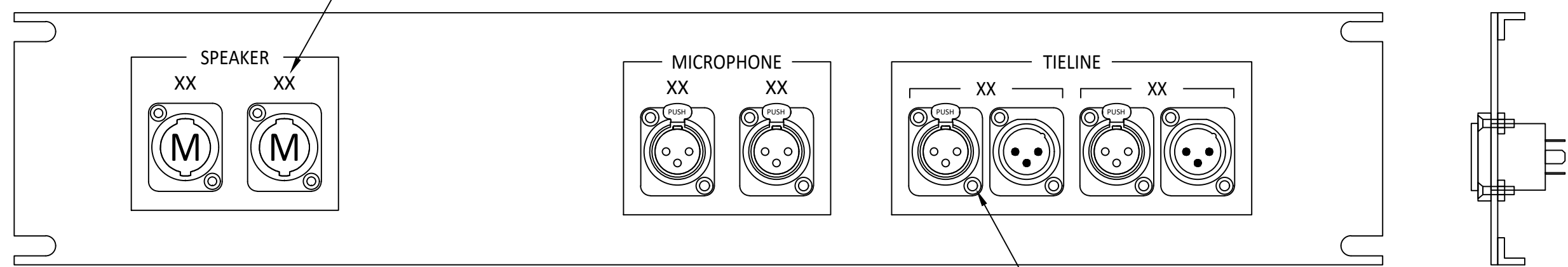


ALL CONNECTORS ARE TO BE MOUNTED USING: 4-40 FLAT COUNTERSUNK HEAD MACHINE SCREW, FLAT WASHER AND NYLON INSERT LOCK NUT, THREADSERT, OR MANUFACTURER RECOMMENDED FASTENER



FABRICATION NOTES:

- 1. NOMENCLATURE IS WHITE PAINT FILLED ENGRAVING ON BLACK ANODIZED PANEL. (CONFIRM WITH ARCHITECTURAL REQUIREMENTS)
2. NOMENCLATURE TO BE UPPER CASE, 14 POINT, HELVETICA LIGHT. (12 POINT ACCEPTABLE WHERE SPACING IS CRITICAL.)
3. PANEL SHOWN IS AN EXAMPLE AND APPLIES TO ALL PANEL AND PLUG BOX DRAWINGS.
4. POSITION CONNECTORS, CONTROLS, ETC. TO ALLOW FOR BACK BOX DIMENSIONS AND PANEL MOUNTING POINTS.
5. MOUNT CONTROLS IN D-SHAPED HOLES TO PREVENT ROTATION OF CONTROL BODY.

ALL CONNECTORS ARE TO BE MOUNTED USING: 4-40 FLAT COUNTERSUNK HEAD MACHINE SCREW, FLAT WASHER AND NYLON INSERT LOCK NUT, THREADSERT, OR MANUFACTURER RECOMMENDED FASTENER

1 PLATE & PANEL CONSTRUCTION CONVENTIONS
SCALE: N.A.

TABLE 5 - CONDUIT SIZING FOR AUDIO CABLES

Table with columns: Mfr, Type, OD, Area, 3/4", 1", 1-1/4", 1-1/2", 2", 2-1/2", 3". Lists various cable types and their dimensions.

Note: Minimum conduit size allowed for audio cables is 3/4 inch. * denotes paired cable. This cable consists of two cables of the given OD.

TABLE 2 - AUDIO WIRING TYPES

Audio system wiring is divided into wiring groups according to their nominal voltage levels:

Table with columns: Group, Wiring Type. Lists Group A (Microphones), Group B (Line level), Group C (Loudspeaker), Group D (Telephone), Group E (Fiber optic).

Note: These wiring groups must never be intermixed within a given conduit run!

TABLE 3 - AUDIO CONDUIT SEPARATION

Minimum conduit separation between conduits carrying wiring of different audio groups is as follows:

Table with columns: Group A, Group B, Group C, Group D, Group E. Shows adjacent, 6", 12", 12" separation requirements.

Note: Ninety degree crossings in close proximity are acceptable.

