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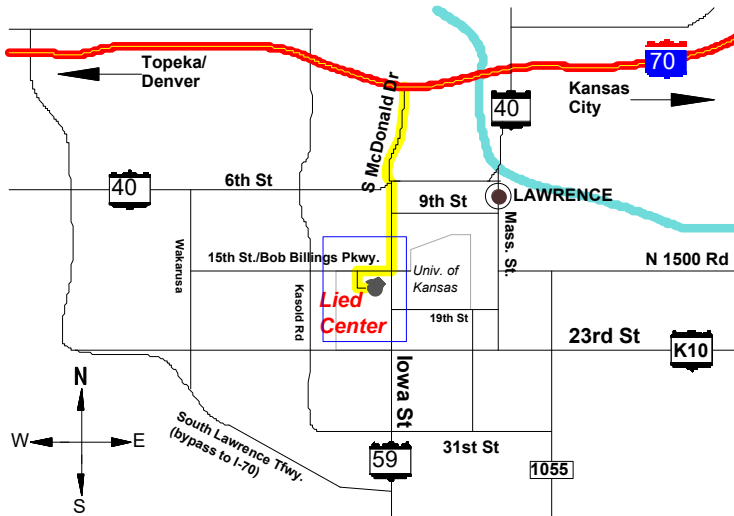
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Wi-Fi network KUGUEST
(no password needed)

GPS COORDINATES 38°57'18"N, 95°15'44"W

DIRECTIONS From I-70.

- Exit I-70 at West Lawrence, **Exit No. 202**. Proceed SOUTH onto South McDonald Drive.
- Continue SOUTH under overpass and merge onto Iowa St.
- Continue SOUTH on Iowa Street to 15th St./Bob Billings Pkwy.
- Turn WEST (right) onto 15th St./Bob Billings Pkwy.
- Turn SOUTH (left at first light) onto Crestline Drive.
- Turn EAST (first left at top of hill) onto Petefish Drive.
- The Lied Center is directly ahead. Turn left into the lot just past the Dole Institute and follow service entrance signs to the loading dock/stage door on the North side of the building.



LOADING Level 30' push to stage.

- Loading Docks (2)** 4'h
- Dock Doors** 8'w x 10'h
- Delivery Dock** 3'h
- Stage Door** Adjacent to loading dock on North side of building.

PARKING (2) tractor-trailers and (1) tour bus or delivery van can stay at loading docks. No permits required. Additional on-site parking is available for trucks, busses, and private vehicles.

SHORE POWER Available. See ELECTRICAL SERVICES.

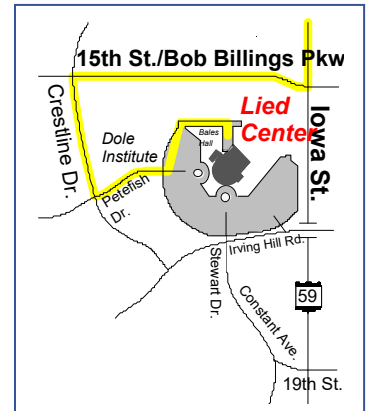


Loading Dock

THE LIED CENTER



The Lied Center of Kansas is a major university presenter engaging audiences and artists through presentation, education, research, and service. Opened in 1993, the Lied Center offers a variety of performing arts events and special events. The Lied Center is also home for performances by the KU School of Music, and is the location for major campus and community events.



Map Inset

LOCAL CREW

The Lied Center of Kansas is a not-for-profit educational institution. Trained college students are used for all events, augmented with professional stagehands when needed. The University of Kansas and The Lied Center of Kansas do not have a collective bargaining agreement covering stage - hands with I.A.T.S.E. or any other collective bargaining agency.

HOUSE

SEATING

	Totals	(include wheel chair spaces).
Orchestra Level	1102	(25)
Balcony I Level	510	(12)
Balcony II Level	334	(10)
Pit Seats (removable)	74	

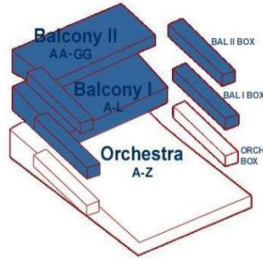
Maximum Seating 2020
Maximum Capacity 2020

Typical Seat Kills

House Mix Position	29
Orchestra Left, Row N	5

Typical Total Seating 1912

With typical seat kills and no pit seating.



House



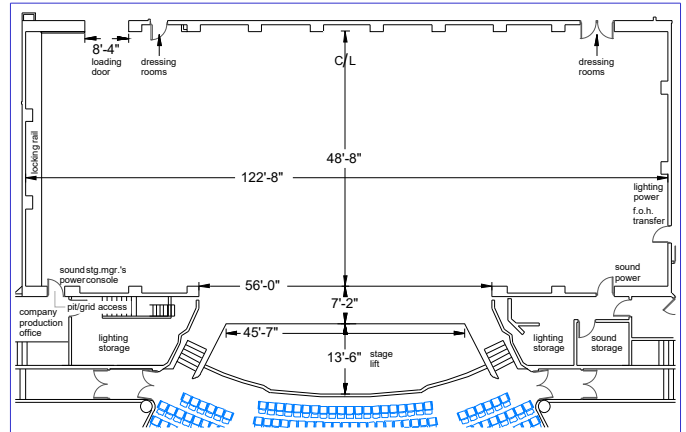
House Mix Position



Green Room

STAGE DIMENSIONS

Proscenium Width	56'-0"
Proscenium Height	28'-0"
Stage Width	122'-8"
Plaster Line to Back Wall	48'-8"
Plaster Line to DS Apron Edge	7'-2"
Plaster Line to DS Lift Edge	20'-8"
Stage Height from Floor	3'-6" at front aisle.



