

PANEL NAME: R10

FOR ADD/DELETE CHANGES
BY HE BID DATE.
BY HE PRODUCTS
LUE FOR FIXTURE AND
OM THE CONTRACTOR OR

SEN THIS JOB WAS
OR SHALL VERIEY THIS
INDER BEFORE THE BID.
OR FREIGHT AS NOTED,

WE APPROVAL PRIOR TO
NO LESS THAN 2 WEEKS

RES UPON A/E REQUEST
HEIR INTENDED USE AND
STO FACILITATE
BRAWINGS.
HE SPECIFICATIONS.
L REQUIREMENTS FOR

FACTS" LISTED OR TO BE

RENES)

ARCHITECT / CONSULTANT

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PROJECT DESCRIPTION

KEY BANK TOWER LEVEL 10 AND 16 TI

ajc architects

36 S STATE ST, SLC UT 84111

AHJ STAMP

LIGHTING RELAY PANEL SCHEDULE ACCESSORIES: INTEGRAL PROCESSOR PANEL NAME: R16 LOCATION: ASTRONOMICAL TIMECLOCK SUPPLY VOLTAGE: LAN CONNECTIVITY AND CONTROL MOUNTING: SURFACE **ENCLOSURE: NEMA 1** CHANNEL CONTROL CHANNEL CONTROL LOAD (WATTS) RELAY DIMMING PANEL. DESCRIPTION A | B | C | D | E | F **DESCRIPTION** PANEL... DIMMING RELAY T16AA-2 LTG: SE OPEN OFFICE **T16AA-10** Y 2 LTG: NW OPEN OFFICE T16AA-4 LTG: W OPEN OFFICE 450 200 LTG: CORRIDORS **T16AA-12** Y 4 LTG: CORRIDORS 550 488 LTG: LOBBY T16AA-8 LTG: SW OPEN OFFICE 0 0 **SPARE** -- 10 11 --0 0 -- - - - - - - - -**SPARE** -- 12 --14 LIGHTING SENSORS 16 DIMMING | CHANNEL DESCRIPTION CHANNEL PROGRAMMING REQUIREMENTS NO MANUAL ON, AUTO SWEEP OFF SWEEP OFF AT (10PM), MANUAL ON/OFF VIA LOW VOLTAGE SWITCH** TIME OFF (10PM)/TIME ON (6AM)** ALWAYS ON - NIGHT LIGHTING, MANUAL OFF VIA LOW VOLTAGE SWITCH EXTERIOR LIGHTS OUT AT MIDNIGHT EXTERIOR PHOTOCELL ON/TIME OFF (12AM) NO EXTERIOR LIGHTING ALL NIGHT EXTERIOR PHOTOCELL ON/OFF PROGRAM AS DIRECTED BY OWNER **GENERAL NOTES:** 1. PROGRAMMING OF SYSTEM SHALL COMPLY WITH CURRENT IECC REQUIREMENTS. 2. COORDINATE INITIAL PROGRAMMING WITH OWNER AND MODIFY CONTROL TIMES AND OPERATION AS REQUESTED BY OWNER. 3. PROVIDE FINE TUNING PROGRAMMING AND ADJUSTMENTS UPON REQUEST BY OWNER WITHIN FIRST 6 MONTHS AFTER SUBSTANTIAL COMPLETION. 4. ALL SPARE RELAYS AND CHANNELS SHALL BE INCLUDED WITH ORIGINAL SYSTEM INSTALLATION. 5. UPON LOSS OF NORMAL POWER, ALL EMERGENCY LIGHTING RELAYS SHALL TURN ON TO 100% UNTIL NORMAL POWER IS RESTORED, THEN GO BACK TO STANDARD MODE. ** CHANNEL SHALL BE PROGRAMMED WITH 10 MINUTE WARNING PRIOR TO TURNING LIGHTS OFF BY BLINKING THE LIGHTS OFF/ON/OFF/ON.

	L	LOCATION: ELEC. EX ASTRONOMICAL TIMECLOCK																						
	SUPPLY	VOLTAGE:																			LAN CONNECTIVITY AND CONTRO)L		
	N	OUNTING:	SURFACE																					
	FN	CLOSURE:	NEMA 1																					
		02000112.	· · · · · · · · · · · · · · · · · · ·																					
					СНА	NNFI	CON	NTROI								СНА	NNFI	CON	TROI					
RELAY	DIMMING	PANEL	DESCRIPTION	A	В	С	D				LOA	D (WA1	(TS)	F	E	D	С	В	- A	DESCRIPTION	PANEL	DIMMING	RELAY
1	Υ	T10L-2	LTG: W OPEN OFFICE	X				+-		450 6										X	LTG: SE OPEN OFFICE	T10L-10	_	2
3	Υ	T10L-4	LTG: NW OPEN OFFICE	X				†			6	50 40	0							Х	LTG: E OPEN OFFICE	T10L-12	Υ	4
5	Υ	T10L-6	LTG: CORRIDORS		Х								1.	200 400						Х	LTG: NE OPEN OFFICE	T10L-14	Y	6
7	Υ	T10L-8	LTG: SW OPEN OFFICE	X						750 39	90								Х		LTG: LOBBY	T10L-16	Y	8
9			SPARE									0									SPARE			10
11			SPARE											0 0							SPARE			12
13			SPARE							0 (0										SPARE			14
15			SPARE									0									LIGHTING SENSORS			16
CHA	NNEL	DIMMING	CHANNEL DESCRIPTION	CHA	NNE	L PR	OGR/	AMMI	NG R	EQUIRE	JENTS	3												
	A	NO	MANUAL ON, AUTO SWEEP OFF								OFF V	IA LOV	V VC	DLTAGE	SWITC	H**								
	В	NO	CORRIDOR & COMMON SPACE		TIME OFF (10PM)/TIME ON (6AM)**																			
	С	NO	NIGHT LIGHTS							•			LO	W VOLT	AGE S	WITC	H							
	D	NO	EXTERIOR LIGHTS OUT AT MIDNIGI								(12A	M)												
	E	NO	EXTERIOR LIGHTING ALL NIGHT					CELL																
	F I	NO SPARE PROGRAM AS DIRECTED BY OWNER																						

LIGHTING RELAY PANEL SCHEDULE

ACCESSORIES: INTEGRAL PROCESSOR

SHEET NAME:

INTERIOR LIGHTING FIXTURE SCHEDULE

REVISIONS

MARK DATE DESCRIPTION
1 6/4/19 ADD #01

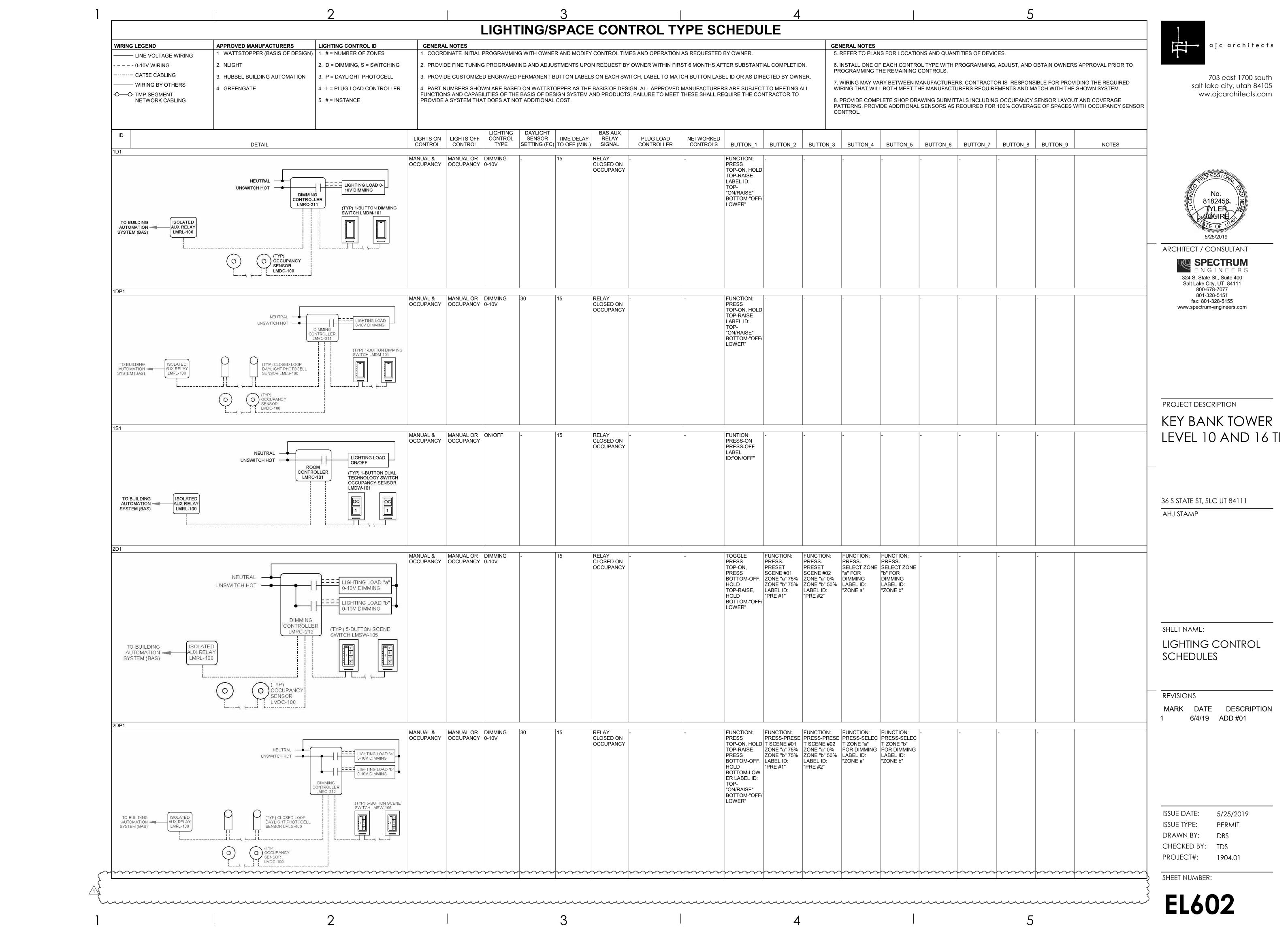
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DRAWN BY: DBS
CHECKED BY: TDS

CHECKED BY: TDS
PROJECT#: 1904.01

SHEET NUMBER:

EL601



		2		3			4	5	
	LIGHTING/SPACE CONTROL TYPE SCHEDULE								
WIRING LEGEND	APPROVED MANUFACTURERS	LIGHTING CONTROL ID	GENERAL NOTES				GENERAL NOTES		
——— LINE VOLTAGE WIRING	1. WATTSTOPPER (BASIS OF DESIGN) 1. # = NUMBER OF ZONES	COORDINATE INITIAL PRO	OGRAMMING WITH OWNER AND MODIF	Y CONTROL TIMES AND OPERATION	AS REQUESTED BY OWNER.	5. REFER TO PLANS FOR LOCATI	IONS AND QUANTITIES OF DEVICES.	
0-10V WIRING CAT5E CABLING WIRING BY OTHERS -O TMP SEGMENT NETWORK CABLING	2. NLIGHT3. HUBBEL BUILDING AUTOMATION4. GREENGATE	 2. D = DIMMING, S = SWITCHING 3. P = DAYLIGHT PHOTOCELL 4. L = PLUG LOAD CONTROLLER 5. # = INSTANCE 	PROVIDE CUSTOMIZED E 4. PART NUMBERS SHOWN FUNCTIONS AND CAPABILIT	ENGRAVED PERMANENT BUTTON LABEL	ELS ON EACH SWITCH, LABEL TO MATHE	RST 6 MONTHS AFTER SUBSTANTIAL COMPLETICH BUTTON LABEL ID OR AS DIRECTED BY ON MANUFACTURERS ARE SUBJECT TO MEETING THESE SHALL REQUIRE THE CONTRACTOR T	PROGRAMMING THE REMAINING WNER. 7. WIRING MAY VARY BETWEEN I WIRING THAT WILL BOTH MEET 1 0 8. PROVIDE COMPLETE SHOP DR	ROL TYPE WITH PROGRAMMING, ADJUST, AND OBTAIN OWNERS APPROVAL PRIOR TO GONTROLS. MANUFACTURERS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE REQUIRED THE MANUFACTURERS REQUIREMENTS AND MATCH WITH THE SHOWN SYSTEM. RAWING SUBMITTALS INCLUDING OCCUPANCY SENSOR LAYOUT AND COVERAGE AL SENSORS AS REQUIRED FOR 100% COVERAGE OF SPACES WITH OCCUPANCY SENS	
ID 3DP1	DETAIL			LIGHTING DAYLIGHT CONTROL SENSOR TIME DELAY TYPE SETTING (FC) TO OFF (MIN.		NETWORKED CONTROLS BUTTON_1 BUTTON_2	2 BUTTON_3 BUTTON_4 BUTTON_5	BUTTON_6 BUTTON_7 BUTTON_8 BUTTON_9 NOTES	
TO BUILDING ISOLATED AUX RELAY SYSTEM (BAS) LMRL-100	NEUTRAL UNSWITCH HOT DIMMING CONTROLLER LMRC-213 (TYP) CLOSED LOOP DAYLIGHT PHOTOCELL SENSOR LMLS-400 (TYP) OCCUPANCY SENSOR LMDC-100	LIGHTING LOAD "a" 0-10V DIMMING -=== LIGHTING LOAD "b" 0-10V DIMMING (TYP) 5-BUTTON SCENE SWITCH LMSW-105	MANUAL & MANUAL OR OCCUPANCY 0-2		RELAY CLOSED ON OCCUPANCY	TOGGLE PRESS TOP-ON, PRESS BOTTOM-OFF, HOLD TOP-RAISE, HOLD BOTTOM-LOW ER), %,		

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LIGHTING CONTROL SCHEDULES

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ABBREVIATIONS

NOTE: ALL ABBREVIATIONS MAY NOT BE USED.

AUGMENTED

CATEGORY

ENHANCED

GIGA HERTZ

PLENUM

EQUIPMENT ROOM

NOT IN CONTRACT

POWER SUPPLY RISER PATCH PANEL

OWNER ELECTRONICS

STATION PATCH PANEL

VERTICAL WIRE MANAGEMENT

FIBER PATCH PANEL

HORIZONTAL WIRE MANAGEMENT

TELECOMMUNICATIONS DISTRIBUTION ROOM

DEFINITIONS

NOTE: ALL DEFINITIONS MAY NOT BE USED.

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS.

SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE

SELECTED". "APPROVED". "REQUIRED". AND "PERMITTED" MEAN "DIRECTED BY

APPROVE: THE TERM "APPROVED". WHERE USED IN CONJUNCTION WITH THE

ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND

REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE

PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION,

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION,

PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING,

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY

SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION

DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL

SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND

SYSTEMS". THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO

ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS

ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR

OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE

ELECTRONIC SYSTEMS: THE TERM "ELECTRONIC SYSTEMS" IS USED TO

THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR

NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR

CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED".

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED",

THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

PROTECTING, CLEANING, AND SIMILAR OPERATIONS."

OPERATIONS THEY ARE ENGAGED TO PERFORM.

AND SIMILAR OPERATIONS."

AND READY FOR THE INTENDED USE."

DATA CABLING SYSTEMS, ETC...

SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE

EACH

FR

GIG

NIC

OE

TDR

TYP

VWM

HWM

2. PROVIDE PLENUM RATED CABLE IN ALL AIR PLENUMS. IF A PLENUM RATED CABLE IS NOT SPECIFIED, PROVIDE THE PLENUM RATED EQUIVALENT TO THE SPECIFIED CABLE.

3. LABEL ALL CABLE INSTALLED UNDER THIS CONTRACT REGARDLESS OF

4. THE EQUIPMENT LABELING IDENTIFIED ON DETAILS IN THESE DRAWINGS ARE EXAMPLES ONLY OF THE ACTUAL LABELING WHICH IS REQUIRED AS PART OF THIS CONTRACT. PRIOR TO FABRICATION, SUBMIT THE NOMENCLATURE FOR ALL LABELS TO THE OWNER FOR REVIEW. THIS REQUIREMENT INCLUDES BUT IS NOT LIMITED TO ALL CABLE LABELING, AND ALL EQUIPMENT LABELING.

5. IF OUTLET IS TERMINATED IN CEILING SPACE, LABEL THE T-BAR GRID WITH THE OUTLET NUMBER FOR EASY LOCATION AND IDENTIFICATION.

6. GROUND ALL EQUIPMENT RACKS INSTALLED UNDER THIS CONTRACT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.

7. PROVIDE THE QUANTITY OF PATCH PANELS REQUIRED +20% FOR THE TOTAL DATA OUTLETS SHOWN ON FLOOR PLANS FOR THE PARTICULAR LEVEL.

8. RACK SPACE ALLOCATION SHOULD BE FOLLOWED PER DRAWINGS. IF YOU HAVE A SYSTEM THAT HAS NO RACK SPACE ALLOCATED PLEASE CALL BOE SAUSEDO AT 801-707-3805

9. ENSURE ALL BASKET TRAY AND COMMUNICATIONS CONDUITS HAVE BEEN GROUNDED TO THE TEC/TDR, USING A MINIMUM #6 CU.

10. CONTRACTOR TO LOOSELY BUNDLE ALL CABLES TOGETHER BY FLOOR OR ORIGINATION.

11. FOR EVERY CABLE PULL SPECIFIED, COIL 15' OF EXCESS CABLE AT THE STATION END FOR FUTURE USE AND 3'-0" OF EXCESS CABLE AT THE TDR END. NEATLY COIL AND SECURE CABLE ABOVE THE CEILING OR BELOW FLOOR WHERE APPLICABLE.

12. COORDINATE WITH ALL SUBS TO ENSURE THAT ALL CABLES ARE PROTECTED FROM ANY DIRECT PAINT OR INCIDENTAL OVERSPRAY.

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KEY BANK TOWER LEVEL 10 AND 16 TI

36 S STATE ST, SLC UT 84111

AHJ STAMP

SHEET NAME:

TELECOM SCHEDULES AND NOTES

REVISIONS

MARK DATE DESCRIPTION

ISSUE DATE: ISSUE TYPE:

PERMIT DRAWN BY: CHECKED BY: JDA

5/25/2019

1904.01

SHEET NUMBER:

PROJECT#:

