

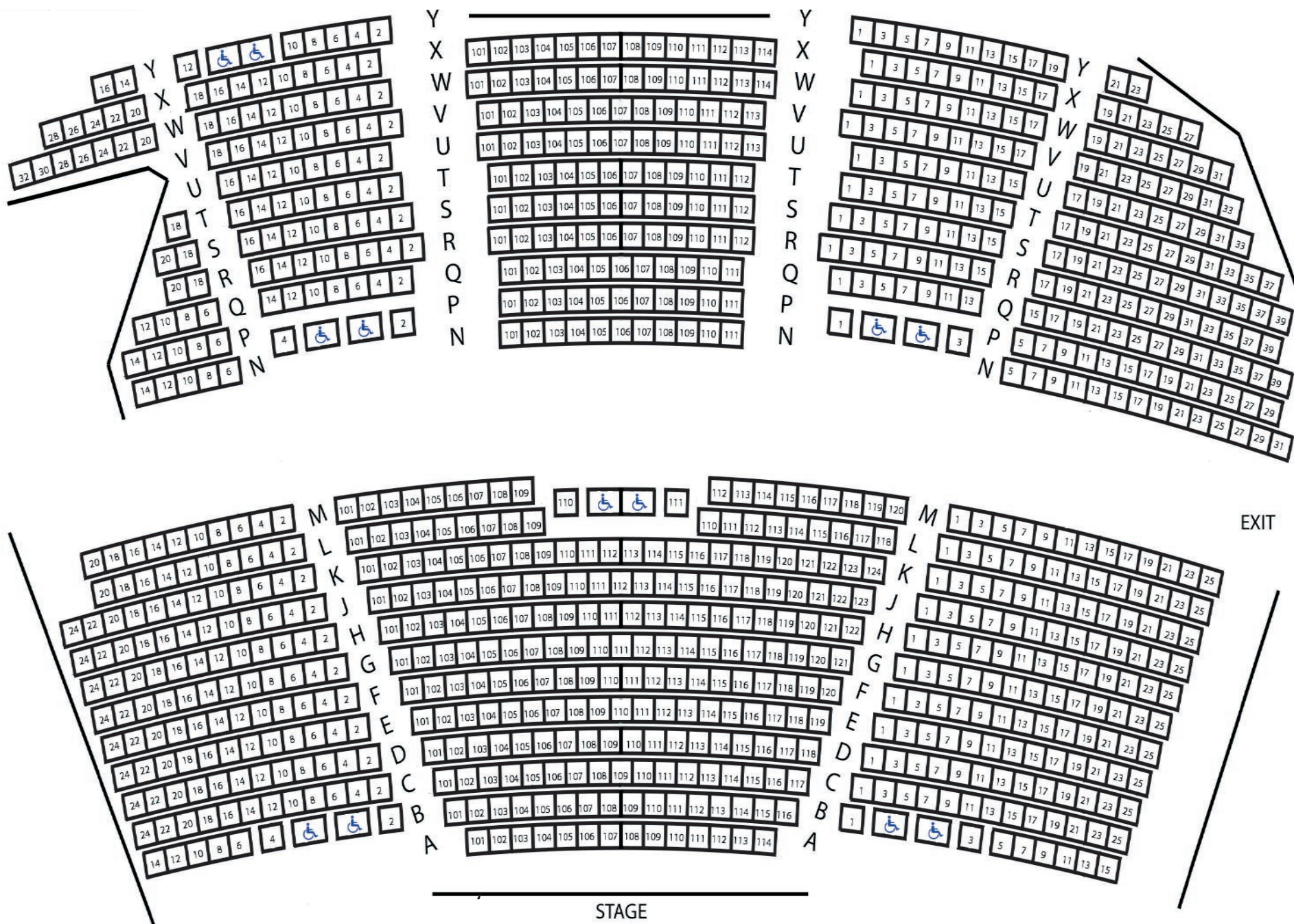


Melrose Performing Arts Center

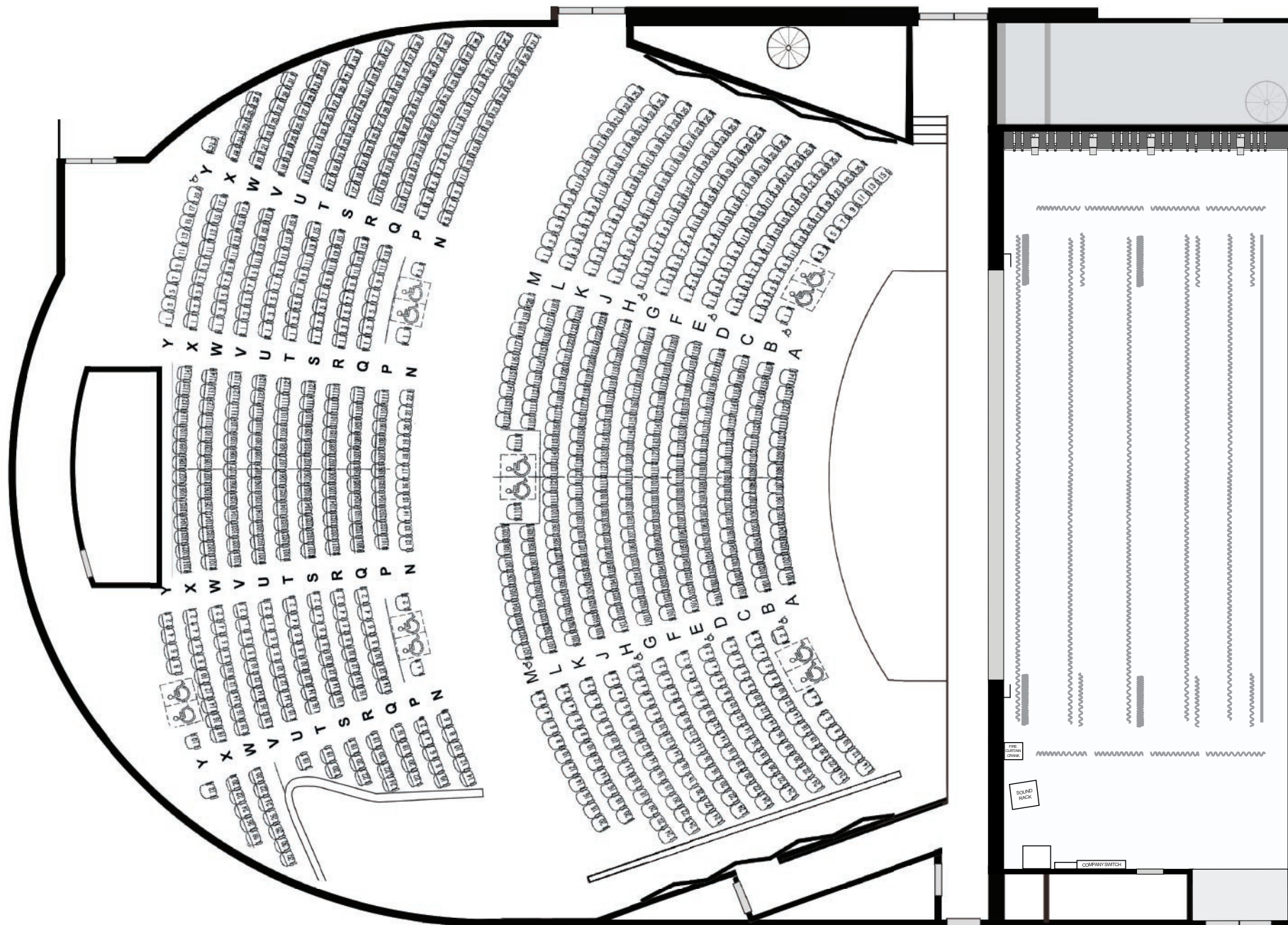
Melrose Veteran's Memorial Middle School

