

### Spratt Stadium Field Speaker System

4525 Downs Drive  
Saint Joseph, MO 64507

816-271-5877

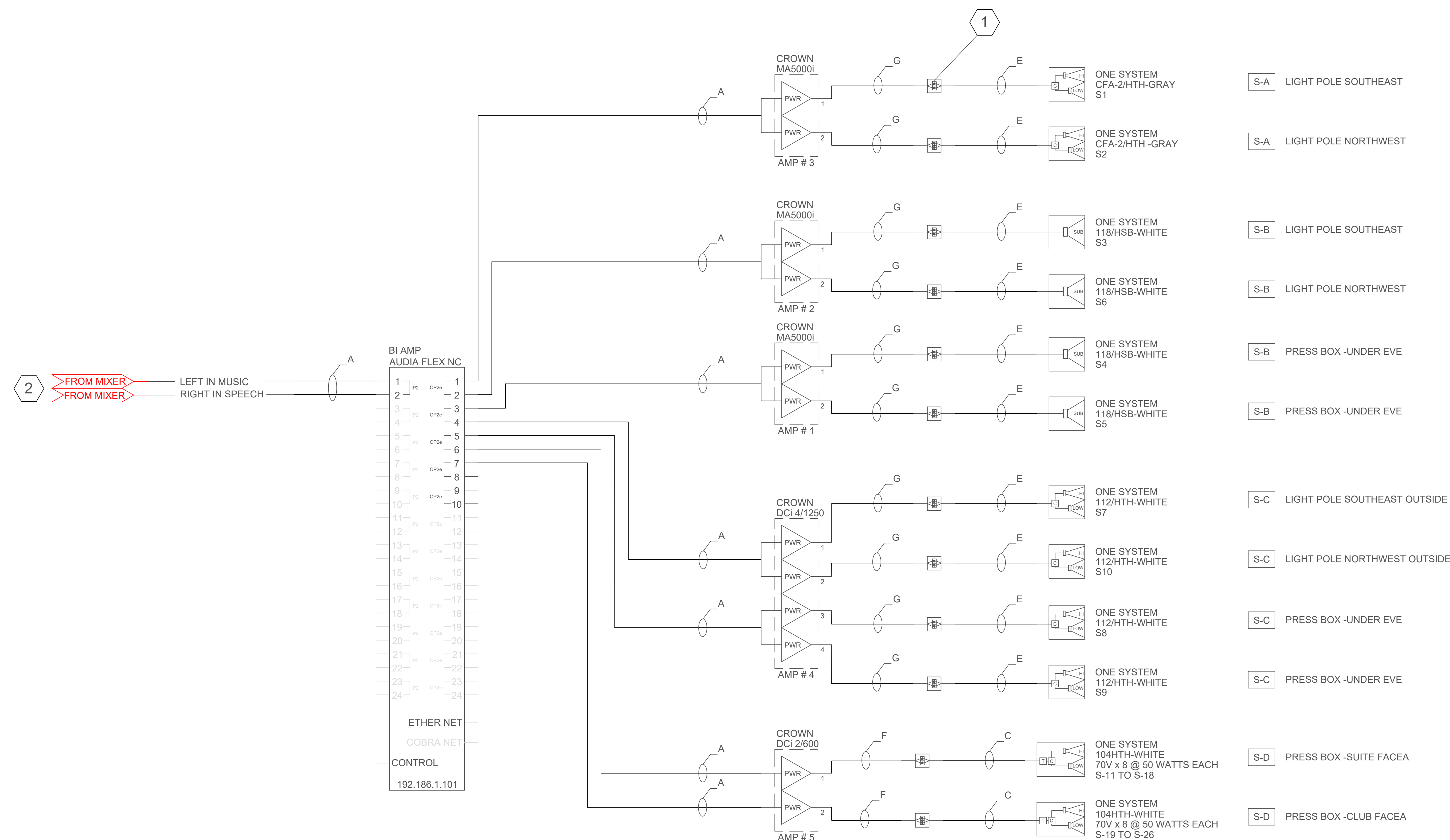
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#### NOTES

**1** SPLICING JUNCTION BOX  
ALL THE CABLE THAT IS GOING TO BE RUN ABOVE THE CEILING TILE NEEDS TO BE PLENUM CABLE. ALL THE CABLE THAT PENETRATES THE BUILDING AND IS EXPOSED TO THE ELEMENTS NEEDS TO BE UV RATED CABLE. THE SOUND CONTRACTOR NEEDS TO COORDINATE WITH THE PROJECT ELECTRICAL CONTRACTOR (RS ELECTRIC CORP) TO INSTALL A 4-11/16" SQUARE BY 2-1/8" DEEP BOX LIKE THE RACO 257 WITH A LID AT THE SIGHT OF THE PENETRATION IN THE PLENUM SPACE TO MAKE THE SPLICE BETWEEN THE PLENUM CABLE AND THE UV RATED CABLE. A TWO BAY TERMINAL STRIP NEEDS TO BE MOUNTED IN THE RACO BOX. USE THE CORRECT SIZE NON-INSULATED FORKED SPADES FOR THE SIZE OF THE WIRE AND THE SIZE OF THE SCREWS ON THE TERMINAL STRIP. A CONDUIT NEEDS TO THEN CONNECT TO AN EXTERIOR WEATHERPROOF BOX SUCH AS A HUBBELL PDB77550GY WITH APPROPRIATE GASKET SEALED COVER PLATE. THE EXTERIOR BOX SHALL BE SEALED ON THE TOP AND SIDES WITH A UV AND MILDEW RESISTANT CAULK. CABLE EXITING THE BOX ON THE BOTTOM CAN USE A NON-WEATHERPROOF CONNECTOR TO ALLOW THE BOX TO DRAIN. CABLES EXITING THE SIDES SHALL USE AN APPROPRIATELY SIZED WEATHERPROOF CABLE GLAND CONNECTOR SUCH AS HUBBLE SEC50GA. PROJECT ELECTRICAL CONTRACTOR (RS ELECTRIC CORP) WILL PROVIDE AND INSTALL ALL BOXES AND CONDUIT FOR BUILDING PENETRATION.

