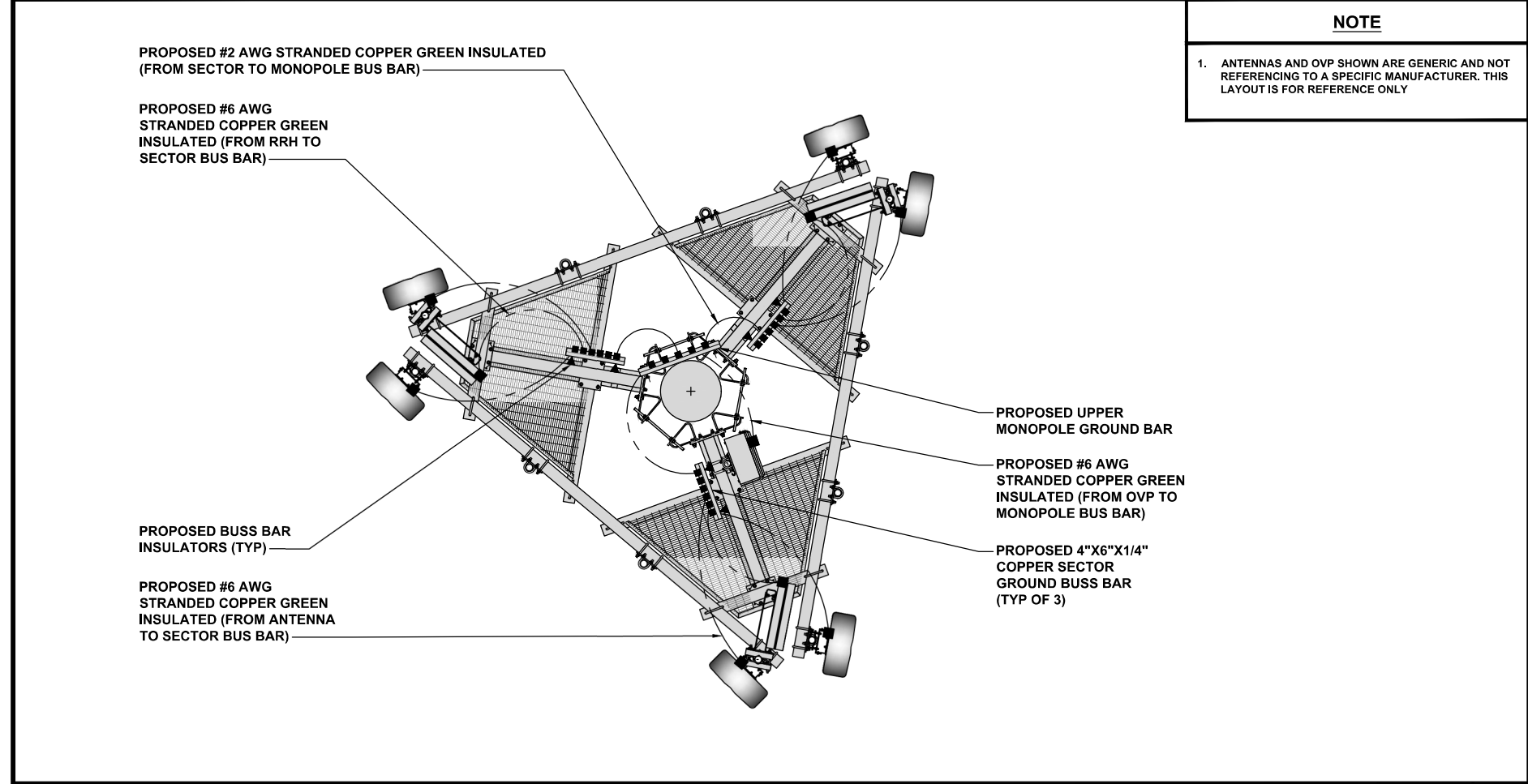


TYPICAL EQUIPMENT GROUNDING PLAN

NO SCALE 1



TYPICAL ANTENNA GROUNDING PLAN

NO SCALE 2

● EXOTHERMIC CONNECTION

■ MECHANICAL CONNECTION

GROUND BUS BAR

GROUND ROD

TEST GROUND ROD WITH INSPECTION SLEEVE

#6 AWG STRANDED & INSULATED

4/0 AWG BARE STRANDED COPPER

#2 AWG SOLID COPPER

BUSS BAR INSULATOR

GROUNDING LEGEND

1. GROUNDING IS SHOWN DIAGRAMMATICALLY ONLY.
2. CONTRACTOR SHALL GROUND ALL EQUIPMENT AS A COMPLETE SYSTEM. GROUNDING SHALL BE IN COMPLIANCE WITH NEC SECTION 250. GROUNDING AND BONDING REQUIREMENTS AND MANUFACTURER'S SPECIFICATIONS.
3. ALL GROUND CONDUCTORS SHALL BE COPPER; NO ALUMINUM CONDUCTORS SHALL BE USED.

