

REPORT

135-149 SHAFTESBURY AVENUE, LONDON

TEST FIT REPORT

Charcoalblue LLP
180 The Strand
2 Arundel Street
London WC2R 3DA

+44 (0)20 7928 0000
studio@charcoalblue.com
www.charcoalblue.com

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registered in England with number OC372258

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Then and now - The Saville Theatre, Shaftesbury Avenue

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EXECUTIVE SUMMARY

Charcoalblue have been engaged by the Iconi group to carry out a Test Fit Report exploring whether a theatre can be inserted within the existing building envelope on the site of the former Saville Theatre on Shaftesbury Avenue.

Charcoalblue attended a site walk round in early August 2019 to understand the building, inspect what elements of the former theatre structure remain and to explore the viability of returning the current cinema back into a West End Theatre.

This report highlights the following:

- Brief theatrical history of the venue
- Proposed area schedule and massing diagrams
- Theatre design sketch proposals
- Precedent theatre overlays
- Technical systems proposals
- High level budgetary technical systems costs and exclusions

Please note that this report is prepared for the client listed, any information used by a third party is at their own risk. If you would like to contact Charcoalblue for more information, please address any queries to jenni.harris@charcoalblue.com

1. HISTORY OF THE VENUE

The Grade 2 Listed Saville Theatre, designed by Sir Thomas Bennett and with the prolific theatre architect Bertie Crewe consulting on the project, opened on 8th October 1931. The building was praised for its modern approach breaking free of Victorian pastiche. It is interesting to note that very few theatres were built between the wars and as such the remaining exterior is architecturally significant.

Originally designed to be a classical theatre it had a capacity of around 1,200 on three levels, with additional standing the capacity could rise to over 1,500. Circulation was good, private boxes were supported by rearing rooms, bars located at each level and a sumptuous saloon placed under the stalls. The building housed a high level of performer support spaces – twenty two dressing rooms and large chorus rooms. Administration was located the on The New Compton Street side and is existing, this façade is utilitarian but retains a good character.

The stage was located around 4.5m below grade, there are remnants of it at the rear of the current Cinema screen 1. The proportions modest at 9.6m wide and 9.3m deep. The top of the flytower and grid remain in place, masked by the façade externally and the cinema installations inside.

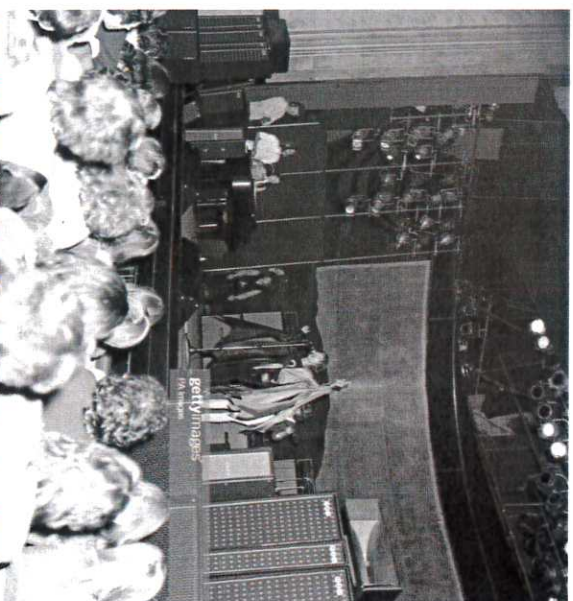
The venue was initially successful in presenting theatre but struggled, as did so many theatres, with the popularity of cinema which was flourishing. Briefly damaged during the Blitz, the Theatre was eventually bought by Brian Epstein in 1965 who turned the venue into one of London's principle music venues. During Epstein's time the venue saw the likes of the Beatles, The Who, Pink Floyd, Elton John, Chuck Berry, Fats Domino, the Rolling Stones, Jimi Hendrix and the Bee Gees perform at the venue. In 1969 the theatre was sold and used as a theatre – a young Cameron Mackintosh producing work on stage. Yet the ownership of the building changed once again and was sold to ABC Theatres and they converted the venue into a cinema with two screens. The stage area and foyers were also converted leaving very little of the original theatre structure intact. In 2001 the building was sold to the Odeon Cinema group which added 2 more screens to the building.

The building's most significant element is its front façade, a large sculptured frieze by Gilbert Bayes runs along it for nearly 40 meters, representing 'Drama Through The Ages.' This unique façade treatment is surprisingly untouched and still seen on the building today. It is praised from both heritage and architectural communities, with the Theatres Trust describing it as 'perhaps the most significant sculpture of the 1930s on a prominent building'.

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Issue type: Information



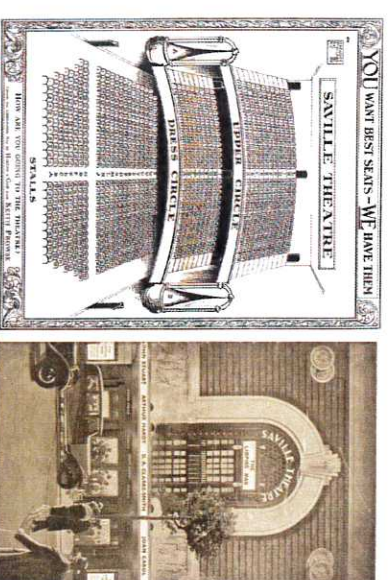
The original stalls bars in the mid 1930s



The Rolling Stones performing at the Saville Theatre in the mid 1960s



Brian Epstein programming and outside the Saville Theatre in mid 1960s



Early seating plan and original theatre exterior

2. THEATRE DESIGN

2.1 AUDITORIUM SHAPE AND DESIGN

This study has focused on testing the site opportunities, in particular can a +/-1,000-seat theatre with appropriately sized stage and flytower fit alongside the associated public and back-of-house support accommodation within the current building facade?

Referencing the original theatre layout helps unlock some of the potential yet doesn't give us all the answers. The original theatre layout was wide, covering most of the width of the plot. Long rows of seats with audience seated very close to exit doors and whilst Shaftesbury Avenue was busy back then it was not as noisy as it is now and audience expectation has changed, therefore we need to ensure an acoustic buffer between the auditorium and street.

Seating was generous for the time, but not compared to modern comfort and safety standards. Sightlines in the original room were good from all levels, this as a result of a steep stalls and even steeper balconies, which also allowed a high level of standing audience.

The new theatre must offer a high level of audience comfort with the same excellent sightlines as the original, however modern regulations and the site constraints indicate the new venue will have a lower capacity to the original.

The following pages illustrate an initial concept, it is a functional response to the brief and site. The design proposal suggests a narrower room than the original, this gives much needed circulation and ensures a suitable acoustic separation between the auditorium and the busy street.

By bringing in the width of the auditorium we've adopted a tighter geometry for the theatre, creating an intimate horseshoe shape for the auditorium establishing a physical link between the facing balconies and actors on stage. The shaping of the balconies and auditorium ceiling are indicative in this study, though would be the most significant elements in any theatre and will define the building.

