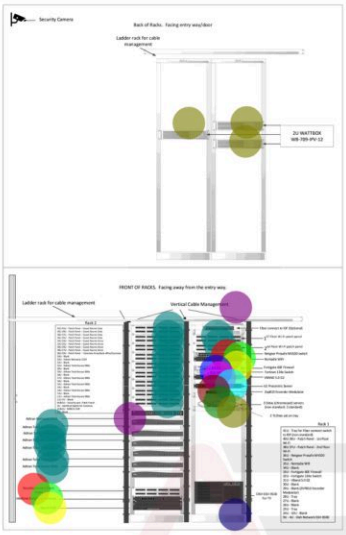
ABLE Estimating
ABILITY - ACCURACY - ON TIME



1 TELECOMMUNICATIONS RACK ELEVATIONS DETAILS
NOT TO SCALE

LOW VOLTAGE SYMBOLS LEGEND

SYMBOL LEGEND IS A STANDARD LIST. SOME SYMBOLS IN THE LEGEND MAY NOT BE USED IN THIS PROJECT.

SYMBOL	DESCRIPTION
▼	TELEPHONE OUTLET
W	WALL MOUNT TELEPHONE
▽	DATA OUTLET
▼	TELEPHONE/DATA OUTLET
4▼	4-PORT TELEPHONE/DATA OUTLET
W	WIRELESS ACCESS POINT
	TELEVISION OUTLET
	LADDER RACK
	CABLE TRAY
	DOOR CONTACT
	ELECTRIC STRIKE
RE	REQUEST TO EXIT DEVICE
CCTV	VIDEO SURVEILLANCE CAMERA
R	CARD READER
PB	DURESS PUSHBUTTON
M	MAGNETIC LOCK
IC	INTERCOM

SHEET INDEX

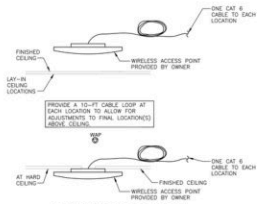
T001	LOW VOLTAGE SYSTEMS – SYMBOLS LEGEND, SCHEDULES, AND DETAILS
T002	LOW VOLTAGE SYSTEMS DETAILS
T101	LEVEL ONE FLOOR PLAN – LOW VOLTAGE SYSTEMS
T102	LEVEL TWO FLOOR PLAN – LOW VOLTAGE SYSTEMS
T103	LEVEL THREE AND FOUR FLOOR PLAN – LOW VOLTAGE SYSTEMS

DATA OUTLET SCHEDULE

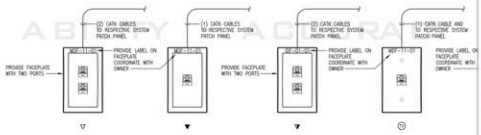
SYMBOL	DESCRIPTION	COLOR	FACEPLATE	CATALOG #
▽	PROVIDE FACEPLATE WITH SINGLE KNOCK OUT FOR TELE/DATA OUTLET. (1) CAT6 CABLES TO IT ROOM.	WHITE		LEVITON OR EQUAL
2▽	PROVIDE FACEPLATE WITH TWO (OR QUANTITY AS INDICATED) KNOCK OUTS. ONE BLANK AND TWO CAT6 CONNECTIONS FOR TELE/DATA OUTLET. (2) CAT6 CABLES TO IT ROOM.	WHITE		LEVITON OR EQUAL
4▼	PROVIDE FACEPLATE WITH THREE KNOCK OUTS. TWO CONNECTIONS FOR TELE/DATA OUTLET AND ONE BLANK. (2) CAT6 CABLES TO IT ROOM.	WHITE		LEVITON OR EQUAL
▼	PROVIDE FACEPLATE WITH SINGLE KNOCK OUT FOR TELE/DATA OUTLET. (1) CAT6 CABLES TO IT ROOM.	WHITE		LEVITON OR EQUAL
▼	PROVIDE FACEPLATE WITH SINGLE KNOCK OUT FOR TELE/DATA OUTLET. (1) CAT6 CABLES TO IT ROOM.	STAINLESS STEEL		LEVITON OR EQUAL
TV	PROVIDE 2-GANG BOX, 1-GANG FACEPLATE WITH SINGLE KNOCK OUT FOR TV. (1) CAT6 CONNECTION FOR TV.	WHITE		LEVITON OR EQUAL