EQUIPMENT/CABLE LIST THE ITEMS INDICATED BELOW SHALL NOT BE CONSTRUED AS A "BILL OF MATERIALS". THIS LIST IDENTIFIES ITEMS OF SIGNIFICANCE USED DURING THE DESIGN OF THE CABLING INSTALLATION. WHERE THE ITEMS INDICATED ARE ONE PORTION OF AN ASSEMBLY, THE ENTIRE ASSEMBLY SHALL BE PROVIDED UNLESS SPECIFIED OTHERWISE. PROVIDE ALL MISCELLANEOUS HARDWARE AND SUPPORTS WHICH MAY NOT BE LISTED HERE, FOR A COMPLETE INSTALLATION. COMPARE CATALOG NUMBERS WITH DESCRIPTIONS AND NOTIFY ENGINEER OF DISCREPANCIES PRIOR TO BID. IF CATALOG NUMBERS DO NOT MATCH DESCRIPTIONS, THE DESCRIPTIONS TAKE PRECEDENCE. PROVIDE COMPLETE SUBMITTAL FOR APPROVAL PRIOR TO PURCHASING ANY EQUIPMENT OR CABLE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. ACCEPTABLE TYPES STATION CABLE, DATA - CATEGORY 6A FUTP PLENUM, BLUE, DATA SIEMON 9A6P4-A5-06-R1A STATION CABLE, DATA - CATEGORY 6A FUTP PLENUM, YELLOW, WIRELESS DATA SIEMON 9A6P4-A5-05-R1A 50 PAIR CATEGORY 3 RISER CABLE, GRAY GENERAL CABLE OR EQUAL FIBER OPTIC CABLE, SINGLE-MODE, 12 STRAND, ARMORED, PLENUM CABLE, YELLOW SIEMON 9BC8P012LE205A LC CONNECTOR, SIMPLEX SINGLEMODE SIEMON FC1-LC-SM-B02 VOICE OUTLET, SINGLE GANG FACEPLATE, WHITE W/WALL HUNG PHONE SIEMON MX-WP-Z6AS-SS MOUNTING STUDS, ONE POSITION W/CATEGORY 6A INSERT DATA OUTLET, SINGLE GANG FACEPLATE, WHITE, 2 POSITION SIEMON 10GMX-FPS02-02 CATEGORY 6A JACK - DATA, BLUE SIEMON Z6A-S06 DATA OUTLET, SURFACE MOUNT BOX, WHITE, 2 POSITION SIEMON MX-SMZ2-02 CATEGORY 6A JACK - DATA, BLUE SIEMON Z6A-S06 DATA OUTLET, FURNITURE FACEPLATE, BLACK SIEMON MX-UMA-01 CATERGPRU 6A JACK - DATA. BLUE SIEMON Z6A-S06 BLANK MODULE, BLACK SIEMON MX-BL-01 DATA OUTLET, SURFACE MOUNT BOX, WHITE, 2 POSITION SIEMON MX-SMZ2-02 CATEGORY 6A JACK - DATA, YELLOW SIEMON Z6A-S05 DATA OUTLET, SURFACE MOUNT BOX, WHITE, 1 POSITION SIEMON MX-SMZ1-02 SIEMON Z6A-S06 CATEGORY 6A JACK - DATA, BLUE 48 PORT, 1RU ANGLE PATCH PANEL WITH OUTLETS SIEMON Z6AS-PA-48 48 PORT, 2RU ANGLE PATCH PANEL, 110 STYLE SIEMON HD5-48A FIBER PATCH PANEL, 3RU SIEMON RIC3-48-01 SIX POSITION FIBER ADAPTOR PANEL, LC SIEMON RIC-F-LCU12-01C WALL MOUNT INTERCONNECT CENTER, BLACK SIEMON SWIC3-M-01 FST FIBER SPLICE TRAY BRACKET SIEMON TRAY-B-01 FIBER SPLICE TRAY SIEMON TRAY-M-3 BLANK ADAPTER PLATE, BLACK SIEMON RIC-F-BLNK-01 HORIZONTAL WIRE MANAGERS, 4RU PANDUIT NCMHAEF4 VERTICAL WIRE MANAGERS, DOUBLE SIDED, BLACK CHATSWORTH 40096-703 EQUIPMENT RACK, 7' x 19", 45RU, BLACK CHATSWORTH 55053-703 CABLE RUNWAY - 24", BLACK WITH ALL REQUIRED MOUNTING ACCESSORIES CHATSWORTH 10250-724 CABLE RUNWAY - 18". BLACK WITH ALL REQUIRED MOUNTING ACCESSORIES CHATSWORTH 10250-718 BUTT SPLICE KIT, BLACK CHATSWORTH 11301-701 JUNCTION SPLICE KIT, BLACK CHATSWORTH 11302-701 FOOT KIT. BLACK CHATSWORTH 11309-701 6" CHANNEL RACK TO RUNWAY, BLACK CHATSWORTH 12409-724 TRIANGLE BRACKETS, BLACK CHATSWORTH 11746-724 END CLOSING KIT, CABLE RUNWAY, BLACK CHATSWORTH 11700-724 WALL ANGLE SUPPORT KIT, CABLE RUNWAY, BLACK CHATSWORTH 11421-724 CABLE RUNWAY ELEVATION KIT, 6" CHATSWORTH 10506-706 CABLE RUNWAY RADIUS DROP CHATSWORTH 12100-712 STATION PATCH CABLE, CAT 6A SHIELDED, BLUE, 5 SIEMON ZM6A-S0506 STATION PATCH CABLE, CAT 6A SHIELDED, BLUE, 7' SIEMON ZM6A-S0706 STATION PATCH CABLE, CAT 6A SHIELDED, BLUE, 10' SIEMON ZM6A-S1006 STATION PATCH CABLE, CAT 5E, BLUE, 5' SIEMON MC5-8T-05-B06C STATION PATCH CABLE, CAT 5E, BLUE, 7 SIEMON MC5-8T-07-B06C STATION PATCH CABLE, CAT 5E, BLUE, 10' SIEMON MC5-8T-10-B06C PATCH CABLE, FIBER, SINGLEMODE DUPLEX W/LC CONNECTORS, YELLOW, 3 METER J2-LCLCP-03 PATCH CABLE, FIBER, SINGLEMODE DUPLEX W/ LC CONNECTORS, YELLOW, 5 METER J2-LCLCP-05

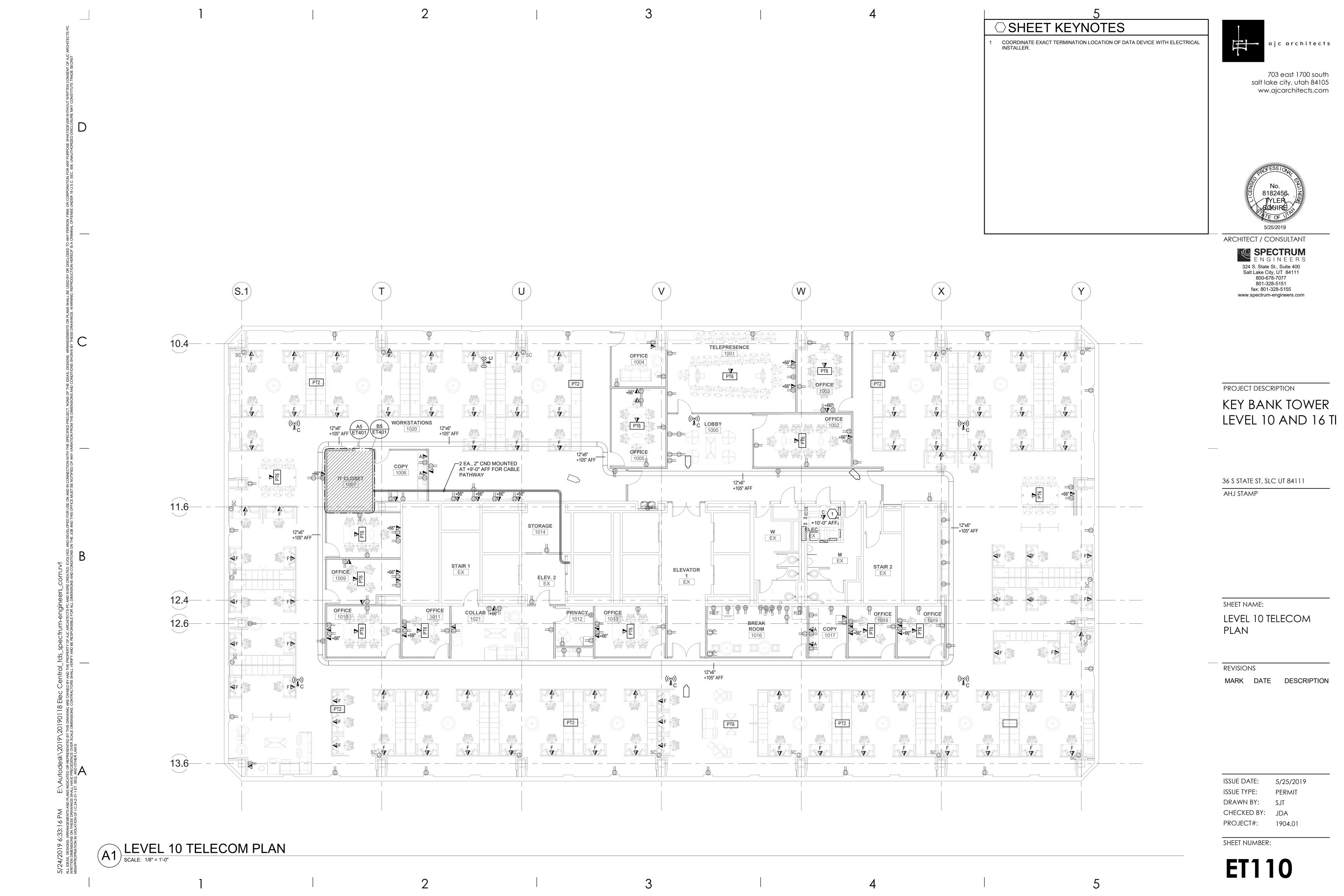
TELECOMMUNICATIONS GROUNDING BUS BAR NOTE: ALL RACKS, LADDER, PATCH PANELS AND ACCESSORIES SHALL BE BLACK IN COLOR.

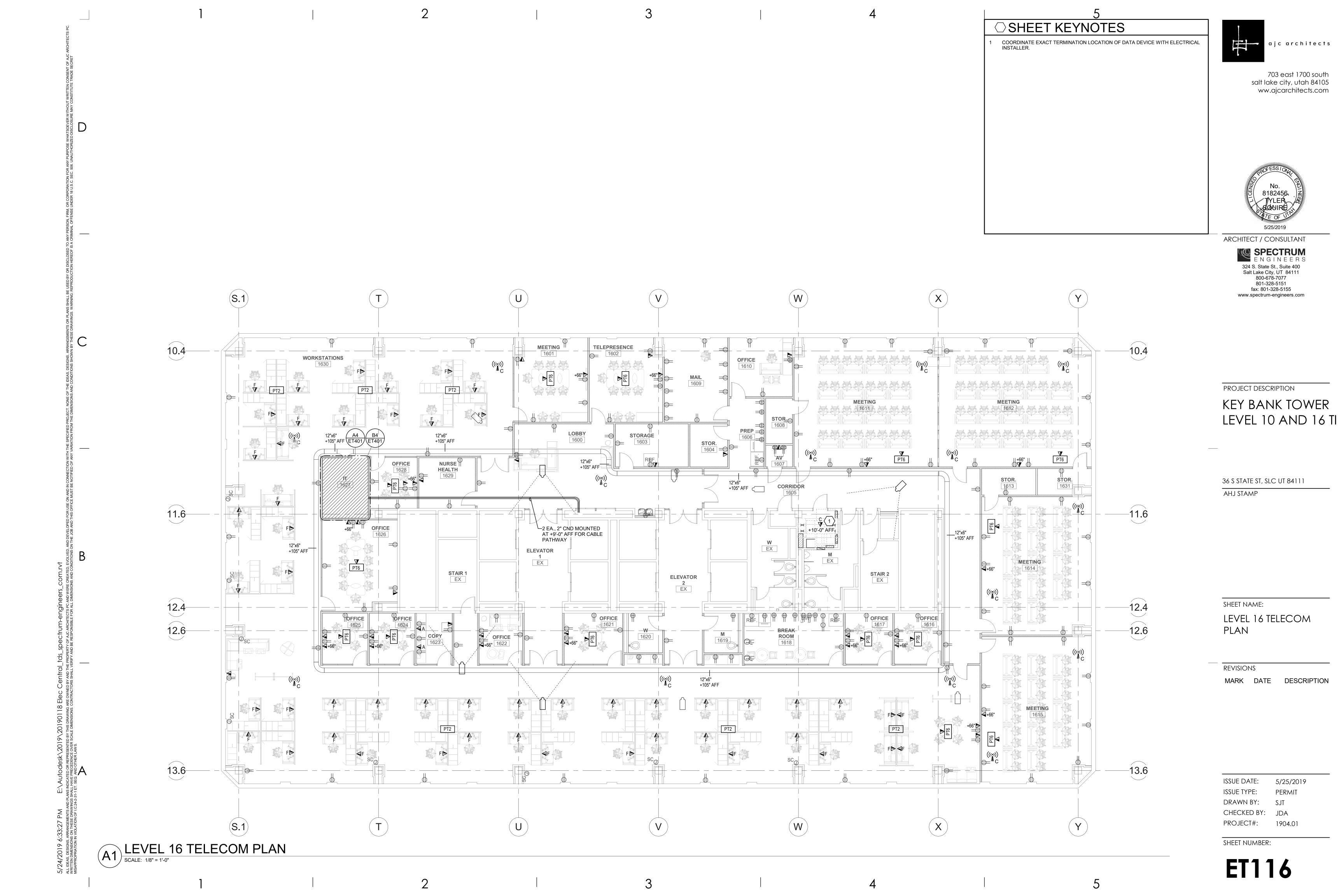
PLYWOOD BACKBOARD, 4' X 8', GRADE AC, FIRE TREATED & PAINTED

TELECOMMUNICATIONS MAIN GROUNDING BUS BAR

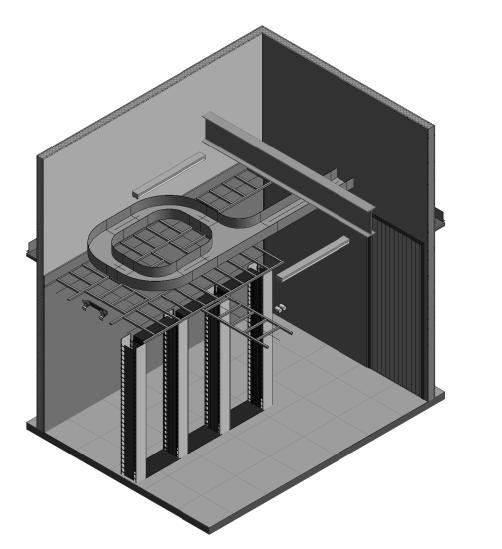
CABLE/OUTLET COLOR SCHEDULE							
COLOR	TYPE						
BLACK	TV COAX						
BLUE	ANALOG PHONE						
BLUE	DATA						
BLUE	IP SECURITY CAMERAS						
GREY	SECURITY CARD READERS						
ORANGE	CLINICAL ENGINEERING / NURSE CALL						
RED	FIRE SYSTEMS						
RED	FORESEER						
WHITE	PUBLIC ADDRESS						
YELLOW	WIRELESS						
GREEN	VENDOR NETWORK						

System Responsibility Matrix Designed Furnished Installed Ву Notes Telecomm Raceways, Conduit/Cable Tray/J-Hooks Design Team Contractor Contractor Boxes, Raceways, Cabletray, ect. Backbone Fiber Contractor | Qualified Contractors: IES, CVE, Data Tech Professionals Design Team Contractor Fiber Termination Shelves (FPP1, FPP2) Design Team Contractor Contractor | Qualified Contractors: IES, CVE, Data Tech Professionals Copper Backbone Cabling Design Team Contractor | Qualified Contractors: IES, CVE, Data Tech Professionals Contractor Riser Patch Panels (RPP1) Design Team Contractor | Qualified Contractors: IES, CVE, Data Tech Professionals Contractor Fuse Protection for Backbone Cabling Contractor Contractor | Qualified Contractors: IES, CVE, Data Tech Professionals Design Team Cat 6A Horizontal Cable Design Team Contractor Contractor | Qualified Contractors: IES, CVE, Data Tech Professionals Patch Panels/Inserts SPP, WPP Design Team Contractor Qualified Contractors: IES, CVE, Data Tech Professionals Contractor Horizontal Wire Manager (1RU, 2RU) Contractor Qualified Contractors: IES, CVE, Data Tech Professionals Design Team Contractor Vertical Wire Manager Design Team Qualified Contractors: IES, CVE, Data Tech Professionals Contractor RJ45 Inserts, Faceplates, Surface Mount Boxes Design Team Contractor Faceplate color to be coordinated with architect and owner. Contractor Fiber optic, Cat 6 and Cat 6A Patch Cords Owner Owner Patch cord quantities and lengths to be identified by owner. Building MDF/IDF Racks Design Team Contractor Contractor | Qualified Contractors: IES, CVE, Data Tech Professionals Building MDF/IDF Ladder Rack Design Team Contractor Contractor | Qualified Contractors: IES, CVE, Data Tech Professionals Active Network Electronics Contractor Wireless AP's, L2/L3 network switches, etc. Owner Owner UPS/PDU Owner Owner

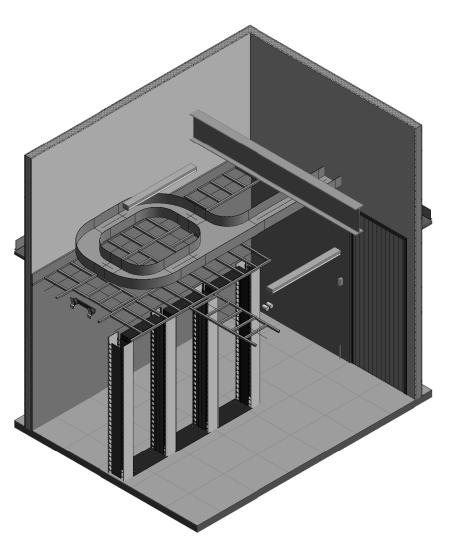




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ENLARGED IT CLOSET 1627 C4 ISOMETRIC PLAN SCALE:



ENLARGED IT CLOSET 1007 C5 ISOMETRIC PLAN SCALE:

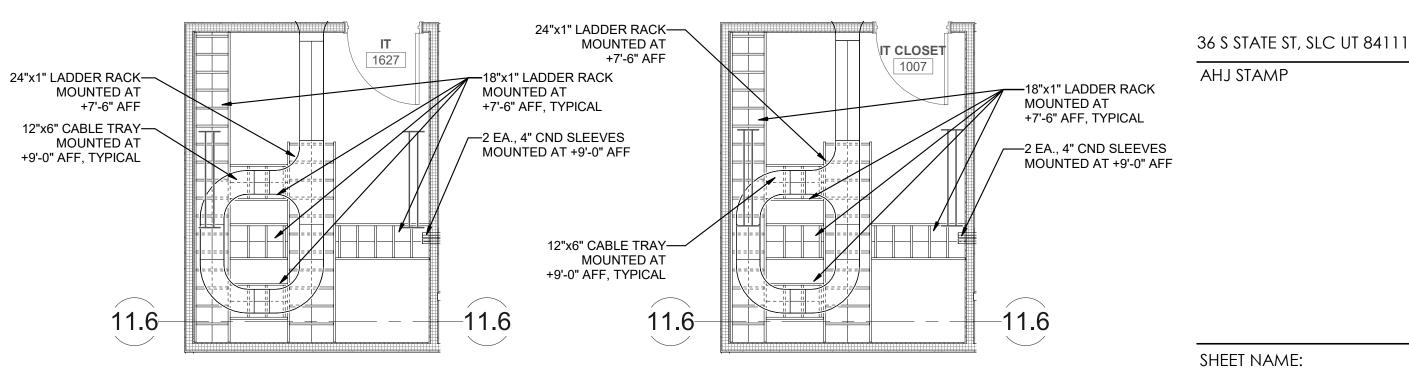


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PROJECT DESCRIPTION

KEY BANK TOWER LEVEL 10 AND 16 TI



ENLARGED IT CLOSET 1627 B4 LADDER RACK PLAN

SCALE: 1/4" = 1'-0"



ENLARGED TELECOM PLANS



MARK DATE DESCRIPTION

IT CLOSET

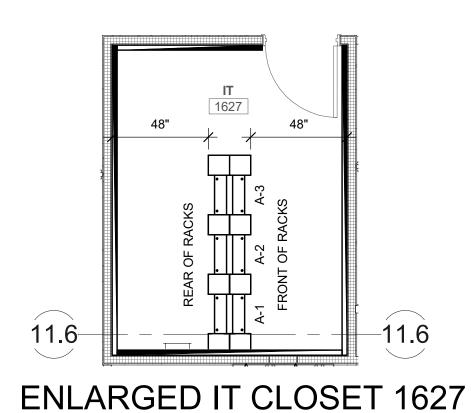
ENLARGED IT CLOSET 1007 A5 EQUIPMENT RACK PLAN

SCALE: 1/4" = 1'-0"

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SHEET NUMBER:

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EQUIPMENT RACK PLAN

SCALE: 1/4" = 1'-0"

DATA DEVICE DROP SCHEDULE - IT CLOSET 1007							
DATA DEVICE TYPE	DETAIL LOCATION	COMM ROOM LOCATION	TOTAL BY FLOOR	# OF DROPS			
LEVEL 10							
CEILING DATA (2-DROP)	SEE DETAIL C4/ET503	IT CLOSET 1007	1	2			
CEILING DATA CAMERA (1-DROP)	SEE DETAIL B4/ET503	IT CLOSET 1007	3	3			
CEILING WIRELESS ACCESS POINT (2-DROP)	SEE DETAIL C5/ET503	IT CLOSET 1007	7	14			
FLOOR DATA (2-DROP)	SEE DETAIL A5/ET503	IT CLOSET 1007	13	26			
FURNITURE DATA (2-DROP)	SEE DETAIL A4/ET503	IT CLOSET 1007	92	184			
WALL DATA (2-DROP)	SEE DETAIL A5/ET503	IT CLOSET 1007	35	70			
WALL DATA - ABOVE COUNTER (2-DROP)	SEE DETAIL A5/ET503	IT CLOSET 1007	4	8			
Grand total	•	-	155	307			



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MARK DATE DESCRIPTION

ISSUE DATE:

