

THE MOTLEY

TELECOM

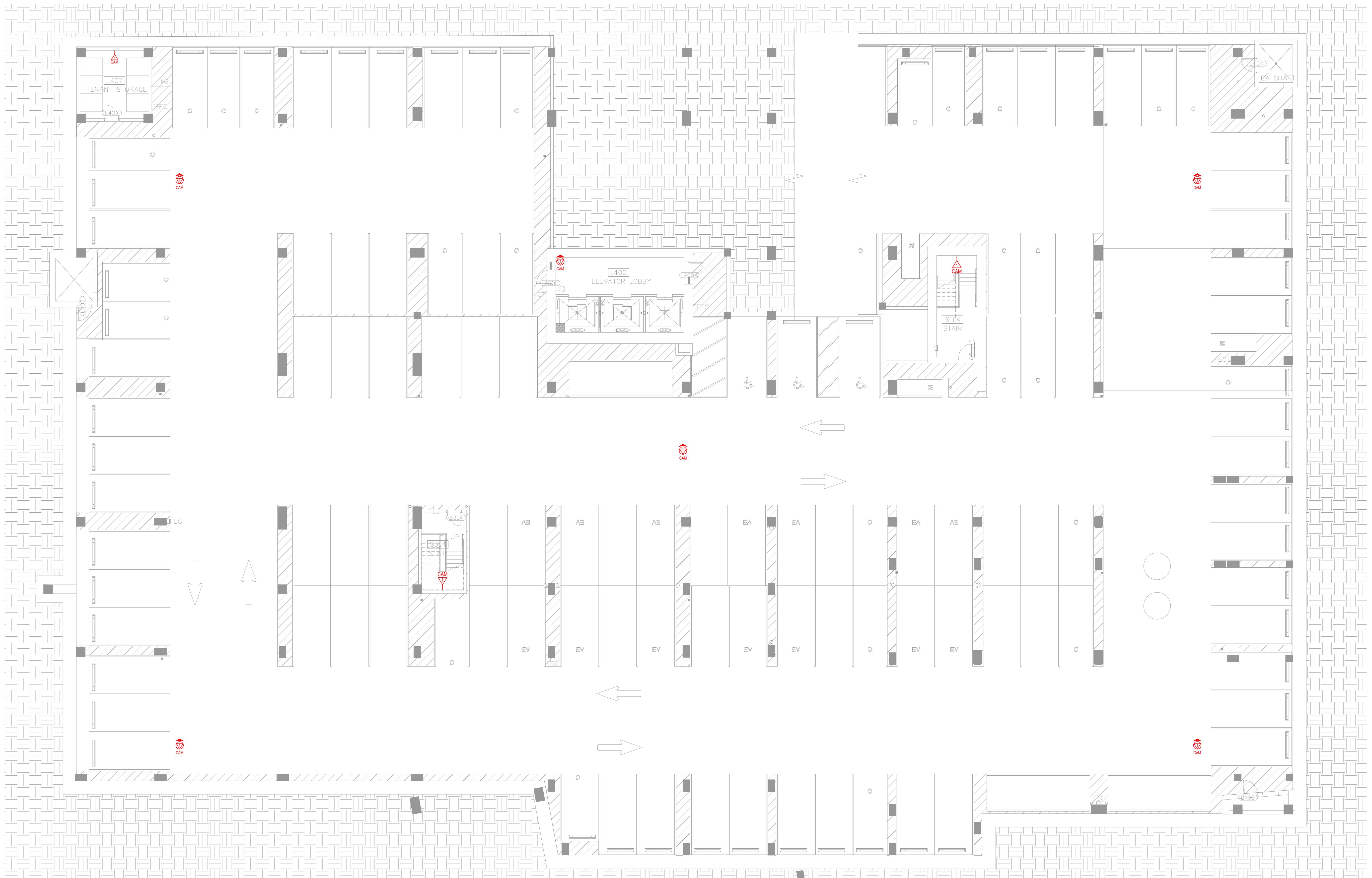
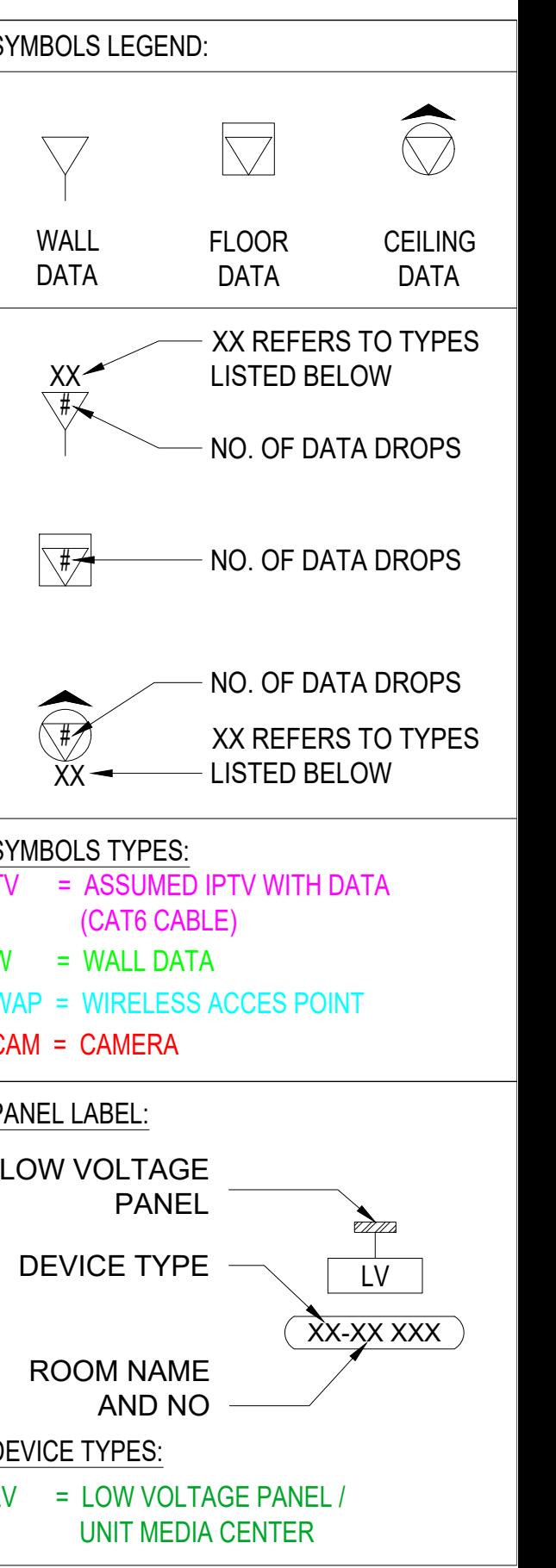
#	SHEET NUMBER	SHEET NAME	REV 0	REV 1	REV 2	REV 3	REV 4	REV 5	REV 6	REV 7	REV 8	REV 9	REV10
1	T0.01	TELECOM COVER PAGE	○	○	○	○							
2	T1.LL4	TELECOM LOWER LEVEL 4 FLOOR PLAN	○	△	○	○							
3	T1.LL3	TELECOM LOWER LEVEL 3 FLOOR PLAN	○	△	○	○							
4	T1.LL2	TELECOM LOWER LEVEL 2 FLOOR PLAN	○	△	○	△							
5	T1.LL1	TELECOM LOWER LEVEL 1 FLOOR PLAN	○	○	○	△							
6	T1.01	TELECOM LEVEL 01 FLOOR PLAN	○	△	○	△							
7	T1.02	TELECOM LEVEL 02 FLOOR PLAN	○	△	○	△							
8	T1.03	TELECOM LEVEL 03 FLOOR PLAN	○	△	○	△							
9	T1.04	TELECOM LEVEL 04 FLOOR PLAN	○	△	○	△							
10	T1.05	TELECOM LEVEL 05 FLOOR PLAN	○	△	○	△							
11	T1.19	TELECOM LEVEL 06-25 FLOOR PLAN	○	△	○	△							
12	T1.26	TELECOM LEVEL 26 FLOOR PLAN	○	△	○	△							
13	T1.27	TELECOM MECHANICAL FLOOR PLAN	○	○	○	△							
14	T1.28	TELECOM MECHANICAL PENTHOUSE FLOOR PLAN	○	○	○	△							
15	T5.01	TELECOM RISER DIAGRAM SHEET 1 OF 4	○	△	○	△							
16	T5.02	TELECOM RISER DIAGRAM SHEET 2 OF 4	○	△	○	△							
17	T5.03	TELECOM RISER DIAGRAM SHEET 3 OF 4	○	△	○	△							
18	T5.04	TELECOM RISER DIAGRAM SHEET 4 OF 4	○	△	△	○							
19	T5.10	TELECOM EQUIPMENT HEAT LOAD ESTIMATE	○	○	○	○							