Stage Dimensions

ORCHESTRA PIT

Pit Elevation from stage floor	- 8'-0"
Pit Width	50'-0"
Pit Depth at center line	20'-8"
Pit Area (approximate)	1050 sq. ft.

STAGE LIFT

Gala Spiralift - variable elevation from stage level (0'-0") to orchestra pit level (- 8'-0"). Takes 45 seconds to travel 8' vertical. Stage lift can be converted to "pit seating" with addition of (5) seating wagons and (74) plush velour theater seats.

STAGE FLOOR Resilient, smooth and level.

Floor Construction From top down.

- 1/8" black battleship linoleum.
- 3/4" under laying (plywood).
- 1" sheathing (plywood).
- 1" x 2" furring on 12" centers.
- 3/4" sheathing (plywood).
- 1" x 2" furring on 12" centers, offset 6" from above furring.
- Cement slab.



Floor Construction

RIGGING

GRID +69' above stage floor. 3" x 1½" steel channel on 5½" centers, 2½" openings between channels. Grid extends over entire stage area from plaster line to back wall.

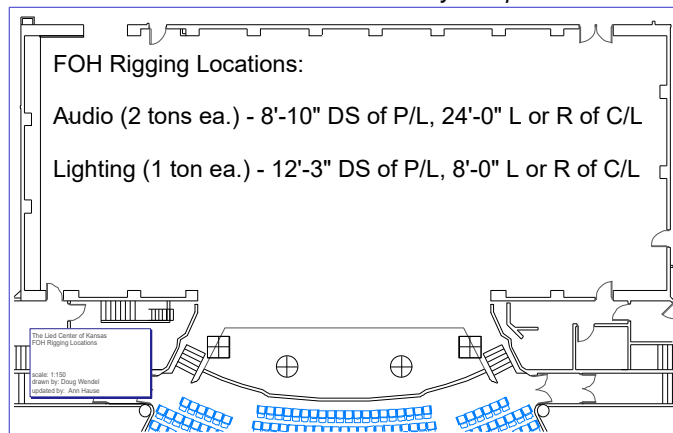
CHAIN MOTOR RIGGING

On Stage Motor points through grid are available in most location up stage of plaster line. Grid pipes available.

Front of House Limited to (4) pre-rigged points through architectural fascia DS of proscenium. Points are beam clamped to high steel with wire rope drops to catwalk positions for quick point installation. Loads approved by structural engineer:

Lighting 4000 lbs on two (2) points. 2000 lb max. per point.

Audio 8000 lbs on two (2) points. 4000 lb max. per point..
Please consult with technical staff for your specific needs.



COUNTERWEIGHT RIGGING Single purchase T-track counterweight system. Sheaves overhung 70" above grid. (8) loft lines per set.

Working Line Sets 43 See LINESET SCHEDULE.

Arbor Capacity 1,200 lbs. each.

Batten Lengths

Line Sets Nos. 1 - 3 76'

Line Sets Nos. 4-30 86'

Line Sets Nos. 31-52 84'

Batten High Trim 67'

Loading Bridge +57', stage right.

Counterweight 46,000 lbs. Available.
Full brick = 43 lbs.

Counterweight Locking Rails

Primary Locking Rail Stage level, stage right.

Secondary Locking Rail +37' bridge, stage right.

Capstan Winch ("Mule") Located in arbor pit.

PIN RAILS Located on SL and SR bridges, +37' level. Tube steel pin rails with welded steel pins on 12" centers run from down state to up stage. Facilitate cable pick-ups and spotting lines.

Spotting Line Hardware Limited amount of spotting sheaves, j-bolts, and hand lines are available.

Rigging for Super Title Screen 20' batten spot rigged on (3) hemp lines with clew located just down stage of main curtain. Suitable for light rigging such as super title screen, small projection screen or banner.

HOUSE DRAPERY

PERMANENT DRAPERY and EQUIPMENT

Main Curtain/DS Legs Manual fly or travel. Midnight blue 25 oz. lined velour with 50% fullness.
(1) Pair 42' w x 31' h each half.

Main Curtain/Grand Teaser Motorized fly, variable speed. Midnight blue, 25 oz. lined velour with 50% fullness.
64' w x 31' h.

Front Projection Screen Steel frame with matte white screen surface. Permanently installed on line set 10.
55' w x 20' h. 36" black border below screen.

Orchestra Shell Ceilings (3) ceiling panels permanently installed on motorized line sets. Panels tilt to vertical position and clear to 50' above stage.

MOVABLE DRAPERY and EQUIPMENT

Borders Black 25 oz velour, sewn flat with no fullness.
(1) 86' w x 16' h.
(4) 86' w x 10' h.

Legs Black 25 oz velour, sewn flat with no fullness.
(1) Pair 26' w x 30' h each, on traveler track.
(4) Pair 15' w x 30' h each.

Traveler Black 25 oz velour, 50% fullness.
40' w x 30' h each half. Mounted on traveler track.