**2** OWNER PROVIDED EQUIPMENT  
MIXER WILL BE PROVIDED BY THE OWNER. THE MIXER WILL LIVE IN THE SOUND EQUIPMENT RACK. ANY THING THAT IS DRAWN IS RED WILL BE PROVIDED AND INSTALLED BY THE OWNER.

WIRE LEGEND			
SYMBOL	VENDOR	MODEL #	DESCRIPTION
A	LIBERTY CABLE	22-1P-DSP-E2-WHT	MIC CABLE SHIELDED PAIR OF 22AWG PLENUM - WHITE
B	LIBERTY CABLE	16-2C-BLK	SPEAKER CABLE 2 CONDUCTOR 16 AWG BURNAL- BLACK
C	LIBERTY CABLE	14-2C-DB-BLK	SPEAKER CABLE 2 CONDUCTOR 14 AWG DIRECT BURIAL- BLACK
D	LIBERTY CABLE	12-2C-DB-BLK	SPEAKER CABLE 2 CONDUCTOR 12 AWG DIRECT BURIAL- BLACK
E	LIBERTY CABLE	10-2C-DB-BLK	SPEAKER CABLE 2 CONDUCTOR 10 AWG DIRECT BURIAL- BLACK
F	LIBERTY CABLE	14-2C-P-WHT	SPEAKER CABLE 2 CONDUCTOR 14 AWG PLENUM-WHITE
G	LIBERTY CABLE	10-2C-TPP-WHT	SPEAKER CABLE 2 CONDUCTOR 10 AWG PLENUM-WHITE