GENERAL NOTES

1. REFER TO THE ENTIRE SET OF CONTRACT DOCUMENTS (ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, AND SPECIALTY) AND COORDINATE ALL WORK WITH OTHER TRADES. ADDITIONAL WORK FOR THIS CONTRACTOR MAY BE INDICATED ON OTHER DRAWINGS AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORK SHOWN IN THE CONTRACT DOCUMENTS.
2. THE WORK INDICATED ON THESE DRAWINGS CONSISTS OF PROVIDING ALL LABOR, SUPERVISION, EQUIPMENT, AND MATERIALS NECESSARY FOR AND INCIDENTAL TO THE INSTALLATION OF THE COMPLETE ELECTRICAL SYSTEMS REQUIRED BY THESE DRAWINGS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. THE RFID CARD ACCESS SYSTEM FOR FRONT ENTRY DOOR SHALL BE PROVIDED AND INSTALLED BY THIS CONTRACTOR. REFER TO THE RESPONSIBILITY MATRIX FOR INFORMATION REGARDING SYSTEM SPECIFICATION.
4. CCTV SYSTEM SHALL BE BY OWNER. THIS CONTRACTOR SHALL INSTALL CABLING PER DRAWINGS. CONDUIT AND BOX ROUGH-IN IS BY DIVISION 26 ELECTRICAL CONTRACTOR.

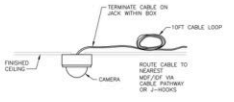


2 WIRELESS ACCESS POINT DETAIL
NOT TO SCALE

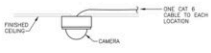


3 TELECOMMUNICATIONS FACEPLATE DETAILS
NOT TO SCALE

- 2U WATTBOX WB-7... 3.0 EA
- Rack 1 - 22 Steps & ... 1.0 EA
- 48 Ports Patch Panel 11.0 EA
- Netgear Prosafe M41... 1.0 EA
- Nomadix Wifi 1.0 EA
- Fortigate 60E Firewall 1.0 EA
- Fortinet 124e Switch 1.0 EA
- Vband 5.0 G2 1.0 EA
- LG Procentric Server 1.0 EA
- Zvp810 Encorder Mo... 1.0 EA
- 3 Zotac (Chromecast... 1.0 EA
- 2 TLOnes Sat On Tary 1.0 EA
- DISH ESH-9500 For ... 1.0 EA
- Adtran NetVanta 1234 1.0 EA
- Adtran Total Access ... 6.0 EA
- Security Camera Pat... 1.0 EA
- Intellinet Switch For ... 1.0 EA
- March DVR 1.0 EA