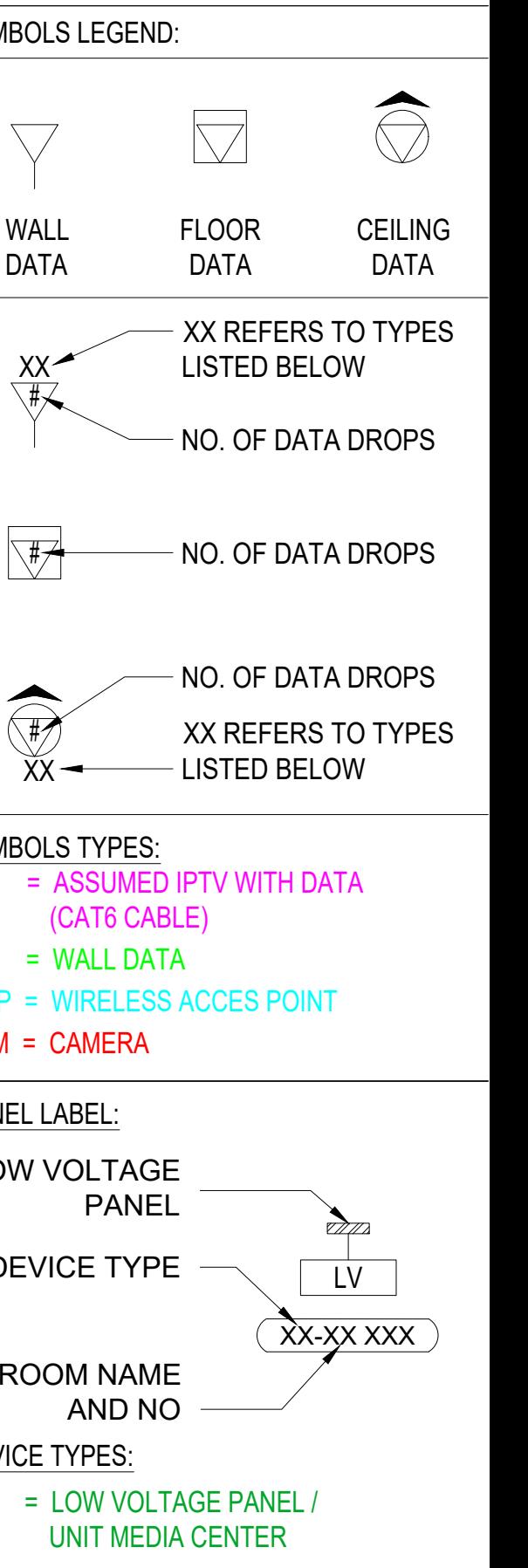
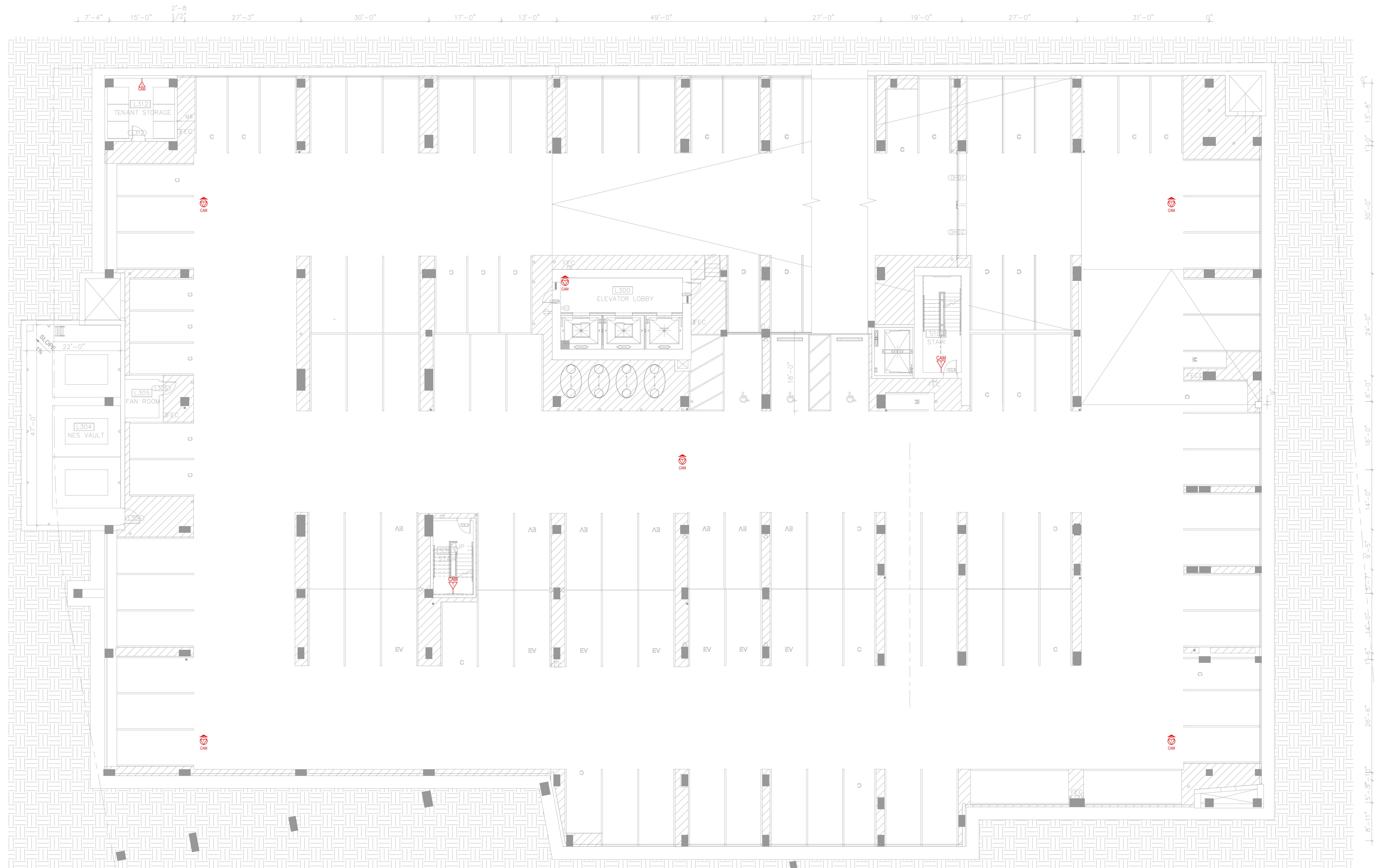
2025/06/26 FOR REVIEW
2025/07/07 CLIENT REVISION
2025/09/05 CLIENT REVISION
2025/09/25 CLIENT REVISION

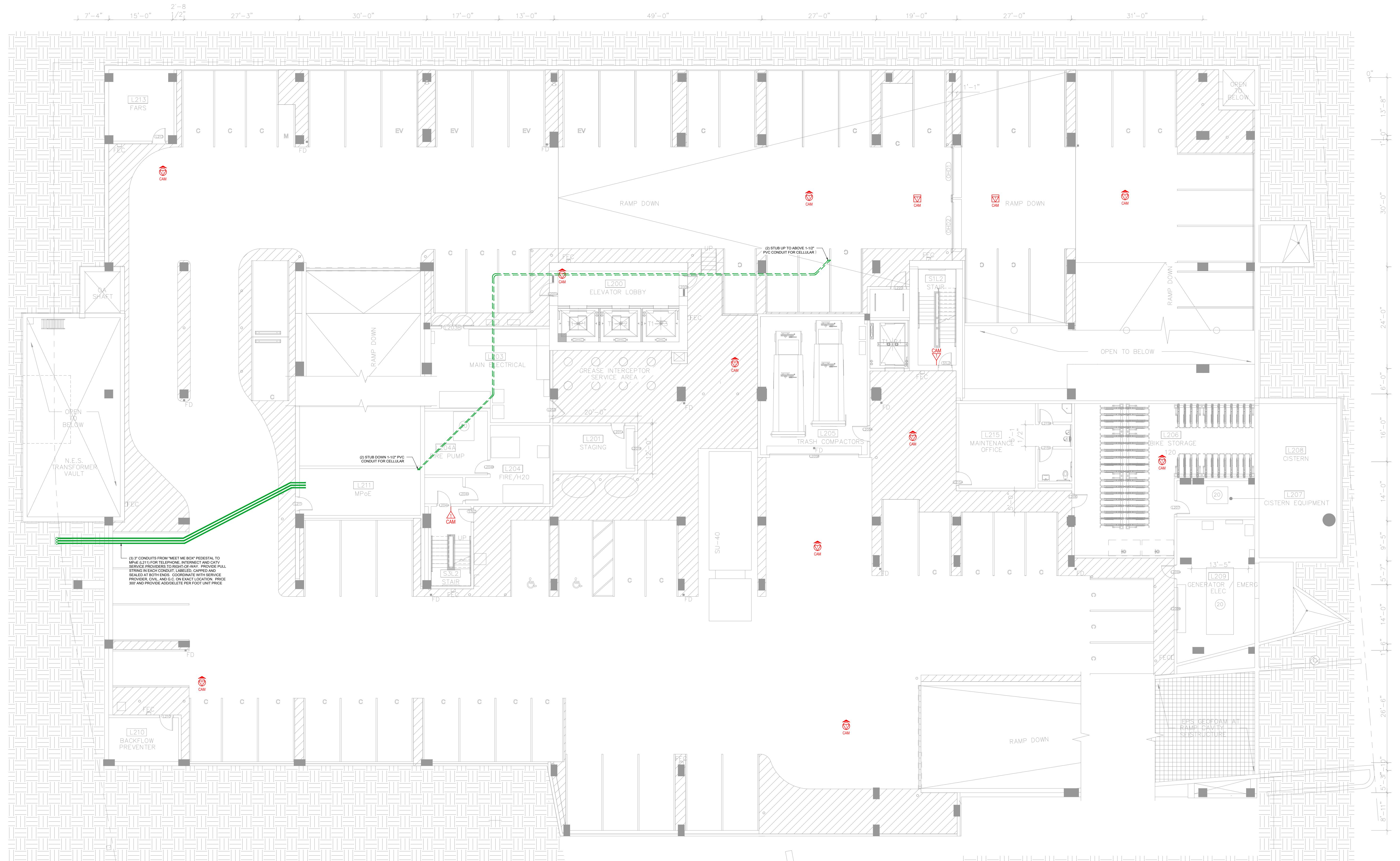
LEGEND:
 ○ CURRENT
 △ REVISED
 ▲ NEW
 ⊗ OMITTED

DESIGN ASSUMPTIONS	
TV: ASSUMED IPTV WITH DATA (CAT6 CABLE)	
UTILITY MEDIA CABINET	
WIFI: WIRELESS MODE	
GENERAL NOTES	
1. VERIFY ALL FINAL OUTLET LOCATIONS AND QUANTITIES WITH ARCHITECTURAL AND INTERIOR DESIGN DRAWINGS.	
2. ALL CABLES FROM UMC HOMERUN TO DESIGNATED IDF ROOM. SEE CORRESPONDING OVERALL PLANS AND/OR CABLING RISER DIAGRAM FOR ZONING INFORMATION.	
3. (1) CAT 6 HOME RUN TO EACH UNIT FROM IDF FURNISHED AND INSTALLED BY OWNER/RC.	
4. (1) FIBER CABLE HOME RUN TO EACH UNIT FROM IDF LOOPED THROUGH MEDIA PANEL (NOT TERMINATED) AND ROUTED TO WIRELESS ACCESS POINT LOCATION ON THE UNIT CEILING BY SERVICE PROVIDER.	
5. WIRELESS ACCESS POINT ROUGHED INTO A SINGLE GAGE CEILING BOX. THE BOX SHALL BE FLUSH WITH THE DRYWALL TERMINATED WITH AND RJ45 MODULAR PLUG BY THE LOW VOLTAGE CONTRACTOR.	