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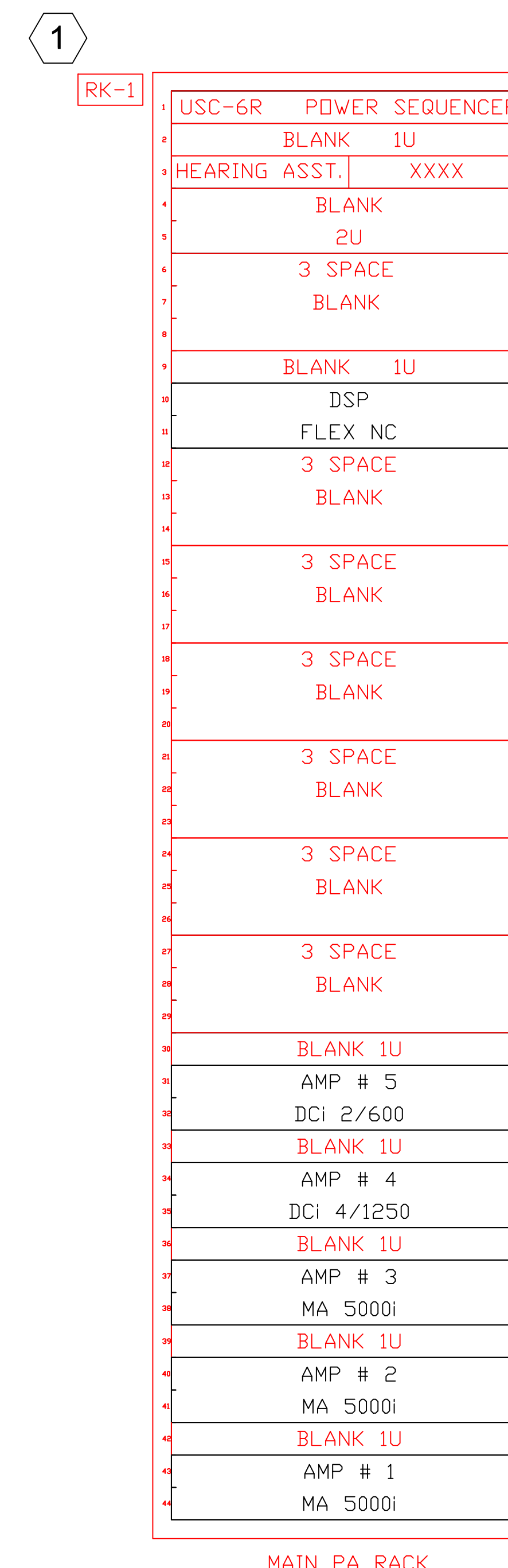
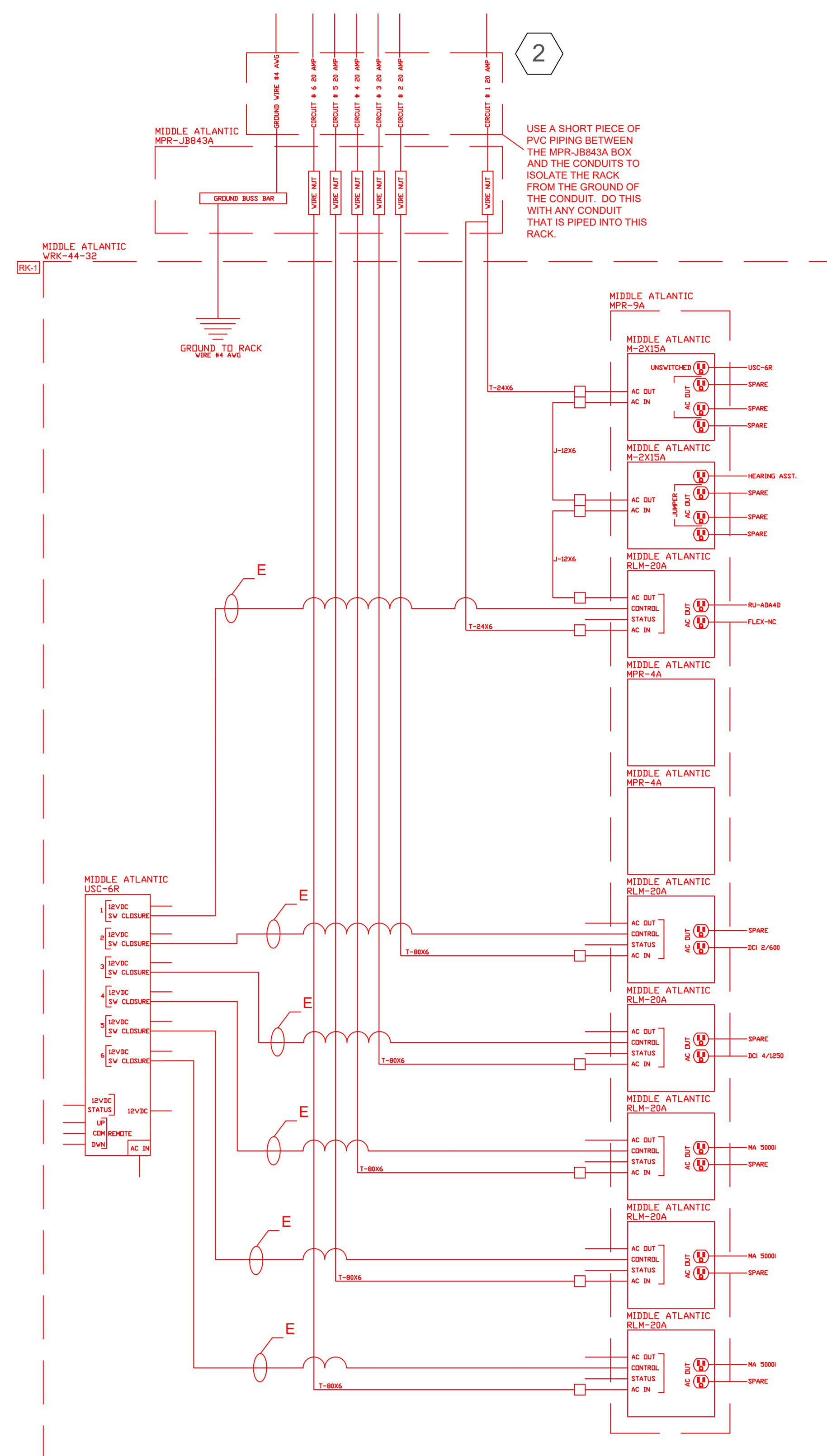
1 EQUIPMENT RACK REQUIREMENTS: OWNER TO PROVIDE ALL RACK COMPONENTS AS PER DRAWINGS SS-2. OWNER TO SUPPLY THE RACK WITH SIDE AND BACK DOOR, BLANK AND VENTED RACK PANELS AND ALL SEQUENCING POWER MODALS AND CABLING. OWNER ALSO TO PROVIDE ALL LOW AND HIGH VIOLATED CABLING AND THE LABOR TO INSTALL IT. OWNER PROVIDED EQUIPMENT IS IN RED.

2 ELECTRICAL REQUIREMENTS: THE SOUND SYSTEM WILL REQUIRE 6 TWENTY AMP CIRCUITS. ALL OF THESE CIRCUITS MUST ORIGINATE FROM THE SAME ELECTRICAL PANEL. EACH ONE OF THESE CIRCUITS MUST HAVE TWO # 12 AWG THNN WIRES. ONE FOR THE HOT AND ONE FOR THE NEUTRAL. THE SOUND SYSTEM GROUND MUST BE A SINGLE POINT GROUND SYSTEM AND ALSO MUST BE GROUNDED AT THAT SAME ELECTRICAL PANEL THAT THE SOUND CIRCUITS ARE LOCATED IN. THE 6 TWENTY AMP CIRCUITS IN THE AMP RACK NEED ONE # 4 AWG THNN WIRE FROM THE RACK TO THE PANEL FOR GROUND. THE SOUND RACK CIRCUITS MUST HAVE AN ISOLATED GROUND AND MUST GET THEIR GROUND FROM THE GROUND WIRE THAT IS RAN ALONG WITH THE HOTS AND NEUTRALS NOT THE CONDUIT OR THE BUILDING. A #4 AWG THNN WIRE SHOULD CONNECT THE MPR-JB843A BUSS BAR TO THE RACK. USE A SHORT PIECE OF PVC PIPING BETWEEN THE MPR-JB843A BOX AND THE CONDUITS TO ISOLATE THE RACK FROM THE GROUND OF THE CONDUIT. **DO THIS WITH ANY CONDUIT THAT IS PIPED INTO THIS RACK.** IF YOU UNHOOK EITHER ONE OF THOSE GROUND WIRES THE RACK ELECTRICAL CIRCUIT ARE ISOLATED FROM GROUND.