350 Lynn Fells Parkway, Melrose, MA, 02176

5/20/2010



Melrose Performing Arts Center
 350 Lynn Fells Parkway, Melrose, MA, 02176

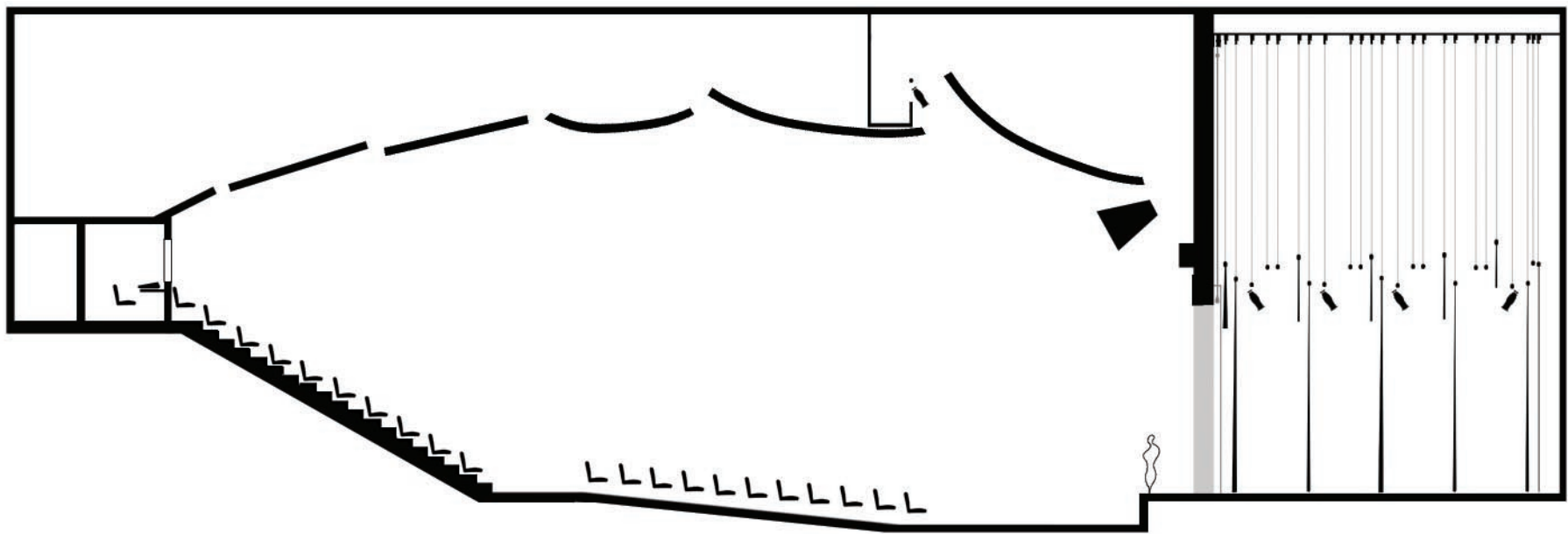


AUDITORIUM PLAN

Melrose Performing Arts Center

350 Lynn Fells Parkway, Melrose, MA, 02176

Scale 1"= 16'



Melrose Performing Arts Center
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CROSS SECTION

LINESET	NAME	SIZE	PLASTER DIST.
	BACK WALL OF STAGE		33' - 6"
24	SCENIC PIPE (WHITE CYC)	48' X 20'	31' - 6"
23	SCENIC PIPE (OLD WHITE CYC)	50' X 20'	30' - 8"
22	BLACK LEG SET	2 X 8' X 20'	30' - 2"
21	4th ELECTRIC W/ RACEWAY		28' - 8"
20	BLACK BORDER	50' X 8'	27' - 2"
19	SCENIC PIPE		26' - 2"
18	SCENIC PIPE		25' - 2"
17	BLACK LEG SET	2 X 8' X 20'	23' - 2"
16	BLACK BORDER	50' X 8'	22' - 2"
15	SCENIC PIPE		20' - 2"
14	SCENIC PIPE		19' - 2"
13	3rd ELECTRIC W/ RACEWAY		17' - 8"
12	BLACK TRAVELER	50' X 20	16' - 2"
11	BLACK BORDER	48' X 8'	15' - 2"
10	SCENIC PIPE		14' - 2"
9	SCENIC PIPE		13' - 2"
8	2nd ELECTRIC W/ RACEWAY		10' - 8"
7	SCENIC PIPE (SCRIM)	48' X 20'	9' - 2"
6	BLACK LEG SET	2 X 8' X 20'	8' - 2"
5	BLACK BORDER	50' X 8'	6' - 2"
4	SCENIC PIPE		5' - 2"
3	1st ELECTRIC W/ RACEWAY		3' - 8"
2	MAIN CURTAIN		2' = 2"
1	VALANCE	50' X 8'	1' = 2"
0	FIRE CURTAIN	50' X 20'	0' - 4"
	PROSCENIUM	48' X 18' X 2'	0 X 0
	EDGE OF APRON		-7'
	FIRST ROW		-29'
	CENTER WHEEL CHAIR RAIL		-56'
	START OF STADIUM SEATING		-71'
	FRONT OF CONTROL BOOTH		-102'

NOTES

The proscenium is 48' wide x 18' tall

Total Stage width is 84' (22' Stage Left, 14' Stage Right)

