01. In-situ board marked concrete
02. Dark timber panelling
03. Light terrazzo floor
04. Patinated brass counter tops, handrails and inlays
05. Dark anodised aluminium or steel
06. Precast concrete vaults
07. Boardroom carpet
08. Precast concrete stair
09. Glass pavement lights
10. Decorative plaster repaired and reconstructed
11. Window frames repainted

5.0 Theatre Design

During this design stage the challenge from a theatre design point of view has been to ensure that the technical performance of the auditorium is upgraded to meet the demands of modern productions and their audiences.

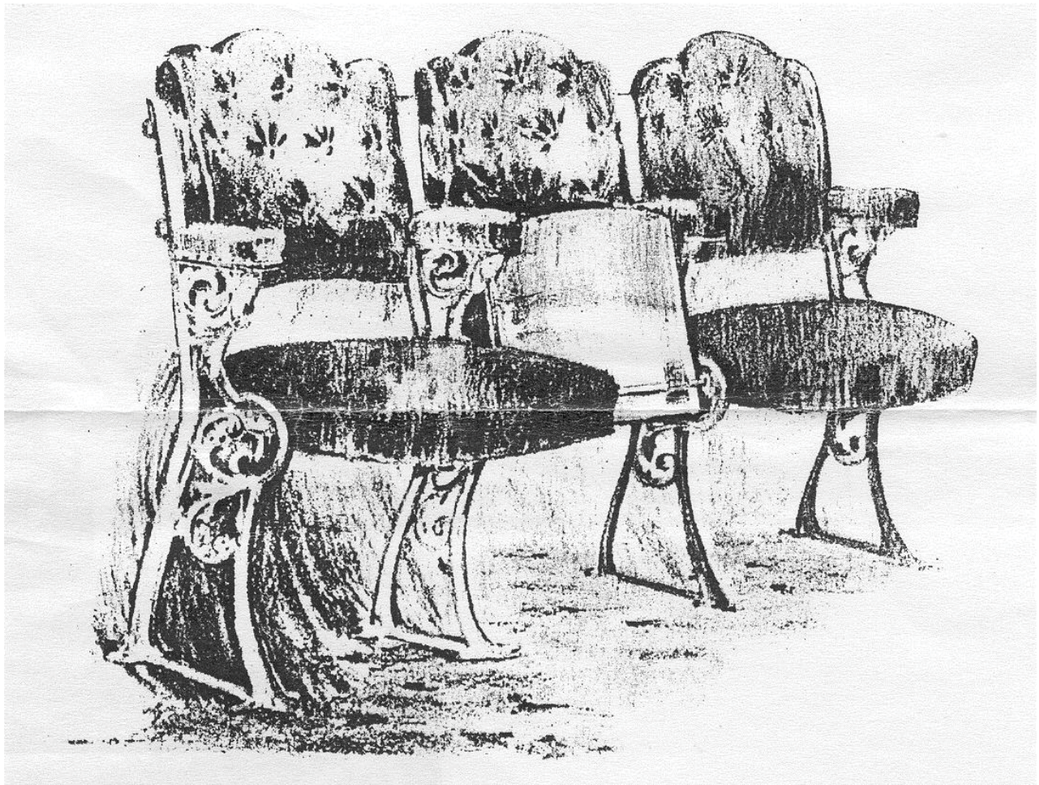
Within the auditorium there are opportunities to upgrade the audience experience to match the improvements to the front-of-house and backstage areas. Sightlines, comfort, capacity, accessibility and even character can all be addressed as part of the refurbishment. The back wall of the auditorium will be relocated two rows further into the room, allowing rationalisation of the current seating layout so as to maximise the income generated from ticket sales. It is recommended that the re-seating is procured early on in the construction process to minimise financial losses.

Current concerns include:

- Lack of choice for wheelchair users, currently confined to using the front of the Royal Circle and the boxes only;
- A lack of level access in the building means temporary ramps are needed to move wheelchair users around the building. In exceptional cases wheelchair users are not able to be accommodated within the current arrangement;
- Poor setting out of stalls seats, in particular the lack of staggering to seats along the centreline;
- No sound and light lobbies to the auditorium.

There is an opportunity to:

- Make the Stalls and parts of the Royal Circle universally accessible, without detriment to the historic fabric of the building;
- Improve sightlines by staggering seating positions and by altering the seat profile;
- Improve level of comfort and convenience by making the seats ergonomically better-suited to their placement;
- Minimise the impact of changes on the seating capacity;
- Choose a new seat that results in a similar acoustic performance as the current seats.



— A.R. Dean Seat c.1910 From: A.R. Dean Trade Catalogue, theatresearch archive

6.0 Access

This section contains an explanation of measures incorporated within the proposed scheme to facilitate access and use of the building by all people, including those with reduced mobility. It indicates how the proposals meet relevant regulation and recognised good practice guidance. The assessment includes building approach and external areas, entrances, horizontal and vertical circulation and accessible toilet provision.

This report assesses the usability of the scheme for all, including those with mobility, sensory and cognitive impairments. It should be noted that, following good practice, guidance for accessibility will benefit all users of the environment including older people and carers of young children, not only those with recognised disabilities.

This statement deals with the Stage 2 scheme only, and assesses the proposals against current access standards. Detailed issues relating to Building Control approval will be dealt with at the appropriate stage.

The key principles are:

- To ensure that access to enter, circulate and exit the building (subject to the constraints of the existing building) is inclusive for all and does not present barriers to people with disabilities;
- To locate facilities (subject to the constraints of the existing building) in a similar location on plan to aid navigation within the building.

The basis of these principles has been applied with regard to the following access standards and best practice guidance:

- Building Regulations, Approved Document Part M (Access to and use of buildings) - Volume 2: Buildings other than dwellings 2015 Edition;
- British Standard BS 8300:2009 Design of buildings and their approaches to meet the needs of disabled people - Code of practice (+A1:2010);
- British Standard 9999:2008 Code of practice for fire safety in the design, management and use of buildings;
- Requirements and implications of the Disability Discrimination Act 1995 (DDA) Parts 2 and 3;
- Equality Act 2010;
- BS EN 81-70:2003 - Safety rules for the construction and installations of lifts;
- BS- EN 81-82:2013 - Safety rules for the construction and installation of lifts.

Arriving at the Building

The Shaftesbury Theatre is located on the intersection between Bloomsbury Street and High Holborn (A40), a TFL Red Route. The proposed development of Princes Circus in the London Borough of Camden' s West End Project will allow the principal building entrance to move.

At present the roads are both one-way heading south and west respectively, and are lined on both sides by generous pedestrian footpaths which run parallel to the Theatre facades.

The Theatre is located 300 metres from High Holborn and 200 metres from Tottenham Court Road underground stations, and is within 2km the King's Cross & St Pancras International railway transport station.

Car and cycle parking

The proposals do not allow for any provision of able bodied or disabled parking. However, a dedicated loading bay will be formed by the West End Project on High Holborn for use during Theatre get-in. This dedicated space is within 10 metres travel distance of the main entrance to the building, and may be able to function as a drop-off and pick-up bay for those with limited mobility pre and post show. This is to be explored in more detail in the next stage with the West End Project team.

The proposed scheme does not make allowance for bicycle parking or storage space. Again it is proposed that this is to be explored in more detail in the next stage with the West End Project team.

Approach & External Areas

Front Entrance

Access to the Theatre will be from one of two locations on the Bloomsbury Street façade. The principal entrance has been relocated onto the Bloomsbury Street façade to offer direct access to the building from Princes Circus. This entrance will be provided with three new glass and metal framed, automated doors, each of which have a clear width of 1000mm with level thresholds to Princes Circus.

A series of secondary accesses will be retained via the cupola tower at the corner of the building. This consists of three sets of double doors with approximate clear width of 1550mm, two of these set have level thresholds to Princes Circus.

The design and provisions of the public space are yet to be defined by the West End Project team, but the understanding is that this space will be terraced to allow level access to both the Cupola and the proposed new entrance.

Access within the building

Foyer & Box Office

The Theatre Box Office is prominently located opposite the new principal entrance doors, with access gained via a new open foyer with level access throughout. This location will allow good visual connectivity and ease of access to all patrons, also adding a level of security control for the theatres. The Box Office desk is sufficiently long to allow side approach and accommodates a lower height for wheelchair users. It will provide an induction loop facility.

The floor and wall finishes will avoid highly reflective surfaces. It is intended that within the new foyer areas that a new hard wearing flooring will be used. Any chosen floor surface will have a suitable slip resistance.

Way finding signage will allow individuals to navigate themselves through the space.

From the foyer access to the auditorium will be via a new platform lift

Lift

Due to the age and listing of the building, the Theatre has never benefitted from a lift. Therefore, a new person of reduced mobility (PRM) platform lift will be provided which allows access between the Theatre foyer and the rear of the stalls via the crossover corridor. To ensure that the material impact of this lift are kept to a minimum it is currently proposed to provide a lift core with overall dimensions of 1900 x 2200mm, which would include all wall linings, structure and lift gear. This core would accommodate a lift car of 1000 x 1250mm internal dimensions and will be provided with a back-up power supply so that the lift may function during a managed evacuation scenario if the situation allows.

All lift lobbies will provide wheelchair compliant refuges with emergency alarm and intercom points. The lift will also function as a small capacity goods lift for the building, allowing movement of stores between the basement and the bars should this function be required.

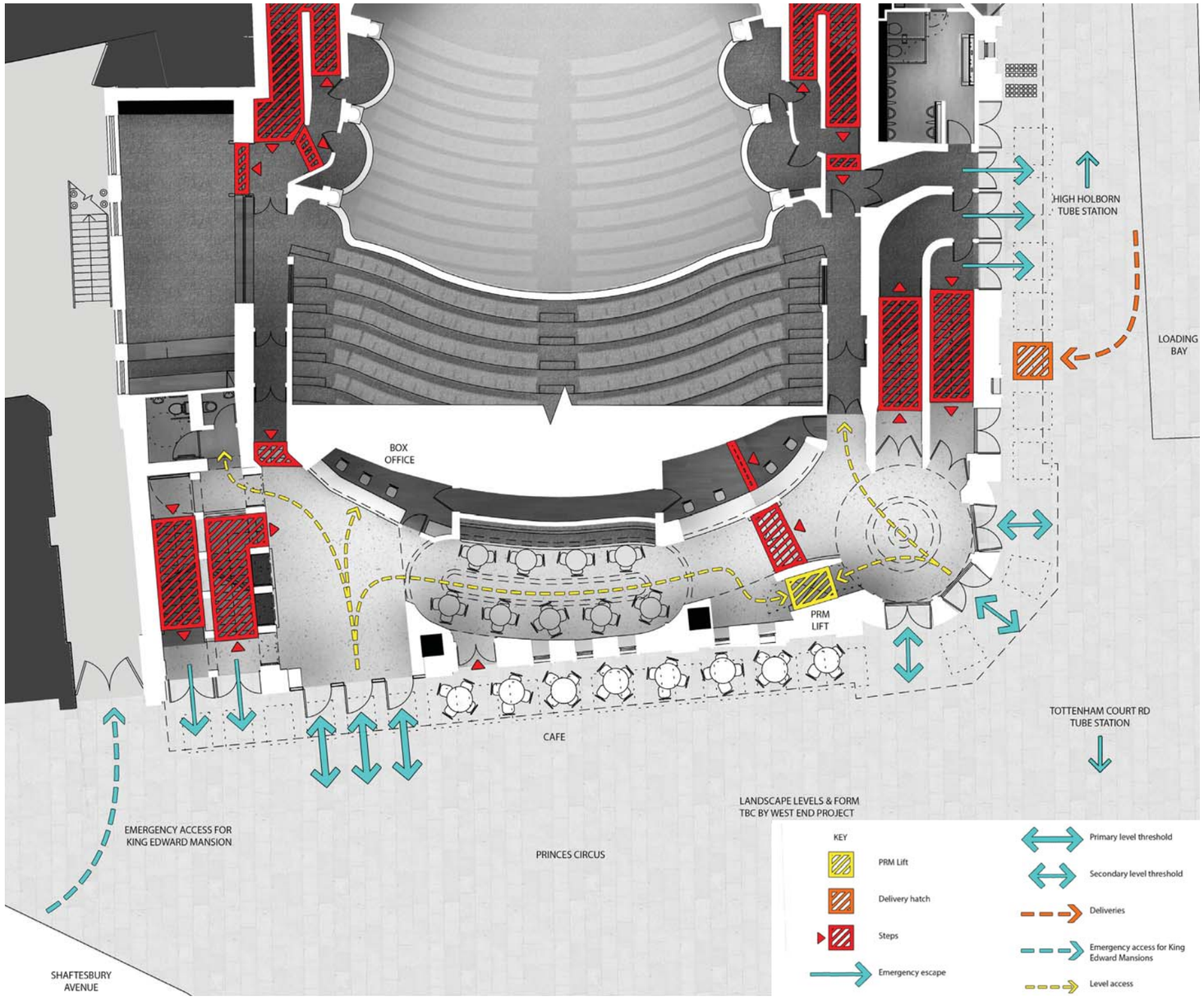
For the first time, and in line with the guidance contained in the "Yellow Book", the Theatre will provide up to fourteen PRM seats within the stalls. This has never previously been possible due to the level changes and stepped access around the auditorium. The new provision will be achieved via reseating of the auditorium which will look to stagger the sight-lines between the rows. This staggering will increase the space provisions at the end of the rows, allowing for oversized and removable seating for the use of wheelchair patrons.

WCs
An accessible WC is provided at both Ground Floor foyer and stalls level. Throughout the building all the reconfigured WC provisions will benefit from an ambulant WC cubicle.

Stairs
The existing stairs in the building will be retained, with the exception of the High Holborn stair which will be removed to increase usable floor area and rationalise the WC provision. A new section of stair will be added within the existing core of Stair 01 which will improve access between the foyer, basement box and stalls. Where possible, and taking into account restrictions of space, the new stairs has been designed to comply with Approved Documents Part M requirements.

The existing stone stair between the cupola foyer and the current foyer bar will be relocated to a position next to the platform lift. This proposal will return the stair to a location which is more aligned to the original building.

On the upper floors, the stepped accesses to the bars will be improved by widening and providing new handrails, replaced surfacing to the treads and contrasting nosings to the steps.



7.0 Operation and Waste Management

The Shaftesbury Theatre operates a joint waste management system that extends to the Theatre's neighbouring building Sovereign House. The scheme currently serves four businesses in addition to the Theatre. This approach minimises the number of collections whilst ensuring volume levels are efficient.

Currently waste is split into three categories General Waste, Mixed Recycling and Glass. There are daily collections of each category, generally between the hours of 8.00am and 10.00am.

Currently our contractor processes the waste as below:

General Waste

Processed at an energy-from-waste facility where it is dried and burned at temperatures of over 1000°C. The ash is used for recycling whilst the heat is used to generate steam that is passed through a turbine to generate electricity exported to the National Grid.

Mixed Recycling

Seeks to recycle all types of paper and card to create a range of products from high quality stationary through to packaging.
Glass is crushed into a consistent glass cullet that is then supplied to bottle and jar manufacturers who make new bottles and jars.
Separately, the Theatre recycles all toner cartridges, electrical and IT equipment. This service is extended to the resident Production. At the end of each production's life the Producer is encouraged to recycle scenery. This results in:

- Component reuse;
- Timber becoming chipboard, animal bedding, insulation products, mulch etc;
- Plastics being made into pellets and reused for manufacturing;
- Metal being crushed and sent for smelting to become raw product;
- Polystyrene being compacted and processed for use in electricity generation.

With better storage, resulting from the proposed development, the Theatre intends to explore its ability to expand its recycling to include:

- Metal cans;
- Batteries;
- Plastic;
- Food waste;

This service will be offered to all businesses that are part of our waste management scheme.

8.0 Structure

Michael Jackson Consulting
Chartered Structural Engineers

204 Bolton Road, Worsley, Manchester, M28 3
Tel: 0161 790 4404 Fax: 0161 790 4
email: postmaster@mjconsult.co

Our Ref: 2714/MJ

Date: 16 Nov 2017

Method Statement: Rev A

High Holborn – New Basement Extension

- Footpath to be closed, hoarding to be erected around the area of works and site to be prepared ready for piling.
- 20.3m long contiguous piled wall, 450mm diameter, to be formed parallel to and, 2.93m away from the existing stone façade, to a depth of 10m.
- 15No. CFA piles, 450mm diameter, in groups of 3, to be installed to a depth of 25m within the boundary of new contiguous piled wall. Piles to be finished at existing street level.
- Existing ground, within the boundary of new contiguous piled wall, to be carefully excavated to a depth of approx. 3.61m. Excavation to be no lower than the existing concrete foundations.

Note: Any existing services buried in this zone to be repositioned, in conjunction with the Local Authority, in a newly formed trench outside of the working zone. All services are to be located prior to any piling works commencing.

- 5No. reinforced concrete pile caps to be installed over the new piles to the newly excavated basement level. Piles to be cut down to the basement level prior to installing the caps. The pile caps are to be installed as close to the existing building as possible without disturbing the existing concrete foundations
- New reinforced concrete slab to be constructed between the new pile caps. Exact levels to be determined to suit pavement level details.
- Contiguous piled wall to be rendered with Sika 1 structural waterproof render system (or similar approved).
- Walls to receive a Bituthene tanking membrane.
- New 200mm thick reinforced concrete wall to be constructed in front of the waterproofing to the perimeter of the newly formed basement room.
- New reinforced concrete columns to be constructed off the newly formed pile caps.
- New reinforced concrete roof installed from the newly formed columns to the top of the contiguous piles.
- Pavement level reinstated in conjunction with Local Authority specification.