3 ENLARGED VIEW OF SOUND SYMBOL LEGEND ON SHEET SS-2A.

SHEET NUMBER

**SS-2**



MAIN PA RACK

1 SOUND SYSTEM POWER ONE LINE  
SS-2 SCALE: NONE

2 SOUND SYSTEM POWER ONE LINE  
SS-2 SCALE: NONE

3

SYMBOL	DESCRIPTION	REMARKS
S-A	...	...
S-B	...	...
S-C	...	...
S-D	...	...
RK-1	...	...

3

SPEAKER	SPEAKER #	BRAND	MODEL #	MOUNTING BRACKET	CABINET ORIENTATION	HORN ORIENTATION	SPEAKER SPLAY	SPEAKER SPLAY
					VERTICAL	VERTICAL	VERTICAL	HORIZONTAL
S-A	S-1, S-2	ONE SYSTEM	CFA-2HTH-WHITE	PM-M-WHITE	VERTICAL	30 X 55	345	270
S-B	S-3, S-4	ONE SYSTEM	118HSB-WHITE	PM-M-WHITE	VERTICAL	N/A	305	270
S-B	S-4, S-5	ONE SYSTEM	118HSB-WHITE	118HSB-UM-WHITE	HORIZONTAL	N/A	305	270
S-C	S-7	ONE SYSTEM	112HSB-WHITE	PM-M-WHITE	VERTICAL	60 X 105	305	240
S-C	S-10	ONE SYSTEM	112HSB-WHITE	PM-M-WHITE	VERTICAL	60 X 105	305	300
S-C	S-8, S-9	ONE SYSTEM	112HSB-WHITE	112HTH-UM-WHITE	HORIZONTAL	60 X 105	305	270
S-D	S-11 TO S-18	ONE SYSTEM	104HTH-WHITE	PT-10M-WHITE	VERTICAL	80 X 110	300	270
S-D	S-19 TO S-28	ONE SYSTEM	104HTH-WHITE	PT-10M-WHITE	VERTICAL	80 X 110	285	270

3 SOUND SYSTEM KEYS  
SS-2 SCALE: NONE

Design Commissioned By Missouri Western  
State University

Date 4/8/2016 RFP#

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SOUND SYMBOL LEGEND				
SYMBOL	DESCRIPTION	SOUND CONTRACTOR	ELECTRICAL CONTRACTOR	NOTES
<b>S-A</b> #	SPEAKER ONE SYSTEM CFA-2/HTH-GRAY	PROVIDED AND INSTALLED BY SOUND CONTRACTOR.	ELECTRICAL CONTRACTOR TO PROVIDE 4-11/16" SQUARE 2-1/8" DEEP BOX LIKE RACO 257 WITH A SINGLE GANG MUD RING. RUN CONDUIT BACK TO RK-1. SEE SOUND CONTRACTOR FOR SIZE OF CONDUIT AND PATH.	POUND SING = SPEAKER NUMBER
<b>S-B</b> #	SPEAKER SUB ONE SYSTEM 118/HSB-WHITE	PROVIDED AND INSTALLED BY SOUND CONTRACTOR.	ELECTRICAL CONTRACTOR TO PROVIDE 4-11/16" SQUARE 2-1/8" DEEP BOX LIKE RACO 257 WITH A SINGLE GANG MUD RING. RUN CONDUIT BACK TO RK-1. SEE SOUND CONTRACTOR FOR SIZE OF CONDUIT AND PATH.	POUND SING = SPEAKER NUMBER
<b>S-C</b> #	SPEAKER ONE SYSTEM 112/HSB-WHITE	PROVIDED AND INSTALLED BY SOUND CONTRACTOR.	ELECTRICAL CONTRACTOR TO PROVIDE 4-11/16" SQUARE 2-1/8" DEEP BOX LIKE RACO 257 WITH A SINGLE GANG MUD RING. RUN CONDUIT BACK TO RK-1. SEE SOUND CONTRACTOR FOR SIZE OF CONDUIT AND PATH.	POUND SING = SPEAKER NUMBER
<b>S-D</b> #	SPEAKER ONE SYSTEM 104HTH-WITE	PROVIDED AND INSTALLED BY SOUND CONTRACTOR.	ELECTRICAL CONTRACTOR TO PROVIDE 4-11/16" SQUARE 2-1/8" DEEP BOX LIKE RACO 257 WITH A SINGLE GANG MUD RING. RUN CONDUIT BACK TO RK-1. SEE SOUND CONTRACTOR FOR SIZE OF CONDUIT AND PATH.	POUND SING = SPEAKER NUMBER
<b>RK-1</b>	SOUND EQUIPMENT RACK MIDDLE ATLANTIC WRK-44-32 & SPN-44-312	PROVIDED AND INSTALLED BY OWNER.	ALL HIGH VOLTAGE WIRING TO BE DONE BY ELECTRICAL CONTRACTOR. ALL THE CONDUIT FOR THE LOW VOLTAGE WIRING IS TO BE DONE BY THE OWNER. SOUND SYSTEM NEEDS 9 ISOLATED GROUND 20 AMP CIRCUITS. WIRE AS PER DRAWING 1 ON SS-2.	