Our design for this new Lyric Theatre is arranged over three levels, a stalls located in the basement (level -1) seating around 500, this is entered from an adjacent foyer. The circle is accessed directly from street level seating 200, with a control room on centre, this level is complimented by a balcony above, perhaps broken into two, seating 300.

The stage is modest but well-proportioned for the heart of London, it measures 12m deep by 16.5m wide, with a proscenium opening 11m and 7.5m high. The new grid is at 20m above stage and for the most part fits within the existing skyline, albeit the corners are extended to improve the flying above stage.

The design is indicative yet supports the proposal to house a comfortable 1,000-seat proscenium theatre inside the existing walls of the building.

2.2 FOYERS AND FRONT OF HOUSE ACCOMMODATION

Using the original plans as a base of our design we have included a modest ground floor foyer to welcome guests that also houses the main theatre bar, ticket office and principle stair to the lower foyer and upper seating levels. We are proposing using all of the existing doors at ground level with only the addition of 1 door in the facade. After research it appears that a door in a similar position to the one we are proposing was part of the facade, but since the building was converted into the cinema this door was infilled.

The basement levels have a small bar on level -1 with the main toilets and cloakroom on level -2. The upper levels include bars and additional toilets and further front-of-house stores.

A new public elevator also caters for bar deliveries is located on the Stacey Street side.

2.3 BACKSTAGE ACCOMMODATION

Again, referencing the original (and existing) backstage accommodation we have located the majority of the backstage accommodation on the North side of the building.

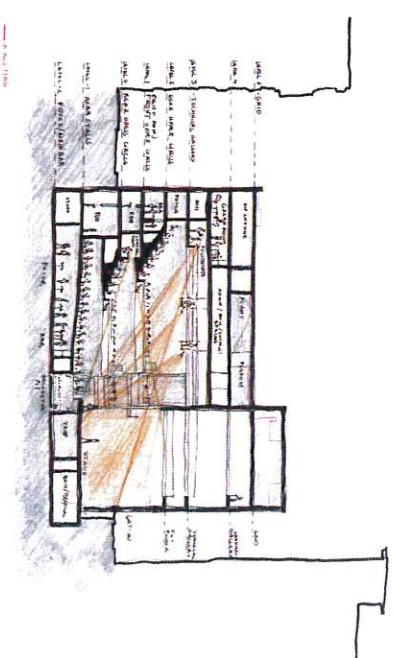
Beginning the process with an area schedule highlighting which rooms could be afforded within the confines of the current building envelope. The schedule had been issued to Gardiner and Theobald to assist with the cost plan and is also appended to this report for reference.

We have ensured throughout the building that there are suitable amounts of dressing rooms, toilets, showers and technical facilities.

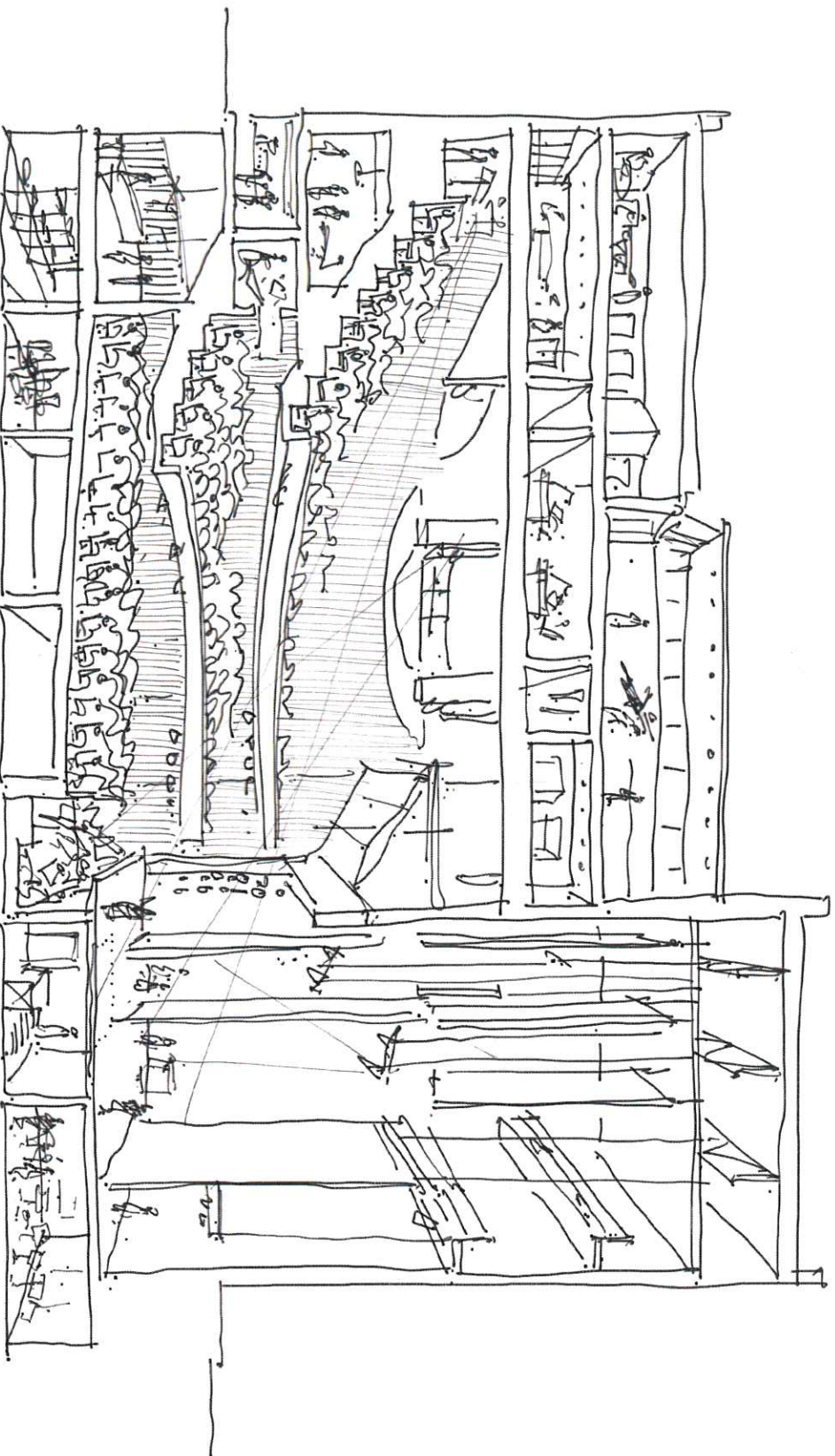
2.4 UPPER FLOORS

Owing to the adjacency requirements of the auditorium, foyers, stagehouse and flytower volume, a lot of the building programme has been inserted into