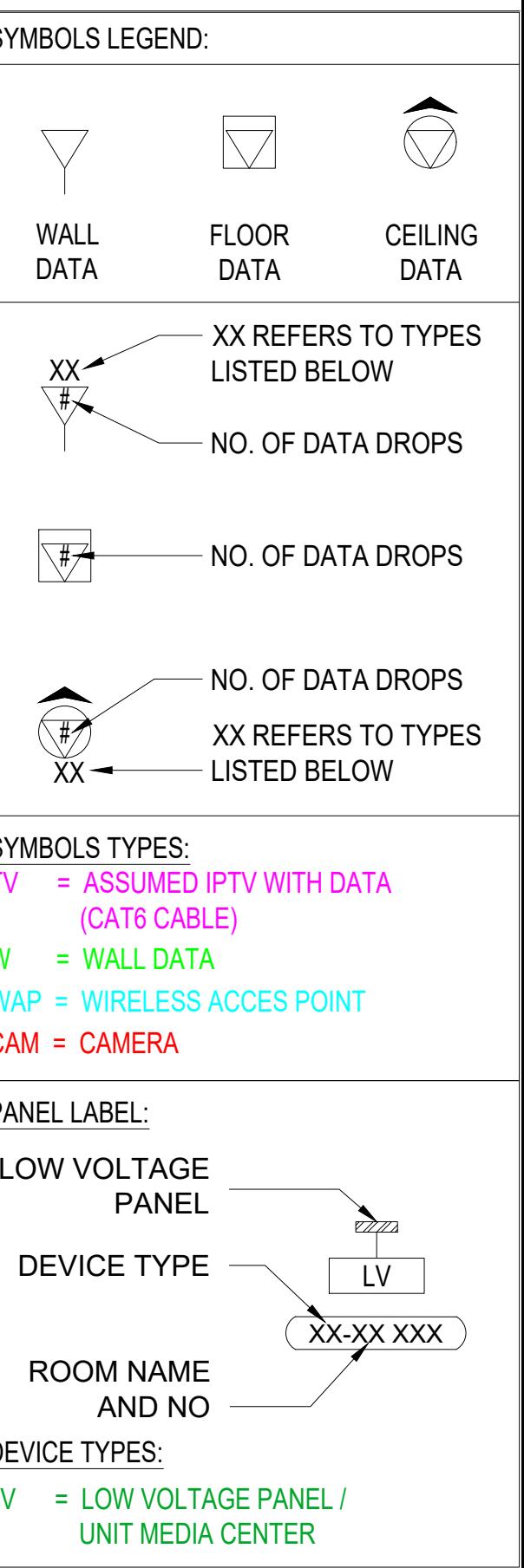
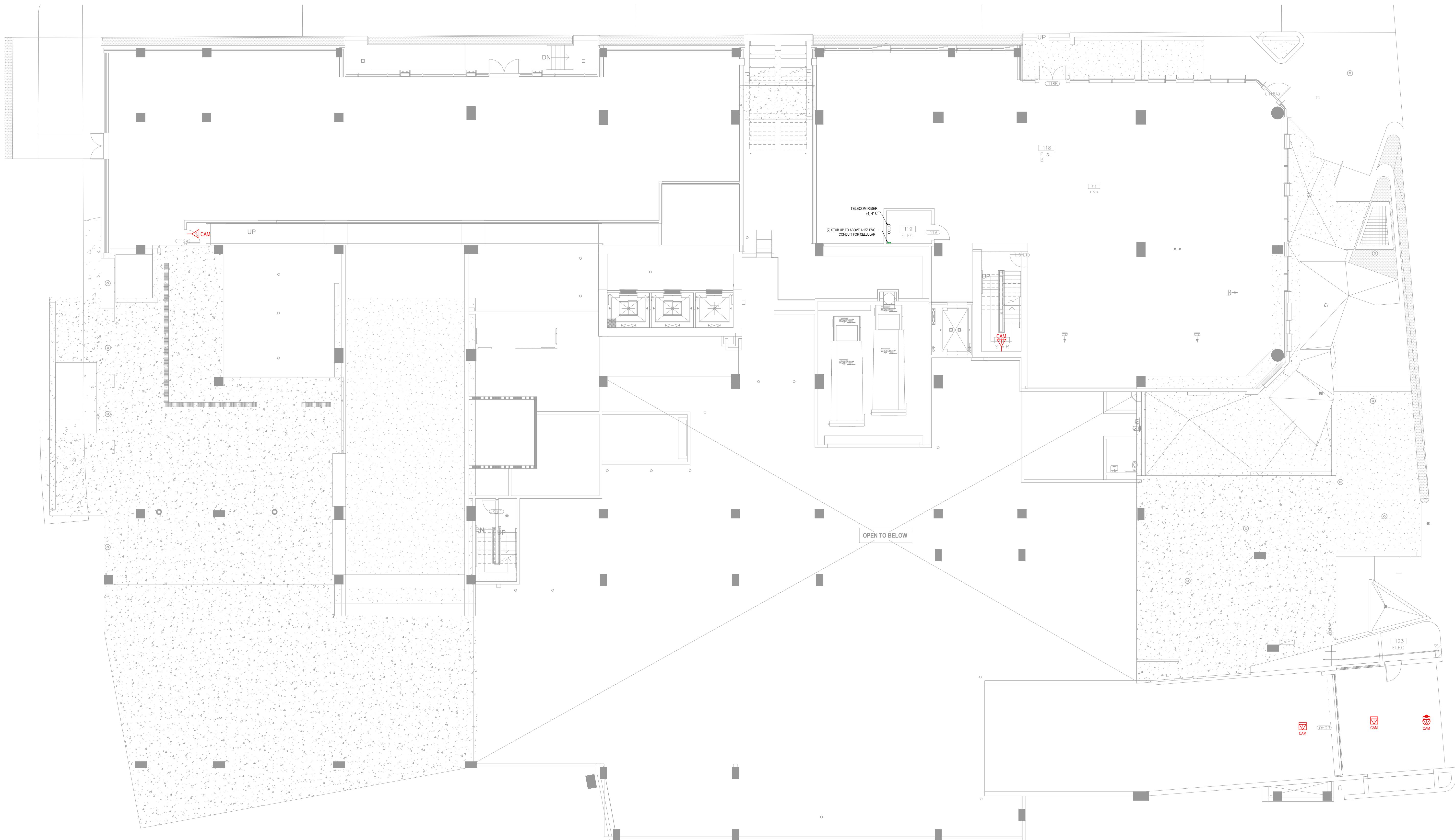
CONDUIT NOTES	
1. CONDUIT RUNS SHALL CONTAIN NO MORE THAN TWO (2) 90 DEGREE BENDS AND HAVE AN AGGREGATE BEND OF NO MORE THAN 180 DEGREES WITHOUT A PULL BOX. PULL BOXES SHALL BE INSTALLED IN STRAIGHT CONDUIT SECTIONS ONLY.	
2. ALL CONDUITS STUBS FOR OUTLET BOXES SHALL STUB TO ACCESSIBLE CEILING SPACE CONTIGUOUS TO DESTINATION CLOSET.	
3. ALL BELOW GRADE CONDUITS SHALL BE SCHEDULE 40 PVC.	
4. ALL CONDUITS SHALL BE ROUTED OVERHEAD, NOT UNDERGROUND OR BELOW GROUND FLOOR SLAB - EXCEPT FOR INCOMING SERVICE CONDUITS AND DEMARQ EXTENSION.	
5. LABEL ALL CONDUIT ENDS WITH DESTINATION.	
GENERAL NOTES	
1. ALL CONDUIT RUNS SHALL CONTAIN A PULL BOX FOR EVERY 180 DEGREE OF BENDS. ALL SWEEPS SHALL BE 48" RGS DOUBLE WRAPPED WITH 10 MIL TAPE FOR UNDERGROUND INSTALLATION.	
2. ALL CONDUITS STUBS FOR OUTLET BOXES SHALL STUB TO ACCESSIBLE CEILING SPACE CONTIGUOUS TO DESTINATION CLOSET.	
3. ALL BELOW GRADE CONDUITS SHALL BE SCHEDULE 40 PVC.	
4. INCOMING SERVICE AND OTHER BELOW GRADE CONDUITS SHALL HAVE 4" SEPARATION FROM ADJACENT CONDUITS AND SHALL STUB 4" A.F.F.	








SYMBOLS LEGEND:	WALL DATA	FLOOR DATA	CEILING DATA
	XX REFERS TO TYPES LISTED BELOW		
	XX → NO. OF DATA DROPS		
	NO. OF DATA DROPS		
	XX → NO. OF DATA DROPS		
	XX → NO. OF DATA DROPS		
SYMBOLS TYPES:			
TV = ASSUMED IPTV WITH DATA (CAT6 CABLE)			
W = WALL DATA			
WAP = WIRELESS ACCES POINT			
CAM = CAMERA			
PANEL LABEL:			
LOW VOLTAGE PANEL			
DEVICE TYPE			
ROOM NAME AND NO			
DEVICE TYPES:			
LV = LOW VOLTAGE PANEL / UNIT MEDIA CENTER			







SYMBOLS LEGEND:

WALL DATA FLOOR DATA CEILING DATA

XX REFERS TO TYPES LISTED BELOW

NO. OF DATA DROPS

NO. OF DATA DROPS

XX REFERS TO TYPES LISTED BELOW

XX

SYMBOLS TYPES:

V = ASSUMED IPTV WITH DATA (CAT6 CABLE)

W = WALL DATA

VAP = WIRELESS ACCES POINT

CAM = CAMERA

PANEL LABEL:

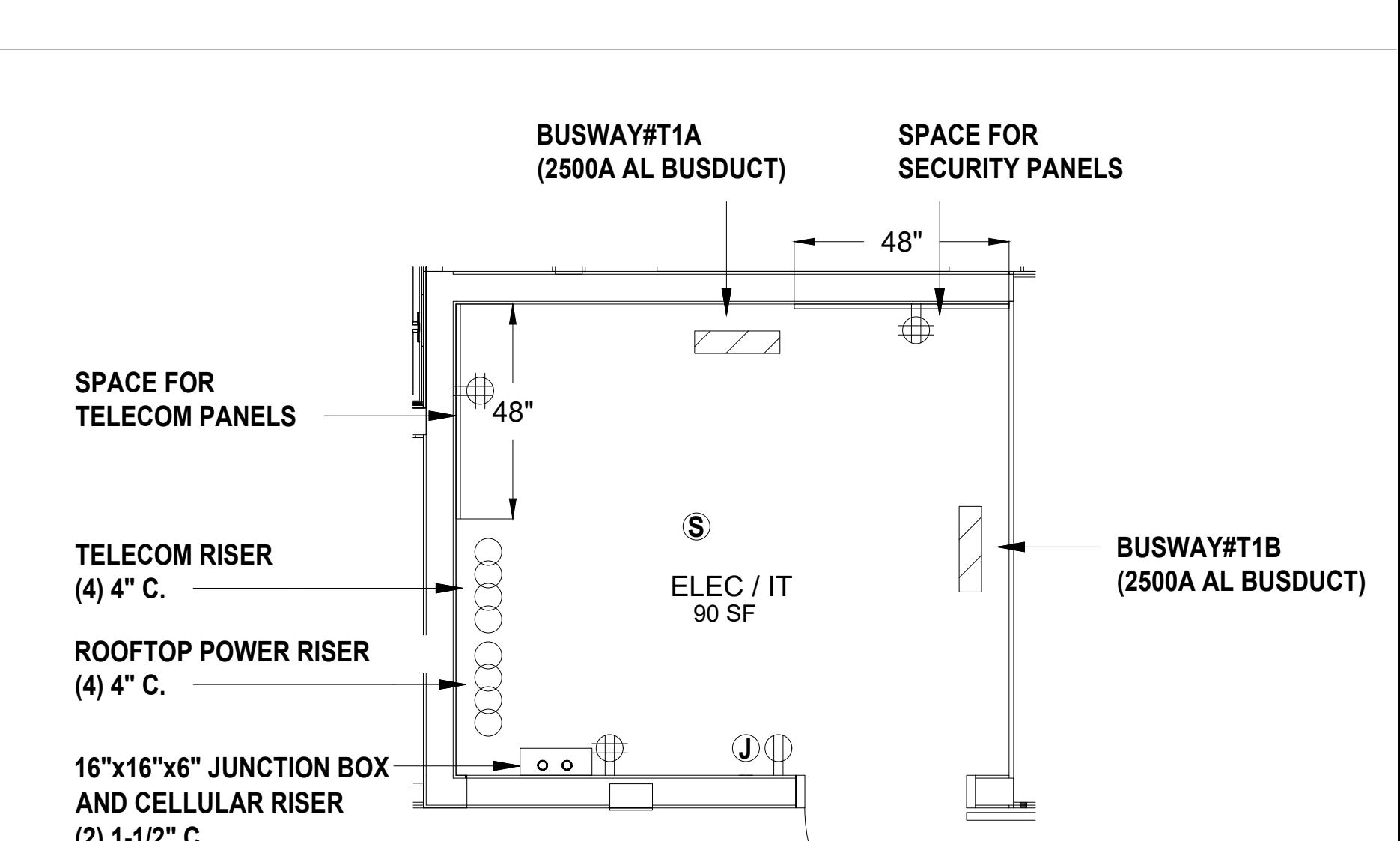
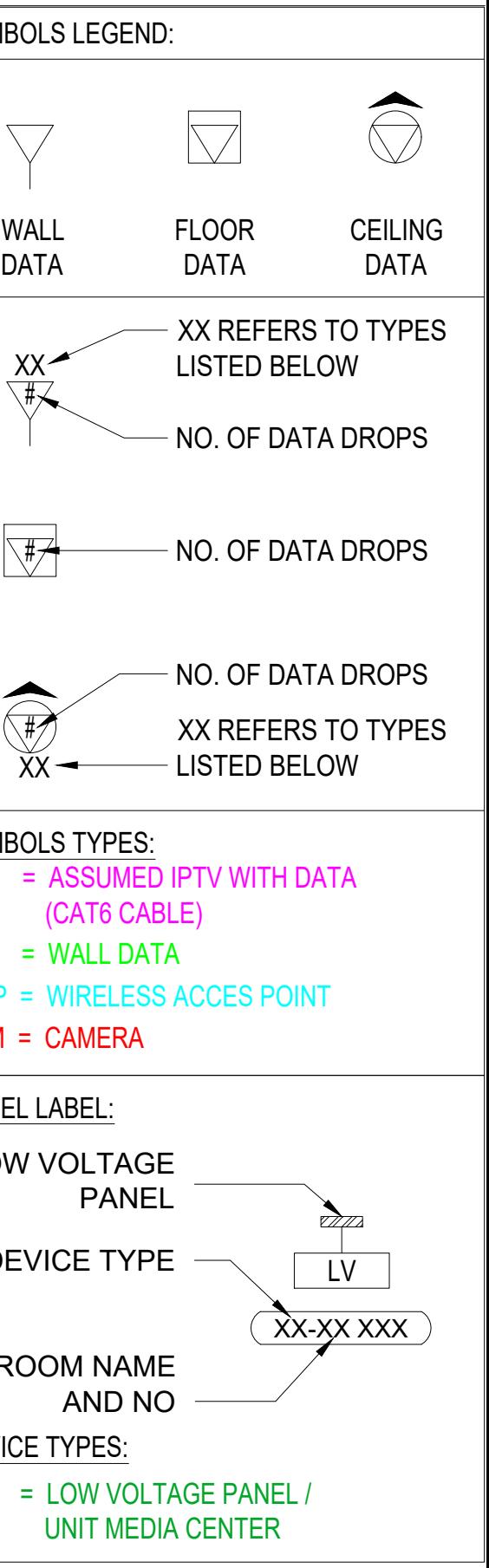
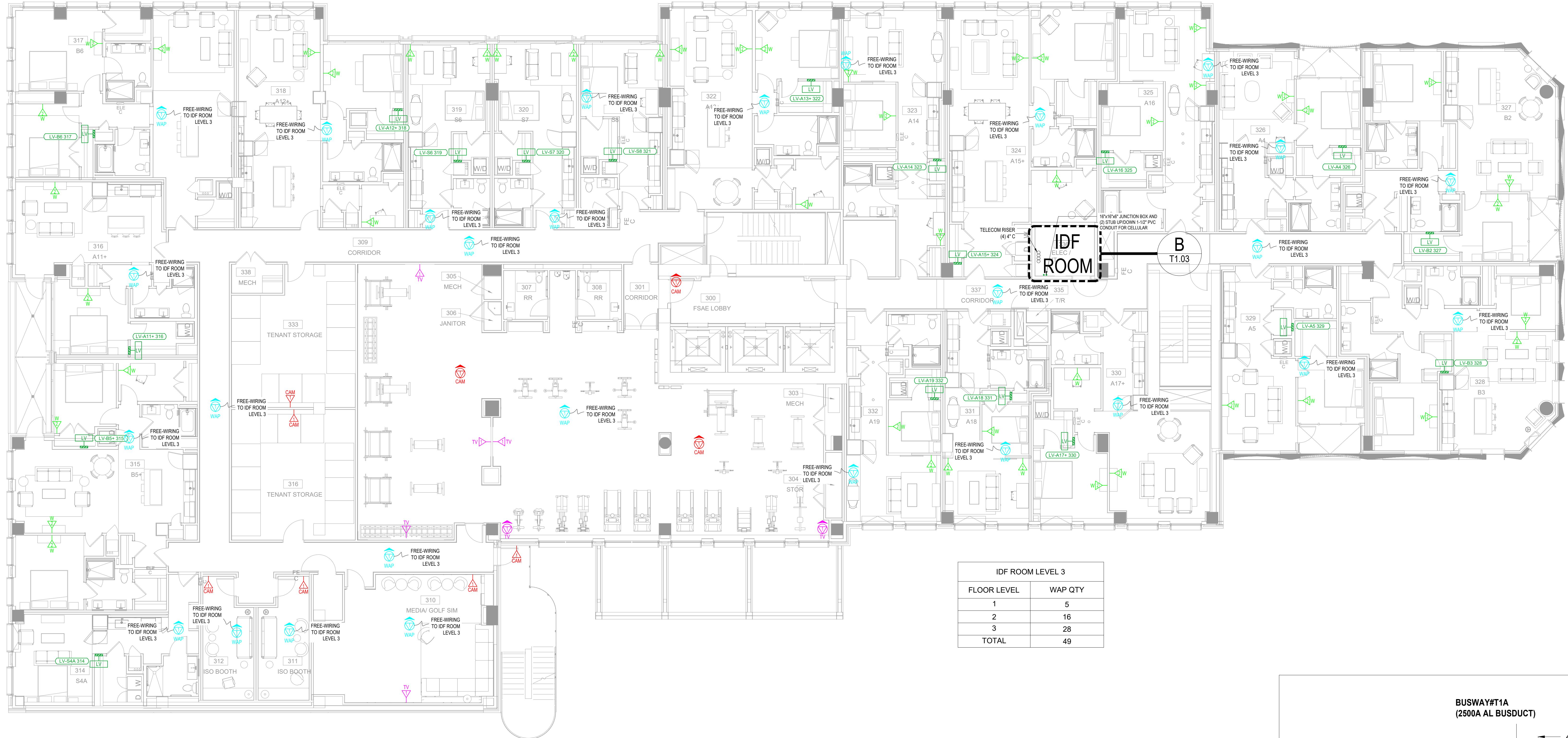
LOW VOLTAGE PANEL