GROUNDING KEY NOTES

- A

EXTERIOR GROUND RING: 4/0 AWG STRANDED COPPER, BURIED AT A DEPTH OF AT LEAST 30 INCHES BELOW GRADE, OR 6 INCHES BELOW THE FROST LINE AND APPROXIMATELY 36 INCHES FROM THE EXTERIOR PLTE FENCE.
- B

TOWER GROUND RING: THE GROUND RING SYSTEM SHALL BE INSTALLED AROUND AN ANTENNA TOWER'S LEGS, AND/OR GUY ANCHORS. WHERE SEPARATE SYSTEMS HAVE BEEN PROVIDED FOR THE TOWER AND THE BUILDING, AT LEAST TWO BONDS SHALL BE MADE BETWEEN THE TOWER RING GROUND SYSTEM AND THE BUILDING RING GROUND SYSTEM USING MINIMUM 4/0 AWG STRANDED COPPER CONDUCTORS.
- C

BOND TO INTERIOR GROUND RING: 4/0 AWG STRANDED COPPER WIRE PRIMARY BONDS SHALL BE PROVIDED AT LEAST AT FOUR POINTS ON THE INTERIOR GROUND RING.
- D

GROUND ROD: UL LISTED COPPER CLAD STEEL. MINIMUM 5/8" DIAMETER BY EIGHT FEET LONG. GROUND RODS SHALL BE DRIVEN TO THE DEPTH OF GROUND RING CONDUCTOR.
- E

FRAME BONDING: THE BONDING POINT FOR TELECOM EQUIPMENT FRAMES SHALL BE THE GROUND BUS THAT IS NOT ISOLATED FROM THE EQUIPMENTS METAL FRAMEWORK.
- F

ICE BRIDGE SUPPORTS: EACH ICE BRIDGE LEG SHALL BE BONDED TO THE GROUND RING WITH 4/0 AWG STRANDED COPPER CONDUCTOR. PROVIDE EXOTHERMIC WELDS AT BOTH THE ICE BRIDGE LEG AND BURIED GROUND RING.
- G

TOWER TOP COLLECTOR BUSS BAR IS TO BE MECHANICALLY BONDED TO PROPOSED ANTENNA MOUNT COLLAR.
- H

TEST WELL: CONSIST OF GROUND ROD INSTALLED WITH INSPECTION SLEEVE. GROUND RODS TO BE UL LISTED COPPER CLAD STEEL. MINIMUM 5/8" DIAMETER BY EIGHT FEET LONG.
- I

POST CONSTRUCTION TEST REQUIREMENTS FOR SYSTEM RESISTANCE DESIGN OF 5 OHMS OR LESS.

NOTE

1. ANTENNAS AND OVP SHOWN ARE GENERIC AND NOT REFERENCING TO A SPECIFIC MANUFACTURER. THIS LAYOUT IS FOR REFERENCE ONLY

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BLACK & VEATCH

16305 SWINGLEY RIDGE RD, SUITE 230  
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PROJECT NO:	409336.0036.2030
DRAWN BY:	VDP
CHECKED BY:	AL

REV	DATE	DESCRIPTION
7	09/16/24	PER JURISDICTION COMMENTS
6	07/01/24	PER CONTRACTOR COMMENTS
5	04/22/24	PER JURISDICTION COMMENTS
4	02/15/24	PER CLIENT COMMENTS
3	01/09/24	PER JURISDICTION COMMENTS
2	10/16/23	PER JURISDICTION COMMENTS
1	06/15/23	PER JURISDICTION COMMENTS
0	05/19/23	ISSUED FOR 100% CDs

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

AMEREN PLTE PROJECT

KEATON

3605 HWY K

O'FALLON, MO 63368

MONOPOLE

SHEET TITLE

GROUNDING PLANS AND NOTES

SHEET NUMBER

G-1

GROUNDING KEY NOTES

NO SCALE 3