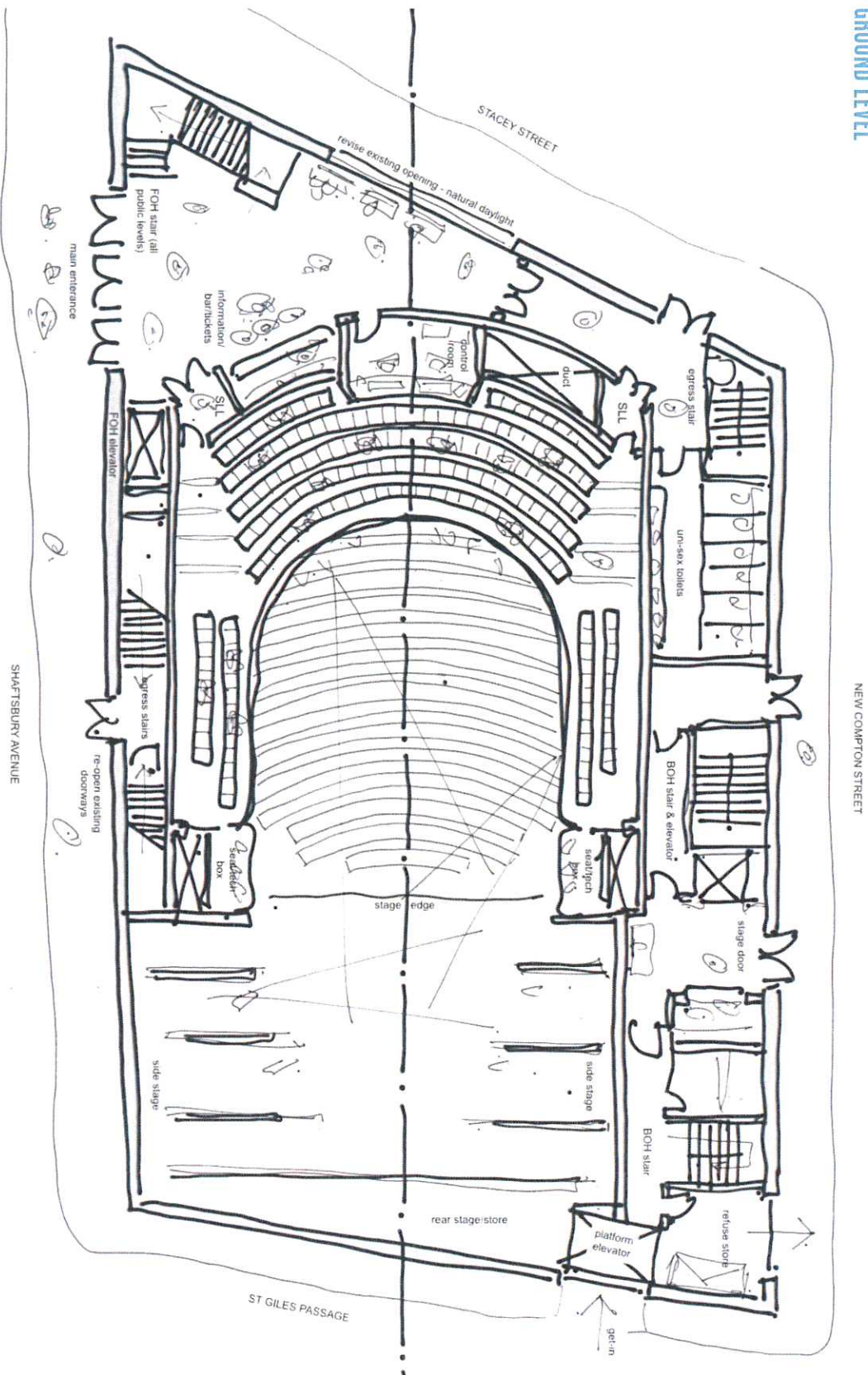
levels -1 to 3. The upper floors being Levels 4 & 5 have been drawn to illustrate what other accommodation needs to be included within the building as an exercise, though the final layout of these could be amended as required. There are further opportunities for bars and VIP areas on these levels, along with additional dressing room space, offices and plant. This study and plans have demonstrated that the support accommodation can be afforded within the scheme, though will need some stacking within the building which isn't unusual for a West End Theatre.



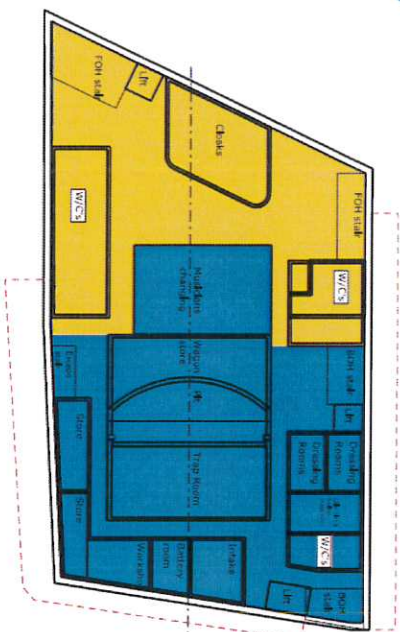
2.5 SKETCH LONG SECTION THROUGH THEATRE



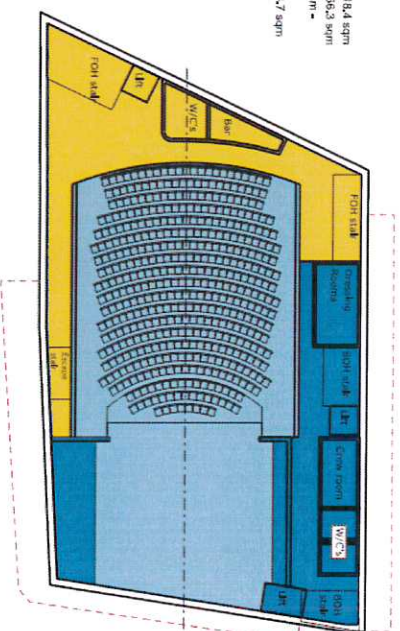
2.6 SKETCH OF GROUND LEVEL



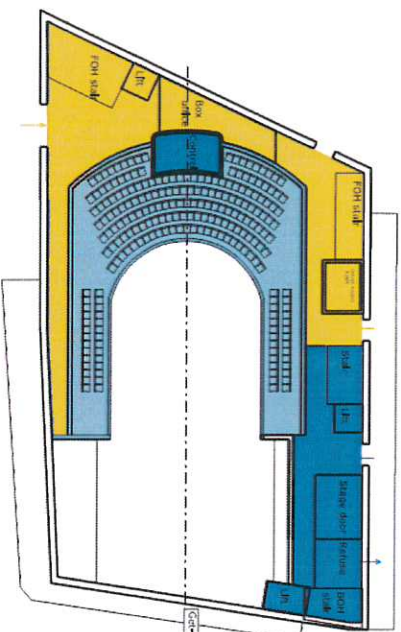
Yellow – Front of house
Blue – Back of house
Cyan – Auditorium and stage