5 SECURITY CAMERA – ACCESSIBLE CEILING
NOT TO SCALE



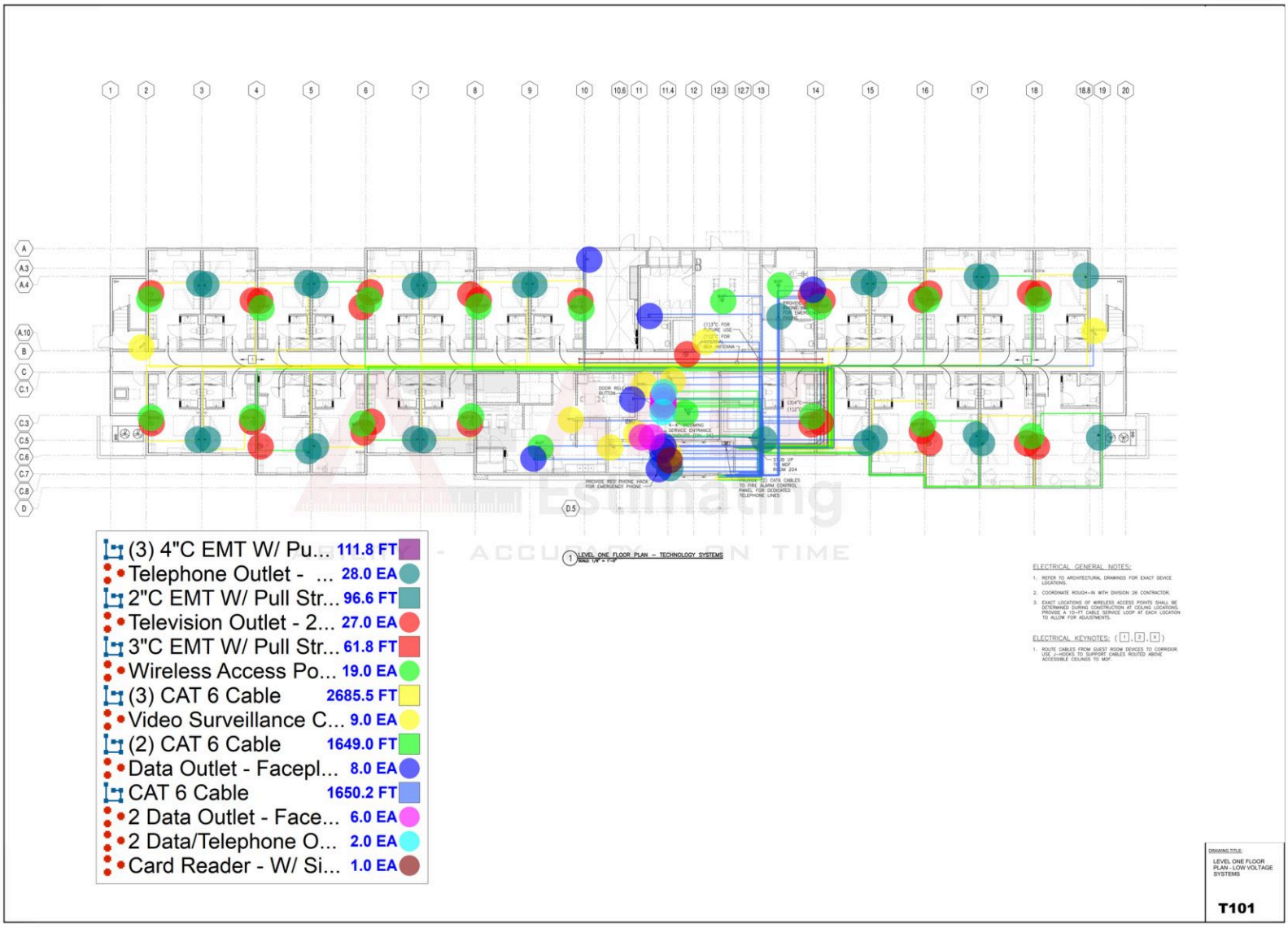
6 SECURITY CAMERA – NON-ACCESSIBLE CEILING
NOT TO SCALE

DRAWING TITLE:
LOW VOLTAGE SYSTEMS - SYMBOLS LEGEND SCHEDULES AND DETAILS

T001

Sample takeoff prepared by ABLE Estimating | ableestimating.com | Client details removed

ABLE Estimating
ABILITY - ACCURACY - ON TIME



1 LEVEL ONE FLOOR PLAN – TECHNOLOGY SYSTEMS
SCALE: 1/8" = 1'-0"

ELECTRICAL GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT DEVICE LOCATIONS.
2. COORDINATE ROUGH-IN WITH DIVISION 26 CONTRACTOR.
3. EXACT LOCATIONS OF WIRELESS ACCESS POINTS SHALL BE DETERMINED DURING CONSTRUCTION AT CEILING LOCATIONS. PROVIDE A 10-FT CABLE SERVICE LOOP AT EACH LOCATION TO ALLOW FOR ADJUSTMENTS.