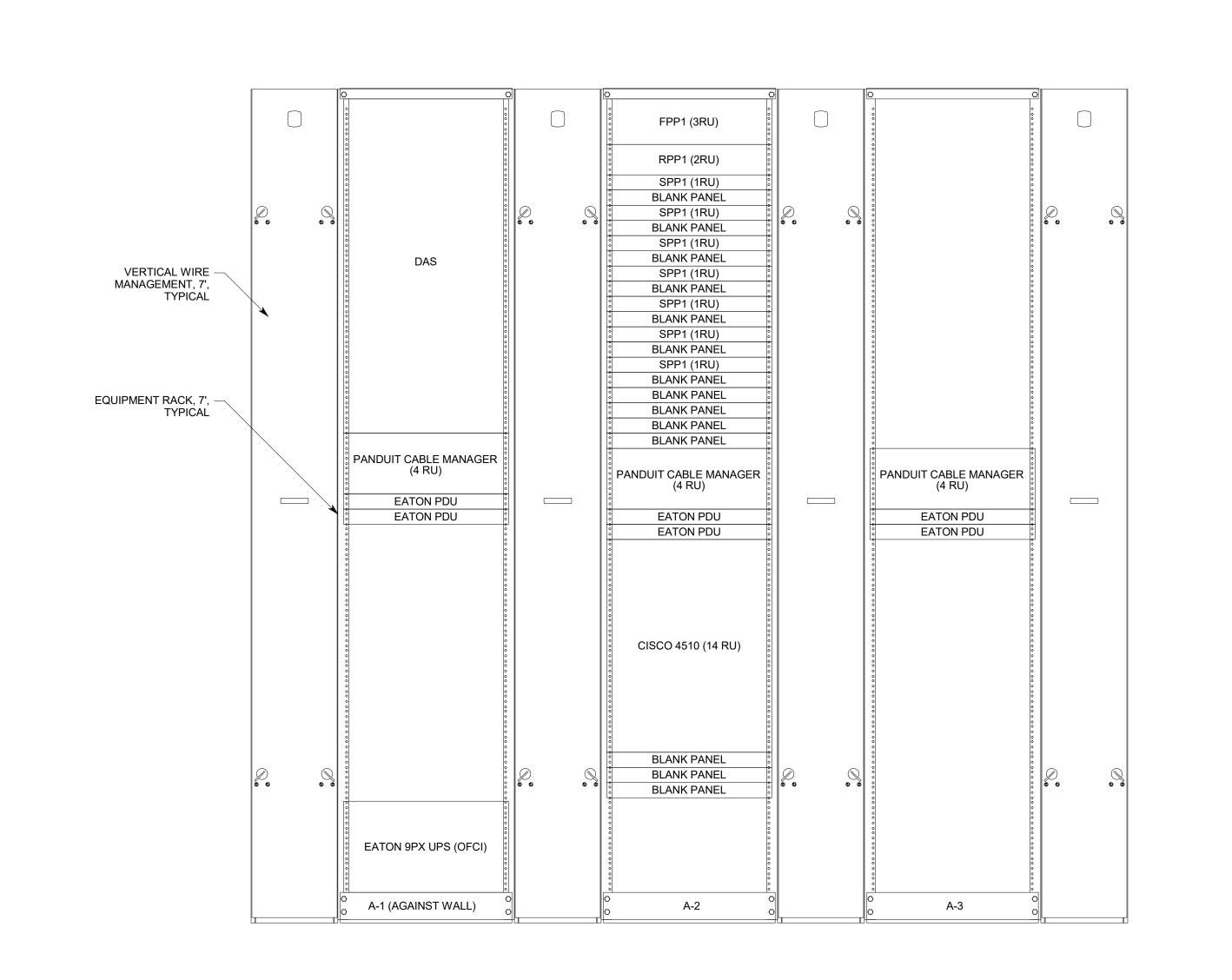
PERMIT DRAWN BY: CHECKED BY: JDA

5/25/2019

PROJECT#: 1904.01

SHEET NUMBER:

ET501



TELECOM RACK ELEVEVATION DETAIL, LEVEL 10, IT CLOSET 1007
NO SCALE

DATA DEVICE DROP SCHEDULE - IT CLOSET 1627							
COMM ROOM TOTAL BY # OF							
DATA DEVICE TYPE	DETAIL LOCATION	LOCATION	FLOOR	DROPS			
LEVEL 16							
CEILING DATA (2-DROP)	SEE DETAIL C4/ET503	IT CLOSET 1627	1	2			
CEILING DATA CAMERA (1-DROP)	SEE DETAIL B4/ET503	IT CLOSET 1627	4	4			
CEILING WIRELESS ACCESS POINT (2-DROP)	SEE DETAIL C5/ET503	IT CLOSET 1627	14	28			
FLOOR DATA (2-DROP)	SEE DETAIL A5/ET503	IT CLOSET 1627	14	28			
FURNITURE DATA (2-DROP)	SEE DETAIL A4/ET503	IT CLOSET 1627	51	102			
WALL DATA (2-DROP)	SEE DETAIL A5/ET503	IT CLOSET 1627	35	70			
WALL DATA - ABOVE COUNTER (2-DROP)	SEE DETAIL A5/ET503	IT CLOSET 1627	2	4			
Grand total		•	121	238			



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PROJECT DESCRIPTION

KEY BANK TOWER LEVEL 10 AND 16 TI

36 S STATE ST, SLC UT 84111

AHJ STAMP

SHEET NAME:

TELECOM EQUIPMENT RACK ELEVATIONS

REVISIONS

MARK DATE DESCRIPTION

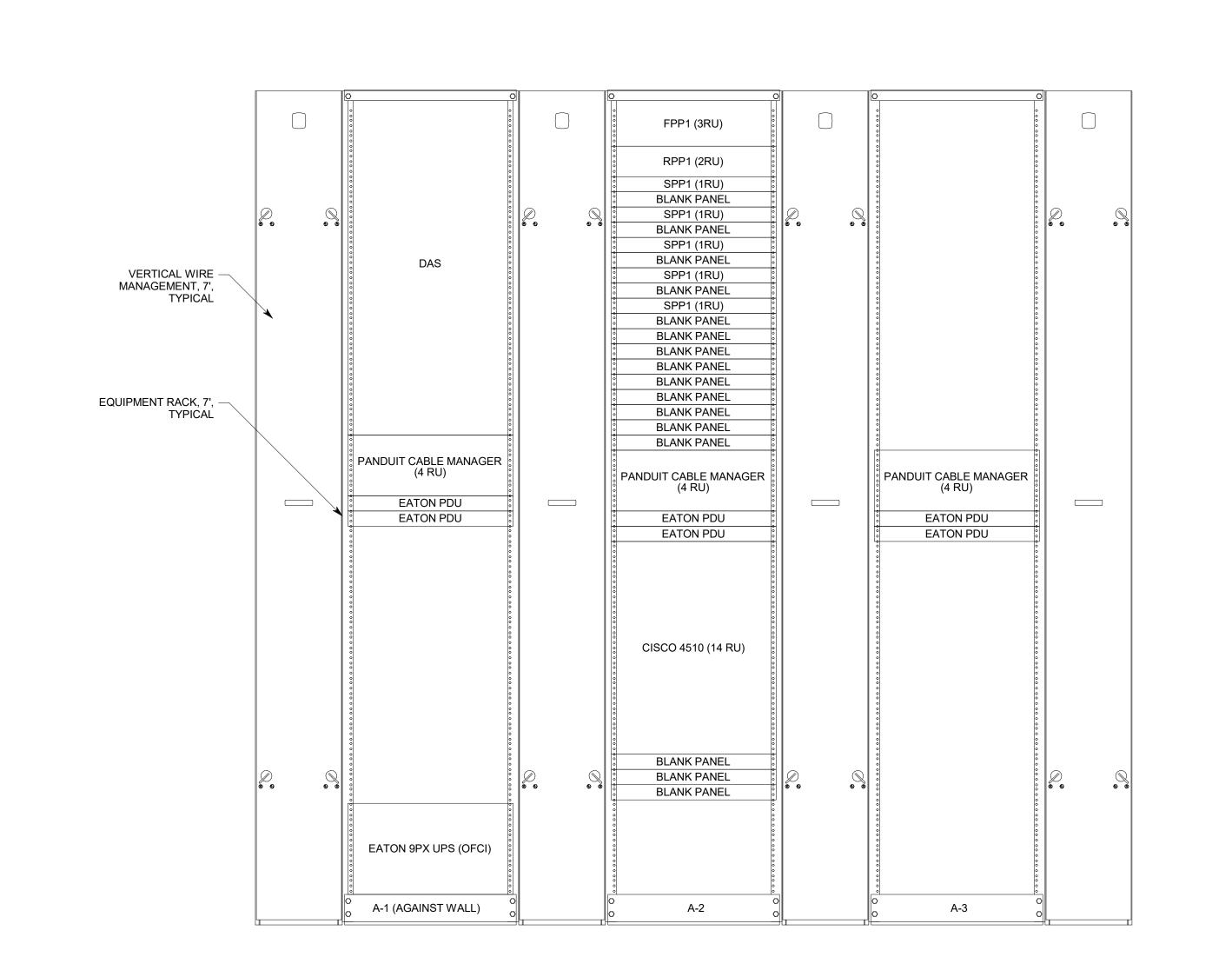
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PERMIT DRAWN BY: CHECKED BY: JDA PROJECT#: 1904.01

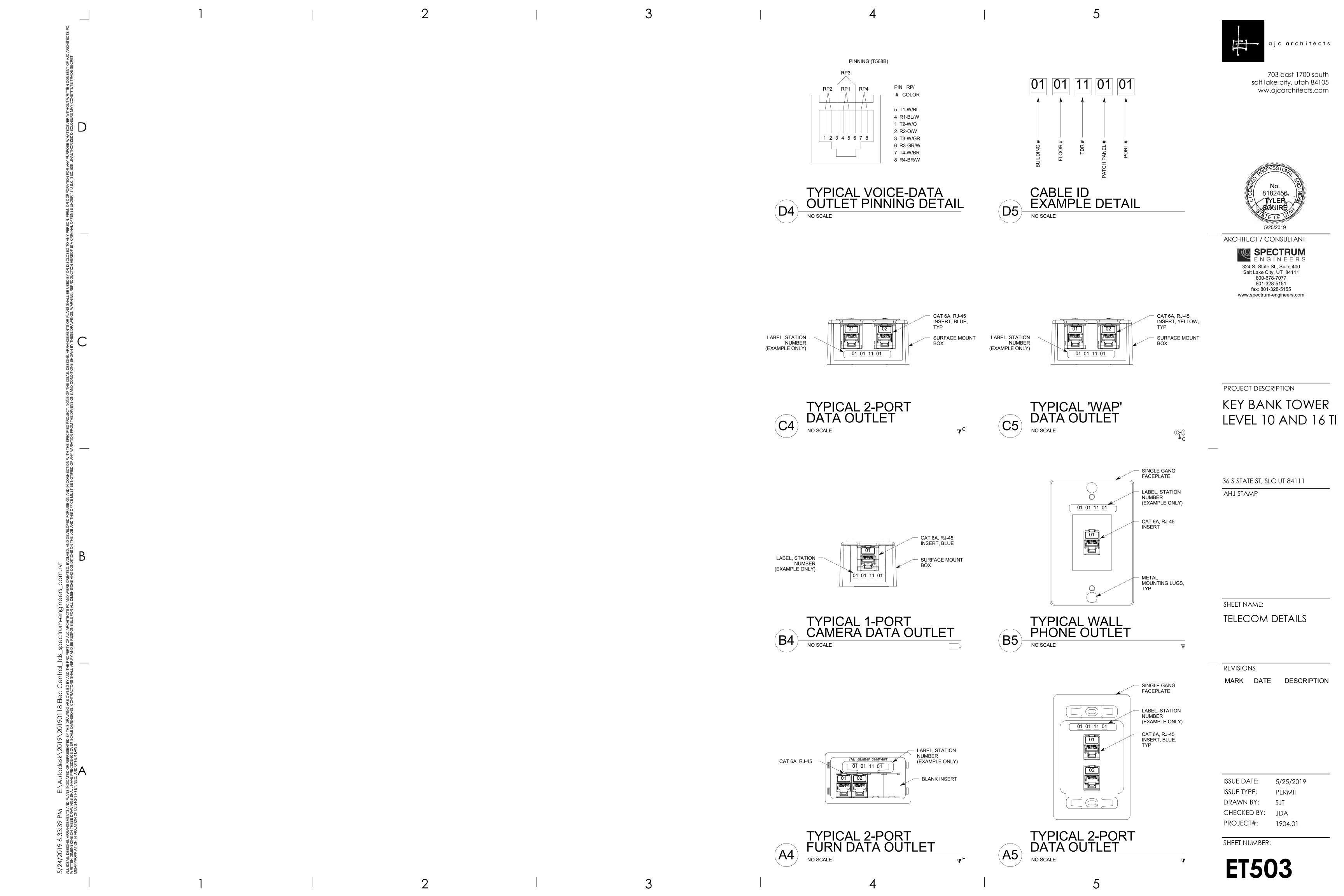
5/25/2019

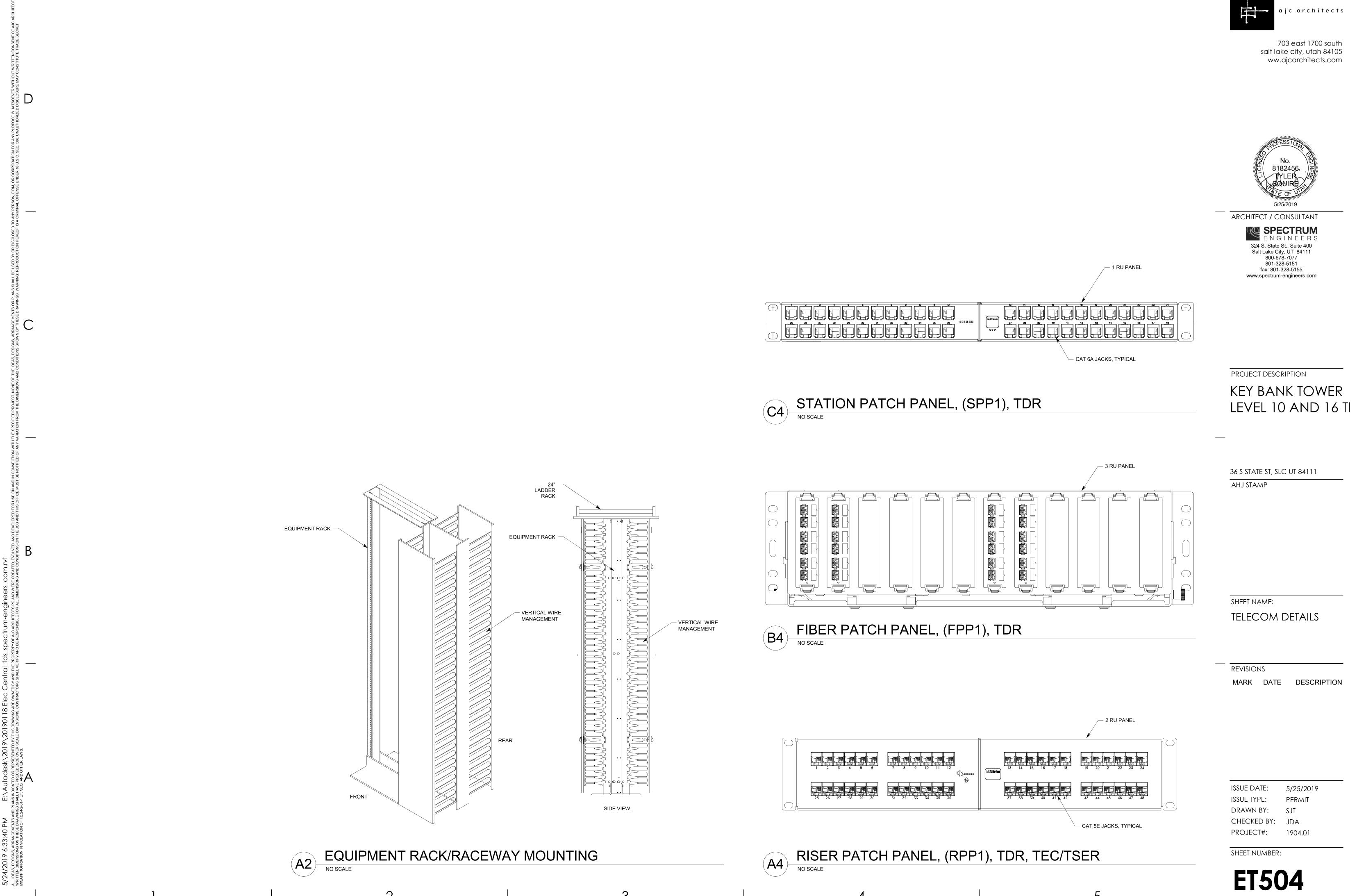
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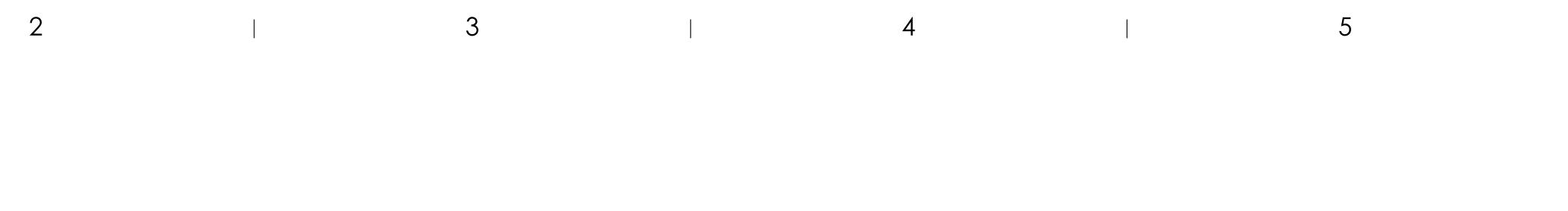
ET502



TELECOM RACK ELEVEVATION DETAIL, LEVEL 16, IT CLOSET 1627
NO SCALE



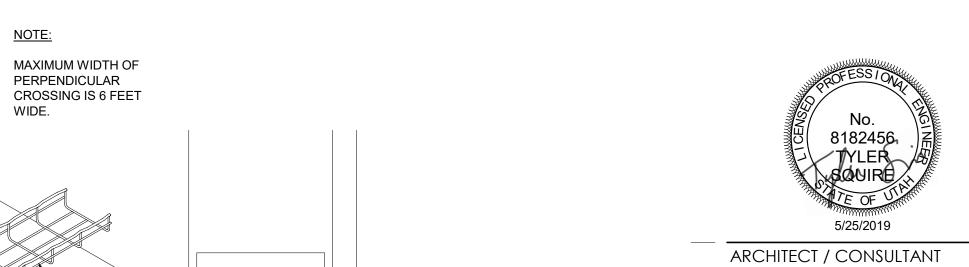






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PROJECT DESCRIPTION KEY BANK TOWER LEVEL 10 AND 16 TI

36 S STATE ST, SLC UT 84111

SHEET NAME:

AHJ STAMP

TELECOM DETAILS

REVISIONS

MARK DATE DESCRIPTION

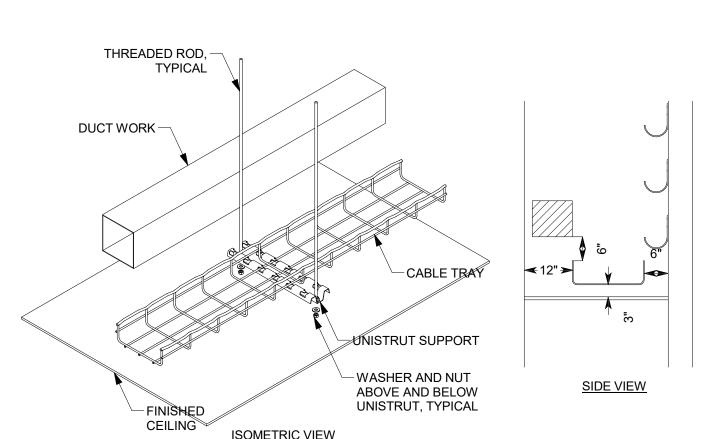
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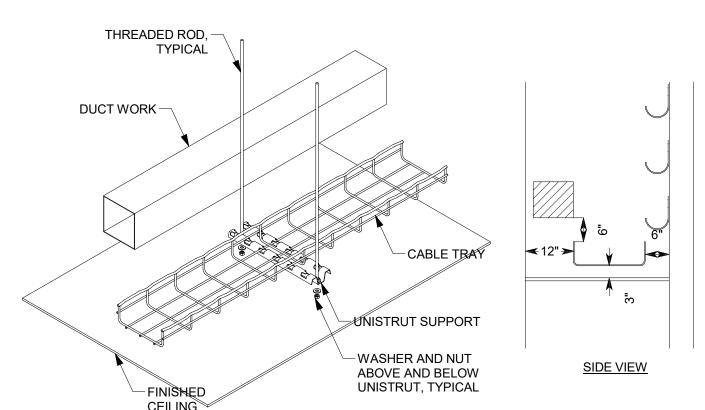
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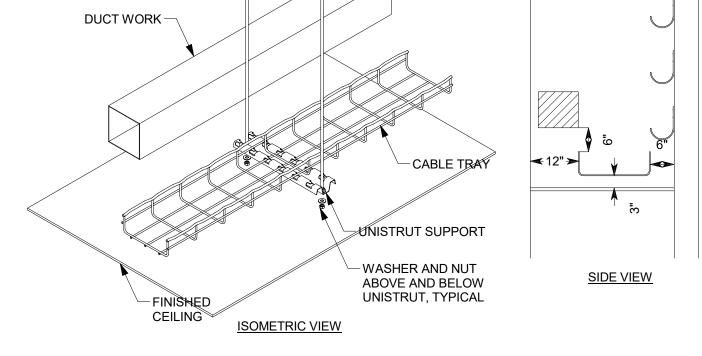
PROJECT#: 1904.01

SHEET NUMBER:

ET505











THREADED ROD, -

__DUCT WORK

FINISHED CEILING

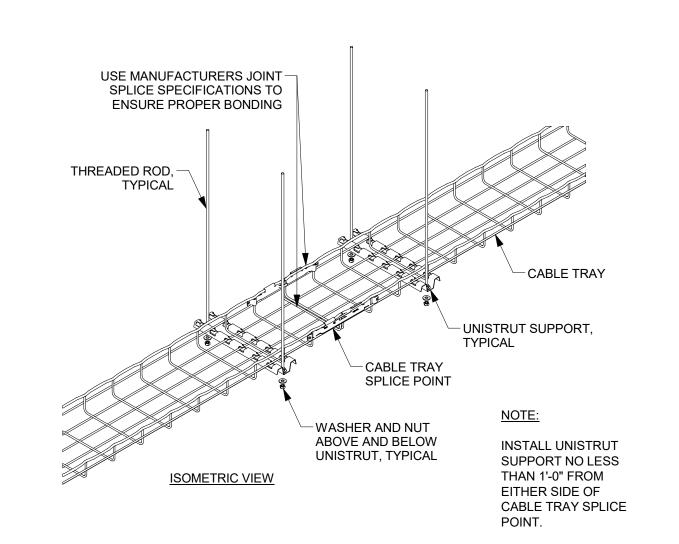
ISOMETRIC VIEW

WIDE.