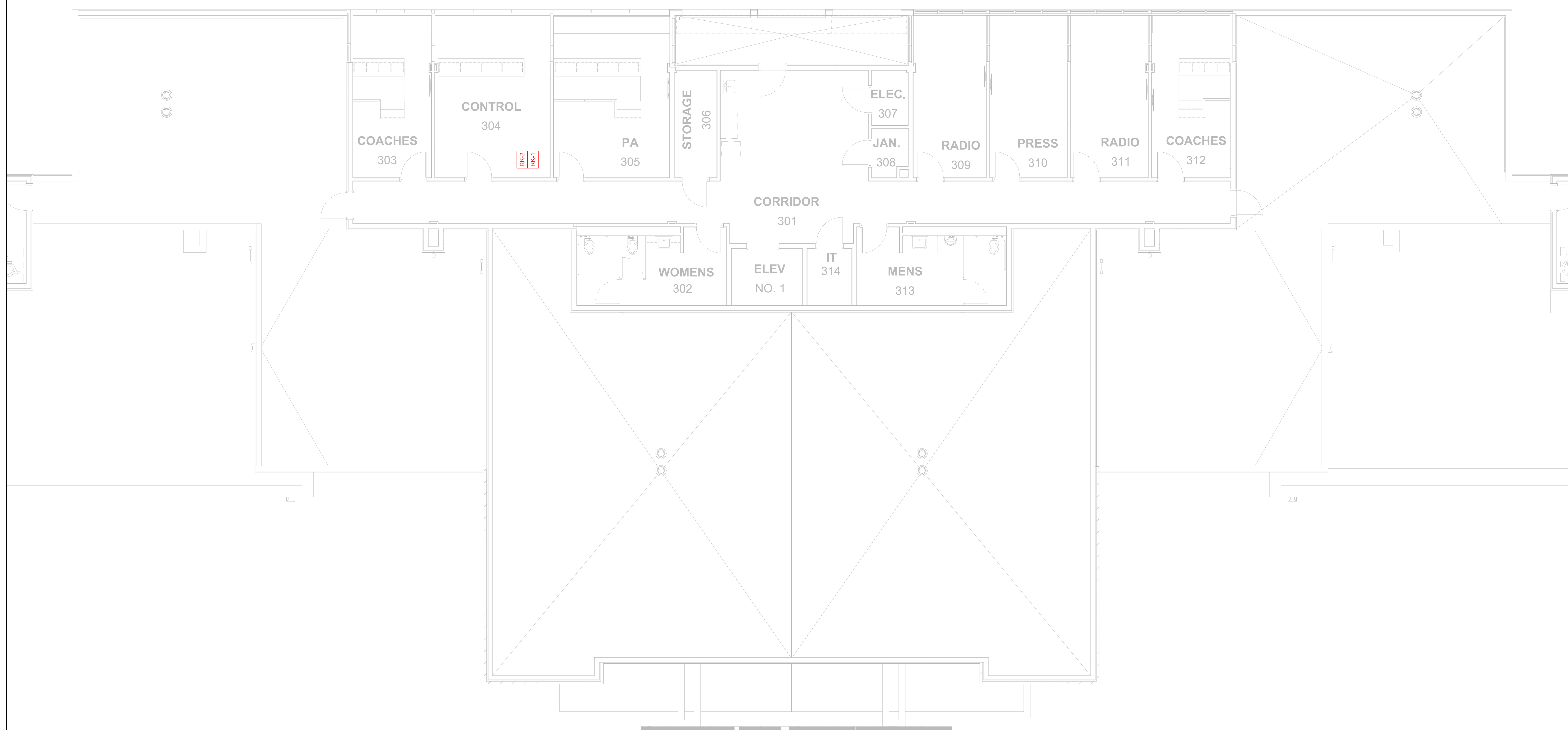
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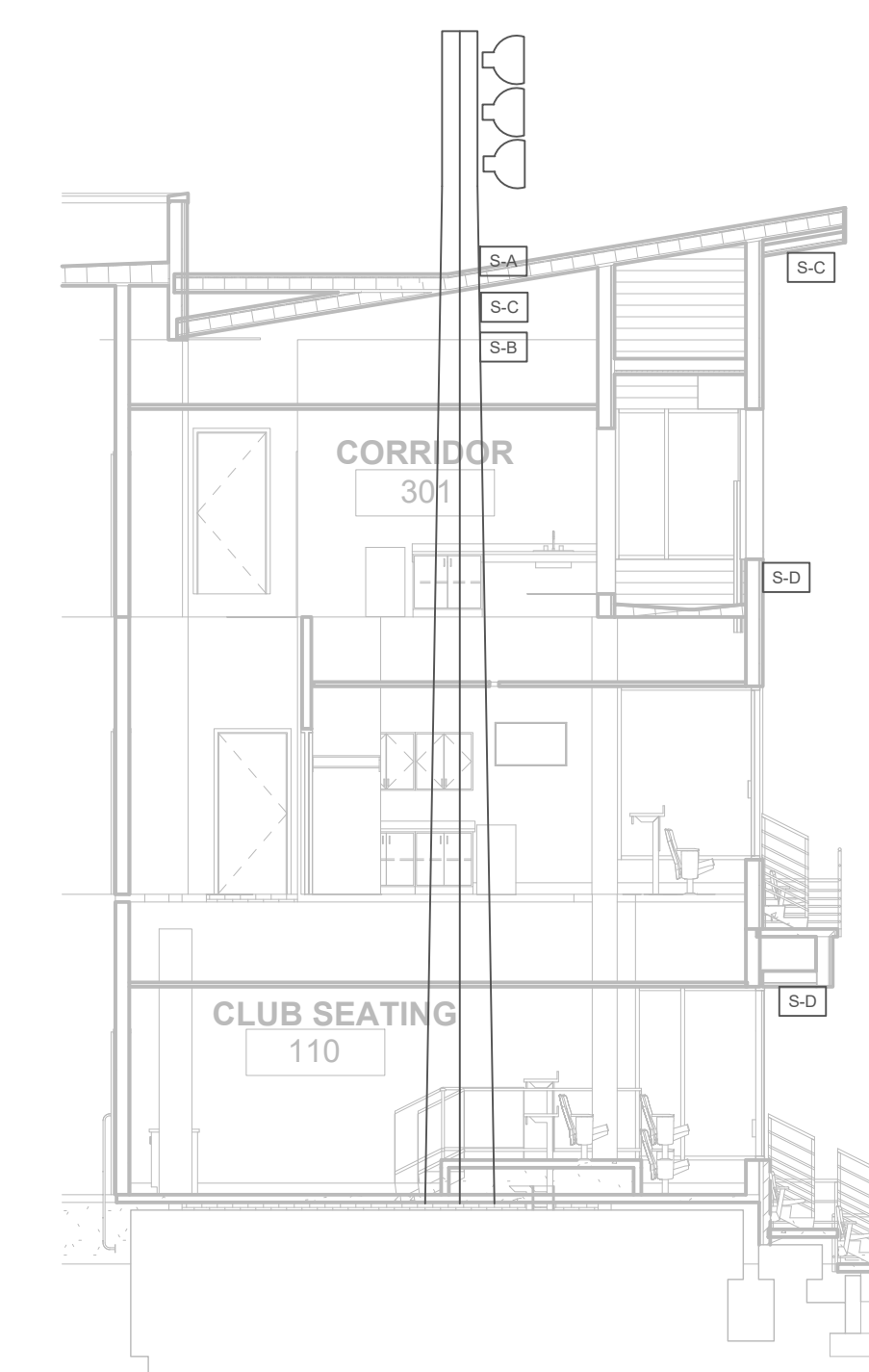
