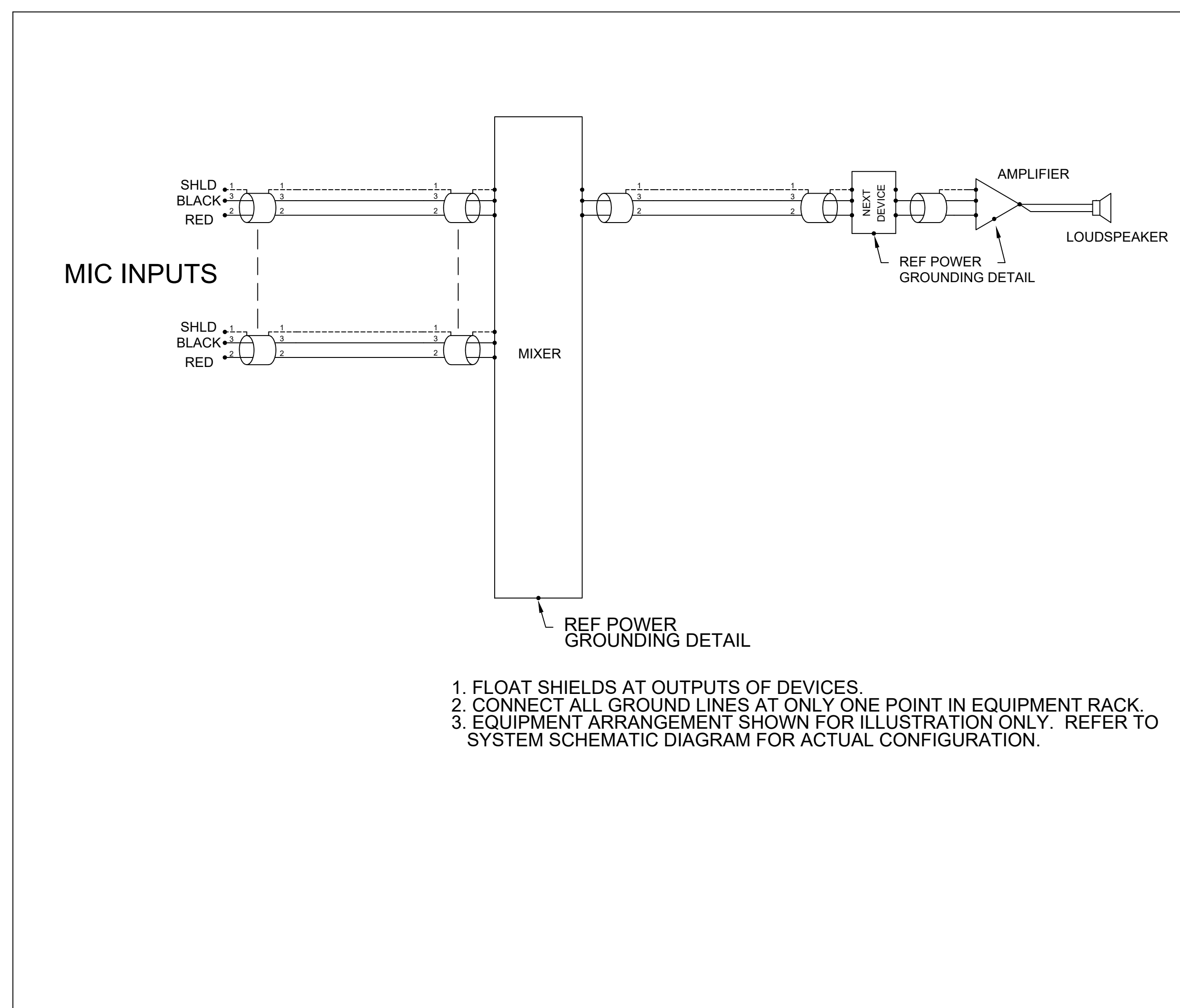


1 SYMBOL LEGEND
ALL SYMBOLS MAY NOT BE USED



2 SIGNAL GROUNDING DETAIL
NO SCALE

AFF	ABOVE FINISHED FLOOR ATTENUATOR
ATT	
CASS	CASSETTE
CD	COMPACT DISC
CH	CHANNEL
CKT	CIRCUIT
CV	COMPOSITE VIDEO
DA	DISTRIBUTION AMP
DIA	DIAMETER
DM	DIMENSION
DWG	DRAWING
ELEC EQUIP	ELECTRICAL EQUIPMENT
G	GROUND
GA	GAUGE
GEN	GENERATOR
HF	HIGH FREQUENCY
HORIZ	HORIZONTAL
ICOMIC	INTERCOM
IG	ISOLATED GROUND
IB	INTERCOM JUNCTION BOX
ISO	ISOLATION
LIR	LEFT/RIGHT
MIC	MICROPHONE
MIX	MIXER
MP	MICROPHONE PATCH
MOD	MODULATOR
MON	MONITOR
MTD	MOUNTED
MTRX	MATRIX
N	NEUTRAL
OFE	OWNER FURNISHED EQUIPMENT
PLT	PLATE
PNE	PANEL
POE	POWER OVER ETHERNET
PROJ	PROJECTOR
PS/PSU	POWER SUPPLY UNIT
SJ	SPEAKER JUNCTION BOX
SW	SWITCH
SYNC	SYNCHRONIZATION
UB	UNDER BALCONY
UNBAL	UNBALANCED
VD	VIDEO
VJ	VIDEO JUNCTION BOX
W	WATT
WI	WITH
W/O	WITHOUT

3 ABBREVIATIONS

NEUMANN SMITH
architecture

400 Galleria Office Centre
Suite 555
Southfield, Michigan 48034
phone 248.352.8310
fax 248.352.1821
ns@neumannsmith.com

WAYNE STATE UNIVERSITY

Student Center 5th & 7th
Floors Renovations

Wayne State University
5221 Gullen Mall
Detroit, Michigan 48202

WSU No. 034-261806

5 & 7

GENERAL INFORMATION & DIVISION OF LABOR

TERMS:
FURNISH = PROVIDE AND INSTALL.
PROVIDE = DELIVER TO CUSTOMER IN BOX.
INSTALL = TAKE PROVIDED PIECE AND INSTALL PER DRAWING AND SPEC.

ELECTRICAL CONTRACTOR:

- ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT AND BOXES ASSOCIATED WITH THE AUDIO, VIDEO, AND THEATRICAL LIGHTING SYSTEMS AS SHOWN ON THE DRAWINGS.
- ELECTRICAL CONTRACTOR SHALL SUPPLY ALL JUNCTION BOXES FOR THE AV AND THEATRICAL LIGHTING SYSTEMS WITH APPROPRIATE COVERS.
- ALL CONDUITS NOT SPECIFICALLY IDENTIFIED SHALL BE 3/4".
- ALL CONDUITS BELOW GRADE SHALL BE PVC OR AS REQUIRED BY CODE. ALL CONDUITS ABOVE GRADE SHALL BE EMT OR AS REQUIRED BY CODE.
- NO CONDUIT SHALL BE INSTALLED WITH MORE THAN THREE (3) 90 DEGREE BENDS. IF A CONDUIT RUN REQUIRES MORE THAN THREE BENDS OR IF THE CONDUIT RUN IS IN EXCESS OF 150' IN TOTAL LENGTH, INSERT A PULL BOX OR USE THE NEXT LARGER SIZE CONDUIT.
- ALL CONDUITS TO BE LABELED AT THE SOURCE BOX WITH THE DESTINATION BOX IN A CLEAR AND LOGICAL MANNER.
- ENDS OF ALL CONDUITS ARE TO BE DEBURRED AND SHALL HAVE AN APPROPRIATE BUSHING INSTALLED.
- ELECTRICAL CONTRACTOR SHALL SUPPLY A POLY PULL-LINE IN EACH CONDUIT.
- ALL LINE VOLTAGE WIRE FOR THE SOUND, VIDEO, AND THEATRICAL LIGHTING SYSTEMS SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
- LINE VOLTAGE CONDUITS SHALL MAINTAIN A MINIMUM OF 24" SEPARATION FROM AUDIO SIGNAL CONDUITS EXCEPT TO CROSS AT 90° ANGLE WHEN NECESSARY.
- ALL AV FLOOR POCKETS INCLUDING COVER PLATES AND LIDS SHALL BE SUPPLIED AND INSTALLED BY THE ELECTRICAL CONTRACTOR.
- PROVIDE A #6 TECHNICAL GROUND WIRE FROM THE INSULATED GROUND BUS BAR IN PANEL BPAV TO THE MAIN AUDIO EQUIPMENT RACKS.

AV CONTRACTOR:

- ALL LOW VOLTAGE WIRE FOR THE SOUND AND VIDEO SYSTEMS SHALL BE SUPPLIED AND INSTALLED BY THE AV CONTRACTOR.
- NO WIRE SPLICES IN CONDUIT.
- REFER TO SPECIFICATIONS FOR ADDITIONAL INSTALLATION DETAILS.
- ENGRAVED PANELS IN FLOOR BOXES AND ON WALL PLATES SHALL BE FURNISHED AND INSTALLED BY THE AV CONTRACTOR.

