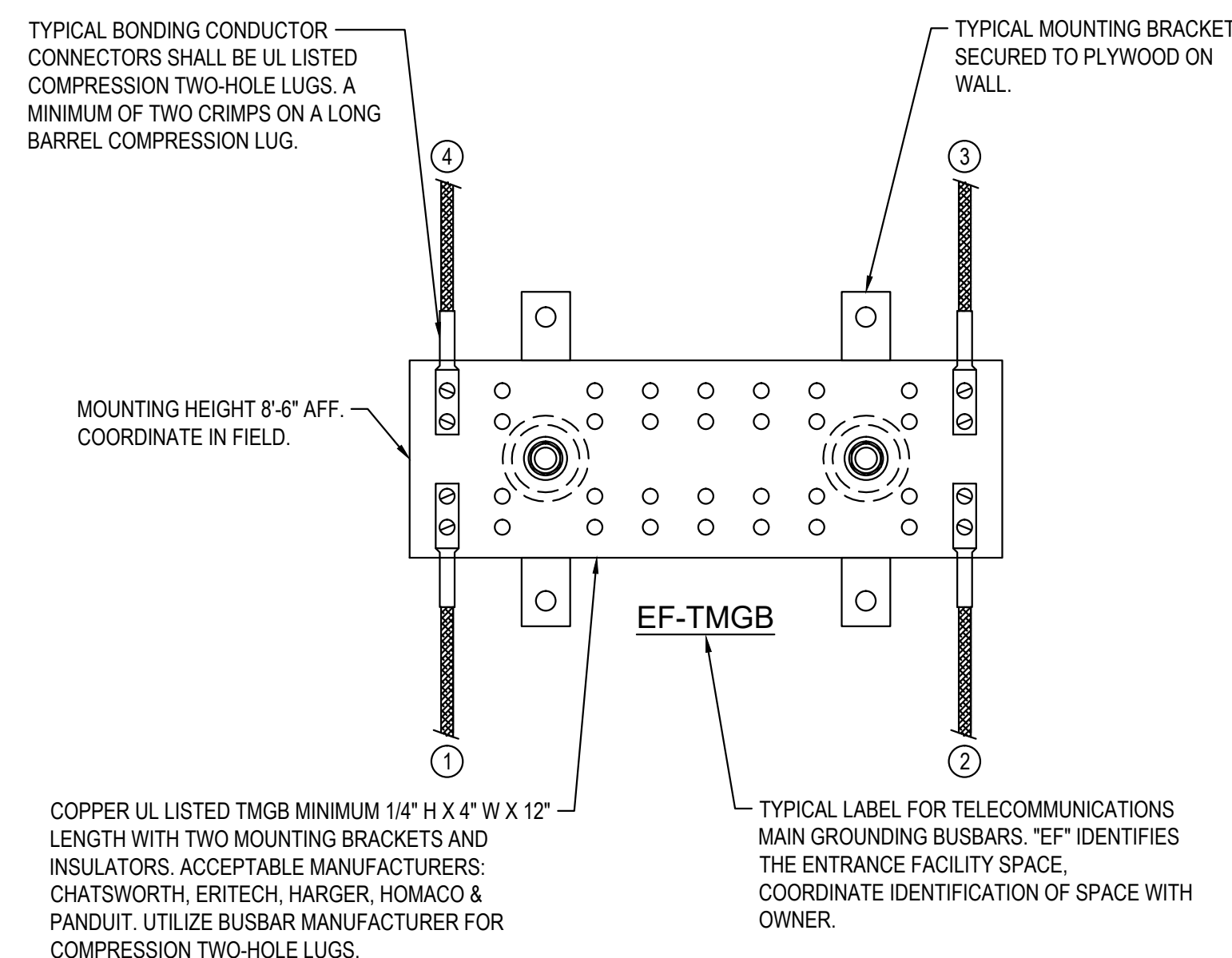


SECURITY EQUIPMENT UPGRADE PROJECT
MANATEE CO CENTRAL JAIL
 14470 HARLEE ROAD, PALMETTO, FL 34221



GROUNDING & BONDING GENERAL NOTES

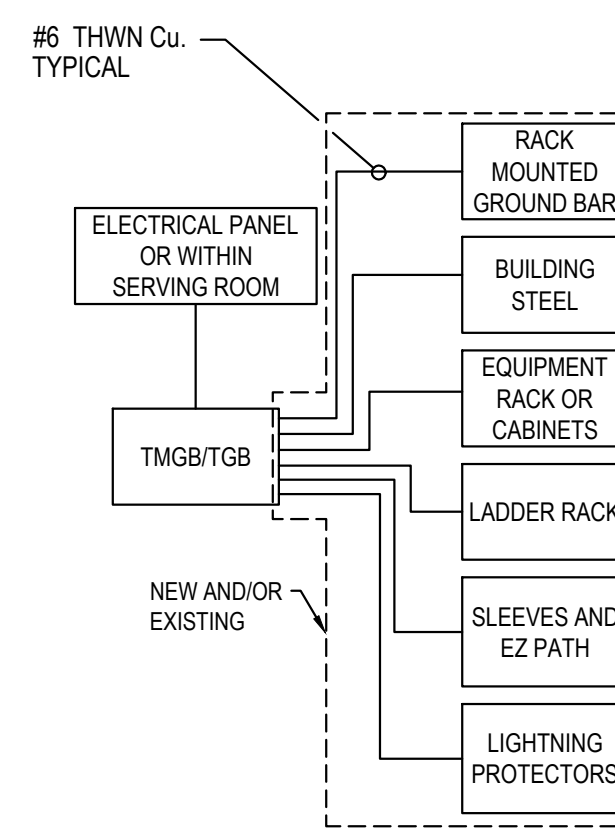
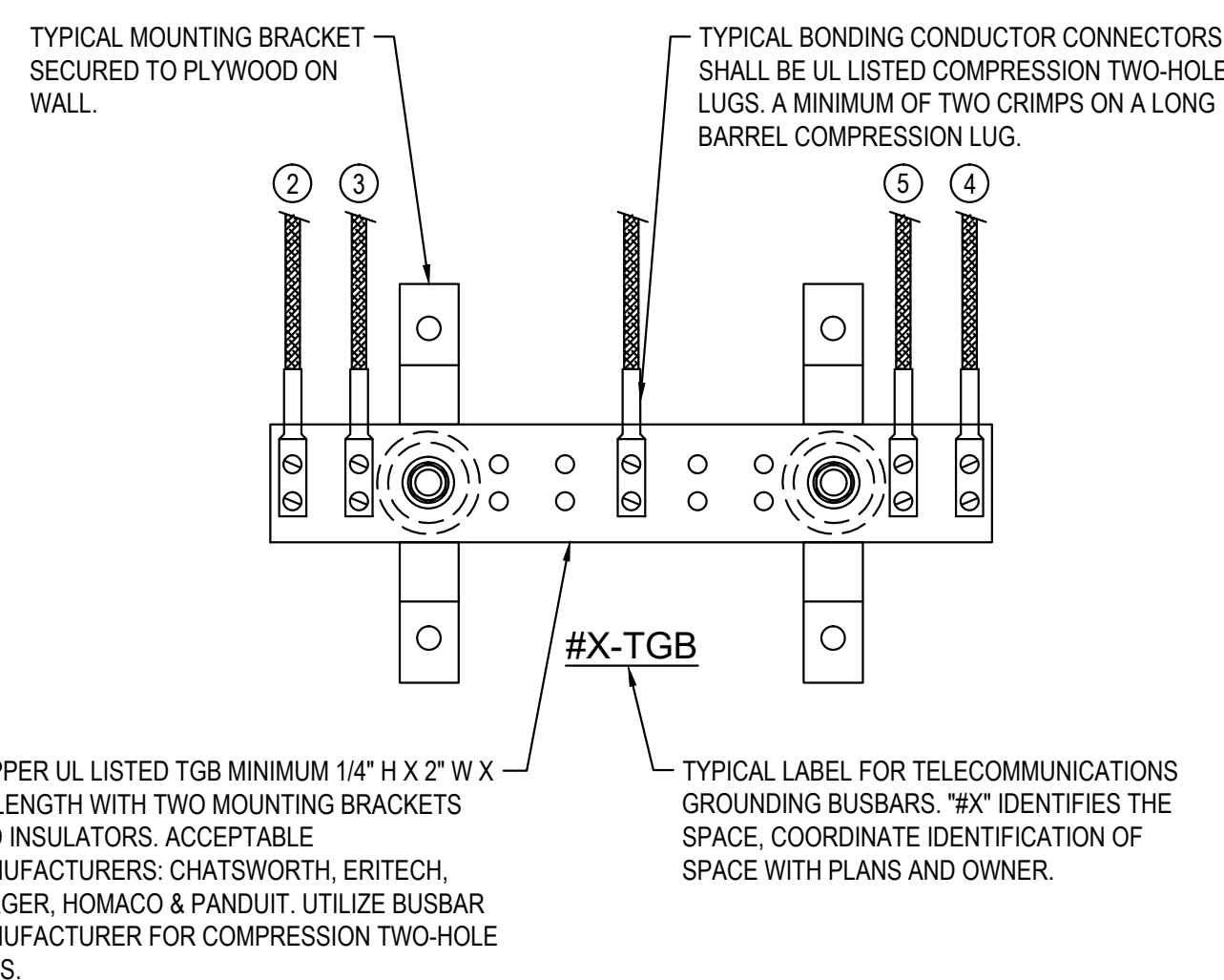
- ALL TELECOM GROUNDING WORK SHALL BE PROVIDED AND INSTALLED BY STRUCTURED CABLING CONTRACTOR.
- MAIN BONDING CONDUCTORS SHALL BE #30 AWG COLOR GREEN INSULATED COPPER CONDUCTOR OR SIZED PER BONDING CONDUCTOR SIZING CHART (ANSI J-STD-607-B) IN PATHWAY - DETERMINED BY CONTRACTOR.