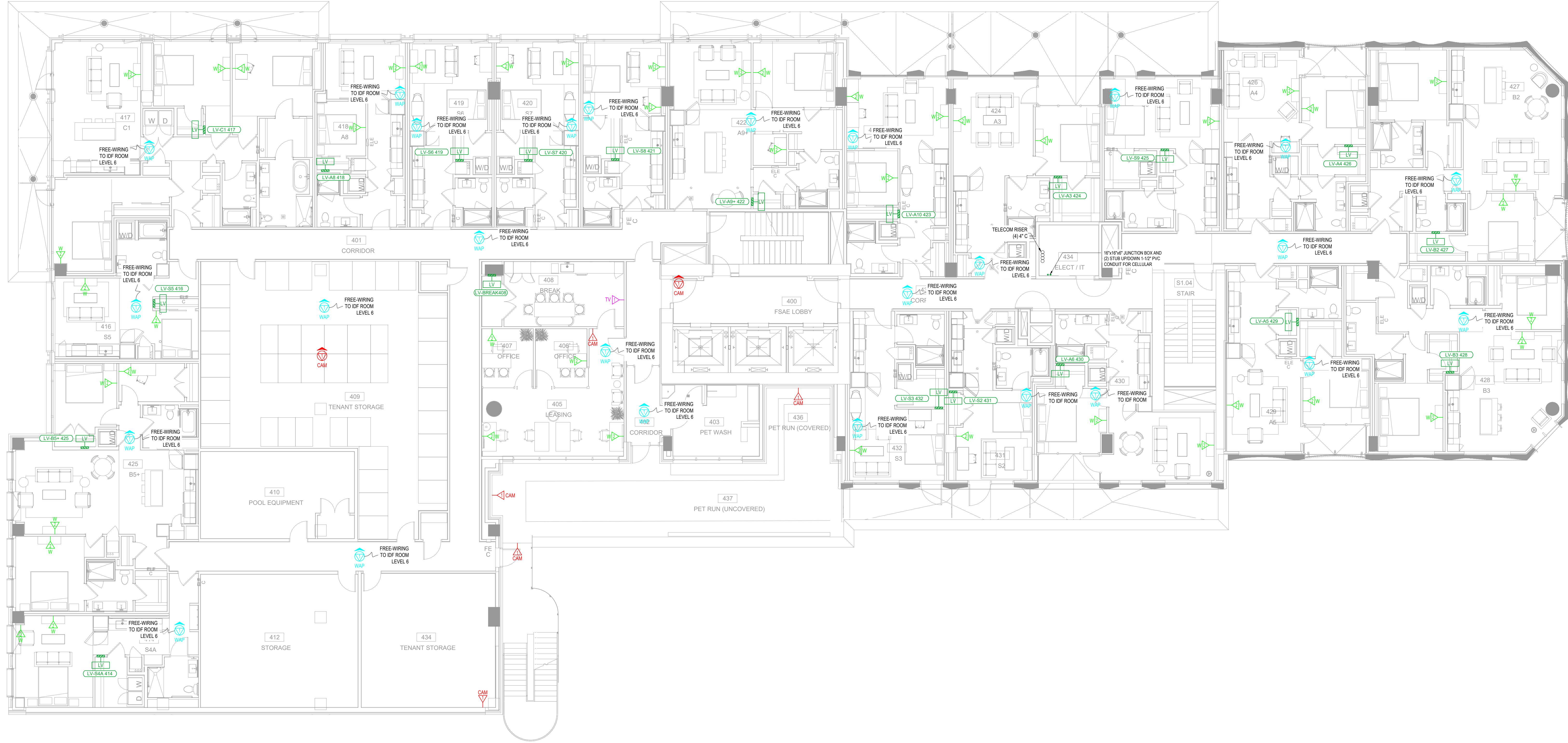
DEVICE TYPE

ROOM NAME AND NO

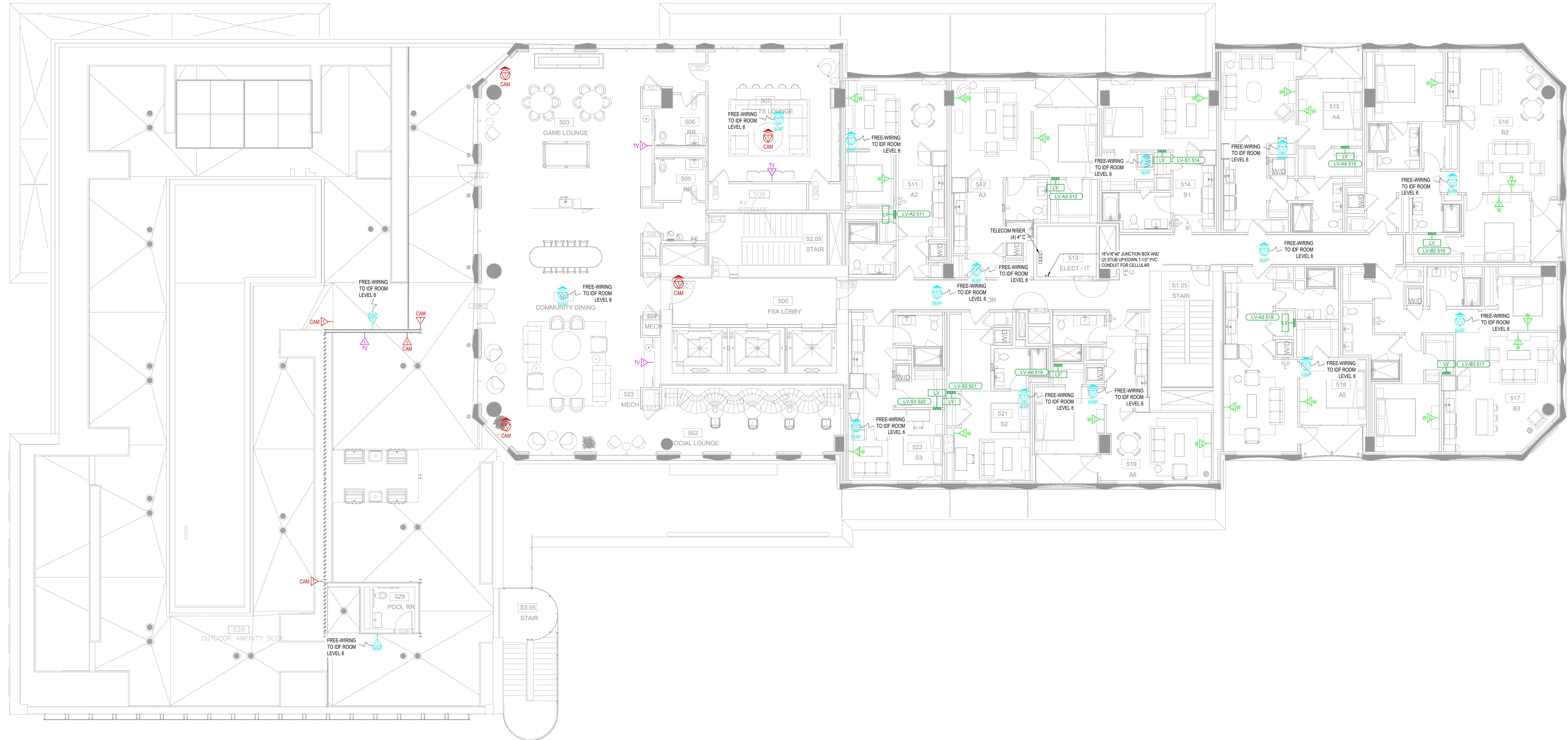
DEVICE TYPES:

V = LOW VOLTAGE PANEL / UNIT MEDIA CENTER

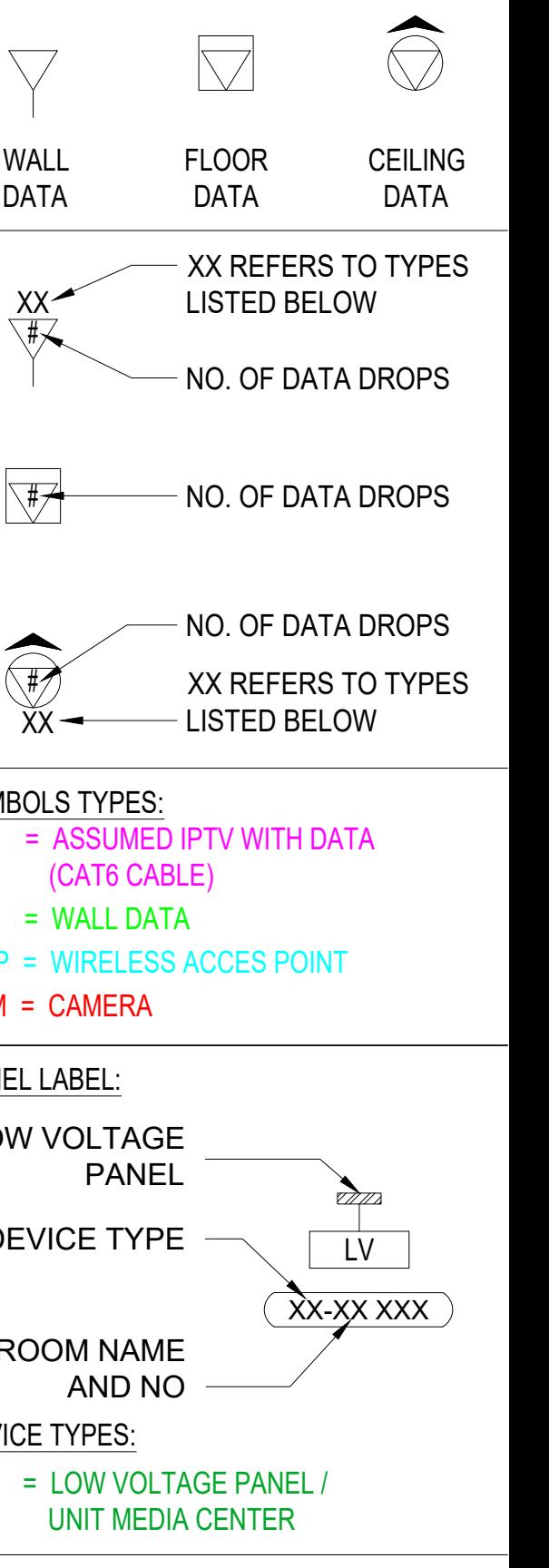




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WALL DATA	FLOOR DATA	CEILING DATA
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DEVICE TYPES:		
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SYMBOLS | LEGEND

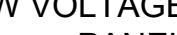


SYMBOLS TYPES:

V = ASSUMED IF V WITH DATA
(CAT6 CABLE)
W = WALL DATA
WAP = WIRELESS ACCES POINT
CAM = CAMERA

PANEL LABEL:

LOW VOLTAGE
PANEL
DEVICE TYPE
ROOM NAME



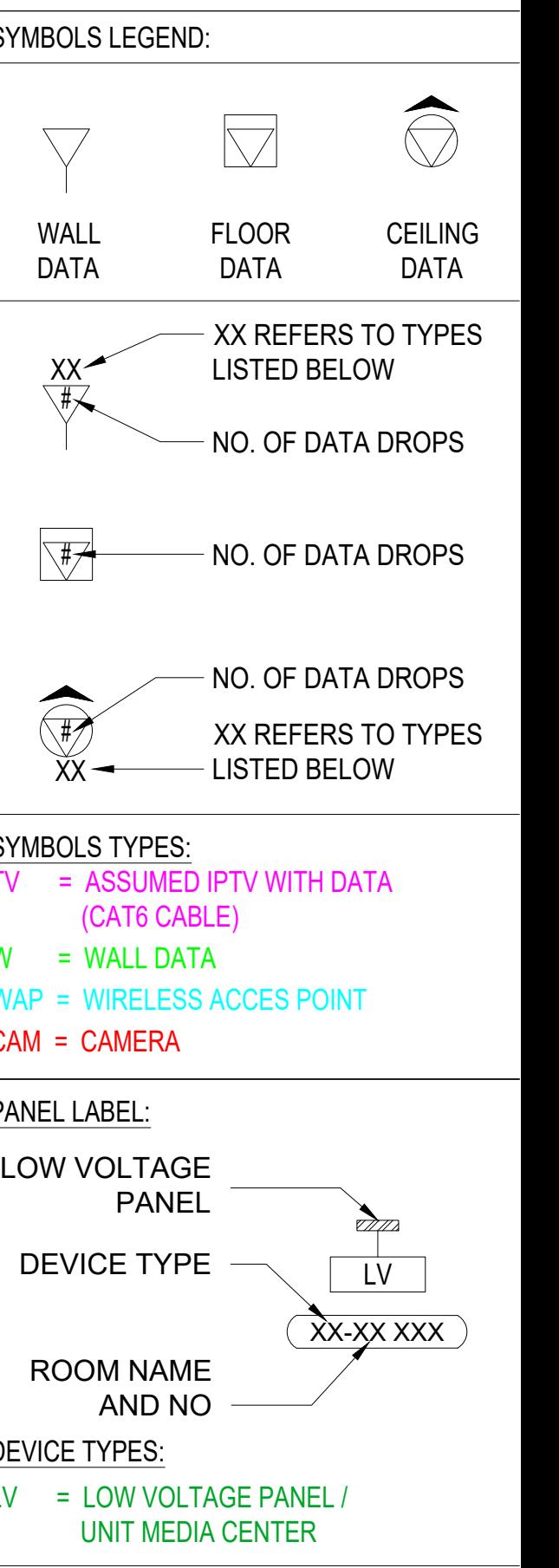
The diagram consists of three text labels: 'LOW VOLTAGE PANEL' at the top left, 'DEVICE TYPE' in the middle left, and 'ROOM NAME' at the bottom left. Arrows point from each label to a corresponding text box. The 'LOW VOLTAGE PANEL' label points to a box containing 'LV'. The 'DEVICE TYPE' label points to a box containing 'XX-XX XXX'. The 'ROOM NAME' label points to a box containing 'XX-XX XXX'.

AND NO _____

DEVICE TYPES:
**LV = LOW VOLTAGE PANEL /
UNIT MEDIA CENTER**

LOW VOLTAGE = LV

UNIT MEDIA CENTER



IDF ROOM LEVEL 6	
FLOOR LEVEL	WAP QTY
4	26
5	16
6	16
TOTAL	58

IDF ROOM LEVEL 9	
FLOOR LEVEL	WAP QTY
7	16
8	16
9	16
TOTAL	48

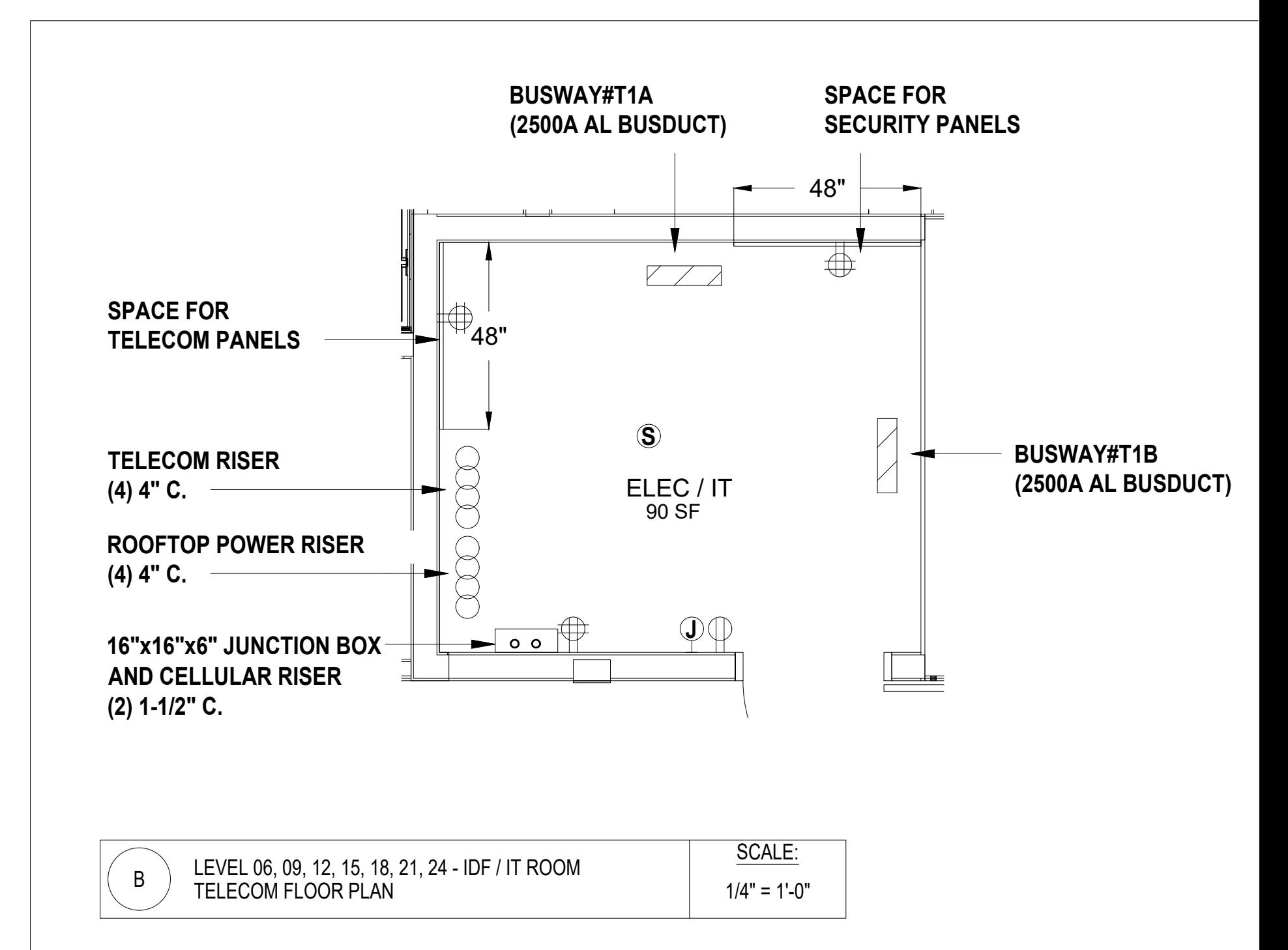
IDF ROOM LEVEL 12	
FLOOR LEVEL	WAP QTY
10	16
11	16
12	16
TOTAL	48