4 DIVISION OF LABOR
NO SCALE

CONDUIT SEPARATION DATA

AUDIO / VIDEO CONDUIT TYPE	POWER CONDUIT TYPE	SEPARATION DISTANCE		
		UNDER 20 AMP	ABOVE 20 AMP	ABOVE 120 AMP
PVC	PVC	4 FT	12 FT	NO
EMT	EMT	2 FT	4 FT	NO
EMT	RIGID	4 IN	1 FT	4 FT
RIGID	RIGID	1 IN	4 IN	16 IN

* AMPERAGE IN CONDUIT IS THE SUM OF ALL CURRENT CONDUCTORS IN THE PIPE.
NO DESIGNATES A CONDITION THAT SHOULD NOT BE DONE.

CONDUIT LOCATION SEPARATION DATA

POWER CONDUIT TYPE	AV EQUIPMENT LOCATION	UNDER 60 AMP	60 TO 120 AMP
EMT	CONTROL ROOM	OK	30 IN
RIGID STEEL	CONTROL ROOM	OK	OK
EMT	HOUSE MIX/PULL PATH	OK	4 FT
RIGID STEEL	HOUSE MIX/PULL PATH	OK	1 FT
EMT	PLATFORM, PIT	OK	4 FT
RIGID STEEL	PLATFORM, PIT	OK	1 FT
EMT	EQUIPMENT ROOMS	OK	30 IN
RIGID STEEL	EQUIPMENT ROOMS	OK	OK

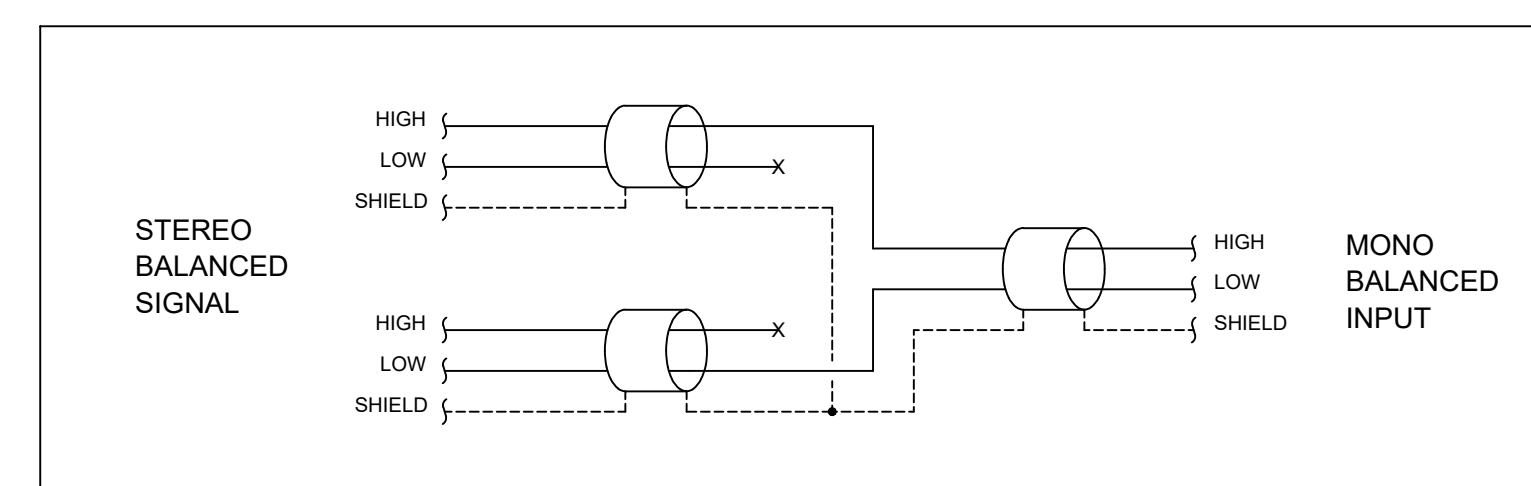
NO LARGE POWER TRANSFORMERS OR MOTORS SHOULD BE LOCATED WITHIN 50 FEET OF RECORDING OR BROADCAST STUDIOS, STAGES, WORSHIP PLATFORMS, CONTROL ROOMS, AV EQUIPMENT ROOMS, OR SOUND CONTROL POSITIONS.

POWER CONDUCTOR SIZING DATA

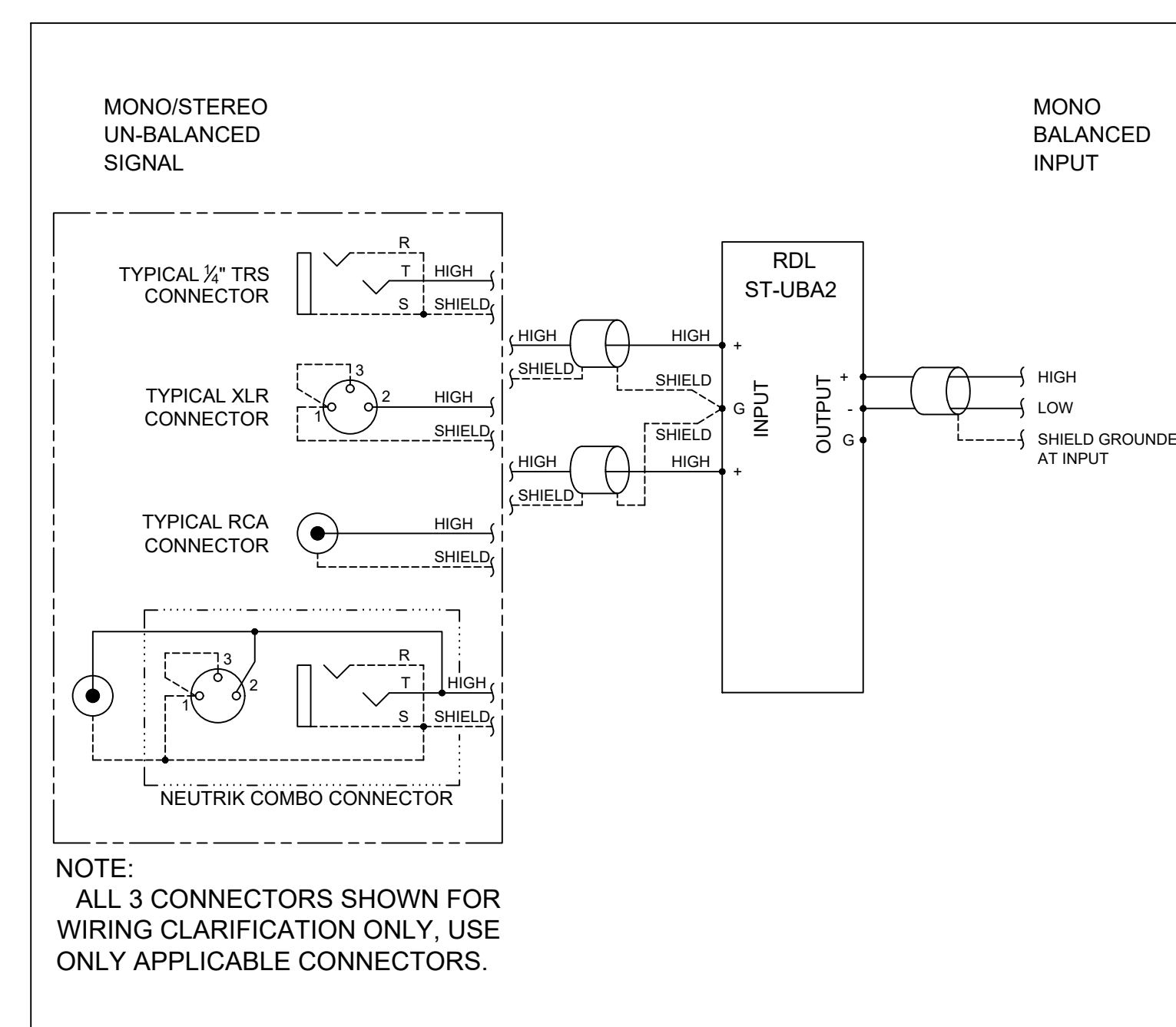
DISTANCE	CONDUCTOR SIZE
0' - 100'	#12 AWG CONDUCTORS
100' - 175'	#10 AWG CONDUCTORS
175' - 250'	#8 AWG CONDUCTORS
250' - 400'	#6 AWG CONDUCTORS

