

4.4 Auditorium and Foyer

Acoustic Interventions

To improve the acoustic performance of the main auditorium the design team, led by Max Fordham, have undertaken a series of acoustic surveys to assess the current reverberation times of the space and the appropriateness for a variety of events.

These surveys has led to Max Fordham advising the design team to introduce a series of bass traps.

What are bass traps?

Bass traps treatments are constructed with rigid mineral wool and absorb more low-end frequencies in a room. Bass Traps are a very cost effective manner in which to treat a room. Bass Traps have a profile ranging from 101mm - 177mm and up, which are perfect for tightening up low frequencies that may distort the listening experience.

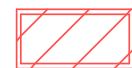
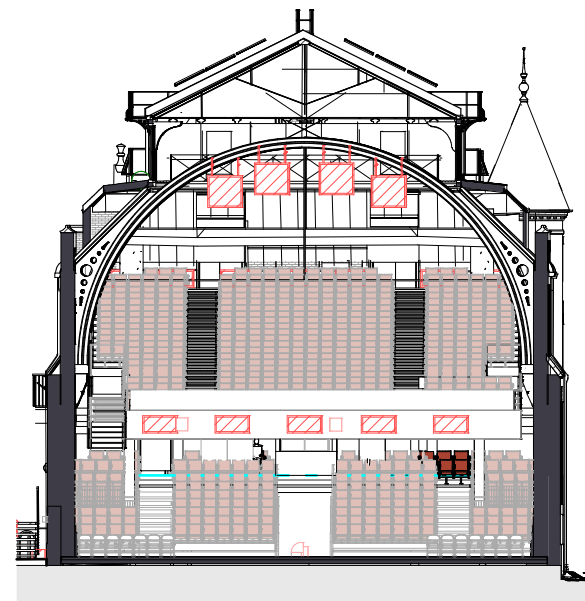
The thickness of the profile of the bass trap panels forces the sound waves to travel further inside of the panel, which is why it is considered bass trapping.

Visual appearance

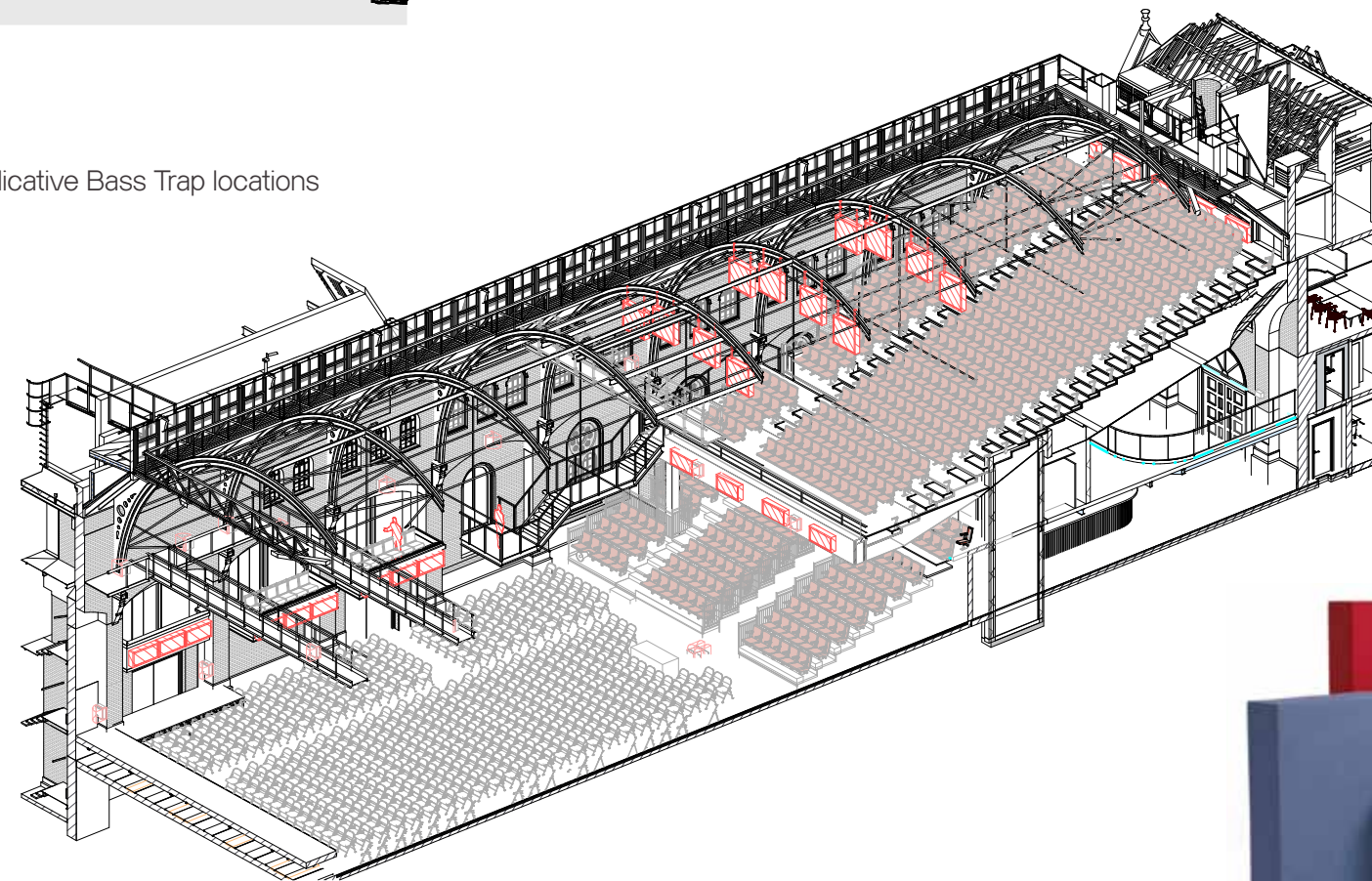
Bass traps are formed from cross banded layers of plywood and filled with dense acoustic insulation. This construction is then wrapped in fabric. This gives many options for the visual appearance of the bass traps proposed to be installed in the Corn Exchange.

Quantity

The required area of Bass Traps is influenced by many factors and will have a significant impact on the acoustic quality of the space. We are therefore committed to carrying out detailed testing at RIBA Stage 4.