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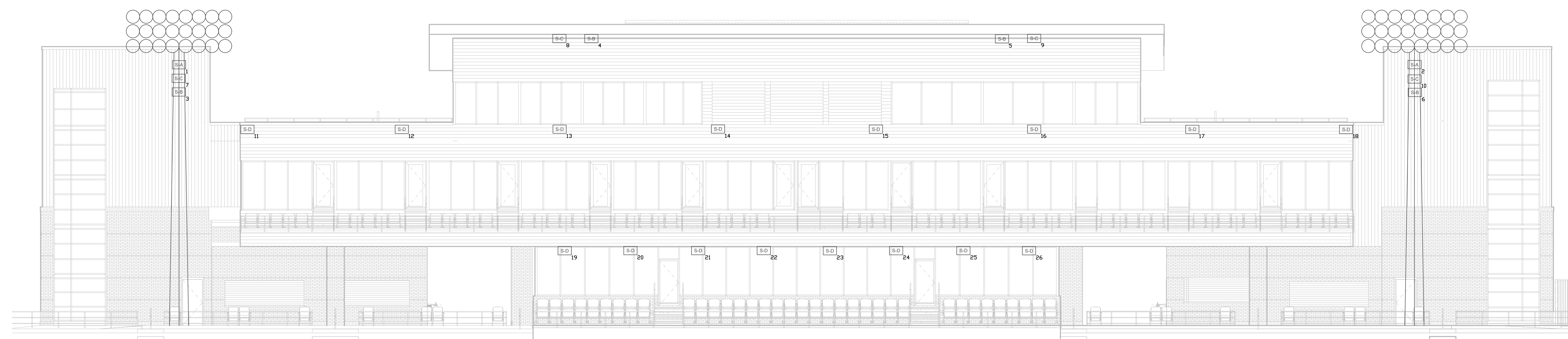
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NOTES