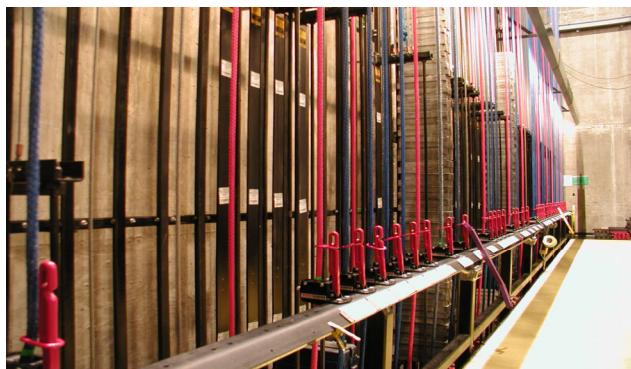
Blackout Drop Black 25 oz velour. Sewn flat without fullness.
65' w x 30' h.

Scrim Black sharks tooth.
65' w x 30' h.

Rear Projection Cyclorama Garriets "Opera-Cyc." Off -white vinyl. Also use as front or rear projection screen.
65' w x 30' h.

Sky Drop/Bounce Natural muslin, horizontally seamed.
62' w x 33' h.

Small Projection Screen Garriets "Opera-Cyc." Off-white vinyl. Front or rear projection.
20' w x 16' h.



Locking Rail, Stage Right

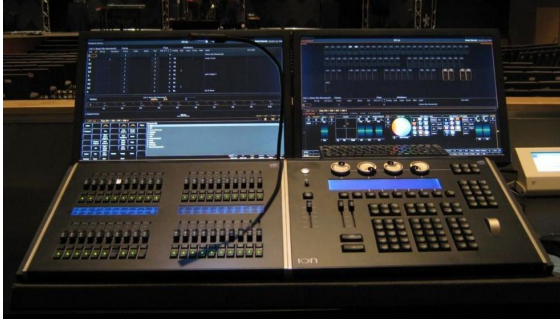
LIGHTING SYSTEM

Dimmers ETC Sensor, dimmer per circuit.. 466 dimmers @ 2.4kw (20A). 16 dimmers @ 6.0kw (50A).

Dimmer Control ETC Net3 DMX512 over Ethernet. Two (2) universes used for house dimmers. Network supports a third (3rd) DMX512 universe for auxiliary DMX devices.

Network Taps (8) fixed locations: light booth, house center, SL, SR, no.1 ceiling beam, no. 2 ceiling beam, SL box boom, SR box boom.

Inputs/Outputs (3) Net3 touring 2-port output gateways, (1) in booth, (2) floaters with turnaround adapters.



Primary Lighting Console ETC Ion 1000 with 2x20 fader wing. Located in control booth at rear of orchestra. EOS compatible.

Secondary Lighting Console ETC Expression 3-400. Located stage right. Used for lectures, simple concerts.

Accessories Remote video node and monitors, wired and wireless focus remotes.

Free tutorials available: <http://www.etcconnect.com>

House Light Control ETC Unison with multiple presents. Control panels in key areas. Production lighting consoles may also control house lights.

FOH LIGHTING POSITIONS and CIRCUITS

Front of House Circuit Transfer

Stage left wall, 20 Amp, 2p+g connectors.

- No. 1 Ceiling Beam** (34) 2.4kw circuits.
45' DS of P/L, 59' above stage, 52° angle from DSC at P/L.
- No. 2 Ceiling Beam** (29) 2.4kw circuits.
66' DS of P/L, 59' above stage, 42° angle from DSC at P/L.
- No. 2 & 3 Spot Booths** (2) 2.4kw circuits per side.
126' DS of P/L, 59' above stage, 25° angle from DSC at P/L.
- No. 1 Box Boom** (10) 2.4kw circuits per side.
6' DS of PL, 32' off CL, 12' to 27' above stage.
- No. 2 Box Boom** (12) 2.4kw circuits per side.
13' DS of PL, 35' off CL, 12' to 27' above stage.
- No. 3 Box Boom** (10) 2.4kw circuits per side.
22' DS of PL, 32' off CL, 24' to 47' above stage.
- No. 4 Box Boom** (10) 2.4kw circuits per side.
46' DS of PL, 41' off CL, 37' to 47' above stage.

ON STAGE CIRCUITS

- SL Drop Boxes** (15), each with (6) 2.4kw circuits.
- SR Drop Boxes** (15), each with (6) 2.4kw circuits.
(1), each with (2) 6.0kw circuits.
- SL Floor Pockets** (5), each with (4) 2.4kw circuits.
- SR Floor Pockets** (5), each with (4) 2.4kw circuits.
- US Floor Pockets** (5), each with (4) 2.4kw circuits.
- DSL Wall** (8) 2.4kw circuits.
(4) 6.0kw circuits.
- DSR Wall** (8) 2.4kw circuits.
(4) 6.0kw circuits.
- USL Wall** (4) 2.4kw circuits.
- USR Wall** (4) 2.4kw circuits.

LIGHTING EQUIPMENT

FRONT OF HOUSE INSTRUMENTS See FRONT OF HOUSE LIGHT PLOT for types and locations. Instruments will not be moved for use on stage.

STAGE INSTRUMENTS C-clamps, safety cables and color frames are available for all instruments. All connectors are 20 A, 2P+G stage pin.