- FASTENING BONDING CONNECTOR TWO-HOLE LUGS TO ALL BUSBARS SHALL BE CLEANED AND APPLY A COPPER ANTI-OXIDANT TO THE CONTACT AREA OF BOTH THE CONNECTOR LUG AND THE BUSBAR.
- BONDING CONDUCTORS AND BUSBARS SHALL BE LABELED WITH IDENTIFICATION LABEL IN ACCORDANCE WITH THE REQUIREMENTS OF ANSITIA/EIA-606-B.
- BONDING CONDUCTORS SHALL BE LABELED WITH IDENTIFICATION LABEL NOTED BELOW AND SECURED WITH CABLE TIE TO EACH CONDUCTOR (ANSI J-STD-607-B) IF THIS CONNECTOR OR CABLE IS LOOSE OR MUST BE REMOVED, PLEASE CALL THE BUILDING FACILITIES MANAGER."
 - THE TMGB AND THE NEAREST GROUNDING ELECTRODE.
 - THE TGB AND THE NEAREST ELECTRICAL SERVICE GROUND.
 - EACH TGB AND THE PATHWAY(S), RACK(S), CABINET(S) AND APPLICABLE EQUIPMENT.
- STRUCTURED CABLING CONTRACTOR SHALL PERFORM CONTINUITY TESTING MEASUREMENTS OF THE GROUNDING RESISTANCE TO NOT EXCEED 0.1 OHM BETWEEN:
 - THE TMGB AND THE NEAREST GROUNDING ELECTRODE.
 - THE TGB AND THE NEAREST ELECTRICAL SERVICE GROUND.
 - EACH TGB AND THE PATHWAY(S), RACK(S), CABINET(S) AND APPLICABLE EQUIPMENT.