Bloomsbury Street – New Basement Extension

- Process described above to be carried out along Bloomsbury Street creating a 32m x 6.9m basement area.

Internal Works – Remodelling Front of House Areas

- Stair 1 to be extensively remodelled to provide access to the new basement area. Existing concrete stairs and supporting masonry will be removed (following temporary propping) and replaced with new low-profile stairs that will visually link the ground and basement floors. Structural steel framing will be used to replace walls which are to be removed. Loads will be spread to foundation level using spreader beams on low level existing walls
- Stair 3 will be removed at first and second floor level and will be replaced with usable space for the theatre patrons. New floors will consist of steel beams built into existing masonry, supporting new composite floors such as Richard lees hollow rib.
- New structural opening formed through existing external walls into the new basement construction.

9.0 Services

2 KEY DESIGN STRATEGIES AND PARAMETERS

2.1.1 Sustainability, Environment and Energy

The sustainability requirements for the project are set by the Shaftesbury Theatre's own internal environmental and sustainability policies, the requirements for planning, and the building regulations requirements.

Generally, for the existing building, the brief is to rationalise and upgrade the mechanical and electrical systems to improve the effectiveness and efficiency of the M&E systems while minimising the impact on the existing fabric of building, particularly the auditorium.

The Shaftesbury Theatre was built in 1911 and is a listed building. As part of the works the interiors of the existing building, and particularly the auditorium, are to be redecorated in the spirit of the original design drawings by Bertie Crewe.

The services will be designed to minimise visual impact where possible by using the fabric of the existing building to conceal them.

We believe we can rationalise the existing grilles and/or use grilles which harmonise more sympathetically with interior finishes.

The rationalisation of the roof plant will reduce the visual impact of the services from Princes Circus and High Holborn.

2.1.2 Natural Ventilation

Where possible the existing building will be naturally ventilated through existing and new opening windows. The existing foyer and many of the bars are currently naturally ventilated, with spot cooling where required, and we believe this is still the best strategy given the intermittent use of these spaces.

Because the new basement bar is beneath Bloomsbury Street there is no direct access to outside air. This space will therefore be supplied by air from the auditorium ventilation system.

2.1.3 Mechanical Ventilation

The existing auditorium ventilation plant will be replaced with new heat recovery AHUs located on the roof. This will have many advantages compared to the existing system as follows:

- Increase the fresh air provision into the space and improve the internal conditions in the auditorium.
- The AHUs will have a high efficiency heat recovery thermal wheel to capture energy from the extract air, energy which would have otherwise been lost to outside.
- Controllable inverter driven direct drive fans will reduce energy consumption.
- Improved control optimises the ventilation flowrate, and the heating and cooling loads, which will reduce energy wasted though extended operating hours and excessive flowrates.
- The AHUs will have integrated heat pumps which are tuned to work with the AHU. This will maximise the systems efficiency when compared to the existing rooftop AHU.

2.1.4 Heating

The boilers were recently upgraded as part of heating improvement works and are connected to the theatres existing heating system via a heat exchanger in the basement.

The equipment downstream of the heat exchanger has not been upgraded at present. Replacing the existing heating circulation pumps on the heating secondary side with modern variable speed, direct drive circulation pumps, will improve controllability allowing the pump to respond to demand. This will help reduce the energy consumption.

2.1.5 Cooling

Some spaces are heated and cooled using a number of local DX systems, with a fan coil unit in the room and condenser unit located on the roof. Replacing existing DX units with Heat Recovery VRF systems will improve efficiency and reduce overall energy use.

The existing chiller will be removed as part of the work. The AHU integrated DX unit and the VRV system will provide the cooling

2.1.6 Water Use

The water installations will focus on reducing water use throughout the buildings with the following new sanitary fittings provided.

- Low and dual flush WC cisterns.
- Spray taps for all WHB outlets.
- All appliances to be the minimum flow rate systems.

We believe the new project will reduce overall water consumption when compared to the existing building by using water saving devices.

The existing FOH hot water is generated by an inefficient indirect hot water cylinder located in the basement plantroom. Replacing the cylinder with a new well insulated direct gas fired water heater with modern controls and an efficient circulation system will reduce energy losses.

2.1.7 LV Distribution

The existing LV distribution network is haphazard with distribution boards being supplied from other distribution boards, rather than from the main switch panel. Distribution boards are located in positions which are going to be remodelled and many are getting toward the end of their serviceable life. The intention therefore is to fully replace the FOH distribution network.

Within the remodelled areas, i.e., bars, main entrance Foyer and WCs, the existing wiring will be removed and new wiring provided from the new distribution boards.

2.1.8 Auditorium Lighting

The existing auditorium lighting will be replaced with a new LED scheme typically as follows:

- Downlights within the soffits.
- LED wall lights will replace the existing types and additional fixtures provided to improve the lighting level in particular areas.
- Existing chandeliers will be cleaned and relamped with LED lamps.
- Emergency luminaires replaced entirely.

The use of LED fixtures will bring a number of benefits to the theatre including reduced energy consumption, a decrease in the maintenance requirements, better control and more uniform light levels across the seating.

2.1.9 External Lighting

The external lighting comprises a number of metal halide spot and flood lights ranging from 35W to 250W and it is proposed that these will be removed and replaced with a new scheme using LED fixtures to illuminate specific architectural details of the ornate façade at high level.

The proposed lighting fixtures will be a combination of linear modules and spot lights with RGBW light engines to provide the ability to change the colour of the facades to suit a particular show. The colour temperature of the white component will be selected to enhance the natural colour of the façades.

The use of LED fixtures will bring a number of benefits to the theatre including reduced energy consumption, an increase in the maintenance cycles, better control and enhanced visual appearance because the LED fixtures are smaller and more able to be concealed.

2.2 BUILDING SIMULATION

We are proposing to use a Computational Fluid Dynamics (CFD) model to simulate the environmental conditions within the auditorium subject to agreement by the client.

CFD visualises the temperature and air movement within the auditorium by modelling the space, including supply and return air grilles, obstructions and the audience. This will help us to understand the effectiveness the proposed ventilation strategy. The CFD model can be used to review the ventilation and cooling settings for different audience sizes and inform the client of limitations.

2.3 PART L2 AND ENERGY USE

We have been advised by Approved Inspectors Services (AIS) that the works will be subject to Part L2B and that we will need to consider consequential improvements to the following systems:

- Lighting;
- Heating plant and heating controls.

The extent of the consequential improvements is to be confirmed by AIS, as we understand that it is usual for 10% of the value of the works to be allocated toward energy saving measures. The main items to contribute toward this are:

- Installation of a new and efficient auditorium lighting installation;
- Installation of a new and efficient external lighting installation;
- Installation of new and efficient plant, including heating plant, cooling plant, water heaters, and heat recovery plant, such as air handing plant and VRF condenser units.
- Extending / replacing the existing control system to provide efficient control over plant, provide good monitoring and feedback, energy metering and localised zone control.

Whilst we have considered a range of renewable technologies at the feasibility stage, these have been discounted on the basis of technical, viability and aesthetics, and that the building is listed.

The new Basement Box will be designed in accordance with Part L2A.

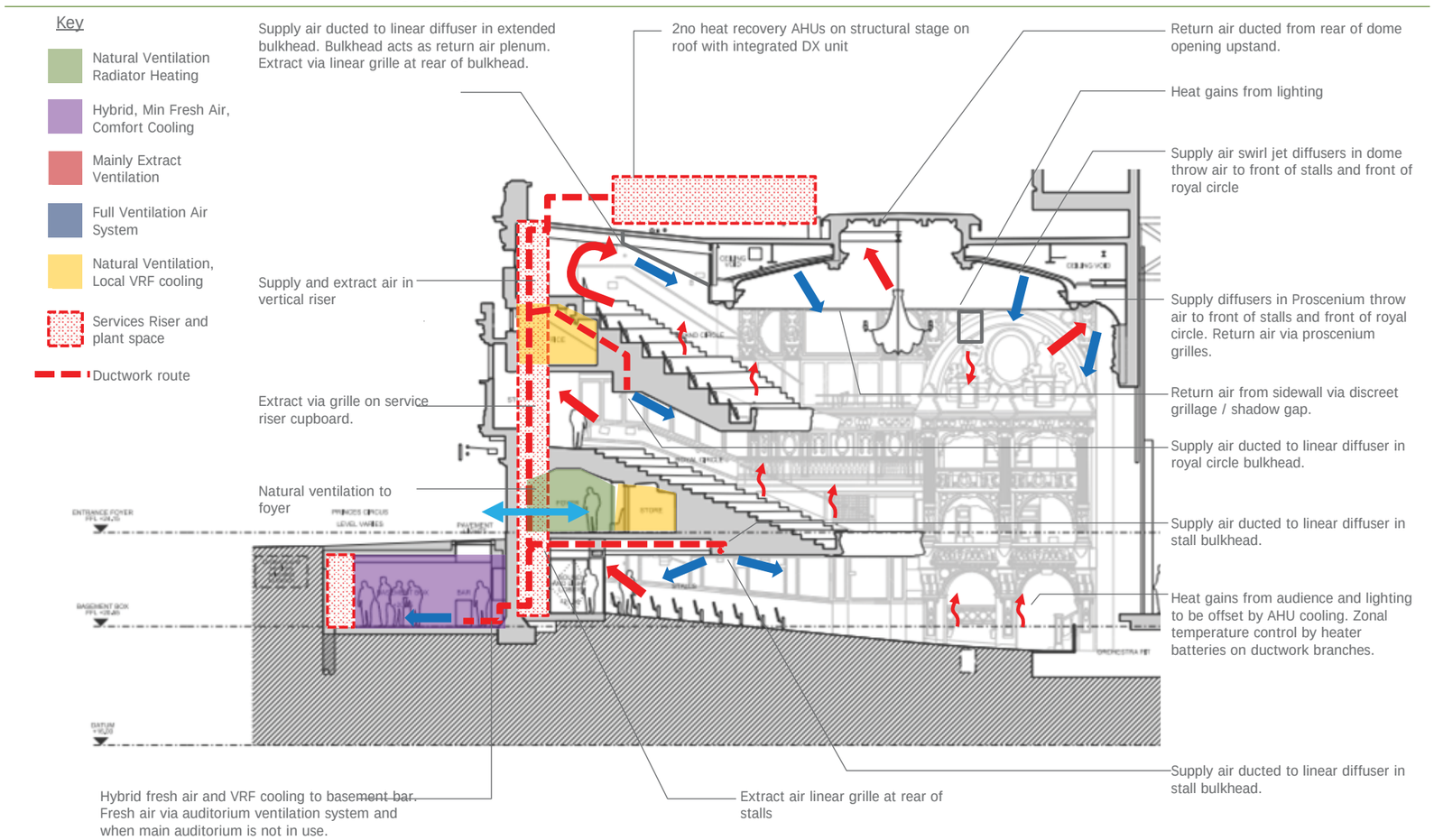
2.4 ENERGY PERFORMANCE CERTIFICATE

AIS are to confirm whether the new basement box will require an EPC on completion.

2.5 PHASING

The refurbishment works will be phased over the forthcoming 4-5 years to suit the theatres show timetable and potential dark periods, the ability to access areas outside of the public spaces to refurbish spaces and also to coordinate with the Camden West End project works.

The phasing programme is currently being developed by GVA.



10.0 Fire Strategy

THE FIRE SURGERY

Shaftesbury Theatre

London

Fire Strategy Report, RIBA Stage 2

Revision 0

Project Number: P496

Report Number: 171129R1F0

Date: 29th November, 2017

This report has been prepared for the sole benefit, use and information of Shaftesbury Theatre for the purposes set out in the report or instructions commissioning it. The liability of The Fire Surgery Limited in respect of the information contained in the report will not extend to any third party.

Revision	Revision 0	Revision 1	Revision 2	Revision 3
Author	Frances Radford			
Position	Fire Engineer			
Reviewed by	Andrew Nicholson			
Position	Director			
Comment	Stage 2 issue			
Date	29/11/2017			

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Summary of the Functional Requirements of the Building Regulations 2010.

	BS 9999 Non-compliance	Fire Engineering Solution	Building Control Approval Status
Means of escape	Stairs discharge through foyer which contains fire load.	Managed escape where occupants exit via alternate routes if the foyer is blocked, assisted by staff.	To be discussed.
Compartmentation	N/A		
Structural fire resistance	As existing		
Automatic fire detection and alarm	N/A		
Emergency lighting and signage	N/A		
Access and facilities for fire fighting	No fire fighting shaft included for assembly building over 7.5 m.	As existing condition, no additional risks added to the upper floors in the refurbishment.	To be discussed.
Smoke management systems	N/A		
Automatic Suppression systems	N/A		
Fire Safety Management	Evacuation to be directed by staff dependant on the fire location.	High level of management and training to be provided by the theatre.	To be discussed.

Contents

1 Introduction

1.1 Executive summary

This report describes the RIBA Stage 2 fire strategy for the refurbishments of the front of house areas of the Shaftesbury Theatre. The following is a summary of the key items described in the report:

- Stair capacity is sufficient for the building without Stair 3 (located at the east of the building, currently serving Second floor), allowing it to be removed.
- The building will be simultaneously evacuated, with new areas provided with detection that links in to the building's existing fire alarm system.
- The evacuation will be managed by staff to allow for escape through the foyer without limiting its use.
- The platform lift will be adapted to allow for egress of mobility impaired persons to reduce reliance on carry-up procedures. It will not be an evacuation lift as described in codes, but will be available if the fire is not in the foyer or Basement Box, so will be provided with emergency power if possible.
- The existing structure will be retained, with new elements of structure achieving 60 minutes fire rating.
- The new basement stair will keep an open feel through use of fire doors and a fire curtain that will operate in the event of a fire.
- Firefighting access is unchanged from the current condition as it is not possible to incorporate firefighting shafts into the existing fabric of the building.
- External changes to the building will not affect the external fire spread assessment, so no additional fire rating is required for the façade.

The following bullet point list for the project provides the key fire safety systems associated with the scheme to demonstrate compliance with the functional requirements of the Building Regulations 2010:

- A new L2 AFD system to BS 5839 part 1 for the new works interfaced into the existing fire alarm system.
- The basement box roof will be constructed with 60 minutes fire resistance.
- Fire and smoke curtain to separate the escape stair from the Basement Box in accordance with BS 8524 2015.
- Emergency lighting to new areas in accordance with BS 5266 2017.
- Possible secondary power supply to the Basement Box platform lift.
- Exit signage shall be placed along the escape routes in accordance with BS 5499-1:2002 Graphical symbols and signs.

1.2 General

The Fire Surgery has been commissioned by Theatre of Comedy Company to provide a fire strategy for the front of house refurbishments to the Shaftesbury Theatre in London. This RIBA Stage 2 report has been written to describe the fire strategy at this stage of the design. RIBA stage 2 is conceptual design, therefore this report is high level and identifies the key challenges with the fire strategy and the possible active and passive systems that could be provided to address these challenges.

The report provides information for design team coordination and costing purposes.

This report is not intended to be used as part of a Building Regulations submission, but will be used as a starting point for discussing the Fire Strategy Principles with the Approving Authorities.

1.3 Building description

The Shaftesbury Theatre is an existing theatre located at 210 Shaftesbury Avenue in the London Borough of Camden. It is Grade II listed and in a local conservation area.

The aim of the project is to refurbish the front of house areas of the Shaftesbury Theatre, to increase toilet and bar provisions for the audience, accessibility for wheelchair users and to create a more welcoming entrance on Princes Circus. Shaftesbury Theatre is located on the corner of Princes Circus and High Holborn and was opened in 1911.

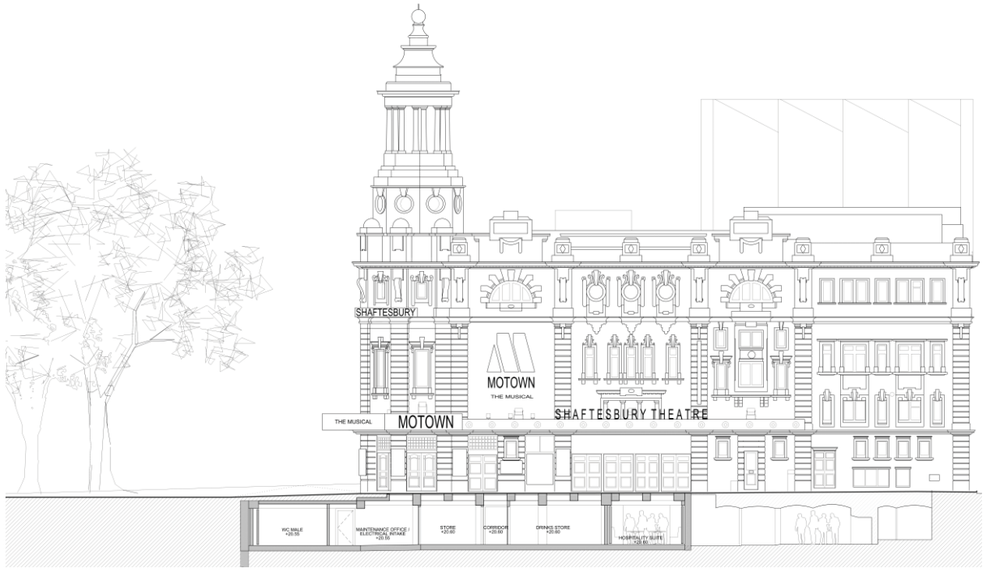


Figure 1 - Elevation view of the proposed design, from High Holborn

A key aspect of the refurbishment is to remove the existing stair 3 from the building. It is thought that the stair is not currently required for means of escape. Therefore, the intention is to remove the stair and reuse the space for additional bar and toilet facilities.

