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TELECOMMUNICATIONS SYSTEM RISER
NOT TO SCALE

TELECOMM. SYSTEM RISER GENERAL NOTE:

COOPS ARE SHOWN AT EQUAL HEIGHTS FOR CLARITY. EXISTING FLOOR ELEVATIONS MAY VARY. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXACT ELEVATIONS AND PROVIDING APPROPRIATE PATHWAY BETWEEN STRUCTURES. REFER TO SITE FIBER ROUTING PLAN FOR ADDITIONAL INFORMATION AND WORK REQUIREMENTS.

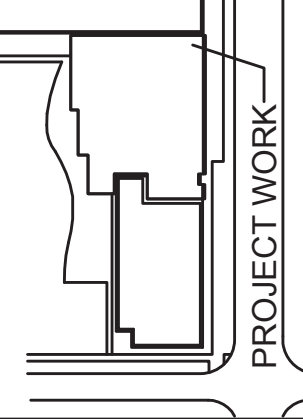
LEGEND: TELECOMM. RISER

- | | |
|------------------------|---|
| --- | EXISTING CABLE - TO BE DEMOLISHED |
| --- | EXISTING CABLE - TO REMAIN |
| --- | NEW BACKBONE CABLEING, FOLLOW EXISTING PATHWAYS WHERE AVAILABLE |
| --- | FUTURE BACKBONE CABLEING |
| | 2-HOUR FLOOR OR WALL (NOT ALL FIRE RATED WALLS ARE SHOWN ON THE RISER) |
| ▬ | FIRE-RATED PENETRATION AND/OR CONDUIT SLEEVES IN FIRE-RATED WALLS OR FLOORS (SLEEVES MAY BE LOCATED TOGETHER PHYSICALLY IN FIELD BUT SHOULD BE SEPARATE ON RISE) (SEE RISES FOR FURTHER DETAILS) VERIFY ALL PENETRATIONS AND CONDUITS ARE PROPERLY FIRE-STOPPED AND PENETRATIONS ARE PROPERLY COORDINATE FIRE-RATINGS WITH ARCHITECTURAL PLANS. |
| RENOV
EXIST
CITY | BACKBONE CABLE - REFER TO FLOOR PLANS FOR RACEWAY REQUIREMENTS.
FIM - TIGHT BUFFER, INTERLOCKED ARMORED RISER FIBER OPTIC BACKBONE CABLEING (25.1 MILITARY SPECIFICATION) (SEE RISES FOR FURTHER DETAILS)
FMC - CAT3 COPPER BACKBONE CABLEING
XX - INDICATES NUMBER OF 62.5MM ID MODE OR SINGLE MODE STRANDS
XX - INDICATES NUMBER OF STRANDS |
| RT | DATA RISER TERMINATION - PROVIDE BACK MOUNTED RISER OPTIC TERMINATION HOUSING (LULU) FOR TERMINATION OF FIBER OPTIC BACKBONE CABLEING. REFER TO TELECOM DETAILS FOR ADDITIONAL REQUIREMENTS. |
| RT | VOICE RISER TERMINATION - PROVIDE WALL MOUNTED 110 BLOCKS FOR TERMINATION OF CAT 3 BACKBONE CABLEING. REFER TO TELECOM DETAILS FOR ADDITIONAL REQUIREMENTS. |

CONSULTANTS:

BID ISSUE		06/19/15
Revisions		Date

KEY PLAN



ARCHITECTS/ENGINEERS:

CBLH
DESIGN
**Architecture
Planning
Interior Design**

**FREDRICK FREDRICK & HELLER
ENGINEERS, INC.**
BROADVIEWTWP., OHIO 44147
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TELECOMMUNICATIONS SYSTEM RISER

Approved: Project Director

Location	LOUIS STOKES MEDICAL CENTER 10701 EAST BLVD,	
Date	06/19/2015	<div>Checked</div> <div>MPL</div> <div>Drawn</div> <div>CPC</div>

Project Number
 541 371
 Building Number
 L8
 Drawing Number
 T5-1
 Dwg. 234 of 239

**BID ISSUE - FOR CONSTRUCTION
FULLY SPRINKLERED**



- REQUIREMENTS FOR POE
 - 115 VAC 15 AMP FROM UPS IN RACK
 - 15 CAT5 WIRE BETWEEN POES
- POE SWITCHES GREATER THAN 30FT
- FT). THE SWITCHES HAVE BUILT-IN ABILITY TO USE FIBER. THE SWITCHES ARE DESIGNED TO WORK WITH A MODEM FIBER WHICH CAN INCREASE THE NEED FOR A REPEATER. A MINI GBIC (MINI GIGABIT INTERFACE CONNECTOR WHICH TERMINATES THE FIBER TO THE POE) IS REQUIRED
- REQUIREMENTS FOR THE UPC
 - 115 VAC 15 AMP MAX EMERGENCY POWER - FROM UPS IN RACK
- REQUIREMENTS FOR THE VOP SERVER
 - 115 VAC 15 AMP MAX EMERGENCY POWER - FROM UPS IN RACK
 - 1 CAT5 WIRE BETWEEN POE AND THE SERVER
 - 2 CAT5 WIRES (LABELLED ETH, SPARE) BETWEEN
 - THE VOP SERVER AND THE UPC
- REQUIREMENTS FOR THE SMART CLIENT SERVER
 - 115 VAC 15 AMP MAX EMERGENCY POWER - FROM UPS IN RACK
 - 2 CAT5 WIRES (LABELLED ETH, SPARE) BETWEEN
 - THE CLIENT SERVER AND THE UPC
- REQUIREMENTS FOR THE ADVANCE FEATURE SERVER
 - 115 VAC 15 AMP MAX EMERGENCY POWER - FROM UPS IN RACK
 - 2 CAT5 WIRES (LABELLED ETH, SPARE) BETWEEN
 - THE ADVANCE FEATURE SERVER AND THE UPC

COMMUNICATION NOTES:

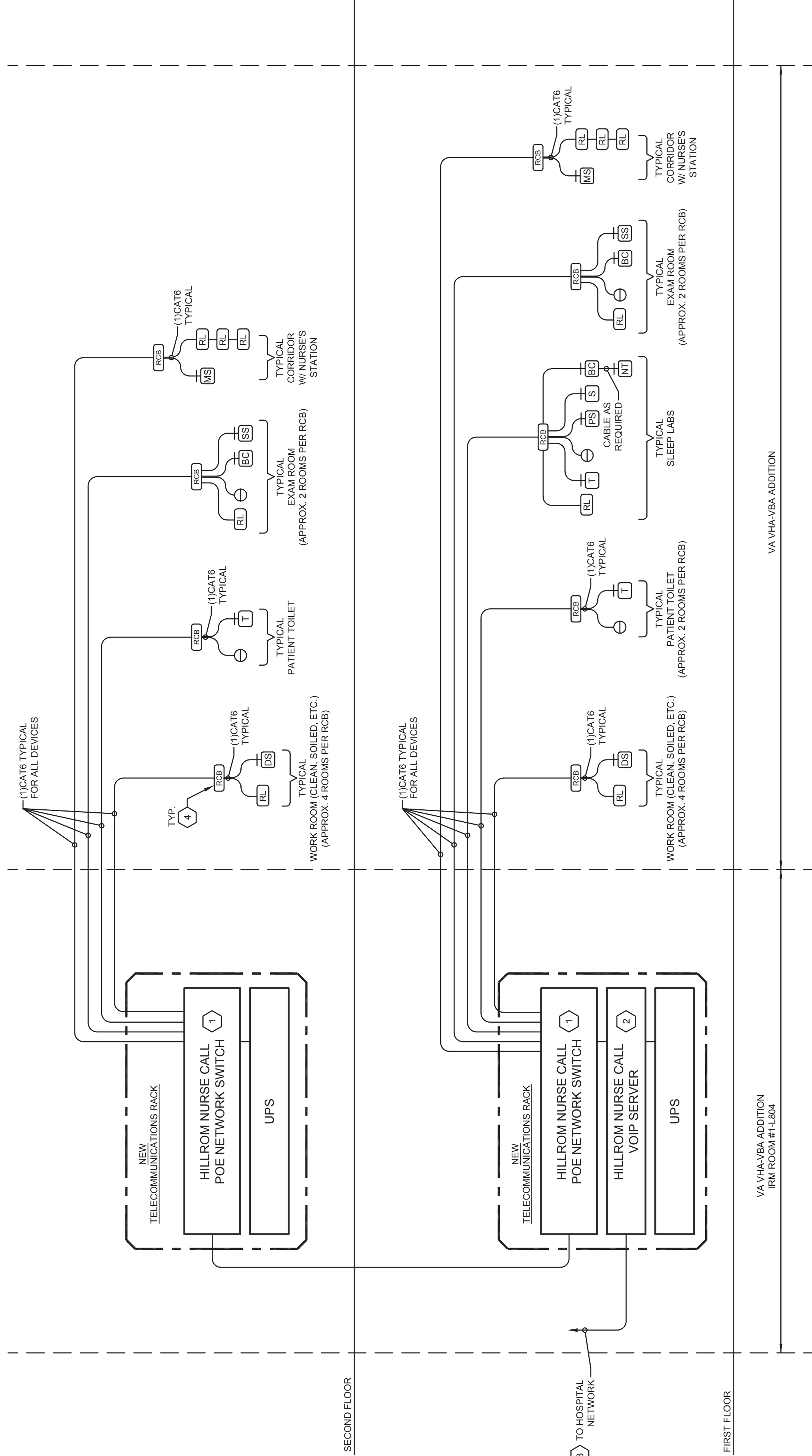
1. COMMUNICATION CABLE BELDEN 1858A OR EQUIVALENT BANG IS REQUIRED
2. CABLE MUST BE 18 AWG 24 PAIRS TWISTED PAIR
3. LOCATION OF HOUGH FOR ALL BIED INTERFACE UNITS MUST WOOD INTERFERENCE OR
4. DAMAGE FROM PATENT BIED
5. LOCATIONS TO BE FIELD DETERMINED ARE FOR ILLUSTRATION PURPOSES ONLY, ACTUAL
6. HOME-RUNS FROM ROOM BOXES THAT CONTROLS DOME LIGHTS TO POLE MUST NOT
7. BE USED FOR ANY OTHER PURPOSES
8. ALL R45 CONNECTORS MUST BE AMP PART 5-57316-4. CABLE MUST BE TERMINATED
9. WITH AMP TERMINATION TOOL. PART 2238682
10. SUPPLIED BY INSTALLING CONTRACTOR. PROVIDE SWITCH FOR EACH RELAYING
11. RELAY. EACH SWITCH CONTAINS ONE SET OF NORMALLY OPEN MOMENTARY DRY
12. CONTACTS. A COMMON AND ONE SWITCH LEG IS PROVIDED. LIGHTING RELAYS
13. TO OPERATE THESE RELAYS MUST BE PROVIDED BY INSTALLING CONTRACTOR TO BUD.
14. ALL SPECS W/IN THESE GRANTS ARE SUBJECT TO CHANGE WITHOUT NOTICE
15. NOT INCLUDED. PROVIDE W/IN THE NETWORK R45 P. EACH RELAYING
16. UNLESS OTHERWISE NOTED, ALL NON-STANDARD PRODUCTS ARE NOT UL APPROVED

GENERAL NURSE CALL SYSTEM NOTES:

- N1 ALL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70B. THE WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
- N2 ALL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70B. THE WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
- N3 ALL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70B. THE WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
- N4 ALL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70B. THE WIRING SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:

NURSE CALL SYSTEM RISER CODED NOTES:

1. NURSE CALL POWER OVER ETHERNET SWITCH:
NEW HILL-ROOM NAVIGARE SWITCH (HILL-ROOM #2218NCA242).
A. 19" RACK-MOUNTABLE
B. (24) 10/100M SWITCHING PORTS
C. 24 RJ-45 NETWORK PORTS
D. 36Watt FOR PoE
E. COMPATIBLE WITH HILL-ROOM NAVIGARE AUDIOVISUAL NURSE CALL DEVICES.
2. NURSE CALL POWER-OVER-IP SERVER, COORDINATE REQUIREMENTS AND CONNECTION TO EXISTING VMAC HILL-ROOM SERVER WITH HILL-ROOM. PROVIDE ALL COMPONENTS NECESSARY FOR A COMPLETE SYSTEM.
3. HILL-ROOM VENDOR SHALL PROVIDE ALL ADDITIONAL COMPONENTS, SOFTWARE, ETC NECESSARY TO EXTEND THE EXISTING CAMPUS HILL-ROOM NURSE CALL SYSTEM AND SANITIZATION SYSTEM.
1. PROVIDE NEW NURSE CALL SYSTEM AND DEVICES IN PROJECT AREA.
2. CONNECT NEW NURSE CALL HEAD-END EQUIPMENT TO EXISTING HILL-ROOM SYSTEM IN THE MAIN CAMPUS BUILDING VIA NETWORK CABLING.
4. EXACT QUANTITY OF ROOM CONTROL BOARDS (RCB) SHALL BE DETERMINED BY HILL-ROOM SYSTEM VENDOR ON SITE-SPECIFIC SHOP DRAWINGS.