TABLE 4 - ELECTRICAL CONDUIT SEPARATION

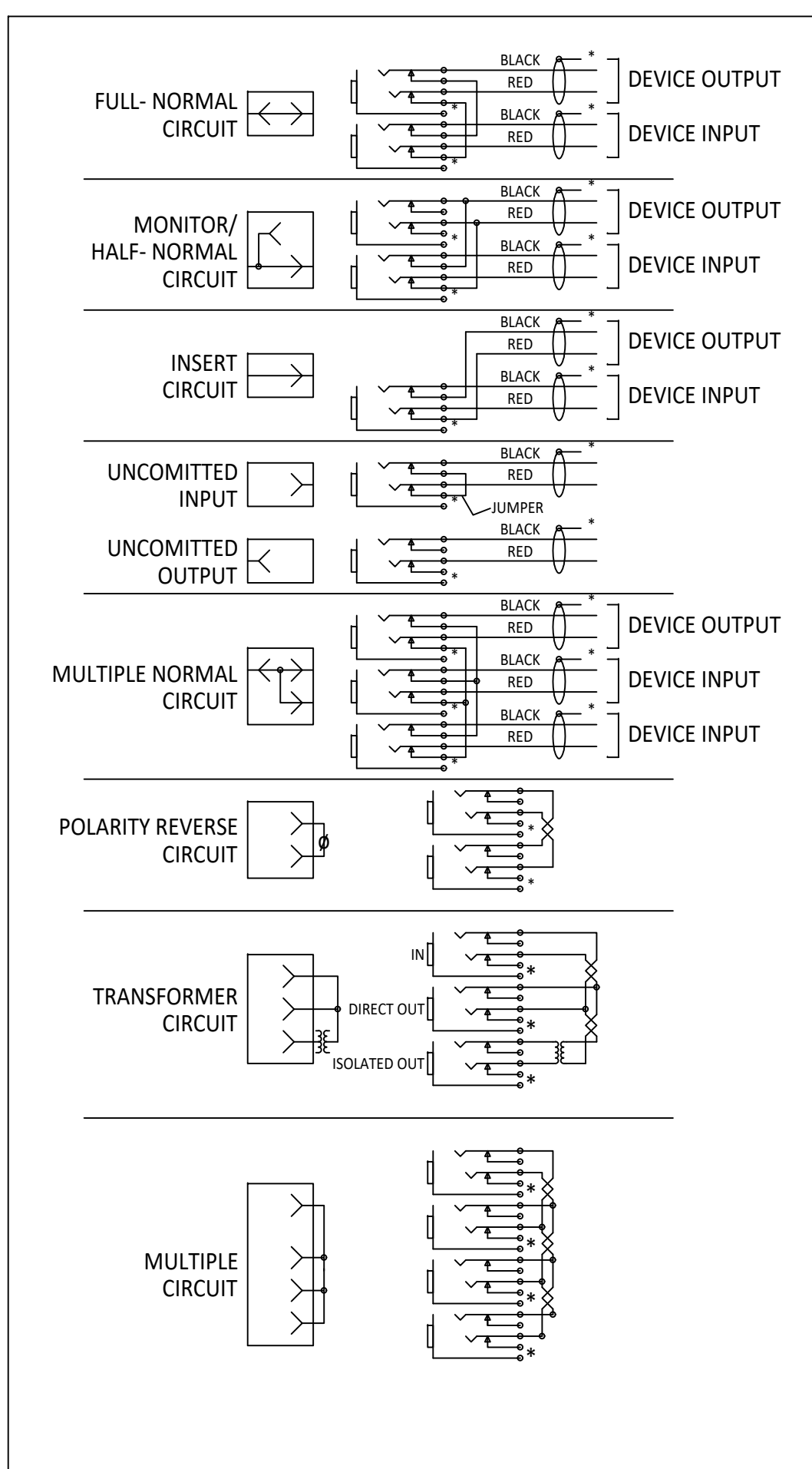
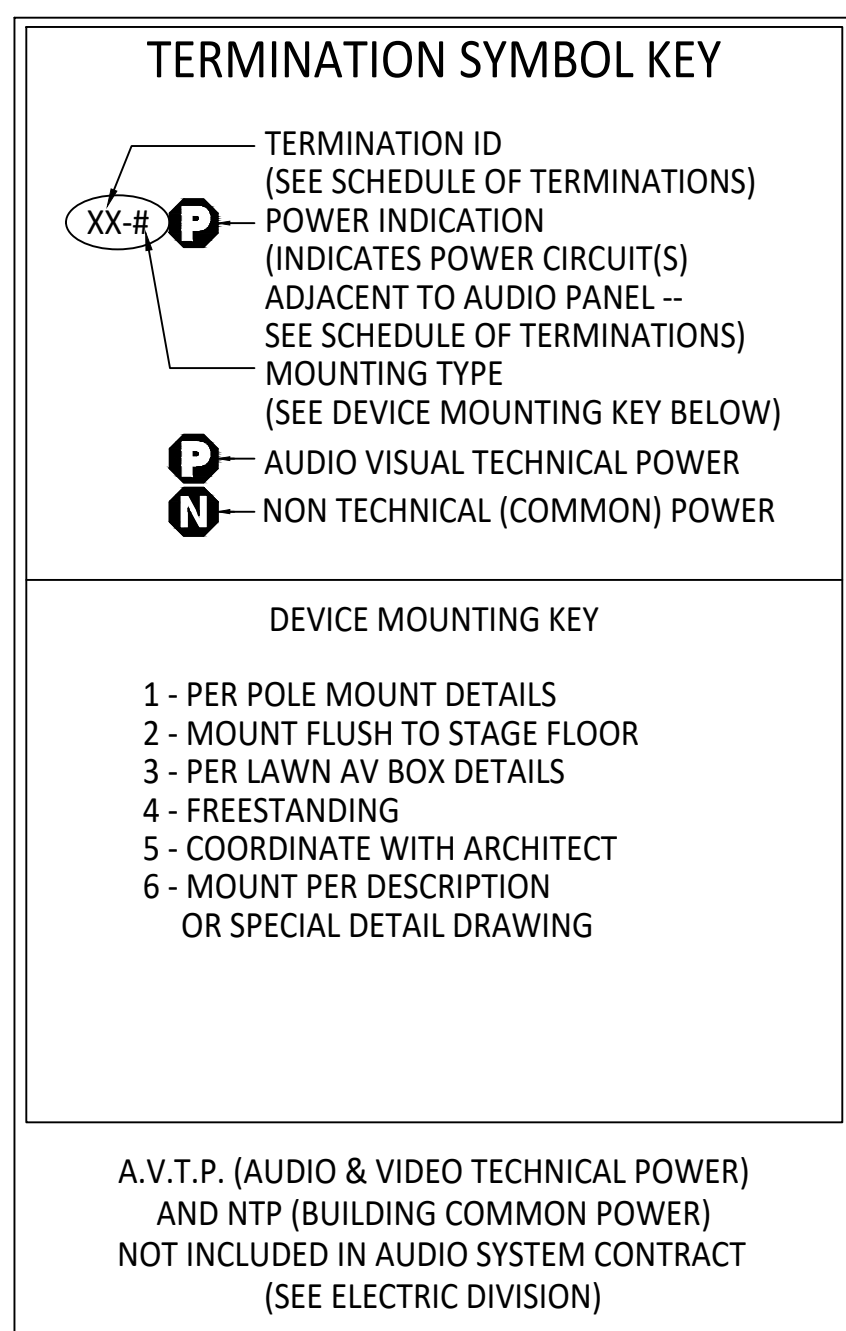
Minimum conduit separation between conduits carrying audio wiring and other electrical service conduit is as follows:

Table with columns: Group A, Group B, Group C, Group D, Group E. Shows 24", 12", 6", 12", adjacent separation requirements for lighting, SCR, and 220/440VAC circuits.