Indicative Bass Trap locations



Bass Trap examples - available in any colour

4.4 Auditorium and Foyer

Revitalised foyer

The Corn Exchange suffers from relatively small foyer space in comparison to the size of the auditorium and the number of visitors to the venue. Were the venue being designed as a purpose built performance space the foyer would be much larger.

This presents a challenge to the Corn Exchange as a balance between the following factors needs to be considered when proposing changes to the foyer;

Usable bar length

This impact how many people can get to the bar, the number of taps and the number of bar staff that can operate in the space.

Dwell space

The foyer needs to act as a space that allows people to dwell, have conversations, discuss the gig after the show and generally occupy the space once they've got a drink from the bar.

Circulation

The foyer is also a key circulation space, sitting directly off the main entrance, the majority of visitors are going to pass through this space to enter the auditorium.

Allowing that movement to happen around the bar and through the dwell space is critical.

Design Response

Working with Blue Horizon Ventures, expert theatre consultants who help transform commercial resilience, the bar layouts on the right have been developed.

A horseshoe shoe shaped bar provides a central focus to the space, unlocking the ability to have two entrances into the auditorium flanking the bar.

The staircases up to the mezzanine have been reconfigured to keep circulation away from the bar. These stairs lead up to a new mezzanine bar, a smaller offer but very visible from the main entrance.

It is felt that these layouts find a balance between usable bar length, dwell space and circulation and therefore optimise the available space with the Corn Exchange.

Proposed Foyer Features

Visitors are greeted with a striking horseshoe shaped bar on entering the space, feature lighting above and around the bar will add to the ambiance.

On either side of the foyer the staircases have been reconfigured to keep circulation away from the bar. These lead you up to the mezzanine level.

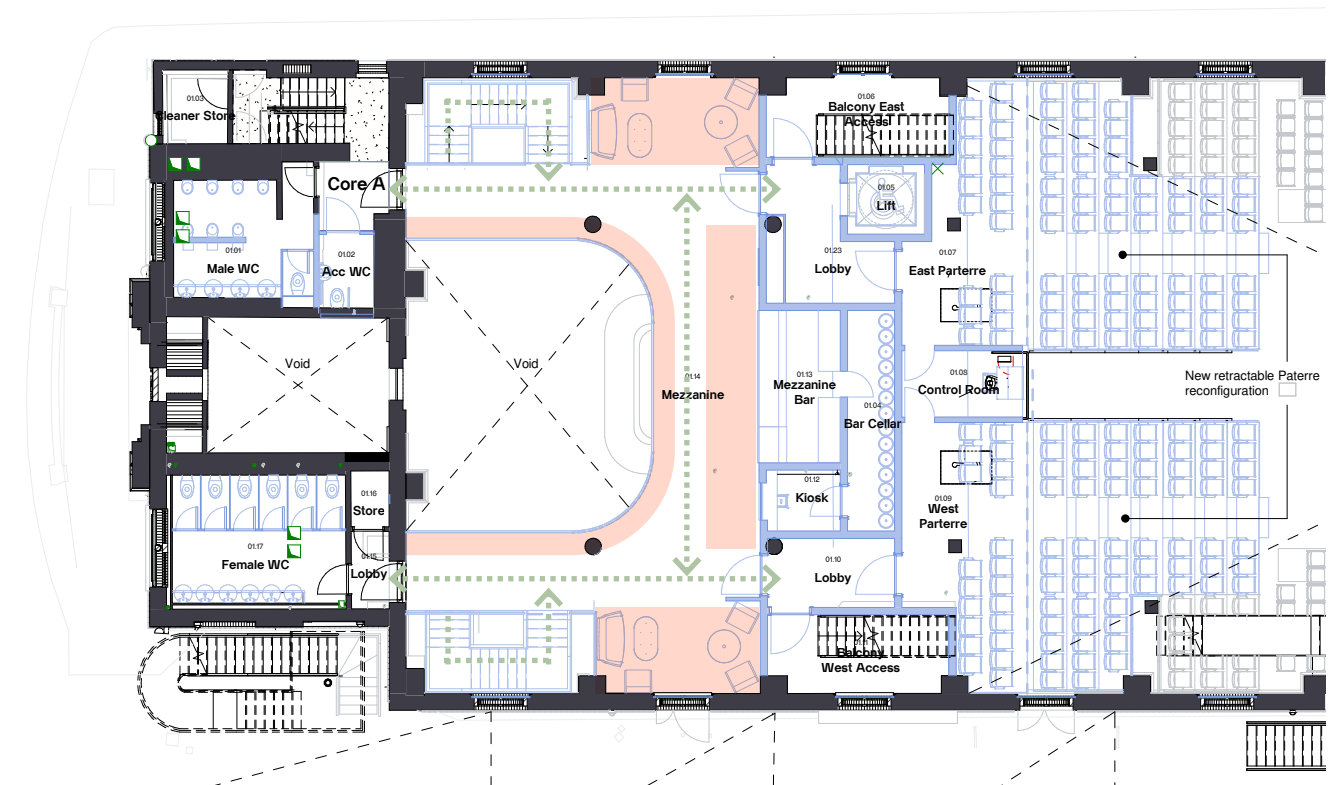
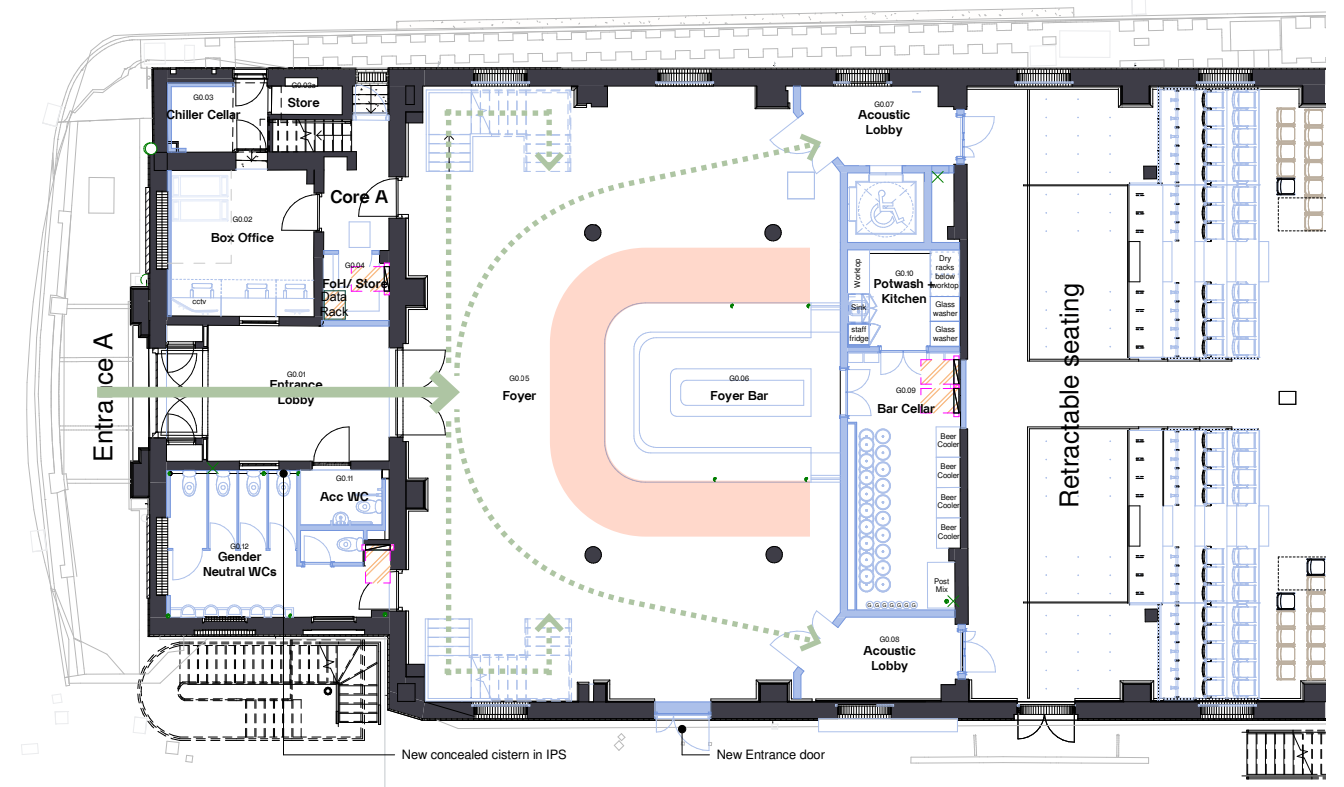
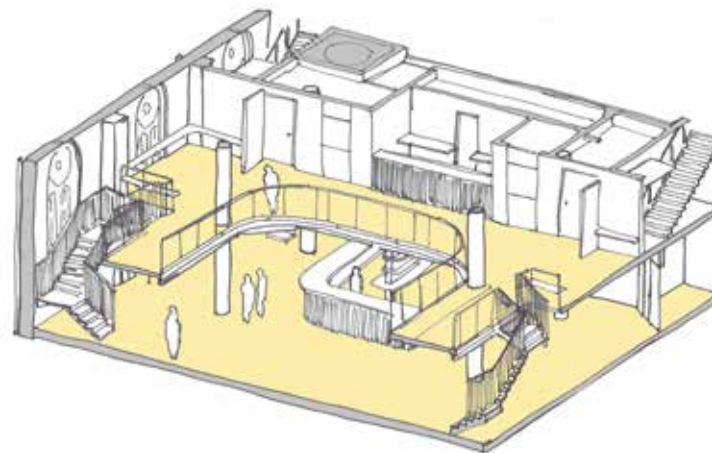
Above the ground floor bar a new mezzanine level bar will be visible, giving visitors a choice of where to grab a drink. The double height space is defined by a generous balcony, deliberately cantilevered from the columns to provide space for visitors to pause whilst maintaining circulation to the toilets.