Grid is at 44'

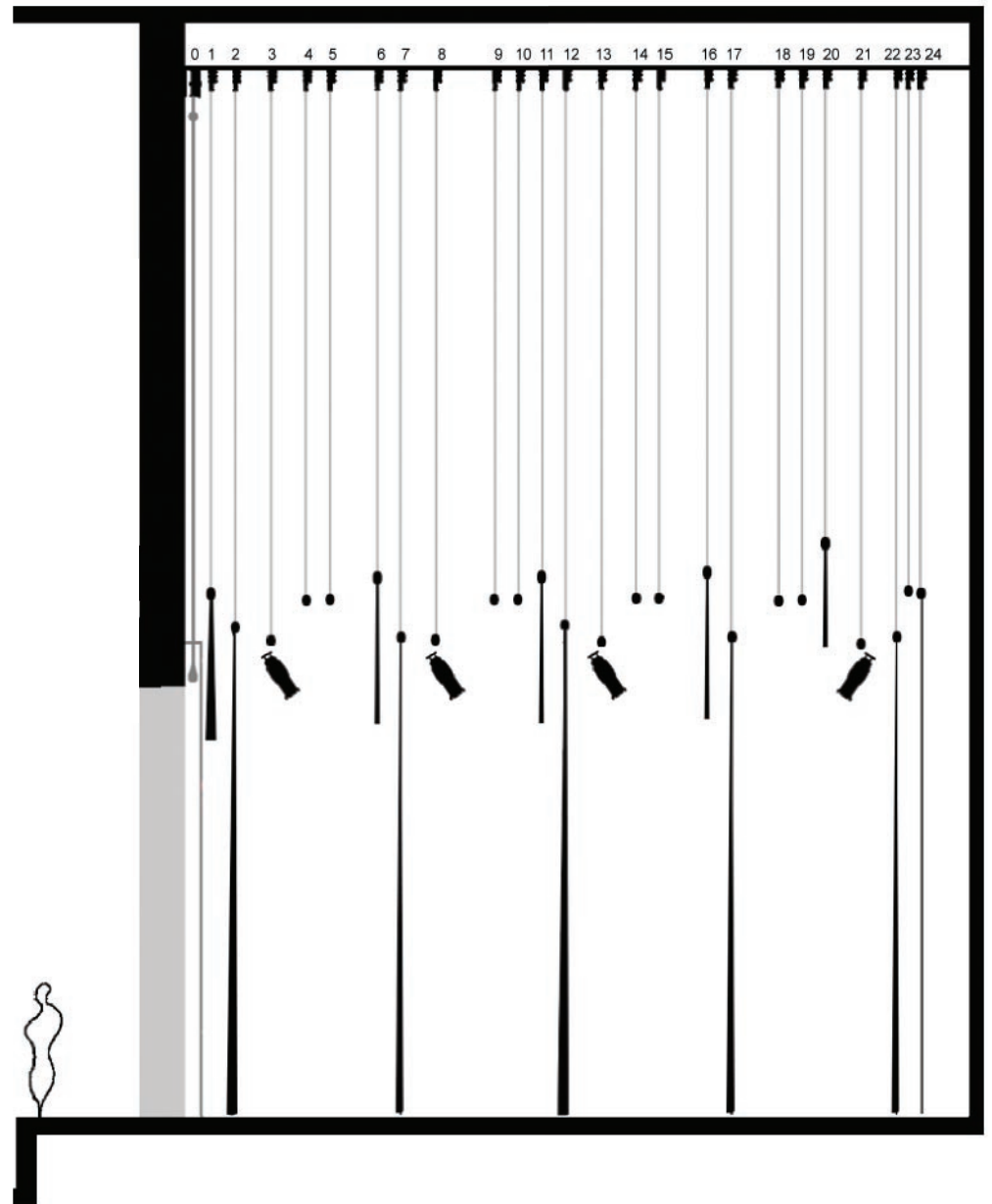
Catwalk position is about 36' up and 28' out

All pipes are 60' long

Widest point in the auditorium is 107'

Typical trims are marked with tape on some line sets

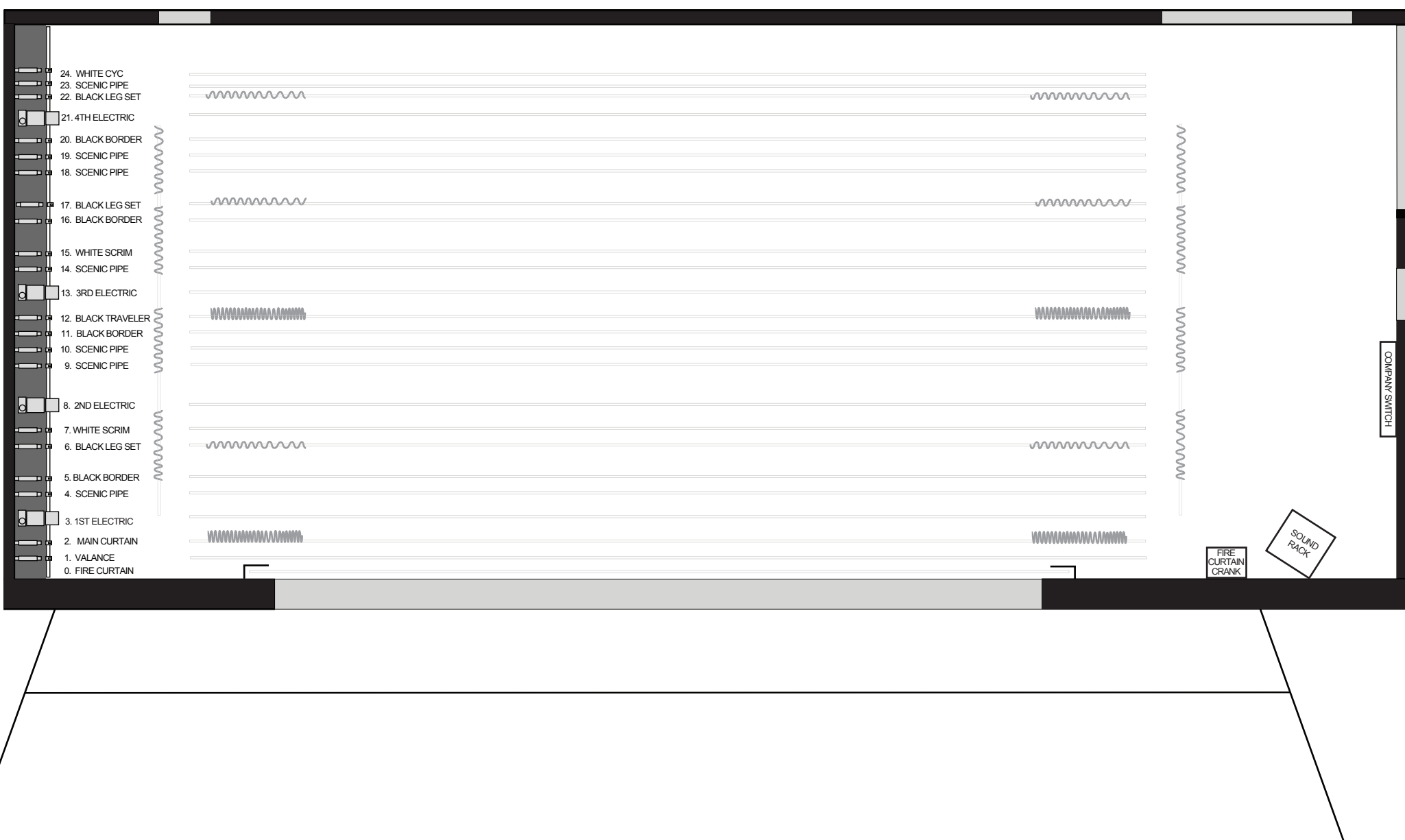
Trims for all electrics are marked with a ribbon to line up with bar on wall