NURSE CALL SYSTEM RISER

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CONSULTANTS:	

KEY PLAN



PROJECT WORK:

CBLH DESIGN

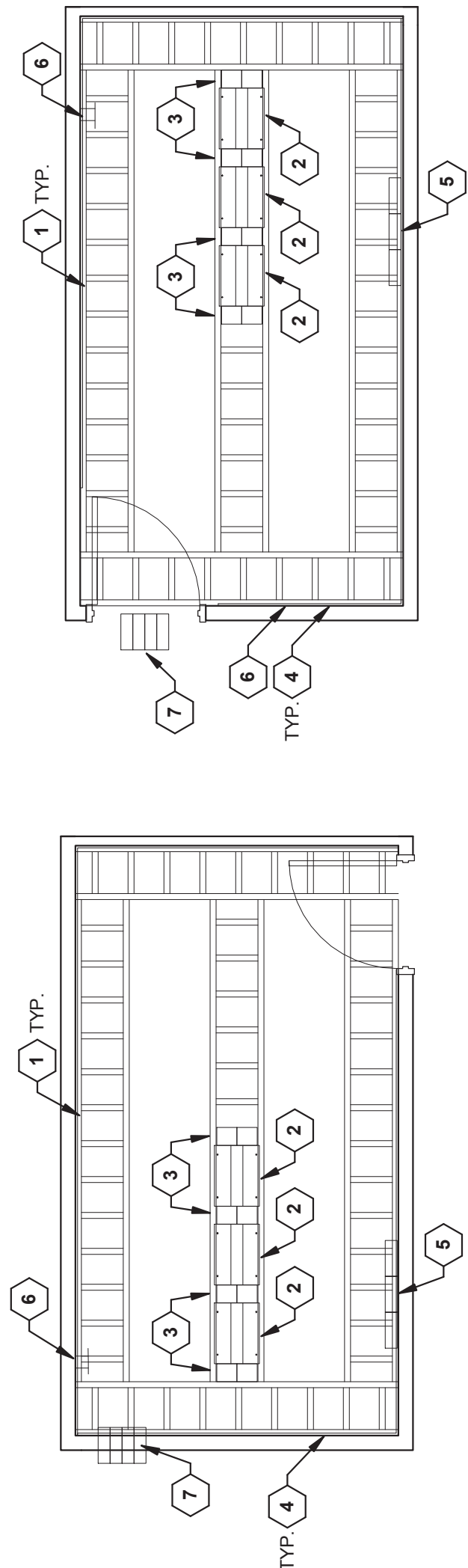
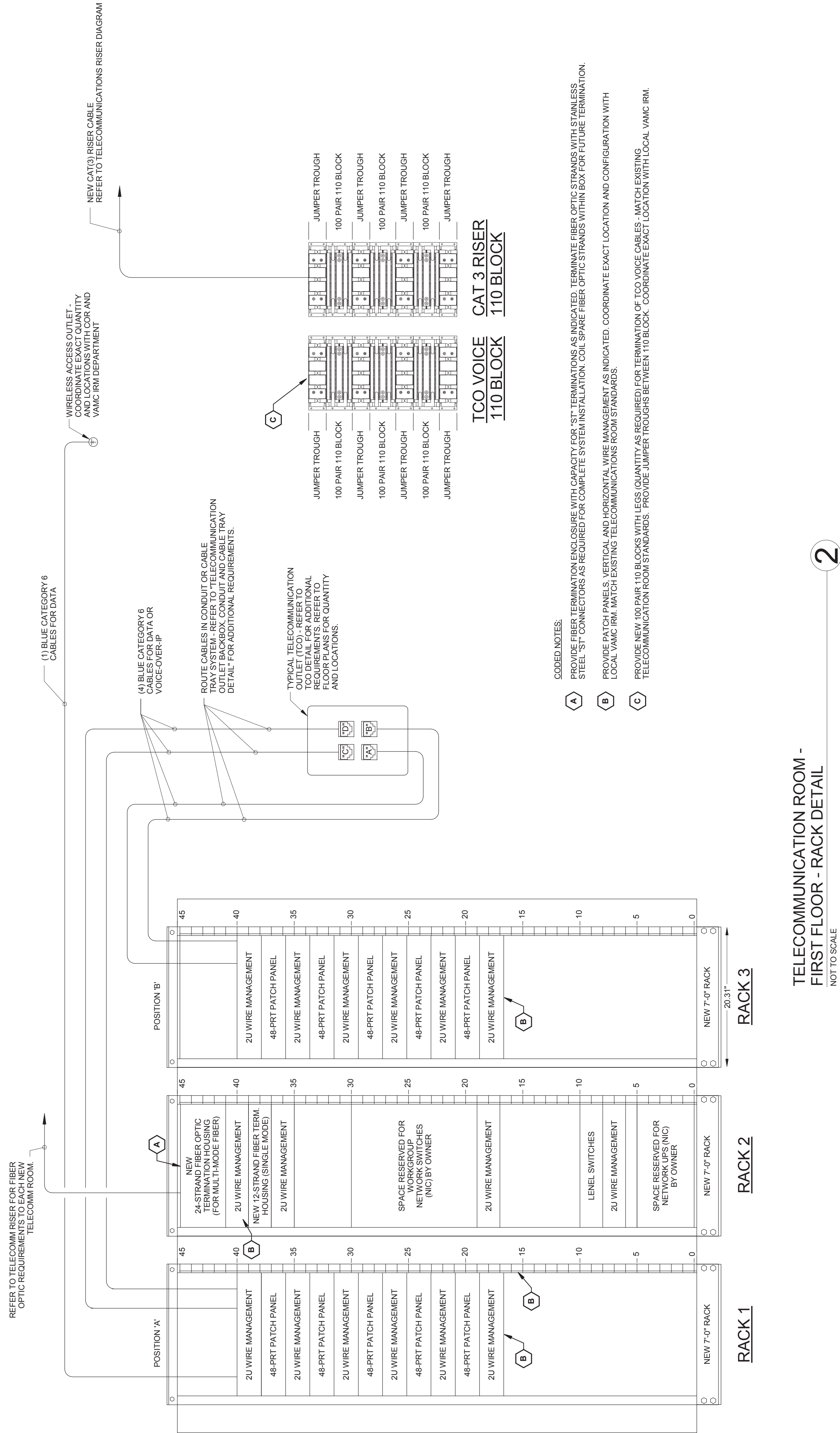
Architecture Planning Interior Design

**Cleveland, OH 44130
7680 Freeway Circle
440.245.2000 f**

ARCHITECTS/ENGINEERS:

	<p>ARCHITECTURAL PROJECT # 14639</p>	<p>Drawing Title</p> <p>NURSE CALL SYSTEM RISER DIAGRAM AND NOTES</p>	<p>Approved: Project Director</p>
	<p>M. P. LONG 59459</p>	<p>PROFESSIONAL ENGINEER</p>	<p>REBRICK, REBRICK & HELLER 100 EAST NIMBLE LANE SUITE 200 COLUMBUS, OHIO 43204 614.265.8800 FAX: 614.265.8801 WWW.REBRICK-REBRICK-HELLER.COM</p>

Project Title	Project Number
VA Building VA VHA-VBA ADDITION	541 371
	Building Number
	L8
Location	Drawing Number
LOUIS STOKES MEDICAL CENTER 10701 EAST BLVD.	T5-2
Date	Dwg
06/19/2015	235 of 239
Checked	Drawn
MPL	CNC

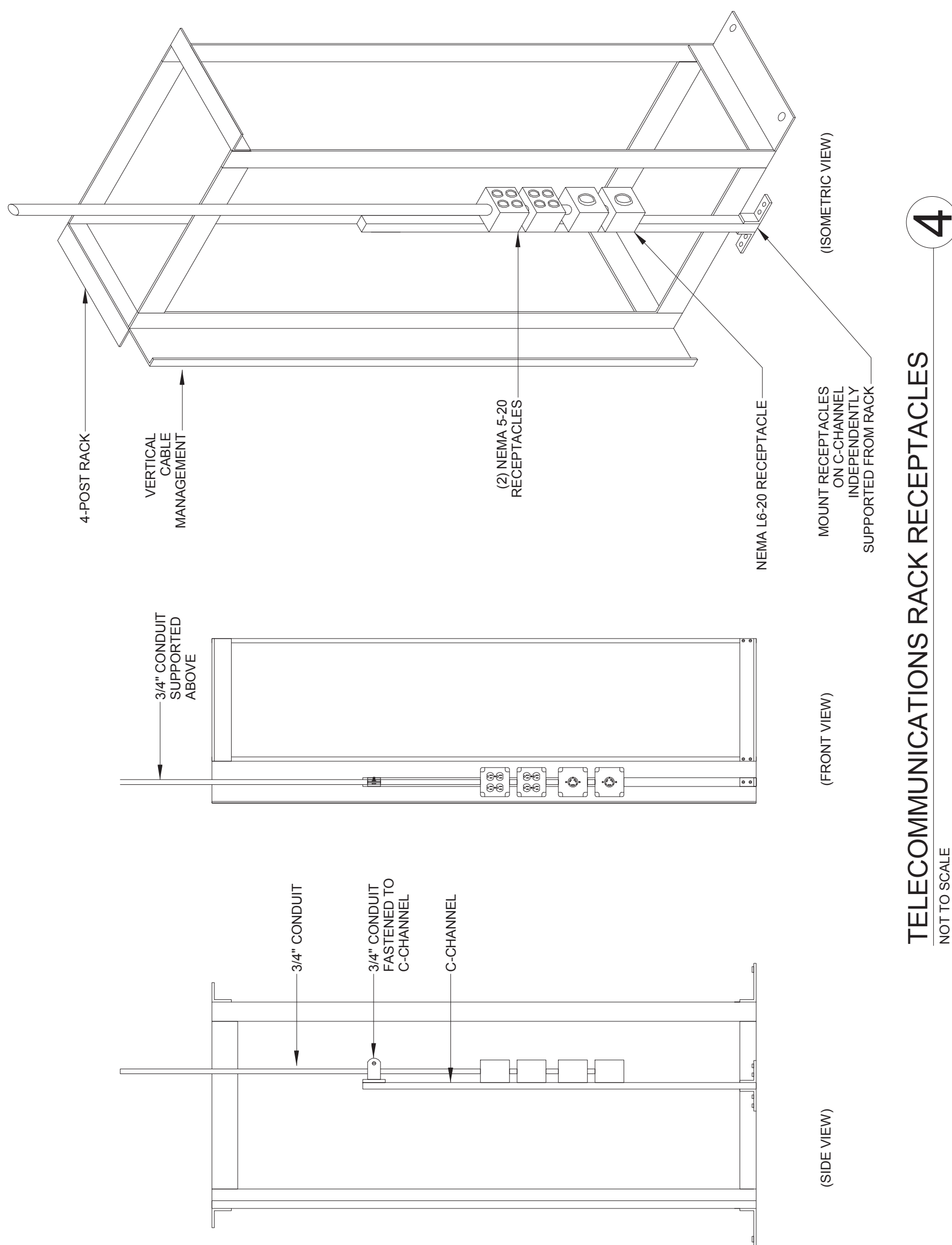
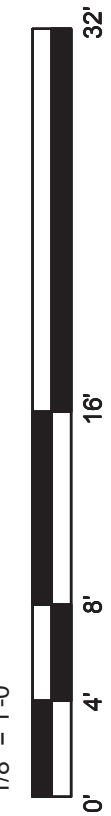


FIRST FLOOR

SECOND FLOOR

- ## ENLARGED TELECOM. ROOMS CODED NOTES
- | | |
|---|--|
| 1 | PROVIDE 3/4" X 8", 2-HOUR FIRE-RETARDANT PLYWOOD MOUNTED 12" AF ROUND PERIMETER OF NEW TELECOM ROOMS. |
| 2 | PROVIDE 1/4" X 7/8" 2-POST RACK WITH RAIL MARKINGS ON CHANNEL WITH HORIZONTAL AND VERTICAL CABLE MANAGER. BOLT RACK TO FLOOR PER SPECIFICATIONS. TELECOM ROOM SWITCHES AND UPS PROVIDED BY OWNER. TELECOM PATCH PANELS PUNCH DOWN. TELECOM PATCH PANELS PUNCH DOWN. TELECOM PATCH PANELS PUNCH DOWN. ETC. SHALL BE PROVIDED BY THE CONTRACTOR. REFER TO TECHNOLOGY DETAILS ON THIS DRAWING FOR ADDITIONAL REQUIREMENTS. |
| 3 | PROVIDE DOUBLE 3' W/ 1' HIGH VERTICAL CABLE MANAGERS ON BOTH SIDES OF EACH RACK. |
