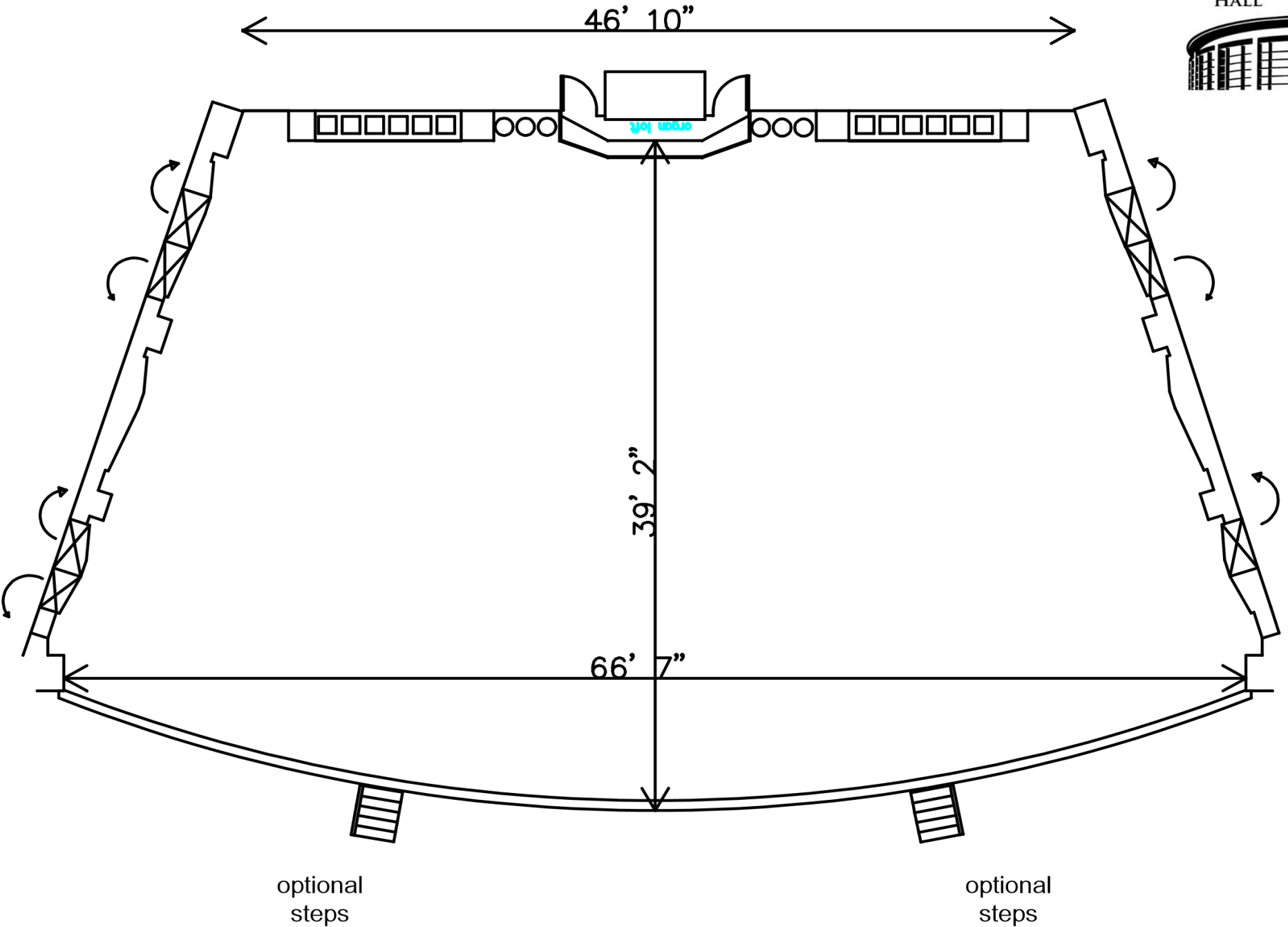
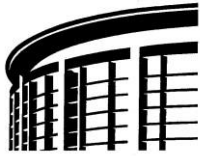