(4)	14° Ellipsoidal	ETC Source4	575w
(16)	19° Ellipsoidal	ETC Source4	575w
(12)	20° Ellipsoidal	Colortran	1000w
(42)	26° Ellipsoidal	ETC Source4	575w
(1)	26° Ellipsoidal	Strand SL	575w
(36)	30° Ellipsoidal	Colortran	1000w
(34)	36° Ellipsoidal	ETC Source4	575w
(16)	36° Ellipsoidal	Strand SL	575w
(24)	40° Ellipsoidal	Colortran	1000w
(10)	50° Ellipsoidal	ETC Source 4	575w
(1)	50° Ellipsoidal	Strand SL	575w
(2)	90° Ellipsoidal	Selecon	575w
(10)	6" Fresnel	Colortran	1000w
(24)	8" Fresnel	Colortran	2000w
(64)	Source4 PAR	ETC Source4	575w

(7) Ovation B-1965FC LED Batten fixtures
7-cell RGBAL Chauvet 423w

(10) COLORado Batten 144 Tour LED Ground Row
3-cell RGBWA Chauvet 181w

ACCESSORIES

- Pattern holders
- Top hats
- Irises
- Side arms
- Boom bases and pipes
- Floor stands
- (24) 8" Barn doors
- (10) 6" Barn doors

FOLLOWSPOTS (3) Strong Super Trouper LT 2kW. Located in Spot Booths 1 & 4 and Center projection booth

ATMOSPHERIC EFFECTS

(1) Reel EFX DF50 hazer.

ELECTRICAL SERVICES

LIGHTING POWER Located stage left wall.

(3) 400A/leg, 120/208V, 3Ø, 5-wire, Cam-lock or tails

SOUND POWER Located stage left or right.

Transformer isolated.
(1) 200A/leg, 120/208V, 3Ø, 5-wire, bare-lugs.

SHORE POWER SERVICES Located at loading dock.

(2) 50A/leg, 120/208V, 1Ø, range plug.

SOUND

HOUSE SPEAKER SYSTEMS

Center Cluster System (mono): All JBL component system w/ sub. Mounted at C/L above proscenium

Main PA System (stereo)

(8) Meyer CQ2 self-powered, long throw, full-range loud speakers (15" + 4" compression driver)

(2) Meyer 650P self-powered subwoofer (2 x 18")

System configuration is (2) CQ2s over (1) 650P ground-stacked with (2) CQ2s flown in proscenium per side.

Consult with technical staff for availability

Enhancement Systems

(4) Meyer UMP-1P self-powered near fill loud speakers. Under balcony and box seating fills (delayed)

System Processing

(2) Dolby Lake 4 x 12 with wireless tablet PC control. All house zones available (cluster, stereo system, near fill, delay zones)

Assistive Listening System Hearing Loop system, 1 channel.

House System Tie-In (3) locations: house mix, stage left and stage right

MONITOR SPEAKERS

(4) EV SX-300 (12" + 1" horn, 2-way, wedge/pole mount)

(1) Galaxy Hotspot, full range monitor (low profile)

(2) Meyer UPJ-1P self-powered speakers

(1) JBL PRX812W (12", 2-way full range monitor)

(4) JBL PRX815W (15", 2-way full range monitor)

(1) JBL PRX815XLFW (15" active subwoofer)

HOUSE MIXING AND PROCESSING

House Mix Position Orchestra level. Not obstructed or under balcony. 21' SR of center, 67' from plaster line
12' w x 6' d (+3' d seating overhang)

House Sound Console Avid DShow Profile with mix rack. 48 x 32 x 8 ch insert. All comps, gates, EQs, reverb, delay, etc. are onboard.

Auxiliary Sound Console Behringer X32, 32 channel

Playback and Recording

Dual CD Player Denon DV-D4000

CD Player/recorder HHB CRD830

INTERCOM Clear Com, (4) channels with patching matrix. Tie-in located stage right. Permanent stations located in all key positions. Single channel belt packs and headsets available

DRESSING ROOM PAGE Available at stage manager's desk or patchable. Pages all dressing rooms, and backstage areas

PROGRAM MONITOR Audio program available to all dressing rooms and backstage areas, operator booths, offices and lobby areas. Individual volume controls in backstage and office areas

MICROPHONES

Wireless

(6) Sennheiser Evolution systems. Available mics:

(4) Countryman E6 headset

(4) Sennheiser MKE2 lavalier

(6) Sennheiser EW500 hand held

(2) G2 835 cardioid capsule

(4) G3 945 hypercardioid capsule

Wired

(3) AKG C414

(4) AT 853

(3) AT 857Q unipoint

(2) C-ducer CRSE/8 contact mic

(3) Crown PCC160 pressure zone mic

(1) EV RE20

(4) Neuman KM184

(2) Sennheiser MD421

(2) Shure Beta52

(4) Shure Beta58

(10) Shure SM57

(8) Shure SM58

(1) Shure SM58 w/switch

(4) Shure SM81

Accessories Direct boxes, microphone stands, boom arms sub snakes, cables and adapters

VIDEO

PROJECTION

Projector Eiki LC-HDT2000. 15K lumens, Native 2K resolution. Mechanical shutter for full black out. 4 hot-swappable lamps. Located in booth at rear orchestra