MISTRUT SUPPORT

WASHER AND NUT
ABOVE AND BELOW
UNISTRUT, TYPICAL

SIDE VIEW





10' CABLE TRAY WITH SUPPORT AT ENDS

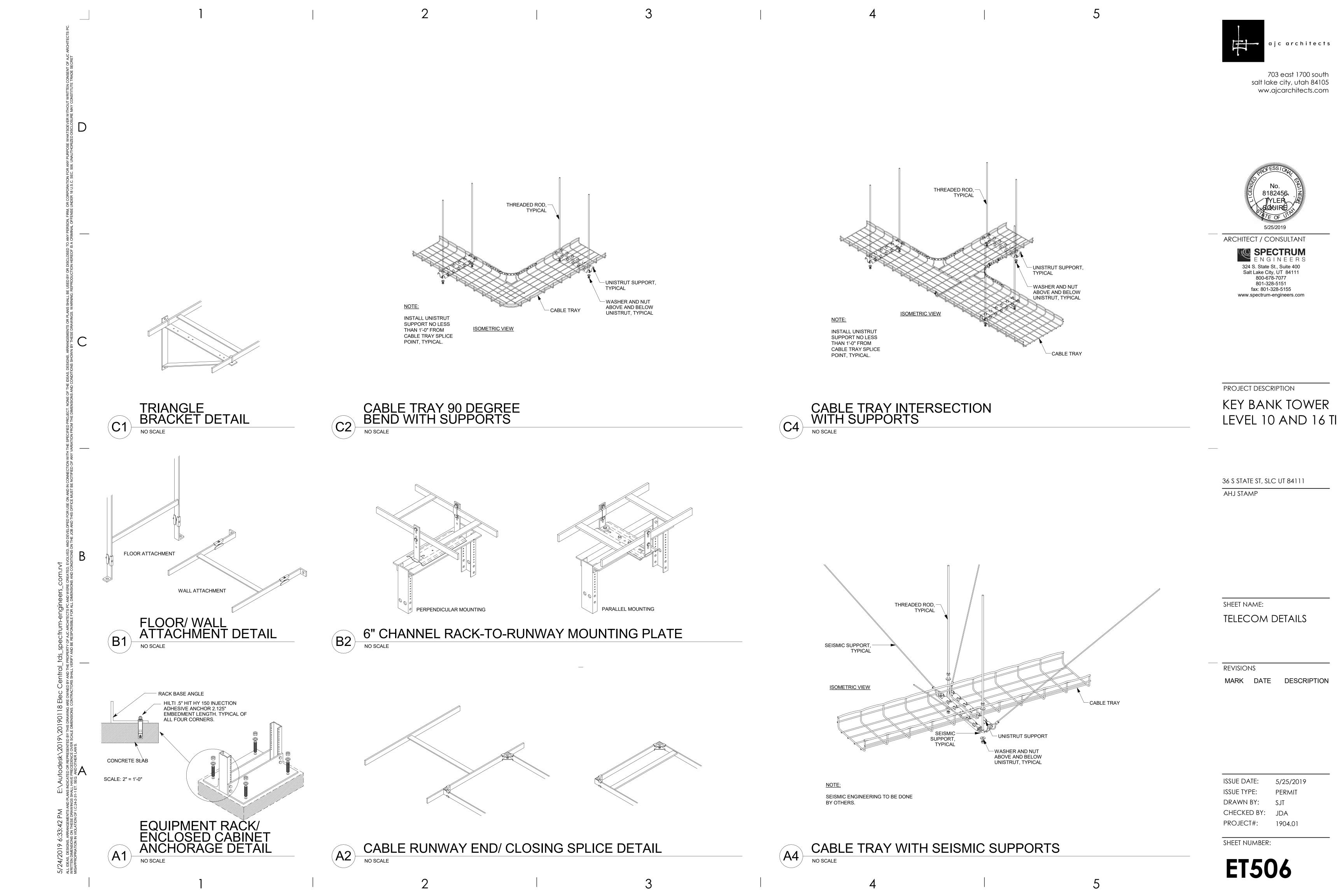
NOTE: ISOMETRIC VIEW -UNISTRUT SUPPORT, TYPICAL

THREADED ROD, -TYPICAL

INSTALL UNISTRUT SUPPORT NO LESS THAN 1'-0" FROM EITHER END OF CABLE TRAY ON 10'-0" SECTION.

WASHER AND NUTABOVE AND BELOW

UNISTRUT, TYPICAL



- 1. ALL LOW VOLTAGE COMMUNICATIONS CONDUIT SHALL BE GROUNDED TO BASKET TRAY OR TELECOMMUNICATIONS GROUNDING BUS BAR.
- 2. "TMGB" SHOULD BE $\frac{1}{4}$ "x4"x24". PANDUIT PART NUMBER GB4B1028TPI-1, OR

GENERAL NOTES:

- 3. "TGB" SHOULD BE $\frac{1}{4}$ "x2"x24". PANDUIT PART NUMBER GB2B0514TPI-1, OR EQUAL.
- 4. EMT CONDUIT GROUNDING CLAMP SHOULD BE ELECTROLYTIC CAST BRONZE. PANDUIT PART NUMBER GPL-"X"-"X", OR EQUAL.
- 5. RIGID CONDUIT GROUND CLAMP SHOULD BE O-Z/GEDNEY BLG-XXXX, OR HBLG-XXXX, OR EQUAL.
- 6. GROUNDING LUGS SHOULD BE TWO HOLE LONG BARREL LUGS. PANDUIT PART NUMBER LCC6, OR EQUAL.



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PROJECT DESCRIPTION

KEY BANK TOWER LEVEL 10 AND 16 TI

36 S STATE ST, SLC UT 84111

AHJ STAMP

SHEET NAME:

TELECOM EQUIPMENT RACK GROUNDING DETAIL

REVISIONS

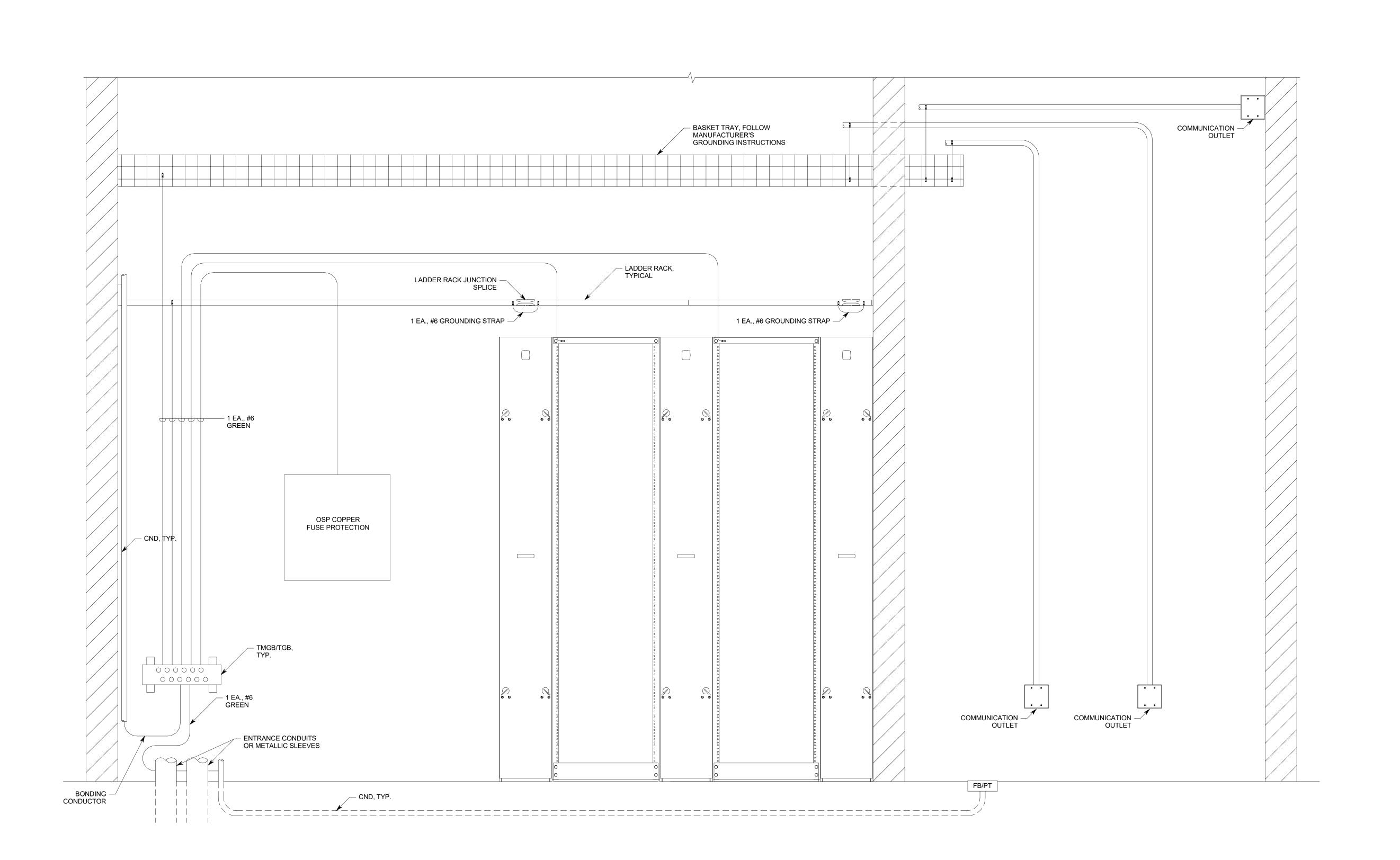
MARK DATE DESCRIPTION

ISSUE DATE: 5/25/2019

DRAWN BY: CHECKED BY: JDA PROJECT#: 1904.01

SHEET NUMBER:

ET507



GENERAL SHEET NOTES

1. PROVIDE CABLE TRAYS ABOVE CEILINGS IN CORRIDORS LEADING TO THE TDR PER INTERMOUNTAIN HEALTHCARE STRUCTURED CABLING STANDARDS.

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PROJECT DESCRIPTION

KEY BANK TOWER LEVEL 10 AND 16 TI

36 S STATE ST, SLC UT 84111

AHJ STAMP

SHEET NAME:

TELECOM CONDUIT RISER DIAGRAMS

REVISIONS

MARK DATE DESCRIPTION

ISSUE DATE:

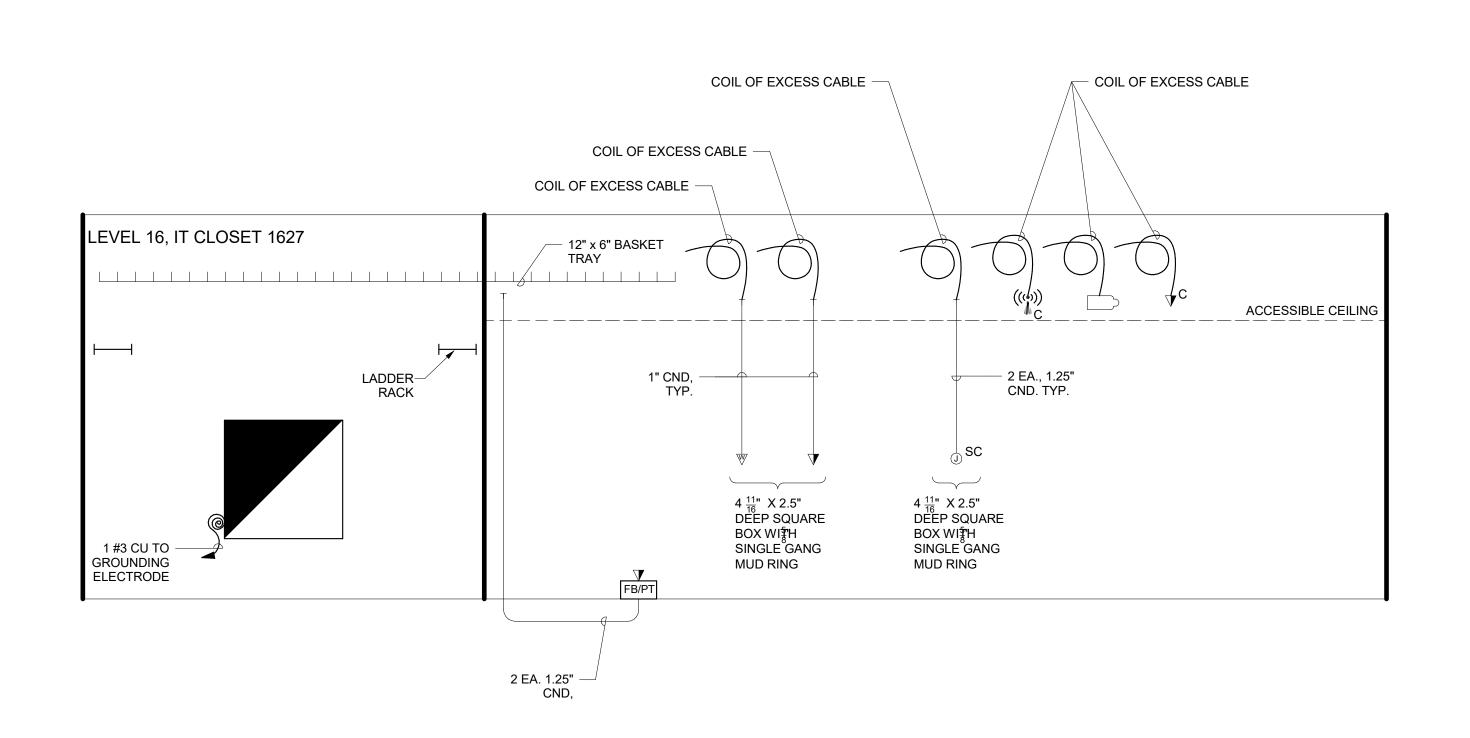
DRAWN BY: CHECKED BY: JDA PROJECT#: 1904.01

5/25/2019

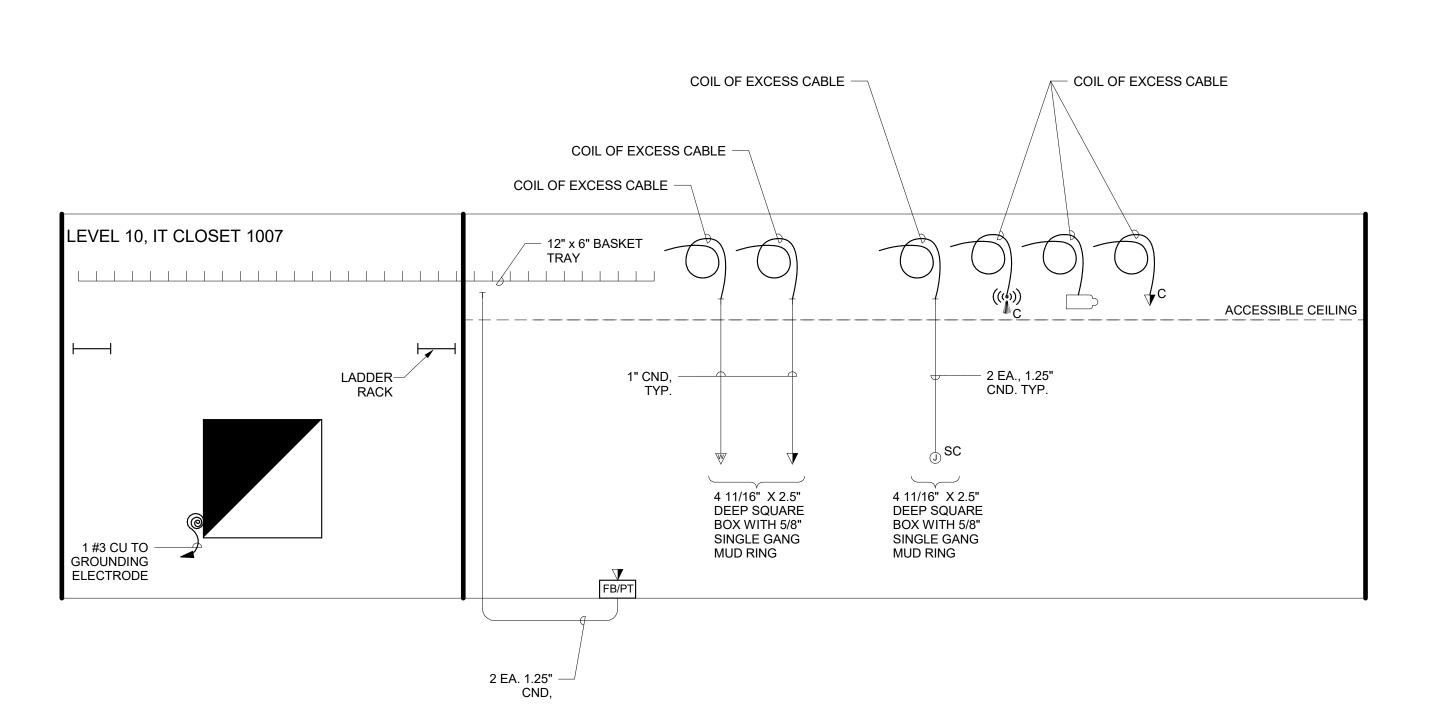
PERMIT

SHEET NUMBER:

ET601



TELECOM CABLING CONDUIT RISER DIAGRAM (LEVEL 16)
NO SCALE



TELECOM CABLING CONDUIT RISER DIAGRAM (LEVEL 10)

2 EA. CAT 6A F/UTP CABLE YELLOW 2 EA. CAT 6A F/UTP CABLE BLUE 2 EA. CAT 6A F/UTP CABLE BLUE - 1 EA., 12 STRAND SINGLE-MODE — 1 EA., 50 PAIR 1 EA. CAT 6A F/UTP CABLE BLUE CAT 3 UTP TYPICAL OF ALL VIDEO SURVEILLANCE 1 EA. CAT 6A F/UTP CABLE BLUE -**FIBER** RACK
MOUNTED (TYP) CAMERAS (SEE EY SHEETS) STATION FIBER PATCH **FIBER** RISER PATCH PATCH SPLICE BLOCK **PANELS** TRAY (FST) **PANELS** PANEL (SPP1) (TYP) (EXISTING) (RPP1) STATION OUTLETS (TYPICAL) 2 - CAT 5E PATCH CORDS, TYP SM FIBER - F/UTP CAT 6A PATCH CORDS, TYP CORDS, TYP

TELECOM CABLING RISER DIAGRAM (LEVEL 16)

LEVEL 16, COMM RISER CLOSET

LEVEL 16, IT CLOSET 1627

2 EA. CAT 6A F/UTP CABLE YELLOW -2 EA. CAT 6A F/UTP CABLE BLUE 2 EA. CAT 6A F/UTP CABLE BLUE 1 EA., 12 STRAND SINGLE-MODE FIBER 1 EA., 50 PAIR CAT 3 UTP 1 EA. CAT 6A F/UTP CABLE BLUE -TYPICAL OF ALL VIDEO
SURVEILLANCE
CAMERAS (SEE EY
SHEETS) 1 EA. CAT 6A F/UTP CABLE BLUE RACK
MOUNTED (TYP) STATION PATCH FIBER SPLICE TRAY (FST) RISER PATCH FIBER PATCH **PANELS** BLOCK **PANELS** PANEL (SPP1) (TYP) (EXISTING) STATION OUTLETS (TYPICAL) - CAT 5E PATCH CORDS, TYP SM FIBER PATCH F/UTP CAT 6A PATCH CORDS, TYP CORDS, TYP LEVEL 10, COMM RISER CLOSET LEVEL 10, IT CLOSET 1007

TELECOM CABLING RISER DIAGRAM (LEVEL 10)

3

GENERAL SHEET NOTES

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SHEET KEYNOTES

EXTEND 50 PAIR CAT 3 PLENUM CABLE TO COMM CLOSET. TERMINATE 50
PAIR ON EXISTING 66 BLOCKS ON WALL. USE THE CABLE COUNT 1301-1350.
TEST ALL COPPER PAIRS AFTER TERMINATION.