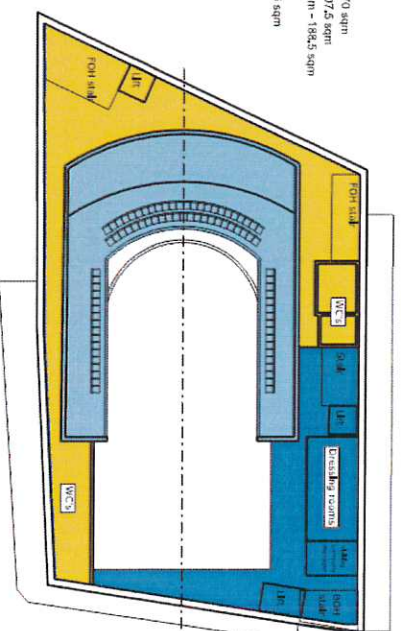
LEVEL-2



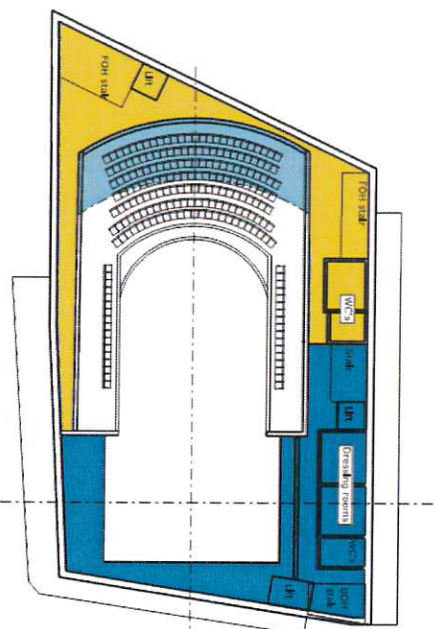
LEVEL -1



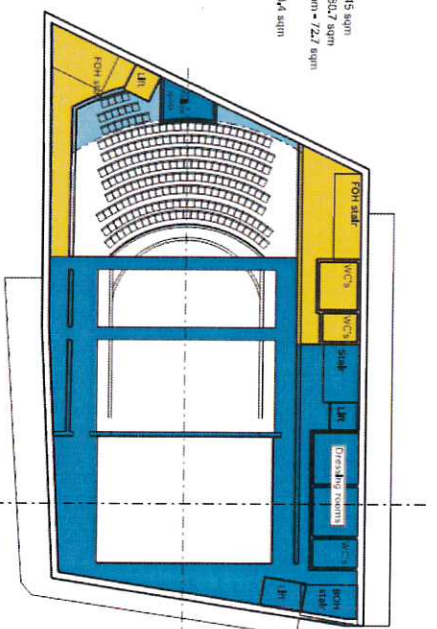
LEVEL 0



LEVEL 1



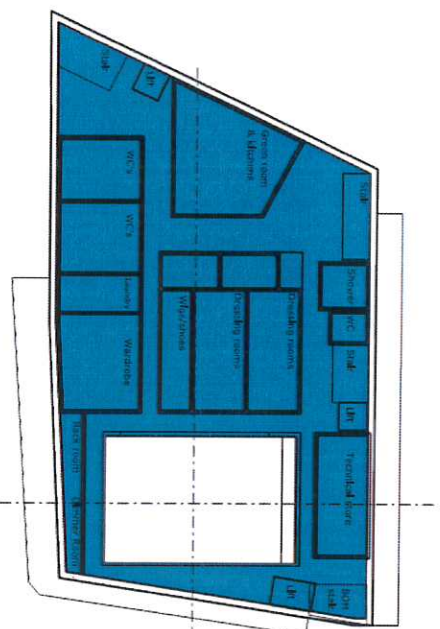
Area:
FOH - 145 sqm
BOH - 162.7 sqm
Auditorium - 72.7 sqm
Tot - 379.4 sqm



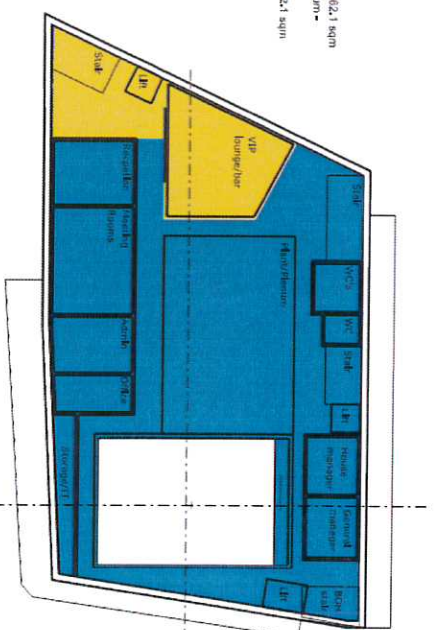
Area:
FOH - 103.4 sqm
BOH - 251.9 sqm
Auditorium - 21.8 sqm
Tot - 377.1 sqm