Accompanying the mezzanine bar a kiosk selling sweet and savoury snacks, ice creams etc. is proposed. Adjacent to these are two spaces with booth seating and space to perch.

The reconfiguration of the foyer allows the bar to be served by an appropriately sized cellar, pot wash and re-heat kitchen. The mezzanine bar too has a cellar space, deliberately positioned above the ground floor cellar to allow drinks lines to serve both bars.

These works also allow two acoustic lobbies to be formed on either side of the building, creating two routes into the auditorium.

The proposed works collectively will improve the visitor experience and build on the past success of Cambridge Corn Exchange.



4.4 Auditorium and Foyer

Bar Lengths and Cellar Space

Ground Floor Bar

A new horseshoe configuration maintains access along both sides of the perimeter, allowing queuing within the foyer without impeding access to the auditorium. Though the usable bar length is 0.1m shorter than existing, circulation, efficiency, and staff operation are greatly improved. Dwell space is increased and storage rationalised into a single 26sqm room, replacing 3–4 smaller stores.

Mezzanine Bar

A new mezzanine bar provides 5.3m of additional bar length and a 13.9sqm cellar, stacked above the ground floor for efficient servicing. Combined, the two levels increase overall bar length and cellar capacity.

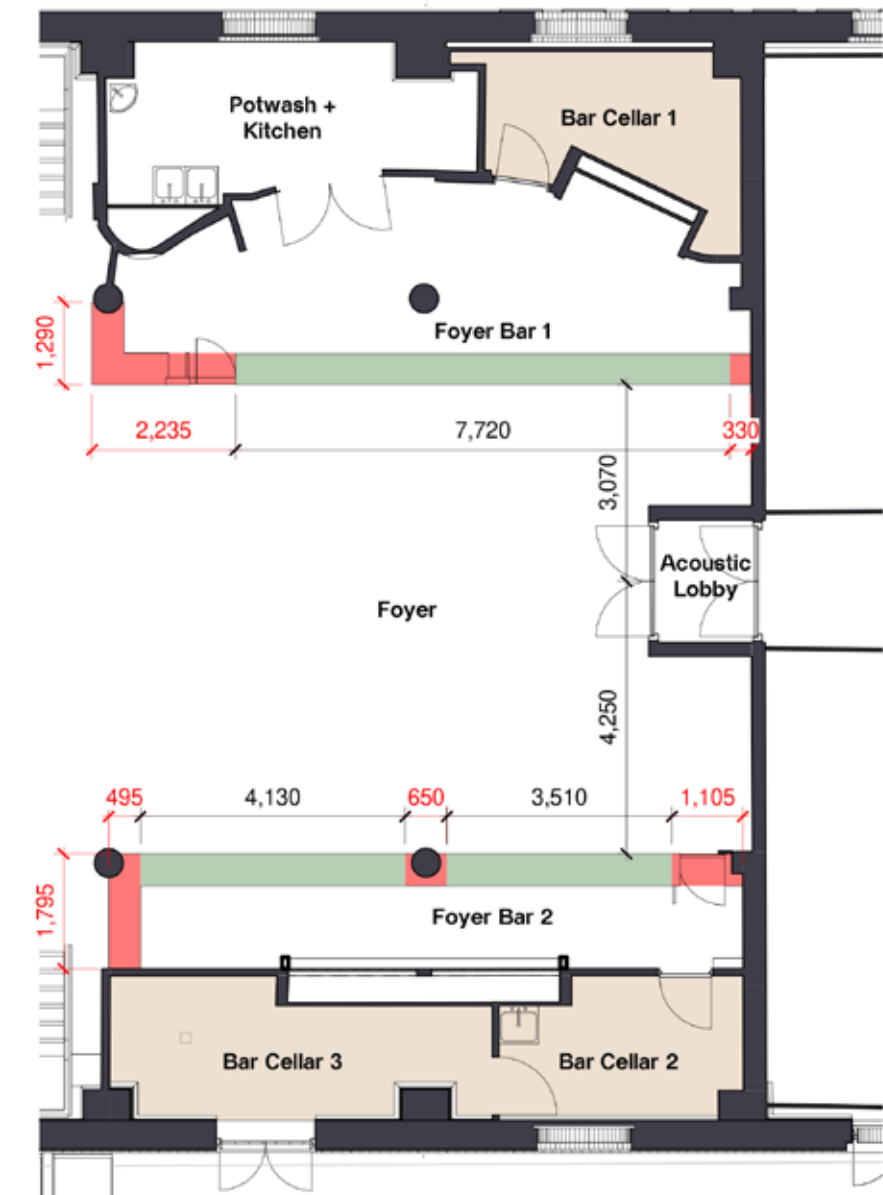
St John’s Bar

Bar length and cellar are slightly reduced, improving room capacity and resolving inefficiencies while retaining full functionality.

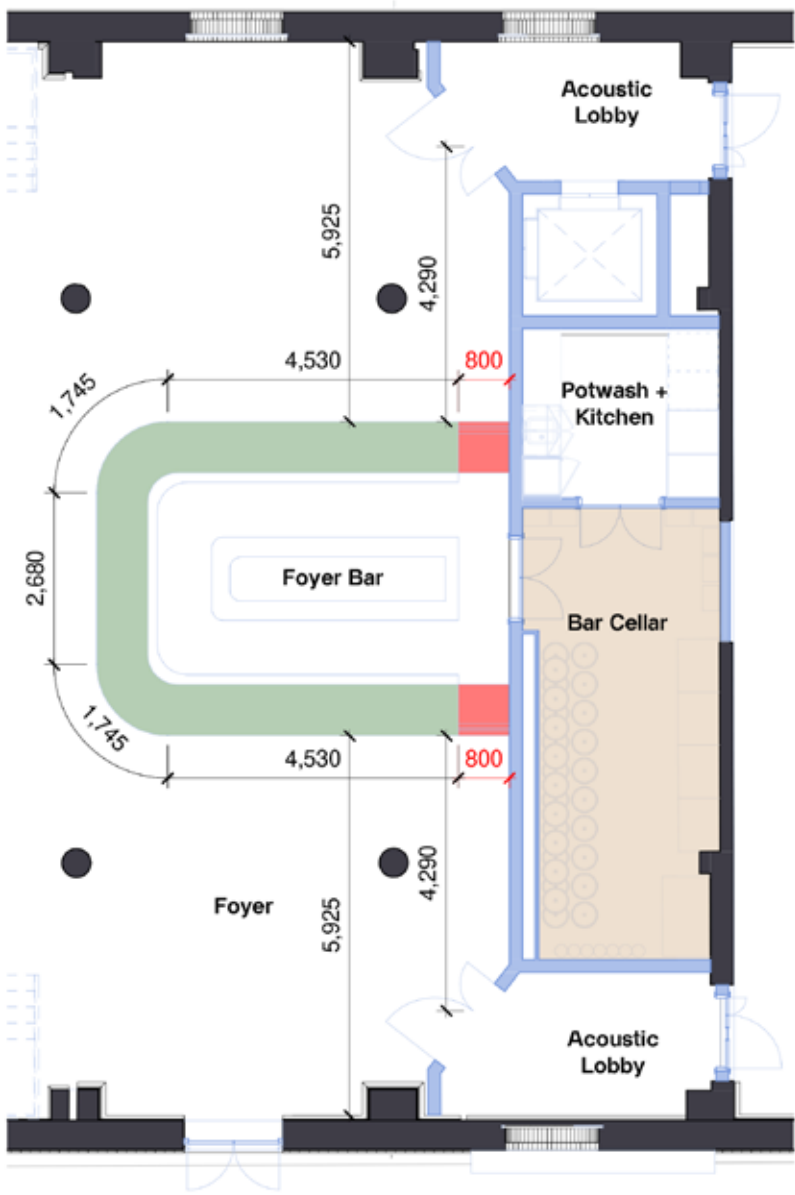
No. 3 Parsons Court

Two new bars (8.1m total) with basement cellar and keg hatch from Parsons Court. This activates the courtyard, supporting spill-out use and stronger links with the Corn Exchange.