Benaroya Hall S. Mark Taper Stage Dimension



BENAROYA
HALL



contact – TD@seattlesymphony.org
Updated February 2026

S. Mark Taper Foundation Auditorium

Audio Equipment List

FOH mixer and Processing

- 1 Yamaha PM7 and RPiO 622 stage rack – 64 input, 32 output
- 1 Marantz CD/Cassette Combo Unit
- 1 Tascam CD-RW901SL
- 1 Denon DN-700R USB Recorder

FOH mix position located right of center in the back 2 rows of the house 120ft from the downstage edge

Main Concert Sound System

d&b V Series L/R arrays

- 9 V-Series loudspeakers per array consisting of (8) V8 and (1) V12 loudspeakers
- 2 V-Sub center flown subwoofers processed from the L/R main arrays
- 4 V-Sub ground supported subwoofers are available for deployment
- 3 Ti10P 3rd tier balcony delay loudspeakers processed from the L/R main arrays
- 2 Ti10P 2nd and 3rd tier proscenium balcony delay loudspeakers processed from the L/R main arrays

All Main Concert Sound System loudspeakers are powered by d&b D12 amplifiers

Front Fills

- 8 E8 loudspeakers powered by d&b D6 amplifiers available on a send from FOH

Under-Balcony Audience Fill System

The under-balcony system consists of 54 separately processed, passive 2-way speakers, integrated within the auditorium and are available on a send from FOH

Stage Monitor System

- 10 L-Acoustics 112XT - 12" Coaxial stage monitors
- 2 L-Acoustics 115XT - 15" Coaxial stage monitors
- 1 L-Acoustics LA4 Monitor amp rack – 10 mixes
- 3 Mackie SRM 150 personal monitors
- 5 JBL Control 25 monitors
- 6 JBL Control 29 monitors are located on the side walls of the stage for Orchestra available on an Aux send from FOH

Intercom System

ClearCom Intercom - 48 Channel Matrix routes 4 Communication Channels throughout the venue.
Wireless BTR-800 - 4 beltacks and 2 channels of communication

Hearing Impaired System

Sennheiser Tourguide 2020-D radio frequency Assistive Listening System with mono headsets and induction loops for telecoil enabled hearing aids.

AC Power

Stage Right – 60 amp 3 Phase with the sound system ground and 400 amp 3 Phase service isolated of sound system ground
Loading Dock – 100 amp and 200 amp 3 Phase services. 100ft path to downstage left entrance
All company switches are camlock or bare wire connections

Microphone Inventory

The microphone inventory is shared between our two main performance spaces

1	Earthworks PM40 Piano Microphone System
10	Neumann KM184 Cardioid Condenser Microphones
7	Neumann KM185 Super-Cardioid Condenser Microphones
4	AKG C414B Large Diaphragm multi-pattern Condenser Microphones
6	AKG C480B-ULS Small Diaphragm Condenser Microphones
2	AKG C747 Miniature Shotgun Microphones
1	AKG D112 Kick Drum Microphone
4	AKG C1000 Cardioid Condenser Microphones
2	Sennheiser e614 Cardioid Condenser Instrument Microphones
6	Sennheiser e604 Cardioid Dynamic Instrument Microphones
4	Shure SM87A Super Cardioid Condenser Vocal Microphones
8	Shure SM57 Cardioid Instrument Microphones
6	Shure SM58 Cardioid Vocal Microphones
4	Shure SM58S Cardioid Switched Microphone
6	Shure Beta98 Drum Microphones
1	Shure Beta52 Kick Drum Microphone
2	Shure Beta91 Kick Drum Microphones
2	Sennheiser MD421 Instrument Microphones
3	Sennheiser 835S Switched Vocal Microphones
1	Sennheiser 835 Cardioid Vocal Microphones
11	Sennheiser 845 Super Cardioid Vocal Microphones
1	Rode NT4 Stereo Microphone
3	Crown PCC160 Floor Microphones
2	Electro-Voice RE20 Large Diaphragm Dynamic Microphone
8	Whirlwind Director Passive Direct Boxes
2	Radial PRO AV2 Passive Direct Boxes
2	Radial J48 Active Direct Boxes
2	Radial PRO D2 Passive Direct Box
4	Whirlwind 4 channel MLTSP 1x3 microphone splitter