LEVEL 2

LEVEL 3



Area:
FOH - 662.1 sqm
BOH - 662.1 sqm
Auditorium -
Tot - 662.1 sqm



Area:
FOH - 115.5 sqm
BOH - 555.6 sqm
Auditorium -
Tot - 671.1 sqm

LEVEL 4

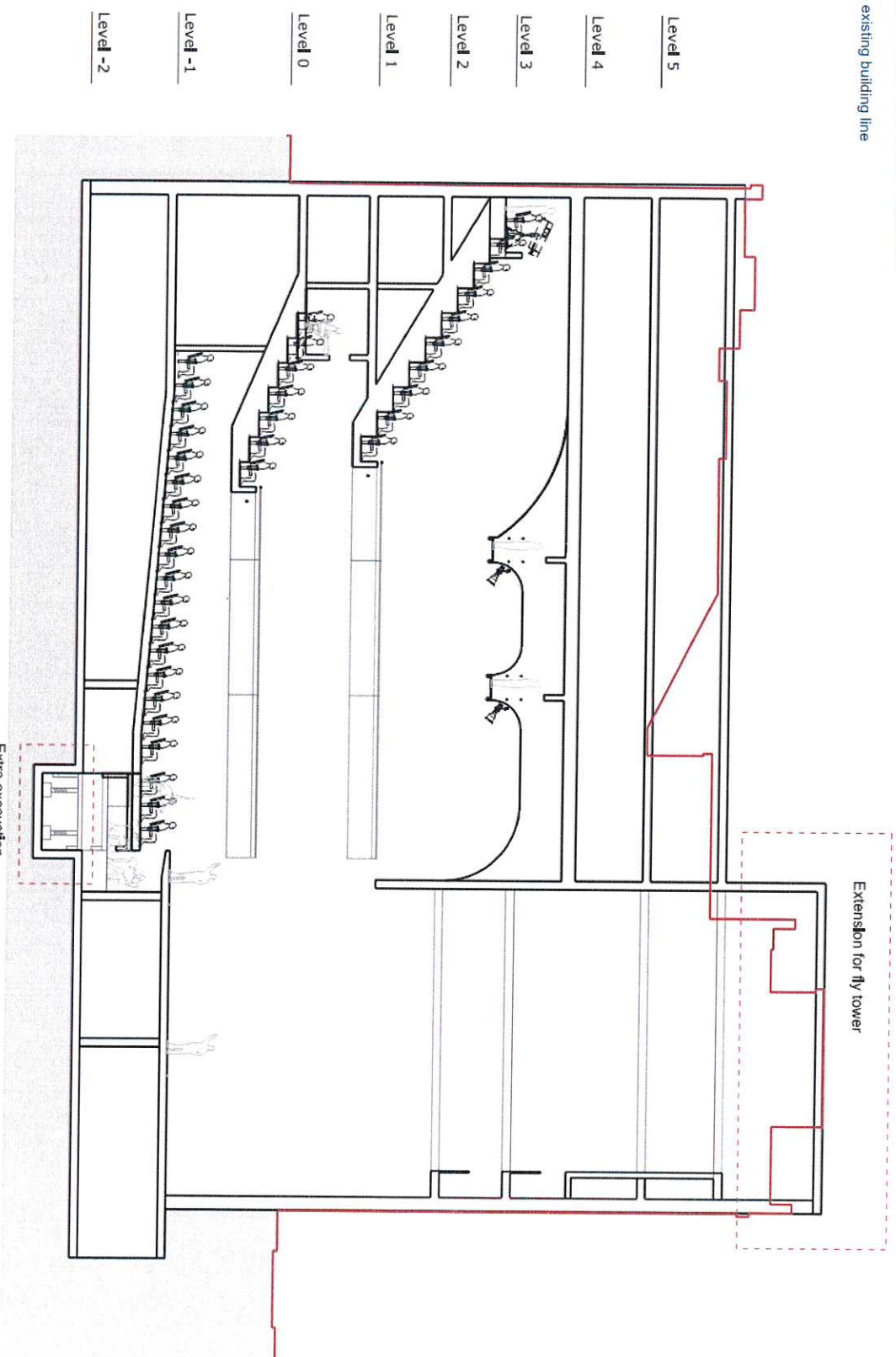
LEVEL 5

Glt: 122.7 sqm
TOTAL AREA:
4994.2 sqm

Total Area - 5%:
4744.5 sqm

2.8 LONG SECTION WITH BUILDING OVERLAY

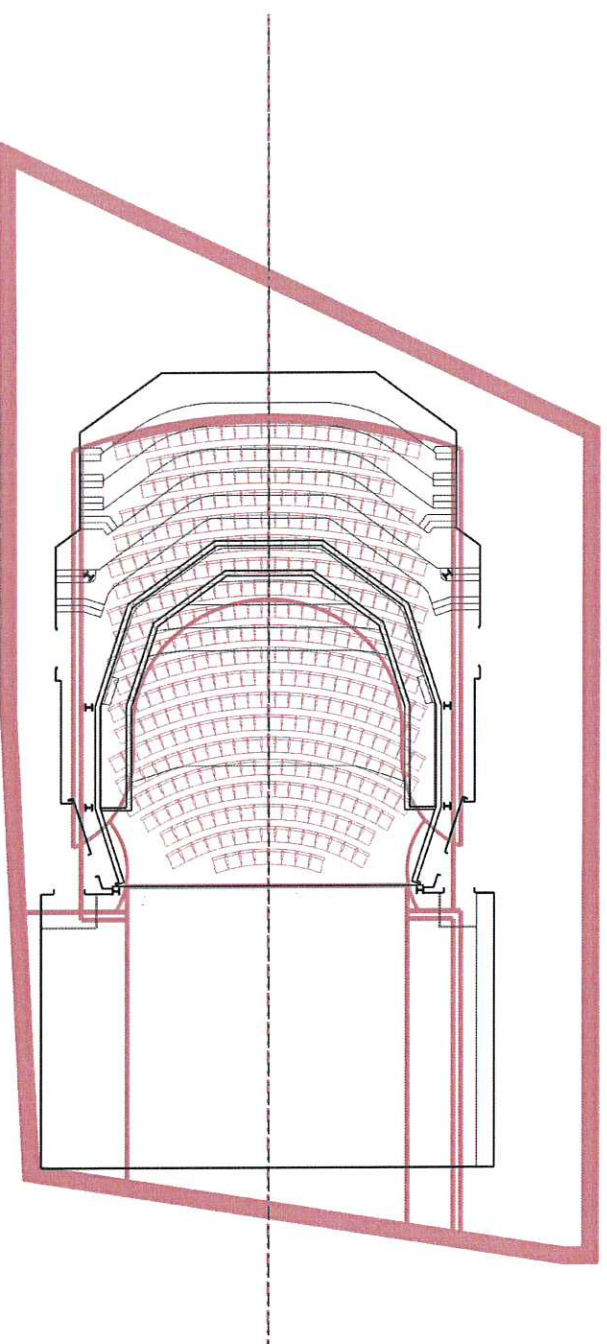
Red outline shows the existing building line