Zone	Existing Areas			Proposed Areas			Difference	
	Total Bar Length (m)	Useable Bar Length (m)	Storage Area (m ²)	Total Bar Length (m)	Useable Bar Length (m)	Storage Area (m ²)	Useable Bar Length (m)	Storage Area (m ²)
Ground Floor Bar	23.26	15.36	30.43	16.83	15.23	26	-0.1	-4.4
Mezzanine Bar	0	0	0	5.52	5.32	13.89	5.3	13.9
St.Johns Bar	9	7.52	9.97	8.6	5.88	6.85	-1.6	-3.1
No.3 Parsons Court	n/a		21.1 (n/a)	10.13	8.14	10.8	8.1	10.8
Totals	32.26		40.4	41.08		46.74		
Total Difference							11.7	17.1



Existing Bar Length and Cellar. Red dimensions denotes unusable areas



Proposed Bar Length and Cellar

4.4 Auditorium and Foyer

Revitalised foyer



4.4 Parson's Court Summary

Given the relatively small foyer space within the Corn Exchange we have taken the opportunity to bring Parson's Court to life.

A space that is currently used to store refuse serving several businesses in the area can be transformed into an external social space, one that visitors to the Corn Exchange can spill out into.

The proposal relocates all waste storage elsewhere, creating the opportunity to transform Parson's Court into an active and inviting space.

A new ground-floor bar at No. 3 will spill out into the courtyard, complemented by a back bar fronting onto Parson's Court to encourage interaction with the Corn Exchange.

The space is envisioned as a lively "run-up" to performances, with potential for a food van, impromptu performances, and other temporary activations that enhance the pre-show experience

Landscaping

The existing surface within Parson's Court is proposed to be removed and replaced. The proposed primary material is Yorkstone, to tie in with the wider Public Realm proposals.

There are opportunities for small quantities of planting within the space, noting that these are limited by fire escape and servicing vehicle access.

For further details of the proposals for Parson's Court please refer to section 4.x Landscape.



4.5 3 Parson's Court Appearance

Parson's Court links the Corn Exchange through to 3 Parson's Court, currently occupied by Cambridge Live Tickets and offices for Corn Exchange staff.

Cambridge Live Tickets is currently accessed via Wheeler Street. The Box Office is currently open on Corn Exchange performance days only. From 6pm for evening performances, or 1 hour before the start time for matinees.

This under utilisation of space provides an opportunity to add to the evening and night time economy in this area.

Cambridge Live Tickets is flanked by Steak & Honour and Pho Vietnamese street food. Sticks 'n' Sushi and Giggling Squid are located on the opposite side of the road. Further food and beverage offers are located on Corn Exchange Street, Peas Hill and Bene't Street.

The Proposals

Our proposals include the following:

- Change of use from Cambridge Live Ticket office and office space (Useclass E(g)(offices)) to Sui Generis (drinking establishment)
- Replacement of shop front
- Alterations to internal arrangements
- Partially infill rear courtyard
- Fabric improvements
- New MEP systems
- Installation of photovoltaic panels to south facing roofs.



Orange lines indicate frontage occupied by food and beverage establishments



4.5 3 Parson's Court

Planned Use

With 3 Parson's Court in the scope of the project the council have asked the design team to explore opportunities for a food and beverage or commercial leases in any of the space provided by 3 Parson's Court.

Design Development

Several options for the use of 3 Parson's Court have been reviewed during RIBA Stages 2 & 3.

The ground floor has continuously been shown as a bar to provide additional access to refreshments for visitors to the Corn Exchange.

The use of the upper floors has been tested as commercial office space, additional space to provide food and increased bar area.

The proposed use for the upper floors has settled on a series of VIP rooms which will allow visitors to the Corn Exchange to have upgraded access and amenities beyond a standard concert ticket.

Ground Floor Bars

The primary access to the refurbished 3 Parson's Court will be via Wheeler Street, secondary access is available off Parson's Court linking the venue to the Corn Exchange and the external social space.

The new Wheeler Street frontage will tie in with the other food and beverage offerings that line the road.

Covered Seating Area

The existing external courtyard will be partially in filled with WC and then provided with a transparent covering. This will form a sheltered external space to complement the internal bars and larger Parson's Court social space.

Additional WCs

At ground floor seven additional WC's will be installed, including one wheelchair accessible facility. These WC's will serve both 3 Parson's Court and the Corn Exchange before, during and after shows.

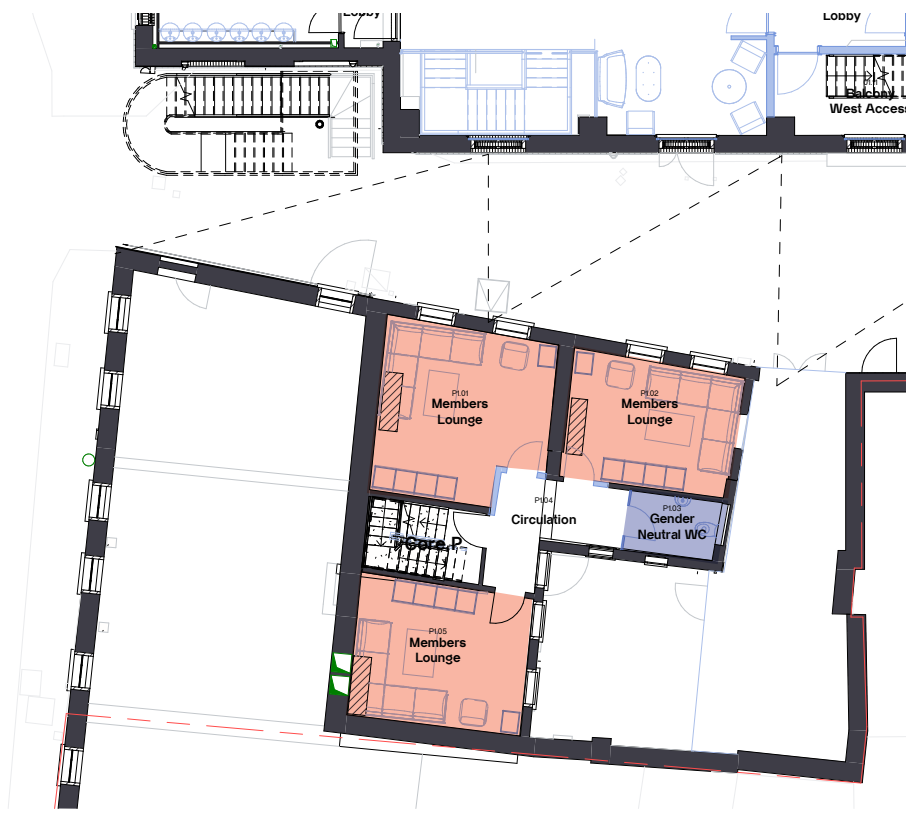
VIP Rooms

On the first and second floors six VIP/ members lounge spaces have been created. These spaces will allow visitors to have upgraded access and additional amenities.