* CONDUCTOR SIZING BASED ON 1200W LOAD @ 120V AC

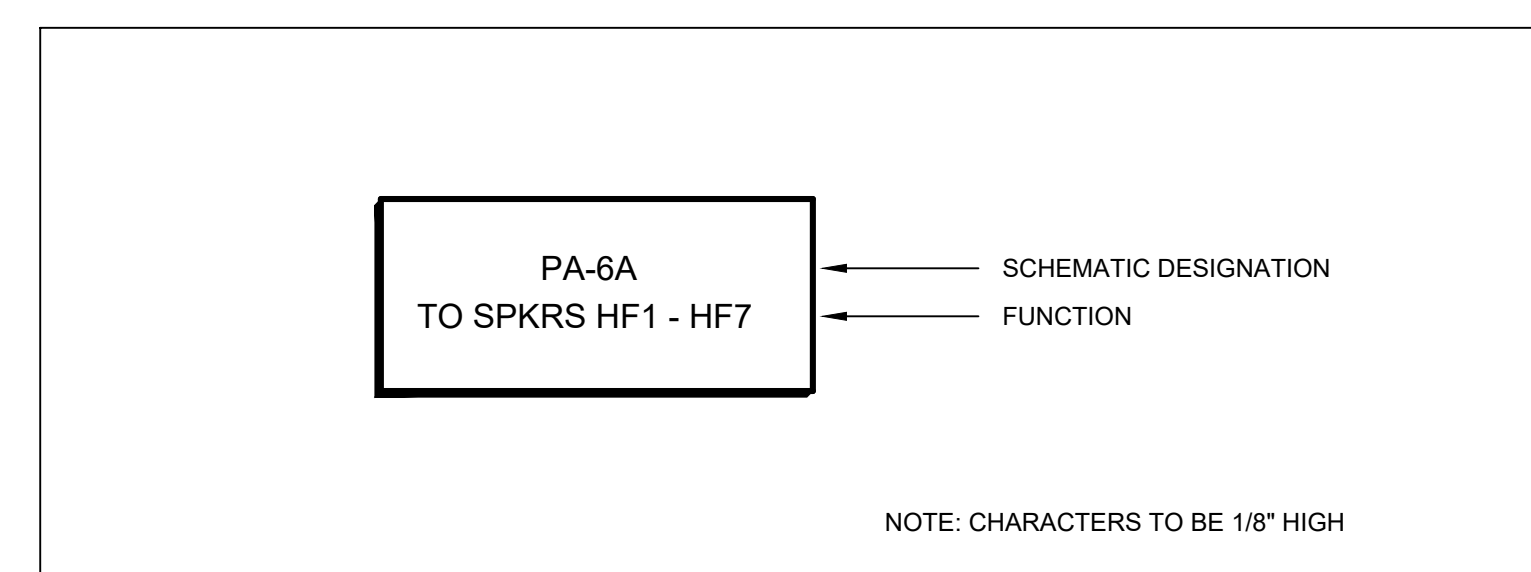
5 CONDUIT SEPARATION DETAIL / DATA.
NO SCALE



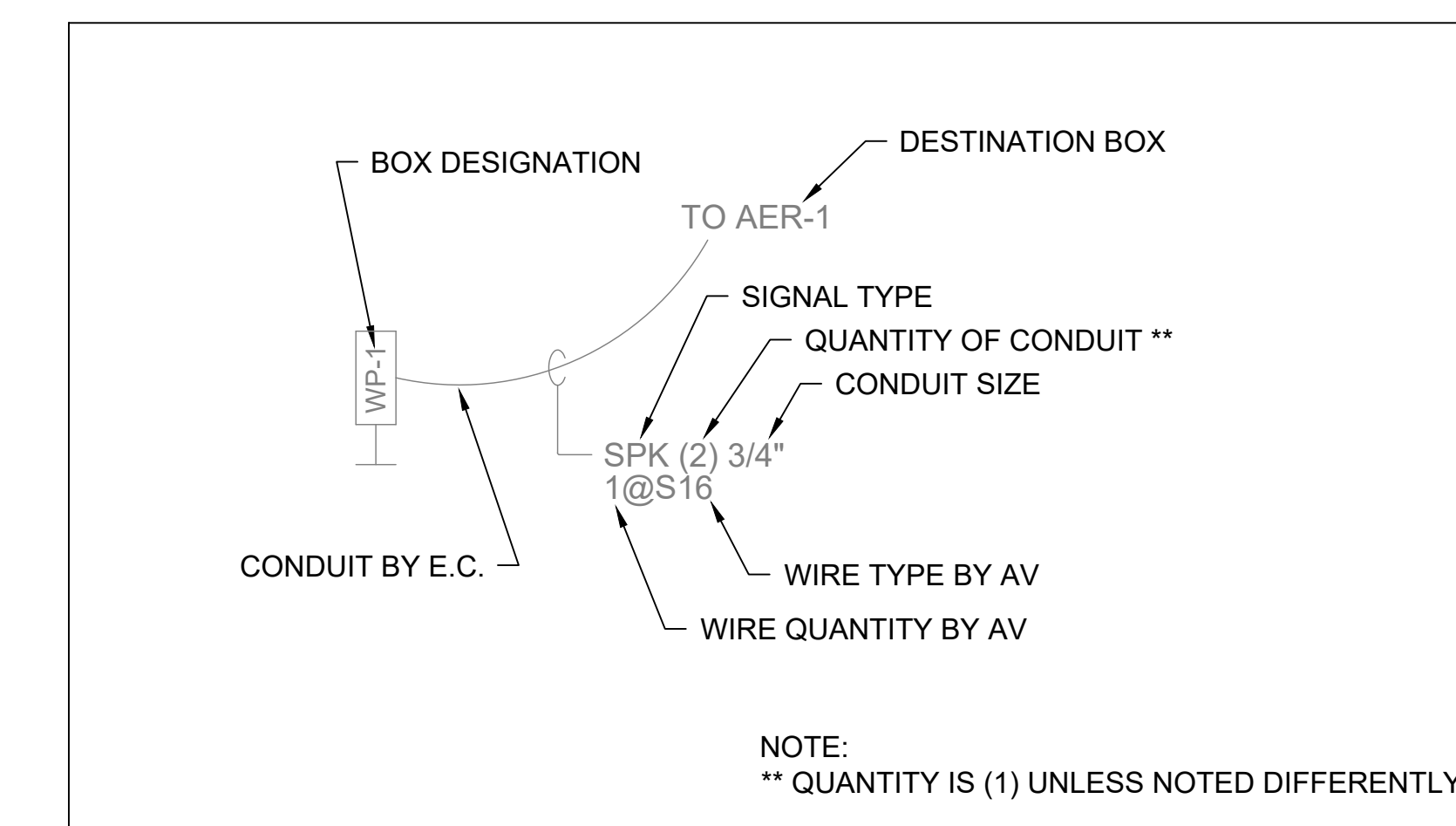
6 MONOING NETWORK DETAIL
NO SCALE



7 MONOING NETWORK DETAIL
NO SCALE



8 TYPICAL EQUIPMENT LABEL
NO SCALE



9 CONDUIT SIZE AND WIRE PULL DETAIL
NO SCALE

AV SHEET LIST

SHEET NUMBER	SHEET DESCRIPTION
AV100	GENERAL INFO, DIVISION OF LABOR, SHEET INDEX
AV101	AV SCHEMATICS
AV102	AV SCHEMATICS
AV200	5TH & 7TH FLOOR PLANS
AV400	DETAILS

10 DRAWING INDEX

ACOUSTICS BY DESIGN
Consultants in Acoustics & AVL Systems Design

124 Fulton Street East, 2nd Floor
Grand Rapids, MI 49503
Portland, OR 1, Detroit, MI
(616) 272-9779

www.acousticsbydesign.com

Revisions

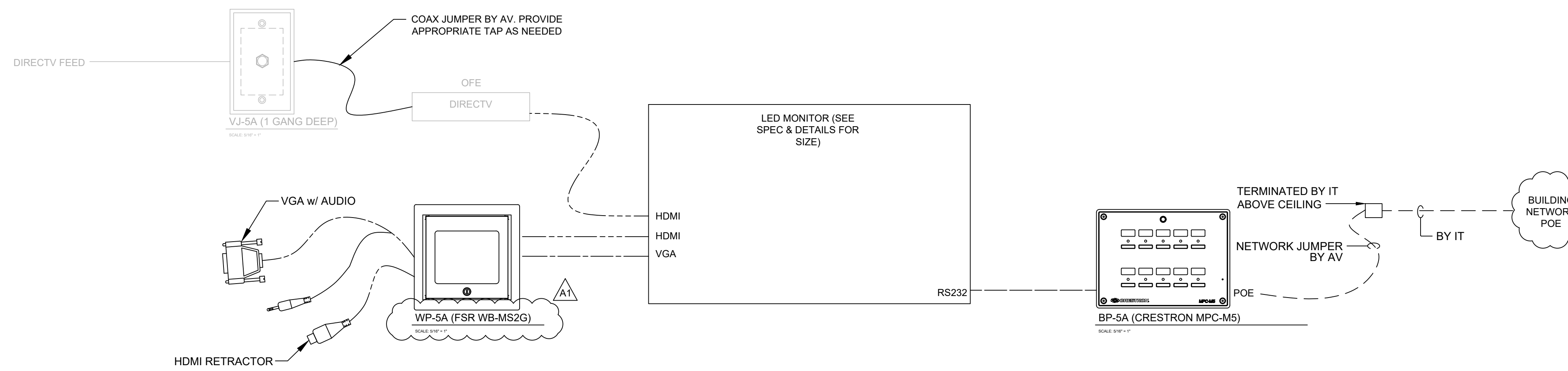
07/05/16 - ADDENDUM NO. 1
05/27/16 - BID PACK 2
AUDIO VISUAL

