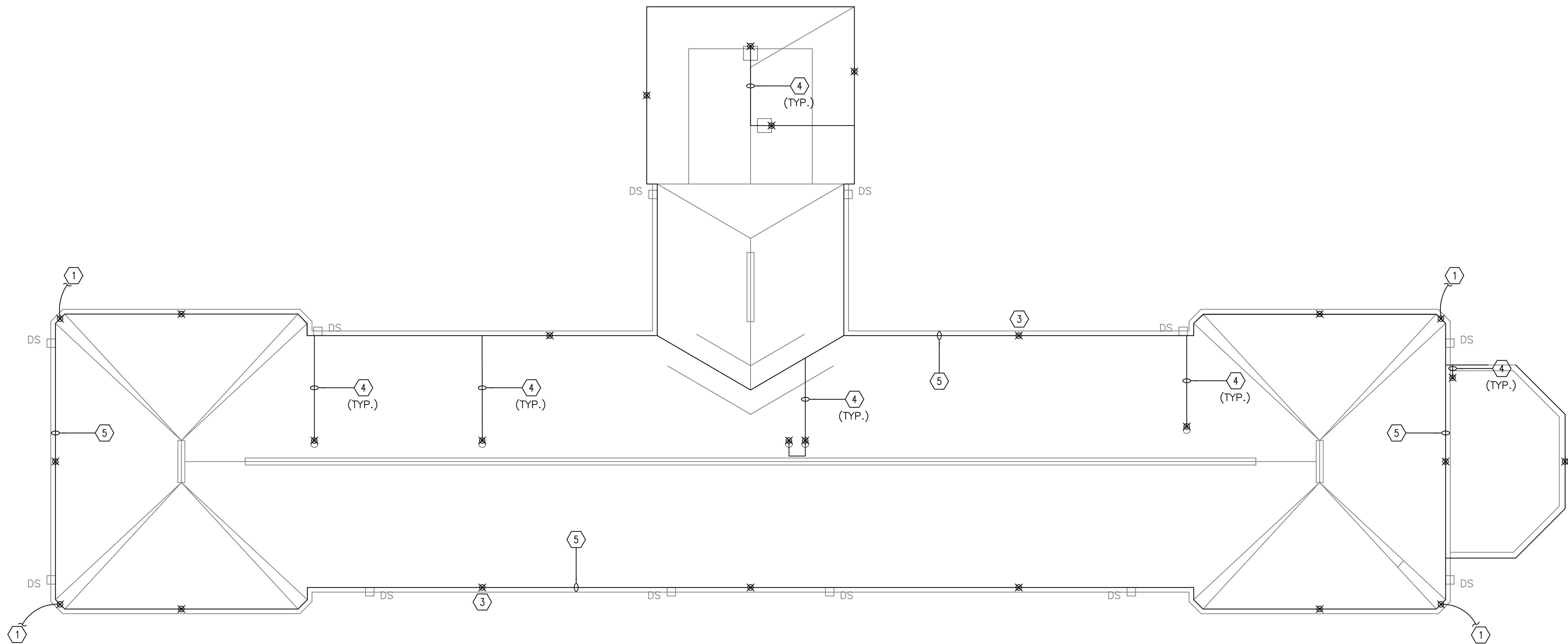
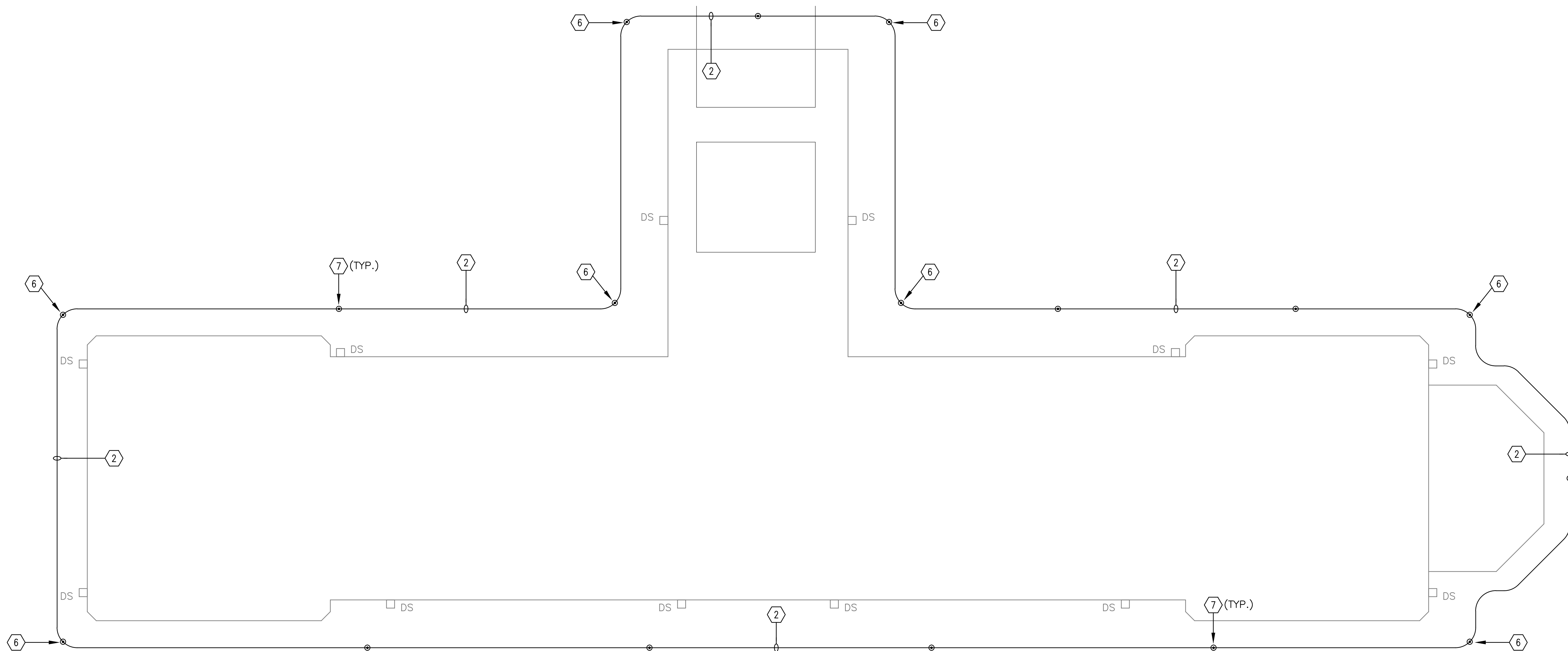