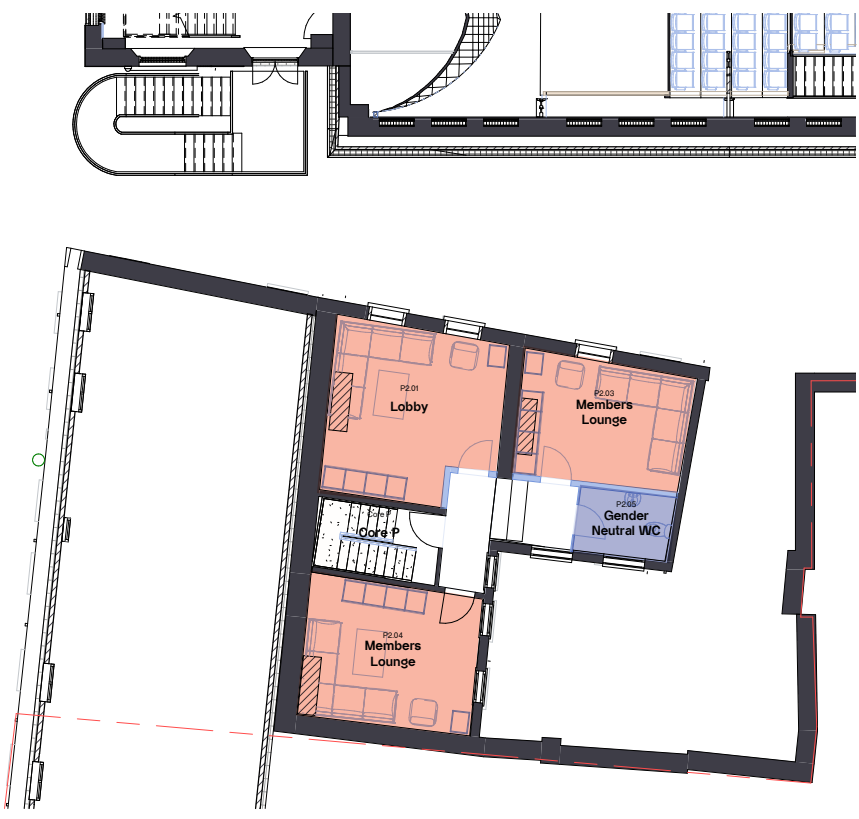
VIP packages vary by venue and details will be developed as part of the business plan. The spaces will be designed as comfortable lounge type spaces to allow VIP guests to enjoy a drink and something to eat in the confines of rooms that accommodate 6-8 people.



Ground Floor Plan



First Floor Plan



Second Floor Plan

4.6 Extension & Plant Enclosure

Summary

With the constraints of the existing building form and the higher heritage nature of the main auditorium, the original part of the Corn Exchange, it is proposed to extend and infill the southern portion of the latter addition.

The proposed new infill at rear of the scheme allows for reconfigured green room space, kitchen and dressing rooms for performers. Further space will be allocated to plant equipment.

The extension is proposed to be formed in a lightweight construction to modern standards. High levels of insulation and airtightness will be applied, reducing the energy consumption of this new element.

Rear Extension

The rear extension will provide accommodation for a kitchen, to provide refreshments for touring acts, dressing rooms, a green room and additional plant space.

Plant Enclosure

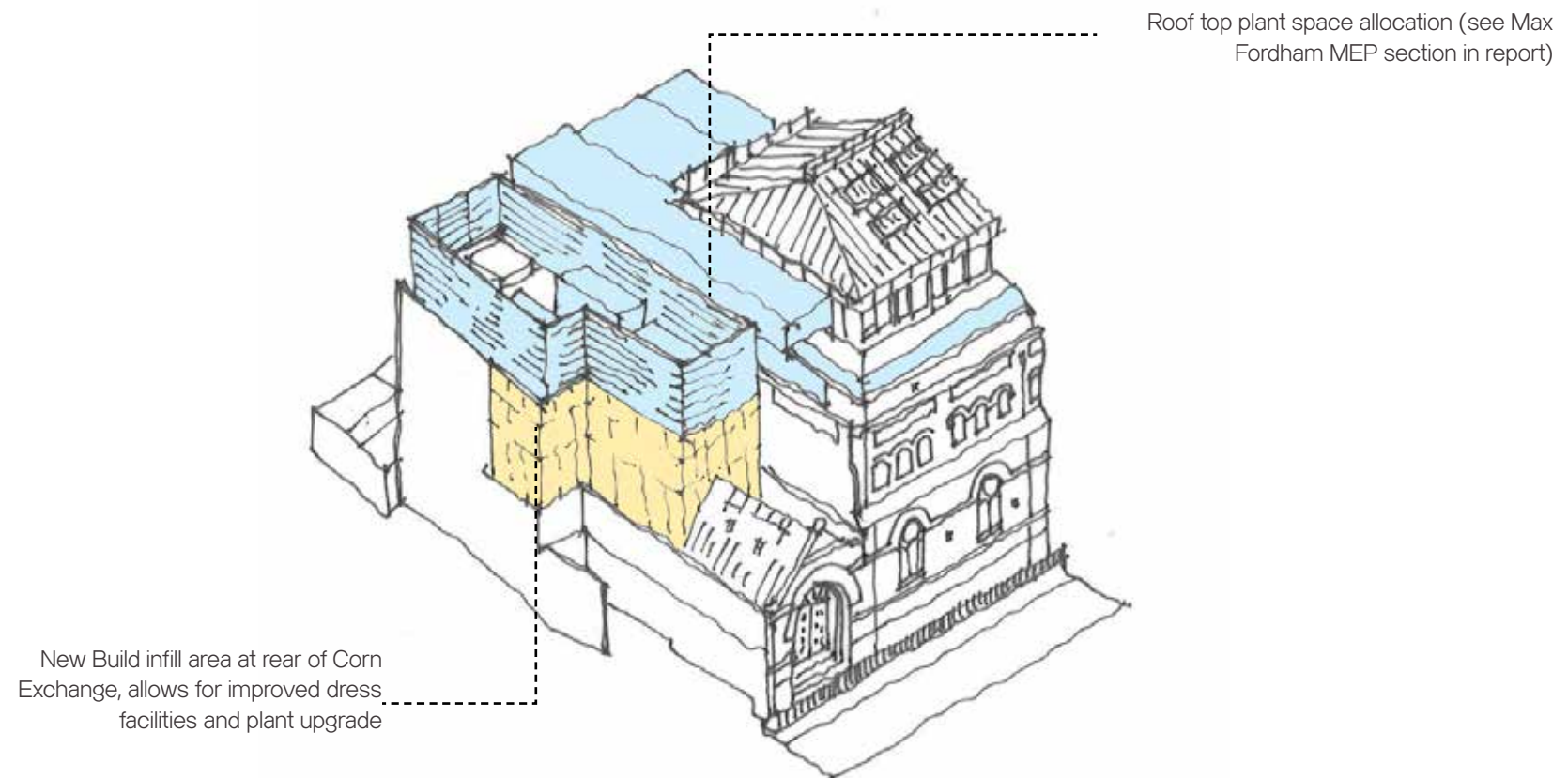
To accommodate the new equipment proposed to provide heating, cooling, hot water and general ventilation a larger amount of equipment is required than is currently housed in the Corn Exchange.