Date: Preliminary
07/05/16 Construction
Drawn: Record
MT
Checked: **TGH** Do not scale
Approved: **TJH** Use figured dimensions only
Bidpak Number

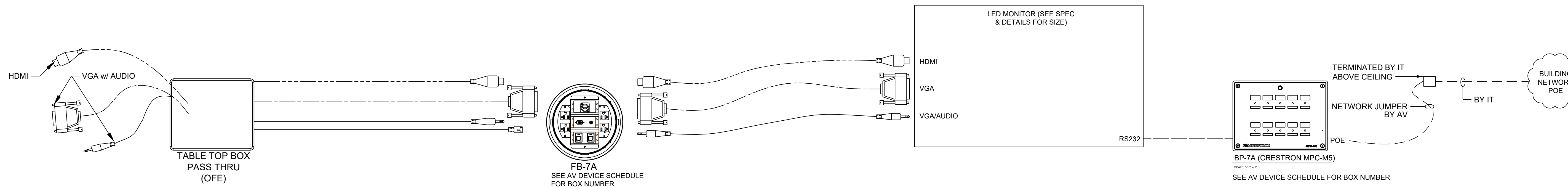
WSU Project Number
034-261806
Job Number
2015025
Title

GENERAL INFO,
DIVISION OF LABOR,
SHEET INDEX

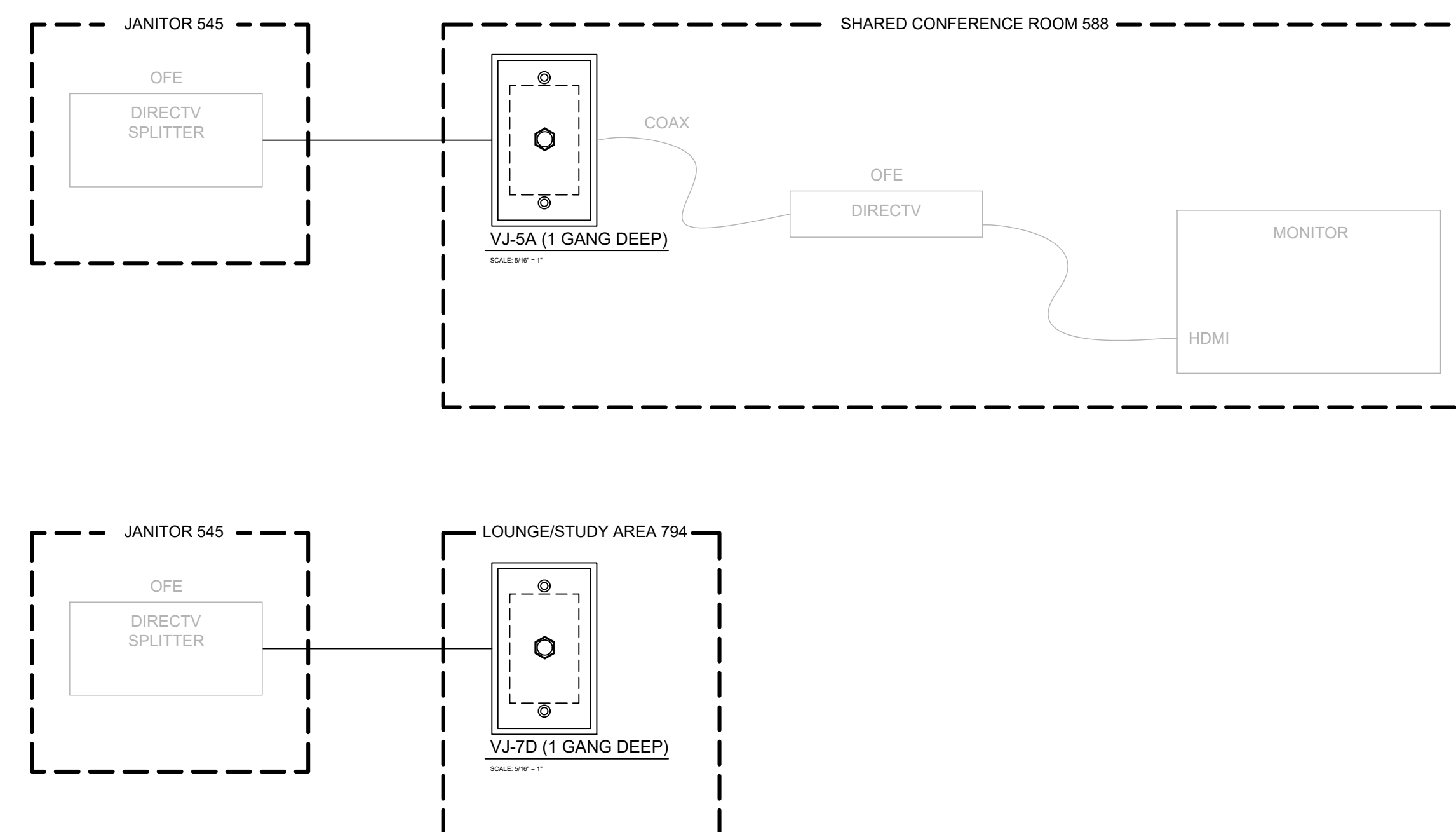
Sheet
AV100



1 ROOM 588 SCHEMATIC
SCALE: NO SCALE



2 SHARED CONFERENCE ROOM 792
SCALE: NO SCALE

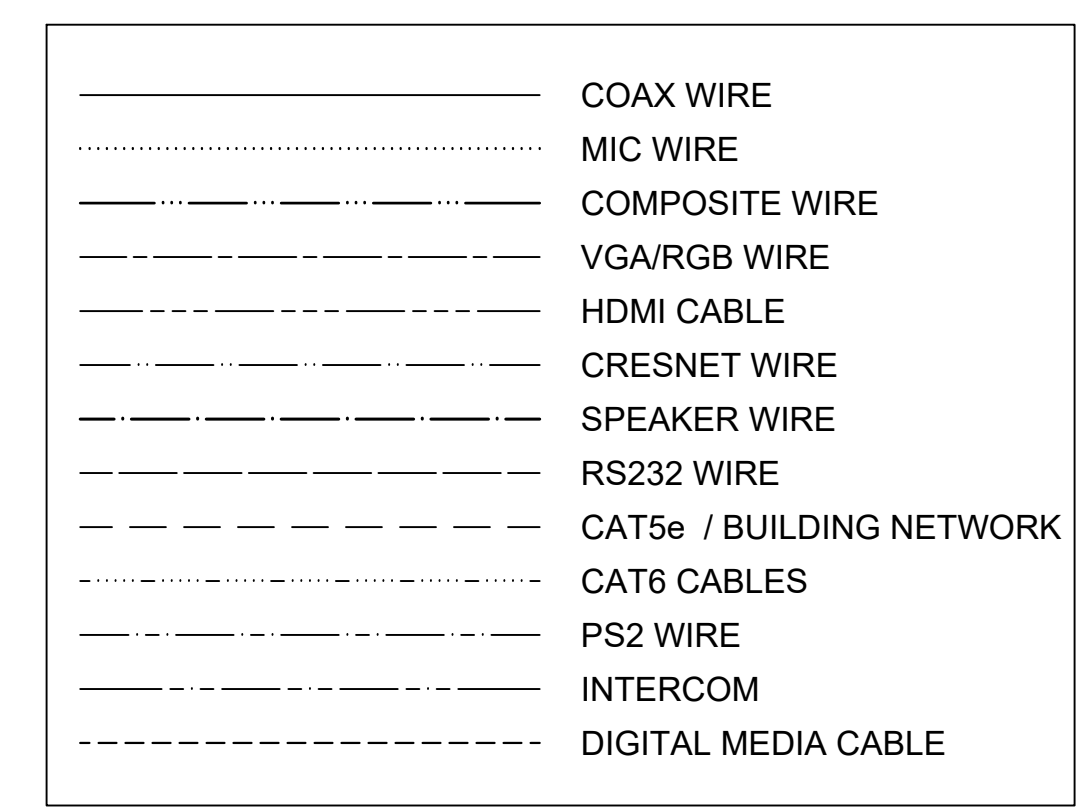
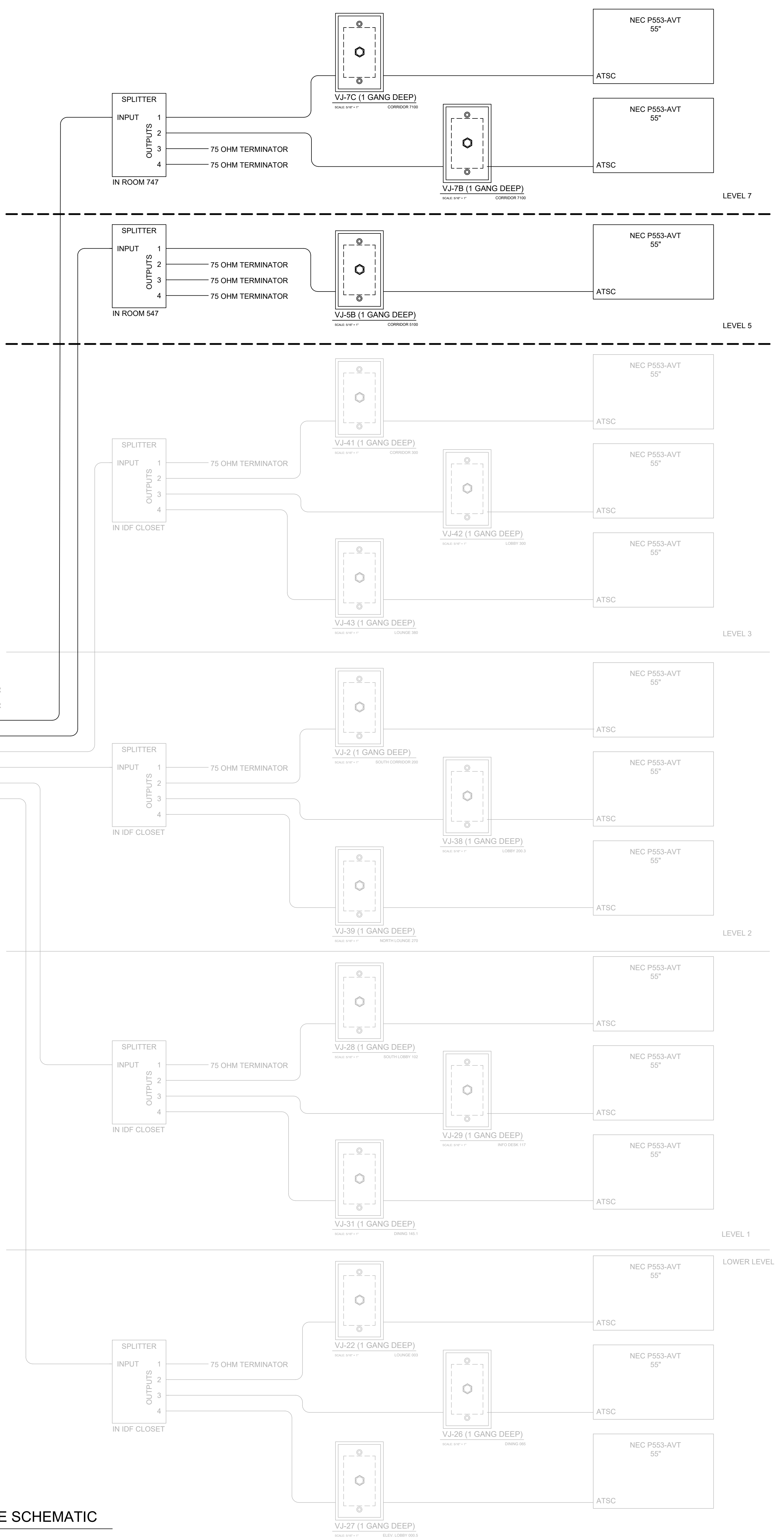