3. PRECEDENT VENUE OVERLAYS

STORYHOUSE THEATRE, CHESTER

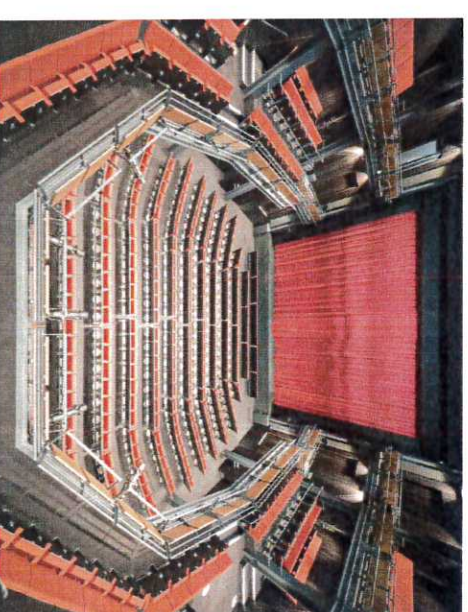
CAPACITY: 850 SEATS



PRECEDENT VENUES

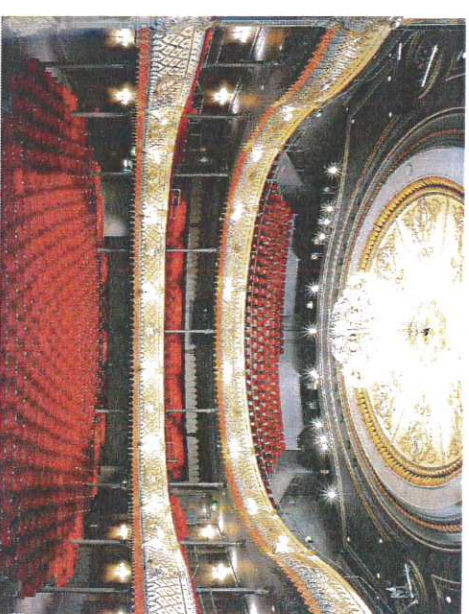
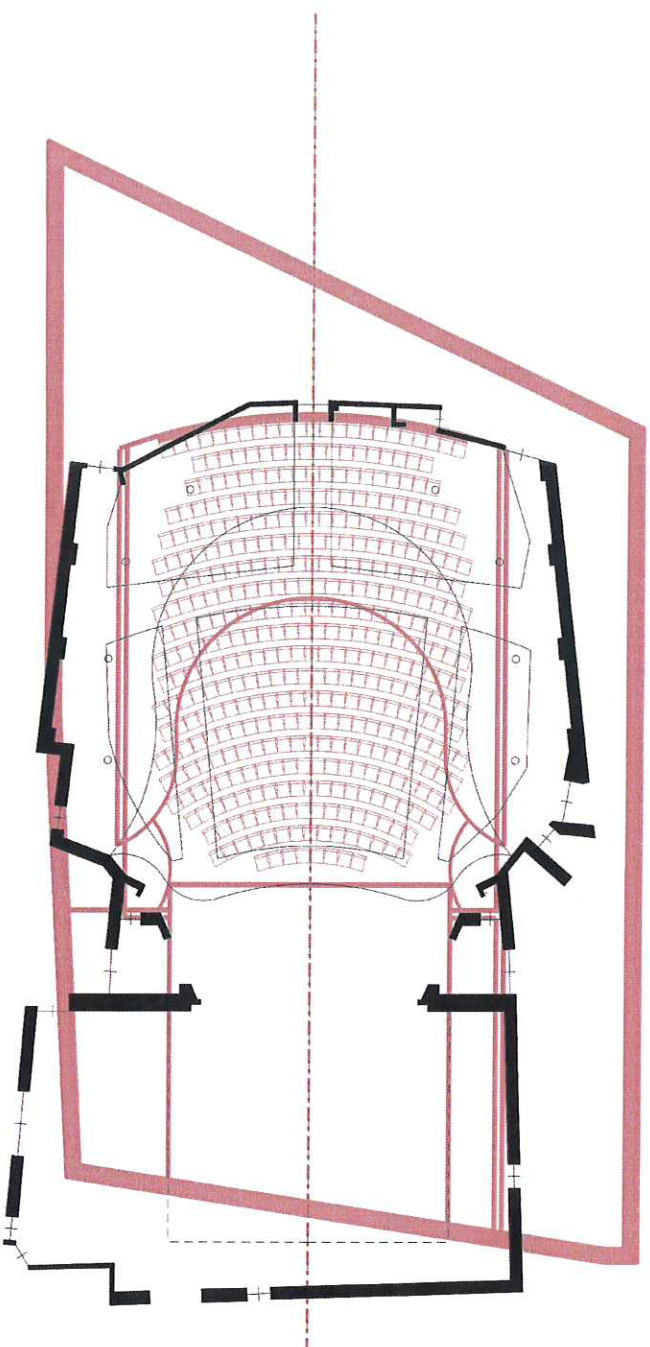
The following pages illustrate built examples of comparable theatres overlaid to the Shafesbury Avenue site. This is an important exercise to understand both the potential and limitations of the site as well as providing useful context to other venues.

The precedent on this page demonstrates an overlay on top of a modern auditorium with current seating out considerations, illustrating that a 1,000 capacity for the Shafesbury site feels about right, with any increase potentially being a compromise for audience comfort.



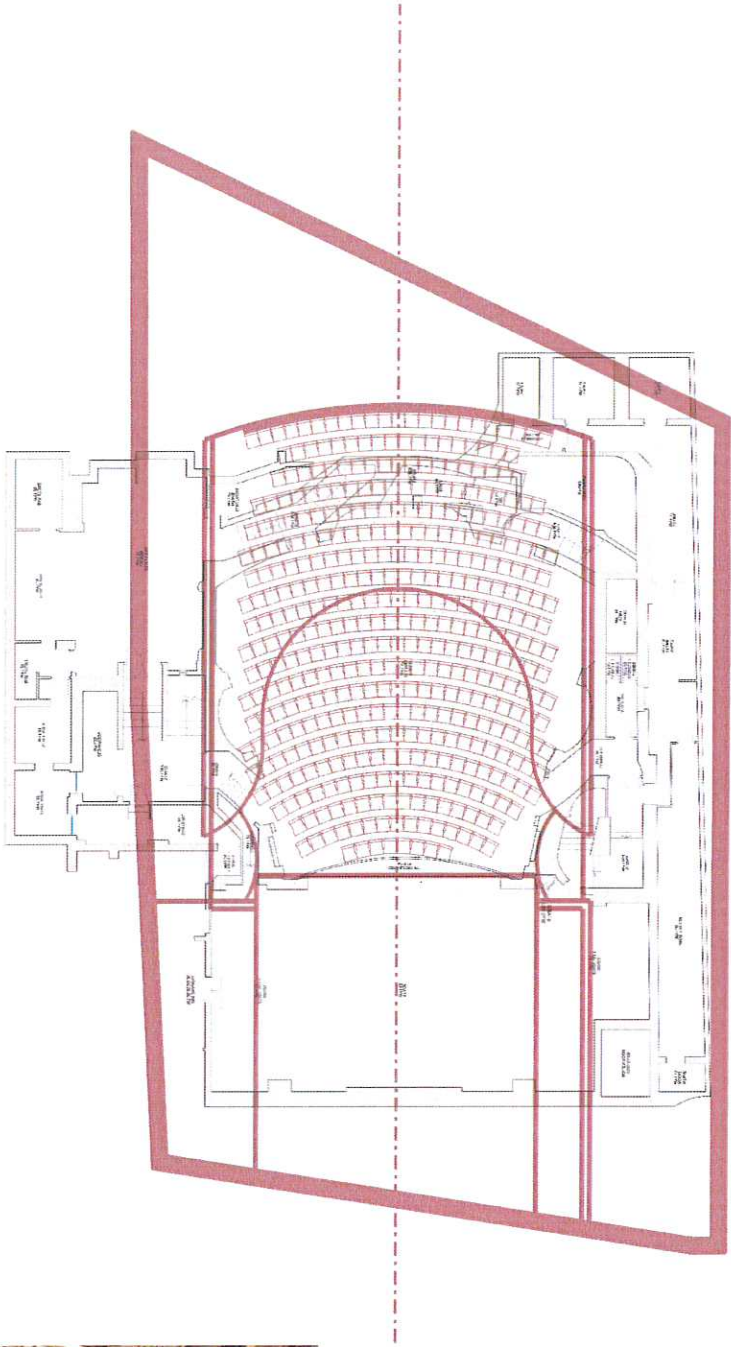
OLD VIC THEATRE, LONDON

CAPACITY: 1,067 SEATS



WYNDHAM'S THEATRE - LONDON

CAPACITY: 750 SEATS



4. TECHNICAL DESIGN

Charcoalblue have reviewed existing technical provision within West End venues, whilst discussing what improvements are required on the current West End stock with working Production Managers. The following sets out the current technical proposals based upon these reviews and conversations and our extensive knowledge and history of technical designs for buildings such as these.

4.1 STAGE ENGINEERING

OVERSTAGE

The theatre will require overstage suspension systems to hang theatrical equipment and effects such as stagelighting, audiovisual equipment and scenic items. To match similar sized theatres elsewhere in the West End, and to strike the right balance between capital and maintenance cost against fit-up time, this is likely to be achieved mostly with counterweight flying systems rather than costlier fully powered flying systems.



Counterweight flying system

We have used the existing fly tower as the base of our design but pushed it a little further to the sides to give more room overhead and to the ancillary spaces around it. Some powered winch line sets in locations for stagelighting bars, heavy scenic items and advance sound positions would be recommended, along with a selection of travelling beams and electric

chain hoists both front of house and at grid level to lift larger, heavier items. Powered winches speed up the fit-up process and induce less strain on operatives having to load weights into counterweight cradles to 'balance' the weights of the applied load to a bar. Due to the nature of most productions being presented in the West End, consideration as to the types of systems installed would be needed, as some productions tend to not use a lot of the venues flying system, instead opting to bring in their own systems and is therefore largely an operators choice as to the level of infrastructure that they choose to provide.