The move to an all electric solution requires the installation of Air Source Heat Pumps on the roof. This then requires visual and acoustic screening.

Extension Form

Through extensive dialogue with Greater Cambridge Shared Planning and Historic England our approach to the extension and plant enclosure has been to keep it as a recessive element. Keeping the form as crisp and simple as possible and then adding visual interest in the cladding.

On the right are a series of design studies looking at colour and pattern.



Extension design options

4.6 Extension & Plant Enclosure

Visual Appearance

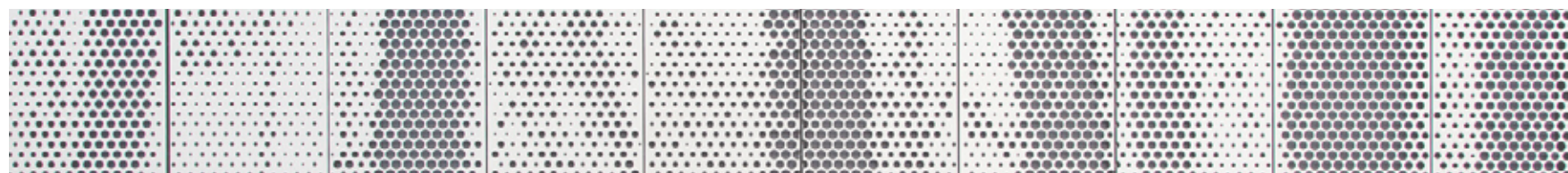
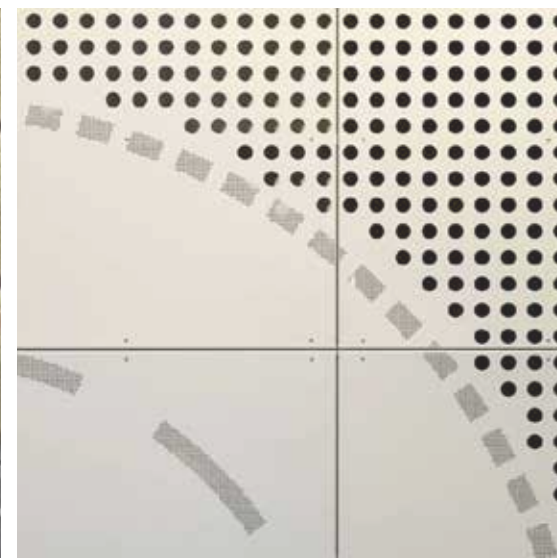
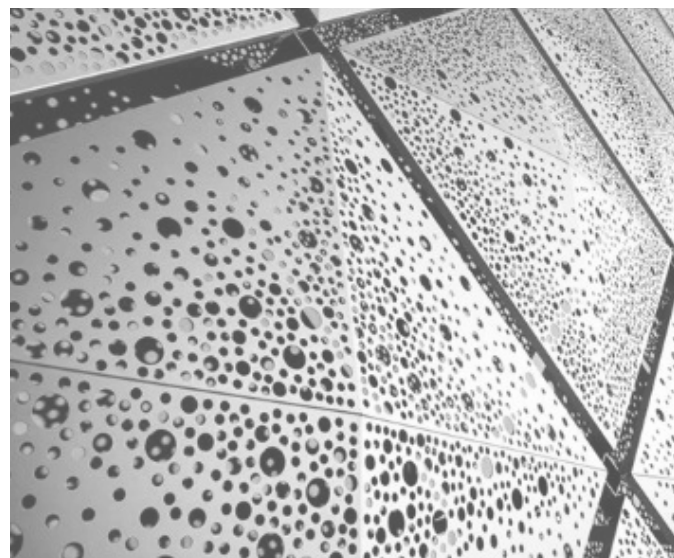
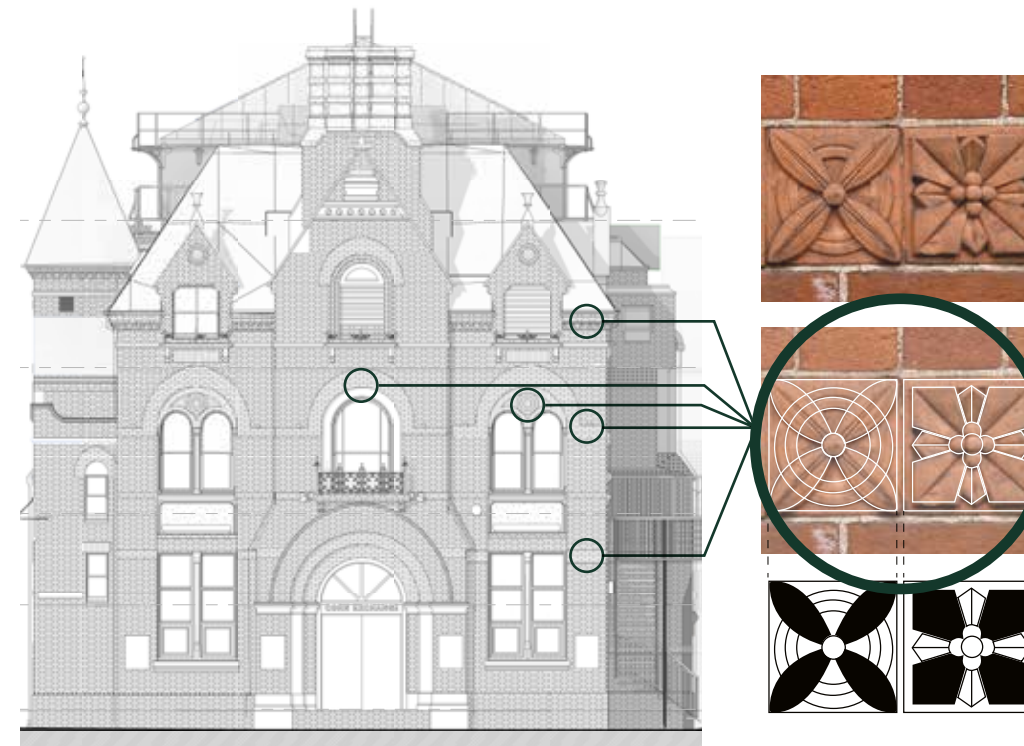
Venetian Gothic patterns of polychromatic brickwork, a defining feature of Richard Reynolds Rowe's 1875 design, have been studied across all elevations of the existing building.