| 4 | PROVIDE 1/4" X 1/4" CABLE TIE BARS PER SPECIFICATIONS. CABLE TIE BARS ON THE FRONT ROOM SHALL BE INTERFERED & SUPPORTED AND MOUNTED ABOVE TELECOM RACKS. COORDINATE CABLE TIE BARS TO AVOID INTERFERENCE WITH DUCTWORK, PIPING, CONDUITS, LIGHTING FIXTURES AND ALL OTHER SYSTEMS WITHIN THE CEILING SPACE. |
| 5 | PROVIDE 10 LB BLOCKS FOR TERMINATION OF CAT3 FEEDER CABLE. REFER TO DETAIL "1" ON THIS DRAWING FOR ADDITIONAL REQUIREMENTS. |
| 6 | PROVIDE 3/4" X 4" X 1/4" COPPER GROUNDING BARS BUILT MOUNTED ON INSULATORS AT 16" HCF PER SPECIFICATIONS IN AVAILABLE SPACE IN TELECOM ROOM. BOND BARS TO NEAREST BUILDING STEEL VIA EXOTHERMIC WELD. HFC 760/52, BOND ALL TELECOM EQUIPMENT RACKS, LADDER TRAYS, AND EQUIPMENT ENCLOSURES TO BARS WITH 4MM GREEN INSULATED STRANDED COPPER BONDING CABLE VIA 1/4" COPPER BONDING CABLE. CONNECT TO MAIN GROUNDING BAR (760/52) THROUGH 1/4" COPPER BONDING CABLE TO CONDUIT TO NEGATIVE INDUCTIVE CHOLEN. |
| 7 | PROVIDE 2 SETS OF 4" H/30" PRE-PATENTED PATHWAYS EACH CONSISTING OF HOUSING, FIRE RATING OF A HARBOR BLENDED STEEL PATHWAY CONTAINING 1/2" OF FIRE SEALING SYSTEM SUFFICIENT TO MEET THE HOUSING FIRE RATING OF THE BARRIER BEING PENETRATED. THE PATHWAY SHALL BE REMOVED OR RETIGHTENED WITHOUT THE NEED TO REMOVE OR REINSTALL THE PRE-STOPPING METALS. THE PATHWAY SHALL BE UL LISTED AND TESTED TO THE REQUIREMENTS OF ASTM E814. |