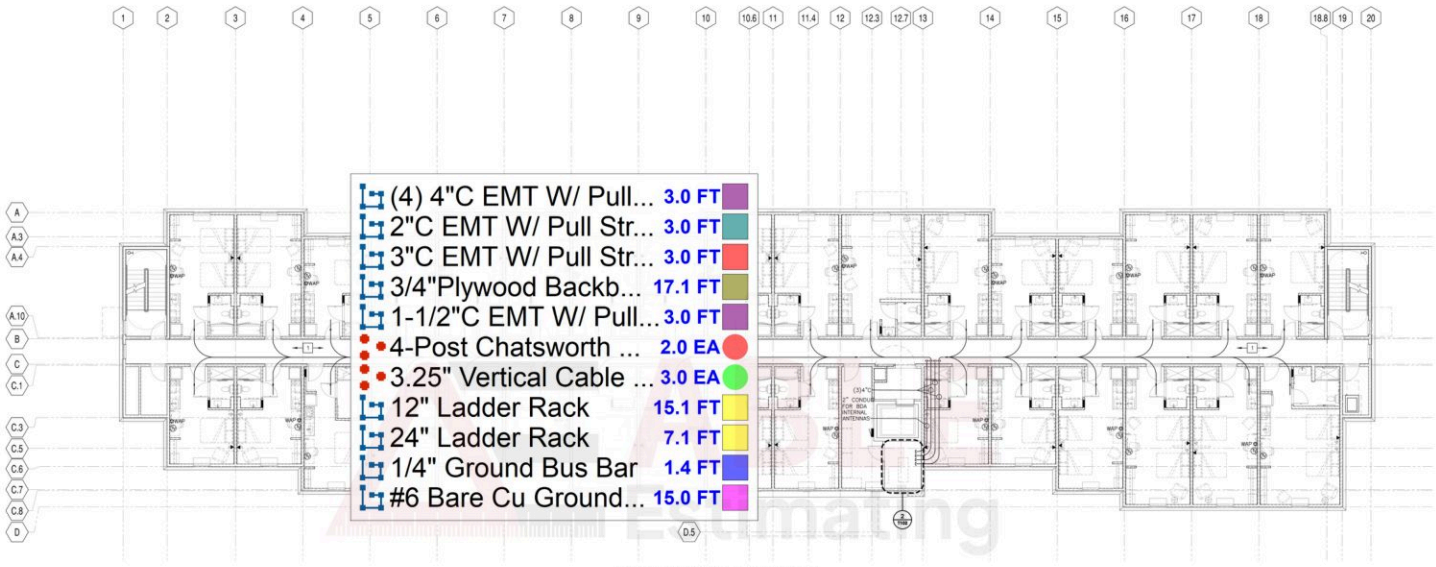
ELECTRICAL KEYNOTES: (1 , 2 , X)

1. ROUTE CABLES FROM GUEST ROOM DEVICES TO CORRIDOR. USE J-HOOKS TO SUPPORT CABLES ROUTED ABOVE ACCESSIBLE CEILINGS TO MDF.

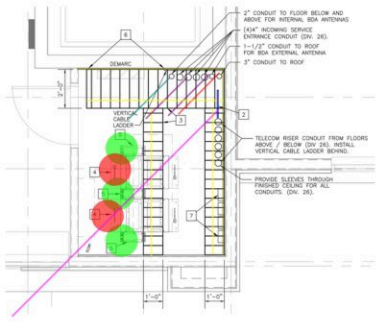
DRAWING TITLE:
LEVEL ONE FLOOR PLAN - LOW VOLTAGE SYSTEMS