Typical travelling beam with hoist

The fire strategy is yet to be developed for the theatre, and it is not yet known whether a fire safety curtain will be required. Typically, a fire curtain would be installed behind the proscenium to separate the stagehouse from the auditorium as larger fire loads are expected within the stage area, though they are no longer deemed to be an essential installation. Indicative costs for a fire curtain have not been included at this stage.

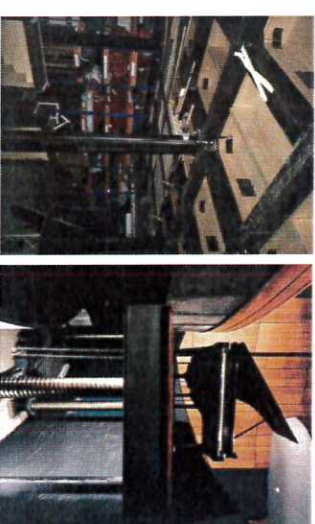
AUDITORIUM RIGGING POSITIONS

For access and rigging of equipment over the seated auditorium area, ganties should be installed at high level with fixed rigging positions. This prevents the need to bring access equipment into the auditorium speeding up the operational processes.

Careful design of both the ganties and auditorium ceiling finish will be vital to ensure an aesthetically pleasing and operationally effective auditorium soffit.

ORCHESTRA PIT LIFT

We expect mechanical assistance will be needed for the forestage elevator to enable quick change between orchestra pit, flat floor and stage extension conditions which is typically provided in the form of a pit lift.



Modular trap system and typical orchestra pit lift

SEATING WAGONS

Seating wagons will form the front row, or rows of stalls and be sited on the orchestra pit lift in 'stalls' position. These wagons, following the rake of the auditorium, allow rows of seats to be transferred quickly and easily from the lift into a sub-stage storage garage when the lift is required for an alternative format. Air castors are typically used for ease of wagon movement to different locations.

TRAPPED STAGE AREA

For a stage of this size with a fly tower, a trapped area of the stage would normally be included to allow performers or equipment to be raised or lowered through the stage during a performance.

Furthermore to this, and after consultation with West End production managers, we propose the stage construction to be modular deck or a framing system that enables easy height adjustment to the stage for the various different productions that may be presented here. This will also give easy adaptability of the stage to be used for traps. Traditionally a stage construction will include a central void infilled with loose pieces that can be removed and reconfigured for different performances. Access is provided at sub-stage level through the trap room. No lifts or other access equipment specific to this purpose has been included in the cost tables as it is assumed that equipment can be hired in for special events. A system

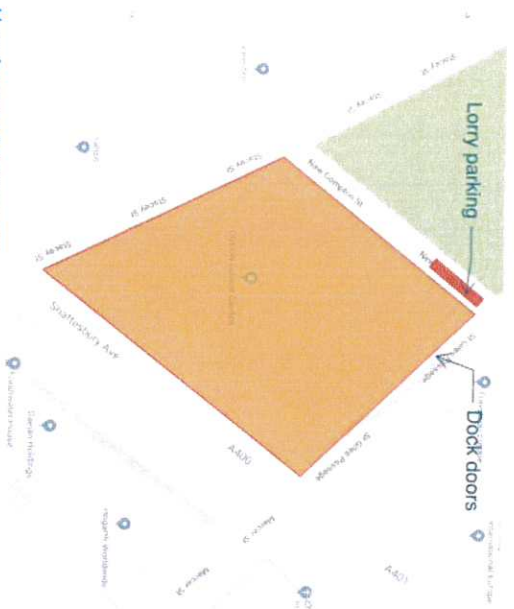
similar to this could be adapted to work with the decking/modular system above it.

DOCK LIFT AND GET IN ACCESS

As the stage will be 2 floors below ground level the get in area will require a platform lift to bring production kit and scenic items down to stage level. The platform lift can be stored flat against the back wall of the theatre when not in use. This gives a safe working platform area and can be mounted on a steel beam rigged under the gallery cross over that can cantilever over the stage.

As the get in doors will be at street level all goods will need to be accessed from lorries via ramps or forklifts. We have included for the cost of a ramp for this purpose.

We recommend that the lorries will park on New Compton street and offload there to give better access and loading room at the get in which is located on St Giles Passage.



Map of proposed get in access

4.2 STAGELIGHTING

INFRASTRUCTURE

The stagelighting infrastructure will consist of a centralised dimmer room feeding dimmed/switched power circuits and data lines to an array of stagelighting facility panels distributed around the stage and auditorium. The data control network infrastructure will allow lighting control consoles to be operated from several locations including the control room, auditorium and stage. This infrastructure will not be as large as usual in most modern theatres as most West End productions will bring in their own temporary infrastructure. There will be a good array of temporary cable routes onstage and throughout the auditorium to allow productions to run in their own cables if required.



Temporary cable routes and hangers

Most West End productions require multiple power supplies for various departments. Custom temporary power panels around the stage should be included for powering temporary stage lighting, audiovisual and stage engineering equipment.

HOUSELIGHT SYSTEM

A centralised houselight/working light processor will provide control of all installed lighting for activities including cleaning, fit-up, rehearsal and performance. A master control panel will allow operatives to control and programme the houselight system to meet requirements, and a set of simple push panels will be situated at entrance areas and key points as light switches, which can be 'locked out' during performance times.

DEAD BLACKOUT SYSTEM

A 'dead blackout' control system is advised to be able to override the emergency lighting and exit signs within the auditorium for short periods of time for dramatic purposes, such as when an actor needs to leave/enter the stage without the glow of the auditorium lighting. This is a controlled system typically with a 'Deadman's handle' and automatic timed/emergency restore. The timings of restoration will generally depend upon the local licensing authority.



Typical stage lighting dimmer racks

4.3 AUDIO, VIDEO & TECHNICAL COMMUNICATIONS

INFRASTRUCTURE

A tie-line infrastructure for audiovisual facilities will be required to allow signals to be routed both within the theatre and to provide links around the building. A centralised rack room will be required for the patch racks where tie-lines terminate as well as amplifiers and other noisy equipment can be located away from the auditorium and control room to prevent disturbance. The infrastructure where possible will be based on digital and/or ethernet based protocols, but special care should be taken to minimise latency. There will only be a minimal quantity of analogue services to reduce costs and future-proof the theatre.

This system will be larger than the stagelighting infrastructure but still use the same principal that it can be either used on productions or be bypassed if a production brings in its own kit and cabling.

Panels and also temporary cable routes will be routed around the side and back walls to allow surround sound speakers to be rigged as required as this is now common practice in most West End productions.

It should be possible to operate digital or analogue audio mixing consoles from several positions including an audio mix position in the stalls seating area - required for live mixing so that the operator can hear what the audience hears - and the Control Room. The Control Room should have a large operable window which can be closed for such times as only musical playback is required – or open to allow the sound engineer to hear what the sound reproduction conditions exist within the room.