BONDING CONDUCTOR SIZING CHART

LENGTH (FEET)	SIZE (AWG)
LESS THAN (<) 13'	# 6
14' - 20'	# 4
21' - 26'	# 3
27' - 33'	# 2
34' - 41'	# 1
42' - 52'	# 1/0
53' - 66'	# 2/0
GREATER THAN (>) 66'	# 3/0

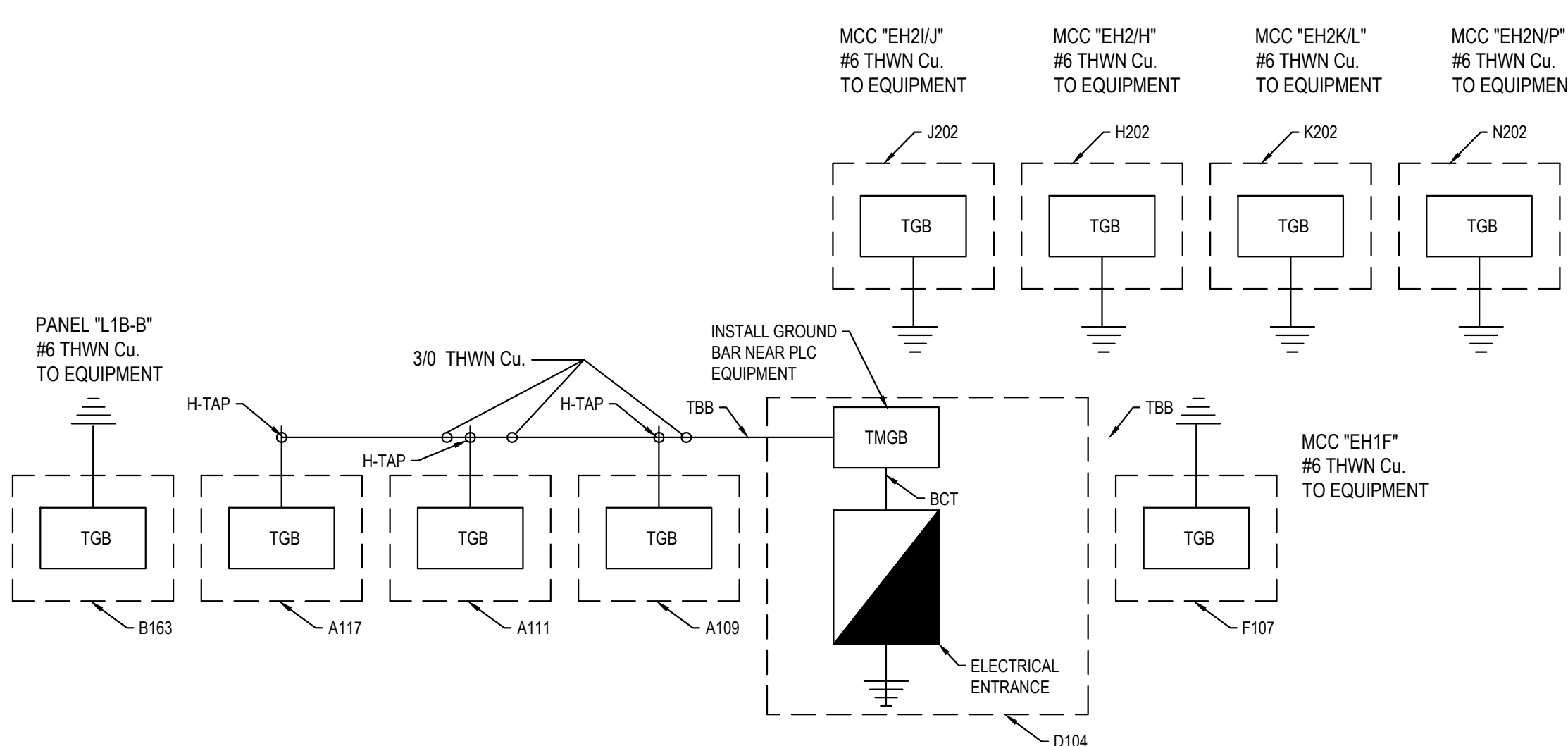
GROUNDING & BONDING RISER DETAIL NOTES

- BONDING CONDUCTOR FOR TELECOMMUNICATIONS (BCT) TO BUILDING GROUNDING ELECTRODE. BCT SHALL NOT BE SMALLER THEN THE TBB.
- BCT TO NEAREST BUILDING STEEL STRUCTURE. IF APPLICABLE UTILIZED EXOTHERMIC WELDING CONNECTION TO BUILDING STEEL.
- TELECOMMUNICATIONS BONDING BACKBONE (TBB) FOR GROUNDING EQUIVALIZER (GE), IF APPLICABLE.
- TYPICAL TBB(S) THAT INTERCONNECTS ALL TGB(S) WITH THE TMGB.
- BCT TO TELECOMMUNICATIONS CABLE RUNWAYS(S), RACK(S), CABINET(S) AND APPLICABLE EQUIPMENT. DAISY CHAINING OF BCT AT RELAY RACKS IS NOT ACCEPTABLE. EACH RACK IS TO HAVE A BCT TO A COMPRESSION LUG TAP TO DEDICATED HOMERUN ACT BACK TO THE TGB. SEE DETAILS.