T101

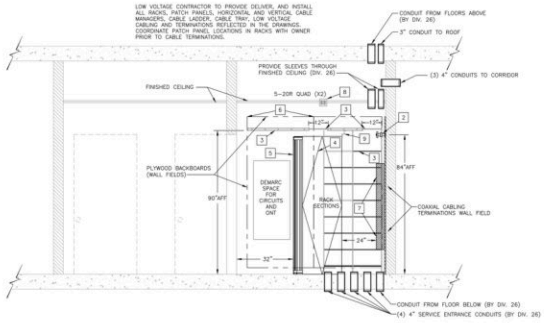
ABLE Estimating
ABILITY - ACCURACY - ON TIME



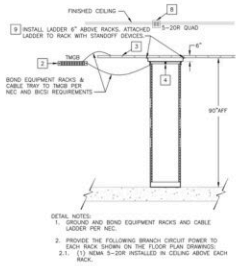
1 LEVEL TWO FLOOR PLAN – LOW VOLTAGE SYSTEMS
SCALE: 1/8" = 1'-0"



2 LARGE SCALE MDF ROOM – LOW VOLTAGE SYSTEM
SCALE: 1/2" = 1'-0"



3 MDF SECTION / ELEVATION
NOT TO SCALE



4 EQUIPMENT RACK POWER & GROUNDING REQUIREMENTS
NOT TO SCALE

ELECTRICAL GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT DEVICE LOCATIONS.
2. COORDINATE ROUGH-IN WITH DIVISION 26 CONTACTOR.
3. EXACT LOCATIONS OF WIRELESS ACESS POINTS SHALL BE DETERMINED DURING CONSTRUCTION AT CEILING LOCATIONS. PROVIDE A 10'-0" CABLE SERVICE LOOP AT EACH LOCATION TO ALLOW FOR ADJUSTMENTS.

ELECTRICAL KEYNOTES: (1 , 2 , X)

1. INSTALL CABLES FROM GUESTROOM DEVICES TO CORRIDOR. USE J-HOOKS TO SUPPORT CABLES INSTALLED ABOVE CORRIDOR ACCESSIBLE CEILINGS TO MDF. WHERE CEILINGS ARE NOT ACCESSIBLE, PROVIDE CONDUITS FOR CABLING INSTALLATION.
2. TMGB (TECHNICAL MAIN GROUND BAR) – INSTALL 84" AFF.
3. 12"/24" LADDER RACKS, (REF. WIDTH ON FLOOR PLANS). INSTALLATION @ 90" AFF BY LOW VOLTAGE CONTRACTOR. BOND TO TMGB PER NEC REQUIREMENTS.
4. 4 – POST CHATSWORTH QUADRARACK (24RU). FURNISH AND INSTALL BY LOW VOLTAGE CONTRACTOR. BOND TO TMGB PER NEC REQUIREMENTS.
5. 3.25" VERTICAL CABLE MANAGER WITH SNAP ON COVER. FURNISH AND INSTALL BY LOW VOLTAGE CONTRACTOR.
6. 3/4" PLYWOOD BACKBOARD WALL FIELD – SERVICE PROVIDER DEMARCATION SPACE.
7. 3/4" PLYWOOD BACKBOARD WALL FIELD – COAXIAL CABLING WALL FIELD TERMINATIONS.
8. 120V/20A QUAD RECEPTACLES 5-20R RECEPTACLES MOUNTED ABOVE IT RACKS IN CEILING.
9. SECURELY ATTACHED CABLE LADDER TO RACKS WITH MANUFACTURER'S RECOMMENDED LADDER STANDOFF DEVICES.