350 Lynn Falls Parkway, Melrose, MA, 02176

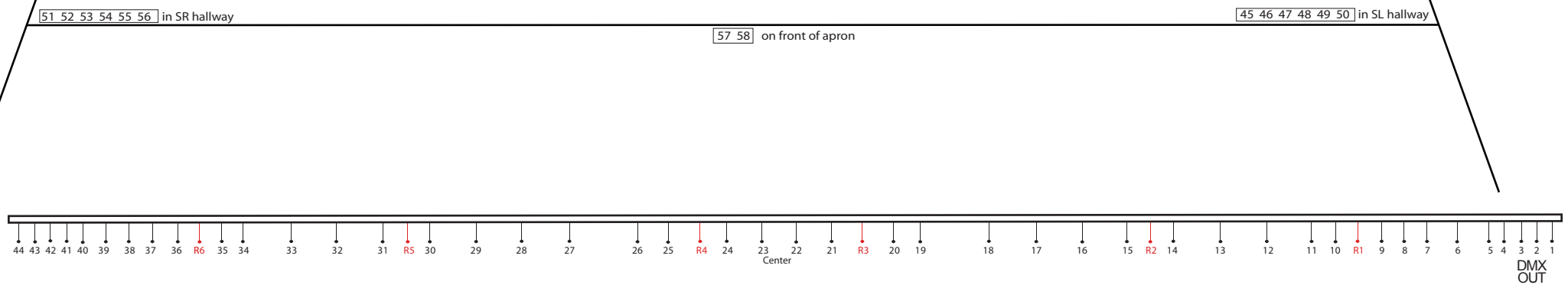
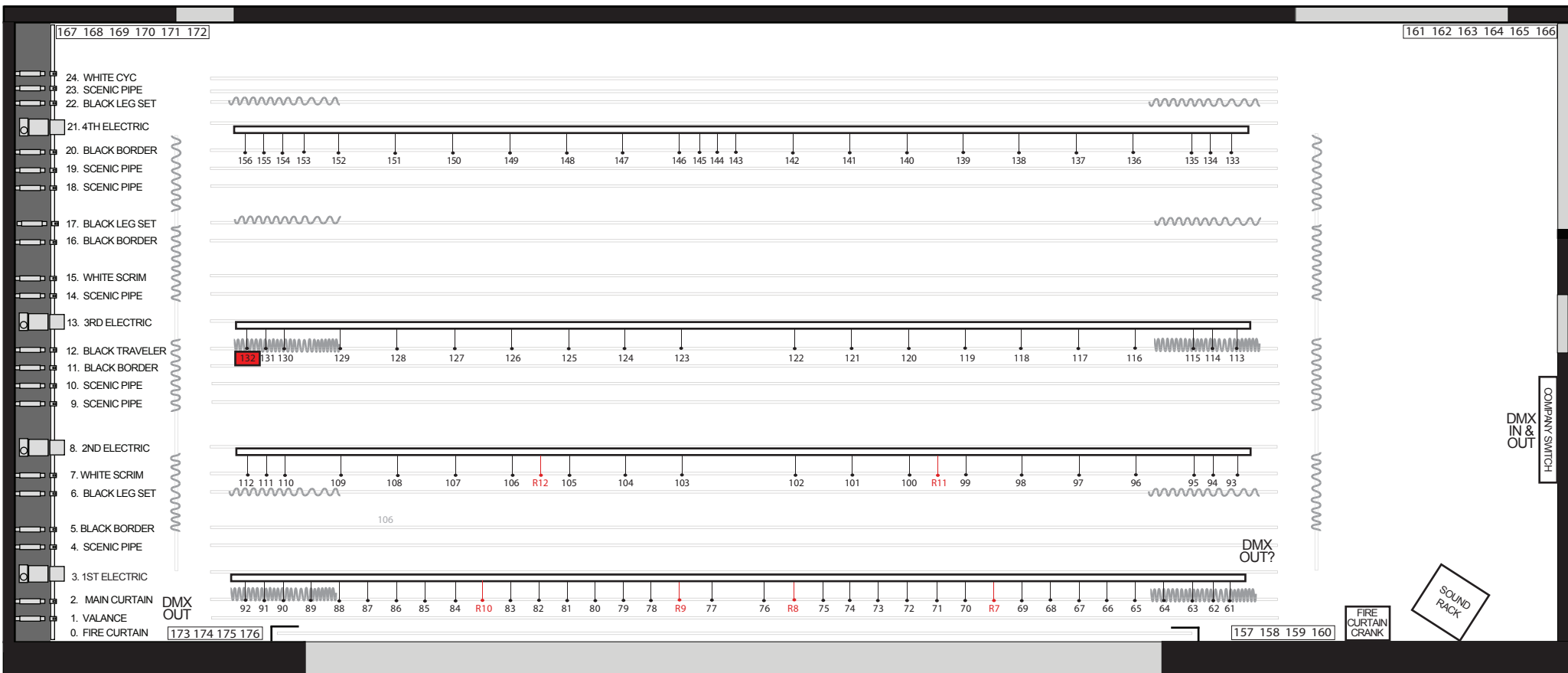
Scale 1" = 8'