Note: Heavy current demands in or long parallel runs with the above services may dictate greater separations to avoid interference with the audio system.

2 CONDUIT INFORMATION
SCALE: N.T.S.

3 AUDIO/VIDEO TERMINATION KEY
SCALE: N.A.



4 AUDIO PATCH PANEL WIRING CONVENTIONS
SCALE: N.T.S.

5 PROJECT NOTES
SCALE: N.A.

Key - Connectors table listing various connectors like Whirlwind W3CRP, Male XLR, Female XLR, RCA, BNC, RJ-45, DB9, Speakon, Fiber optic, Toggle switch, 10K potentiometer, Selector switch, Sequencer, Duplex electrical receptacle, and Single electrical receptacle.

6 AUDIO/VIDEO STANDARD CONNECTORS & SYMBOLS
SCALE: N.A.

Key - Signal Flow table defining symbols for Reference Number, Reference Marker, Control Path, Jumper Cable, Multitail Fan Out, Connection Point, Speaker, Termination Label, Provide Cable, Amplifier, Potentiometer, Remote Volume Control, Patch Bay, Transformer, X'P3T Switch, X'PDT Relay, Circuit Path Junction, Circuit Path Cross No Junction, Multiple Circuit Paths, Power Supply Voltage, and Power Supply Common.

7 TABLE OF CONTENTS
SCALE: N.A.

Table of Contents table with columns: SHEET NUMBER, SHEET TITLE. Lists sheets AV0.01 to AV5.01.

7 TABLE OF CONTENTS
SCALE: N.A.

- 1. GENERAL
1.1. See audio/video system written specification 27 41 00 for work scope information.
1.2. All custom panels shall be numbered according to audio system signal flow.
1.3. Drawings are concept only and detailed only to the extent necessary to show design intent and signal flow.
2. MOUNTING & FINISHES
2.1. Design drawings are conceptual. Rigging methods, where shown, are to indicate intent.
2.2. See location drawings for plan-view locations of all devices.
2.3. Unless specifically noted otherwise, devices mounted in public view shall be provided in a color matching the wall or ceiling where mounted.
2.4. Aiming information is provided as a guide to initial installation.
2.5. After field-aiming is complete, all devices must be rigidly locked in place such that normal operational disturbances or environmental factors do not affect future device performance.
2.6. See location drawings for plan-view locations of all devices.
2.7. Unless specifically noted otherwise, devices mounted in public view shall be provided in a color matching the wall or ceiling where mounted.
2.8. Unless specifically noted otherwise, all AV back boxes to be mounted to walls and ceilings shall be recessed into the designated surface and the associated panel shall be mounted flush to the mounting surface.
3. ELECTRICAL COORDINATION
3.1. All audio/video system technical and common power is provided as part of electrical contract.
3.2. Line voltage receptacles indicated as a part of custom audio panels are provided and installed by the audio contractor.
3.3. The performance audio & video low voltage systems are not shown on the electrical drawings, except for the associated power locations.
3.4. As defined in the referenced specifications sections, this work scope shall include, but be limited to:
3.4.1. Prepare a low voltage riser diagram indicating the routing of all low voltage conduit to be installed for the AV systems.
3.4.1.1. If the electrical systems are being documented in a Building Information Management system, the low voltage riser shall also be documented in the BIM.
3.4.1.2. A preliminary AV low voltage riser diagram may be included as a part of these drawings. If included here, the preliminary routing is to indicate the general intent and scope of the conduit, and shall not be construed as final or definitive.
3.4.1.2.1. The inclusion of these preliminary drawings does not change the obligation of the electrical contractor to prepare the AV lowvoltage riser.
3.4.1.2.2. The minimum conduit size for any AV low voltage conduit shall be 3/4".
3.4.1.2.3. Obtain all of the performance audio/video systems devices back boxes from the audio/video contractor and install these back boxes as directed.
3.4.2. Provide and install all conduits between these devices back boxes per the "Schedule of Terminations". Conduits shall be sized based on the cable content as noted on the "Schedule of Terminations".
3.4.3. Provide 2 ea. nylon pull strings per conduit in all empty audio/video conduits. Pull strings to be continuous runs; do not splice pull strings.
3.4.4. Obtain the sequencing load center(s), if specified, from the audio/video contractor and install where indicated on the appropriate electrical power AV DEVICES drawings.
3.4.5. At performance audio/video systems device locations containing isolated ground receptacles, provide all conduit and conductors from sequencing load center and make final connections at both ends. (The receptacle in the devices shall be provided by the audio/video contractor.)
3.4.6. Furnish and install audio/video company switch(es) and provide electrical service thereto as indicated in the electrical drawings.
3.4.7. Furnish and install the audio/video system technical power transformer and provide electrical service thereto as indicated in the electrical drawings.
3.4.8. Furnish and install the audio/video system technical power distribution panel board and provide electrical service thereto as indicated.
3.4.9. Classify all conduits by wiring groups per the criteria provided in section 26 05 34 of the specifications and provide separation between different wiring group conduits and from other electrical service conduits as scheduled in section 26 05 75 of the specifications.
3.4.10. Label all installed AV low voltage conduit at the origins, at each point of termination to a pull box, and at the destination.
3.5. All audio/video low voltage cables shall be provided and installed by the audio/video contractor.