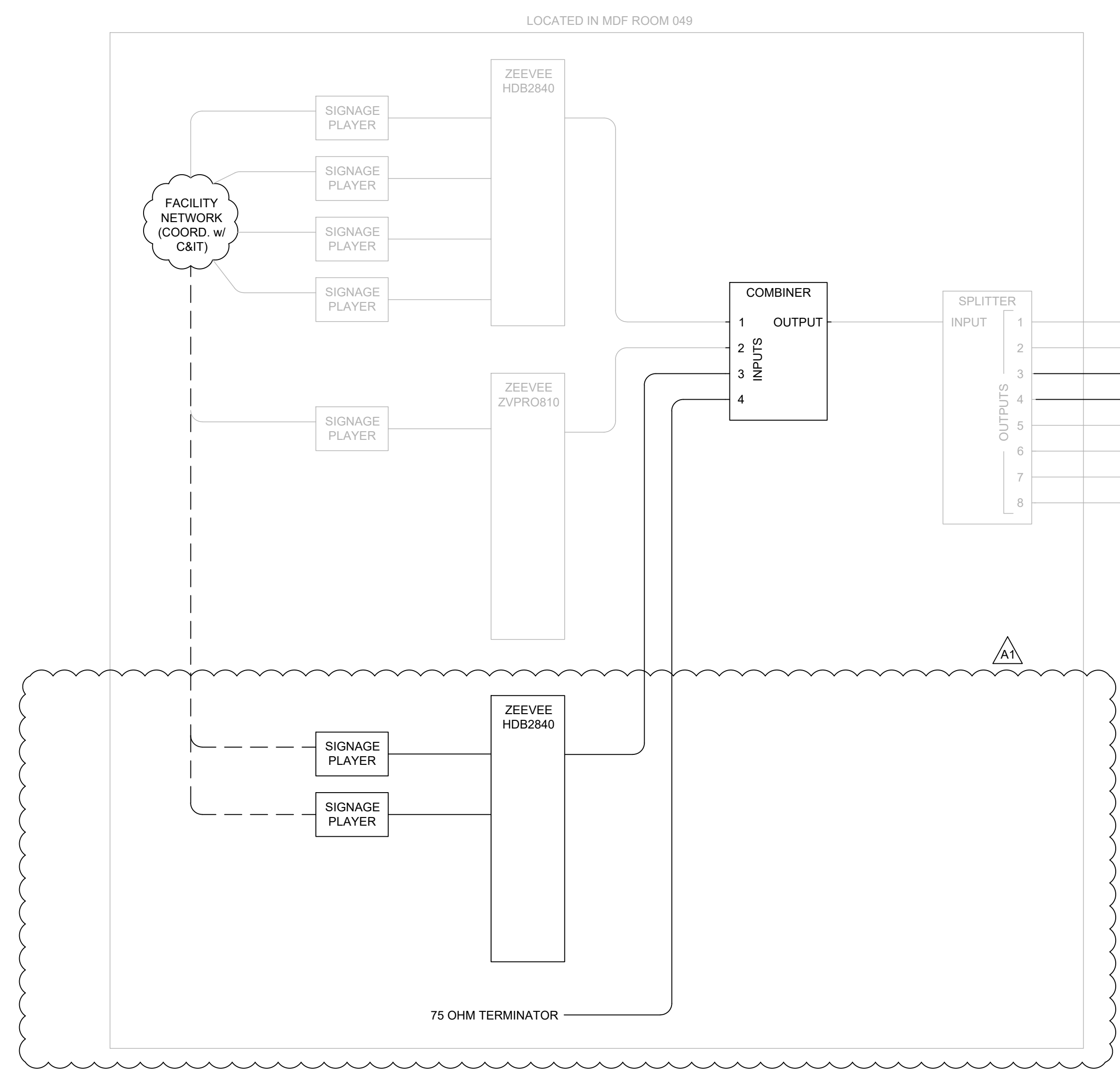


NOTE: DIRECTV CONTACT FAMILIAR WITH THE EXISTING DIRECTV PROVIDED INFRASTRUCTURE AT WSU STUDENT CENTER:
QUINN ANSTED
SERVICE FORCE COMMUNICATIONS
28165 HARWISH DRIVE
FARMING, MI 48334-3209
OFFICE PHONE: (248) 521-0024

3 DIRECTV DISTRIBUTION
SCALE: NO SCALE

—————	COAX WIRE
.....	MIC WIRE
-----	COMPOSITE WIRE
-----	VGA/RGB WIRE
-----	HDMI CABLE
-----	CRESNET WIRE
-----	SPEAKER WIRE
-----	RS232 WIRE
-----	CAT5e / BUILDING NETWORK
-----	CAT6 CABLES
-----	PS2 WIRE
-----	INTERCOM
-----	DIGITAL MEDIA CABLE