MEASUREMENTS



Plan View

Melrose Performing Arts Center
350 Lynn Fells Parkway, Melrose, MA, 02176
1/8" = 1' (except for the catwalk which has been scaled and shifted to fit)



Circuits

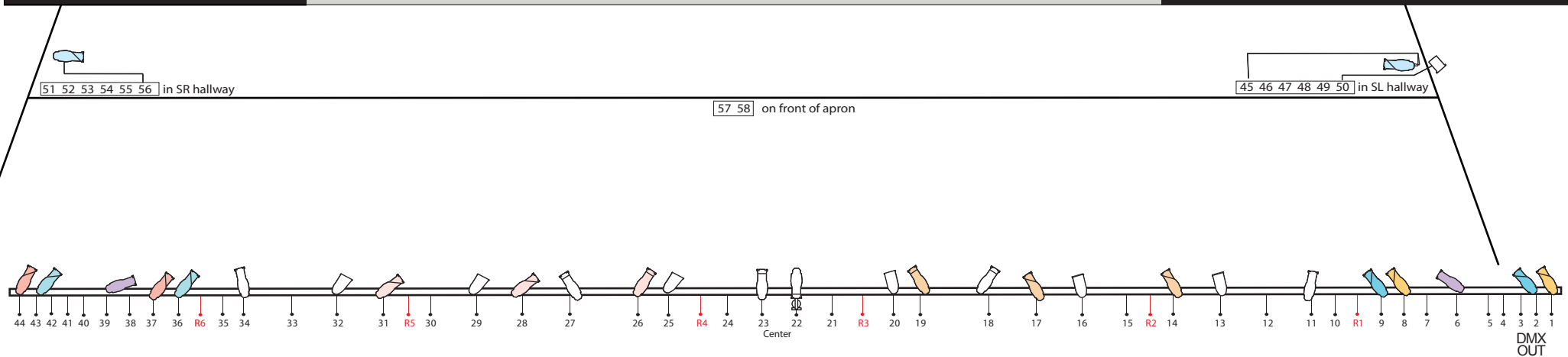
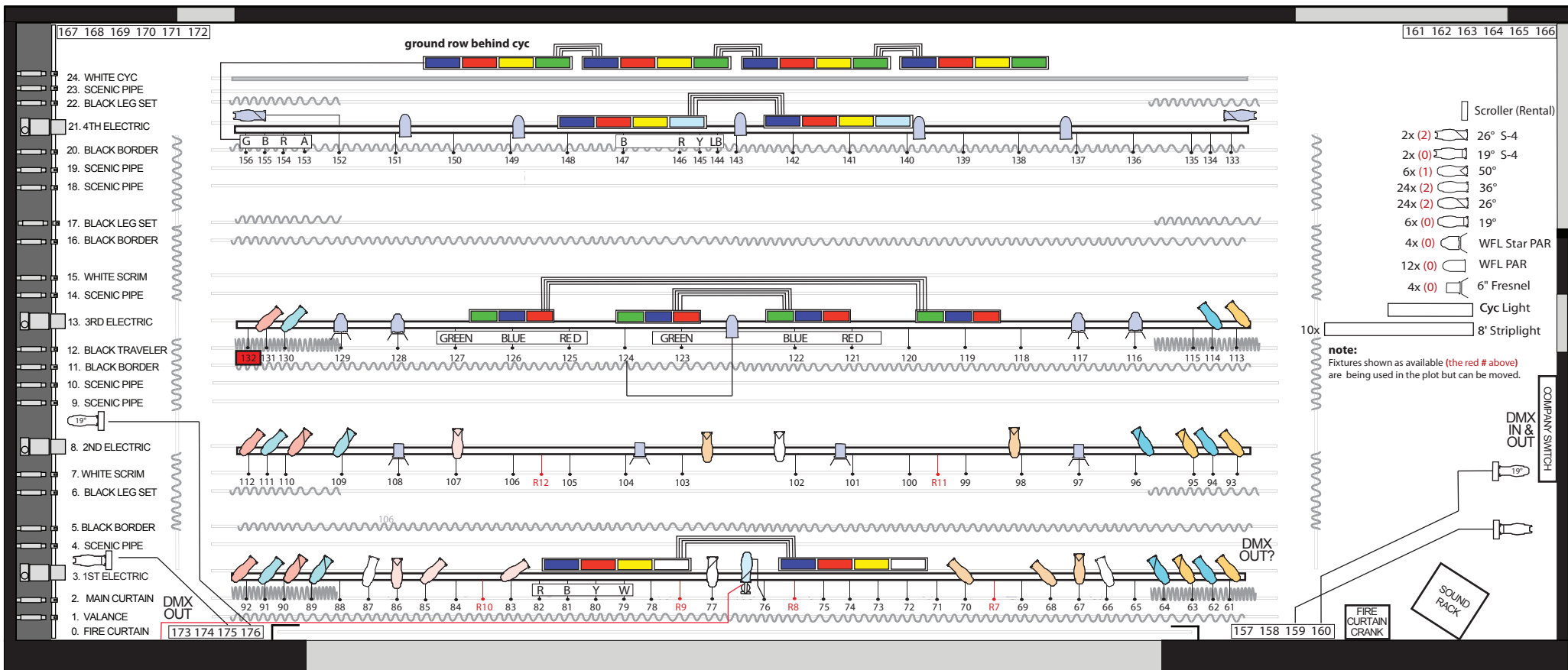
All dimmers are 2.4KW

DMX IN & OUT are also available in the center of the room as well as in the booth.
Intercom connections and stations are distributed around the room.

Melrose Performing Arts Center

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1/8" = 1' (except for the catwalk which has been scaled and shifted to fit)



Lighting Plot

By David McCall
email: david@techshop.net

DMX IN & OUT are also available in the center of the room as well as in the booth.
Intercom connections and stations are distributed around the room.

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1/8" = 1' (except for the catwalk which has been scaled and shifted to fit)

Lighting Plot

A lighting plot has been created that puts all of these instruments in the air. A copy of the plot in this document. There is also a schedule in an Excel spreadsheet form, that can be sorted on different columns to create DMX list, Channel list, Gel cut list, etc.. Everything in the spreadsheet is color coded.

We attempt to maintain this rep plot so that clients will know what they can expect. It is working well at this point. Even though everything is in use, there are 5 ellipsoidals that are marked as specials that can be used as anything you want. There is a moving mirror on the first electric and another on the catwalk that can be used as remote focused specials. Beyond that you should talk to us about any changes you may want make for your. Any changes will have to be restored before you leave.