**1**  
SOUND SYSTEM SPEAKER LAYOUT  
SS-4 SCALE: 1/8" = 1'-0"



**2**  
SOUND SYSTEM SPEAKER LAYOUT  
SS-4 SCALE: 1/8" = 1'-0"

SHEET NUMBER

**SS-4**

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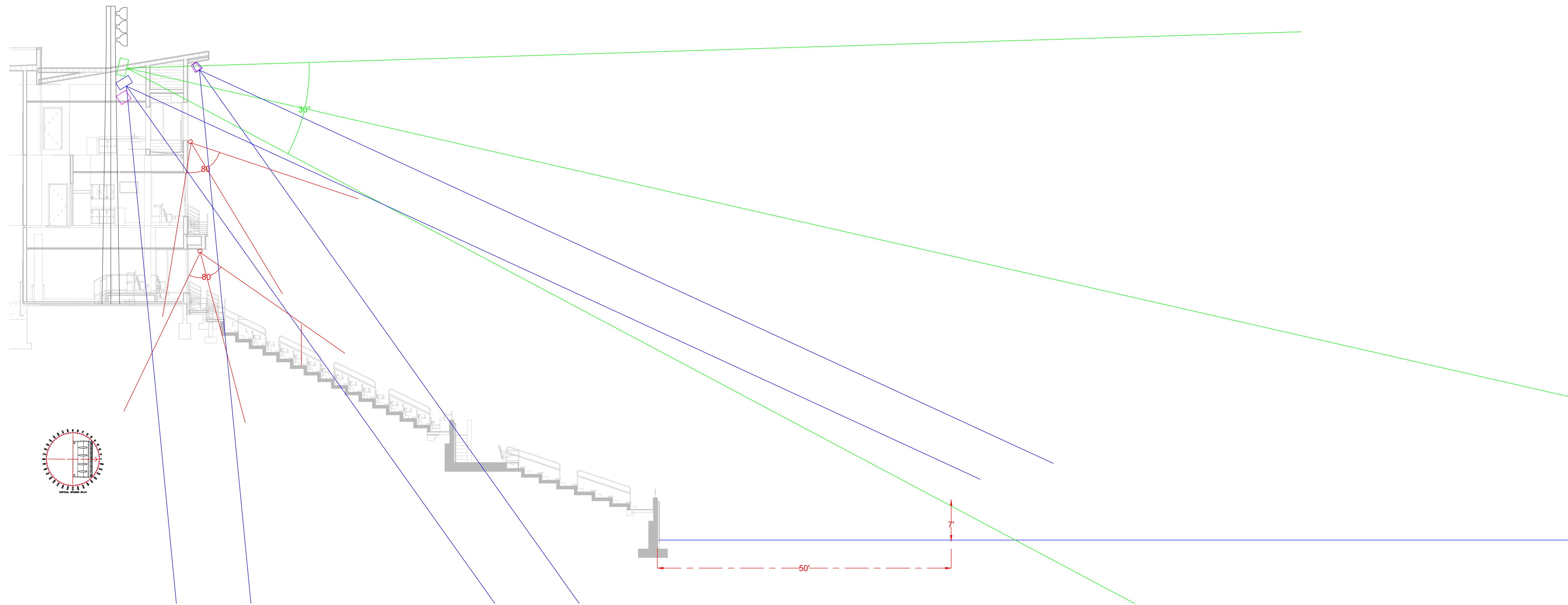
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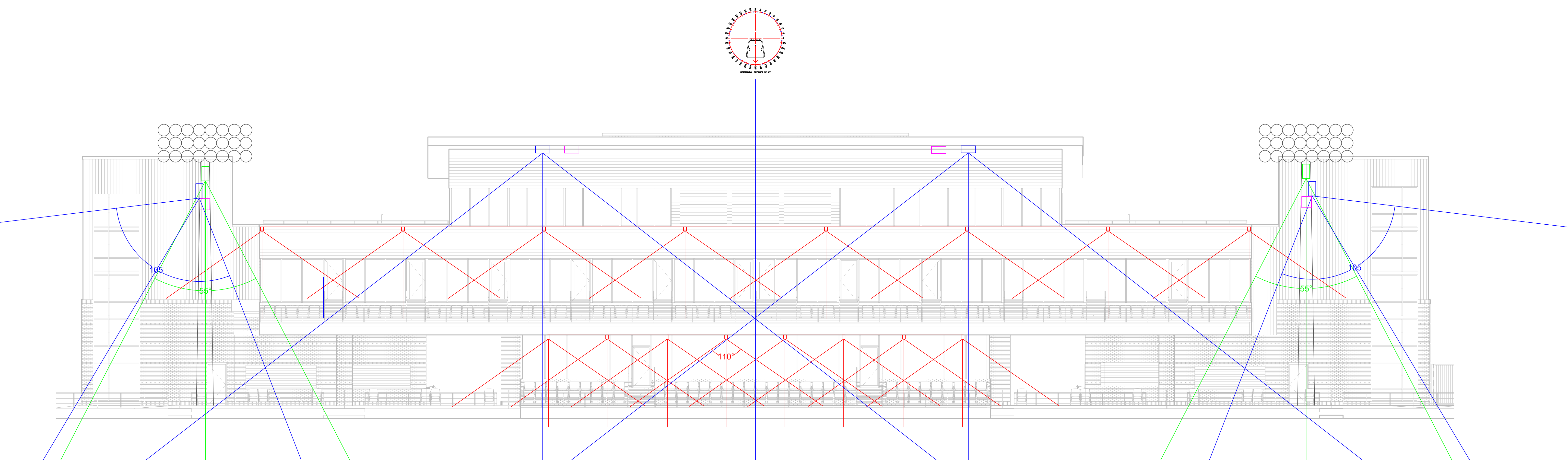
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**1** SOUND SYSTEM SPEAKER COVERAGE  
SS-5 SCALE: 1/8" = 1'-0"