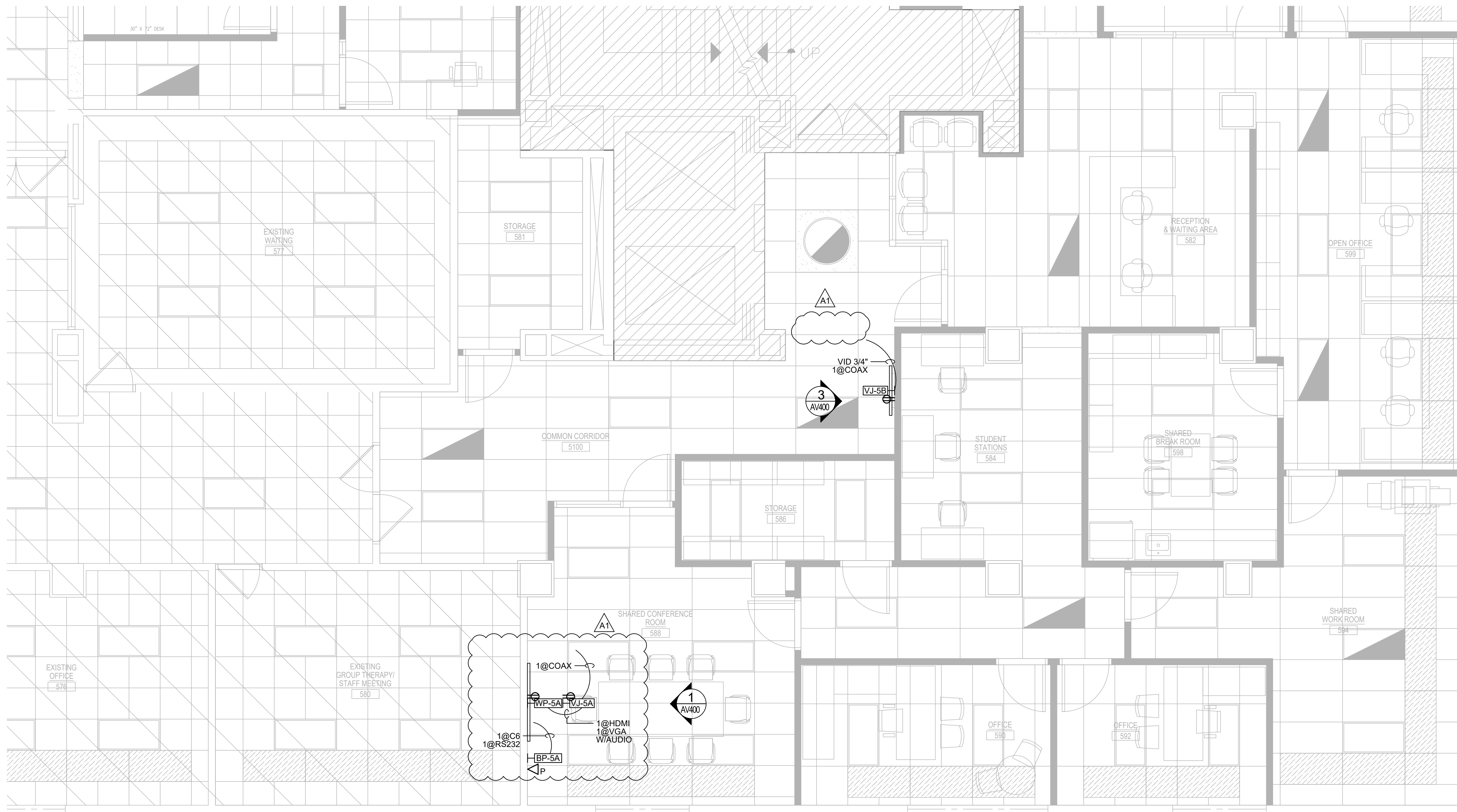
PROJECT LINE-TYPE KEY



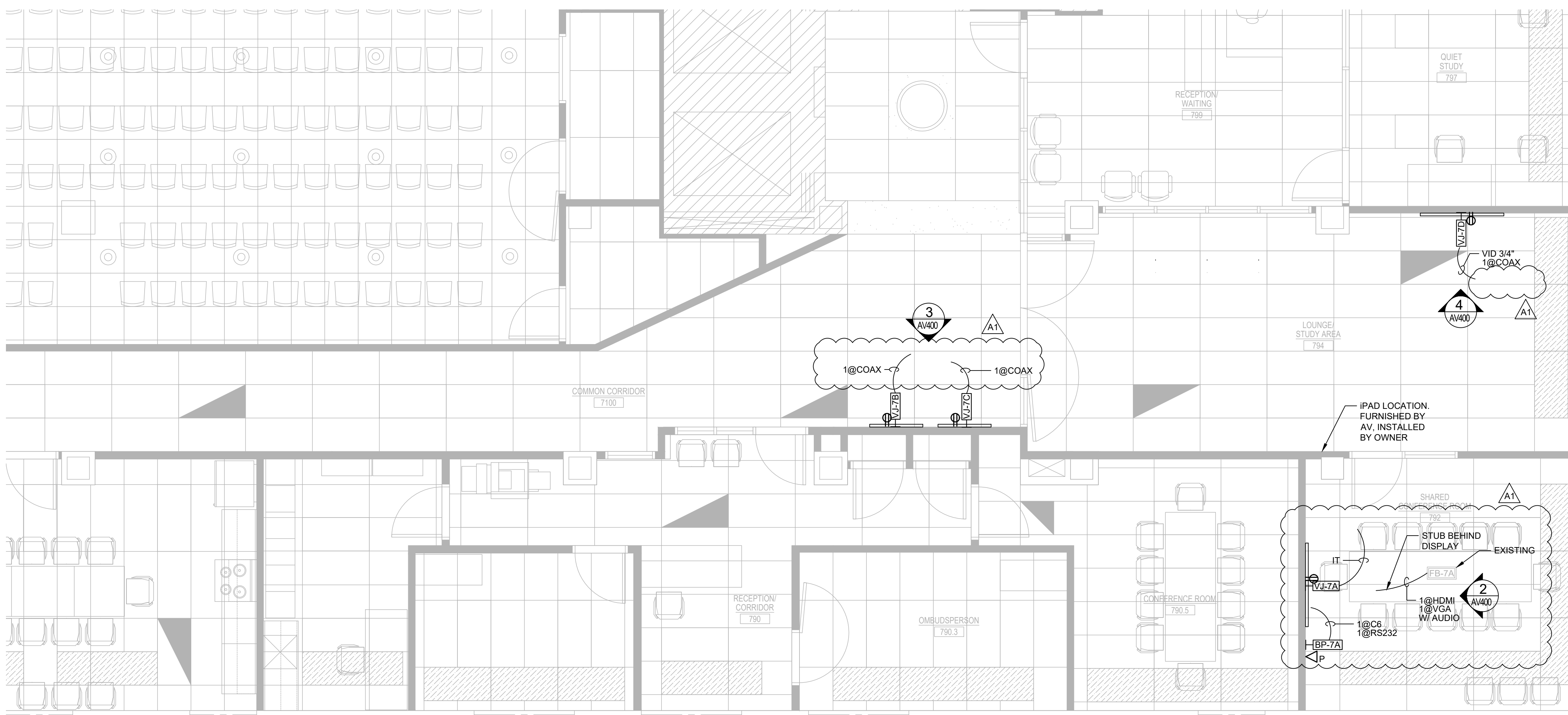
PROJECT LINE-TYPE KEY

1 DIGITAL SIGNAGE SCHEMATIC
 SCALE: NO SCALE

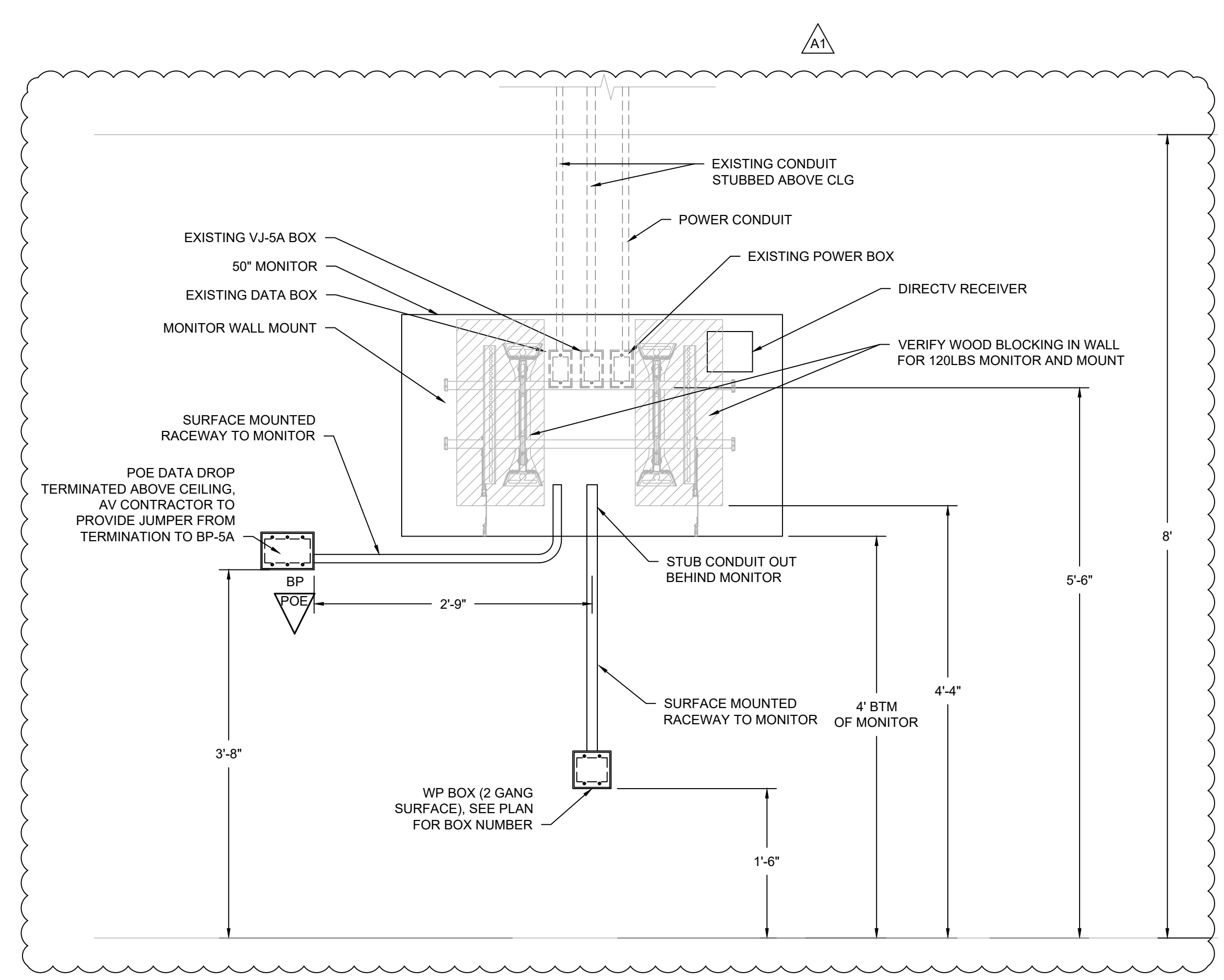
AV JUNCTION BOX SCHEDULE							
BOX #	LOCATION	SIZE	MOUNTING HEIGHT	MOUNTING TYPE	BOX & COVER PROVIDED BY	CONN. PLATE PROVIDED BY	NOTES
BP-5A	CONF RM 588	3 GANG	3'-8" AFF	SURFACE	EC	AV	
BP-7A	CONF RM 792	3 GANG	3'-8" AFF	SURFACE	EC	AV	
FB-7A	CONF RM 792	NOTE	FLOOR	FLUSH	EC	AV	SEE ELECTRICAL DRAWINGS/SPECS. COORD. W/ EC
VJ-5A	CONF RM 588	EXISTING	EXISTING	FLUSH	EXISTING	AV	
VJ-5B	CORRIDOR 5100	EXISTING	EXISTING	FLUSH	EXISTING	AV	
VJ-7A	CONF RM 792	1 GANG	5'-11" AFF	FLUSH	EC	AV	FUTURE DIRECTV CONNECTION
VJ-7B	CORRIDOR 7100	EXISTING	EXISTING	FLUSH	EC	AV	
VJ-7C	CORRIDOR 7100	EXISTING	EXISTING	FLUSH	EC	AV	
VJ-7D	LOUNGE 794	EXISTING	EXISTING	FLUSH	EC	AV	
WP-5A	CONF RM 588	2 GANG	18" AFF	SURFACE	EC	AV	FSR WB-MS2G COVER