The plot contains 9 basic areas and 2 sets of color side washes. There are also a set of downstage areas lit by PARs for when you just need it brighter. The strips on the first electric is gelled White, Yellow, Blue, and Red. The 4th electric is gelled Green, Lt Blue, Red, and Blue. The strips don't put out much at 20'. The Hui cyc lights are gelled green, blue, red and do a pretty nice job of lighting the cyc from the 3rd electric. They can be used as a ground row but they need to be at least 8' from the cyc to light it smoothly. It looks great, but that is a lot of stage to give up for a pretty cyc.

Circuit Distribution

Each of the 216 dimmers is good for 2400 watts.

A total of 176 dimmers are available for theatrical use.

The catwalk has 44 2P+G circuits on separate dimmers (1-44)

Wall boxes with 6 x 20 2P+G circuits on each side of apron (45-50, 51-56)

The Pit has 2 circuits in the middle (57-58)

2 circuits are on the auditorium back wall behind the booth (59-60)

The first electric has 32 2P+G circuits on separate dimmers (61-92)

The second electric has 20 x 2P+G circuits (93-111)

The third electric has 20 2P+G circuits on separate dimmers (112-132)

The fourth electric has 20 2P+G circuits on separate dimmers (133-156)

4 circuits down left 4 more down right (157-160, 173-176)

6 circuits up left and 6 more up right. (161-166, 167-172)

Caution: cables may have to cross traffic areas

Architectural Lighting Control

There are a number of push button control stations around the room. Currently there are only 3 functions programmed; (1.) turns on the house lights (2.) turns on the work lights over the stage and (3.) turns on the lights in the control booth. Panels with less than 3 buttons just turn the house lights on and off. The system can be further programmed using a laptop computer.

Lighting Inventory

Leviton Innovator 72-144 Lighting console

266 2.4K Leviton i series dimmers (dimmers above 176 are spoken for)

2 x 19° ETC Source-4 Ellipsoidal Reflector Spotlights

2 x 26° ETC Source-4 Ellipsoidal Reflector Spotlights

6 x 19° Leviton #LeL19 Ellipsoidal Reflector Spotlights

24 x 26° Leviton #LeL26 Ellipsoidal Reflector Spotlights

24 x 36° Leviton #LeL36 Ellipsoidal Reflector Spotlights

6 x 50° Leviton #LeL50 Ellipsoidal Reflector Spotlights

12 x Altman PAR-64 (WFL?)

4 x Altman Star-PAR with set of 4 lenses and 4 leaf barn doors

4 x Leviton FR1TH-22B 6" Fresnel with 4 leaf barn door

10 x R-40 16 cell 4 circuit Striplights (unknown manufacturer)

4 x Selecon Hui 3 cell cyc lights (1000w)

(All lights have safety cables, color frames and C-clamps)

1 x Off Broadway FS400 follow spot

2 x Rosco I-Cue Moving Mirrors with PSU50 power supplies

4 x 50lbs Boom Bases, 4 x 12' Booms

12 x 24" Sidearms with 2 tees

12 x 10' 2P+G cables

6 x 25" 2P+G cables

9 x 50' 2P+G cables

4 x 100' 2P+G cables

16 x 2P+G two-fer cables

3 x 25' DMX Cables

1 x 50' DMX Cables

Fly system

There are 24 counterweighted linesets. 4 of them are motorized and are setup to be electric. There is a loading gallery with ample weights available. See the measurements page to get information about soft goods.

Audio Input Devices

2 x wireless Shure XLX2 **Hand-Held SM58 Microphone**

9 x wireless Shure ULX1 **Body-Pack Transmitter** w/mics

12 x Shure ULXP4 **Wireless Receiver**

Note: Wireless mic receivers are in a rack backstage left.

2 x Shure Beta 57 **unidirectional dynamic microphone**

4 x Shure SM 58 **unidirectional dynamic microphone**

2 x Denon DNC635 **CD players**

There are also ~10 x 25' mic cables

6 floor stands & 4 table top stands are available.

Source connections on the patch bay (top row)

The first 4 are connected to the mic input connectors on the front of the apron (stage right). 5 and 6 are the 2 inputs that are on the front of the apron (stage left) in the same panel as the video connections. 7 has been left open, and 8 is the feed from the gym. 9-12 are the 4 mic inputs on the stage rear wall. 13-24 are from the 12 wireless mic receivers.

Input connections on the patch bay (bottom row)

There are 2 primary audio mixers in this system

The first 8 inputs on the patch bay feed the Shure Model SCM810/E **8 channel mixer** mounted in the rack backstage left. Inputs 1-4 & 6 are configured as mic inputs, and the remaining inputs are line inputs. With no patch cables installed all of the inputs on the front of the stage except for the top input on the apron input panel stage left are mic inputs. This mixer contains electronics that can be set to allow it to make limited adjustments to the input levels automatically.

The main mixer is a Crest XR-24 **"24" channel audio mixer** (8 mono channels & 8 stereo channels). This mixer is used when a show calls for a sound operator. It is mounted in the small rack at the house right mixing position. The Aphex 228 **Buffer Amplifier** buffers the individual outputs of the 8 channel mixer and sends them to line inputs 1-8 on the Crest Mixer. Mic inputs 1-8 and the left channels of mic inputs S1-S8 on the Crest Mixer are fed by 9-24 on the patch bay backstage. The **2 CD players** come in on line inputs of S7 & S8 on this mixer.



- Power Sequencer (on/off switch)
- 8 Channel Automated Mixer
- 8 Channel Buffer Amp
- Antenna Signal Distribution for Wireless Mics
- Antenna Signal Distribution for Wireless Mics
- Antenna Signal Distribution for Wireless Mics
- Antenna Signal Distribution for Wireless Mics
- Wireless Mic Receivers 1 & 2
- 2 x Wireless Mic Receivers 3 & 4
- 2 x Wireless Mic Receivers 5 & 6
- 2 x Wireless Mic Receivers 7 & 8
- 2 x Wireless Mic Receivers 9 & 10
- 2 x Wireless Mic Receivers 11 & 12
- Local Remote Mix Switch (PA/Drama)
- + Recall Mic and Chime
- Recall Amp (feeds sound to dressing rooms and ticket booth)
- 24 Channel Patch Bay
- Intercom Panel
- Mono Mixer
- Note: the assisted listening system and the DSP have been moved to the sound console in the middle of the room. There is a graphic EQ in this position that is connected to the amp that feeds the jacks on the back wall
- Active Crossover for Main System
- Active Crossover for Main System
- Composite Video to SDI Encoder
- Power Amp for Speaker Jacks on Back Wall
- Power Amp for Speaker Jacks on front of Apron
- Power Amp for Main Speakers

PA/Drama Switch

There is an important switch that is used to alternate between the mixed output of the automated mixer (labeled PA) and the mono feed from the front of house mixer (labeled Drama). This switch controls all of the audio that is fed to all of the other systems (except the stage monitors). The output of the front of house mixer will not be heard if this switch is in the wrong position.