The refurbishment includes excavating a new basement area (referred to as the Basement Box) to provide a new bar and performance space, and opening out the foyer accommodation to increase circulation.

The theatre has 1416 seats in three tiers. The Stalls seats are access from the basement level, the Royal Circle spans between Ground floor and First floor, staff accommodation is located at Second floor and the Grand Circle can be accessed from the Second and Third floor. The highest occupied level is the Third floor at 9 m above the access at Ground floor.

This report considers the changes being made to these front of house spaces and the auditorium as described above. The back of house parts of the theatre building are not included in the refurbishment.

1.4 Applicable Legislation Guidance

The refurbishments works of the theatre will constitute a material alteration, so are subject to approval under the Building Regulations 2010. The ongoing fire safety in the building will be subject to the Regulatory Reform (Fire Safety) Order 2005.

Theatres and public assembly spaces such as the bar will require an entertainments license under the Licensing Act 2003.

The primary guidance document used for this is BS 9999:2017. Where the proposed design is not described in the guidance, this fire strategy describes how the objectives are met using alternative methods. BS 9999 recommendations are provided according to the risk profile of the building. As the occupants of the theatre will be awake and mostly unfamiliar with the building, the assigned occupant characteristic is B. The likely fire growth rate in the building is considered to be medium, as typical for theatre auditoriums, so the risk profile is B2.

Reference will also be made to the Technical Standards for Places of Entertainment (2015) (Yellow Guide).

1.5 Approvals process

The design is subject to formal approval by the Building Control body, in this case Approved Inspector Services (AIS) with a statutory consultation with London Fire and Emergency Planning Authority.

Discussions have taken place with Guy Foster of AIS regarding the fire strategy principles presented in this report. These are considered acceptable subject to detailed design.

1.6 Basis of Design

The objectives of the fire strategy are to meet the functional requirements of the Building Regulations 2010 for Part B. This is concerned with life safety of the occupants and fire fighters.

Whilst the building is Grade II listed, property protection has not been specifically requested by the theatre and therefore requirements to meet additional insurers' have not been provided. The insurers should be consulted with regards to this project and the subsequent fire strategy proposals.

The fire strategy considers single accidental fire use associated with this type of accommodation.

There are 1416 seats and associated members of staff located across the 5 levels of the building. The seating is arranged in tiers as follows:

- Grand Circle – 285 seats,
- Royal Circle - 439 seats,
- Stalls – 692 seats.

The occupancy for the building is based on the seat numbers, with an allowance for staff at each level, as provided by the client in line with their management plan.

Areas including audience bars and staff changing facilities are not included in the occupancy calculation to avoid double counting. The Basement box could have a large occupancy when used as a bar or alternative performance space, but it will not be used as such when the auditorium is fully occupied. As such, the worst case for occupancy is considered to be a full performance with members of the audience either being seated or using the Basement Box bar. Table 1 describes the occupancy, based on what level occupants will leave the building by in a normal evacuation.

Table 1 - Occupancy by floor

Floor	Area	Number of Occupants	
Third	Seating (Grand Circle)	285	295
	Staff allocation	10	
Second	Front of House Office	10	20
	Staff allocation	10	
First	Seating (Upper half of the Royal Circle)	220	230
	Staff allocation	10	
Ground	Seating (Lower half of the Royal Circle)	219	235
	Staff allocation	16	
Basement	Seating (Stalls)	692	783
	Staff allocation	16	
	Stage*	75	

*Stage occupants also have the option to evacuate through the back of house areas, so for most fire scenarios it is assumed that half of the stage occupants use stair S1 and others exit through the back of house.

2 Means of Warning and Escape

2.1 Evacuation Strategy

The evacuation strategy will not change in light of the new proposals. The theatre will be evacuated simultaneously on activation of the alarm. The current procedures for raising the alarm during a performance and at other times will be maintained.

2.2 Means of detection and warning

Where new works are created such as the Basement Box and new bar areas, they will be provided with automatic fire alarm and detection. The system will be designed to meet the performance requirements of an L2 standard in accordance with BS 5839-1:2017.

Sounders will be provided in the new areas also accordance with the existing theatre system. The new detectors will be interfaced into the existing fire alarm system.

2.3 Exit Routes

The main exit routes are shown in Figure 2. The building is served by two main cores (denoted as 1 and 2), which each have 4 stairs (A, B, C and D) which serve different floors. S1 and S2 are open stairs that provide an exit from the stalls near to the stage. The stairs all discharge at Ground floor, in some cases merging with occupants from the Ground floor.

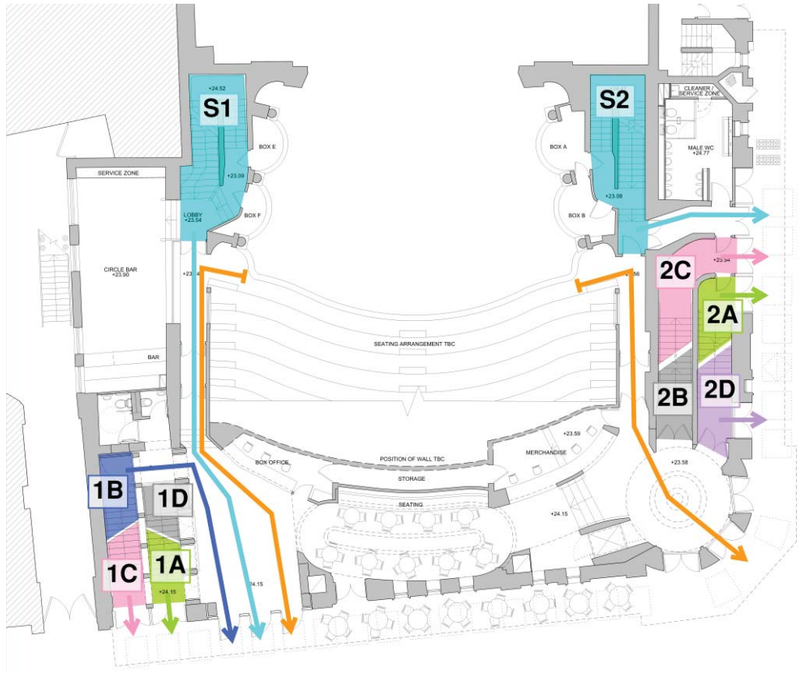


Figure 2 - Exit routes

Stairs 1D and 2B are not used for emergency evacuation and are not signed for escape.

2.4 Escape Stairs

In the current condition, the theatre is served by an additional stair (stair 3). However, a key aspect of the refurbishment strategy is to provide additional space for audience facilities. Therefore it is proposed to remove this stair. As described below, the resulting capacity is sufficient for the occupancy.

The available capacity of the stairs is based on width factors prescribed by BS 9999 2017. The width factor is calculated based on risk profile and number of floors served by the stair. Table 2 shows how many people are expected to use each stair and the associated capacity. It shows that the capacity is much higher than the expected occupancy.

Table 2 - Stair exit capacity

Level		Occupants entering at each level							
3	Grand Circle Upper	148			148				
2	Staff access	20							
1	Royal Circle Upper		230						
G	Royal Circle Lower	Exit	Exit	Exit	Exit	Exit	Exit	Exit	Exit
B	Stalls			142		142	142	179	142
Stair name		1A	1B	1C	2A	2C	2D	S1	S2
Stair width		1500	1500	1500	1500	1500	1500	1200	1200
Levels served		3	1	1	3	1	1	1	1
Width Factor		3.4	4.8	4.8	3.4	4.8	4.8	4.8	4.8
Capacity		**441**	**313**	**313**	**441**	**313**	**313**	**250**	**250**
Occupancy		168	230	142	148	142	142	179	142

As the stairs are not lobbied and there will be no fire rated separation between the portions of the main cores (i.e. stair 1A is in the same protected enclosure as stair 1B), it could be possible that one or more of the stairs would not be available for occupants in the event of a fire. To test for a fire in different locations, the following scenarios were considered:

- Scenario 0 – a small fire in the auditorium which leaves all stairs available (as seen in Table 2);
- Scenario 1 – an stage fire that discounts S1 and S2;
- Scenario 2 – a fire that causes smoke to impact on core 1 and discounts stairs 1A, 1B and 1C;
- Scenario 3 – a fire that causes smoke to impact on core 2 and discounts stairs 2A, 2C and 2D;
- Scenario 4 – a back of house fire that means that all stage occupants will use stair S1.

All scenarios were shown to provide sufficient capacity for the occupancy and further details of scenarios 1 to 5 are provided in Appendix A.

THE FIRE SURGERY

2.5 Ground floor exits

The stairs discharge at Ground floor as shown in Figure 2.

The stairs that discharge directly to outside should have exit doors that are of equal width to the stair. Stairs S1, 1B and the lower part of the Royal Circle discharge through the foyer area, so the exits should be sized for the number of people using them. Exits have been numbered as shown in Figure 3 for clarity, and should be sized as described in Table 3.

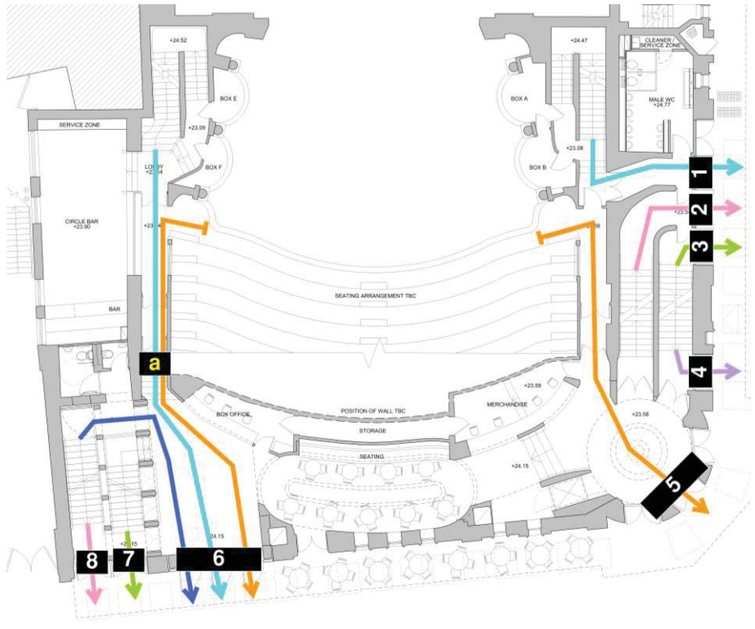


Figure 3 - Ground floor exit numbering

Table 3 - Ground floor exit doors

Exit name	Escaping from	Number of occupants	Door sizing method	Width required
1	S2	142	Same width as stair	1200 mm
2	2C	142	Same width as stair	1500 mm
3	2A	148	Same width as stair	1500 mm
4	2D	142	Same width as stair	1500 mm
5	Lower part of Royal Circle	110	Using B2 width factor 4.1 mm/person	850 mm*

Exit name	Escaping from	Number of occupants	Door sizing method	Width required
6	S1, 1B, lower part of Royal Circle	179 + 230 + 110 = 519	Merging flow calculation** $W_{FE} = NX + 0.75S_{up}$	2309 mm
7	1A	168	Same width as stair	1500 mm
8	1C	142	Same width as stair	1500 mm

*An absolute minimum of 850 mm is used for doors where used by the general public

**Final exit width = (number of occupants from the ground floor x B2 width factor) + (0.75 x 1B stair width)

The doors shown on the architect's plans comply with these requirements, except for exits 7 and 8, which have a local narrowing of 100 mm at the door (clear width 1400 mm) due to the location of a column. It is advised that these doors are resized if possible. However, if this is not possible, the small reduction in width may be shown to be acceptable, given that stairs 1A and 1C (which exit through these doors) are oversized for all the scenarios considered.

At the point labelled "a" in Figure 3, there is a pinch point that is 1050 mm wide. The calculations in the table above assume that half of the lower Royal Circle occupants and all of the Stair S1 occupants exit though point a, which would be 289 people. Based on the width factor for B2 occupancies (4.1 mm/person), this pinch point has the capacity for 256 people. Although this does not provide sufficient capacity for an equal spread of occupants, it is reasonable to assume that if there was any queuing at point a, more Royal Circle occupants would exit at the other side of the auditorium through exit 5, which is considerably oversized. Given this additional exit availability, it is expected that occupants will be able to escape within an acceptable time.

2.6 Exit through the Foyer

As well as forming an exit route from the Ground floor, the foyer also acts as the route to outside for stair 1B. The foyer will be used for the box office and merchandise sales, and will also have seating for the outdoor café. It will not be practical to maintain the foyer as fire sterile due to the use of the space. Instead, a managed evacuation is proposed to ensure that the foyer is not used for egress if it is not safe to do so.

In the event of a fire in the foyer, staff will be responsible for directing the audience to alternative exits. This would mean directing Royal Circle occupants that would otherwise use stair 1A or the foyer exits to move down through the Royal Circle to exit at Ground floor through exit 1. Although this will increase the overall evacuation time due to queuing at exit 1, the escaping audience will not be at any additional risk from the fire as the foyer and auditorium will be fire separated, as described in section 3.2.

This approach will need to be discussed and agreed with the Theatre to ensure that it can be put into practice effectively.

2.7 Egress of Mobility Impaired Persons (MIPs)

The building provides stair access only to the above ground levels, so MIPs who cannot use stairs will be located at Ground, which has level access, or Basement floor which is accessed via a platform lift. There could potentially be a lot of audience members located at Basement level that are unable to use stairs, so it is likely to be impractical to employ the usual MIP strategy of refuges, call points and a carry-up procedure, all on which heavily rely on staff intervention.

Instead, it is proposed that the high level of management available will be able to manage an evacuation that considers the location of the fire. For fires that do not affect the Basement box or foyer areas, the platform lift could be used as a simple means of assisting MIPs out of the building. The platform lift will not be designed to meet the requirements of BS 9999 for an evacuation lift. However, if possible, we propose the lift to have a secondary power supply to provide added resilience, unless it can be demonstrated that the primary power supply will not be interrupted should the lift need to be used for a fire in the auditorium.

If there is a fire in the Basement Box or foyer the platform lift would be unavailable, so management could direct MIPs back into the auditorium, where there would be no risk from a fire. In this scenario, a carry-up procedure would be required, but the fire separation between the auditorium and the fire (as described in section 3.2) would allow more time for this to be completed.

This approach will also need to be discussed with the Theatre to ensure that it meets their needs and can be supported by appropriate staff training.

2.8 Travel distances

The travel distance should not exceed the value given in BS 9999 for the appropriate risk profile. For risk profile B2, this is 50m in two directions and 20 m in one direction.

However, when additional fire protection measures are included such as the L2 AFD system, an additional 15% can be included. For risk profile B2 this is 58 m in two directions and 23 m in one direction. The travel distances in the new Basement Box are within these recommendations.

2.9 Emergency lighting

Emergency lighting will be provided to new areas in accordance with BS 5266-1:2016.

2.10 Emergency signage

Exit signage shall be placed along the escape routes in accordance with BS 5499-1:2002 Graphical symbols and signs. Safety signs, including fire safety signs. BS 5499 Part 4: 2013 –Code of practice for escape route signing.

3 Construction

3.1 Structure

It is not proposed that significant changes will be made to the exiting building structure. Any new load bearing elements of structure as described in BS 9999 2017 will be based on the recommendation that the structure should be protected with 60 minutes fire resistance. The Basement Box ceiling forms the underside of the pedestrian walking surface where occupants will be evacuating from the theatre, so will be required to be fire rated as an element of structure (equivalent to a floor).

Where new structure or compartmentation is relying on existing parts of the building for support, a survey may be required to determine the fire resistance achieved of the existing elements.

3.2 Compartmentation

As described in section 2, the auditorium will be separated from the foyer and the Basement box to facilitate the evacuation strategy. This will require a 60 minute (integrity, insulation and load bearing capacity) rated separation to the walls, but also to the underside of the Royal Circle to complete the separation, as shown in Figure 4. It is currently unknown what rating the construction has, so confirmation is required of the performance that can be achieved and the effect of any concealed spaces or penetrations in these elements.