Zoom Lenses (2): 4.40-6.20:1, 2.63-3.56:1

Front Projection Max. image size on front projection screen:

25'w x 20'h 5:4 or 4:3 standard aspect ratios

35'w x 20'h 16:9 wide screen aspect ratio

Rear Projection *Consult with technical staff for specific needs*

Playback

Mac with QLab

PC Interface (with audio) CAT5 link to stage

PC Interface (with audio) HDMI, in booth

PC Computer, Dell, in booth

Blu-Ray Yamaha BD-S673

Other sources as needed

Switching and Preview Video with audio switching between playback sources. Operator preview/monitor system

CCTV SYSTEM

Color Cameras

(1) View of stage. PTZ mounted at center of Balcony 1

(1) View of audience. Mounted at top of proscenium opening

Patch Bay Located down stage right. RG59U dry lines to selected AVS panels. All terminals BNC

Distribution

(1) 1 x 5 composite video DA Ocean Matrix OMX7019

(1) 1 x 8 composite video DA Ocean Matrix OMX7027

Monitors Available at stage manager's desk, technical offices, loading dock and shop.

STAGE EQUIPMENT

ORCHESTRA SHELL Steel frame, wood paneled acoustical shell by Hoffend and Sons. White concert lighting integrated into ceiling panels. (4) Configurations available (see drawings at right).

- (7) Wall towers, each 14'w x 28'h.
- (3) Ceiling panels on motorized line sets.

ORCHESTRA EQUIPMENT

- (130) Orchestra chairs - (black) steel, armless, upholstered.
- (110) Music stands (black).
- (10) Bass stools.
- (65) Music stand lights.
- (1) Conductor podium.
- (1) Conductor stand.
- (1) 5-panel Perspex drum shield, 5'h.

PLATFORM RISERS Stage Right aluminum frame platforms with black PVC surface. Masking, chair rails and guard rails available. No drilling or painting.

- (16) 4' x 8' Platform tops.
- (7) 8"h Leg sets.
- (10) 16"h Leg sets.
- (5) 24"h Leg sets.

Additional 3' x 8' platform risers are available. Check with technical staff for your needs.

CARPETS Lot of 4' x 8' rubber-backed dark gray industrial carpets available for drum risers, cable covers, and other uses.

LADDERS 6', 8', 10', and 12' are available.

PERSONNEL LIFT Genie, Model #AWP-30. 30' lift height. 12V DC battery power with (2) battery/charger packs.

DANCE EQUIPMENT

Dance Floor Rosco black vinyl dance floor, laid horizontally. Stores on custom dance floor cart.

- (6) 63"w x 70'l rolls overall dimensions: 70'w x 30-6"d.
- (3) 63"w x 44'l rolls provide up to 15' additional depth.

Dance Barres

- (2) 8' sections, double sided.

Rosin Boxes: (2)

MUSICAL INSTRUMENTS

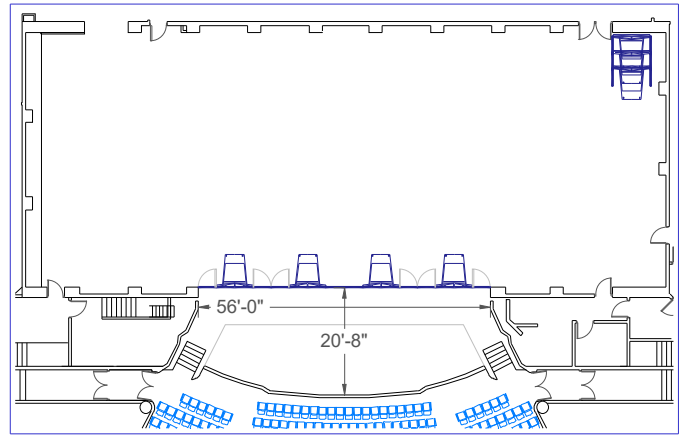
PIANOS

- (2) Steinway D, 9' concert grand pianos.
- (1) Yamaha C3, 6' grand piano.
- (1) Yamaha C3, 6' grand piano (located in upper lobby).
- (1) Yamaha U3E, 48" upright piano.

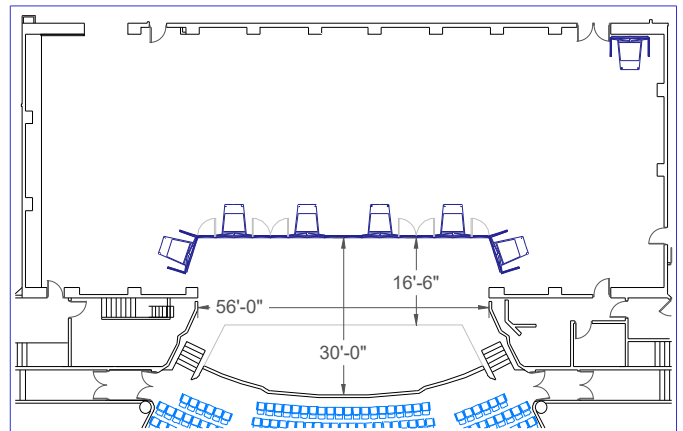
All pianos were new in 1993 and are well maintained. KU Fine Arts piano technician required for all tunings and repairs. Second Steinway D new in 2009.