1 of the 2 outputs of the PA/Drama switch is goes directly to the main system to drive the speakers in the auditorium. The other output goes to a Radio Design Labs RUBDA3 **distribution amp** that sends sound to all of the other systems. This device has connectors that are seen on the front of the backstage rack, but the actual connections have been made on the back of the device. One output feeds a Shure SCM-288 **mono mixer** in this circuit and all local system feeds come from this mixer. Additional feeds from the distribution amp go to the Gym and Cafeteria sound systems.

Main System Output Components

The mono audio from the PA/Drama switch goes to the Shure DFR 22 **sound processor**. This unit plays several roles that were once performed by many discrete devices. The processor's primary functions are to perform equalization and attempt feedback rejection. There are some controls on the front of this unit, but it is intended to be run from a laptop computer. Most people would do well not to touch this device.

Next in the main system is the Renkus-Heinz X12 **active crossovers** followed by 2 Crown CTS 1200 **power amps** and a matched pair of Renkus-Heinz STX7 **speakers** mounted to the ceiling of the auditorium.

Recall System

A TOAA-912MK2 mixer/amp is provided for the **Recall System**. This system allows the stage manager to call the dressing rooms (music rooms) as well as provide a warning chime if needed. The main audio can also be mixed into this system to allow people in these areas to hear the show. The mic is labeled "Audience Recall" but there are no speakers in areas that would be occupied by the audience.

Note:

The sound system is being redesigned. and as a result you may not find it as described in this document.

Please contact David McCall (melrose@techshop.net) if you have any questions.

Intercom System

There are several Audiocom SS2000 **Intercom panels** around the auditorium plus 1 Audiocom MS2002 Intercom panel that is installed into the rack backstage. There is one panel backstage left, one in each of the 2 music rooms (dressing rooms) as well as to the control booth and the ticket booth. Intercom headsets can be connected to these panels as well as to intercom jacks that are disbursed around the room. There are 8 Telex BP2002 Intercom **Beltpacks** with 8 matching Telex **headsets**, and a Telex EGM12N boom mic to be used with the intercom panels. 12 Intercom cables are also provided. A 4 pin cable to be used to extend a headset is available.

Video Connections

On the front of the apron there is a panel with inputs for SVGA computer video, S-video, and composite video. These terminate in a panel on the ceiling of the control booth, then connected directly to a video projector in the booth. This panel also has signals from the cafeteria and the gym. The panel on the front of the apron has 2 line level audio connections. There is a composite video connection at the audio mixing position. This feeds a Kramer FC7501 composite to SDI encoder before sending it to the gym and the cafeteria.

M1	M2	M3	M4	L1	L2		GYM	RW1	RW2	RW3	RW4
P1	P2	P3	P4	P5	P6	P7	P8	D1	D2	D3	D4
W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12
D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	D15	D16

PA / Drama switch:

This switch is used to select between the simple “**PA**” mixer in the rack backstage and the more complex “**Drama**” mixer in the auditorium.

Patch Sources:

M1 - M4 = 4 mic level connections on the front of the apron, house left

L1 = Line level connection on the apron face, house right (top connection)

L2 = Mic level connection on the apron face, house right (bottom connection)

Note: **L1** and **L2** share a panel with the video connections to the lighting booth

GYM = Sound feed from the Gym (block this feed with a dummy patch or turn channel 8 down)

RW1 - RW4 = 4 mic connections on back wall of the stage

W1 - W12 = 12 wireless mic receivers

Patch Inputs:

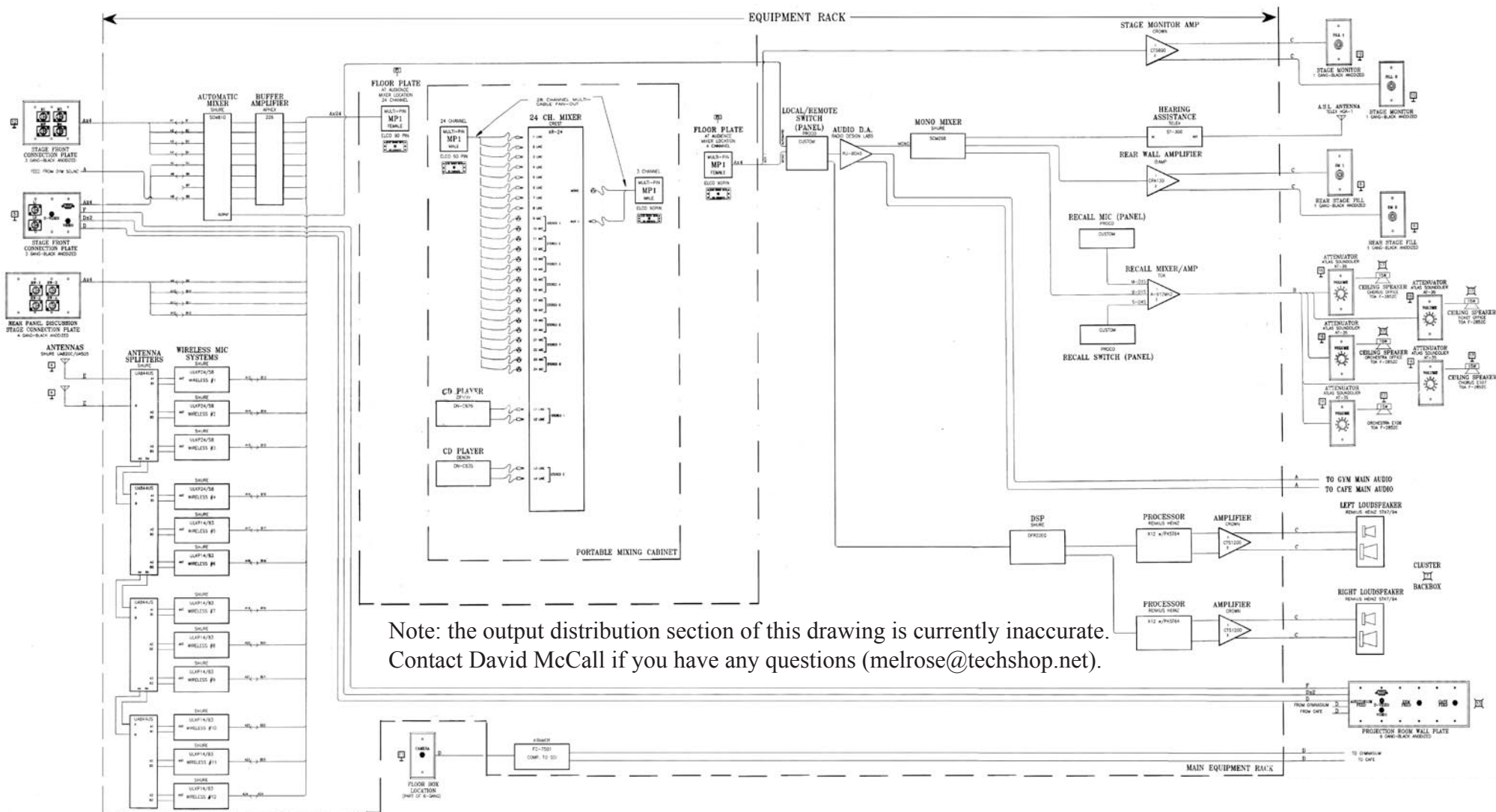
P1 - P8 = 8 inputs to the “**PA**” mixer in the rack backstage