FIRST AND SECOND FLOOR
ENLARGED TELECOMMUNICATIONS ROOM



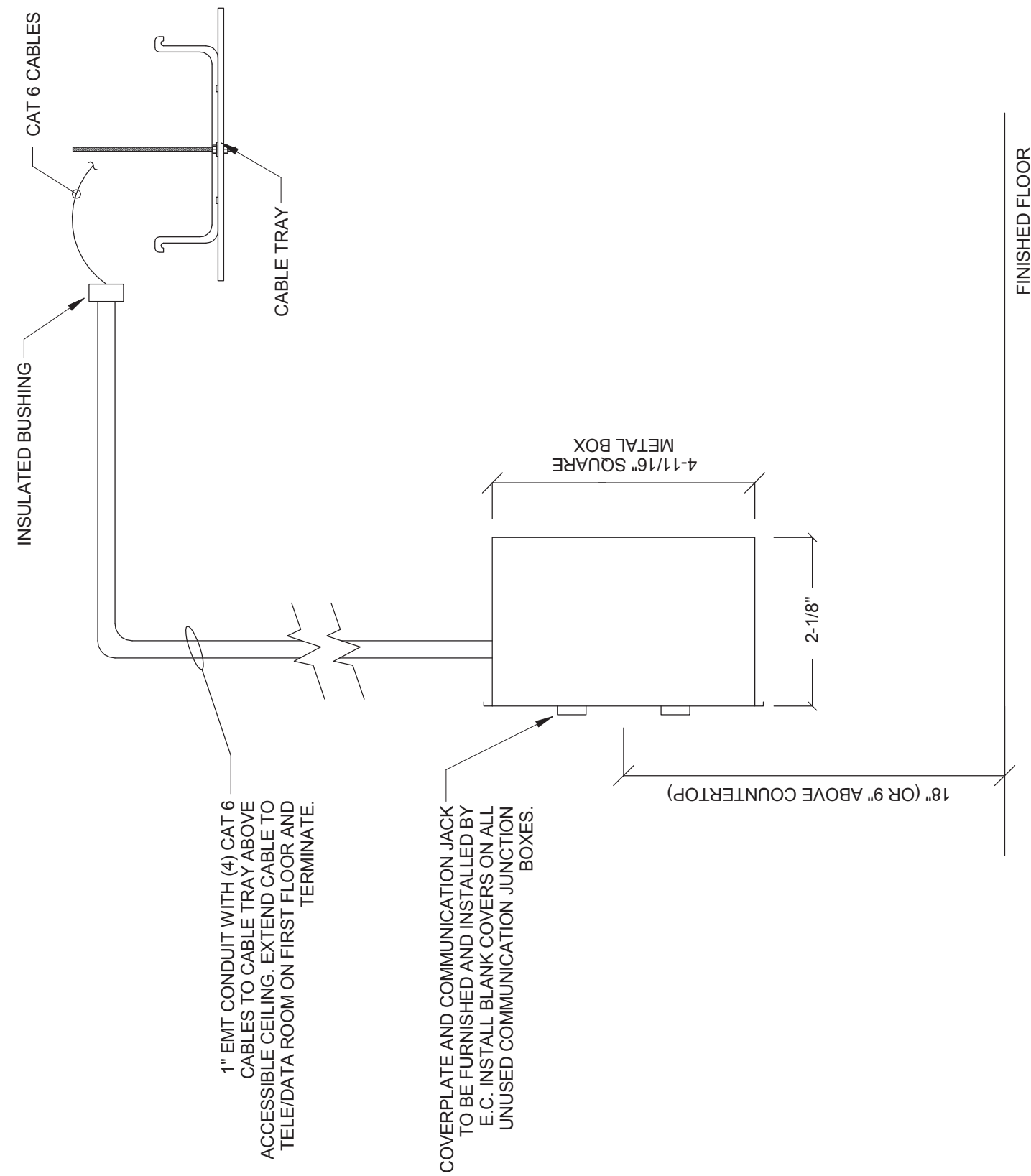
TELECOMMUNICATIONS RACK RECEPTACLES

NOT TO SCALE

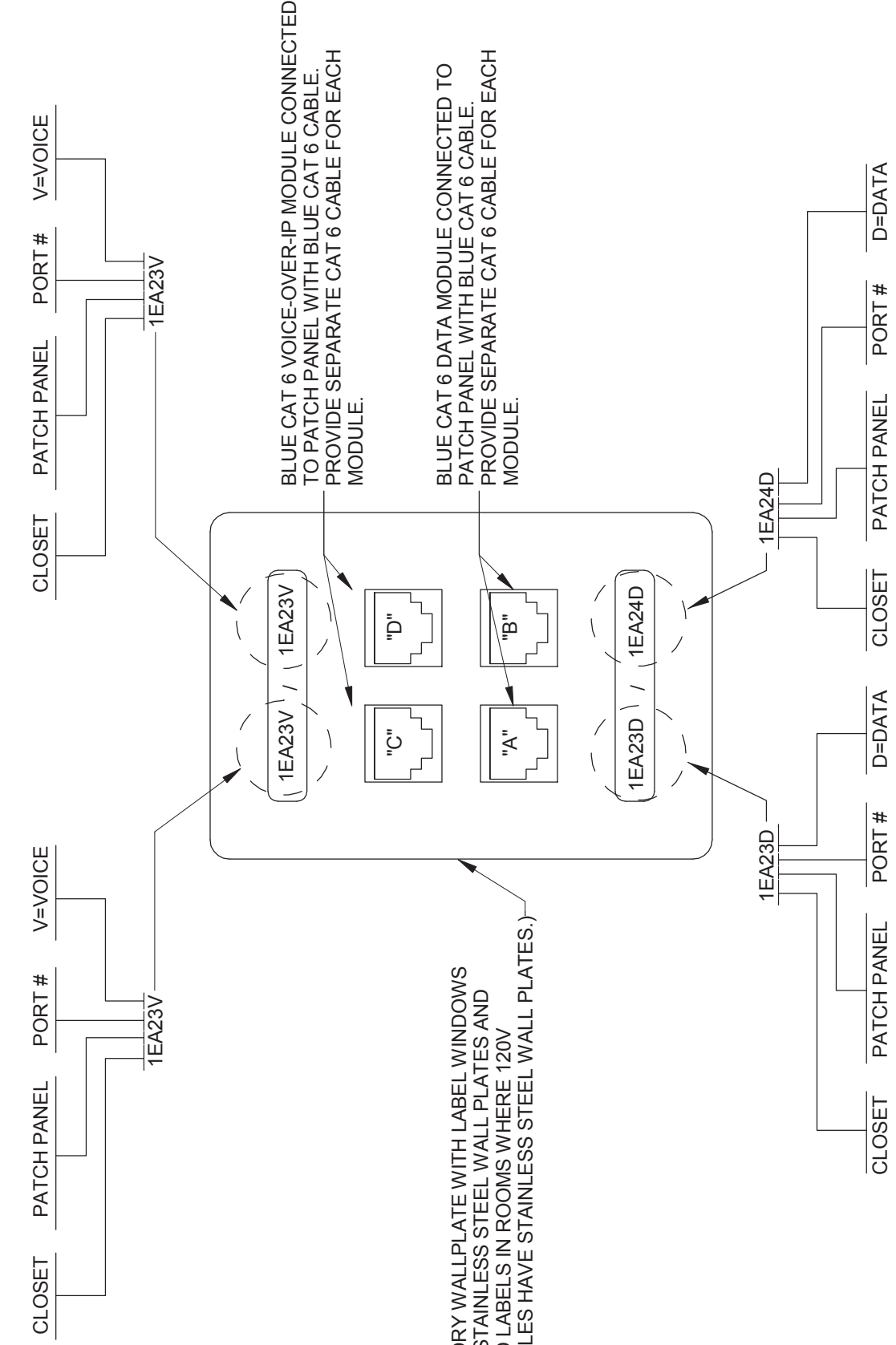
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Drawing Title TECHNOLOGY DETAILS (1 OF 3)	Project Title VA Building VA VHA-VBA ADDITION		Project Number 541-371		Office of Construction and Facilities Management
			Building Number L8		
	Location LOUIS STOKES MEDICAL CENTER 10701 EAST BLVD.		Drawing Number T6-1		
	Approved: Project Director				
		Date 06/19/2015	Checked MPL	Drawn CPC	Department of Veterans Affairs