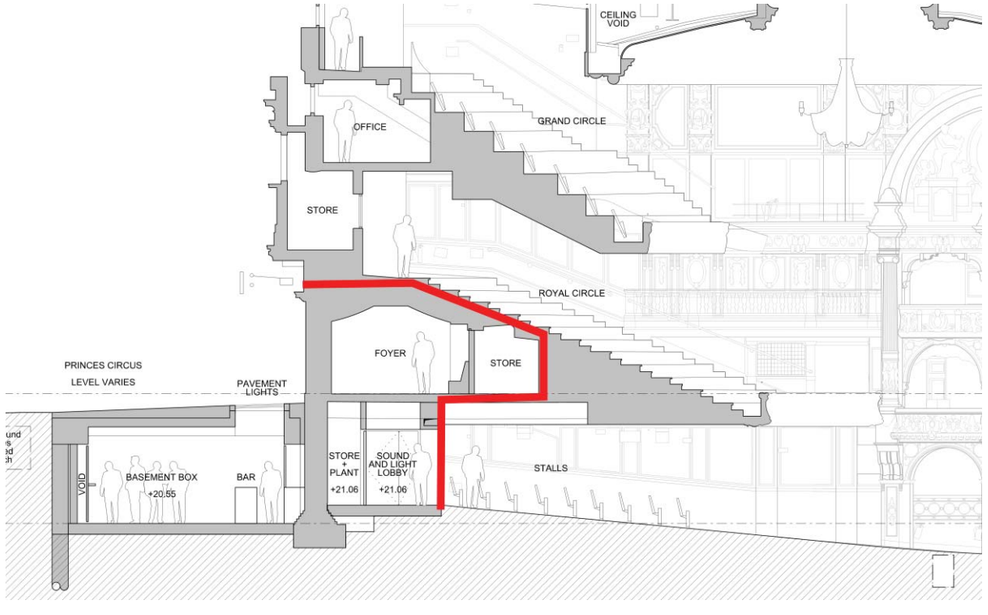


Figure 4 - 60 minute separation (red line) between auditorium and foyer/Basement box

The floor separating basements from ground floors are recommended to be compartment floors in BS 9999 2017, so it is expected that the existing floor above the basement is able to provide this separation to a 60 minute rating.

Other spaces that are a higher fire risk than the surroundings will be fire separated, including:

- Store rooms – enclosed in 30 minute construction;
- Kitchens – enclosed in 30 minute construction;
- Changing rooms – enclosed in 30 minute construction;
- Plant rooms – enclosed according to the risk of the contents.

3.3 Protection to stairs

The two main cores, 1 and 2, will be enclosed in 60 minute fire resisting construction, with FD 30S doors. The portions of stairs within the core will not be separated, contributing to the open feel. Existing construction around the stairs that is retained in the refurbishment will need to be surveyed to identify any potential areas where the compartmentation is not currently achieved.

The base of stair 1D will be separated from the Basement box by a fire and smoke curtain, as shown in Figure 5. The curtain should provide a 60 minute fire rating and descend in rails to complete the enclosure around the core. The curtain will descend on local activation if there is a fire or smoke in the Basement Box. The curtain will be designed and installed in accordance with BS 8524-1 and -2: 2013.

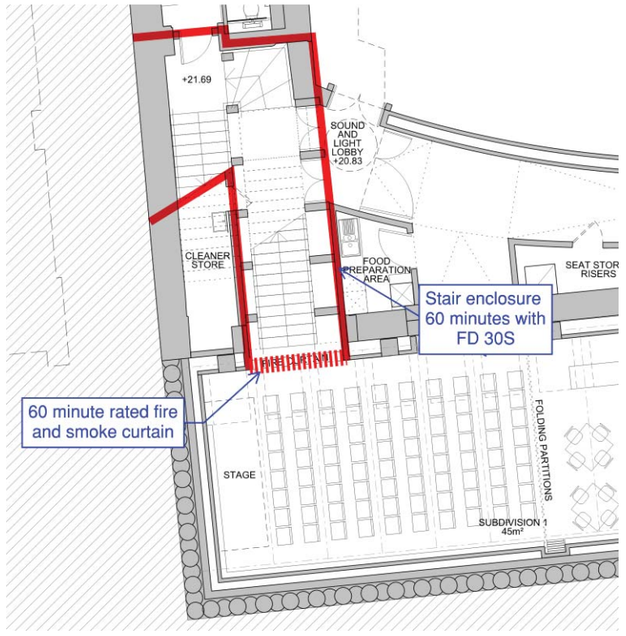


Figure 5 - Fire curtain at Basement level

Figure 6 - Core 1 enclosure at Ground floor (red line indicates 60 minute separation)

The intention is to make core 1 appear open to the foyer area, so the enclosure at Ground level will be formed of a series of fire doors, held open during normal use, as shown in Figure 6. For most doors into stairs enclosed in 60 minute construction, FD 30S doors are sufficient, however the fire door test does not require a significant insulation rating. For this reason, BS 9999 recommends that no fire rated wall have doors that occupy more than 25% of the area of the wall. To compensate for this, an increased performance requirement will be needed for the doors that form the partition around the stairs. This will be discussed further in the next stage.

4 Access and Facilities for the Fire Service

4.1 Vehicle Access

The upgrades to the surrounding area include converting Princes Circus to a pedestrian area, so firefighting vehicle access will be from Shaftesbury Avenue for Core 1 and High Holborn for Core 2, as shown in Figure 7. The set down point for Core 1 is now further away than in the existing condition but is within 18 m from the access door (approximately 12 m) which is therefore acceptable.

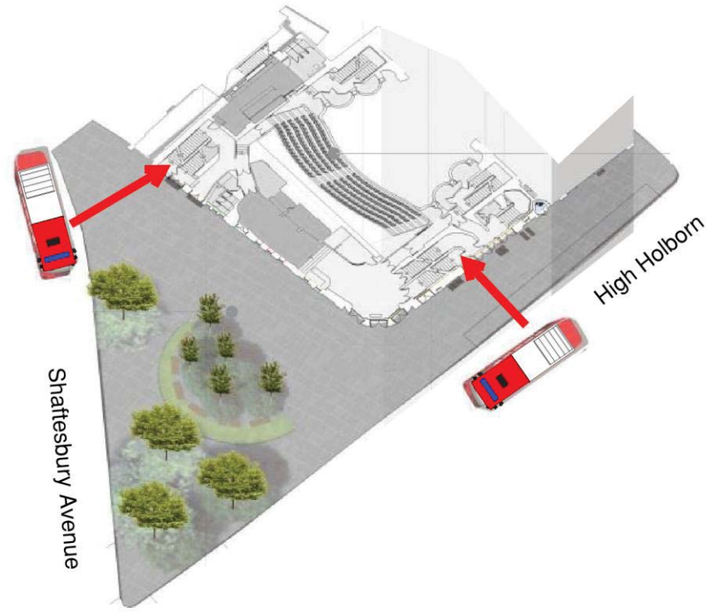


Figure 7 - Indicative site plan showing fire appliance access

4.2 Internal Firefighting

BS 9999 recommends that assembly buildings over 7.5 m are provided with firefighting shafts, however it is not possible for this to be implemented into the existing building fabric of a grade II listed building. The existing arrangement and use of scissor stairs means that it is difficult to provide a firefighting shaft that serves all levels. Although it is not possible to provide a firefighting shaft, it is considered that the arrangement is appropriate, as the risk to the upper floors has not been significantly increased from the existing condition.

The main areas of fire risk in any theatre are the stage and in the Shaftesbury Theatre the new Basement box. These areas are provided with good access from a choice of stairs and are within 45 m

of a fire appliance set down point, so these would not normally require a firefighting shaft. Other areas remain as seating or audience facilities, so the level of fire risk will not be increased from what is existing.

4.3 Basement smoke ventilation

The Basement box will require smoke ventilation, which will be provided naturally through breakout panels in the street above. The panels should provide a vent area of 2.5% of the floor area of the basement (excluding the auditorium area). These breakout panels should be evenly distributed above the basement area.

The auditorium is provided with natural venting above the stage, as part of earlier refurbishment works.

4.4 Emergency Power Supply

All fire protection systems should be provided with emergency backup power, either through batteries, a generator or additional mains supply from a separate source. This includes the platform lift, which will be used as an evacuation lift when appropriate to do so and also the automatic fire curtain.

5 External Fire Spread

The façade of the theatre is largely unchanged from the existing condition with the new proposals. The areas to be demolished and changed are either signage or confined to the Ground floor (as shown in Figure 8), where the existing doors will be replaced by new openings. The West elevation is currently adjacent to a public road, which is being removed and replaced with an open pedestrian area as part of the West End Project commencing in 2018, so the notional boundary distance to the centreline of the nearest road will be increased. Due to the limited extent of the changes, and the increased notional boundary distance, these proposals will not have any effect on the external fire spread performance of the façade.

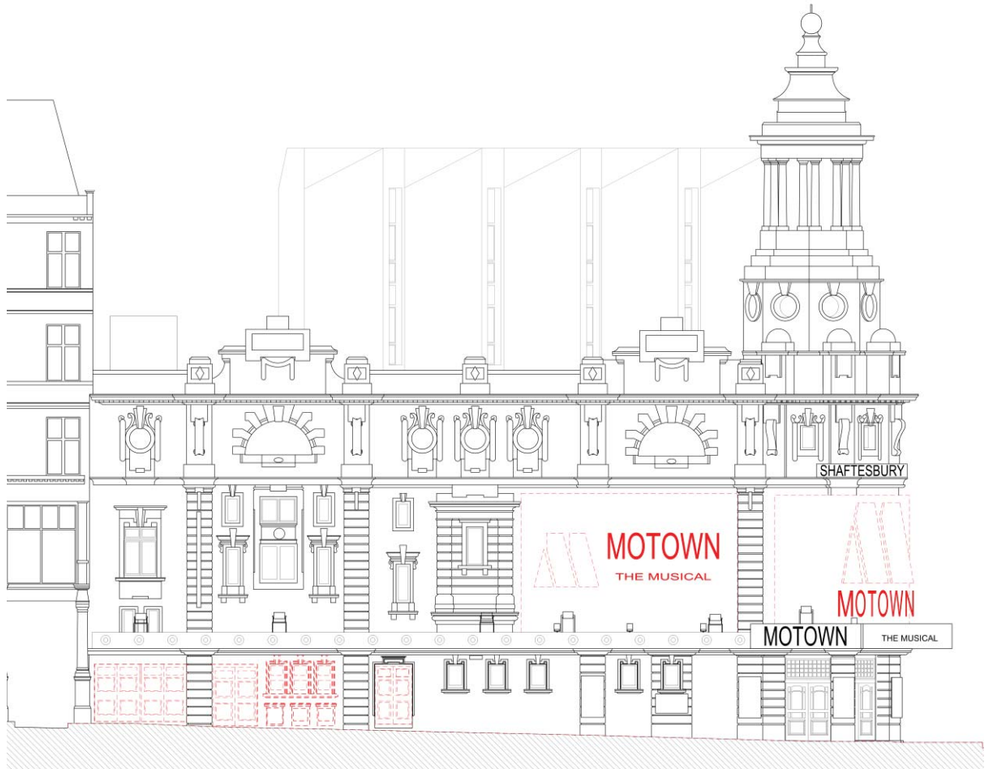


Figure 8 - Existing West elevation, with areas to be demolished in red

6 Construction Phasing

It is proposed to carry out some or all of the proposed works while the theatre continues to be used for performances and the construction will be completed on a phased programme to allow this.

As indicated in this report, the stairs have more capacity than required, so there is some flexibility in allowing for people to remain in the building if one of the stairs is not available.

The phased programme is yet to be confirmed, but in the next Stage fire strategies that cover each of the intermediary stages will be drafted to suit the planned works.

7 Appendix A – Further Capacity Calculations

7.1 Additional fire scenarios for stair capacity calculations.

Scenario 1 – an auditorium fire that discounts S1 and S2, all stage occupants to exit via back of house.

3	Grand Circle Upper	148			148				
2	Grand Circle Lower	20							
1	Royal Circle Upper		230						
G	Royal Circle Lower	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
B	Stalls			236		236	236	NA	NA
		1A	1B	1C	2A	2C	2D	S1	S2
Stair width		1500	1500	1500	1500	1500	1500	1200	1200
Levels served		3	1	1	3	1	1	1	1
Factor (B2)		3.4	4.8	4.8	3.4	4.8	4.8	4.8	4.8
Capacity		**441**	**313**	**313**	**441**	**313**	**313**	**250**	**250**
Occupancy		168	230	236	148	236	236	0	0

Scenario 2 – a fire that causes smoke to impact on core 1 and discounts stairs 1A, 1B and 1C.

3	Grand Circle Upper	NA			295				
2	Grand Circle Lower	NA							
1	Royal Circle Upper		NA						
G	Royal Circle Lower	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
B	Stalls			NA		177	177	215	177
		1A	1B	1C	2A	2C	2D	S1	S2
Stair width		1500	1500	1500	1500	1500	1500	1200	1200
Levels served		3	1	1	3	1	1	1	1
Factor (B2)		3.4	4.8	4.8	3.4	4.8	4.8	4.8	4.8
Capacity		**441**	**313**	**313**	**441**	**313**	**313**	**250**	**250**
Occupancy		0	0	0	295	177	177	215	177

Scenario 3 – a fire that causes smoke to impact on core 2 and discounts stairs 2A, 2C and 2D.

3	Grand Circle Upper	295			NA				
2	Grand Circle Lower	20							
1	Royal Circle Upper		230						
G	Royal Circle Lower	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
B	Stalls			236		NA	NA	274	236
		1A	1B	1C	2A	2C	2D	S1	S2
Stair width		1500	1500	1500	1500	1500	1500	1200	1200
Levels served		3	1	1	3	1	1	1	1
Factor (B2)		3.4	4.8	4.8	3.4	4.8	4.8	4.8	4.8
Capacity		**441**	**313**	**313**	**441**	**313**	**313**	**250**	**250**
Occupancy		315	230	236	0	0	0	274	236

Scenario 4 – a back of house fire that means that all stage occupants will use stair S1.

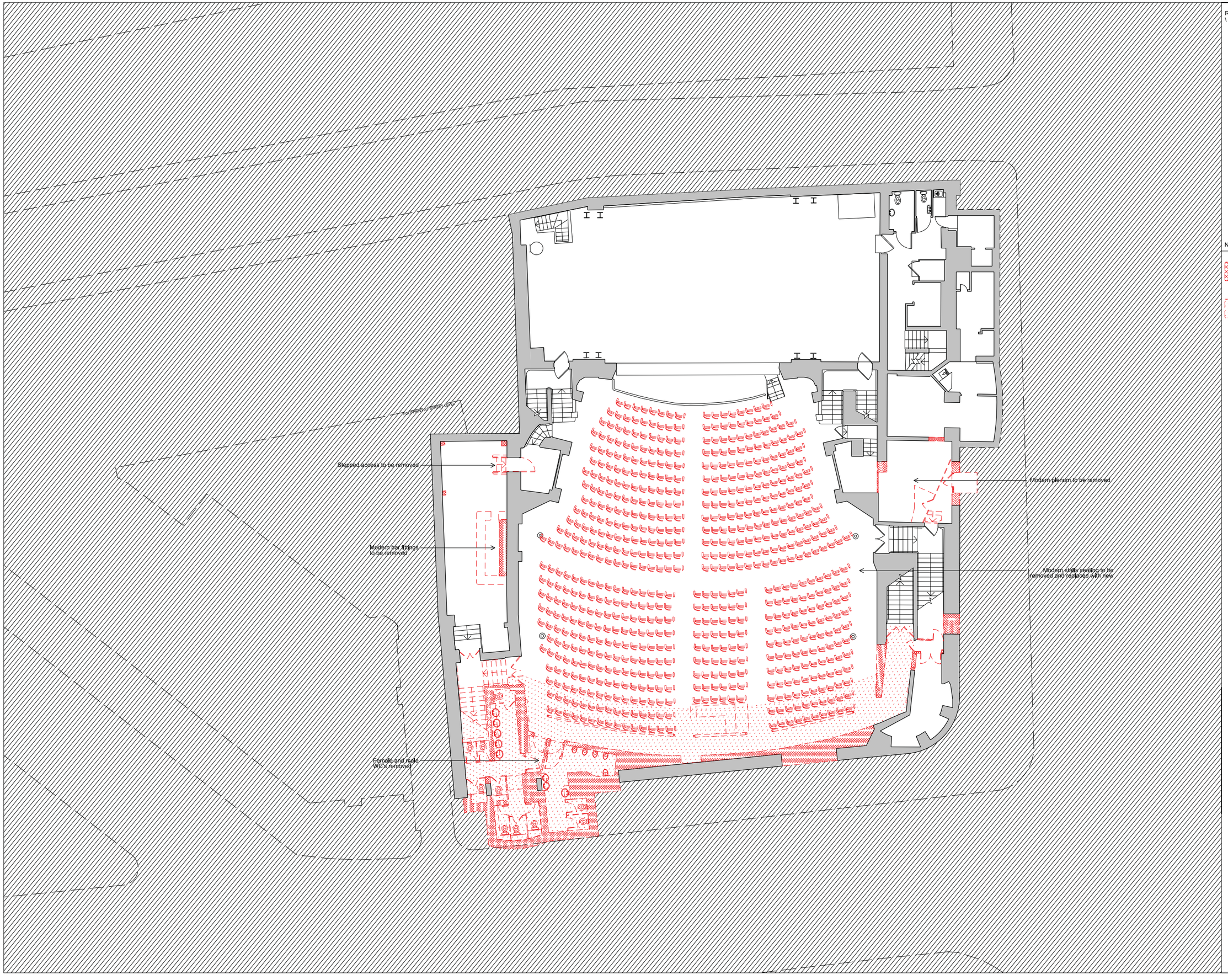
3	Grand Circle Upper	148			148				
2	Grand Circle Lower	20							
1	Royal Circle Upper		230						
G	Royal Circle Lower	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
B	Stalls			142		142	142	217	142
		1A	1B	1C	2A	2C	2D	S1	S2
Stair width		1500	1500	1500	1500	1500	1500	1200	1200
Levels served		3	1	1	3	1	1	1	1
Factor (B2)		3.4	4.8	4.8	3.4	4.8	4.8	4.8	4.8
Capacity		**441**	**313**	**313**	**441**	**313**	**313**	**250**	**250**
Occupancy		168	230	142	148	142	142	217	142