Wireless Microphone Systems

FOH Rack

6	Sennheiser EM3732 receiver channels
6	SKM 3063 body pack transmitters - Lemo connectors
6	SKM5200 handheld transmitters - Neumann KK 105-S capsules

Mobile Rack

4	Sennheiser EM3732 receiver channels
2	SKM500 G3 handheld transmitters - 945 capsules

Headsets & Lavaliers

3	DPA 4066 beige headset - LEMO3 connectors
1	DPA 4066 brown headset - LEMO3 connectors
1	DPA 4066 black headset - LEMO3 connectors
1	DPA 4088 beige headset - MicroDot connector
3	Countryman E6 cocoa headset microphones with LEMO3 connectors
1	Countryman E6 beige headset microphone with LEMO3 connector – dual earpiece
6	Sennheiser ME104 – Lemo3 connectors (1 – right angle)
3	DPA 4061 beige – Lemo3 connectors
1	DPA 4061 black – XLR connector
1	Countryman B3 – XLR connector
2	Sennheiser ME104 – TA4F
2	Sennheiser KA100 – TA4F, no capsules
9	MicroDot to LEMO3 adapters

Video Equipment

- 1 Stewart 28'10" x 16'3" roll down projection screen

The video inventory is shared between our two main performance spaces

- 1 Blackmagic Design ATEM Constellation 8k switcher
- 1 Blackmagic Design ATEM 1 M/E Broadcast Panel
- 1 Barco PDS 902 3G Switcher/Scaler
- 2 Blackmagic Design ATEM Television Studio HD Switcher
- 2 Christie M 4K25 RGB pure laser projectors
- 1 Christie M 4K15 RGB pure laser projector
- 2 Blackmagic Design Ursa G2 cameras w/ tripod
- 2 Blackmagic Design Studio 4k Pro camera
- 3 Blackmagic Design Micro 4k camera
- 1 Blackmagic Design Studio camera HD w/tripod
- 1 Blackmagic Design Studio camera 4K w/tripod
- 1 Panasonic 8-18mm lens– Micro Four Thirds mount
- 5 Panasonic 14-42mm lenses – Micro Four Thirds mount
- 2 Panasonic 45-170mm lenses – Micro Four Thirds mount
- 1 Panasonic 100-400mm lens – Micro Four Thirds mount
- 2 Fujinon XA20sx8.5BERM-K3 lens – ENG mount
- 3 Panasonic AW-UE 150K PTZ cameras
- 2 Panasonic AW-HE 130 PTZ cameras
- 1 Panasonic AW-PR60 PTZ camera controller
- 1 Panasonic AW-RP50 PTZ camera controller
- 2 Decimator MD-HX HDMI/SDI Cross Converters
- 3 Decimator 12G-CROSS 4K Converter
- 4 Blackmagic Design HyperDeck Studio HD Plus recorder
- 1 Blackmagic Design Video Assist 7" 12G recorder
- 1 Blackmagic Design HyperDeck Mini recorder
- 1 Blackmagic Design HyperDeck Shuttle 2 recorder
- 1 Blackmagic Design Video Assist 7" monitor/recorder
- 1 Samsung 60" 4K monitor
- 2 NEC 43" monitors
- 3 LG 24" 4K monitors
- 4 Visio 24" monitors
- 1 Lilliput 10" monitor
- 1 Teradek Prism 801/853 4K SDI encoder
- 2 AJA HELO streaming encoders
- 1 16:9 Fast-Fold front projection screen
- 2 DSAN Perfect Cue Presentation Systems

Staging Inventory

- 30 Stage Right 4ft x 8ft stage decks – 1 side carpeted, 1 side textured fiberglass
- 6 Stage Right 3ft x 8ft stage decks – 1 side carpeted, 1 side textured fiberglass
3ft x 8ft are only configurable at 48", last tier of chorale risers
- 6 8" Steel frames for 4ft x 8ft stage decks
- 10 16" Steel frames for 4ft x 8ft stage decks
- 10 24" Steel frames for 4ft x 8ft stage decks
- 6 32" Steel frames for 4ft x 8ft stage decks