8 GENERAL AUDIO/VIDEO SYSTEM NOTES
SCALE: N.T.S.

TABLE OF CONTENTS					
TERM (1)	TERMINATION FUNCTION	GROUP (2)	QTY (3)	TYPE	ROUTE TO (4)
CA	ANTENNA PANEL TYPE 1	D	2	ANT	ZA
		E	2	STP	ZA
CB	ANTENNA PANEL TYPE 2	D	2	ANT	ZA
		E	1	STP	ZA
CC	ANTENNA PANEL TYPE 3	E	1	STP	ZA
CD	ANTENNA PANEL TYPE 4	E	1	STP	ZA
CE	IN-EAR ANTENNA PANEL	D	1	ANT	ZA
ZA	EXISTING WIRELESS RACK				

NOTES:

PARENTHETICAL TAGS:

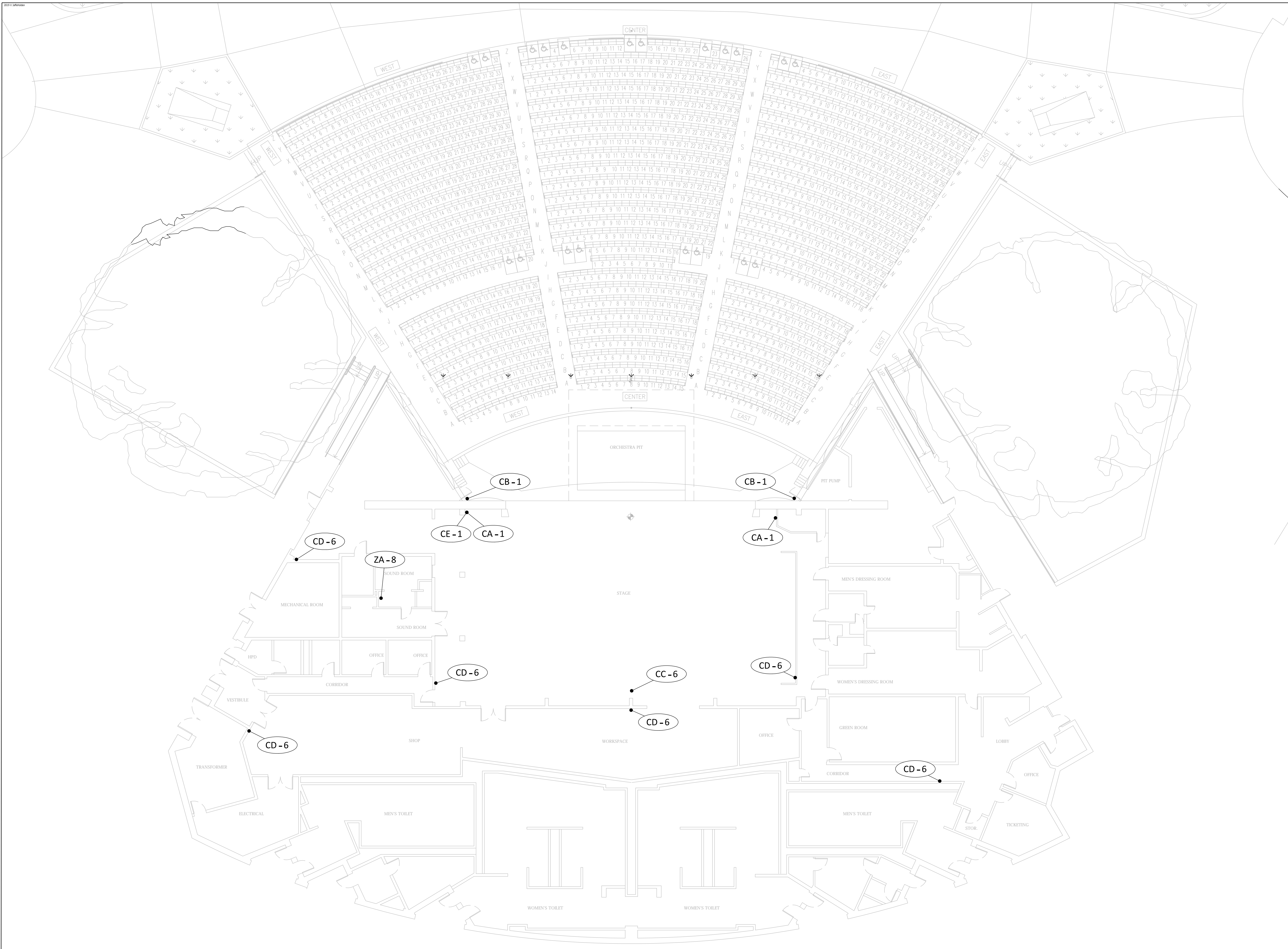
1. DEVICE TERMINATION ID. REFER TO LOCATION DRAWINGS.
2. REFER TO CONDUIT SPECIFICATIONS FOR WIRE GROUP SEPARATION REQUIREMENTS.
3. QUANTITY IS TO EACH TERMINATION ID AS INDICATED IN LOCATION DRAWINGS.
4. WIRING HOME RUNS FROM EACH TERMINATION LOCATION TO "ROUTE TO" TERMINATION WITH NO SPLICES.