DRAWING TITLE:
LEVEL TWO FLOOR PLAN - LOW VOLTAGE SYSTEMS

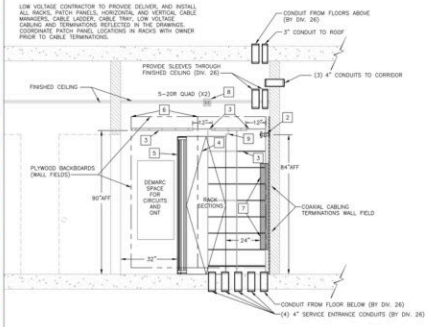
T102

ABLE Estimating
ABILITY - ACCURACY - ON TIME

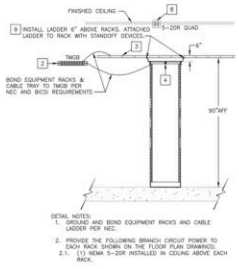


Television Outlet - 2...	33.0 EA
Wireless Access Po...	17.0 EA
Telephone Outlet - ...	33.0 EA
(3) 4"C EMT W/ Pull...	70.9 FT
(4) 4"C EMT W/ Pull ...	0.0 FT
2"C EMT W/ Pull Str...	82.7 FT
3"C EMT W/ Pull Stri...	0.0 FT
(3) CAT 6 Cable	2879.9 FT
(2) CAT 6 Cable	1649.0 FT
CAT 6 Cable	1650.2 FT
3/4"Plywood Backbo...	0.0 FT
1-1/2"C EMT W/ Pull ...	0.0 FT
4-Post Chatsworth Q...	0.0 EA
3.25" Vertical Cable ...	0.0 EA
12" Ladder Rack	0.0 FT

1 LEVEL TWO FLOOR PLAN – LOW VOLTAGE SYSTEMS



3 MDF SECTION / ELEVATION



4 EQUIPMENT RACK POWER & GROUNDING REQUIREMENTS

ELECTRICAL GENERAL NOTES:

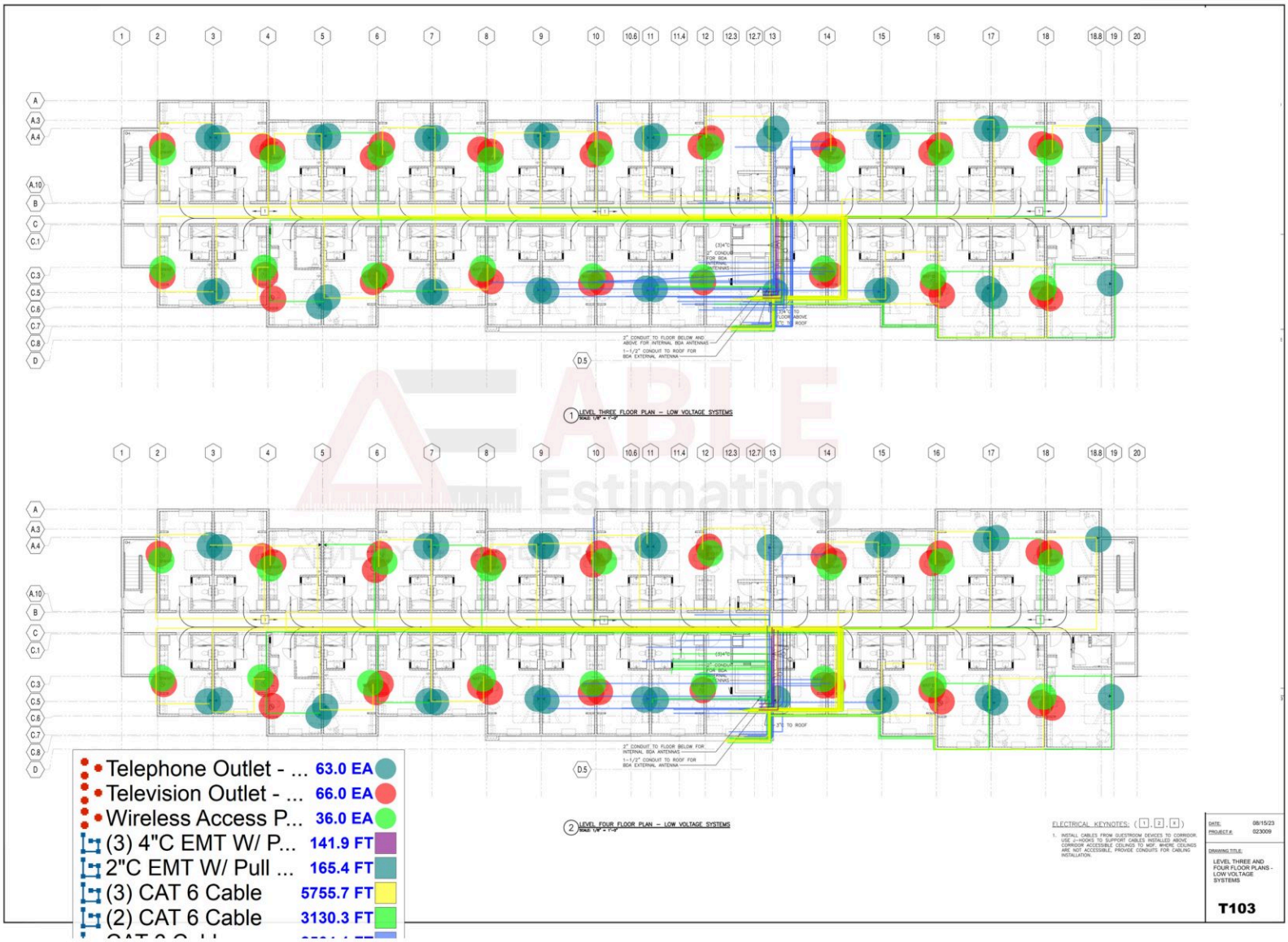
1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT DEVICE LOCATIONS.
2. COORDINATE ROUGH-IN WITH DIVISION 26 CONTACTOR.
3. EXACT LOCATIONS OF WIRELESS ACESS POINTS SHALL BE DETERMINED DURING CONSTRUCTION AT CEILING LOCATIONS. PROVIDE A 10'-0" CABLE SERVICE LOOP AT EACH LOCATION TO ALLOW FOR ADJUSTMENTS.