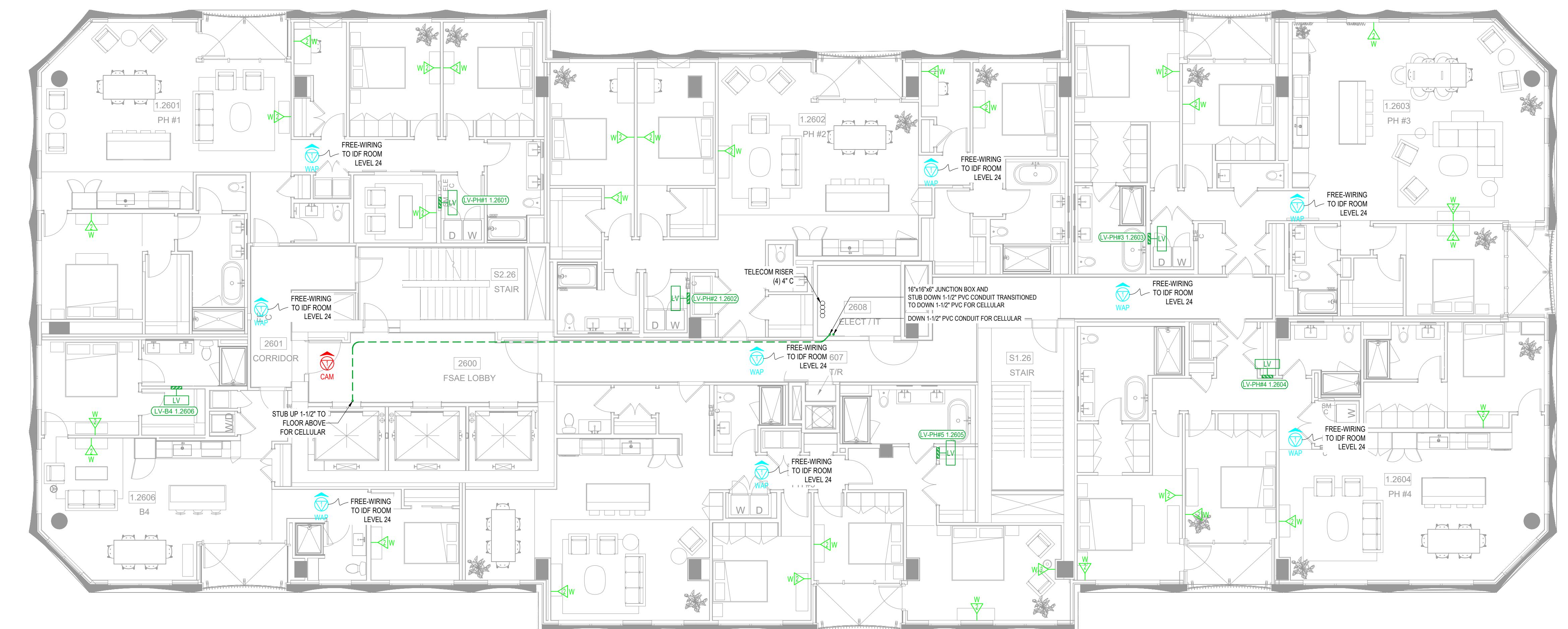
IDF ROOM LEVEL 15	
FLOOR LEVEL	WAP QTY
13	16
14	16
15	16
TOTAL	48

IDF ROOM LEVEL 18	
FLOOR LEVEL	WAP QTY
16	16
17	16
18	16
TOTAL	96

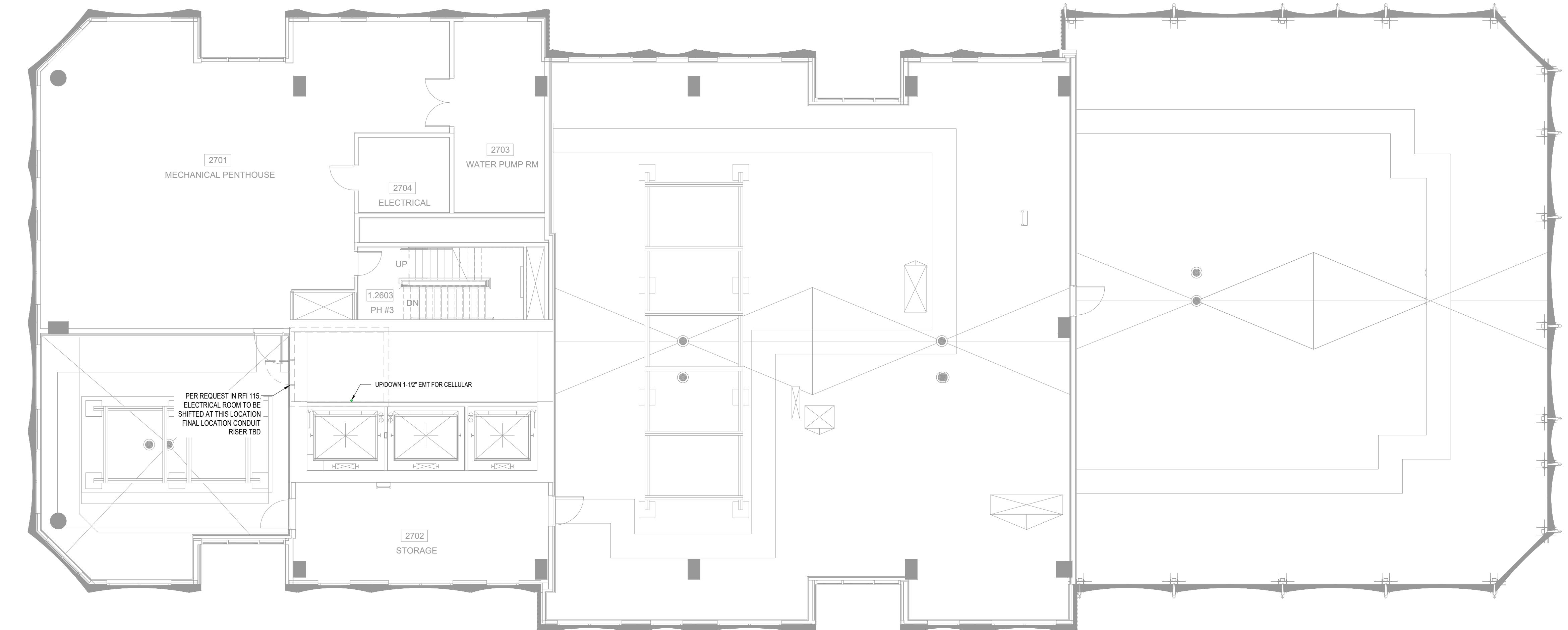
IDF ROOM LEVEL 21	
FLOOR LEVEL	WAP QTY
19	16
20	16
21	16
TOTAL	48