OTHER

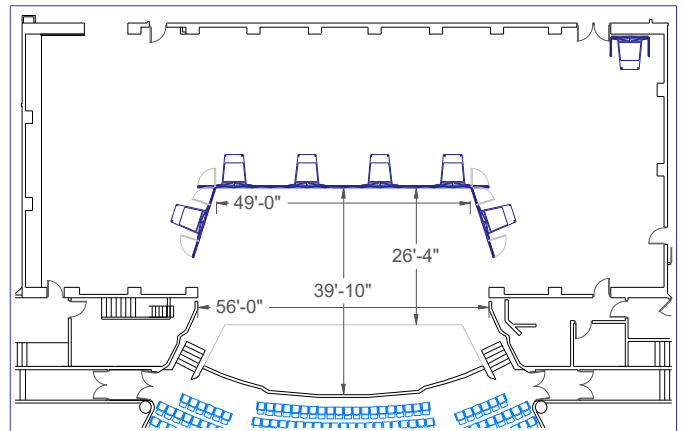
- (4) concert tympani - 23", 26", 29", 32"
- (1) concert harp.



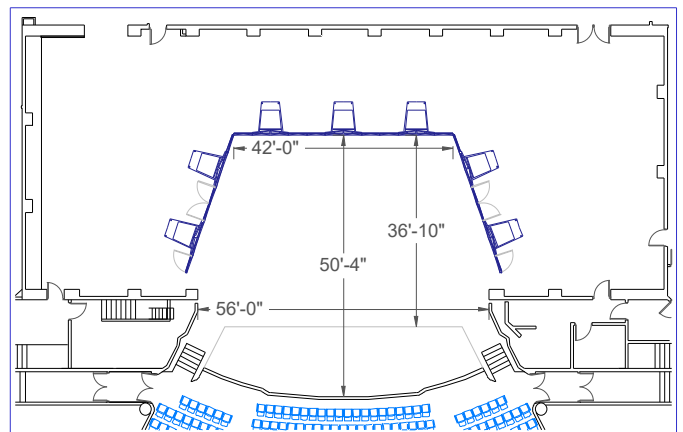
Orchestra Shell at Plaster Line. No Ceiling Panels



Orchestra Shell with (1) Ceiling Panel



Orchestra Shell with (2) Ceiling Panels



Orchestra Shell with (3) Ceiling Panels

BACK STAGE

DRESSING ROOMS Lockable. No keys given out.

Chorus Room A	Seats 21, wheelchair accessible.
Chorus Room B	Seats 16.
Chorus Room C	Seats 14.
Room 24	Seats 2, wheelchair accessible.
Room 28	Seats 3.
Room 32	Seats 3.
Room 34	Seats 2.

Total seating and mirrors for (61) performers. Each dressing room is equipped with costume racks, chairs, mirrors, and incandescent makeup lights. Each has sinks, showers, and toilets, liquid soap, adjustable thermostats, stage manager's page and show program monitor. Towels are available if requested.

CHARLES AND TENSIE OLDFATHER DANCE STUDIO

44' x 24'. Equipped with mirrors, dance barres, sound system, and upright piano. Floor construction is same as stage floor. Dance studio may be used for master classes, rehearsals, lectures, meetings, meal services, and other uses.

LAUNDRY and WARDROBE Laundry room adjacent to Shop and Chorus Room A. Equipment includes (2) washing machines, (2) clothes dryers, (2) garment steamers, sewing machine, irons and boards, rolling costume racks.

TOURING COMPANY PRODUCTION OFFICE 7' x 15'.

Equipped with tables, chairs, (2) telephone lines, high-speed Internet. Located off downstage right. NOTE: Access to grid, loading rail, FOH lighting, and orchestra pit is through production office.