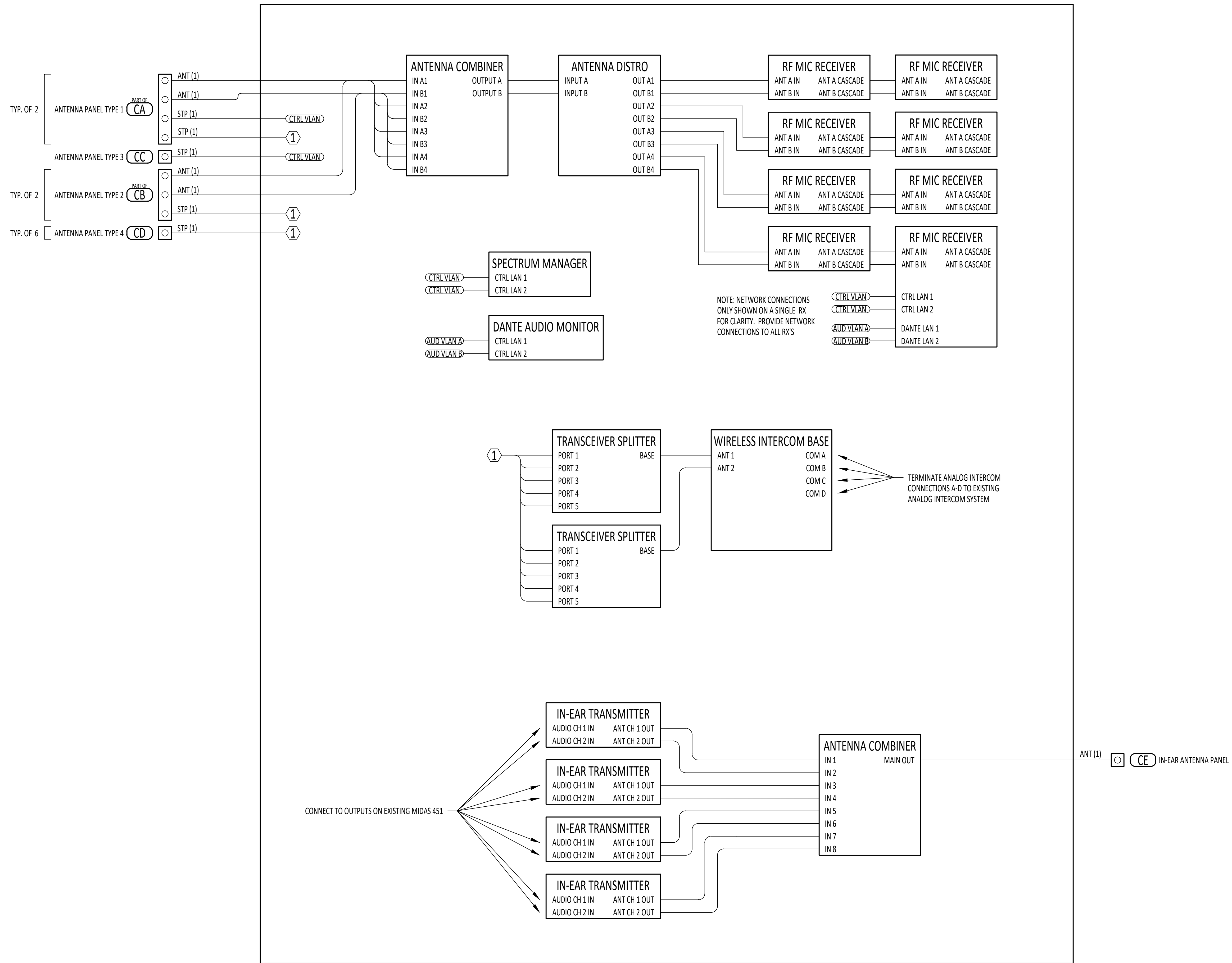
SPECIFICATION REQUIREMENTS FOR CONDUIT AND SPARE CABLING ARE WAIVED FOR THIS PROJECT