Chorale risers can be configured as

- 24ft or 48ft wide and up to 6 rows tall starting at 8"
- 24ft or 48ft wide and up to 4 rows tall starting at 32"

Lighting Equipment

- 1 ETC Ion Xe 12k – Located center at the 2nd Tier projection booth
- 2 Lycian 2000 watt Xenon Spotlights – Located center at the top of the 3rd tier spot booth
- 1 Stage Manger's backstage lighting control

Aluminum Box Truss

- 16 Total Fabrications 20.5" x 12ft
- 3 Total Fabrications 20.5" x 6ft

Relative Notes

Full stage washes that can be soft patched into smaller areas

RED (Lee 106), BLUE (Gam 850), PINK (Rosco 33), Amber (Rosco 22)

All onstage focus (overhead electrics and side boom) is only accessible by a 30ft personnel lift

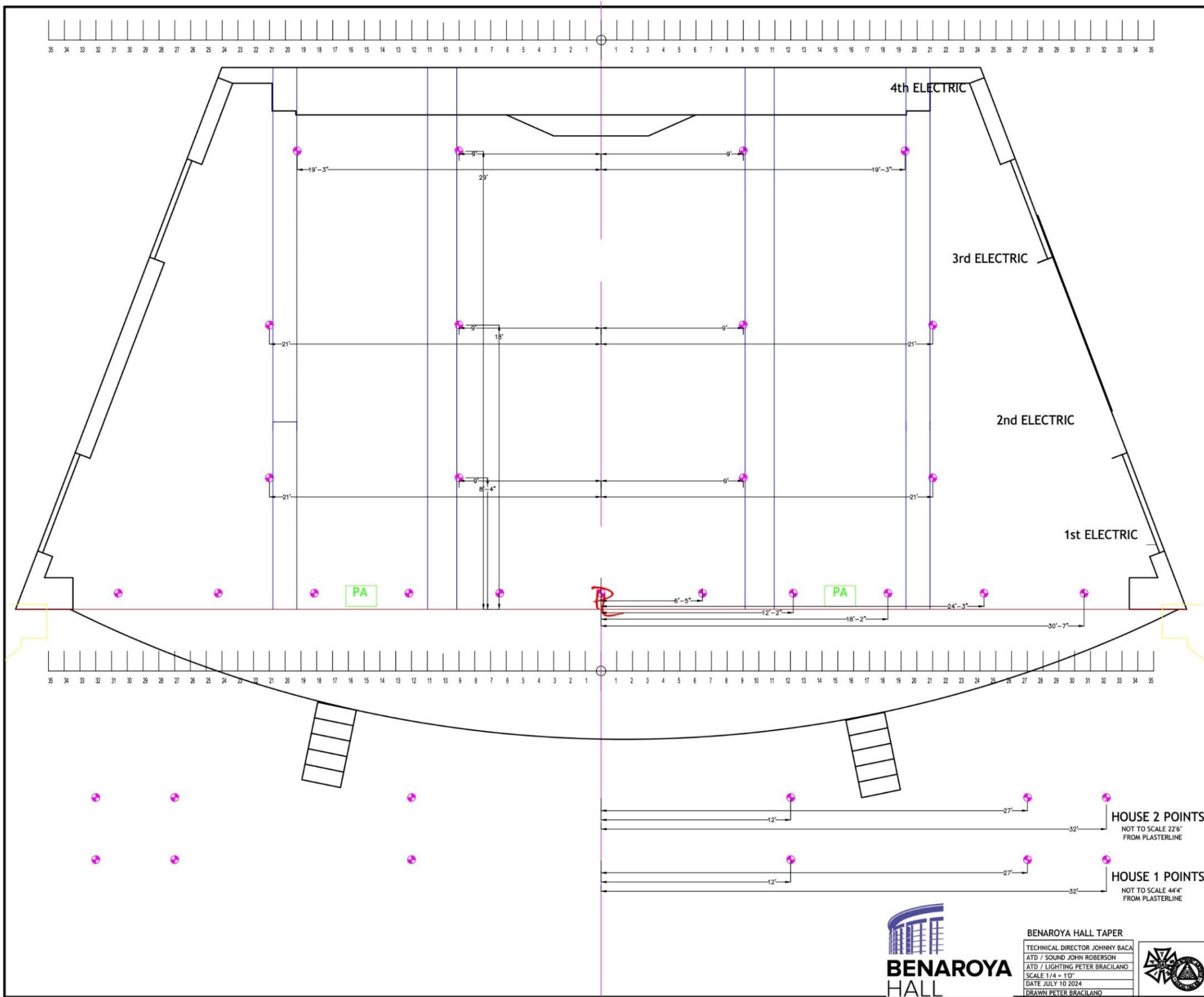
Front of House coves #1 & #2 are accessible by the 5th floor catwalks