ELECTRICAL KEYNOTES: (1 , 2 , X)

1. INSTALL CABLES FROM GUESTROOM DEVICES TO CORRIDOR. USE J-HOOKS TO SUPPORT CABLES INSTALLED ABOVE CORRIDOR ACCESSIBLE CEILINGS TO MDF. WHERE CEILINGS ARE NOT ACCESSIBLE, PROVIDE CONDUITS FOR CABLING INSTALLATION.
2. TMGB (TECHNICAL MAIN GROUND BAR) – INSTALL 84" AFF.
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7. 3/4" PLYWOOD BACKBOARD WALL FIELD – COAXIAL CABLING WALL FIELD TERMINATIONS.
8. 120V/20A QUAD RECEPTACLES 5-20R RECEPTACLES MOUNTED ABOVE IT RACKS IN CEILING.
9. SECURELY ATTACHED CABLE LADDER TO RACKS WITH MANUFACTURER'S RECOMMENDED LADDER STANDOFF DEVICES.

DRAWING TITLE:
LEVEL TWO FLOOR PLAN - LOW VOLTAGE SYSTEMS

T102


Telephone Outlet - ... 63.0 EA
Television Outlet - ... 66.0 EA
Wireless Access P... 36.0 EA
(3) 4"C EMT W/ P... 141.9 FT
2"C EMT W/ Pull ... 165.4 FT
(3) CAT 6 Cable 5755.7 FT
(2) CAT 6 Cable 3130.3 FT
1 LEVEL THREE FLOOR PLAN – LOW VOLTAGE SYSTEMS
2 LEVEL FOUR FLOOR PLAN – LOW VOLTAGE SYSTEMS
ELECTRICAL KEYNOTES:
DATE: 08/15/23
PROJECT #: 023009
DRAWING TITLE:
LEVEL THREE AND FOUR FLOOR PLANS - LOW VOLTAGE SYSTEMS
T103