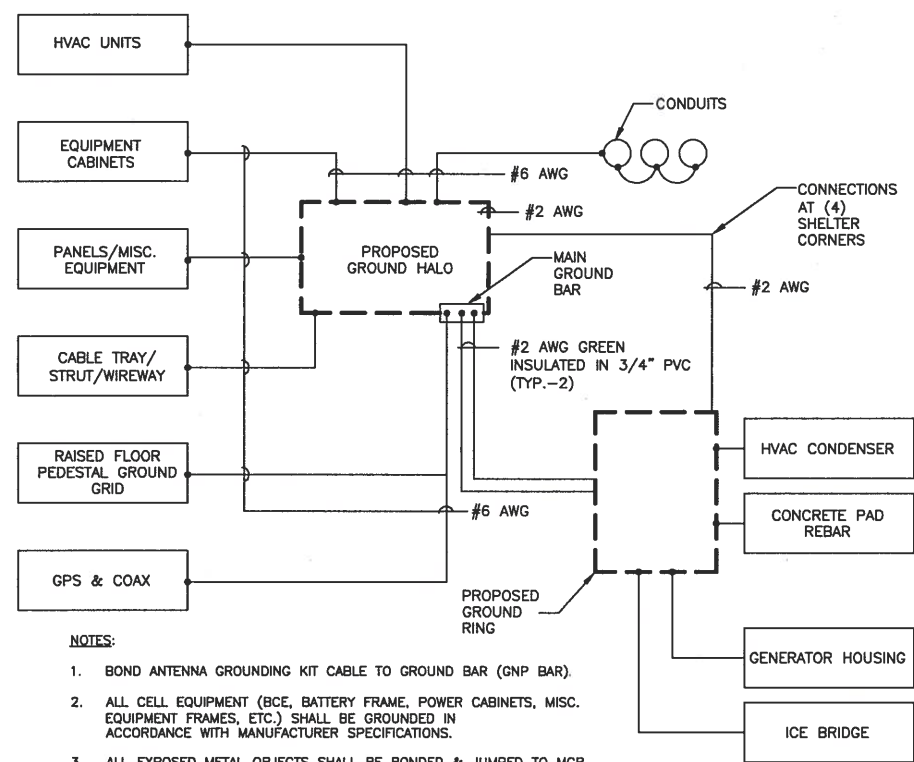
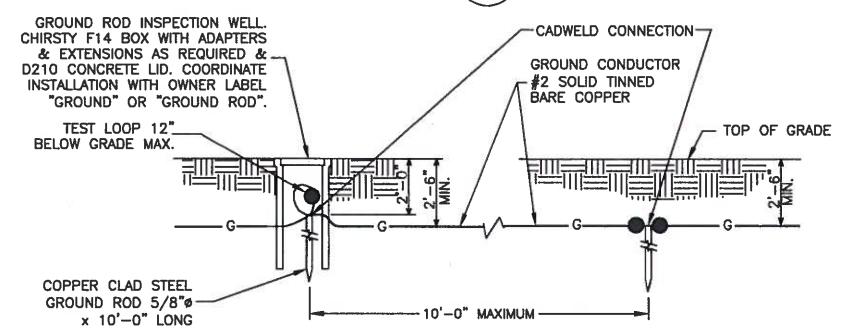


EQUIPMENT ROOM GROUNDING SCHEMATIC
SCALE: N.T.S.



- NOTES:**
- BOND ANTENNA GROUNDING KIT CABLE TO GROUND BAR (GNP BAR).
 - ALL CELL EQUIPMENT (BCE, BATTERY FRAME, POWER CABINETS, MISC. EQUIPMENT FRAMES, ETC.) SHALL BE GROUNDED IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
 - ALL EXPOSED METAL OBJECTS SHALL BE BONDED & JUMPED TO MGB.

GROUNDING DIAGRAM
SCALE: N.T.S.

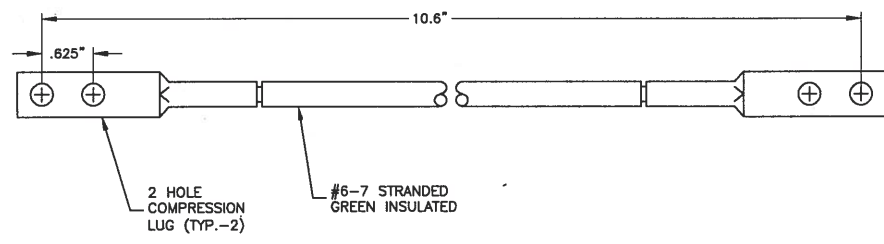


GROUND BOX DETAIL
SCALE: N.T.S.

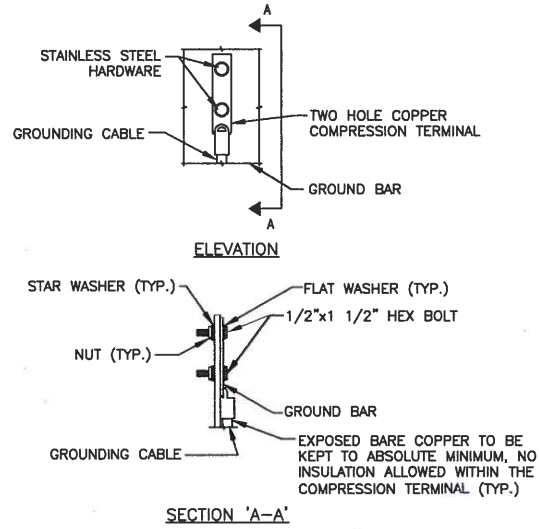
GROUNDING LEGEND

SYMBOL	DESCRIPTION
▶	EXOTHERMIC WELD
■	MECHANICAL CONNECTION

NOTE:
1. ROOM SCHEMATIC IS NOT REPRESENTATIVE OF ACTUAL ROOM LAYOUT. FOR ACTUAL ROOM LAYOUT SHEET E-5.