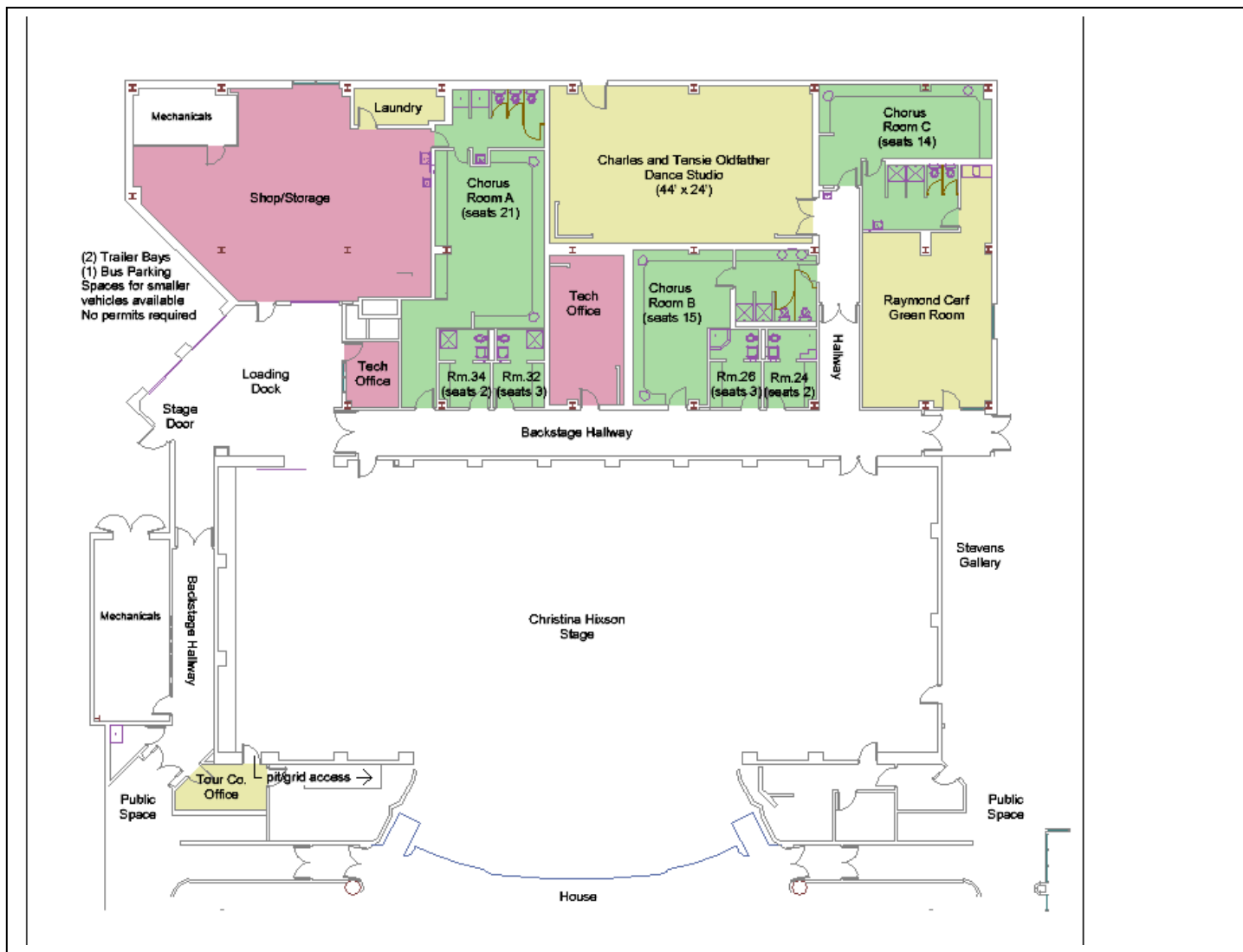
RAYMOND CERF GREENROOM

Equipped with carpet, plush sofas and chairs, table and chairs, kitchenette, ice machine. Cable television available. Shares lavatory facilities with Dressing Room C.

Wireless Internet access available in all backstage areas



Chorus Dressing Room A



LINE SET SCHEDULE

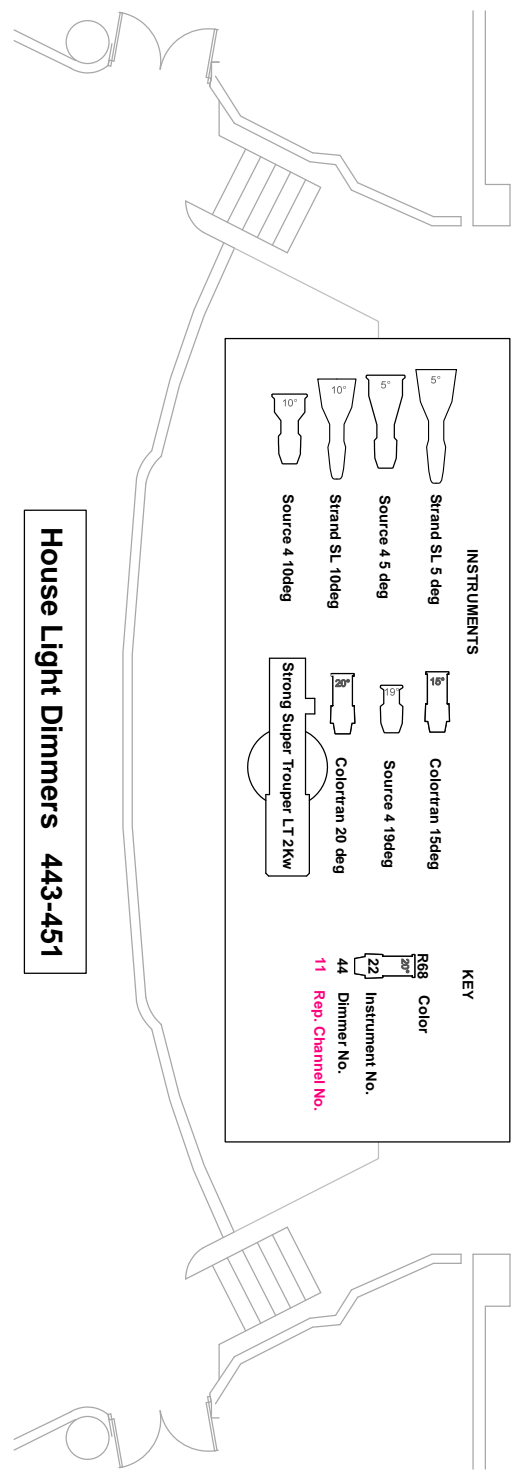
Available as downloadable Excel file at <http://www.lied.ku.edu>