IDF ROOM LEVEL 24	
FLOOR LEVEL	WAP QTY
22	16
23	16
24	16
25	16
26	9
TOTAL	73





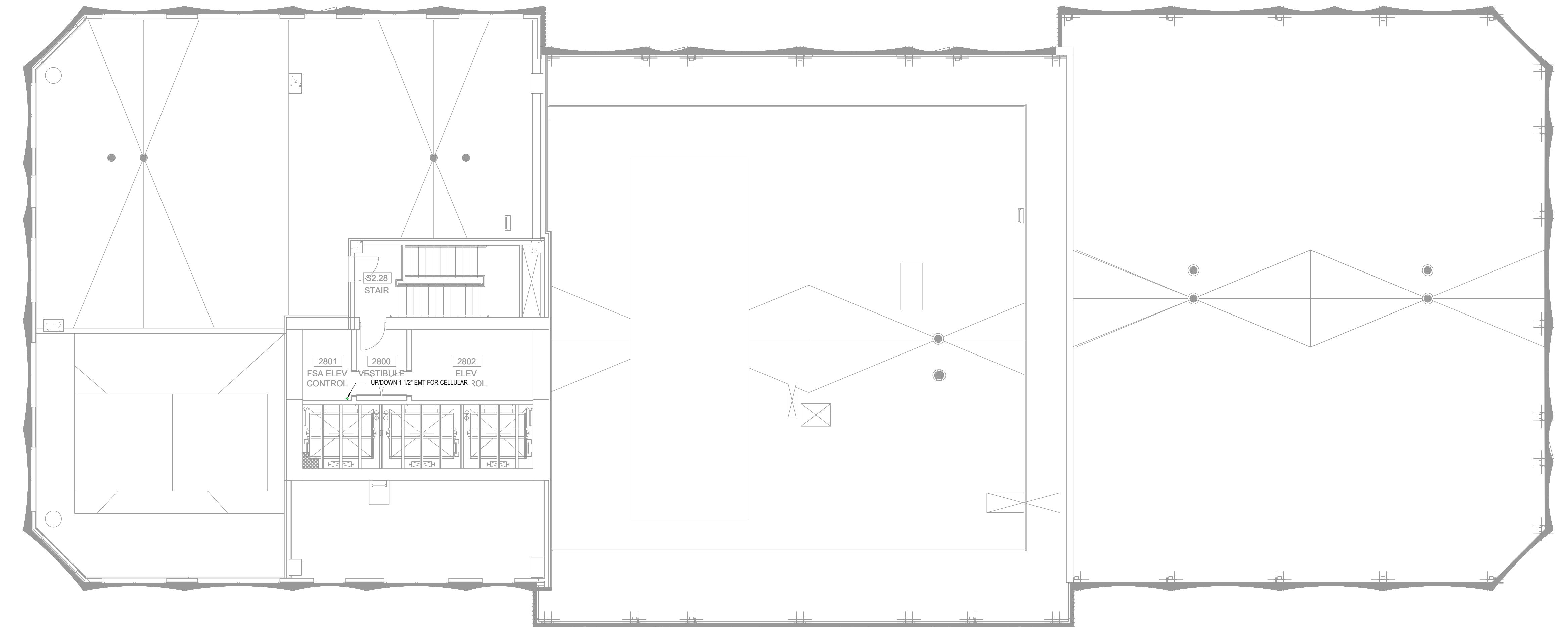
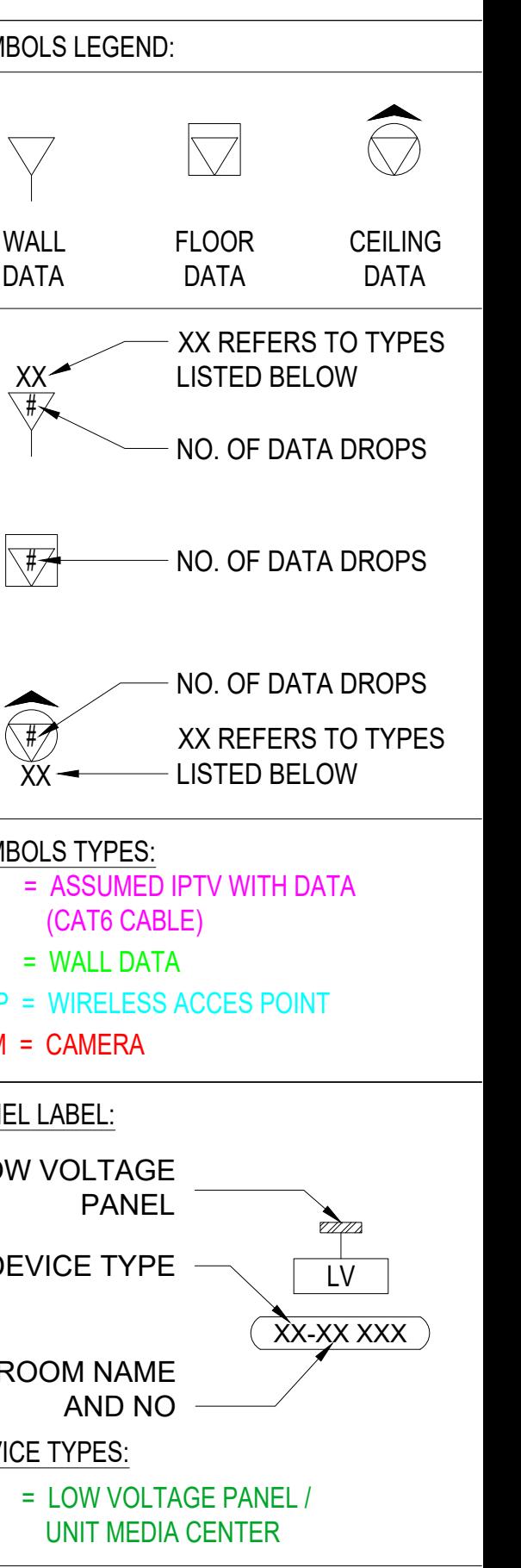
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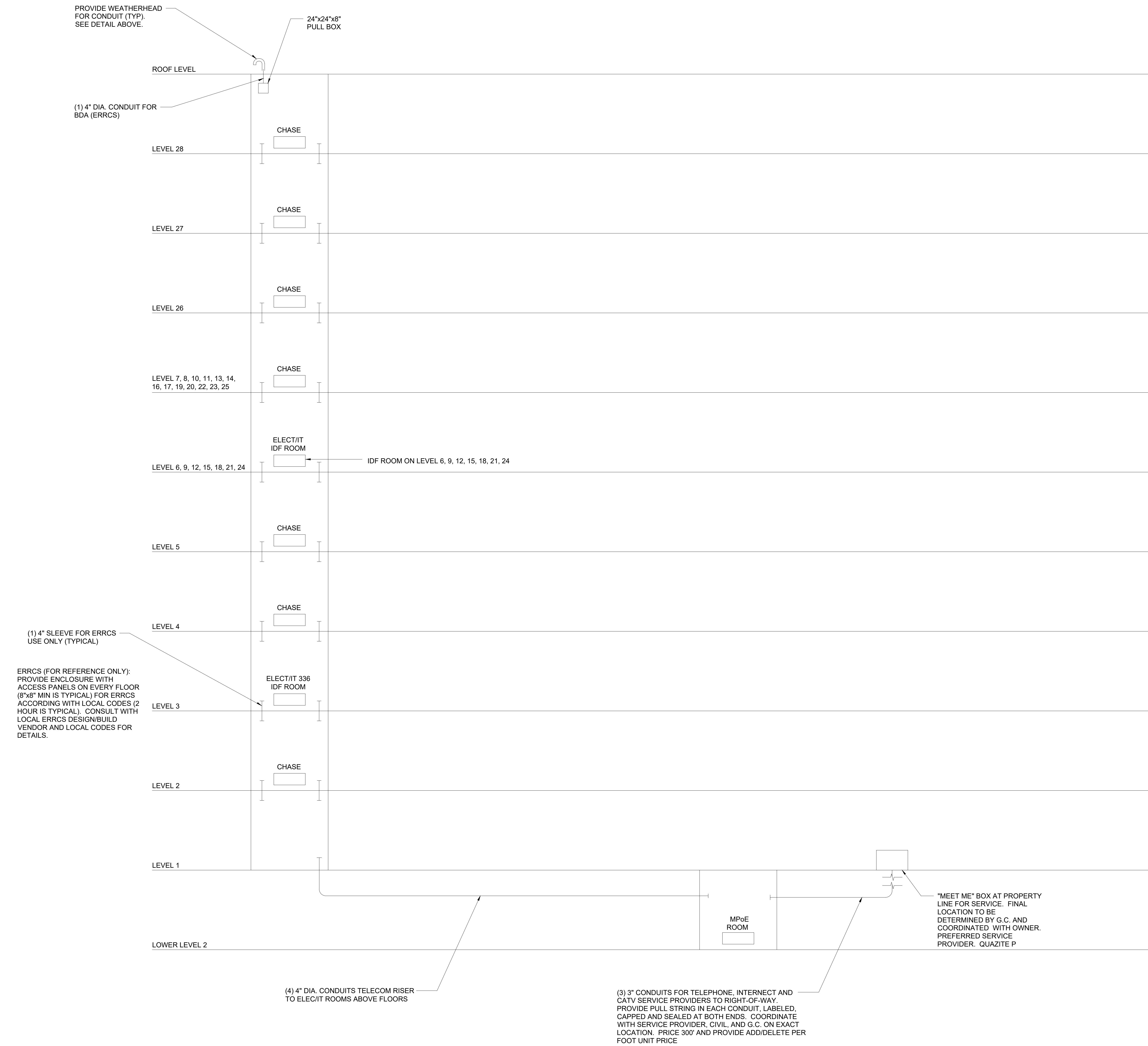
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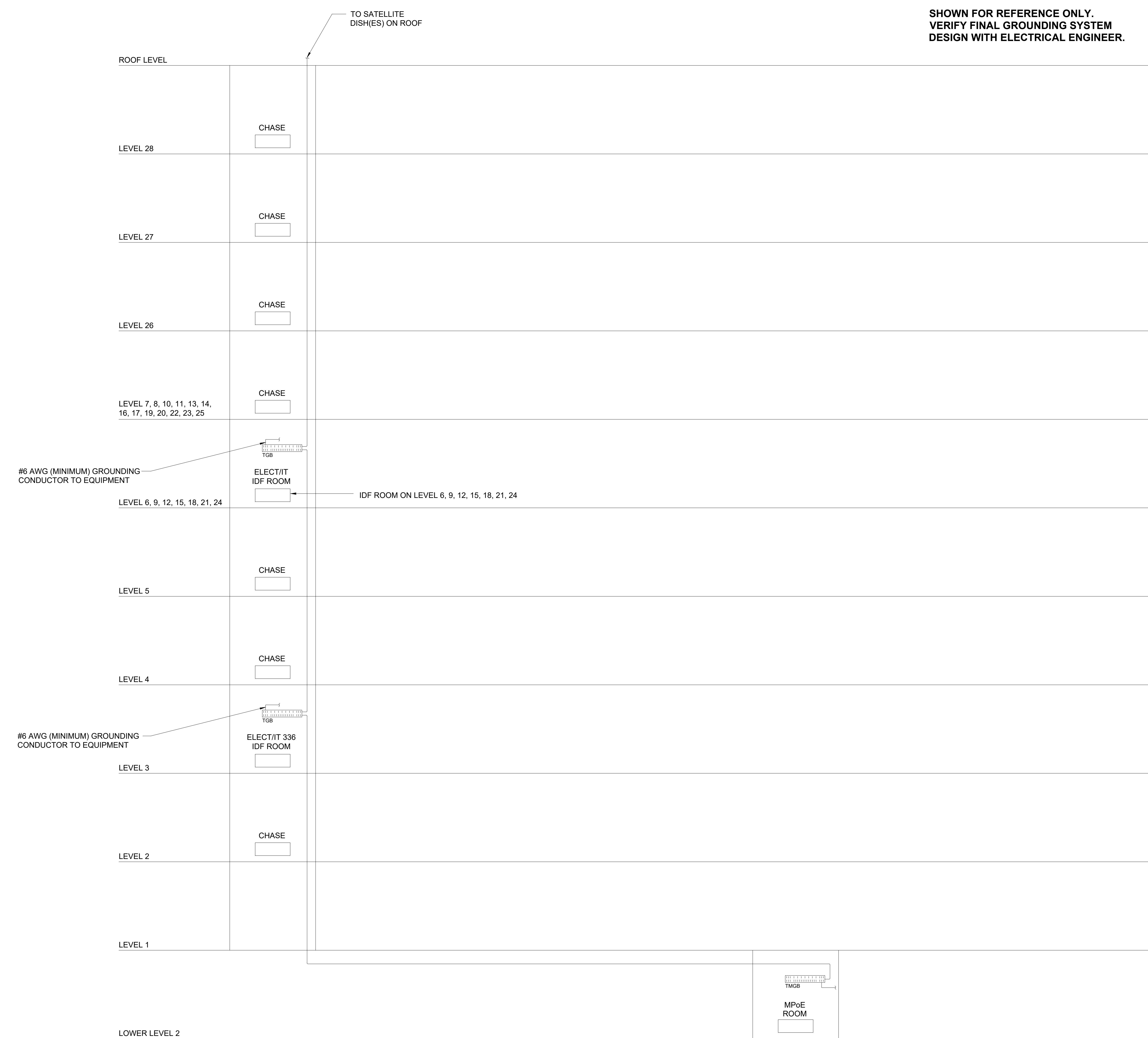
A MECHANICAL FLOOR PLAN TELECOM FLOOR PLAN

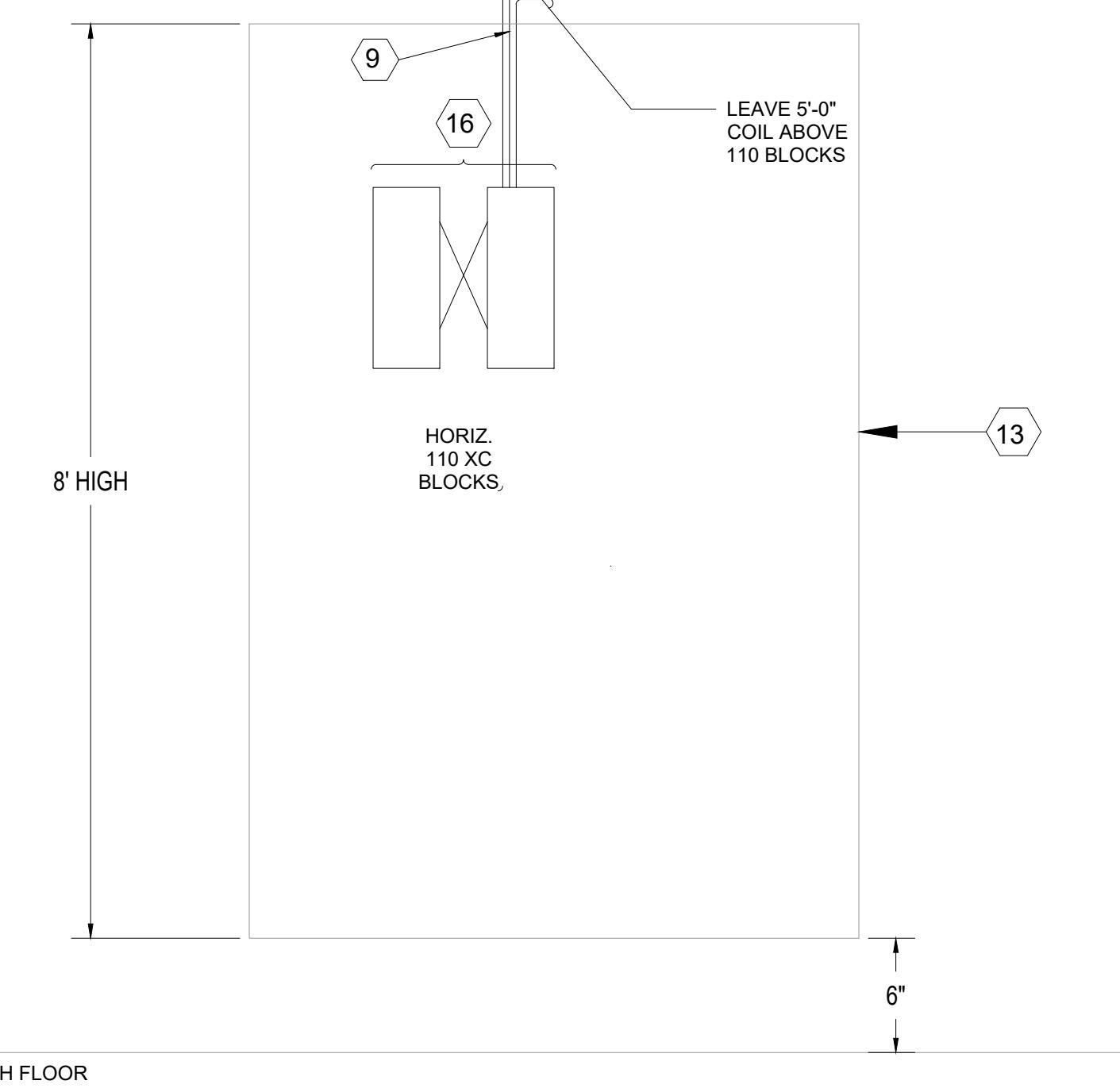
SCALE:



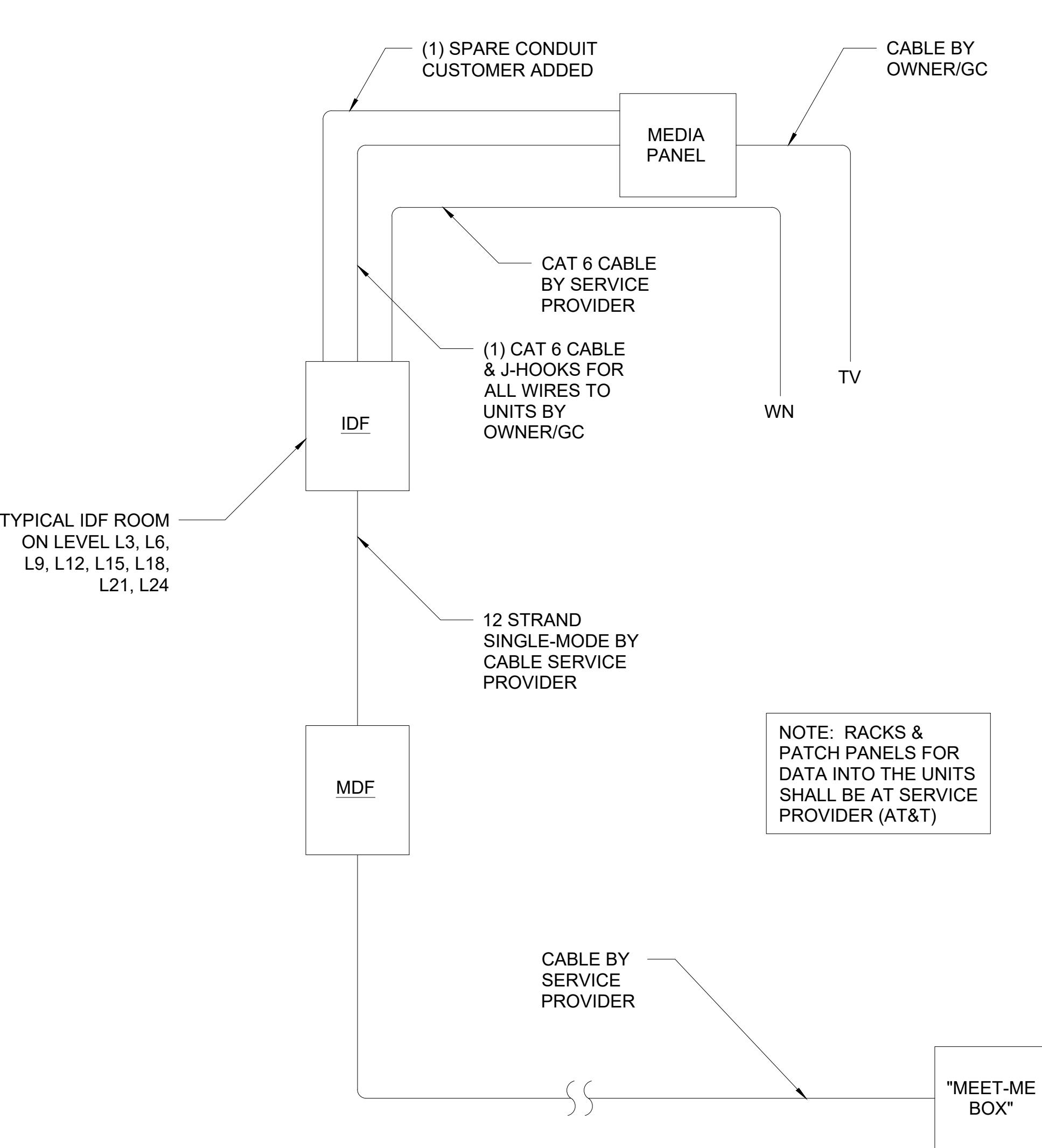








A

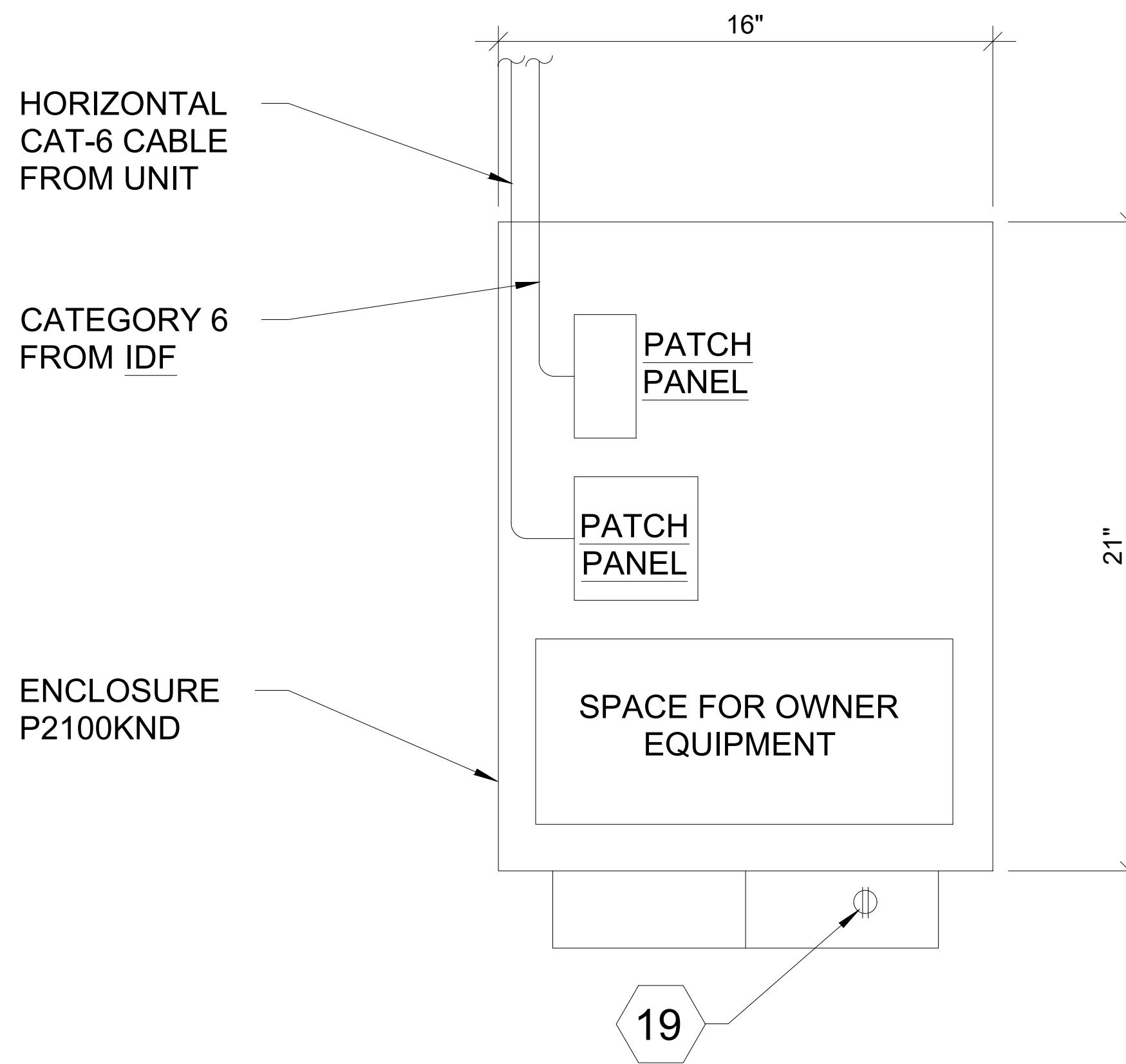
110 BLOCK ELEVATION
ELEVATION DETAILSCALE:
NTS

B

UNIT CABLE DIAGRAM
DIAGRAMSCALE:
NTS

KEYED NOTES

- ① 12" WIDE LADDER RACK. MOUNT ABOVE EQUIPMENT RACKS. INSTALLED BY CABBING CONTRACTOR. CPI OR EQUIVALENT.
- ② FLOOR MOUNTED EQUIPMENT RELAY TRACK, 7" (H) x 19" (W) BLACK, (CPI # 46353-703) OR APPROVED EQUIVALENT.
- ③ RACK MOUNT FIBER ENCLOSURE LOADED WITH 'SC' MULTIMODE BULKHEADS - SUPPLY AS NEEDED TO TERMINATE ALL INCOMING/OUTGOING FIBER CABLES.
- ④ 48 PORT CAT-6 DATA PATCH PANEL RACK MOUNTED. SUPPLY AS NEEDED TO TERMINATE ALL INCOMING HORIZONTAL DATA CABLES AND DATA RISER CABLES. (CAT-3 RATED PANELS MAY BE USED FOR "TELEPHONE TRUNK PANELS").
- ⑤ 120V AC/20A NEMA 5-20R QUAD RECEPTACLE ON DEDICATED EMERGENCY POWER SUPPLY ONE OUTLET ON DEDICATED CIRCUIT PER PACK. COORDINATED INSTALLATION WITH ELECTRICAL CONTRACTOR.
- ⑥ VERTICAL CABLE MANAGER (CPI #11729-703) WITH COVER (CPI #12188-001) OR APPROVED EQUIVALENT.
- ⑦ 2 UNIT HORIZONTAL CABLE MANAGER, 3.5" HIGH RACK MOUNTED.
- ⑧ GROUND BUS BAR FOR COMMUNICATIONS EQUIPMENT GROUND.
- ⑨ INCOMING 4 PAIR, CAT-6, HORIZONTAL CABLES.
- ⑩ INCOMING FIBER CABLES. SEE CABBING RISER DIAGRAM FOR EXACT REQUIREMENTS.
- ⑪ TELEPHONE TRUNK PANEL. SUPPLY AS NEEDED TO ACCOMMODATE ALL ANALOG CABLES.
- ⑫ 20A RATED 66" POWER STRIP (CPI #12848-758) WITH FACTORY INSTALLED 20A PLUG AND WITH 6.5" STAND OFF BRACKETS. SEE DETAIL.
- ⑬ 3/4" AC GRADE PLYWOOD (MOUNT WITH BOTTOM 6" OFF THE FLOOR). 8 FEET HIGH, FIRE RATED OR TREATED ON ALL SIDES WITH TWO COATS OF FIRE RESISTANT PAINT, TYPICAL TO ALL WALLS.
- ⑭ 20 AMP 120VAC QUAD RECEPTACLE ON DEDICATED CIRCUIT.
- ⑮ 20 AMP 120VAC QUAD RECEPTACLE ON DEDICATED CIRCUIT. COORDINATE FINAL REQUIREMENTS WITH MATV SERVICE PROVIDER.0
- ⑯ COORDINATE WITH AV DRAWINGS.
- ⑰ BDA PANEL REQUIRES A 4'x4' SPACE ON THE WALL AND A 3'x3' CLEARANCE IN FRONT OF EQUIPMENT.
- ⑱ WALL MOUNTED EQUIPMENT RACK, 72" H x 25" D. CPI PART NUMBER 11792-725 (OR EQUIVALENT).
- ⑲ PROVIDE DUPLEX POWER OUTLET.



NOTE:
ALL COMPONENTS AS
MANUFACTURED BY PRIMEX

DRAWING NOTE:

1. TYPICAL UMC SHALL BE PRIMEX P2100KND OR APPROVED EQUIVALENT

C

UNIT MEDIA CENTER (UMC) ELEVATION
ELEVATION DETAILSCALE:
NTS

Equipment Type	Qty	Power (W)	Heat Load (BTU/hr)	Notes
48-Port PoE Switch	3	450	1535	Max draw, full PoE load
UPS (1500VA)	2	180	615	Power backup, split load
Media Converters	2	75	256	Fiber or copper transition
Patch Panels and Accessories	-	75	256	Rack infrastructure
Total (Per IDF)	-	780	2662	Worst-case load per room

A IDF ROOM (TYPICAL FOR LEVEL 3, 6, 9, 12, 15, 18, 21, 24)
EQUIPMENT HEAT LOAD ESTIMATE

SCALE:
NTS

Equipment Type	Qty	Power (W)	Heat Load (BTU/hr)	Notes
Core Network Switches	4	500	1700	Aggregation and PoE
Firewall and Router	2	180	615	Redundant connections
Garage Wi-Fi Mesh Points	8	75	256	Full mesh deployment
UPS (3000VA)	2	300	1024	Power backup redundancy
Server (NVR/Logging)	1	450	1365	High-performance server
Patch Panels and Accessories	-	150	512	Rack infrastructure
Total (MDF)	-	1655	5472	Worst-case MDF scenario

B MPoE ROOM
EQUIPMENT HEAT LOAD ESTIMATE

SCALE:
NTS