1. PROVIDE CABLE TRAYS ABOVE CEILINGS IN CORRIDORS LEADING TO THE TDR PER INTERMOUNTAIN HEALTHCARE STRUCTURED CABLING STANDARDS.

2. EXTEND 12 STRAND PLENUM SINGLE-MODE CABLE TO COMM CLOSET. SPLICE TO EXISTING 12 STRAND SINGLE MODE FIBER THAT EXTENDS TO 9TH FLOOR DATA CENTER. TEST ALL FIBER AFTER SPLICING AND TERMINATION.



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PROJECT DESCRIPTION

KEY BANK TOWER LEVEL 10 AND 16 TI

36 S STATE ST, SLC UT 84111

AHJ STAMP

SHEET NAME:

TELECOM CABLE RISER DIAGRAMS

REVISIONS

MARK DATE DESCRIPTION

ISSUE DATE: 5/25/2019
ISSUE TYPE: PERMIT

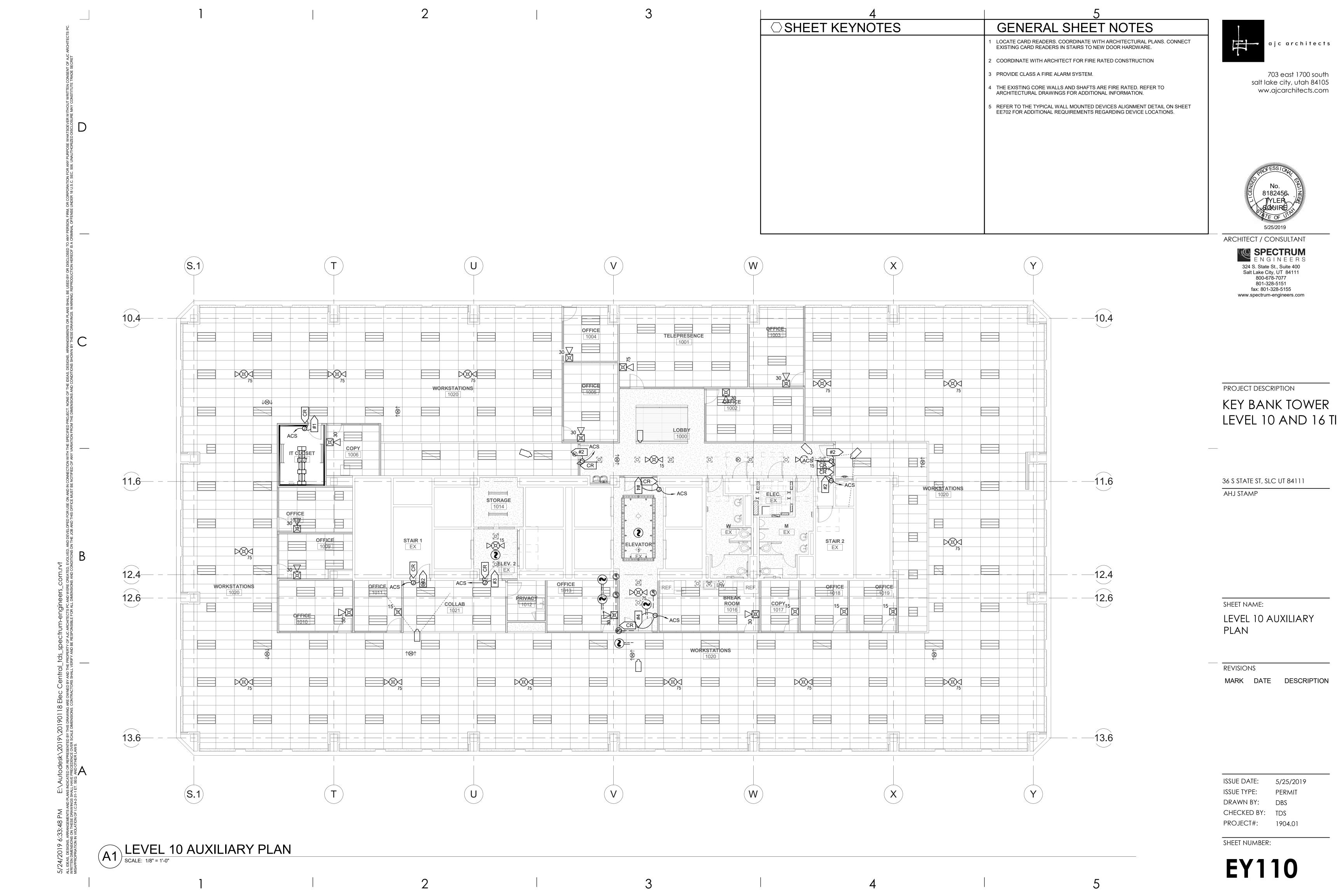
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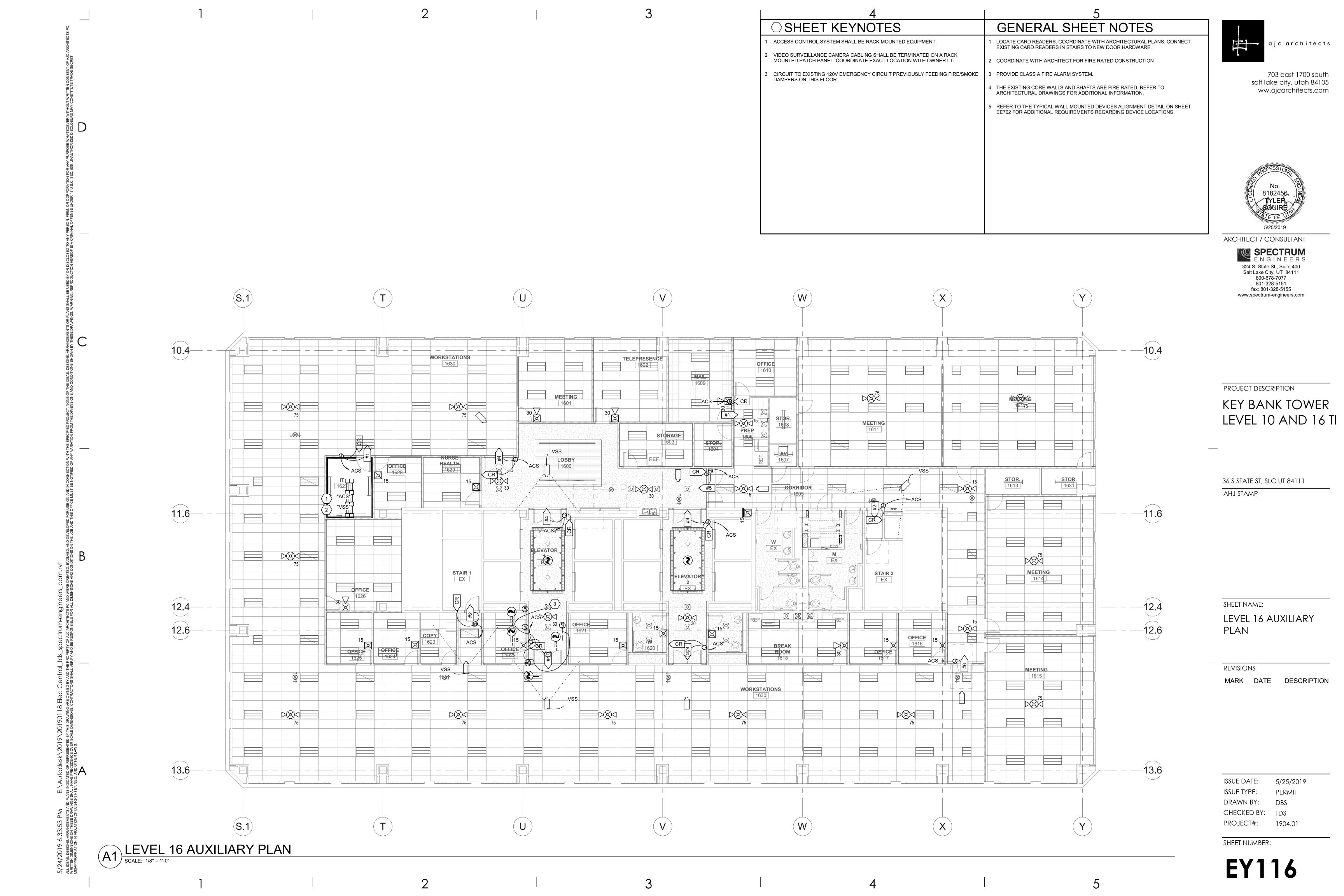
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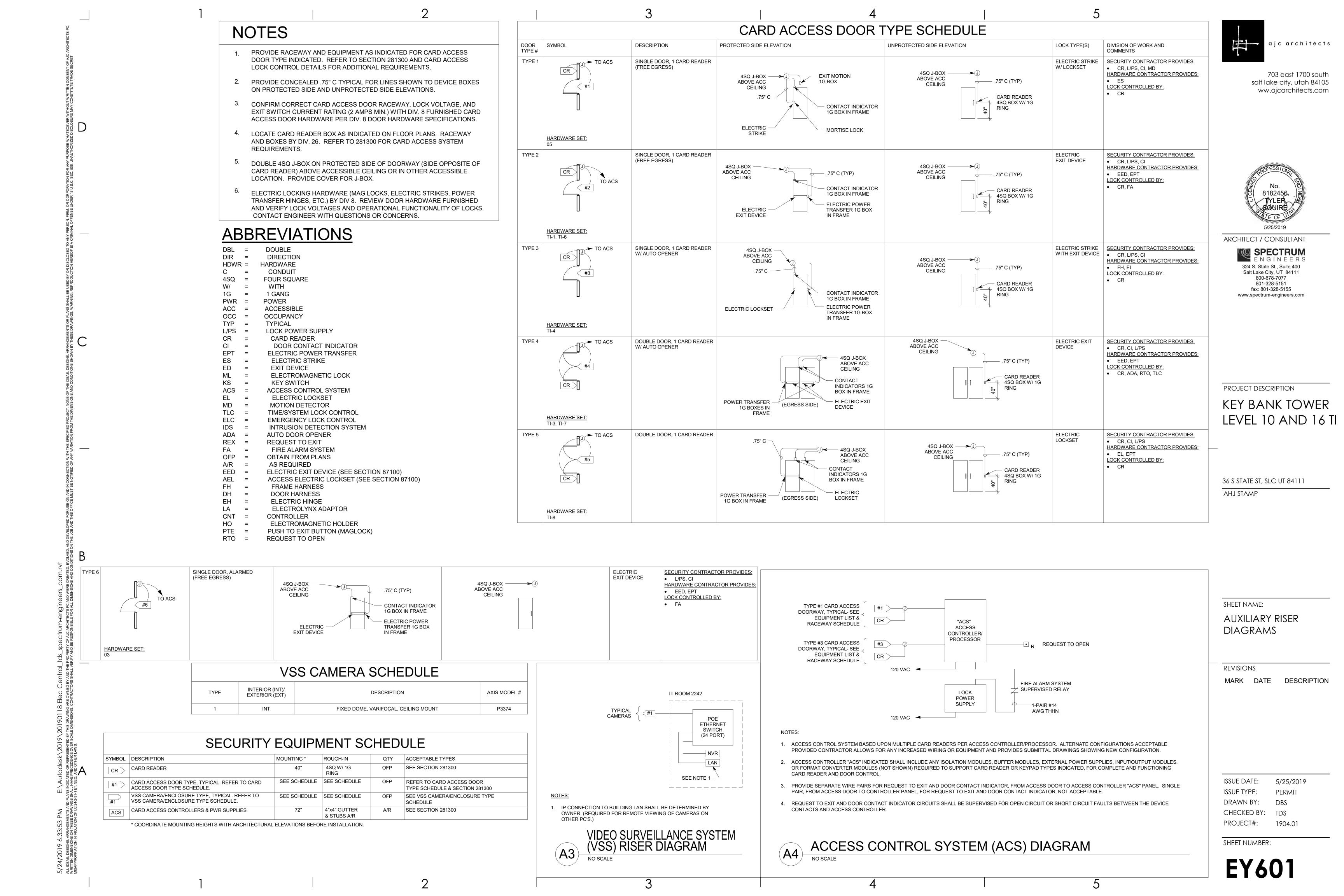
PROJECT#: 1904.01

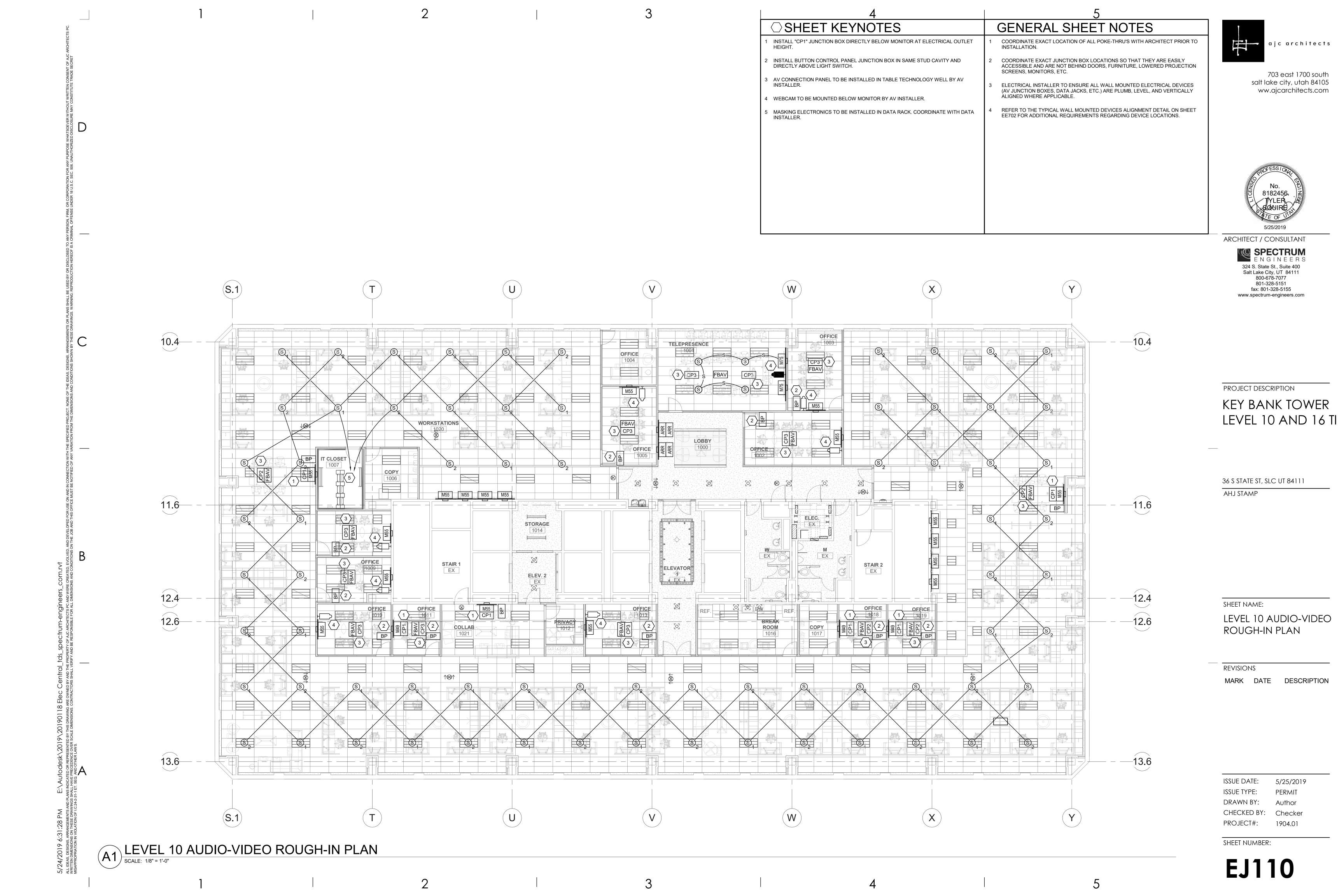
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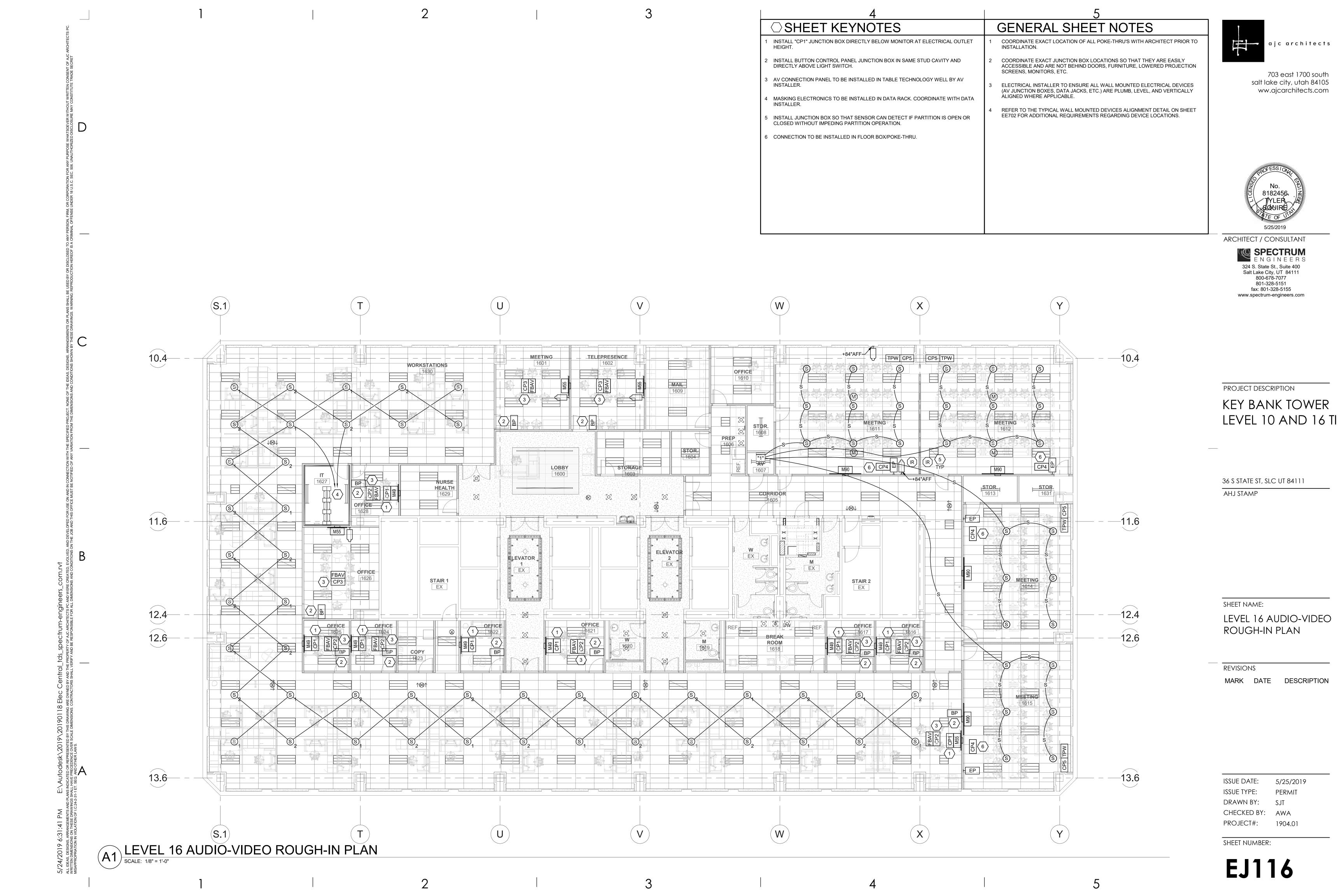
ET602