Seattle Symphony Orchestra instruments may not be re-focused. Instruments marked SPARE must be approved by the Lighting Manager / Assistant Technical Director

Front of House Box Boom #1 & #2 are only accessible by a Rogliss Rescue and Positioning systems

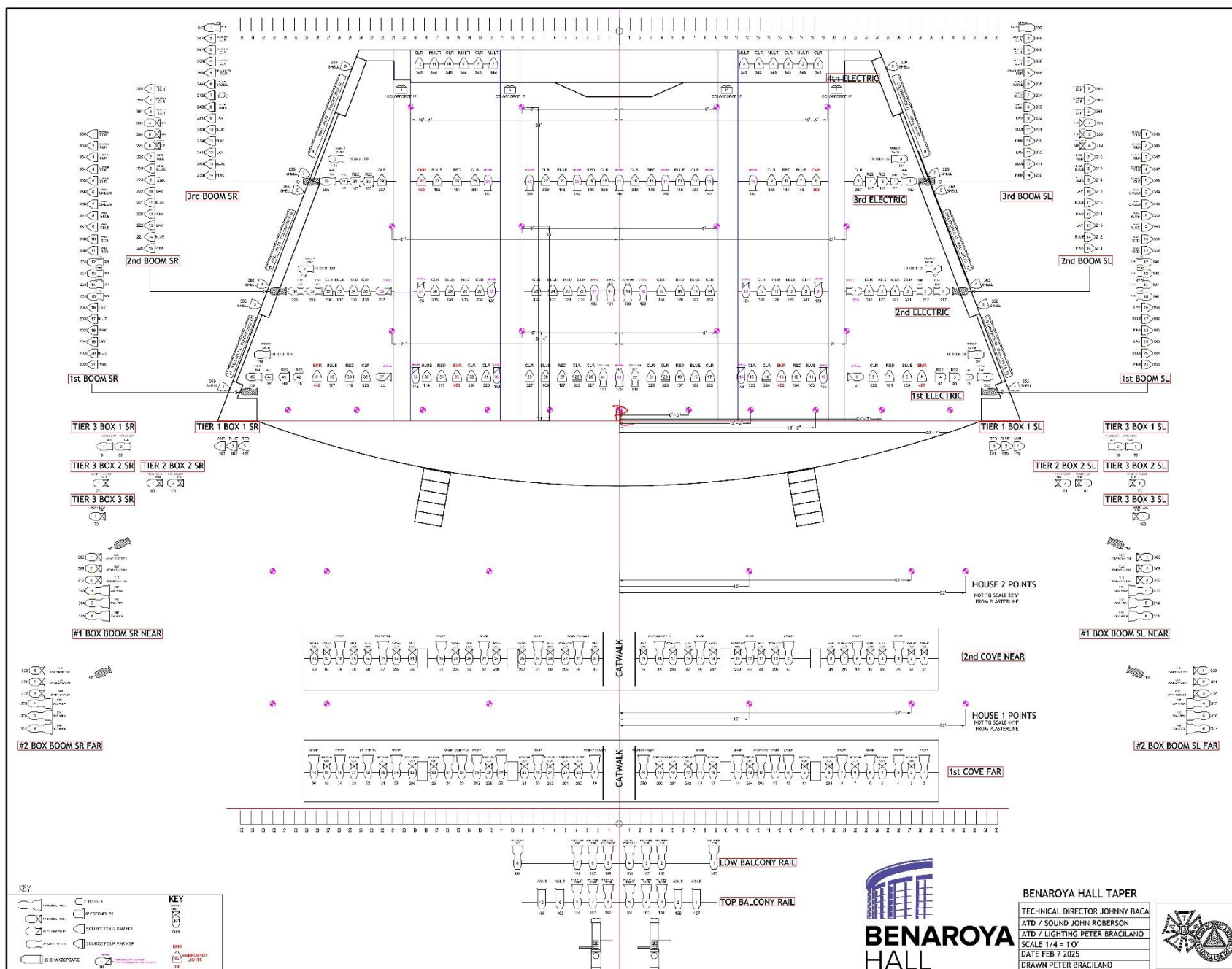
Technical Director and Lighting Manager / Assistant Technical Director are the only authorized personnel to approve re-focus of the Front of House Box Boom