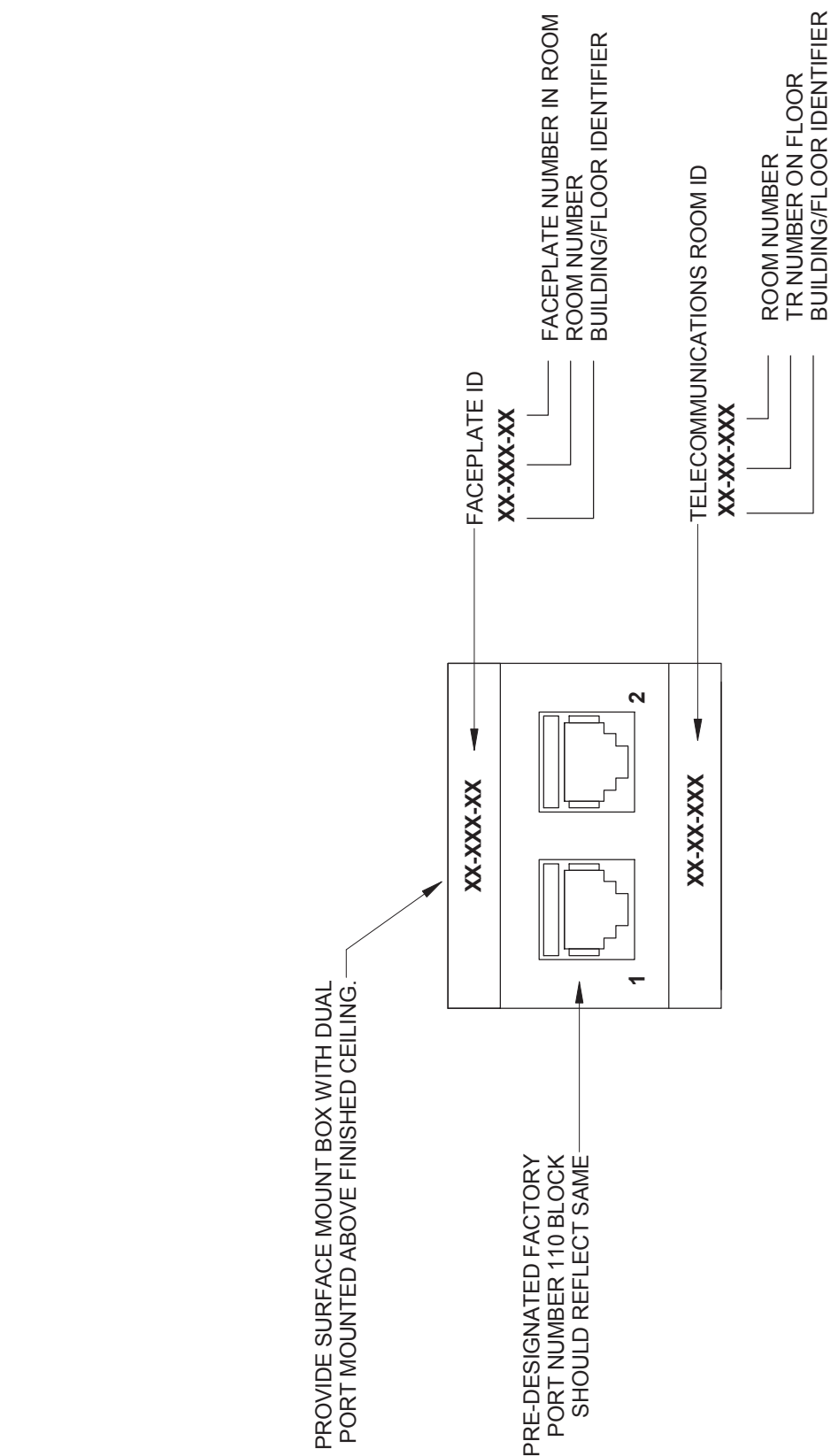


TELECOMMUNICATION OUTLET
BACKBOX, CONDUIT AND CABLE TRAY DETAIL



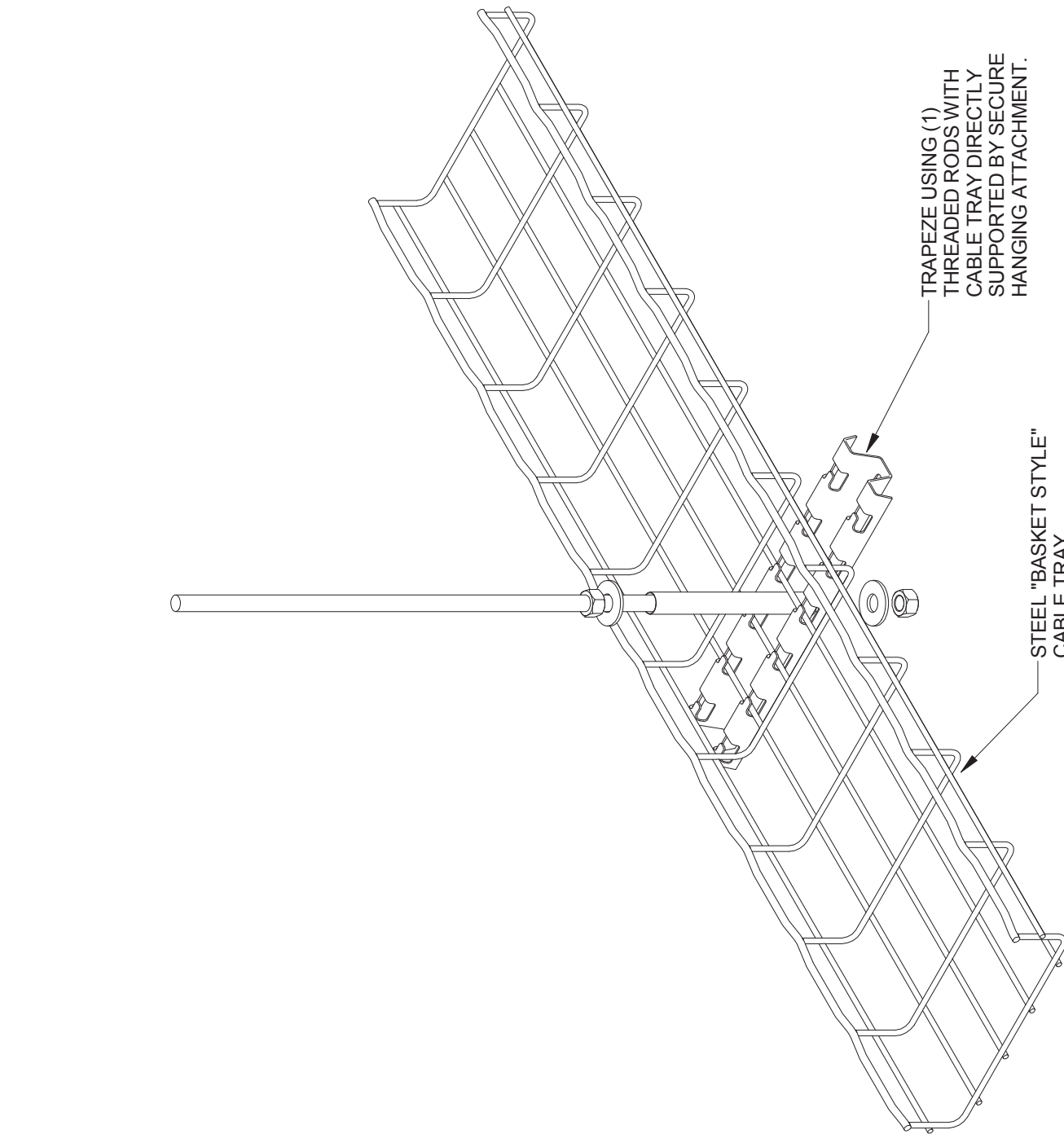
GENERAL NOTES:
1. COORDINATE LABELING SEQUENCE AND FORMAT WITH VA IRM.
2. PROVIDE (1) PURPLE CABLE AND JACK FOR PANIC ALARM IN LIEU OF ONE BLUE CABLE/PORT IN AREAS WHERE A PANIC ALARM DEVICE IS INSTALLED