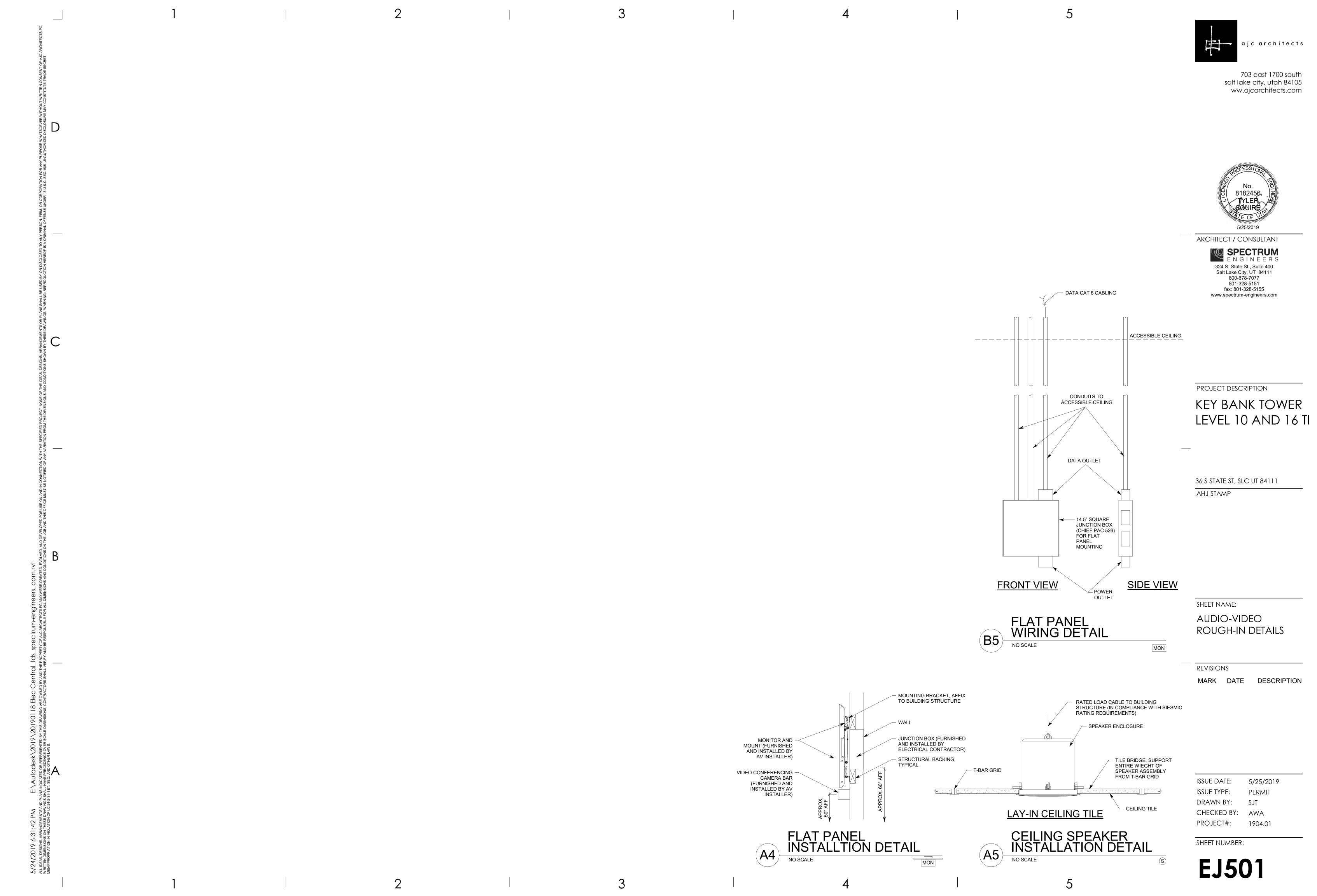












CONDUIT WILL NOT BE ACCEPTED. CONDUITS AND BOXES ABOVE CEILING

2. MAINTAIN MAXIMUM SEPARATION BETWEEN A/V SYSTEM CONDUIT AND ALL

POWER CONDUIT. MINIMUM SEPARATION REQUIREMENTS IS 24".

4. INSTALL ALL EQUIPMENT IN COMPLIANCE WITH THE MANUFACTURER'S

WRITTEN INSTRUCTIONS, SEISMIC CODES, AND INDUSTRY WIDE ACCEPTED

DURING THE SUBMITTAL PROCESS. PROVIDE SHOP DRAWINGS WHICH DETAIL

RIGGING PRACTICES. SUPPORT EQUIPMENT WEIGHT FROM STRUCTURE.

5. IF THE BOXES, ENCLOSURES, & CABINETS SPECIFIED ARE NOT PROVIDED

6. THE ROUGH-IN LOCATIONS FOR PROJECTORS SHOWN ON THE FLOOR PLAN DRAWINGS ARE APPROXIMATE. COORDINATE WITH AV CONTRACTOR FOR

7. ALL ROUGH-IN SHALL BE IN COMPLIANCE WITH ANSI/TIA/EIA 569-B WHICH

9. ALL CONNECTION PANELS SHALL BE WITHIN 12" OF POWER AND DATA

THERE SHOULD BE NO UNNECESSARY BENDS IN CONDUIT RUNS.

12. COVER ALL JUNCTION BOXES WITH A BLANK NYLON COVER PLATE.

10. ALL AV CONDUITS SHALL BE INSTALLED USING SHORTEST RUNS POSSIBLE.

11. CONDUITS AND JUNCTION BOXES SHOWN NO RISER DIAGRAMS ARE TYPICAL

DEFINITIONS

NOTE: ALL DEFINITIONS MAY NOT BE USED.

NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN

THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER",

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS,

USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON

APPROVE: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE

ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING,

ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING,

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE

OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS

TECHNOLOGY SYSTEMS: THE TERM "TECHNOLOGY SYSTEMS" IS USED TO DESCRIBE

WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO

ABBREVIATIONS

NOTE: ALL ABBREVIATIONS MAY NOT BE USED.

SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS,

ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS".

THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS

SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION

ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR

CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR

"REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

OUTLETS, NOTIFY ENGINEER IF DISCREPANCY IS FOUND.

FROM THE MANUFACTURER WITH THE REQUIRED KNOCK OUTS FOR THE

SPECIFIED CONDUIT, FIELD CUT ALL REQUIRED KNOCK OUTS TO TERMINATE

ACTUAL PROJECTION DISTANCES. LOCATE ROUGH-IN FOR PROJECTORS IN

INCLUDES, BUT IS NOT LIMITED TO, ALL CONDUITS HAVING NO MORE THAN

3. INSTALL NYLON PULL STRINGS IN ALL A/V SYSTEM CONDUIT

PROPOSED MOUNTING FOR ALL SUCH EQUIPMENT.

THE QUANTITY AND SIZES OF THE SPECIFIED CONDUITS.

COMPLIANCE WITH THE DISPLAY DEVICE SCHEDULE.

8. ALL CONDUIT FOR AV ROUGH-IN SHALL BE EMT.

TWO 90 DEGREE BENDS.

FOR EACH DEVICE IN ROOM.

LOCATION IS INTENDED.

SIMILAR OPERATIONS."

CLEANING, AND SIMILAR OPERATIONS."

READY FOR THE INTENDED USE."

THEY ARE ENGAGED TO PERFORM.

AMP OR AMPS

ABOVE FINISHED FLOOR

CONVENIENCE OUTLET

REPRESENTATIVE

CONTRACTING OFFICER'S

ELECTRICAL METALLIC TUBING

FIRE ALARM CONTROL PANEL

FLEXIBLE METAL CONDUIT

ADJACENT

ALUMINUM

CONDUIT

"CB","C/B" CIRCUIT BREAKER

CIRCUIT

COPPER

ELECTRICAL

EMERGENCY

EQUIPMENT

FIRE ALARM

FULL LOAD AMPS

FREIGHT ON BOARD

EXISTING

GROUND

EACH

"AFF"

"C"

"CKT"

"CO"

"CU"

"EA"

"EM"

"EMT"

"ENT"

"EX"

"FA"

"FLA"

"F.O.B."

"GFI"

"GR"

"EQUIP"

"ELEC"

"C.O.R."

HEIGHT MAY BE INSTALLED EXPOSED AND PAINTED TO MATCH SURROUNDING

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KEY BANK TOWER LEVEL 10 AND 16 TI

36 S STATE ST, SLC UT 8411

AHJ STAMP

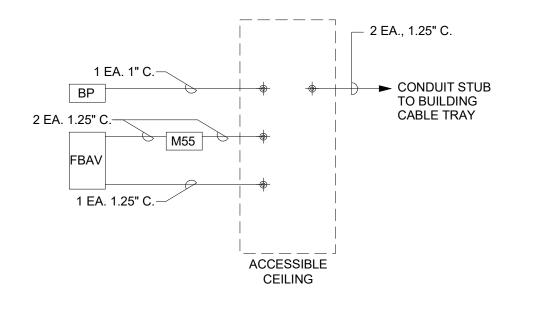
AUDIO-VIDEO ROUGH-IN SCHEDULES, NOTES, AND RISER

MARK DATE DESCRIPTION

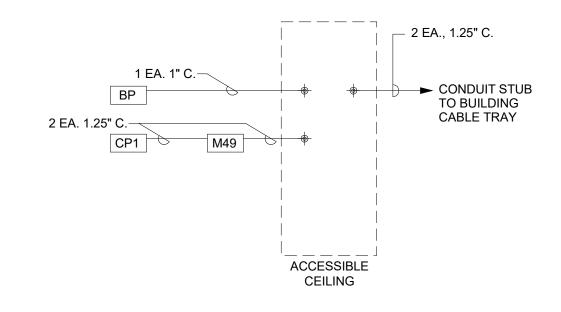
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AUDIO-VIDEO ROUGH-IN SYSTEMS SCHEDULE SYMBOL DESCRIPTION SPECIAL INSTRUCTIONS MOUNTING JUNCTION BOX, 4-11/16" BOX W/ FLUSH IN THE WALL AT ELECTRICAL 2-GANG MUD RING. MINIMUM 3" OUTLET HEIGHT, EXCEPT WHERE DEEP NOTED ON THE DRAWINGS IN TABLE TABLETOP CONNECTION PANEL FURNISHED AND INSTALLED BY AV INSTALLER FLOOR BOX OR POKE-THRU FLOOR REFER TO 'EP' SHEETS FOR TYPE CP4 AND LOCATION FLUSH IN WALL DIRECTLY ABOVE ATTACH JUNCTION BOX TO SAME **BUTTON CONTROL PANEL** JUNCTION BOX, 4-11/16" SQUARE LIGHT SWITCH SIDE OF STUD AS LIGHT SWITCH BOX W/ 2-GANG MUD RING FLUSH IN WALL 12" BELOW FINISHED IR EMITTER PANEL LOCATION, JUNCTION BOX, 4-11/16" SQUARE BOX W/ 1-GANG MUD RING TOUCH CONTROL PANEL, FLUSH IN WALL AT ELECTRICAL JUNCTION BOX, 4-11/16" SQUARE SWITCH HEIGHT BOX W/ 2-GANG MUD RING FLUSH IN HEADER PER SHEET INFRARED SENSOR, JUNCTION KEYNOTE BOX, 4-11/16" SQUARE BOX W/ 1-GANG MUD RING MICROPHONE FLUSH IN FINISHED CEILING FURNISHED AND INSTALLED BY AV INSTALLER MASKING SPEAKER ABOVE CEILING FURNISHED AND INSTALLED BY AV INSTALLER SPEAKER FURNISHED AND INSTALLED BY FLUSH IN FINISHED CEILING SPEAKER LOCATION AV INSTALLER, TRIM RING INSTALLED BY ELECTRICAL. SEE DETAIL A5/EJ501 FURNISHED AND INSTALLED BY AV CAMERA LOCATION **BELOW MONITOR** INSTALLER CAMERA LOCATION **BELOW MONITOR** FURNISHED AND INSTALLED BY AV INSTALLER COORDINATE WITH STRUCTURAL BACKING, FLAT PANEL MONITOR JUNCTION FLUSH IN THE WALL AT BOX, CHIEF PAC 526FCW APPROXIMATELY +60" AFF TO AND COORDINATE EXACT ELEVATION WITH BOTTOM OF BOX, OR AS NOTED ON ARCHITECTURAL ELEVATIONS, SEE PLAN SHEETS DETAILS A4/EJ501 AND B5/EJ501 EQUIPMENT RACK #1, 14-1/2" FLUSH IN WALL BEHIND EQUIPMENT SQUARE JUNCTION BOX AT +18" RACK AFF TO CENTER OF BOX, CHIEF PAC 526FCW REFER TO RISER DIAGRAMS FOR EXACT CONDUIT, 3/4" MINIMUM CONCEALED BEHIND FINISHED SURFACES, UNLESS OTHERWISE SIZES & QUANTITIES.

NOTED

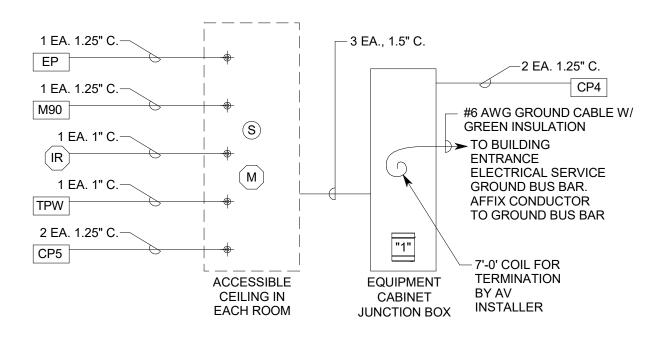


MEDIUM COLLAB. ROOMS AV CONDUIT RISER DIAGRAM

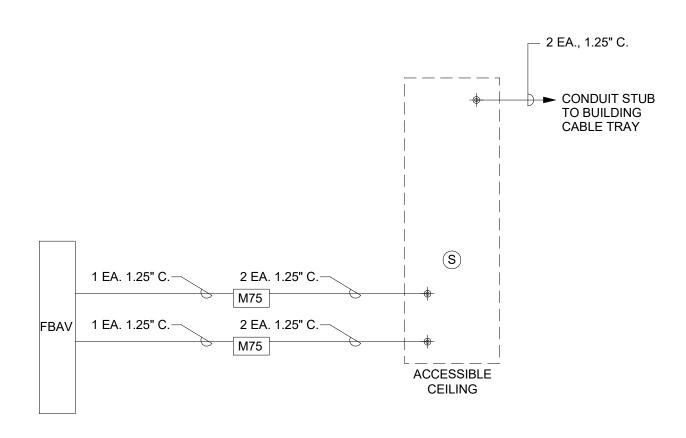




SMALL COLLAB. ROOMS AV CONDUIT RISER DIAGRAM







LARGE COLLAB. ROOM AV CONDUIT RISER DIAGRAM (A1

HAND-OFF-AUTO HORSE POWER

ELECTRICAL NONMETALLIC TUBING "OCP" OVER CURRENT PROTECTION

"R"

WITH

GROUND FAULT INTERRUPTER "UG" UNDER GROUND "XFMR" TRANSFORMER

"WP" WEATHER PROOF

"UF" UNDER FLOOR

"IG" INSULATED GROUND

"IN/IS" INSULATED/ISOLATED

"KVA" KILO VOLT AMPERES

"LFMC" LIQUID TIGHT FLEXIBLE

"LFNC" LIQUID TIGHT FLEXIBLE

"MCA" MINIMUM CIRCUIT AMPS

"MLO" MAIN LUGS ONLY

"N.C." NORMALLY CLOSED

"N.I.C." NOT IN CONTRACT

"N.O." NORMALLY OPEN

REMOVE

"RMC" RIGID METAL CONDUIT

"RNC" RIGID NONMETALLIC CONDUIT

REMOVE AND RELOCATE

"O.C." ON CENTER

"QTY" QUANTITY

"TYP" TYPICAL

METAL CONDUIT

NONMETALLIC CONDUIT

"KW" KILOWATTS

"IMC" INTERMEDIATE METAL CND

SHEET NUMBER:

EJ601

703 east 1700 south

SPECTRUM

PROJECT DESCRIPTION

SHEET NAME:

DIAGRAMS

REVISIONS

ISSUE DATE: 5/25/2019 ISSUE TYPE: PERMIT

PROJECT#: 1904.01

WEST PENN 25812

BELDEN 89907

RF CABLE, 50 OHM, COAXIAL, RG-59

AL	AUDIO-VIDEO SYSTEM CABLE INSTALLATION REQUIREMENTS SCHEDULE									
		•		EN 13 SCHEDULE						
ORIGIN	DESTINATION	CABLE TYPE	QUANTITY	SPECIAL INSTRUCTIONS						
	ER OR	Н	1							
CP1	DISPLAY	R	1							
		L	2							
СРЗ	DISPLAY	Р	2							
		Р	2							
CP4	ER	М	1							
		D	1							
		Р	2							
CP5	ER	L	3							
TPW	ER	D	1							
EP	ER	Х	1							
	- FD	Р	1							
M90	ER	С	1							
(IR)	ER	С	1							
M	ER	D	1							
		Р	1							
	ER	S	1	USE 'S' CABLE FOR POWER AS NEEDED						
S	M75	S	1	CIRCUIT TO ALL SPEAKERS AS SHOWN ON PLAN SHEETS						
LABOE		Р	2							
LARGE COLLAB.	M75	М	3							
TABLE		D	1	1						
ВР	DATA ROOM	D	1							
	DISPLAY	С	1							
BP	2.5. 2	S	1	USE 'S' CABLE FOR POWER AS NEEDED						

CABLE INSTALLATION REQUIREMENTS APPLY TO EVERY DEVICE LOCATION SHOWN IN EVERY ROOM.

ER = EQUIPMENT RACK

AUDIO-VIDEO SHEET INDEX

SHEET NO	SHEET TITLE
TA001	AUDIO-VIDEO SYSTEMS SCHEDULES AND NOTES
TA002	AUDIO-VIDEO SYSTEMS EQUIPMENT LIST
TA501	AUDIO-VIDEO SYSTEMS DETAILS
TA601	AUDIO-VIDEO SYSTEMS DIAGRAMS
TA602	AUDIO-VIDEO SYSTEMS DIAGRAMS

AUDIO-VIDEO SIGNAL TYPE ABBREVIATIONS SCHEDULE

ABBREVIATION	SIGNAL TYPE
AL	AUDIO, LEFT, (LINE LEVEL)
AR	AUDIO, RIGHT, (LINE LEVEL)
AA	ANALOG AUDIO
F	OPTICAL FIBER
V	VIDEO, COMPOSITE-STANDARD RESOLUTION ANALOG VIDEO
YC	S-VIDEO-STANDARD RESOLUTION ANALOG VIDEO
YUV	COMPONENT VIDEO-STANDARD RESOLUTION ANALOG VIDEO
RGBHV	RED, GREEN, BLUE, HORIZONTAL & VERTICAL SYNC-HIGH RESOLUTION ANALOG VIDEO
XGA/VGA	EXTENDED GRAPHICS ARRAY/VIDEO GRAPHICS ARRAY-HIGH RESOLUTION ANALOG VIDEO
DVI	DIGITAL VIDEO INTERFACE-HIGH RESOLUTION DIGITAL VIDEO
HDMI	HIGH DEFINITION MULTIMEDIA INTERFACE-HIGH RESOLUTION DIGITAL VIDEO
DP	DISPLAY PORT-HIGH RESOLUTION DIGITAL VIDEO
TP	TWISTED PAIR
IP	INTERNET PROTOCOL
SDI	SERIAL DIGITAL INTERFACE

DEFINITIONS

NOTE: ALL DEFINITIONS MAY NOT BE USED.

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

APPROVE: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING,

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."

CLEANING, AND SIMILAR OPERATIONS."

THEY ARE ENGAGED TO PERFORM.

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS

TECHNOLOGY SYSTEMS: THE TERM "TECHNOLOGY SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS". THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS,

ABBREVIATIONS

NOTE: ALL ABBREVIATIONS MAY NOT BE USED.