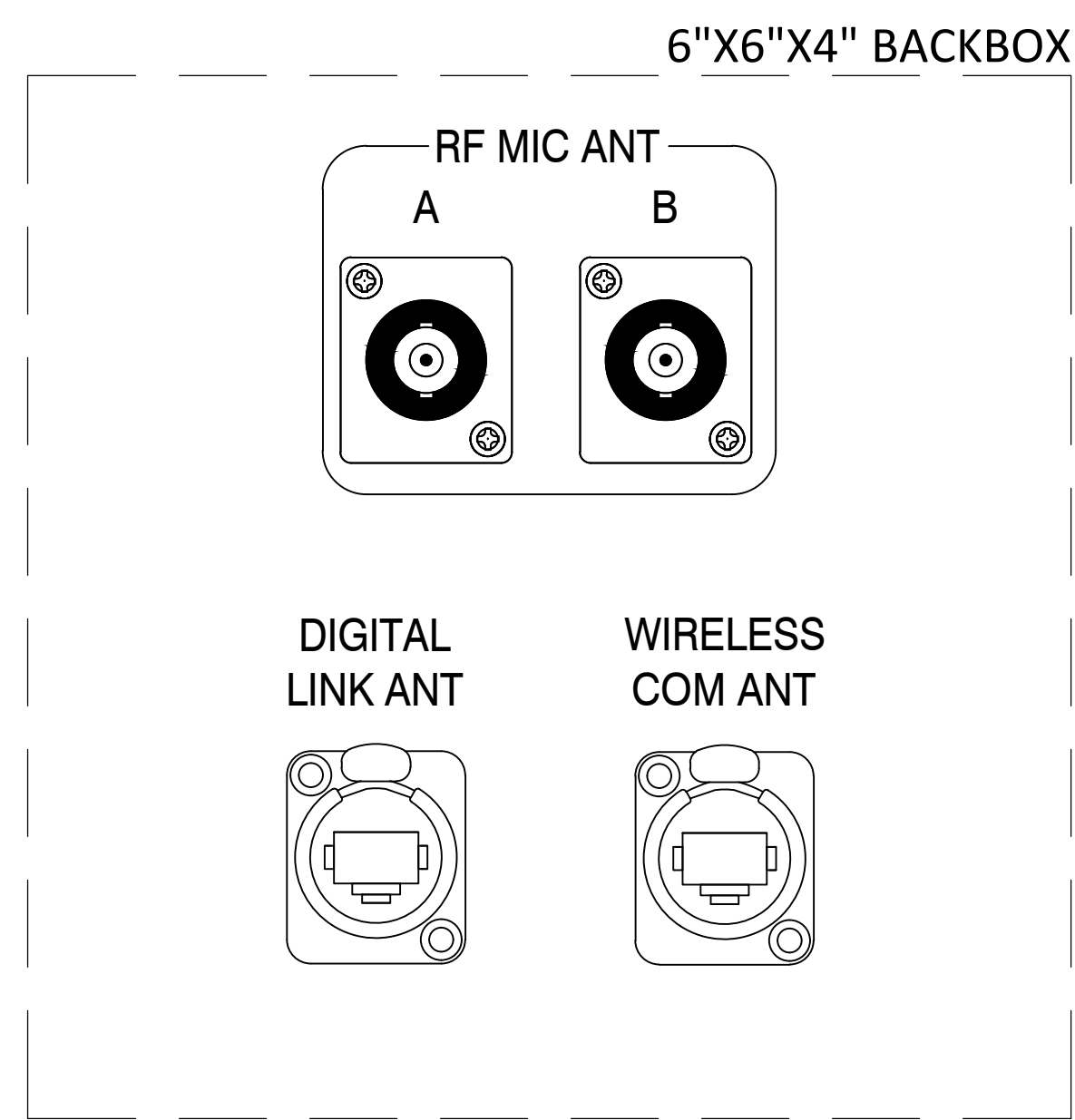
PROVIDE PLENUM RATED VERSIONS OF SPECIFIED CABLING IN LIEU OF INSTALLING CONDUIT.
 PROVIDE BACKBOXES FOR TERMINATION PANELS AS INDICATED ON AV4.01.
 STRAIN RELIEF PLENUM CABLING INSIDE BACKBOX TO KEEP CABLING FROM PULLING OUT IF INADVERTENTLY CAUGHT OR PULLED.

SEE PANEL DRAWINGS IN THE AV4.00 SERIES FOR RECEPTACLE TYPES AND TERMINATIONS.

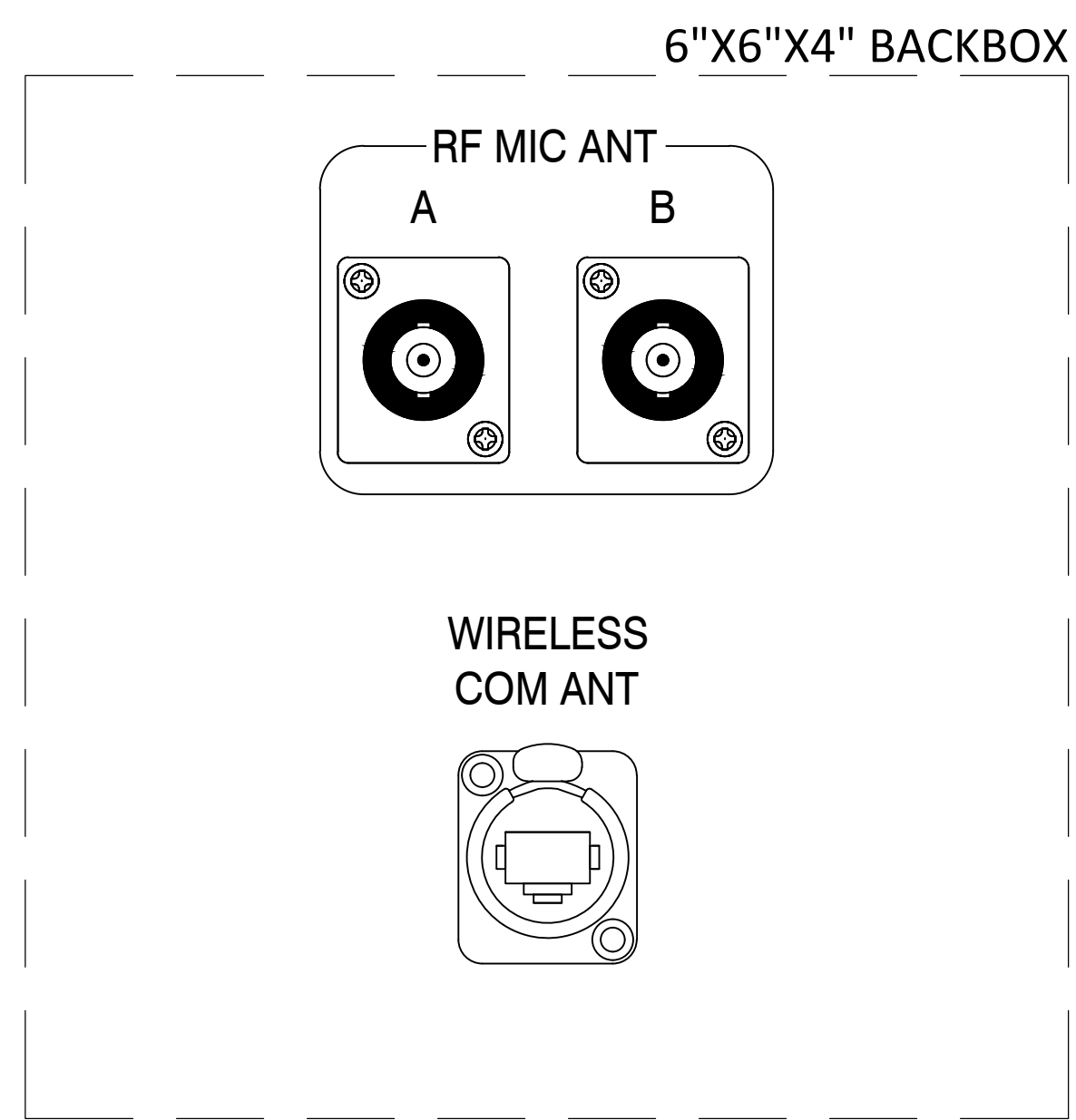
CABLE SCHEDULE			
CABLE TYPE	MANUFACTURER	MODEL	OUTER DIAMETER
MIC	BELDEN	9451	0.135
LINE	BELDEN	1696A	0.234
COM	BELDEN	9460	0.23
LS14	WEST PENN	C206	0.222
LS12	WEST PENN	C207 (X2)	0.26 (EACH)
LS10	WEST PENN	NJ210BKWH (x2)	0.326 (EACH)
LS08	WEST PENN	C208 (x2)	0.498 (EACH)
LSXFR	WEST PENN	226	0.234
70V4	WEST PENN	226	0.234
70V6	WEST PENN	225	0.182
UTP	BELDEN	2412	0.22
STP	BELDEN	10GX52F	0.3
COAX	BELDEN	1794A	0.32
ANT	BELDEN	1694A	0.274
CONTROL	BELDEN	9460	0.23
MMF6	BELDEN	B9E039	0.17
SMF6	BELDEN	B9W039	0.17
ECO1	TRADE	1" EMPTY CONDUIT	
ECO2	TRADE	2" EMPTY CONDUIT	