**2** SOUND SYSTEM SPEAKER COVERAGE  
SS-5 SCALE: 1/8" = 1'-0"

SHEET NUMBER

**SS-5**

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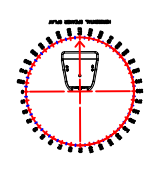
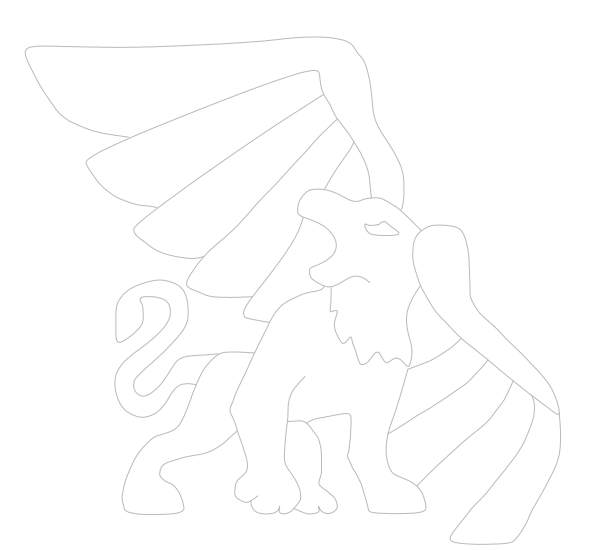
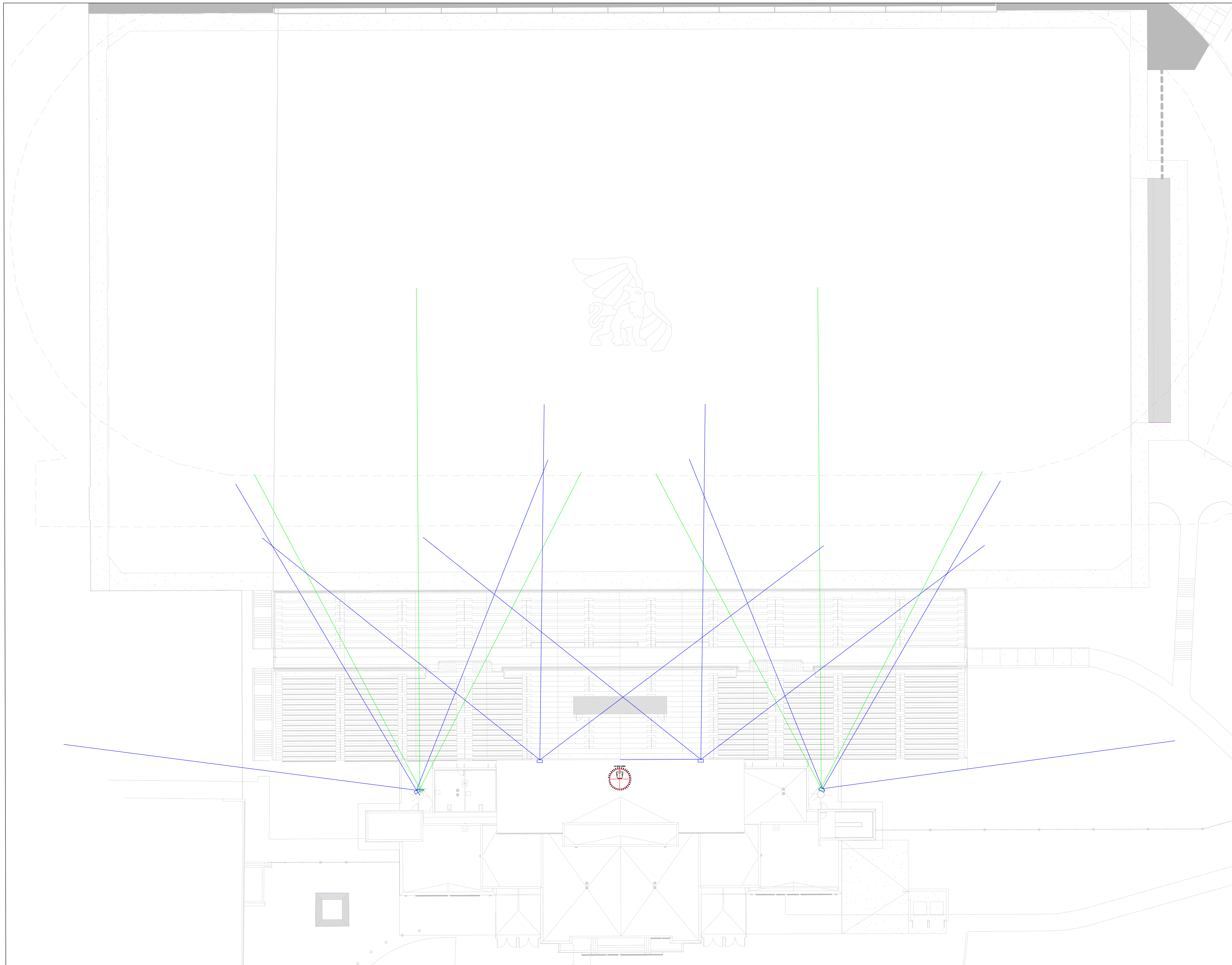
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NOTES

SHEET NUMBER

**SS-6**



1 SOUND SYSTEM SPEAKER COVERAGE  
SS-6 SCALE: 1/8" = 1'-0"