No.	Dist. P/L	Item	Weight	Typical House Goods
1	1'-4"			Main Curtain/ Downstage Legs
2	2'-0"			Main Curtain / Grand Teaser
3	2'-8"			LX1
4	4'-0"			Orchestra Shell Ceiling #1
5	6'-0"			Border (16' H)
6	6'-8"			LX2
7	7'-4"			
8	8'-0"			Border
9	8'-8"			Legs (on split traveler track)
10	9'-4"			Front Projection Screen
11	10'-0"			
12	10'-8"			LX3
13	12'-0"			
14	13'-4"			Orchestra Shell Ceiling #2
15	14'-8"			
16	15'-4"			Border
17	16'-0"			Legs
18	16'-8"			
20	18'-8"			LX4
21	19'-4"			
23	20'-8"			Legs
25	22'-0"			LX5
26	23'-4"			Orchestra Shell Ceiling #3
27	25'-4"			
28	26'-0"			Border
29	26'-8"			Legs
30	27'-4"			
31	28'-0"			LX6
33	29'-4"			
34	30'-0"			
35	31'-4"			LX7
36	32'-0"			
38	33'-4"			
40	34'-8"			Border
41	35'-4"			Legs
42	36'-0"			Black Scrim
43	36'-8"			
44	38'-0"			RP Cyc
45	38'-8"			
46	39'-4"			
47	40'-0"			
48	40'-8"			
49	41'-4"			Cyc Elec
50	42'-0"			
51	42'-8"			Bounce
52	44'-0"			Full Black Traveler

Shaded line sets have permanently installed equipment and are not available for other uses.

Line Set Nos.19, 22, 24, 32, 37, and 39 are not listed because they are not installed.

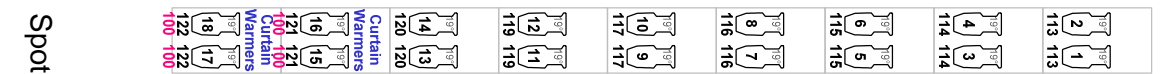
FRONT OF HOUSE LIGHT PLOT



SR
Box #3

SR
Box #4

SL
Box #3



INSTRUMENTS

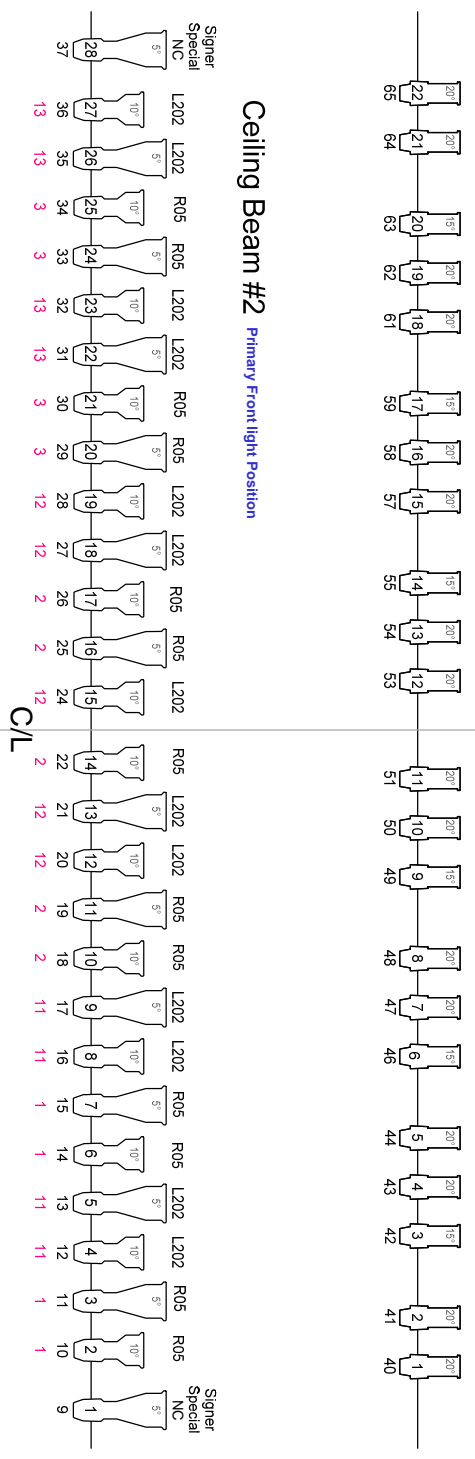
- Strand SL 5 deg
- Source 4 5 deg
- Strand SL 10deg
- Source 4 10deg
- Colortran 15deg
- Source 4 19deg
- Colortran 20 deg
- Strong Super Trouper LT 2Kw

KEY

- Color
- Instrument No.
- Dimmer No.
- Rep. Channel No.

Ceiling Beam #1 Limited coverage angle

Ceiling Beam #2 Primary Frontlight Position



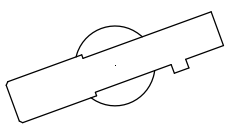
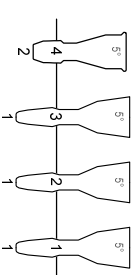
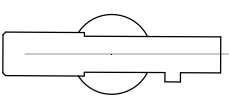
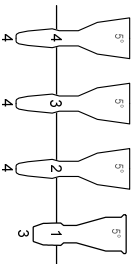
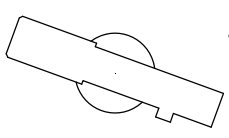
Spot Booth #4

Spot Booth #3

Center Booth

Spot Booth #2

Spot Booth #1



STAGE PLAN

Available as downloadable .DXF file at <http://www.lied.ku.edu>