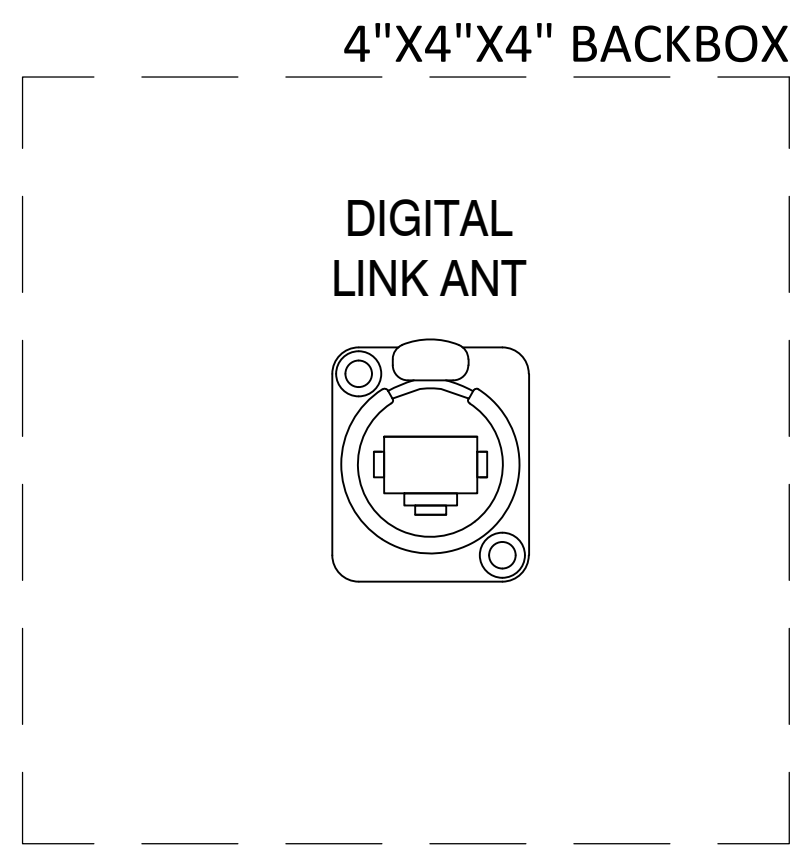




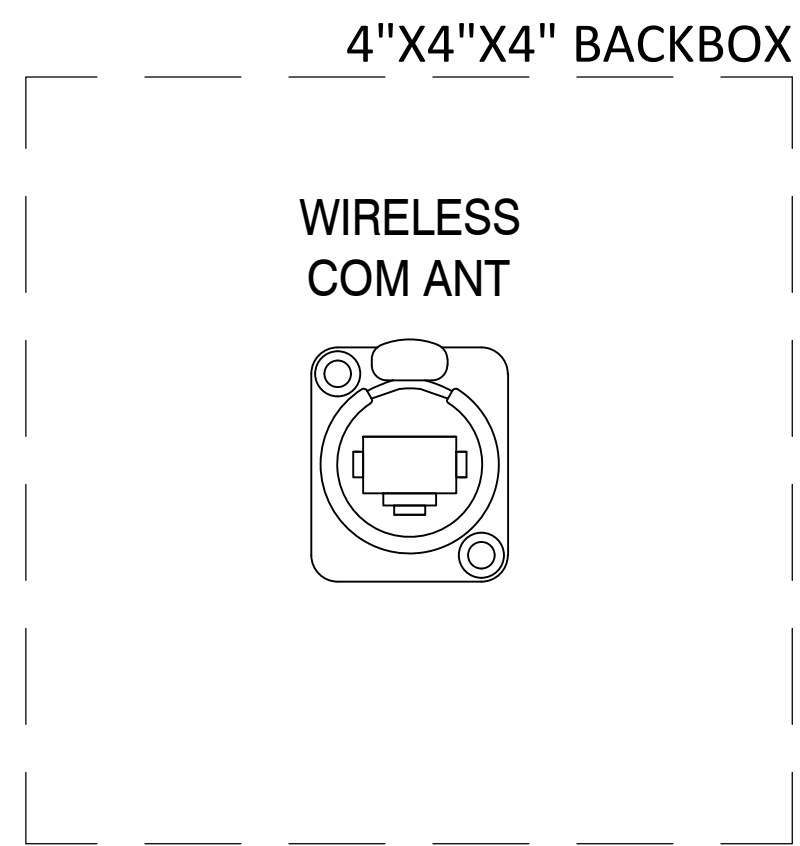
1 PANEL CA
SCALE: 1:1



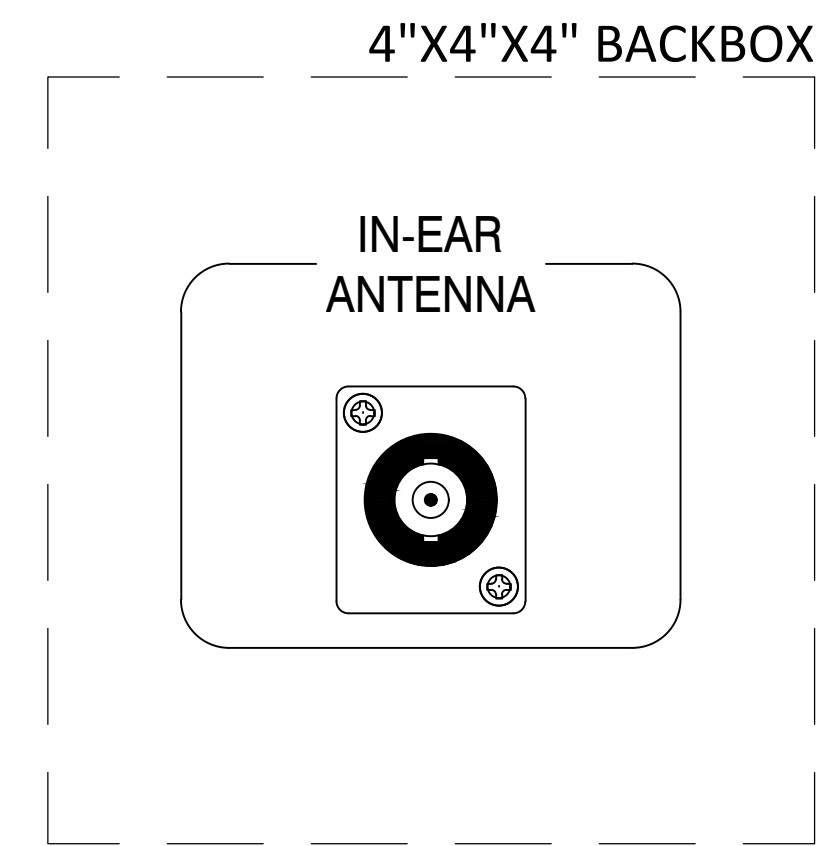
2 PANEL CB
SCALE: 1:1



3 PANEL CC
SCALE: 1:1



4 PANEL CD
SCALE: 1:1



5 PANEL CE
SCALE: 1:1

ZA

BRUSH
NETWORK SWITCH
NETWORK SWITCH
BRUSH
SPECTRUM MANAGER
BLANK
AUDIO MONITOR
BLANK
QUAD RF MIC RECEIVER
QUAD RF MIC RECEIVER
QUAD RF MIC RECEIVER
QUAD RF MIC RECEIVER
RF MIC ANTENNA COMBINER
BLANK
RF MIC ANTENNA DISTRO
QUAD RF MIC RECEIVER
QUAD RF MIC RECEIVER
QUAD RF MIC RECEIVER
QUAD RF MIC RECEIVER
BLANK
WIRELESS INTERCOM BASE
TRANSCIVER SPLITTER X 2
BLANK
DUAL IN-EAR TRANSMITTER
DUAL IN-EAR TRANSMITTER
DUAL IN-EAR TRANSMITTER
DUAL IN-EAR TRANSMITTER
IN-EAR ANTENNA COMBINER
BLANK
8 SPACE BATTERY CHARGER
8 SPACE BATTERY CHARGER
8 SPACE BATTERY CHARGER
8 SPACE BATTERY CHARGER
8 SPACE BATTERY CHARGER
8 SPACE BATTERY CHARGER

- 35RU / 61.25
- 34RU / 59.50
- 33RU / 57.75
- 32RU / 56.00
- 31RU / 54.25
- 30RU / 52.50
- 29RU / 50.75
- 28RU / 49.00
- 27RU / 47.25
- 26RU / 45.50
- 25RU / 43.75
- 24RU / 42.00
- 23RU / 40.25
- 22RU / 38.50
- 21RU / 36.75
- 20RU / 35.00
- 19RU / 33.25
- 18RU / 31.50
- 17RU / 29.75
- 16RU / 28.00
- 15RU / 26.25
- 14RU / 24.50
- 13RU / 22.75
- 12RU / 21.00
- 11RU / 19.25
- 10RU / 17.50
- 9RU / 15.75
- 8RU / 14.00
- 7RU / 12.25
- 6RU / 10.50
- 5RU / 08.75
- 4RU / 07.00
- 3RU / 05.25
- 2RU / 03.50
- 1RU / 01.75
- 0RU / 00.00

THIS IS AN EXISTING RACK
REFER TO SPEC 27 41 00 SECTION 3.10 FOR ADDITIONAL
RACK ASSEMBLY REQUIREMENTS.