TELECOMMUNICATION OUTLET (TCO) DETAIL



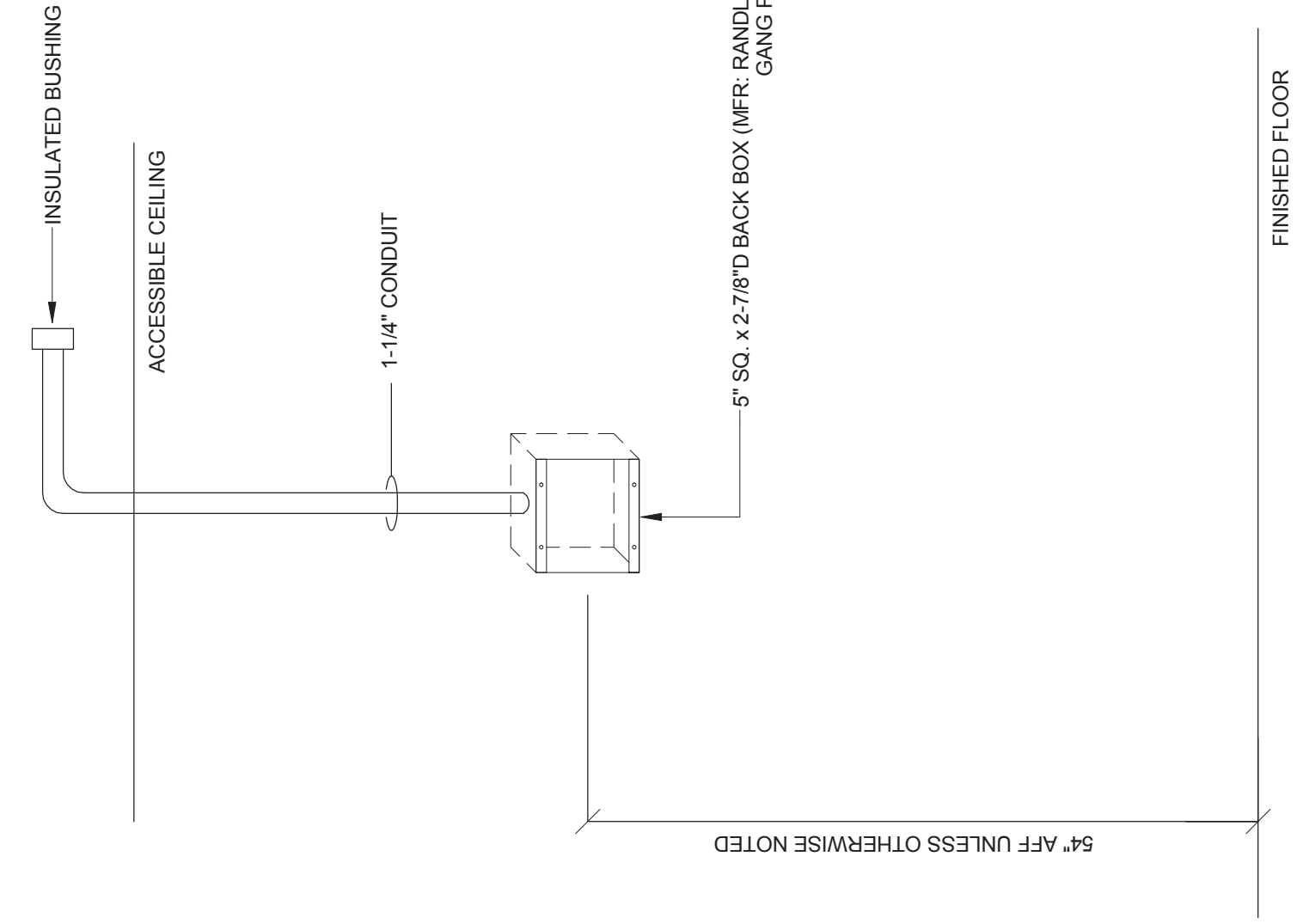
NOTE: VERIFY CABLE COLOR, JACK COLOR, AND FACEPLATE ID STANDARDS WITH VA COR AND IT DEPARTMENT.

WIRELESS ACCESS POINT FACEPLATE

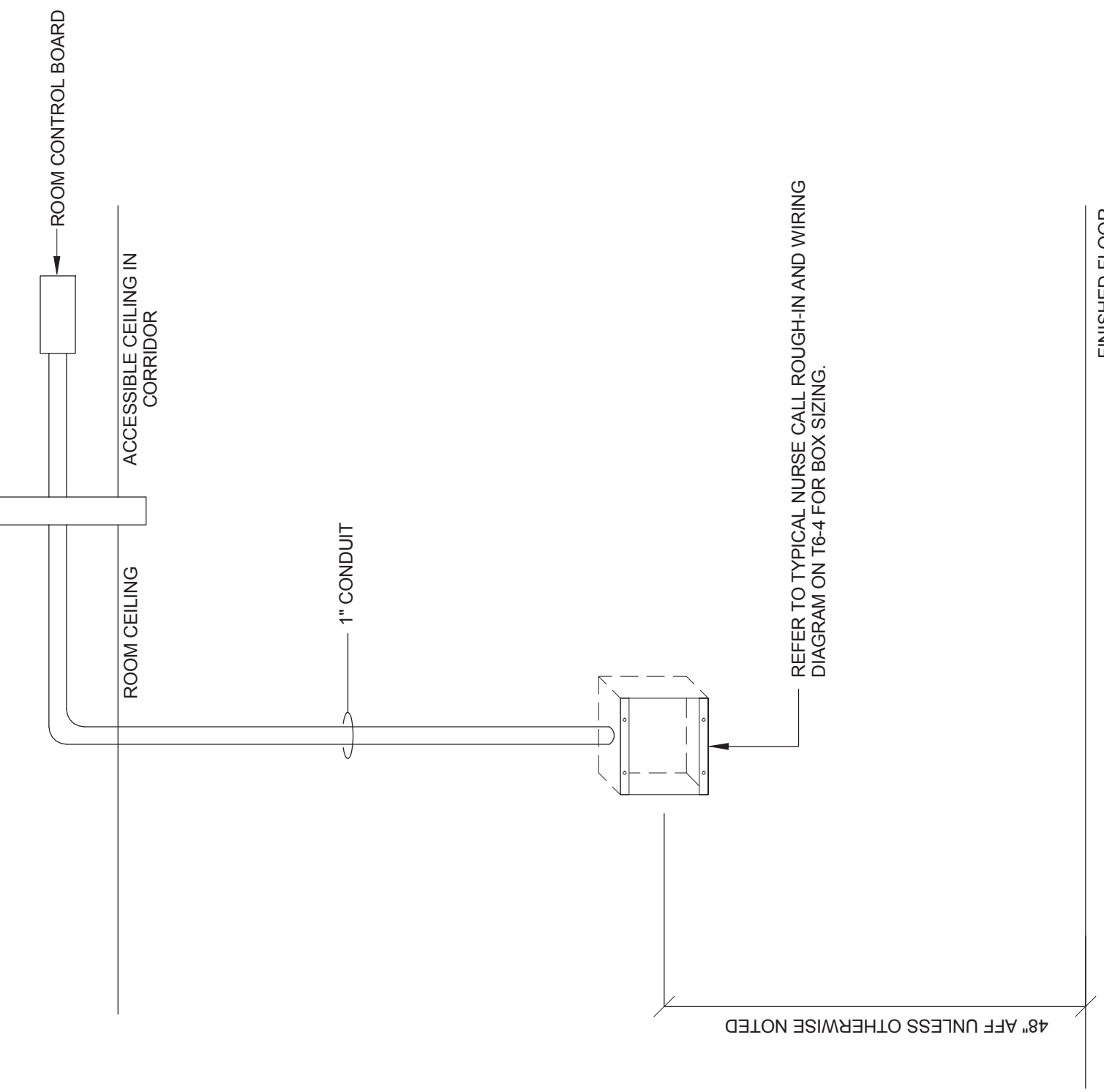


GENERAL NOTES:
1. PROVIDE SUPPORT SPACING FOR THE FULL CABLE CAPACITY OF THE CABLE TRAY.

TELECOMMUNICATION CABLE TRAY DETAIL



TYPICAL WALL PHONE ROUGH-IN



NURSE CALL ROUGH-IN DETAIL

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