Appendices

A

Architectural Drawings

1702_XP_099	\	Existing Plan - Basement - Stalls Level
1702_XP_100	\	Existing Plan - Ground Floor - Lower Royal Circle
1702_XP_101	\	Existing Plan - First Floor - Upper Royal Circle
1702_XP_102	\	Existing Plan - Second Floor - Lower Grand Circle
1702_XP_103	\	Existing Plan - Third Floor - Upper Grand Circle
1702_XP_104	\	Existing Plan - Fourth Floor - Auditorium Roof
1702_XP_105	\	Existing Plan - Roof
1702_XP_210	\	Existing Section - Section AA - Up/Down Stage
1702_XP_220	\	Existing Section - Section BB - Proscenium Stage
1702_XP_230	\	Existing Section - Section CC - Bars
1702_XP_301	\	Existing Elevation - High Holborn - South
1702_XP_302	\	Existing Elevation - Bloomsbury Street - West
1702_P_001	\	Proposed Plan - Location Plan, Development Boundary
1702_P_099	\	Proposed Plan - Basement - Stalls Level
1702_P_100	\	Proposed Plan - Ground Floor - Lower Royal Circle
1702_P_101	\	Proposed Plan - First Floor - Upper Royal Circle
1702_P_102	\	Proposed Plan - Second Floor - Lower Grand Circle
1702_P_103	\	Proposed Plan - Third Floor - Upper Grand Circle
1702_P_104	\	Proposed Plan - Location Plan, Development
1702_P_210	\	Proposed Section - Section AA - Up/Down Stage
1702_P_220	\	Proposed Section - Section BB - Proscenium Stage Left/Right
1702_P_230	\	Proposed Section - Section CC - Bars
1702_P_301	\	Proposed Elevation - High Holborn - South
1702_P_302	\	Proposed Elevation - Bloomsbury Street - West
1702(SK)0031	A	Retained/ Removed/ Proposed Plans - Basement
1702(SK)0032	A	Retained/ Removed/ Proposed Plans Plans - Ground
1702(SK)0033	A	Retained/ Removed/ Proposed Plans Plans - First
1702(SK)0034	A	Retained/ Removed/ Proposed Plans Plans - Second
1702(SK)0035	A	Retained/ Removed/ Proposed Plans Plans - Third



Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

Area to be demolished

Area of slab to be removed

N

0m 1m 5m

Shaftesbury Theatre

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Project Project No. 1702

Shaftesbury Theatre

The Theatre of Comedy Company

Drawing Title

Existing Plan
Basement
Stalls Level

Drawing Number: 1702-XP-099

Revision/Suitability: \

Scale @ A3: 1 : 200

Scale @A1: 1 : 100

Revision Date: 171220 (YY MM DD)

GRAPE STREET

KING EDWARD MANSIONS

SERVICE YARD

SOVEREIGN HOUSE

SHAFTESBURY AVENUE

HIGH HOLBORN

BLOOMSBURY STREET

Female WC removed

Box screening to be amended

Modern bar entry to be amended

Stair to be removed

Modern seating to be removed and replaced with new

Modern box office joinery removed

Modern stairs to be removed

New door opening formed

Existing stair removed between stalls and first floor level

Original door to be adapted

Modern bar, back bar and fittings to be removed

Modern merchandise desk removed

Revisions

	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

Area to be demolished

N

0m 1m 5m

The Theatre of Comedy Company

Shaftesbury Theatre

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Project

Project No. 1702

Shaftesbury Theatre

The Theatre of Comedy Company

Drawing Title

Existing Plan
Ground Floor
Lower Royal Circle

Drawing Number

1702-XP-100

Revision/Suitability

\

Scale @ A3

1 : 200

Scale @A1

1 : 100

Revision Date

171220

YY MM DD

Male WC to be removed

Modern bar, back bar and fittings to be removed

Internal partition to be amended and stepped access removed

Lighting box to be amended

Signage size reduced

Stair to be removed

Female WC to be removed

Modern seating to be removed and replaced with new

New door opening formed

Modern audio description booth to be removed

Modern signage to be removed

Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

Area to be demolished

N

0m 1m 5m

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Project Project No. 1702

Shaftesbury Theatre

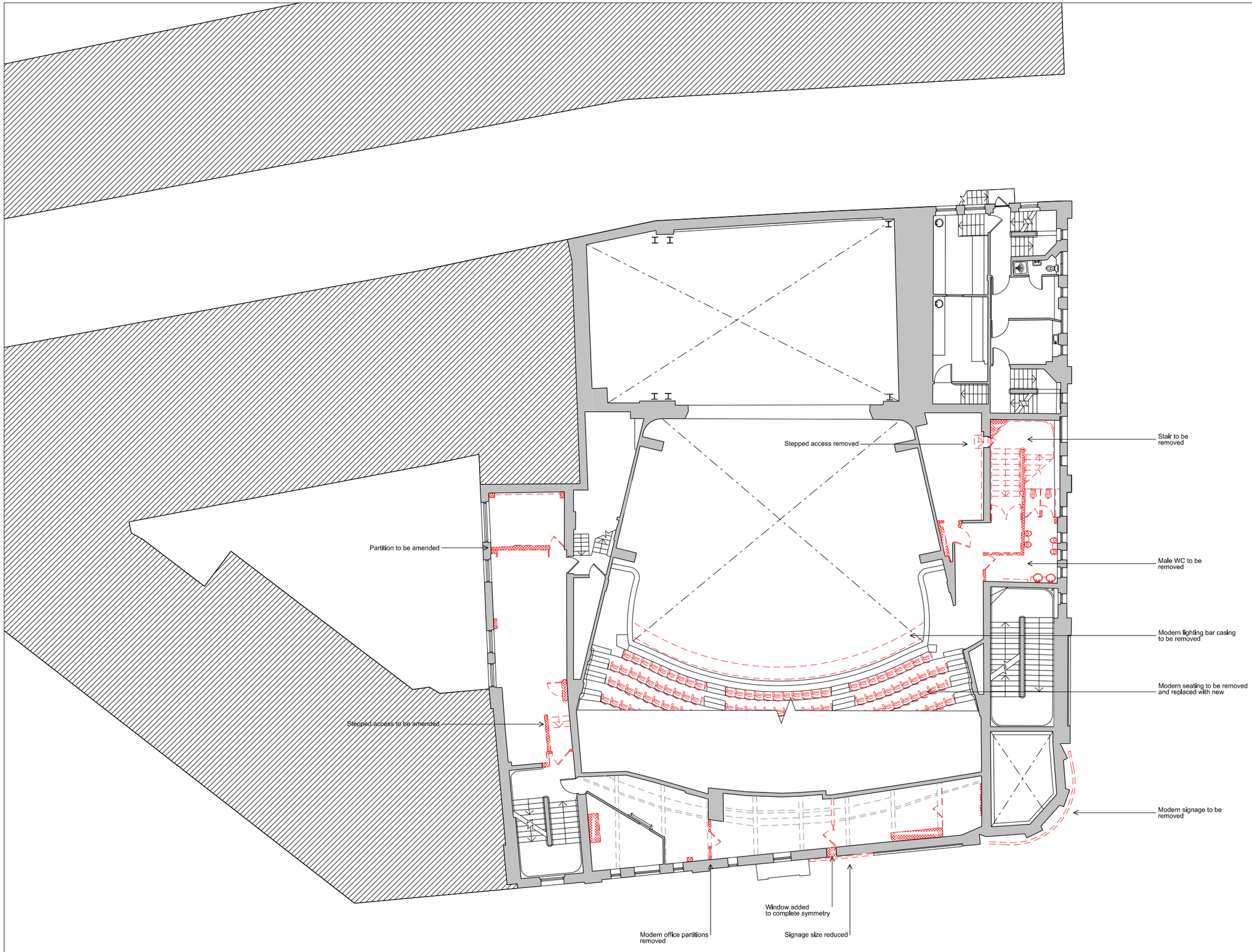
The Theatre of Comedy Company

Drawing Title

Existing Plan
First Floor
Upper Royal Circle

Drawing Number	Revision/Suitability
1702-XP-101	\

Scale @ A3	Scale @A1	Revision Date
1 : 200	1 : 100	171220
		YY MM DD



Revisions
\ 171220 Issued for Planning

By DC | Chk PB

Notes

Area to be demolished

N

0m 1m 5m

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Shaftesbury Theatre

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Project Project No. 1702

Shaftesbury Theatre

The Theatre of Comedy Company

Drawing Title

Existing Plan
Second Floor
Lower Grand Circle

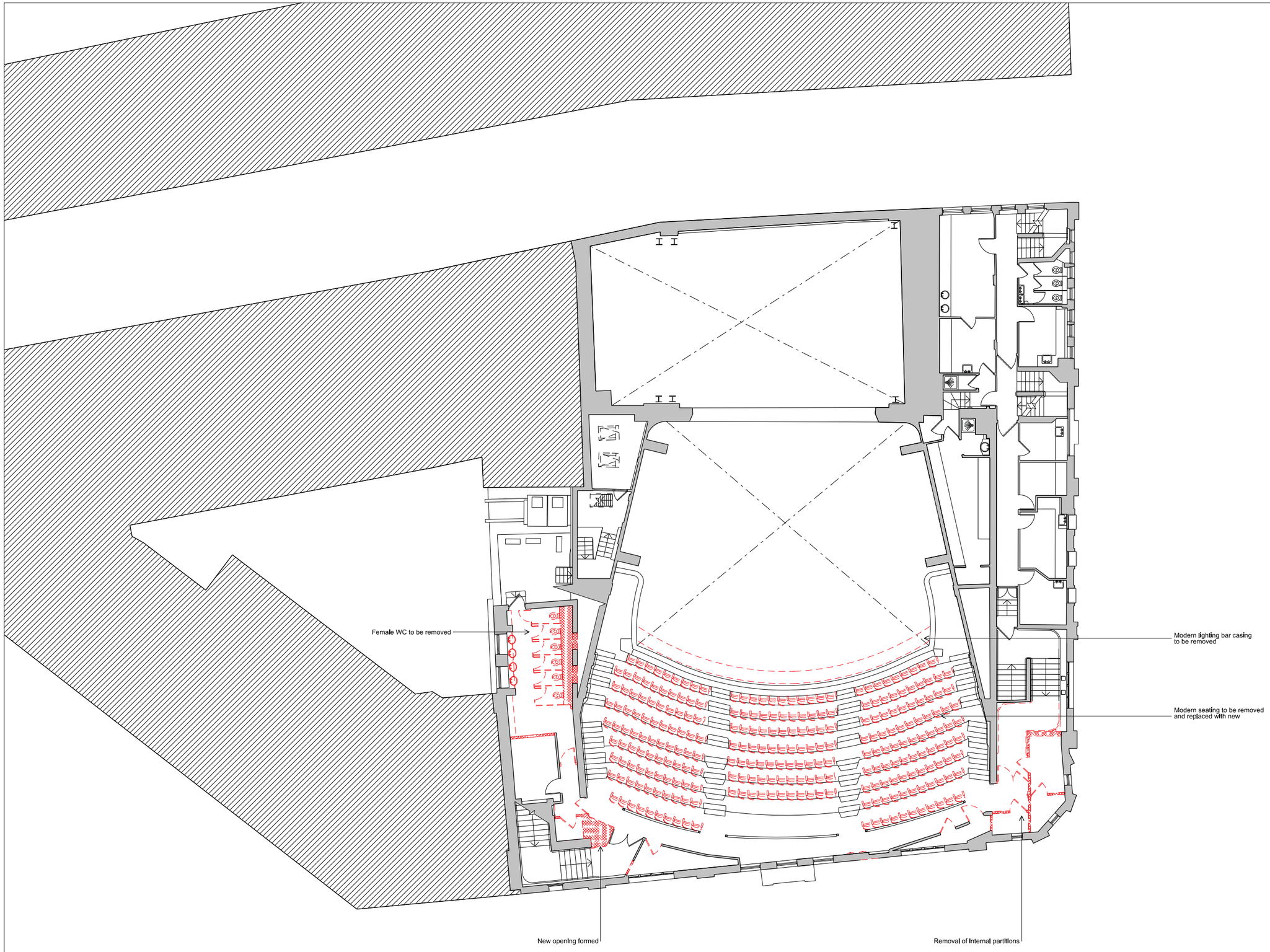
Drawing Number
1702-XP-102

Revision/Suitability
\

Scale @ A3
1 : 200

Scale @A1
1 : 100

Revision Date
171220
YY MM DD



Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

Area to be demolished

N

0m 1m 5m

The Theatre of Comedy Company

Shaftesbury Theatre

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E mail@bennettsassociates.com