This work is time incredibly time-consuming, requiring 4 IATSE Local 15 certified Riggers. This labor call is not included as part of "house labor" and will be billed out to the client.



BENAROYA HALL TAPER
TECHNICAL DIRECTOR JOHNNY BACA
ATD / SOUND JOHN ROBERSON
ATD / LIGHTING PETER BRACILANO
SCALE 1/4" = 1'-0"
DATE JULY 10 2024
DRAWN PETER BRACILANO







Instrument Schedule

TAPER

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TOP BALCONY RAIL	1
LOW BALCONY RAIL	1
COVE #2	2-3
COVE #1	4-5
BBL #2 SL	5
BBL #2 SR	6
BBL #1 SL	6
BBR #1 SR	6
1st ELECTRIC	7-8
2nd ELECTRIC	9-10
3rd ELECTRIC	11-12
4th ELECTRIC	12
1st BOOM SL	13
1st BOOM SR	14
2nd BOOM SL	15
2nd BOOM SR	16
3rd BOOM SL	17
3rd BOOM SR	18
SL SHELL	18
SR SHELL	19
HI SIDE SL	19
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TIER 3 BX 3 SL	20
TIER 3 BX 2 SL	20
TIER 3 BX 1 SL	20
TIER 2 BX 3 SL	20
TIER 1 BX 1 SL	20
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TIER 3 BX 2 SR	20
TIER 3 BX 1 SR	21
TIER 2 BX 3 SR	21
TIER 1 BX 1 SR	21
SND LOCK	21
SOUND LOCK	22
AUDIENCE	23-24



Channel Hookup

TAPER

Channel	Addr	Position	Unit#	Type & Load	Purpose	Color	Templat
(1)	1/294	COVE #2	8	19°SFOUR 750w	DSL SYMPHONY	CLR	
(1)	1/294	COVE #2	13	19°SFOUR 750w	DSL SYMPHONY	CLR	
(1)	1/292	COVE #2	17	19°SFOUR 750w	DSC SYMPHONY	CLR	
(1)	1/292	COVE #2	24	19°SFOUR 750w	DSC SYMPHONY	CLR	
(2)	1/293	COVE #2	12	10°SFOUR 750w	DSC SYMPHONY	CLR	
(2)	1/291	COVE #2	18	19°SFOUR 750w	DSC SYMPHONY	CLR	
(2)	1/290	COVE #2	19	19°SFOUR 750w	DSC SYMPHONY	CLR	
(2)	1/290	COVE #2	22	19°SFOUR 750w	DSC SYMPHONY	CLR	
(2)	1/291	COVE #2	23	19°SFOUR 750w	DSC SYMPHONY	CLR	
(2)	1/293	COVE #2	29	10°SFOUR 750w	DSC SYMPHONY	CLR	
(3)	1/295	COVE #2	28	19°SFOUR 750w	DSR SYMPHONY	CLR	
(3)	1/295	COVE #2	33	19°SFOUR 750w	DSR SYMPHONY	CLR	
(4)	1/299	COVE #1	7	19°SFOUR 750w	SYMPHONY	CLR	
(4)	1/299	COVE #1	11	19°SFOUR 750w	SYMPHONY	CLR	
(4)	1/299	COVE #1	14	19°SFOUR 750w	SYMPHONY	CLR	
(4)	1/297	COVE #1	15	19°SFOUR 750w	SYMPHONY	CLR	
(4)	1/297	COVE #1	26	19°SFOUR 750w	SYMPHONY	CLR	
(5)	1/296	COVE #1	17	19°SFOUR 750w	SYMPHONY	CLR	
(5)	1/296	COVE #1	23	19°SFOUR 750w	SYMPHONY	CLR	
(6)	1/298	COVE #1	28	19°SFOUR 750w	SYMPHONY	CLR	
(6)	1/298	COVE #1	31	19°SFOUR 750w	SYMPHONY	CLR	
(6)	1/298	COVE #1	34	19°SFOUR 750w	SYMPHONY	CLR	
(7)	1/308	BBL #1 SL	1	19°SFOUR 750w	SYMPHONY DS FILL	CLR	
(7)	1/308	BBR #1 SR	1	19°SFOUR 750w	SYMPHONY DS FILL	CLR	
(8)	1/309	BBL #1 SL	2	19°SFOUR 750w	SYMPHONY DS FILL	CLR	
(8)	1/309	BBR #1 SR	2	19°SFOUR 750w	SYMPHONY DS FILL	CLR	