three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot



C1 ROOF LIGHTNING PROTECTION PLAN
1/8" = 1'-0"



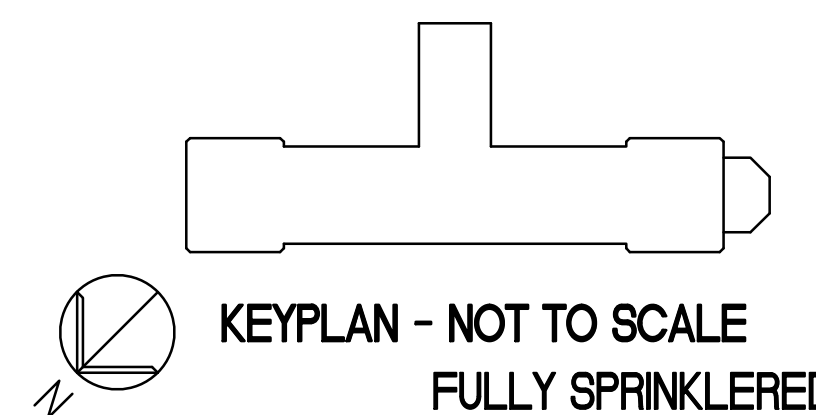
F1 GROUNDING PLAN
1/8" = 1'-0"

GENERAL NOTES

1. COMPLY WITH SPECIFICATIONS AND NOTES BELOW AS APPLICABLE.
2. ALL WIRING SHALL BE COPPER. ALUMINUM WIRING IS NOT ALLOWED. UNLESS OTHERWISE NOTED, ALL WIRING SHALL BE 2#12 AWG SOLID AND 1#12 AWG SOLID EQUIPMENT GROUNDING CONDUCTOR IN EMT. HOMERUNS FED FROM A 20A-1P, 120V CIRCUIT IN EXCESS OF 70' SHALL BE #10 AWG SOLID.
3. ALL WORK SHALL COMPLY WITH NFPA70, NFPA72, NFPA99, NFPA101 & ALL FEDERAL, STATE & LOCAL REGULATIONS.
4. ALL PENETRATIONS THROUGH FLOORS, RATED WALLS AND PARTITIONS SHALL BE SEALED WITH UL APPROVED FIRE SEALANT MATERIAL TO MAINTAIN FIRE RATING FOR THE SEPARATION.
5. ALL UNDERGROUND CONDUITS MOUNTED TO FIXED STRUCTURES ABOVE GRADE SHALL HAVE EXPANSION FITTINGS.
6. PROVIDE WIRE MARKERS TO IDENTIFY CABLES FOR ALL SYSTEMS AT THE ORIGIN, PULL BOXES, AND TERMINATION POINTS. LABELS SHALL BE SELF ADHESIVE OR HEAT SHRINK TYPE.
7. NO LIVE WORK WILL BE ALLOWED. EVERY CIRCUIT SHALL BE LOCKED-OUT AND TAGGED-OUT BEFORE COMMENCING WORK.

KEYED NOTES

- 1 #4/0 BARE TINNED COPPER LIGHTNING PROTECTION DOWN CONDUCTOR TO BURIED GROUND LOOP.
- 2 #4/0 AWG BARE TINNED SOLID COPPER GROUND CONDUCTOR BURIED 30" BELOW GRADE.
- 3 AIR TERMINAL - TYPICAL.
- 4 CLASS 1 COPPER LIGHTNING BONDING CONDUCTOR (14 STRANDS OF #16 AWG WIRE).
- 5 CLASS 1 COPPER MAIN LIGHTNING CONDUCTOR (29 STRANDS OF #16 AWG WIRE).
- 6 CONNECT TO LIGHTNING PROTECTION SYSTEM.
- 7 3/4" X 10' LONG COPPER CLAD GROUND ROD. TOP OF ROD SHALL BE 12" BELOW GRADE.



ALL BUILDING MATERIALS TO MEET NFPA 101

				ARCHITECT/ENGINEERS:				Drawing Title: ELECTRICAL GROUNDING AND LIGHTNING PROTECTION PLAN		Project Title: BUILDING 2 ROOF REPLACEMENT (A+E)		Project Number: 529-12-106		Office of Construction and Facilities Management			
				<div>PARADIGM</div> <div>ENGINEERS AND CONSTRUCTORS</div> <div>300 Mount Lebanon Blvd #201A, Pittsburgh, PA 15234 ~ PH: 502.339.8511 ~ www.paradigmusa.com</div>				Approved Project Director		Location: VA BUTLER HEALTHCARE 325 NEW CASTLE ROAD, BUTLER PA 16001-2480		Building Number: 2					
								Date: 12-20-2012		Checked: BVG		Drawn: MPS					
Revisions:		Date:										Drawing Number: 2.EP101					