Project

Project No. 1702

Shaftesbury Theatre

The Theatre of Comedy Company

Drawing Title

Existing Plan
Third Floor
Upper Grand Circle

Drawing Number

1702-XP-103

Revision/Suitability

\

Scale @ A3

1 : 200

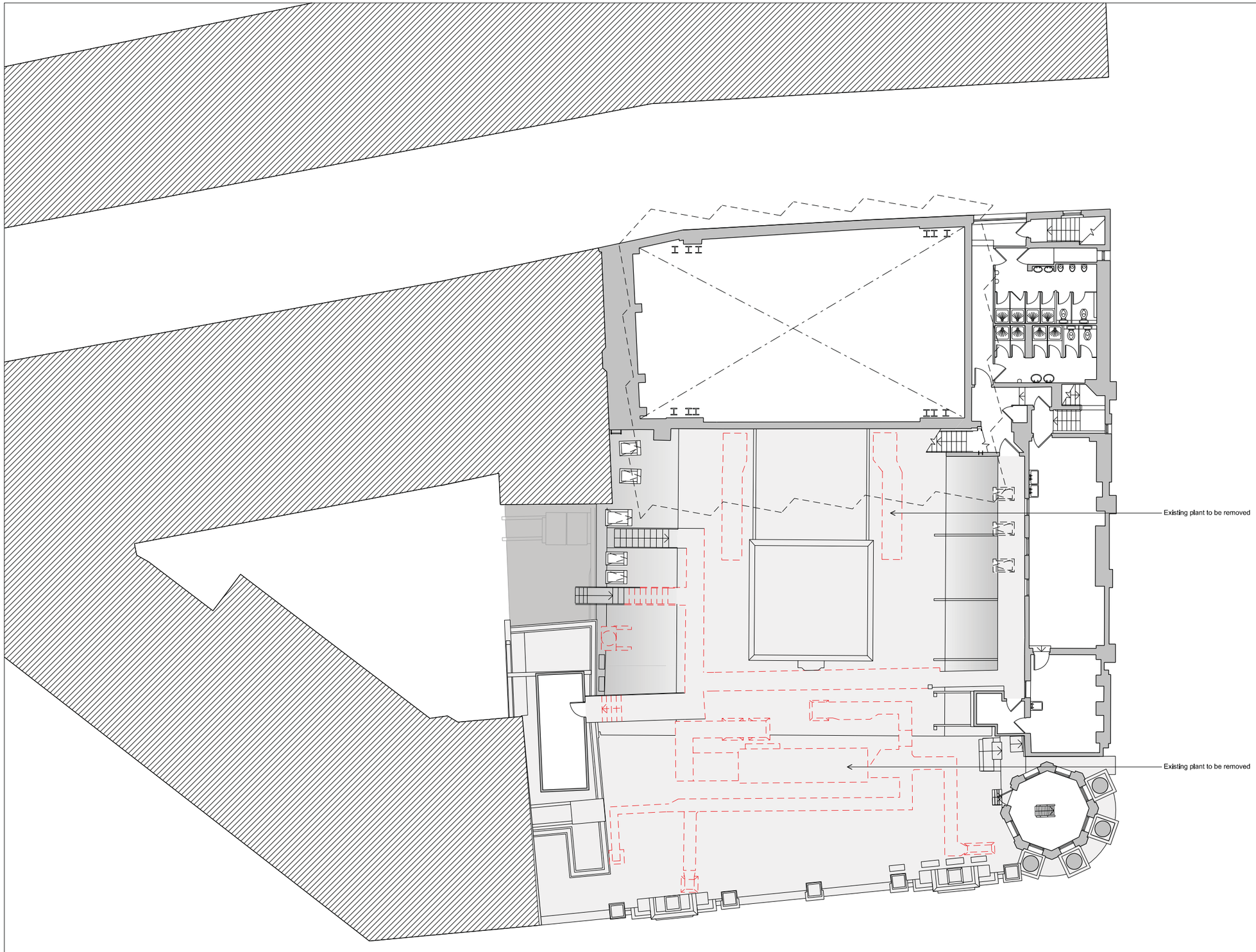
Scale @A1

1 : 100

Revision Date

171220

YY MM DD



Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

Area to be demolished

N

0m 1m 5m

Shaftesbury Theatre

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Project

Shaftesbury Theatre

The Theatre of Comedy Company

Project No. 1702

Drawing Title

Existing Plan
Fourth Floor
Auditorium Roof

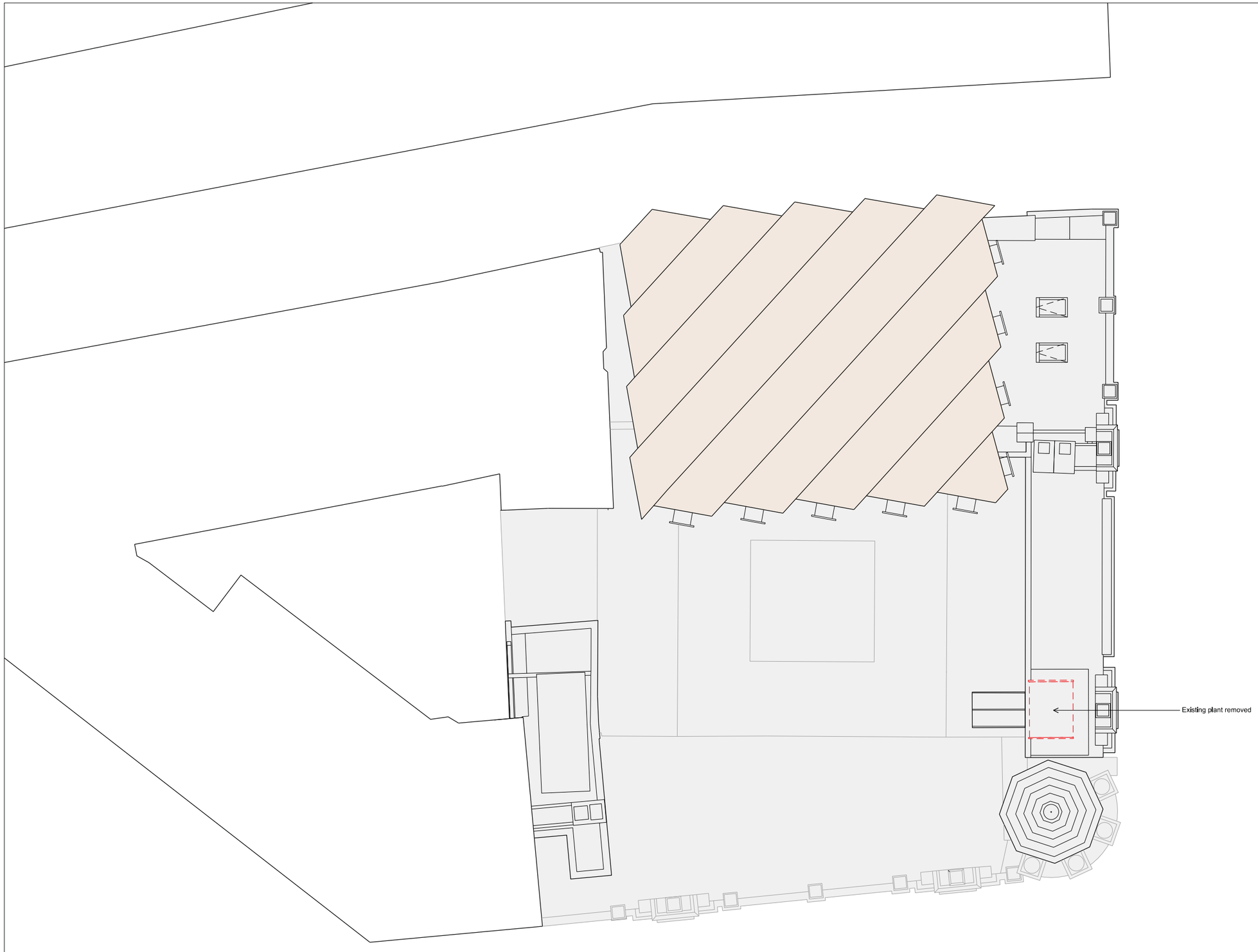
Drawing Number
1702-XP-104

Revision/Suitability
\

Scale @ A3
1 : 200

Scale @A1
1 : 100

Revision Date
171220
YY MM DD



Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

Area to be demolished

N

0m 1m 5m

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Project

Project No. 1702

Shaftesbury Theatre

The Theatre of Comedy Company

Drawing Title

Existing Plan
Roof

Drawing Number

1702-XP-105

Revision/Suitability

\

Scale @ A3

1 : 200

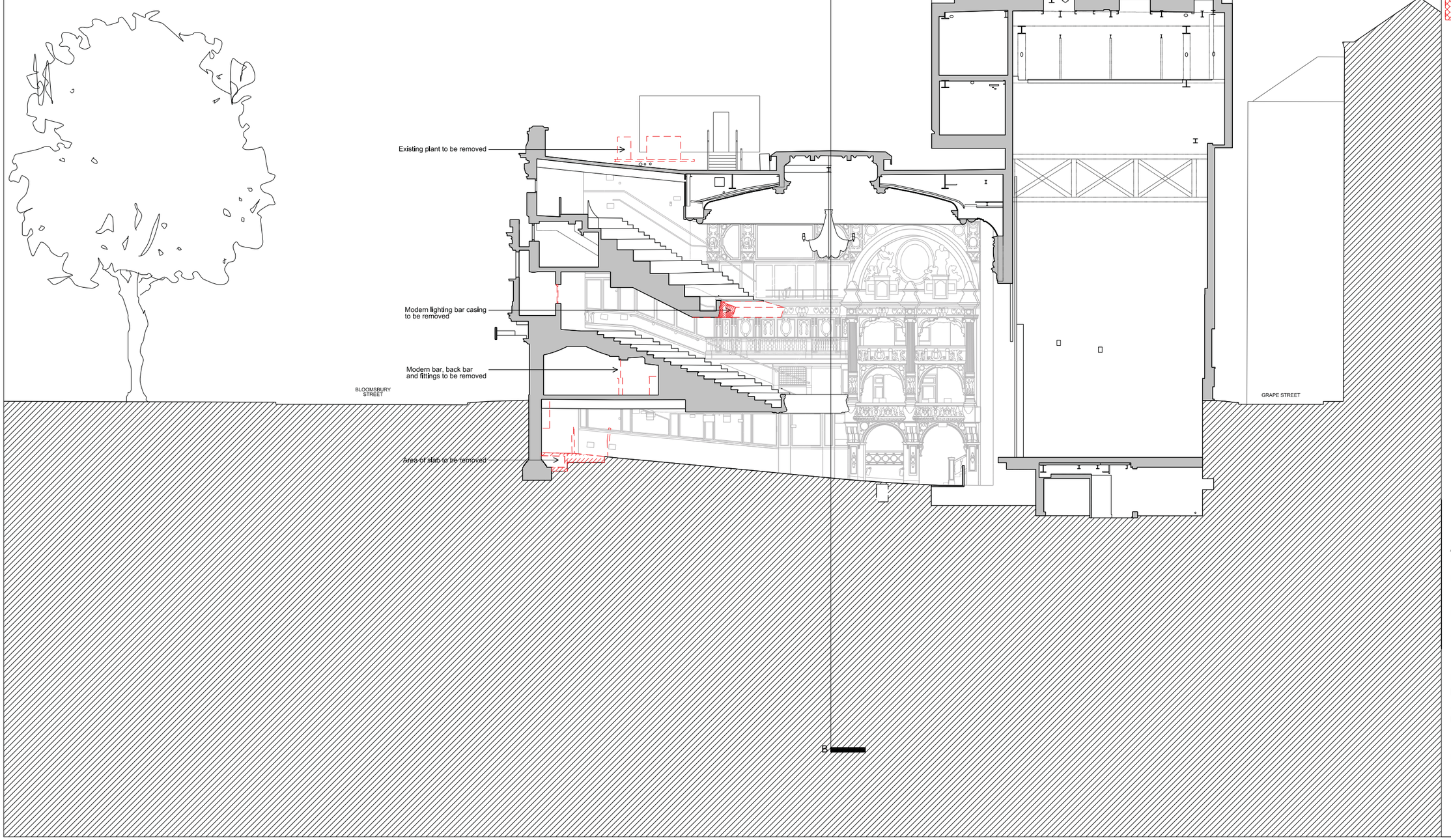
Scale @A1

1 : 100

Revision Date

171220

YY MM DD



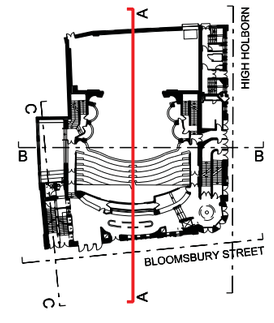
Revisions
\ 171220 Issued for Planning

By DC | Chk PB

Notes

Area to be demolished

0m 1m 5m



The Theatre of Comedy Company

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Project

Project No. 1702

Shaftesbury Theatre

The Theatre of Comedy Company

Drawing Title

Existing Section
Aection AA
Up/Down Stage

Drawing Number

1702-XP-210

Revision/Suitability

\

Scale @ A3

1 : 200

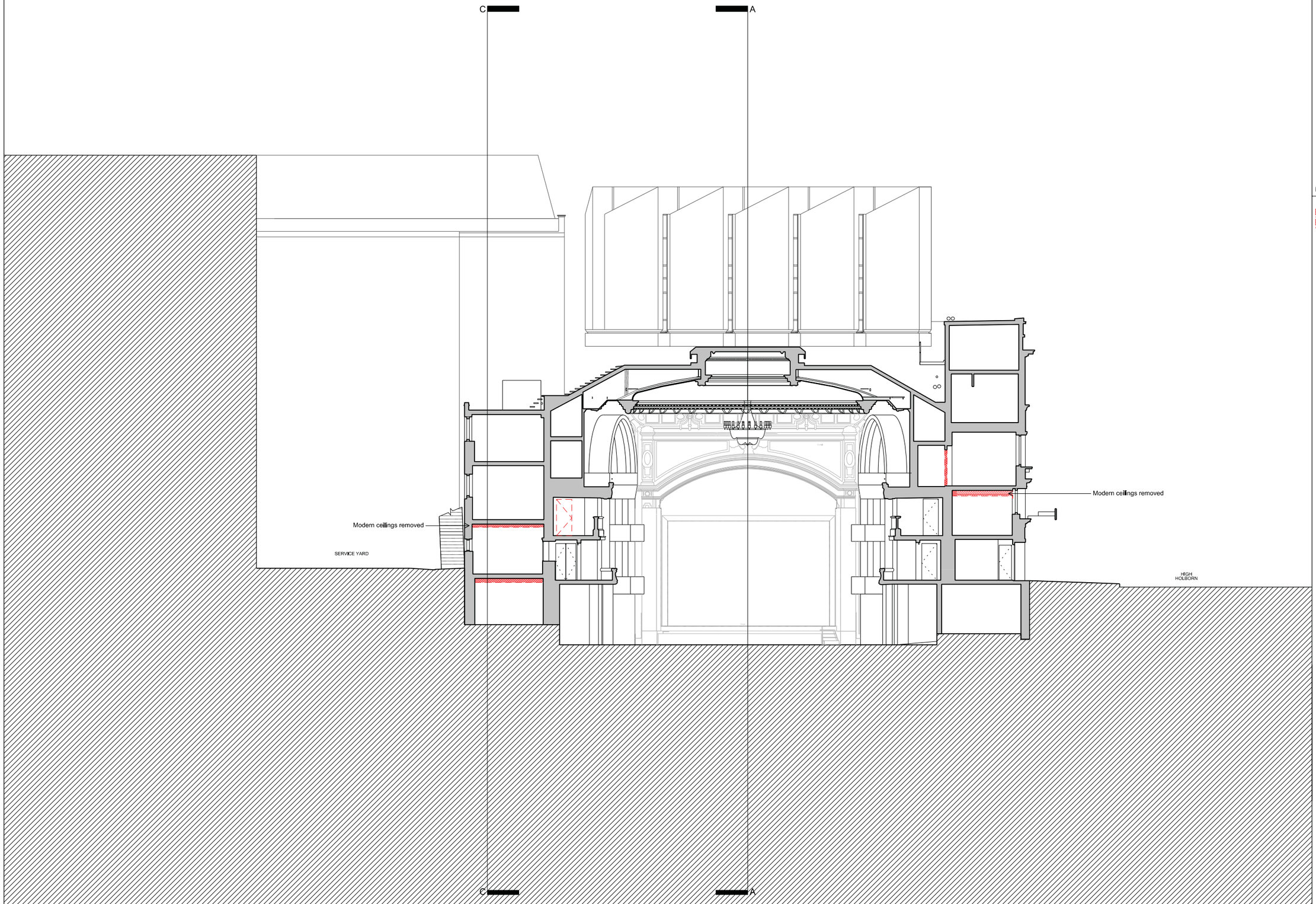
Scale @A1

1 : 100

Revision Date

171220

YY MM DD

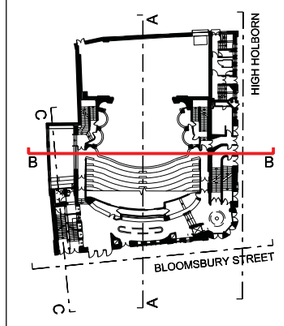


Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

Area to be demolished

0m 1m 5m



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Project — Project No. 1702

Shaftesbury Theatre

The Theatre of Comedy Company

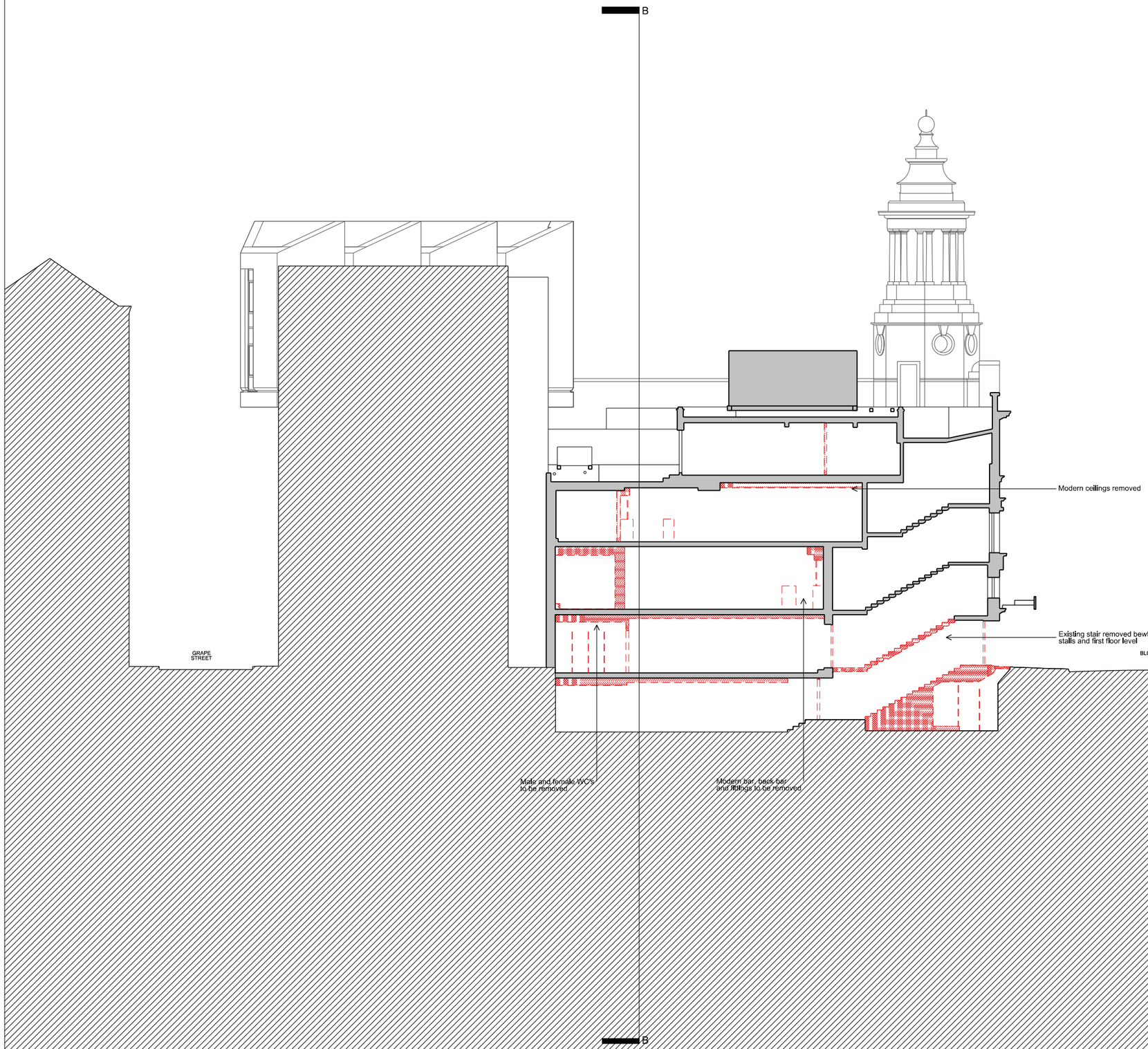
Drawing Title

Existing Section
Section BB
Proscenium Stage Left / Stage Right

Drawing Number	Revision/Suitability
1702-XP-220	\

Scale @ A3	Scale @A1	Revision Date
1 : 200	1 : 100	171220

YY MM DD

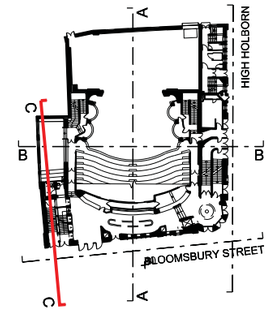


Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

Area to be demolished

0m 1m 5m



The Theatre of Comedy Company

Shaftesbury Theatre

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Project Project No. 1702