"A"	AMP OR AMPS	"IG"	INSULATED GROUND
"ADJ"	ADJACENT	"IMC"	INTERMEDIATE METAL CND
"AFF"	ABOVE FINISHED FLOOR	"IN/IS"	INSULATED/ISOLATED
"AL"	ALUMINUM	"KVA"	KILO VOLT AMPERES
"C"	CONDUIT	"KW"	KILOWATTS
"CB","C/B"	CIRCUIT BREAKER	"LFMC"	LIQUID TIGHT FLEXIBLE
"CKT"	CIRCUIT		METAL CONDUIT
"CO"	CONVENIENCE OUTLET	"LFNC"	LIQUID TIGHT FLEXIBLE
"C.O.R."	CONTRACTING OFFICER'S		NONMETALLIC CONDUIT
	REPRESENTATIVE	"MCA"	MINIMUM CIRCUIT AMPS
"CU"	COPPER	"MLO"	MAIN LUGS ONLY
"EA"	EACH	"N.C."	NORMALLY CLOSED
"ELEC"	ELECTRICAL	"N.I.C."	NOT IN CONTRACT
"EM"	EMERGENCY	"N.O."	NORMALLY OPEN
"EMT"	ELECTRICAL METALLIC TUBING	"O.C."	ON CENTER
"ENT"	ELECTRICAL NONMETALLIC TUBING	"OCP"	OVER CURRENT PROTECTION
"EQUIP"	EQUIPMENT	"QTY"	QUANTITY
"EX"	EXISTING	"R"	REMOVE
"FA"	FIRE ALARM	"RMC"	RIGID METAL CONDUIT
"FACP"	FIRE ALARM CONTROL PANEL	"RNC"	RIGID NONMETALLIC CONDUIT
"FLA"	FULL LOAD AMPS	"RR"	REMOVE AND RELOCATE
"FMC"	FLEXIBLE METAL CONDUIT	"TYP"	TYPICAL
"F.O.B."	FREIGHT ON BOARD	"UF"	UNDER FLOOR
"GFI"	GROUND FAULT INTERRUPTER	"UG"	UNDER GROUND
"GR"	GROUND	"W/"	WITH
"HOA"	HAND-OFF-AUTO	"WP"	WEATHER PROOF
"HP"	HORSE POWER	"XFMR"	TRANSFORMER

GENERAL AUDIO-VIDEO SYSTEMS NOTES

1. CONDUCT AN RF FREQUENCY AUDIT OF THE SITE PRIOR TO SELECTION OF WIRELESS RF OPERATING FREQUENCIES. SELECT FREQUENCIES TO ASSURE INTERFERENCE FREE OPERATION. INSTALL ANTENNAS/TRANCEIVERS OUTSIDE OF THE EQUIPMENT RACK, AT AN ARCHITECT APPROVED LOCATION, WHERE THE BEST SYSTEM PERFORMANCE IS ACHIEVED.

2. FILL ALL UNUSED RACK SPACE WITH BLANK/VENT PANELS.

3. INSTALL/SUSPEND ALL EQUIPMENT IN COMPLIANCE WITH THE MANUFACTURERS WRITTEN INSTRUCTIONS, SEISMIC SPECIFICATION SECTION, AND INDUSTRY WIDE ACCEPTED RIGGING PRACTICES. SUPPORT EQUIPMENT WEIGHT FROM STRUCTURE ABOVE CEILINGS. DURING THE SUBMITTAL PROCESS, PROVIDE SHOP DRAWINGS WHICH DETAIL PROPOSED MOUNTING FOR ALL SUCH EQUIPMENT.

4. PROVIDE MANUFACTURER RECOMMENDED POWER SUPPLIES AND/OR TRANSFORMERS FOR ALL SPECIFIED EQUIPMENT.

5. FURNISH AND INSTALL ALL CABLE AND CONNECTORS REQUIRED FOR ALL AUDIO AND VIDEO SYSTEMS TO COMPLETE MANUFACTURER RECOMMENDED CABLE TO EQUIPMENT TERMINATION TO FORM A COMPLETE AND FULLY FUNCTIONAL SYSTEM AS SHOWN. SELECT CONNECTORS WHICH PASS FULL BANDWIDTH CAPABILITY OF SPECIFIED CABLE. PROVIDE CABLE TYPES AS IDENTIFIED IN THE AUDIO/VIDEO CABLE SCHEDULE.

6. PROVIDE PATCH CABLES TO FULLY INTERCONNECT ALL SPECIFIED AND/OR OWNER FURNISHED EQUIPMENT WITH THE SPECIFIED CONNECTION PANELS, SYSTEM INTERFACES, AND MISCELLANEOUS EQUIPMENT.

7. PROVIDE MANUFACTURER RECOMMENDED, AND INDUSTRY STANDARD, SIGNAL LEVELS AND COMMUNICATION PROTOCOLS THROUGHOUT ENTIRE SYSTEM REGARDLESS OF CABLE LENGTHS. PROVIDE ALL REQUIRED DISTRIBUTION AND PROCESSING EQUIPMENT, INCLUDING BUT NOT LIMITED TO SIGNAL DISTRIBUTION AMPLIFIERS, LINE AMPLIFIERS, LINE DRIVERS, EQUALIZING AMPLIFIERS, GROUND/HUM ISOLATORS, MATCHING/ISOLATION TRANSFORMERS, CONTROL BUS DEVICES, COMMUNICATIONS CONVERTERS, ETC..., WHETHER SHOWN IN THE SINGLE LINE DIAGRAMS OR NOT.

8. PROVIDE POWER, CURRENT, AND/OR SIGNAL SENSORS FOR ALL EQUIPMENT WHERE IT IS NECESSARY FOR CORRECT CONTROL SYSTEM OPERATION.

9. PROVIDE PRE-MANUFACTURED ADAPTER CABLES WHERE REQUIRED FOR MATING CABLE TO CONNECTORS. THESE WILL INCLUDE, BUT ARE NOT LIMITED TO, ADAPTERS WHICH MATE DVI OR DISPLAY PORT TO HDMI, STEREO AUDIO TO MONO AUDIO, CONNECTORS, AND OTHER SIMILAR TERMINATION AND MATING REQUIREMENTS.

10. PROVIDE RACK MOUNT KITS FOR ALL RACK MOUNTED EQUIPMENT. WHERE MANUFACTURERS DO NOT PROVIDE RACK MOUNT KITS, PROVIDE CUSTOM RACK MOUNT KITS AS SPECIFIED.

11. WHERE ANY CABLE IS INSTALLED IN A FASHION WHERE EXPOSED TO PUBLIC VIEW, INSTALL CABLE INSIDE THE SPECIFIED BRAIDED EXPANDABLE SLEEVING. EXAMPLES OF SUCH LOCATIONS INCLUDE, BUT ARE NOT LIMITED TO EQUIPMENT ITEMS ON LECTERNS AND CEILING MOUNTED PROJECTORS.

12. PROVIDE PERMANENT, MECHANICALLY PRODUCED LABELS ON ALL CABLES AT CONNECTORS AND TERMINATION POINTS.

13. CONTROL SPECIFIED DEVICES UTILIZING THE MOST SOPHISTICATED COMMUNICATIONS PROTOCOL AVAILABLE ON THE DEVICE TO BE CONTROLLED. ALWAYS USE RS-232 OR ETHERNET WHEN AVAILABLE.

14. COVER JUNCTION BOXES WITH NO SPECIFIED AV DEVICES WITH BLANK NYLON COVER PLATE. COLOR TO MATCH ELECTRICAL DEVICES.

15. PROVIDE THE SPECIFIED ETHERNET NETWORK SWITCHES IN ALL CONTROL SYSTEMS WHERE REQUIRED TO COMPLY WITH THE CONTROL SYSTEM SINGLE LINE DIAGRAMS SHOWN IN THE DRAWINGS, AND THE PROGRAMMING OUTLINE. CONNECT EVERY CONTROL SYSTEM PROCESSOR, TO THE OWNER'S ETHERNET NETWORK AND COMPLY WITH ALL PROGRAMING REQUIREMENTS.

16. CONNECT ALL SPECIFIED AV EQUIPMENT TO 120 VAC VIA A SPECIFIED TRANSIENT VOLTAGE SURGE SUPPRESSOR INCLUDING ALL MONITORS AND PROJECTORS.

17. SET EDID MINDERS FOR ALL EDID CAPABLE DEVICES TO A RESOLUTION DESIGNATED BY THE OWNER/DESIGNER DURING THE SYSTEM COMMISSIONING

18. SET ALL PLAYBACK DEVICES (DVD, TUNERS, ETC...) TO RGB COLOR SPACE.

19. PROVIDE THE PLENUM RATED EQUIVALENT CABLE IF CABLE IS INSTALLED IN

20. VERY CAREFULLY SUPPORT THE WEIGHT OF ALL HDMI CABLES CONNECTED TO RACK MOUNTED EQUIPMENT USING LOCKIT CABLE LACING BRACKETS AND RACK MOUNTED LACING BARS. PROFESSIONALLY DRESS, LACE, AND STRAIN RELIEF CABLES SO THAT NO WEIGHT FROM INDIVIDUAL HDMI CABLES IS TRANSFERRED TO INDIVIDUAL HDMI CONNECTORS. INSTALL THE SPECIFIED HDMI CABLE LACING BRACKETS ON ALL HDMI CONNECTORS IN COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.

21. SEE "EJ" SHEETS FOR AUDIO-VIDEO ROUGH-IN AND DEVICE LOCATIONS.



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PROJECT DESCRIPTION

KEY BANK TOWER LEVEL 10 AND 16 TI

36 S STATE ST, SLC UT 84111

AHJ STAMP

SHEET NAME:

AUDIO-VIDEO SYSTEMS SCHEDULES AND NOTES

REVISIONS

MARK DATE DESCRIPTION

ISSUE DATE:

PROJECT#:

SHEET NUMBER:

DRAWN BY: SJT
CHECKED BY: AWA

5/25/2019

1904.01

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AUDIO AND VIDEO SYSTEM EQUIPMENT LIST

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0)450	DECODINE	011441777	
SYMBOL	DESCRIPTION	QUANTITY	ACCEPTABLE TYPES
MOD	ASSISTED LISTENING SYSTEM, INFRARED, W/ RECEIVERS AS REQUIRED BY ADA	OFP	LISTEN LT-82
H EP		OFP	LISTEN LA-140 W/ WALL MOUNT BRACKET
		A/R	LISTEN LR-42/ LA-363/ LA-350
Y Y WR	WIRELESS MICROPHONE SYSTEM WITH BODY WORN AND HANDHELD TRANSMITTER, LAVALIER MICROPHONE	OFP	SHURE ULX-D SYSTEM W/ 1, 2, OR 4-CHANNEL RECEIVER, ULXD2/SM86 HANDHELD TRANSMITTER, ULXD1 BODYPAK TRANSMITTER AND WL183 LAPEL MIC
	HEAD WORN ELEMENTS	OFP	COUNTRYMAN E6i
	ANTENNA DISTRIBUTION W/ ANTENNA CABLE	A/R	SHURE UA844/UA870/UA8100
MIC	MICROPHONE, LECTERN, 18" GOOSENECK	OFP	SHURE MX418/C
TPW	WALL MOUNTED TOUCH SCREEN CONTROL PANEL, 7", PoE	OFP	CRESTRON TSW-760-W-S
TPT	TOUCH SCREEN CONTROL PANEL, 7", PoE W/ TABLETOP KIT	OFP	CRESTRON TSW-760 W/ TSW-760-TTK-B-S
CS	CONTROL SYSTEM CENTRAL PROCESSOR W/RS-232, IR, RELAYS & ETHERNET CARD, SEE NOTES #14,15	OFP	CRESTRON PRO3/ C3COM-3
M90	FLAT PANEL DISPLAY, 90", LCD, MINIMUM 1080p	OFP	LG 86UM3C, OR AS APPROVED
	FIXED WALL MOUNT W/ MONITOR MATING PLATE	OFP	CHIEF LSA1U W/ ALL NECESSARY ACCESSORIES
MON	MONITOR LED 23", NATIVE RESOLUTION, 1920x1280, BLACK IN COLOR	OFP	NEC EX231W HP 2311XI OR AS APPROVED
DRXS	TWISTED PAIR DIGITAL VIDEO RECEIVER, HDMI OUT, 8G+ W/ SCALER AND MOUNTING HARDWARE	OFP	CRESTRON DM-RMC-4K-SCALER-C
	LECTERN, MULTIMEDIA W/ FRONT DOORS, REMOVABLE BACK, AND SIDE SHELF	4	DWI ENTERPRISES DM400SE-2, W/ EXTRON CABLE CUBBY 500, AND EQUIPMENT AS DETAILED, ARCHITECT TO SELECT FINISH
"1"	EQUIPMENT RACK #1, WALL MOUNTED, PIVOTING, ENCLOSED E/ FRONT AND REAR RAILS, FRONT DOOR, ZERO CLEARANCE LATCH AND FANS	OFP	MIDDLE ATLANTIC SR40-32/ VFD-40/ DWR-RR40/ QFANFANCORD, OR APPROVED EQUIVALENT, NOTE #15
WVR	WIRELESS VIDEO RECEIVER/ COLLABORATION GATEWAY	OFP	EXTRON SHARELINK 250 W
UPS	UNINTERRUPTIBLE POWER SUPPLY, 20 AMP	OFP	MIDDLE ATLANTIC UPS-2200R
DMS	DIGITAL MATRIX SWITCHER, CARD FRAME W/INPUT AND OUTPUT CARDS, FRAME SIZE AND I/O CARDS AS REQUIRED	OFP	CRESTRON DM-MD 16X16
	ONE TWISTED PAIR INPUT CARD, 8G+	A/R	CRESTRON DMC-4K-C-HDCP2
	ONE HDMI INPUT CARD	A/R	CRESTRON DMC-4K-HD-HDCP2
	OUTPUT CARDS (HDMI, TWISTED PAIR & MM FIBER)	A/R	CRESTRON DMCO
STR	RECORDING / H.264 STREAMING PROCESSOR	OFP	EXTRON SMP 351
CPE	CONTROL PORT EXPANSION MODULE	A/R	CRESTRON C2N-IO
COD2	VIDEO CONFERENCING CODEC	1	CISCO WEBEX CODEC PRO W/ ALL REQUIRED ACCESSORIES AND LICENSES
CRX H	CAMERA AND CAMERA CONTROL UNIT, PTZ, TP CONNECTIVITY, 20X ZOOM	OFP	VADDIO ROBOSHOT 20 UHD 999-9950-000 W/ ONELINK INTERFACE AND WALL MOUNT
	POWER AMPLIFIER, 2-CHANNEL, 100 WATTS PER CHANNEL	OFP	CRESTRON AMP-2100-70
M	CEILING MICROPHONE, STEARABLE, DANTE	OFP	SHURE MXA910W
ASP	AUDIO DIGITAL SIGNAL PROCESSOR, OPEN ARCHITECTURE W/ AEC AND VOIP INTERFACE	OFP	BIAMP TESIRA SERVER-IO AVB W/ TESIRA DAN-A, TESIRA FORTE AVB VR, SEC-4, SOC-4
	,	•	•

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AUDIO AND VIDEO SYSTEM EQUIPMENT LIST

THE ITEMS INDICATED BELOW SHALL NOT BE CONSTRUED AS A "BILL OF MATERIALS". THIS LIST IDENTIFIES ITEMS OF SIGNIFICANCE USED DURING THE DESIGN OF THE ELECTRONIC SYSTEMS INSTALLATION. WHERE THE ITEMS INDICATED ARE ONE PORTION OF AN ASSEMBLY, THE ENTIRE ASSEMBLY SHALL BE PROVIDED UNLESS SPECIFIED OTHERWISE. PROVIDE ALL MISCELLANEOUS HARDWARE AND SUPPORTS WHICH MAY NOT BE LISTED HERE, FOR A COMPLETE INSTALLATION. COMPARE CATALOG NUMBERS WITH DESCRIPTIONS AND NOTIFY ENGINEER OF DISCREPANCIES PRIOR TO BID. IF CATALOG NUMBERS DO NOT MATCH DESCRIPTIONS, THE DESCRIPTIONS TAKE PRECEDENCE. PROVIDE COMPLETE SUBMITTAL FOR APPROVAL PRIOR TO PURCHASING ANY EQUIPMENT OR CABLE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

YMBOL	DESCRIPTION	QUANTITY	ACCEPTABLE TYPES
S	SPEAKER, 6.5", CEILING MOUNTED, W/ GRILLE AND TILE RAILS	OFP	COMMUNITY D6 W/ REQUIRED ACCESSORIES
NS	NETWORK SWITCH, POE, GIGABIT, MANAGED	A/R	CISCO SG30028PP
DPP	DATA PATCH PANEL, CAT6, 24-PORT	1	
DTX DRX	TWISTED PAIR DIGITAL VIDEO TRANSMITTER/ RECEIVER PAIR IN, W/ MOUNTING HARDWARE	OFP	EXTRON HC 404
UTX	TWISTED PAIR USB TRANSMITTER/ RECEIVER PAIR, W/ MOUNTING HARDWARE	OFP	IOGEAR GUCE64
	POWER AMPLIFIER, 70V, MONO, 60 WATT	OFP	EXTRON MPA 601
CP#	CONNECTION PANELS #1, #4, #5	OFP	PLATE W/ CUSTOM CONNECTIONS AND ENGRAVING AS DETAILED. SEE DETAILS ON SHEET TA501.
CP2	CONNECTION PANELS #2, #3	OFP	EXTRON AAP PLATES, SEE DETAILS B5/TA501 AND A4/TA501
N440	FLAT PANEL DISPLAY, 49", LCD, MINIMUM 1080p	OFP	LG 49LV640S, OR AS APPROVED
M49	FIXED WALL MOUNT, LANDSCAPE	OFP	CHIEF MSTU W/ ALL NECESSARY ACCESSORIES, INCLUDING CAMERA SHELF
NACE	FLAT PANEL DISPLAY, 55", LCD, MINIMUM 1080p	OFP	LG 55LV640S, OR AS APPROVED
M55	FIXED WALL MOUNT, LANDSCAPE	OFP	CHIEF MSTU W/ ALL NECESSARY ACCESSORIES, INCLUDING CAMERA SHELF
	FLAT PANEL DISPLAY, 80", LCD, MINIMUM 1080p	OFP	LG 75UH5C, OR AS APPROVED
M75	FIXED WALL MOUNT W/ MONITOR MATING PLATE	OFP	CHIEF LSA1U
-	WEB CONFERENCING SOUND BAR WITH INTEGRATED CAMERA	OFP	AMX ACV-5100
COD CTRL POEI	VIDEO CONFERENCING/ COLLABORATION SYSTEM, INCLUDING TRACKING CAMERA, AND CONTROL TOUCH PANEL	OFP	CISCO WEBEX ROOM KIT PLUS W/ CISCO WALL MOUNT AND PoE INJECTOR
MIC	VIDEO CONFERENCING MICROPHONE	OFP	CISCO TABLE MICROPHONE 20
ВР	BUTTON CONTROL PANEL	OFP	EXTRON MLC PLUS 100, LABELED PER DETAIL. SEE DETAIL B4/TA501.
CPU	SMALL FORMAT COMPUTER, OWNER FURNISHED AND INSTALLED	0	
	CONNECTORS, SEE NOTE 5	A/R	
	POWER SUPPLIES, MISC. TRANSFORMERS, SIGNAL SENSORS, PROTOCOL CONVERTERS, SEE NOTES 4, 7, 8	A/R	
	PATCH CORDS, SEE NOTE 6	A/R	
	ADAPTER CABLES, SEE NOTE 9	A/R	
	CABLE, SEE AUDIO-VIDEO SYSTEMS CABLE SCHEDULE	A/R	
	HDMI CONNECTOR SUPPORT BRACKETS	A/R	EXTRON LOCKIT
	NYLON BRAIDED EXPANDABLE SLEEVING	A/R	TECH FLEX FLEXO PET
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR AT MONITORS	OFP	SURGEX SA82 OR TRIPP LITE ISOBAR6
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR, 20 AMP, RACK MOUNT	OFP	TRIPP LITE IBAR12-20ULTRA

A/R = AS REQUIRED, OFP = OBTAIN FROM PLANS, OFCI = OWNER FURNISHED CONTRACTOR INSTALLED

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PROJECT DESCRIPTION

KEY BANK TOWER LEVEL 10 AND 16 TI

36 S STATE ST, SLC UT 84111

AHJ STAMP

SHEET NAME:

AUDIO-VIDEO SYSTEMS EQUIPMENT LIST

REVISIONS

MARK DATE DESCRIPTION

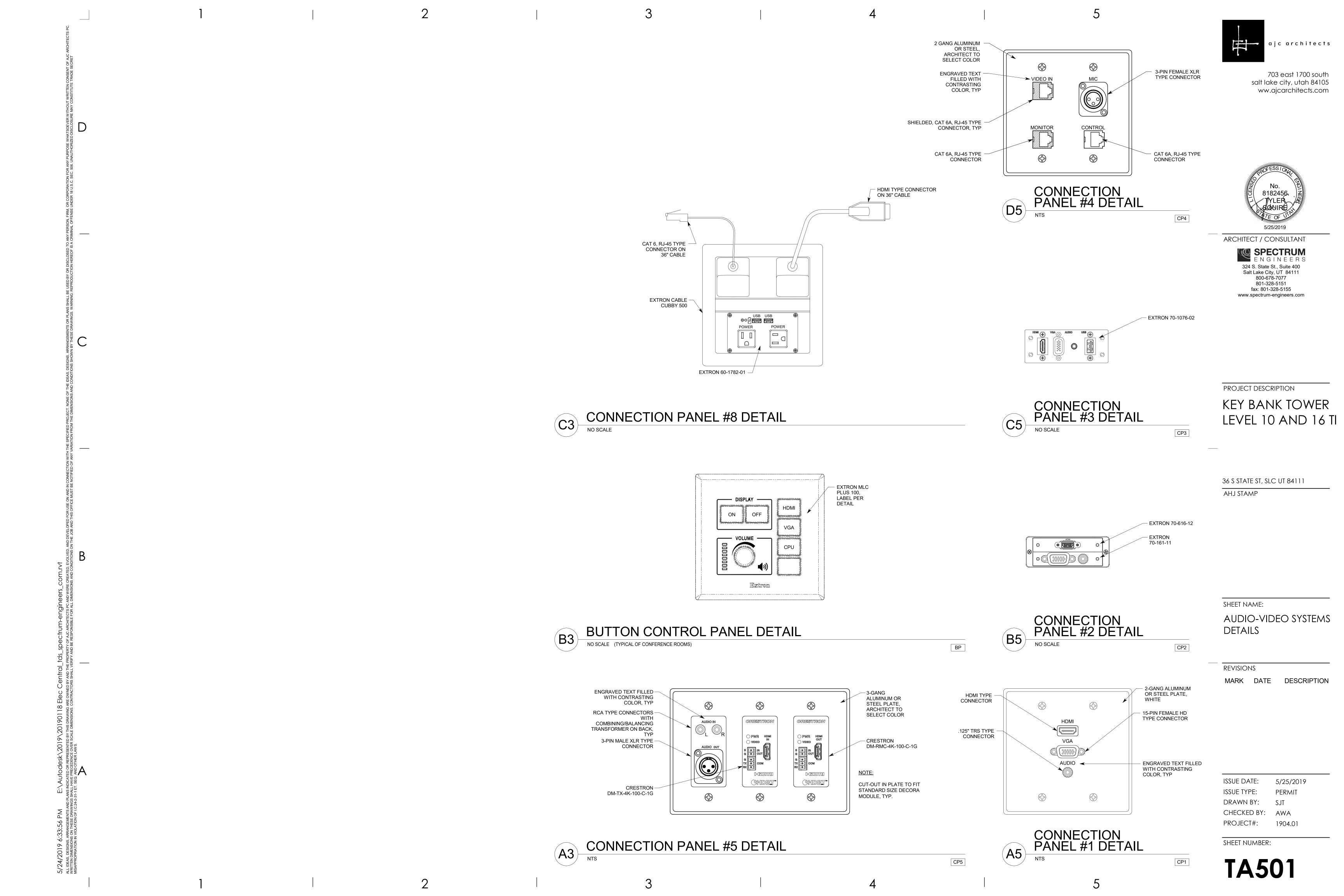
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ISSUE TYPE: PERMIT
DRAWN BY: SJT

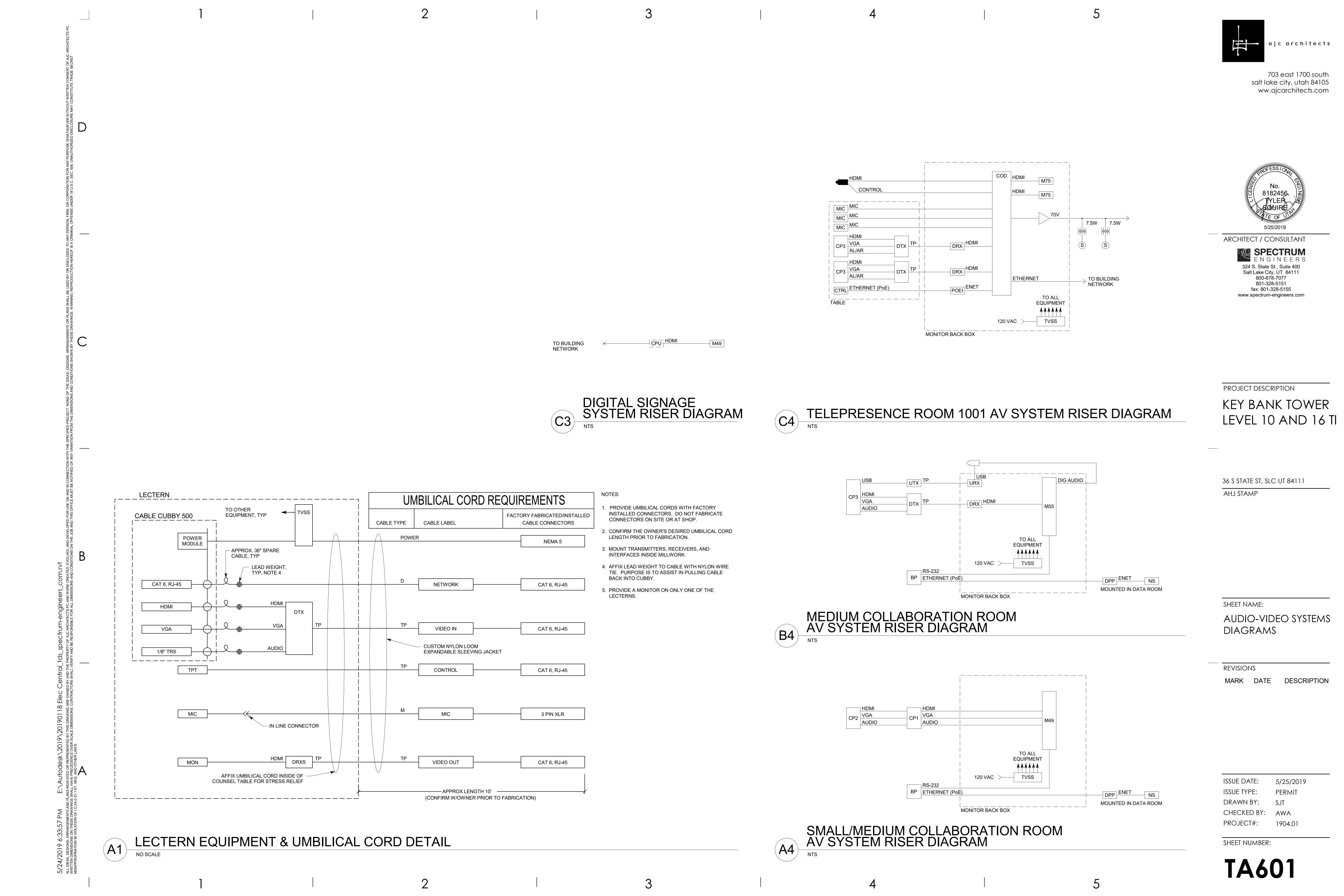
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PROJECT#: 1904.01

SHEET NUMBER:

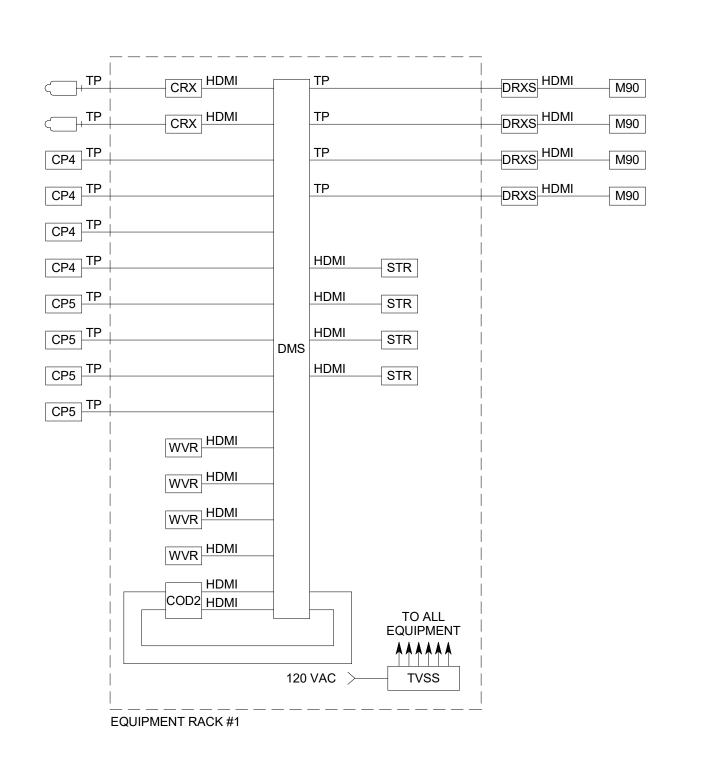
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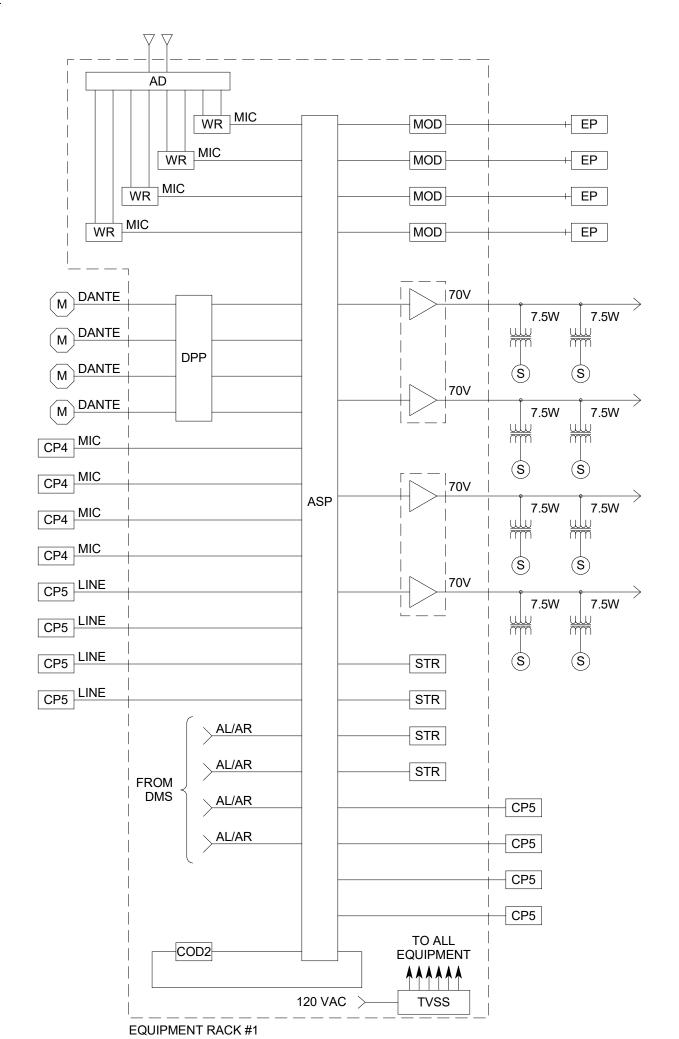
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PROJECT DESCRIPTION KEY BANK TOWER LEVEL 10 AND 16 TI

36 S STATE ST, SLC UT 84111

AHJ STAMP

16TH FLOOR MEETING ROOMS VIDEO SYSTEM RISER DIAGRAM NO SCALE



SHEET NAME: AUDIO-VIDEO SYSTEMS

REVISIONS

DIAGRAMS

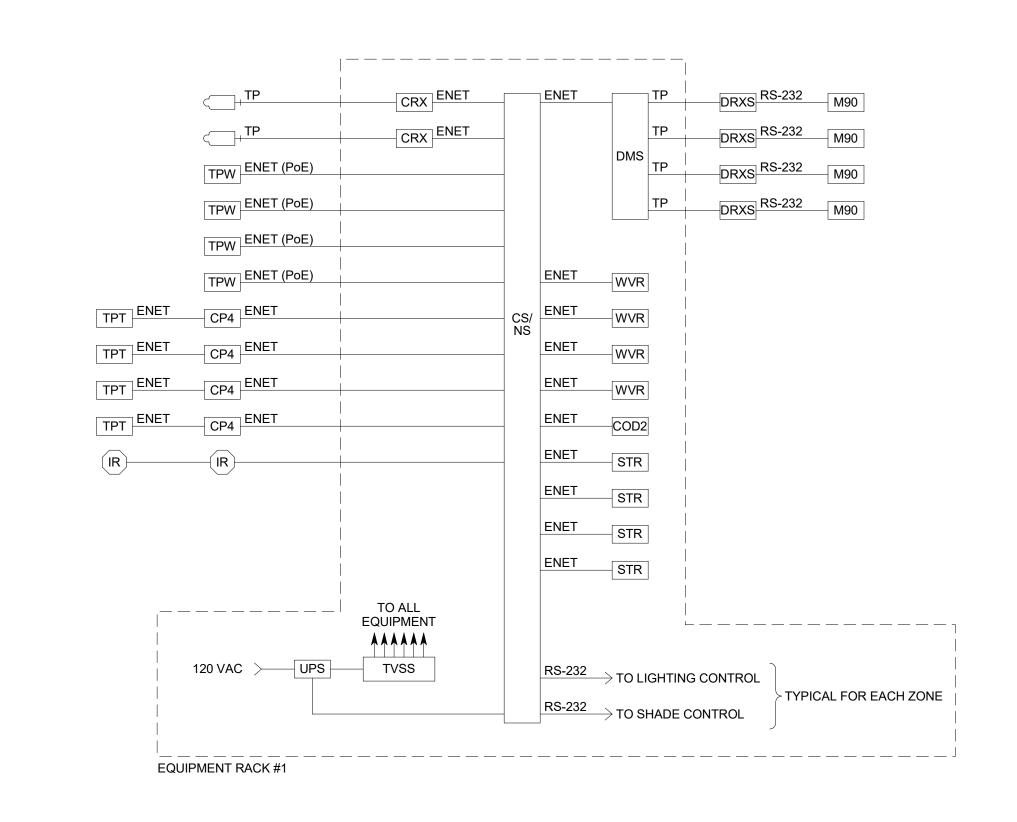
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ISSUE DATE: 5/25/2019 PERMIT DRAWN BY:

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SHEET NUMBER:

TA602



16TH FLOOR MEETING ROOMS CONTROL SYSTEM RISER DIAGRAM NO SCALE

(A4)

NO SCALE

16TH FLOOR MEETING ROOMS AUDIO SYSTEM RISER DIAGRAM

SOUND MASKING NOTES

1. CABLE SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/TIA/EIA 569-A, WHICH INCLUDES, BUT IS NOT LIMITED TO, THE SEPARATION OF THE CABLE TYPES AND THE USE OF J-HOOKS SPACED AT A MAXIMUM OF 5'-0" INTERVALS. SUPPORT J-HOOKS DIRECTLY FROM THE BUILDING STRUCTURE, NOT FROM OTHER BUILDING SYSTEM SUPPORT WIRES OR CABLES.

2. INSTALL ALL EQUIPMENT IN COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS, SEISMIC CODES, AND INDUSTRY-WIDE ACCEPTED RIGGING PRACTICES. SUPPORT EQUIPMENT WEIGHT FROM STRUCTURE. DURING THE SUBMITTAL PROCESS, PROVIDE SHOP DRAWINGS WHICH DETAIL PROPOSED MOUNTING FOR ALL SUCH EQUIPMENT.



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PROJECT DESCRIPTION

KEY BANK TOWER LEVEL 10 AND 16 TI

36 S STATE ST, SLC UT 84111

AHJ STAMP

SHEET NAME:

SOUND MASKING DETAILS, DIAGRAMS, NOTES, AND SCHEDULE

REVISIONS

MARK DATE DESCRIPTION

ISSUE DATE: 5/25/2019 PERMIT DRAWN BY:

CHECKED BY: AWA PROJECT#: 1904.01

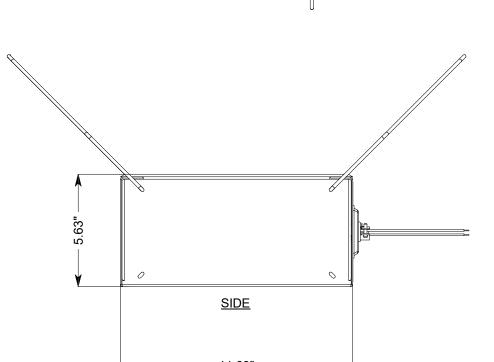
SHEET NUMBER:

SOUND MASKING SYSTEM EQUIPMENT LIST

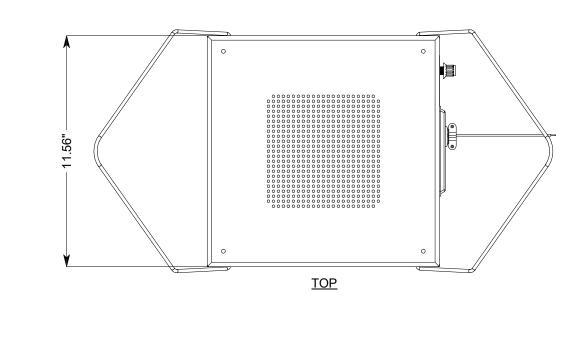
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SYMBOL	DESCRIPTION	QUANTITY	ACCEPTABLE TYPES
NG	MASKING NOISE GENERATOR, MULTI-CHANNEL W/ EQUALIZATION	OFP	ATLAS SOUND ASP-MG24 TDB
(S) _{1,2}	MASKING SPEAKER ASSEMBLY, UPWARD RADIATING W/8" SPEAKER, SUSPENSION CHAIN, AND ROTARY TAP SELECTION	OFP	ATLAS SOUND M1000, SEE DETAIL B1/TM001
PA	POWER AMPLIFIER, 4-CHANNEL, 70V, MINIMUM 200 WATTS PER CHANNEL	OFP	CROWN DCi 4-300 QSC-CX204V
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR, 20 AMP	OFP	TRIPP LITE IBAR12-20ULTRA
	J-HOOKS, SEE DETAIL D1/TM001	A/R	CADDY HILTI
	SPEAKER CABLE, PLENUM RATED, 16AWG, TWISTED PAIR	A/R	BELDEN 6200UE WEST PENN 25226B

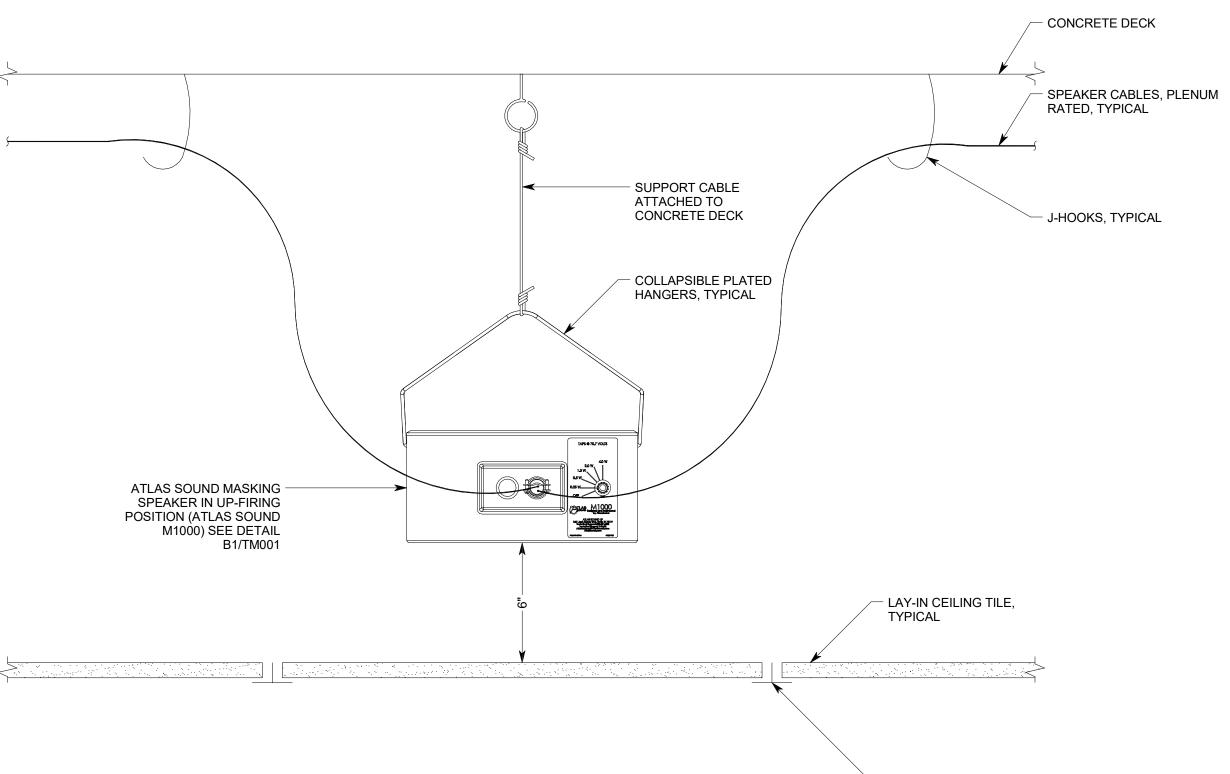
A/R = AS REQUIRED OFP = OBTAIN FROM PLANS RMK = RACK MOUNT KIT



ISOMETRIC



SOUND MASKING SPEAKER DETAIL (ATLAS SOUND M1000)



T-BAR GRID, TYPICAL

EQUIPMENT RACK - IT CLOSET ON RESPECTIVE FLOOR SPEAKER ARRAY TO ALL **EQUIPMENT** *** 120 VAC TVSS

SOUND MASKING SPEAKER INSTALLATION DETAIL

SOUND MASKING SYSTEM RISER DIAGRAM

NTS (TYPICAL OF 10TH AND 16TH FLOORS)

TM001