CABLE TRAY BONDING STRAP
SCALE: N.T.S.



- NOTES:**
- DOUBLING UP OR STACKING OF CONNECTIONS IS NOT PERMITTED
 - OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

TYPICAL GROUND BAR MECHANICAL CONNECTION DETAIL
SCALE: N.T.S.

GROUNDING GENERAL NOTES

- ALL DOWN CONDUCTORS & THE GROUND RING CONDUCTOR SHALL BE #2 AWG, SOLID, BARE, TINNED COPPER, UNLESS OTHERWISE NOTED. ALL CONNECTIONS TO GROUND RING SHALL BE EXOTHERMICALLY WELDED. CONDUCTOR SHALL BE AT A MINIMUM DEPTH BELOW GRADE OF 18 INCHES OR TO LEDGE. MINIMUM BEND RADIUS SHALL BE 8 INCHES. CONDUCTOR SHALL BE AT LEAST 24 INCHES FROM ANY FOUNDATION, UNLESS OTHERWISE NOTED.
- GROUND RODS SHALL BE 5/8" DIAMETER 10' LONG COPPER CLAD, HARGER, T&B, ERICO, OR EQUIVALENT. TOP OF ROD SHALL BE A MINIMUM OF 18" BELOW GRADE. IF LEDGE IS ENCOUNTERED, INSTALL GROUND ROD AT AN ANGLE. ELECTRICAL METER GROUND ROD EXCEPTED.
- WHERE MECHANICAL CONNECTIONS ARE SPECIFIED, BOLTED, COMPRESSION-TYPE, CLAMPS OR SPLIT-BOLT TYPE CONNECTORS SHALL BE USED.
- GRIND OFF GALVANIZING IN AFFECTED AREA. EXOTHERMICALLY WELD #2 CONDUCTOR AT 6" ABOVE GRADE OR FOUNDATION, WHICHEVER IS HIGHER. COLD-GALV AFTER. EXOTHERMICALLY WELD OTHER END TO GROUND RING.
- INSTALL GPS GROUNDING KITS AT EXTERIOR SHELTER EXIT POINTS. EXOTHERMICALLY WELD #2 CONDUCTOR TO EXTERIOR GROUND BAR.
- ALL GROUNDING WORK SHALL COMPLY WITH CONSTRUCTION CONTRACT STANDARDS. FOLLOWING COMPLETION OF WORK, GROUND SYSTEM MUST BE TESTED & SHALL HAVE A RESISTANCE OF 5 OHMS OR LESS SUBMIT AN INDEPENDENT "FALL POTENTIAL" TESTING REPORT.
- ALL GROUNDING CONDUCTORS ON EXTERIOR WALL OF SHELTER SHALL BE INSTALLED IN 3/4" SCH 40 PVC CONDUIT TO 12" BELOW GRADE. ATTACH PVC WITH GALVANIZED "C" CLAMPS.
- CONTRACTOR SHALL HAND-DIG IN AREAS AROUND EXISTING UTILITIES.
- NOTIFY CONSTRUCTION ENGINEER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.
- GROUNDING RING IS SHOWN AS SCHEMATIC ONLY. IT IS DESIGNED WITHOUT BENEFIT OF RESISTIVITY TESTING & DOES NOT NECESSARILY REPRESENT A GROUNDING SYSTEM TO MEET ANY SPECIFIC GROUND RESISTANCE.
- PRIOR TO POURING CONCRETE, ALL REBAR LOCATED NEAR THE BOTTOM OF THE FOUNDATION SHALL BE BONDED TOGETHER TO FORM A SINGLE GROUNDING ELECTRODE, BY STEEL TIES OF OTHER EFFECTIVE MEANS APPROVED BY NEC 2011 & STRUCTURAL ENGINEER, & BONDED TO THE GROUND RING AS DETAILED IN THESE PLANS. (INSPECTION MAY BE REQUIRED PRIOR TO POURING CONCRETE & MUST BE COORDINATED BY CONTRACTOR.)
- IN ACCORDANCE WITH NEC 2014 REQUIREMENTS, ALL GROUNDING ELECTRODES PRESENT ON SITE SHALL BE BONDED TOGETHER (REFERENCE 2014 NEC ARTICLE 250.50).

verizon
WIRELESS
VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

PORTLAND ME HEAD END

CONSTRUCTION DRAWINGS

REV	DATE	DESCRIPTION
0	11/27/17	FOR CONSTRUCTION
C	10/30/17	90% SUBMITTAL
B	10/04/17	80% SUBMITTAL
A	04/14/17	50% SUBMITTAL

Dewberry
Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310



DRAWN BY: SK
REVIEWED BY: MFT
CHECKED BY: BBR
PROJECT NUMBER: 50002925
JOB NUMBER: 50080012
SITE ADDRESS:

1531 CONGRESS ST.
PORTLAND, ME 04102

SHEET TITLE
GROUNDING DETAILS
SHEET NUMBER