Shaftesbury Theatre

The Theatre of Comedy Company

Drawing Title

Existing Section
Section CC
Bars

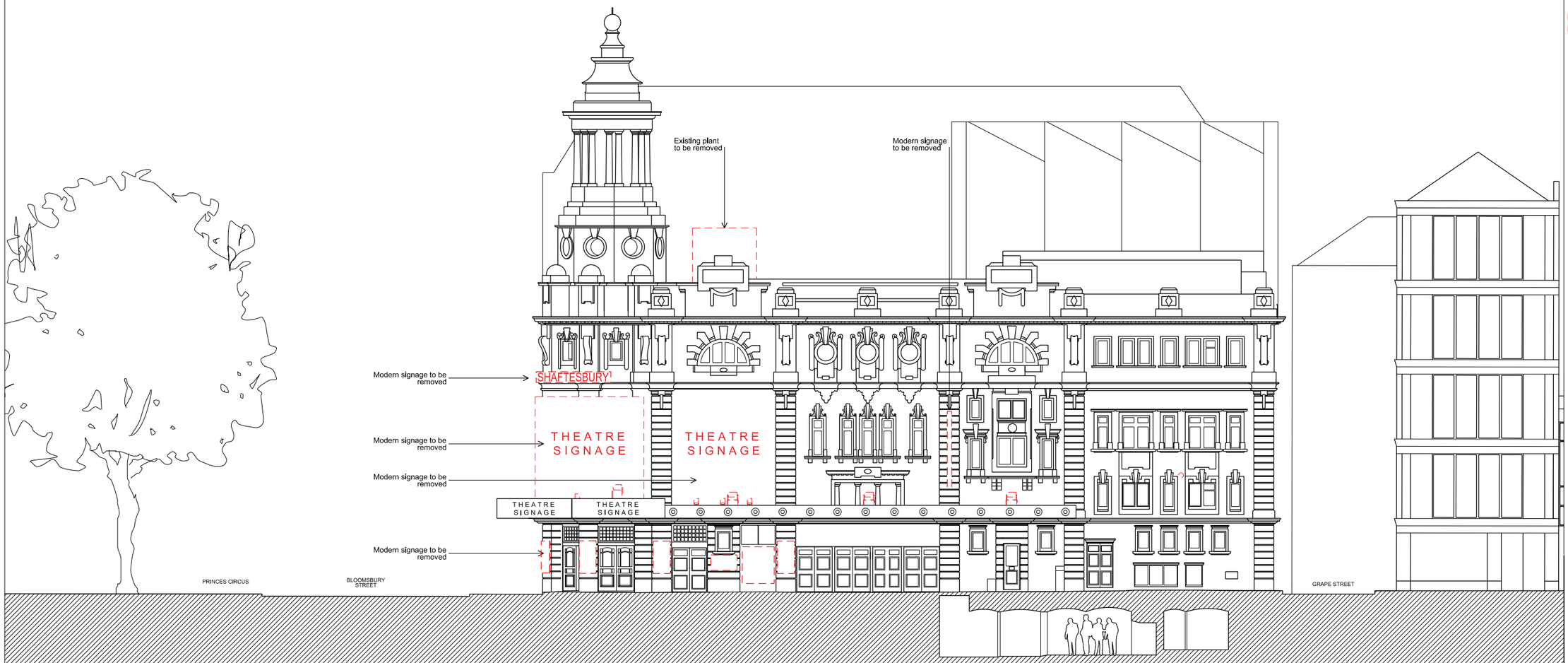
Drawing Number: 1702-XP-230

Revision/Suitability: \

Scale @ A3: 1 : 200

Scale @A1: 1 : 100

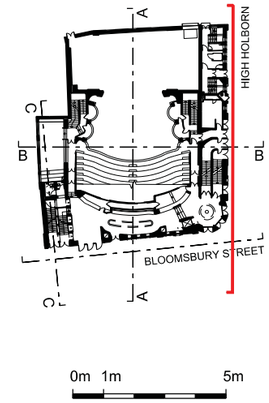
Revision Date: 171220 (YY MM DD)



Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

Area to be demolished



0m 1m 5m

The Theatre of Comedy Company

Shaftesbury Theatre

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Project

Project No. 1702

Shaftesbury Theatre

The Theatre of Comedy Company

Drawing Title

Existing Elevation
High Holborn
South

Drawing Number

1702-XP-301

Revision/Suitability

\

Scale @ A3

1 : 200

Scale @A1

1 : 100

Revision Date

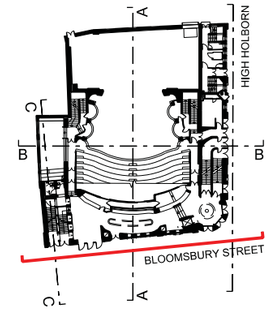
171220

YY MM DD

Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

Area to be demolished



0m 1m 5m

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Project Project No. 1702

Shaftesbury Theatre

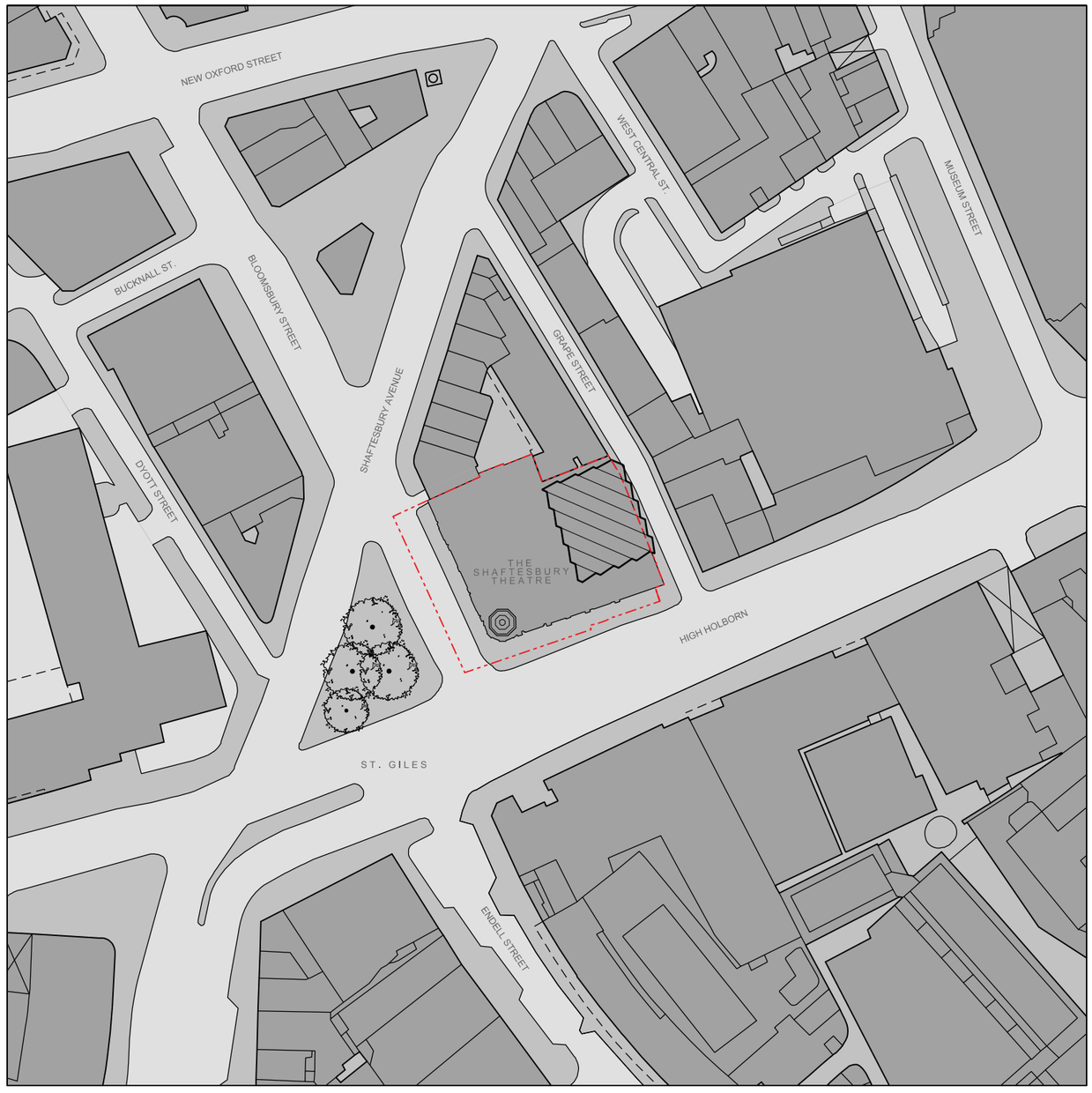
The Theatre of Comedy Company

Drawing Title

Existing Elevation
Bloomsbury Street
West

Drawing Number	Revision/Suitability
1702-XP-302	\

Scale @ A3	Scale @A1	Revision Date
1 : 200	1 : 100	171220
		YY MM DD



Revisions

		By	Chk
\	171220 Issued for Planning	AG	PB

Notes

Proposed development boundary including vaults at lower ground floor only

Additional Ownership Boundary

N

0m 8m 40m

The Theatre of Comedy Company

Shaftesbury Theatre

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Project

Project No. 1702

Shaftesbury Theatre

The Theatre of Comedy Company

Drawing Title

Location Plan
Development Boundary

Drawing Number

1702-P-001

Revision/Suitability

\

Scale @ A3

1 : 1000

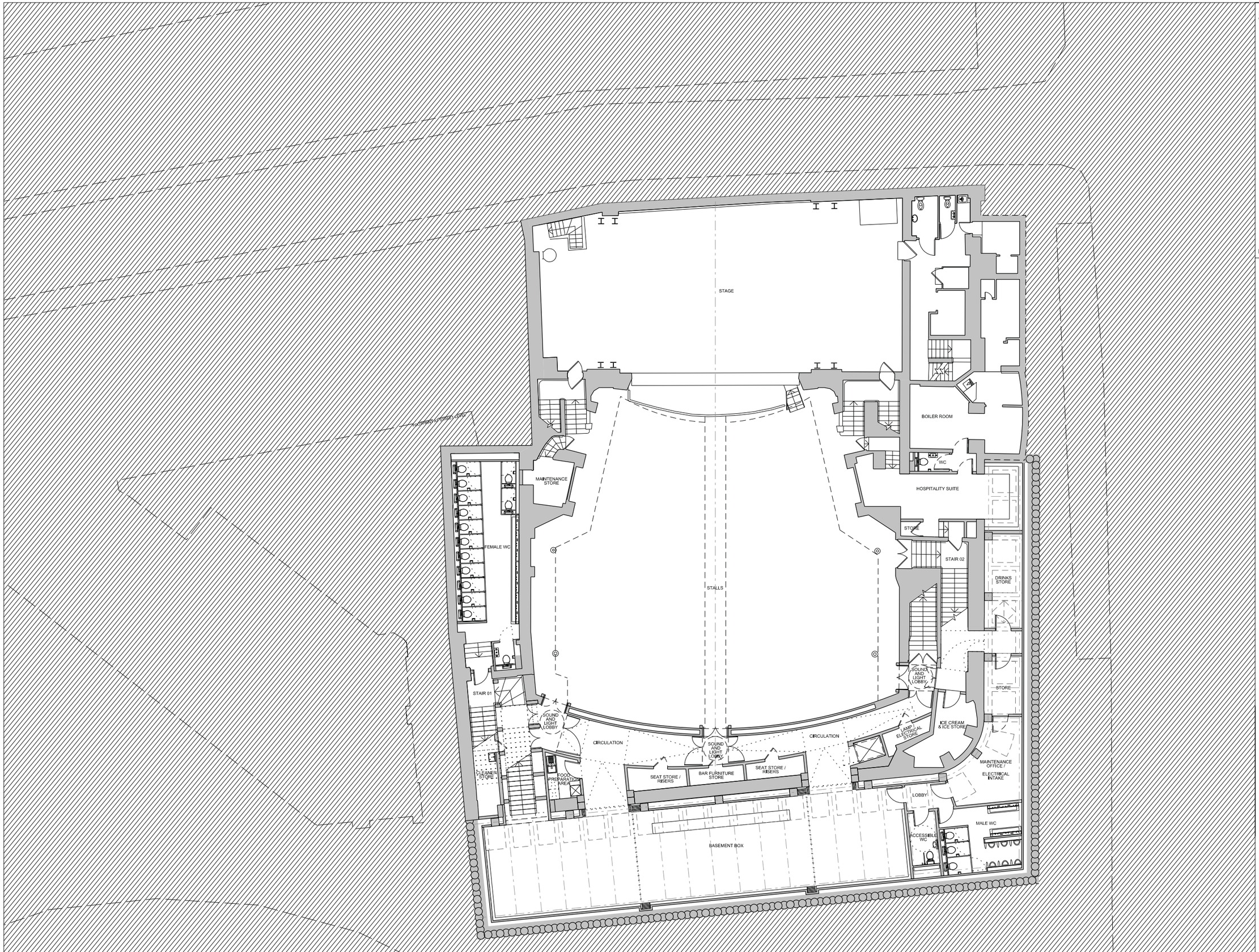
Scale @A1

1 : 500

Revision Date

171220

YY MM DD



Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

N

0m 1m 5m

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Shaftesbury Theatre

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Project Project No. 1702

Shaftesbury Theatre

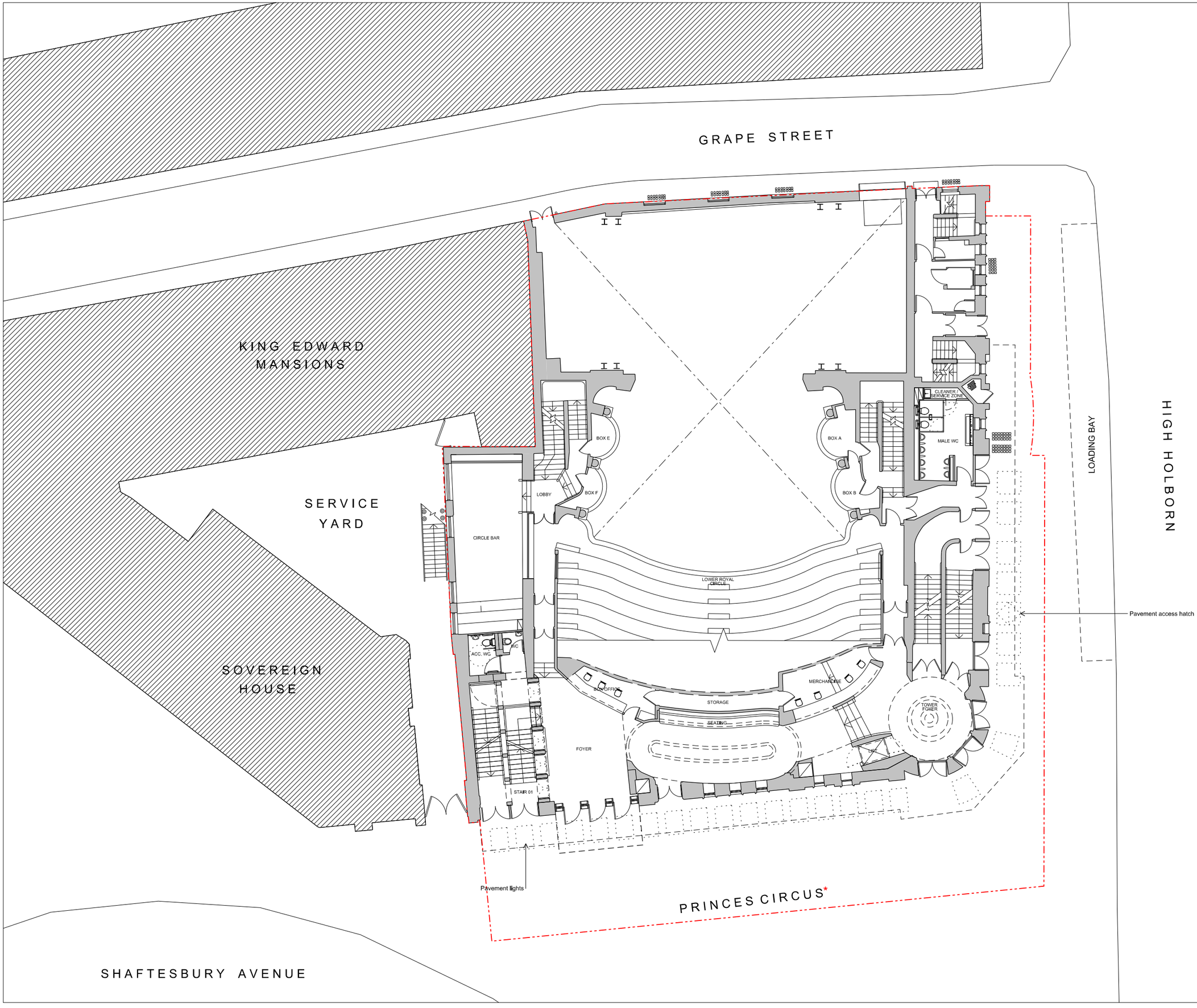
The Theatre of Comedy Company

Drawing Title

Proposed Plan
Basement
Stalls Level

Drawing Number	Revision/Suitability
1702-P-099	\

Scale @ A3	Scale @A1	Revision Date
1 : 200	1 : 100	171220
		YY MM DD



Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

N

0m 1m 5m

* All external works shown indicative. Please refer to West End Project information