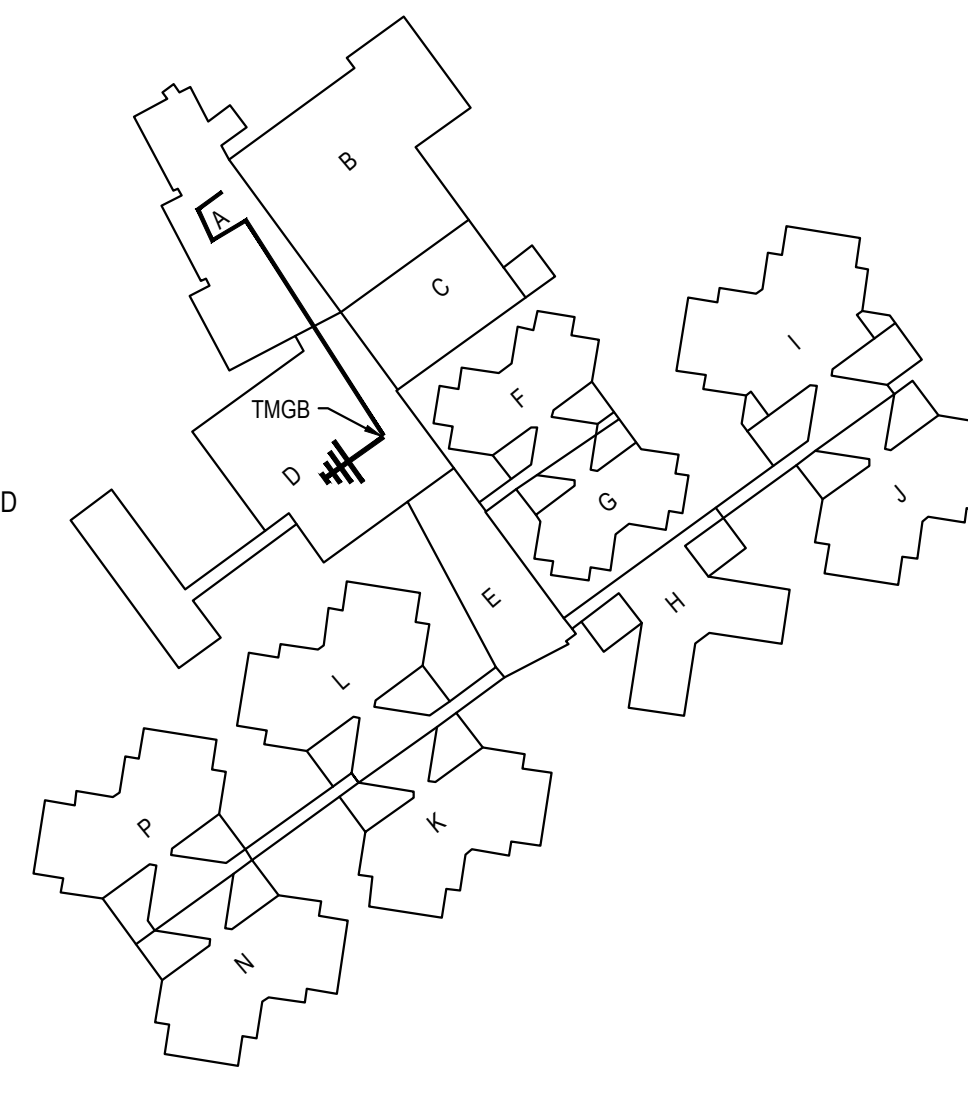


1 GROUNDING AND BONDING DETAIL
SCALE: N/A

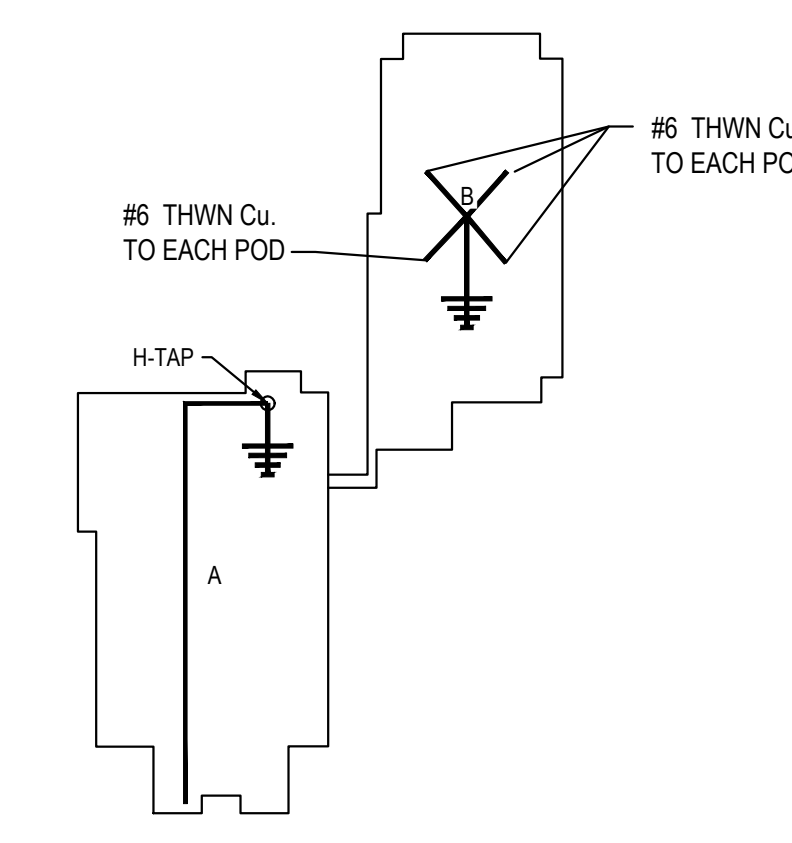
2 TELECOM ROOM BONDING DIAGRAM
SCALE: N/A



4 ANNEX - GROUNDING FLOW DIAGRAM
SCALE: N/A



5 CENTRAL JAIL - LOGICAL GROUNDING PATHWAY DIAGRAM
SCALE: N/A



6 ANNEX - LOGICAL GROUNDING PATHWAY DIAGRAM
SCALE: N/A

GENERAL NOTES:
 1. DESIGNS DIAGRAMMATIC AND NOT BE USED FOR CONSTRUCTION. EXACT PART REQUIREMENTS AND PATHWAYS TO BE FIELD VERIFIED.

100% CD	02/17/2017
Revision:	Date:

Project No.:	2521HE
Checked By:	BF
Designed By:	BF/JM
Drawn By:	JM
Scale:	as shown
Date:	02/17/2017

TECHNOLOGY -
DETAILS

T5.0.03