Typical audiovisual facilities panel and typical stage manager's console

STAGE MANAGERS CONSOLE

Although it may not be used on some productions, we recommend that the theatre purchases a stage manager's console. This will be a hub for facilities including IP based cue lights (to give performers and technical staff a visual signal), paging for front of house and backstage areas, and a ring intercom system to allow technical staff to talk to each other during rehearsals and performances. The intercom will be based around a wired intercom system, but some wireless systems may be included for stage management where the communications belt pack being tethered to a local panel is unsuitable.

ASSISTED LISTENING AND AUDIO DESCRIPTION

In accordance with Equality Act (2010), provision must be made for all audience members. Various systems are available depending on client and user preference. Costs have been included for an assisted listening system within the audiovisual system costs.

BUILDING WIDE

Audio and video show relay allows performers and technical staff to see and hear what is happening on stage with relays to back of house corridors and dressing rooms. The same system can also be used for front of house paging and information and video signals can be distributed to key areas for latecomer's screens.

4.4 LOOSE EQUIPMENT

Normally a lump sum of the budget would be assigned for a large amount of loose equipment. Due to the unconfirmed nature of what the theatre will ultimately be used for we have not accounted for any loose equipment at this stage.

4.5 TECHNICAL COSTS

Technical costs had been issued to the team to assist Gardiner and Theobald with the cost report and are appended to this report for reference.

5. CONCLUSION

Through our work on this project, we have concluded that a circa 1,000 seat theatre could be accommodated on the site within the current façade and footprint. There may need to be some works to increase the roof height to afford a full flytower, though the roof line over the auditorium could remain as existing, pending a further review of the accommodation layout of the upper floors. It is recognised that it is a compromised site with a tricky get-in for productions but has sufficient volume to house a new large scale theatre using the existing basement, so could support longer running performances without the need for weekly turnaround.

The front exterior of the building is unusual, its 'solidity' is not necessarily the starting point for a new theatre which might try and promote transparency, activity and a warm welcome, yet it is of a very high quality and being an architectural rarity, captures a unique "between wars aesthetic".

The site footprint is broadly 780sqm, if measured over eight floors and discounting the voids for stairs, ducts, stage and auditorium, this totals between 4,225 – 4,750sqm, our estimation of the required area is a little higher at 4,890sqm gross, suggesting a close fit for the brief to the site.

The configuration of the building accommodation and design of the auditorium are all open for development, the seating capacity and stage dimensions are subject to change but based on our works during this study an overall capacity of around 1,000 seats appears possible, importantly linked to a stage size comparable to the majority of West End Theatres.

This is an exciting moment, it is a very rare opportunity to be able to create a new thriving West End theatre, we very look much forward to presenting this study and receiving any feedback.

APPENDIX 1 – TECHNICAL COSTS – *REDACTED*

APPENDIX 2 – AREA SCHEDULE

Room name	Area (sqm)	Occ	Notes
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A PUBLIC AREAS

FOH

Principle foyer	600	1,000	Assuming 0.6 sqm per person
Weather lobby			In gross
Information desk/Merchandising Area			In gross
Cloakroom	40		Assuming 50% of audience leave coats/ABTT recommendations
First aid room			In FOH managers office
Toilets (public male)	54	14	Based 40% audience split and ABTT recommendations
Toilets (public female)	149	30	Based 60% audience split and ABTT recommendations
Toilets (accessible)	20	4	Approximately 1 per audience level
TOTAL FOH	863		

TICKETING

Box office	20		
Box office manager	8		
Box office counter support	12		
TOTAL TICKETING	40		

CATERING

Bars and servery	30		
Store	15		
Catering office	8	1	Bar Manager
Central bar store	18		
Refuse	10		
TOTAL CATERING	81		

VIP/EVENT SPACES

VIP Lounge	30		
Toilets	8		
TOTAL VIP/EVENT SPACES	38		

SERVICES

House manager office	12	1	
Changing areas	20		Ushers
Ice cream & programme store	10		Possibly within FOH store
Housekeeping store	15		
FOH store	15		
TOTAL CATERING	72		

TOTAL PUBLIC AREAS 1,094

B AUDITORIUM AND STAGE

AUDITORIUM

Auditorium seating areas	1,000	1,000	1m2 per person
Orchestra pit	45	30	1.5m2 per musician
Seating store	60		
TOTAL AUDITORIUM	1,105		

STAGE

Mainstage	140		W 12.5m x D 11m, triple height
Side stage	110		5m both sides, including fly floors
Rear Stage	60		including crossover galleries
Trap room/understage	40		
TOTAL AUDITORIUM	350		

TECHNICAL ACCOMODATION

Orchestra and general store	15		
General store	15		
General workshop	12		
Stage and equipment drapes	15		
Workshop/maintenance	20		Adjacent to Scene dock
Intake room	12		
Battery room	8		
Unisex toilets	20	4	
TOTAL AUDITORIUM	117		

GET IN

Refuse	8		
Get-in/scene dock	30		
TOTAL AUDITORIUM	38		

TOTAL AUDITORIUM AND STAGE 1,610

Room name	Area (sqm)	Occ	Notes
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C PERFORMER AREAS

DRESSING ROOMS

Dressing room (double)	12	2	With accessible shower, toilet and washbin in room
Dressing room (double)	12	2	natural daylight and openable windows
Dressing room (4 person)	20	4	With shower
Dressing room (4 person)	20	4	With shower
Chorus DR (8 person)	30	8	With min 3 showers
Chorus DR (8 person)	30	8	With min 3 showers
Conductor dressing room	10	1	With shower
Musician male changing room	15		Locker room
Musician female changing room	15		Locker room
Male toilets and shower	15	4	
Female toilets and shower	20	4	
Accessible toilet and shower	8		
TOTAL DRESSING ROOMS	207		

SUPPORT ACCOMODATION

Wardrobe/maintenance	20		
Laundry	10		
Wigs and shoes	8		
Unisex toilets	8	2	
General shower	8		
Green room	25		
Green room kitchen			In gross
TOTAL SUPPORT ACCOMODATION	79		

TOTAL PERFORMER AREAS 286

D ADMINISTRATION ROOMS

TECHNICAL STAFF

Chief electrician and resident stage	12		
Crew room	12		
Visiting company management	8		
Visiting stage management	10		
TOTAL TECHNICAL STAFF	42		

ADMINISTRATIVE AREAS

Reception & Waiting Area	10		
Board/Meeting Room	20		
Programme archive	8		
Finance office	8		
General Manager	8		
House Manager & Assistant	12		
Archives and Storage	10		
Main IT server room	8		
Copying & Stationary, Filing & Storage	8		
Shower	5		
Unisex Toilets	12	2	
TOTAL ADMINISTRATIVE AREAS	109		

STAGE DOOR

Stage door reception	10		
Stage door waiting area			In gross
Toilet	4	1	
TOTAL STAGE DOOR	14		

TOTAL ADMINISTRATION 165

TOTAL AREAS

Total NET usable area	3,155	
Grossing rate (55%)	55%	55% gross includes 40% circulation, 10% plant areas and 5% technical area circulation
Total grossing	1,735	

TOTAL AREA 4,890

END OF CHARCOALBLUE REPORT
135-149 Shaftesbury Avenue, London