Note 1: **P5 & P8** are configured as line level inputs.

All other “**PA**” inputs are set to mic level

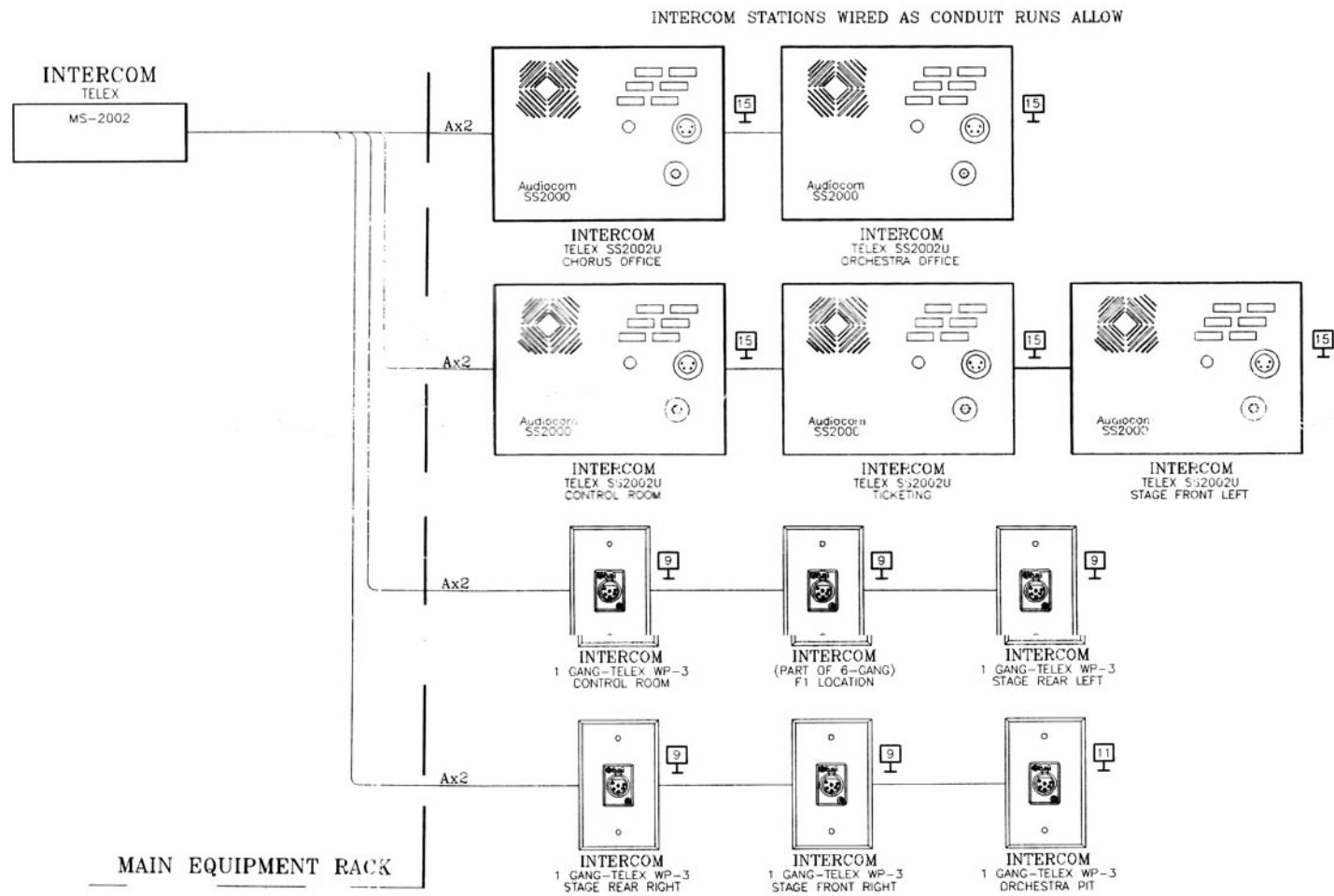
Note 2: The 8 buffered “**PA**” inputs are delivered to the line level inputs **1 - 8** of the “**Drama**” mixer.

D1 - D16 = 16 mic level inputs to the “**Drama**” mixer in the auditorium.



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AUDIO RISER



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INTERCOM RISER

Melrose Veteran's Memorial Middle School Auditorium

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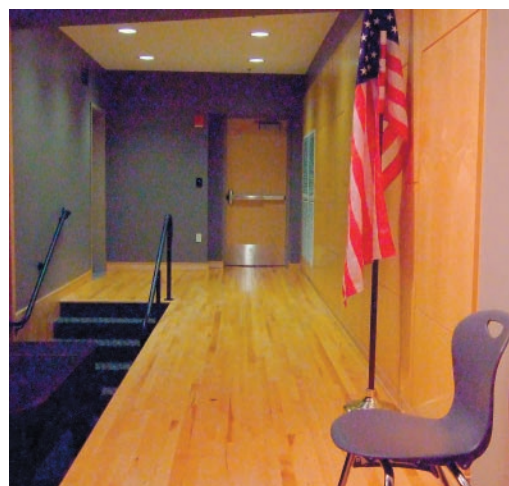
View from the back of the auditorium



View from the back of the stage



Stage left apron with wheelchair ramp



Stage right apron with steps



View from audio mixing position

Melrose Veteran's Memorial Middle School Auditorium
Technical Specifications 05/26/10