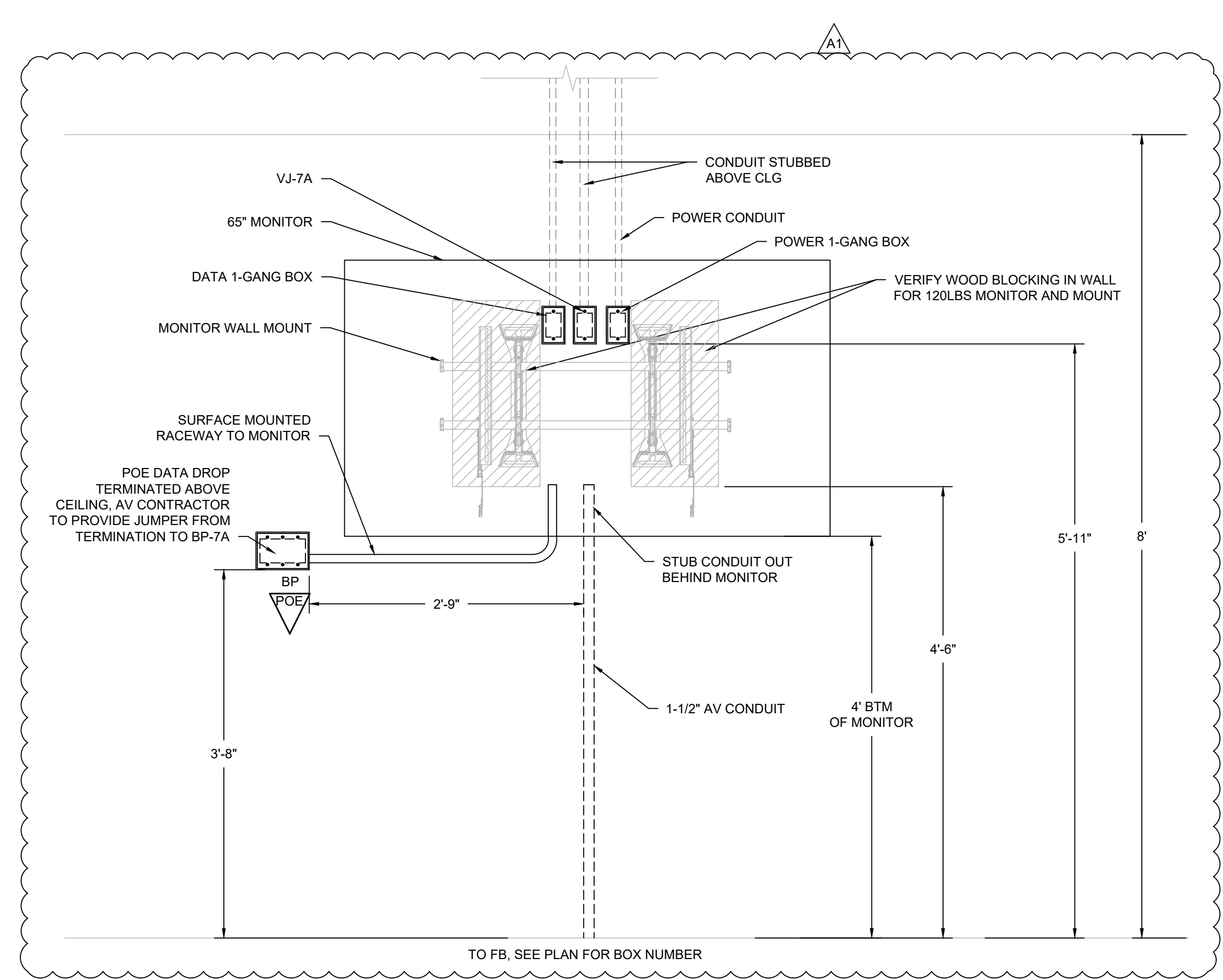
1 5TH FLOOR AV LAYOUT
SCALE: NO SCALE



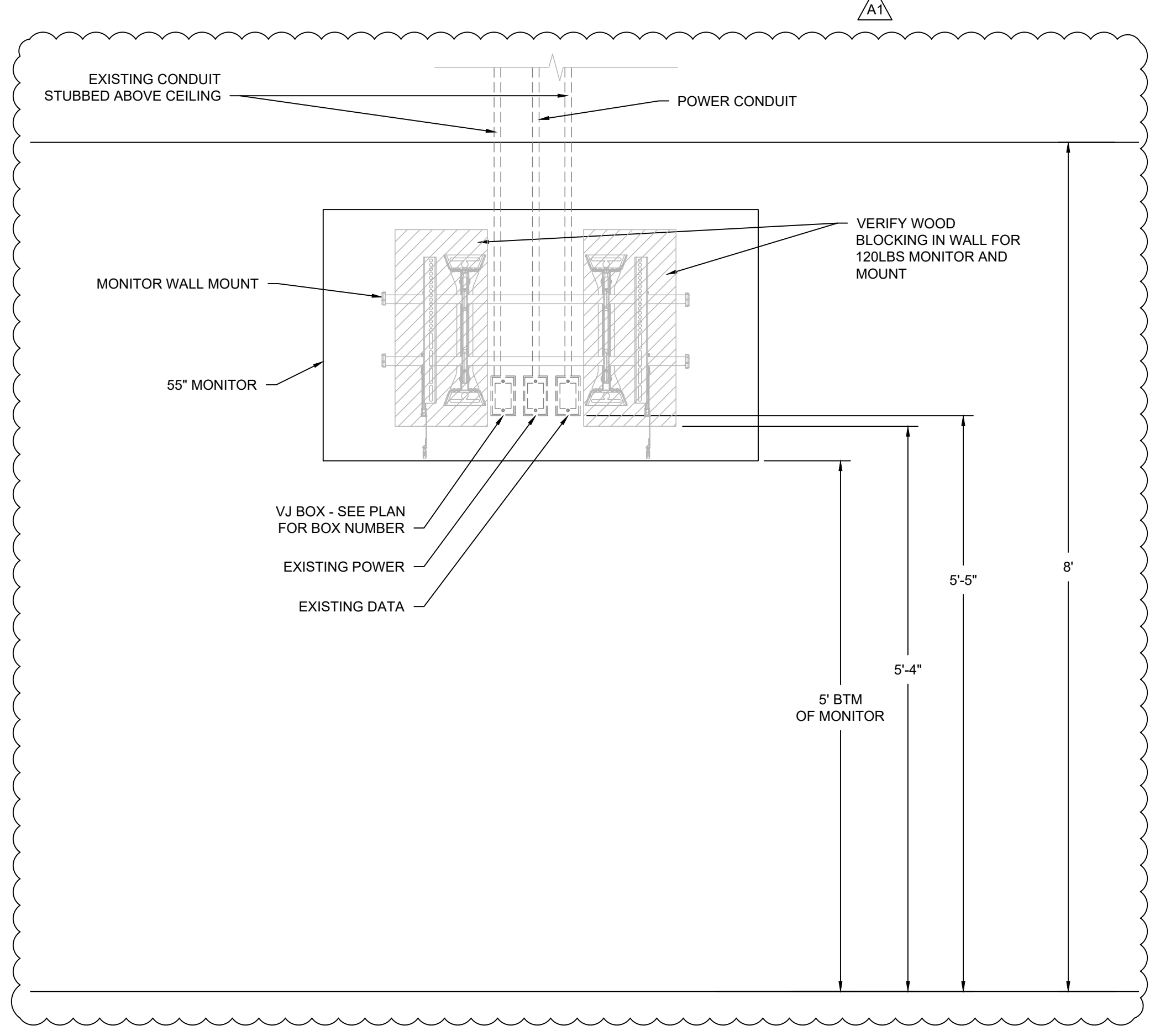
2 7TH FLOOR AV LAYOUT
SCALE: NO SCALE



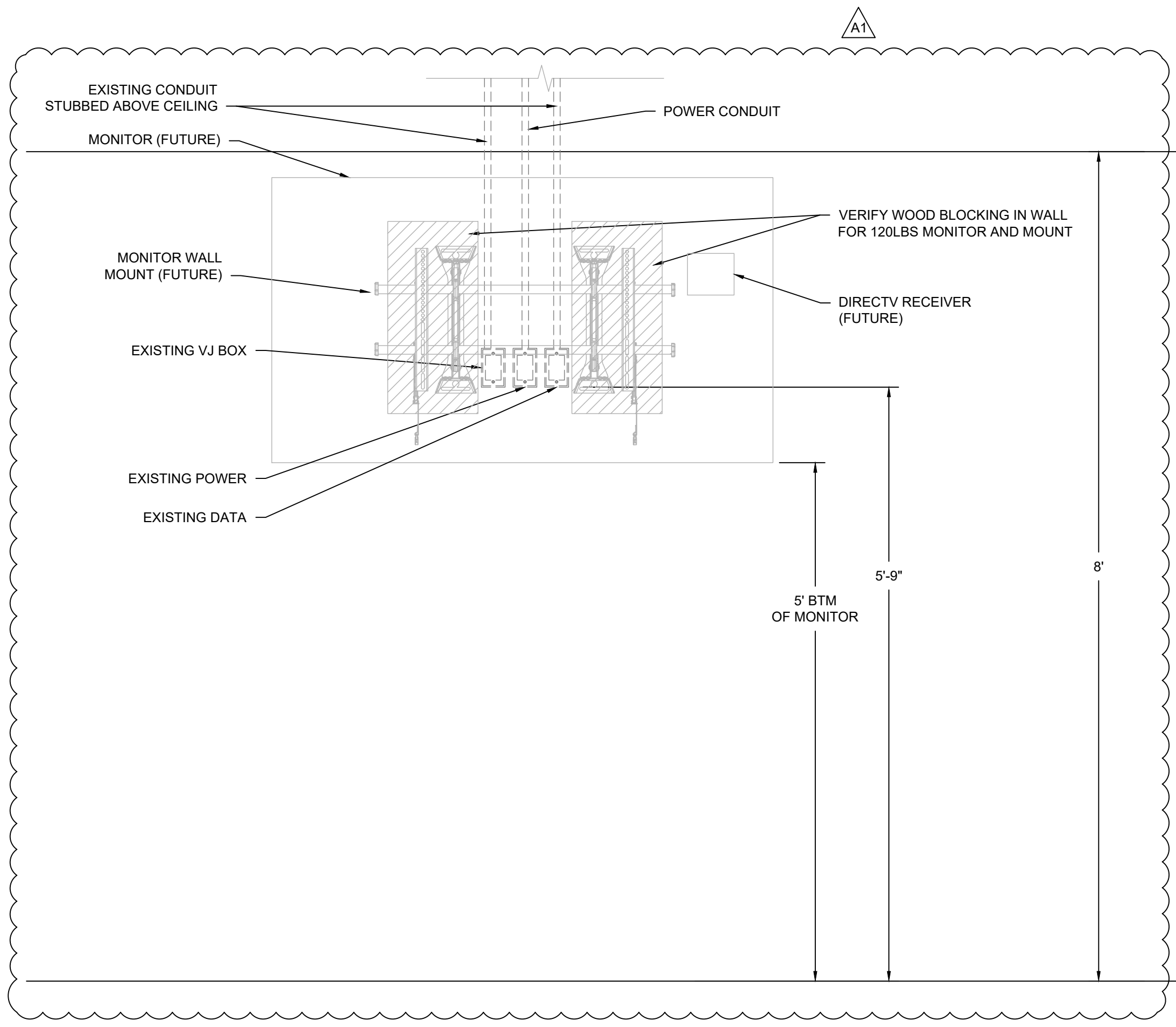
1 SHARED CONFERENCE ROOM 588
MONITOR DETAIL