Address Hookup

TAPER

09/14/2026

Addr	Univ	Channel	Position	Unit#	Type	Purpose	Color
1/2	1	(201)	COVE #2	1	10°SFOUR	SPARE	CLR
1/3	1	(161)	COVE #2	2	14°SFOUR	EXT STAGE	CLR
1/4	1	(202)	COVE #2	3	36°SFOUR	SPARE	CLR
1/5	1	(162)	COVE #2	4	14°SFOUR	EXT STAGE	CLR
1/6	1	(203)	COVE #2	5	10°SFOUR	SPARE	CLR
1/7	1	(163)	COVE #2	6	14°SFOUR	EXT STAGE	CLR
1/8	1	(204)	COVE #2	7	10°SFOUR	SPARE	CLR
1/11	1	(164)	COVE #2	9	14°SFOUR	EXT STAGE	CLR
1/12	1	(205)	COVE #2	10	10°SFOUR	SPARE	CLR
1/13	1	(206)	COVE #2	11	10°SFOUR	SPARE	CLR
1/14	1	(207)	COVE #2	14	10°SFOUR	AREA WASH	CLR
1/17	1	(165)	COVE #2	15	14°SFOUR	EXT STAGE	CLR
1/18	1	(208)	COVE #2	16	10°SFOUR	AREA WASH	CLR
1/19	1	(18)	COVE #2	21	10°SFOUR	SYMPHONY SOLO	CLR
1/20	1	(209)	COVE #2	25	10°SFOUR	AREA WASH	CLR
1/21	1	(166)	COVE #2	26	14°SFOUR	EXT STAGE	CLR
1/22	1	(210)	COVE #2	27	10°SFOUR	AREA WASH	CLR
1/23	1	(211)	COVE #2	30	10°SFOUR	SPARE	CLR
1/24	1	(212)	COVE #2	31	10°SFOUR	SPARE	CLR
1/25	1	(167)	COVE #2	32	14°SFOUR	EXT STAGE	CLR
1/28	1	(213)	COVE #2	34	10°SFOUR	SPARE	CLR
1/31	1	(168)	COVE #2	35	14°SFOUR	EXT STAGE	CLR
1/32	1	(214)	COVE #2	36	10°SFOUR	SPARE	CLR
1/33	1	(169)	COVE #2	37	14°SFOUR	EXT STAGE	CLR
1/34	1	(215)	COVE #2	38	10°SFOUR	SPARE	CLR
1/35	1	(170)	COVE #2	39	14°SFOUR	EXT STAGE	CLR
1/36	1	(216)	COVE #2	40	10°SFOUR	SPARE	CLR
1/38	1	(217)	COVE #1	3	10°SFOUR	SPARE	CLR