Proposed development boundary including vaults at lower ground floor only

The Theatre of Comedy Company
Shaftesbury Theatre

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Project Project No. 1702

Shaftesbury Theatre

The Theatre of Comedy Company

Drawing Title

Proposed Plan
Ground Floor
Lower Royal Circle

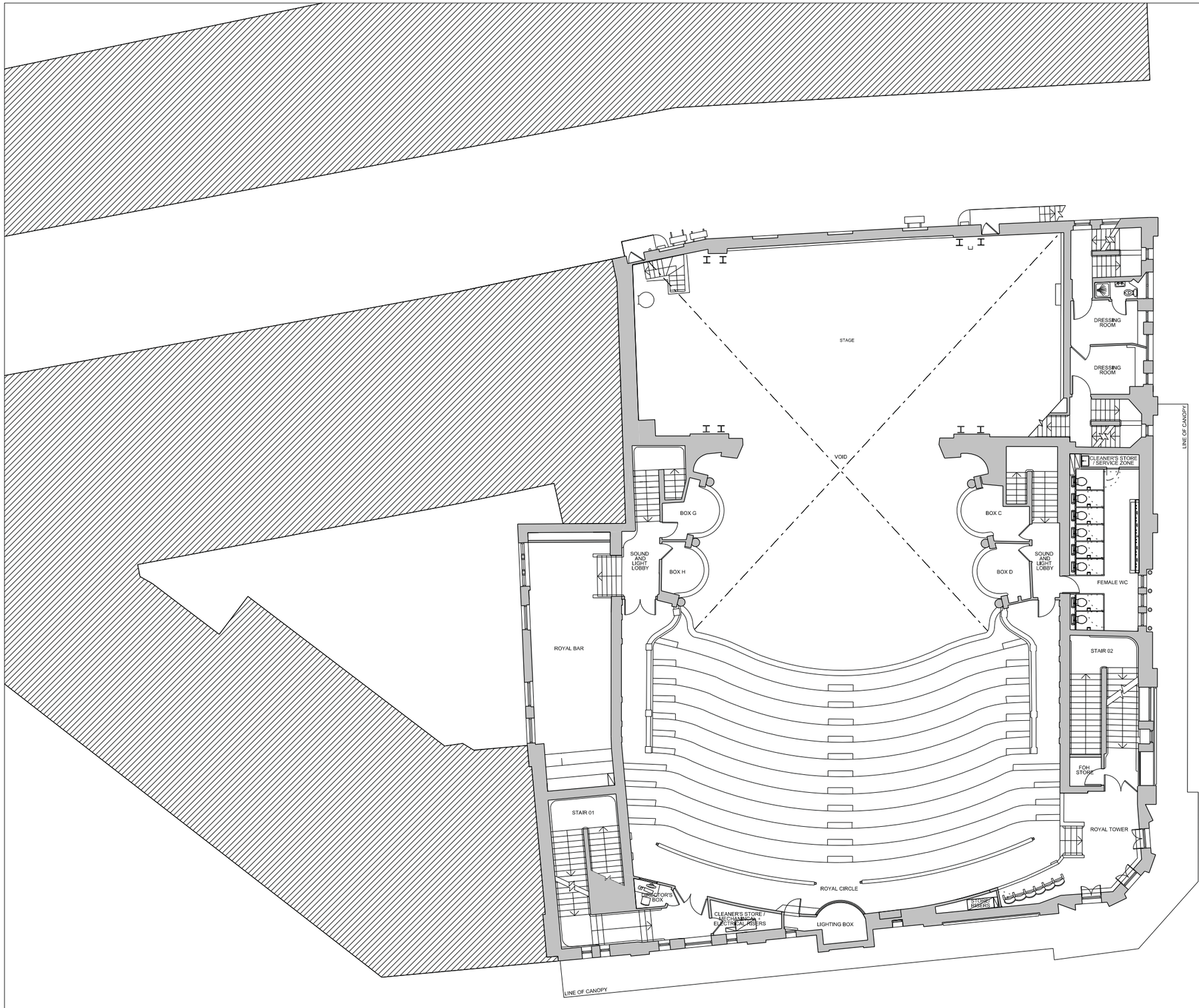
Drawing Number: 1702-P-100

Revision/Suitability: \

Scale @ A3: 1 : 200

Scale @A1: 1 : 100

Revision Date: 171220 (YY MM DD)



Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

N

0m 1m 5m

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Project Project No. 1702

Shaftesbury Theatre

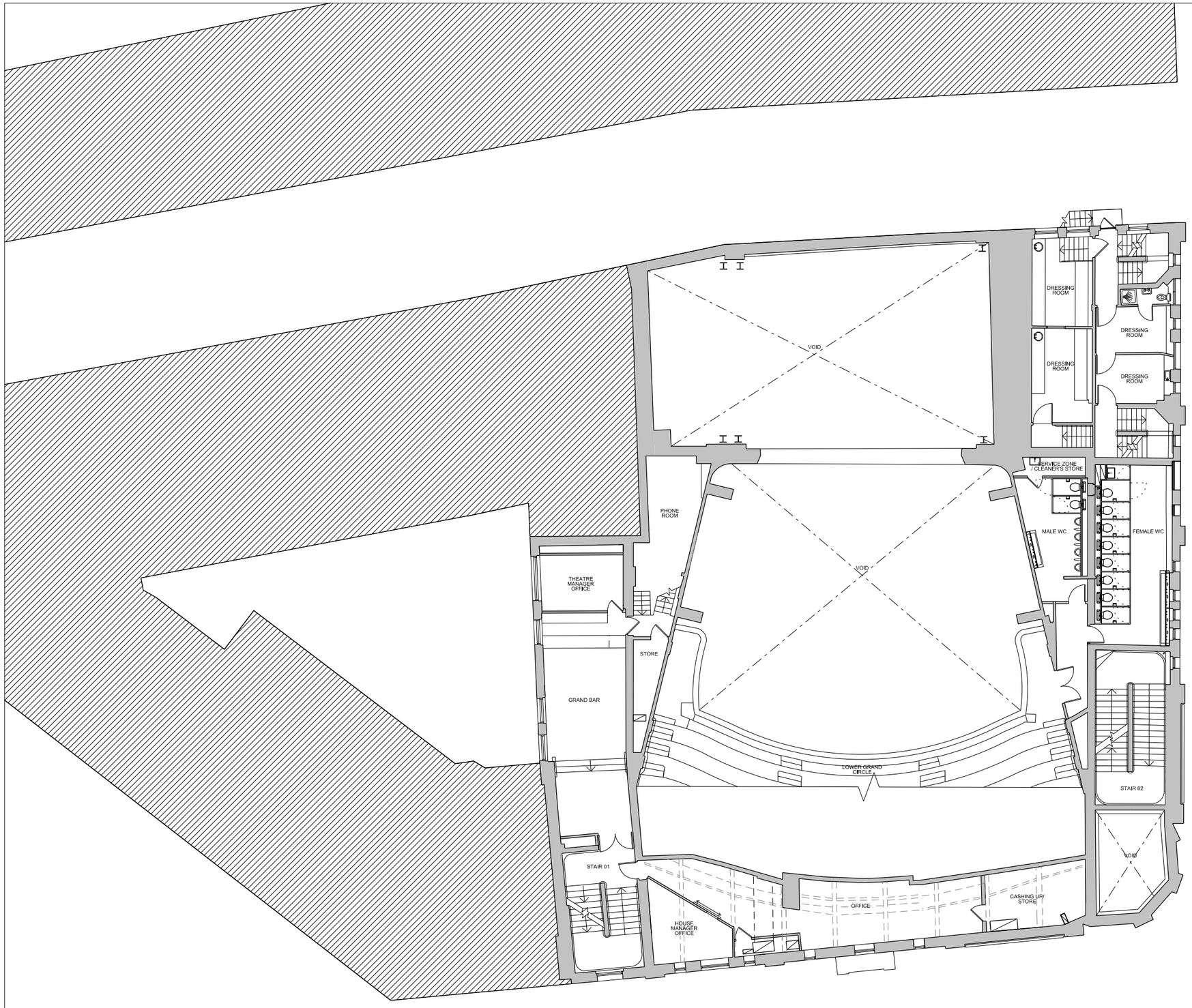
The Theatre of Comedy Company

Drawing Title

Proposed Plan
First Floor
Upper Royal Circle

Drawing Number	Revision/Suitability
1702-P-101	\

Scale @ A3	Scale @A1	Revision Date
1 : 200	1 : 100	171220
		YY MM DD



Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

N

0m 1m 5m

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Project

Project No. 1702

Shaftesbury Theatre

The Theatre of Comedy Company

Drawing Title

Proposed Plan
Second Floor
Lower Grand Circle

Drawing Number

1702-P-102

Revision/Suitability

\

Scale @ A3

1 : 200

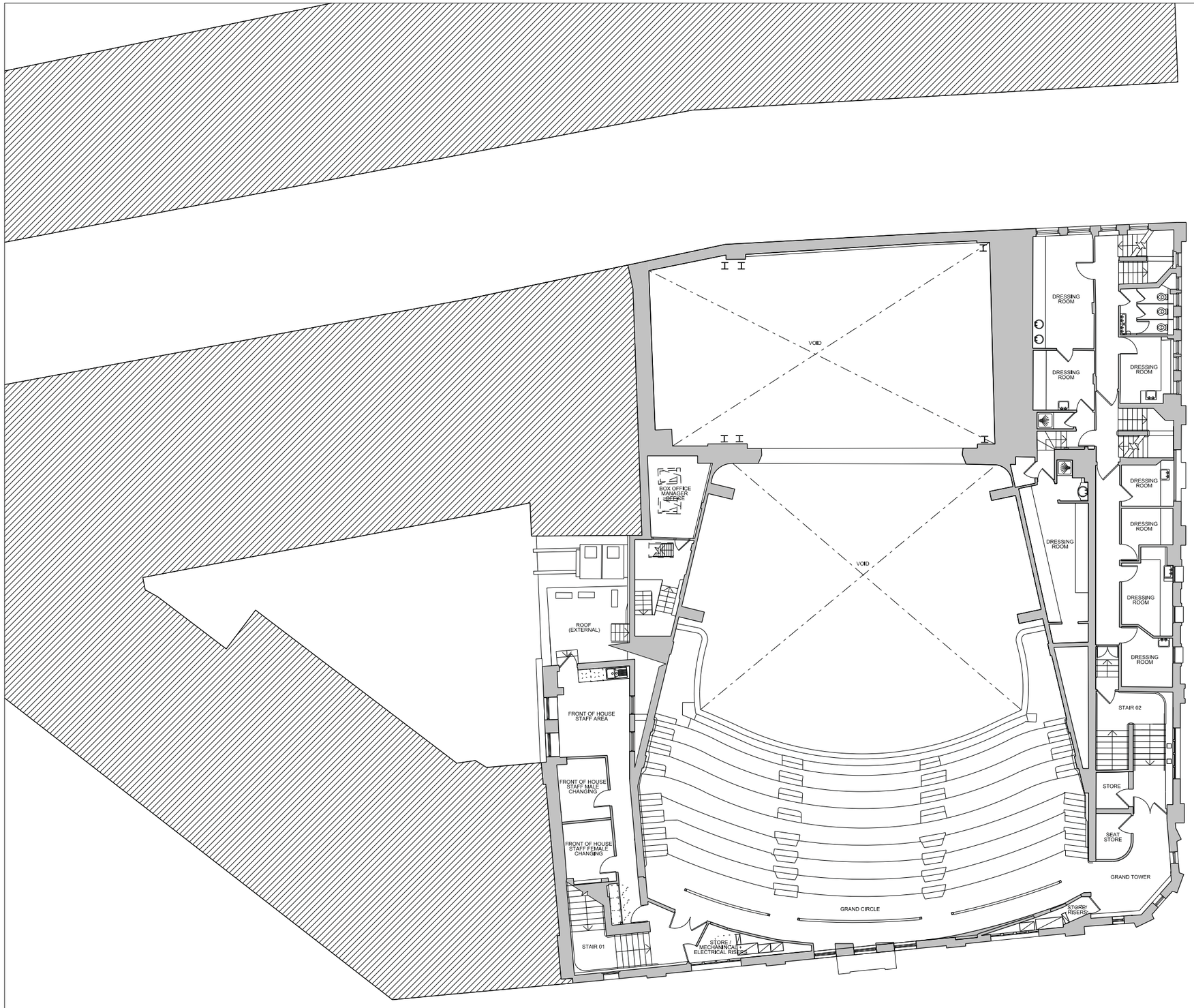
Scale @A1

1 : 100

Revision Date

171220

YY MM DD



Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

N

0m 1m 5m

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Shaftesbury Theatre

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Project

Project No. 1702

Shaftesbury Theatre

The Theatre of Comedy Company

Drawing Title

Proposed Plan
Third Floor
Upper Grand Circle

Drawing Number

1702-P-103

Revision/Suitability

\

Scale @ A3

1 : 200

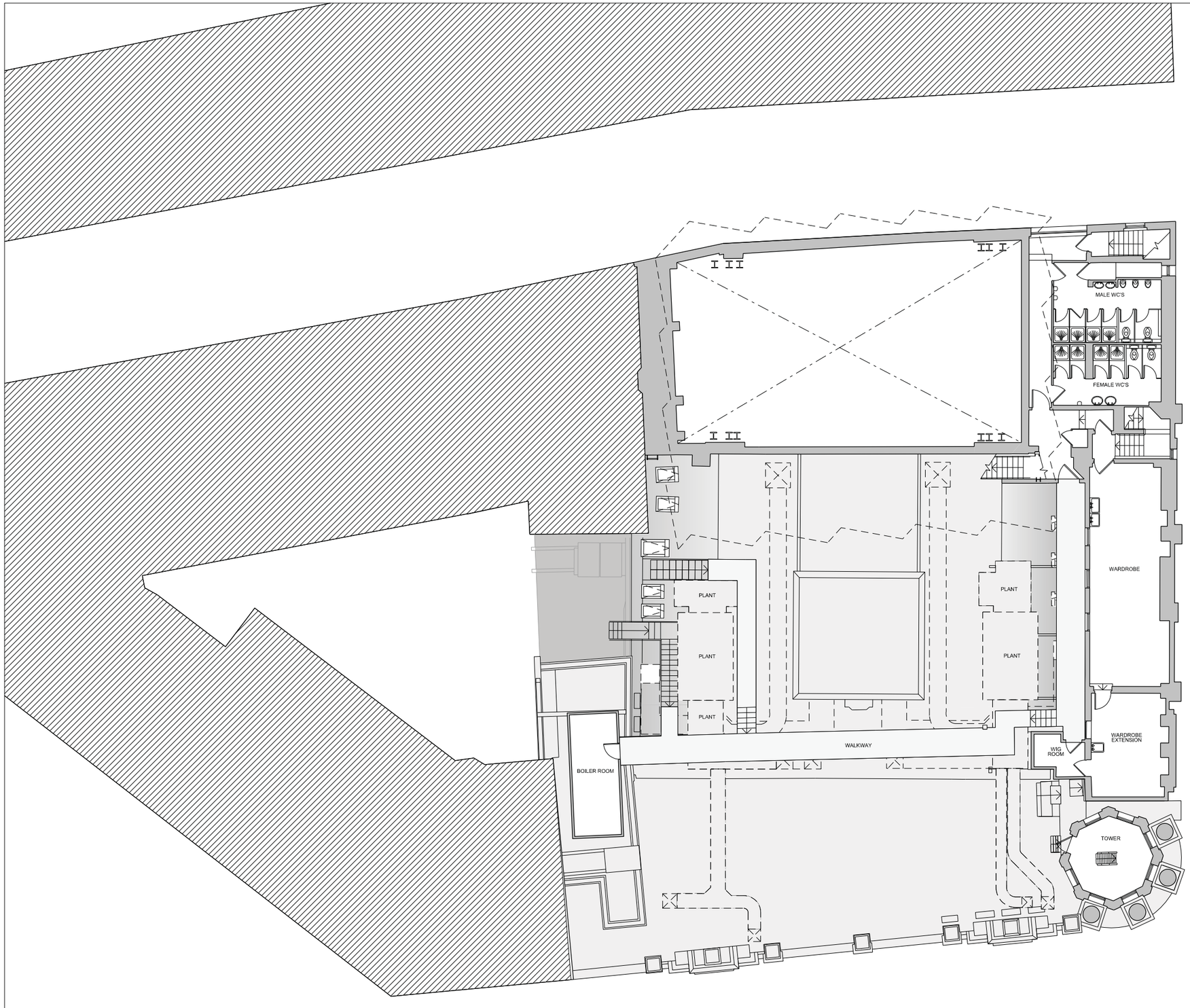
Scale @A1

1 : 100

Revision Date

171220

YY MM DD



Revisions	By	Chk
\ 171220 Issued for Planning	DC	PB

Notes

N

0m 1m 5m

** All plant shown indicative.
Detailed scheme to be developed

The Theatre of Comedy Company
Shaftesbury Theatre

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Project
Shaftesbury Theatre
The Theatre of Comedy Company

Project No. 1702

Drawing Title
Proposed Plan
Fourth Floor
Auditorium Roof

Drawing Number
1702-P-104

Revision/Suitability
\

Scale @ A3
1 : 200

Scale @A1
1 : 100

Revision Date
171220
YY MM DD