SCALE: NO SCALE



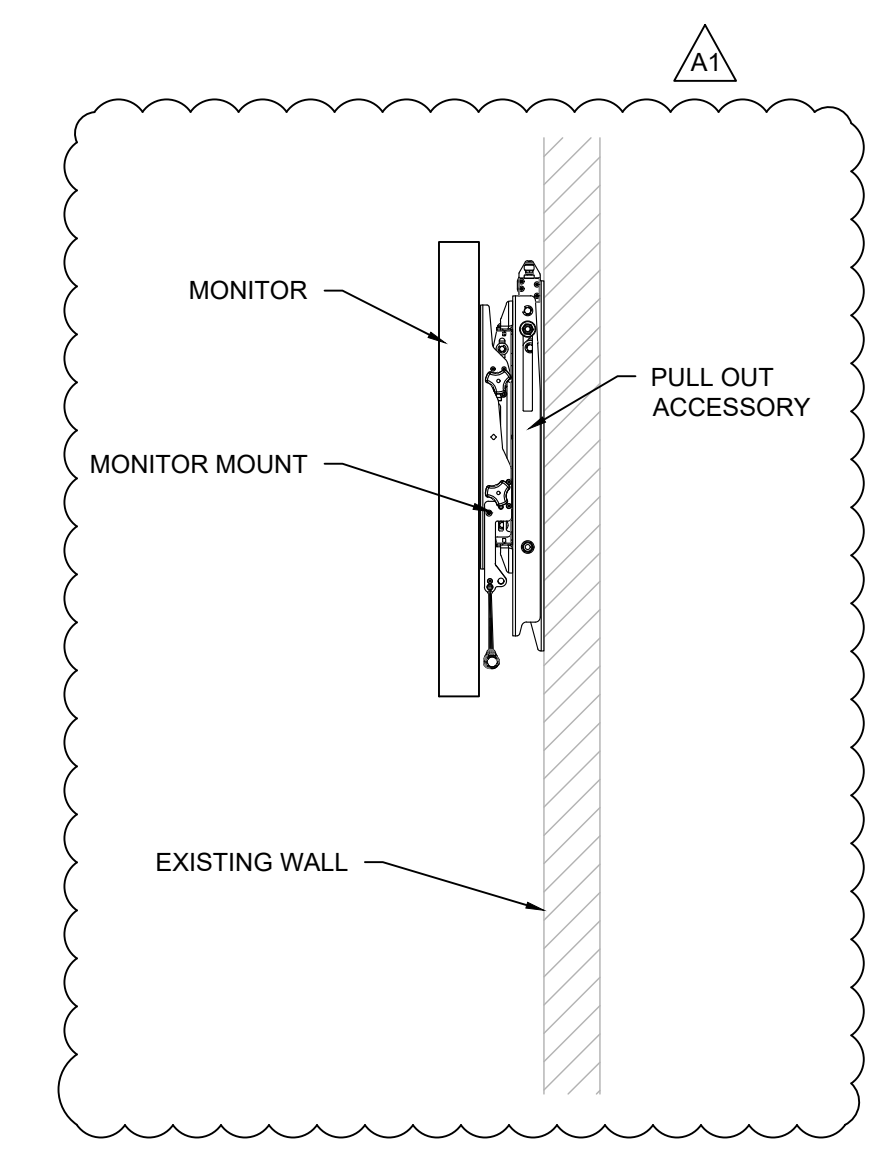
2 SHARED CONFERENCE ROOM 782
MONITOR DETAIL
SCALE: NO SCALE



3 55" DIGITAL SIGNAGE DETAIL
SCALE: NO SCALE



4 65" DIRECTV DETAIL
SCALE: NO SCALE



5 GENERIC MONITOR INSTALLATION DETAIL
SCALE: NO SCALE