Key motifs have been selected and reinterpreted in a contemporary form, preserving their rhythm and character while adapting them for modern construction.

These patterns are expressed in warm-toned metal, chosen to complement the surrounding brickwork, and are realised through perforations, embossing, and debossing to create depth and texture.

The treatment wraps the proposed infill extension as a unified, monolithic surface, while a clear material and expression break is maintained between the wall and the roof above.

This approach ensures that the new intervention reads as both a respectful response to the heritage context and a piece of contemporary architecture.



4.6 Extension & Plant Enclosure

Visual Appearance

CGI looking down Corn Exchange Street



4.6 Extension & Plant Enclosure

Visual Appearance



CGI from elevated walkway looking across Corn Exchange Street

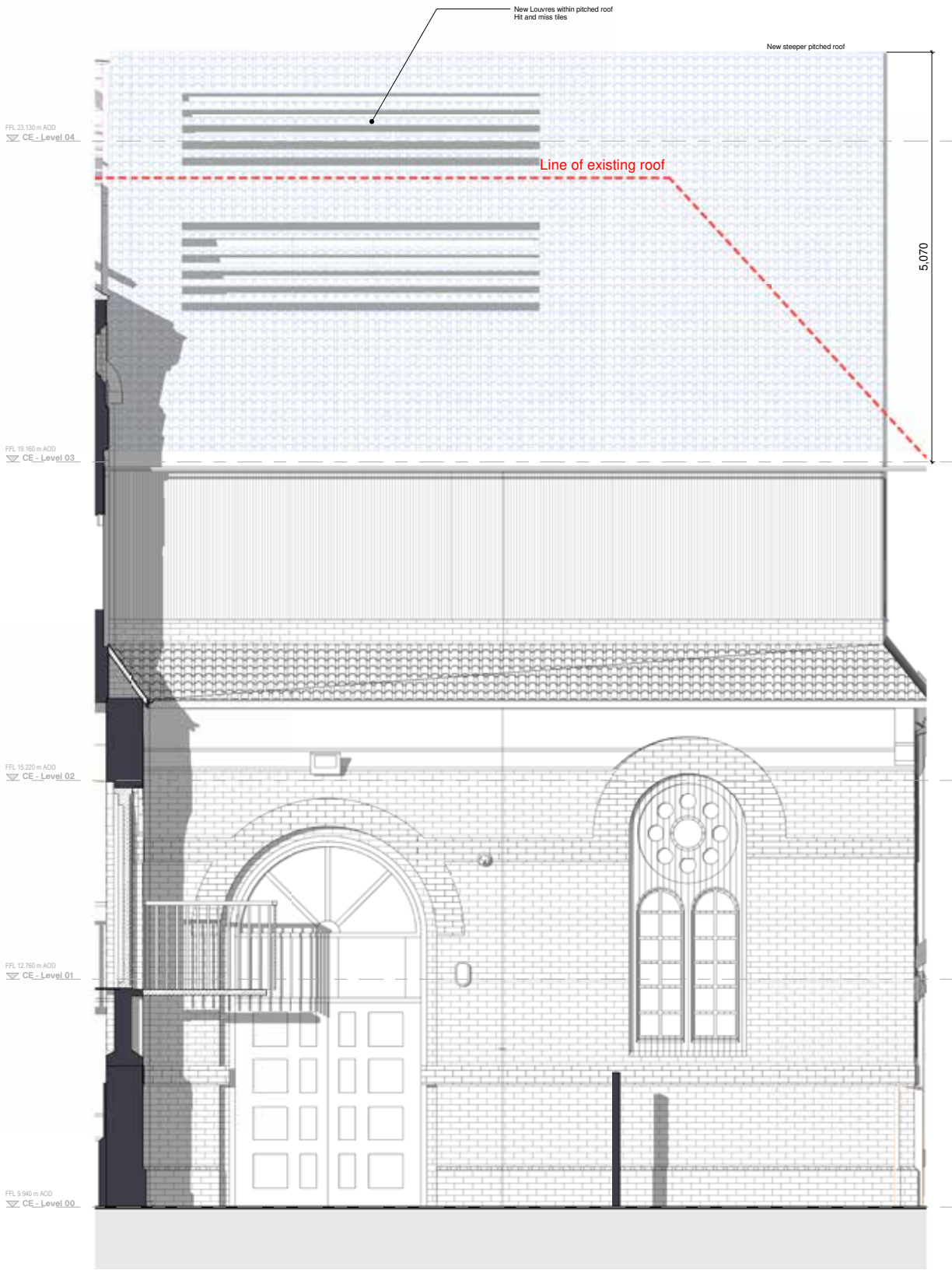
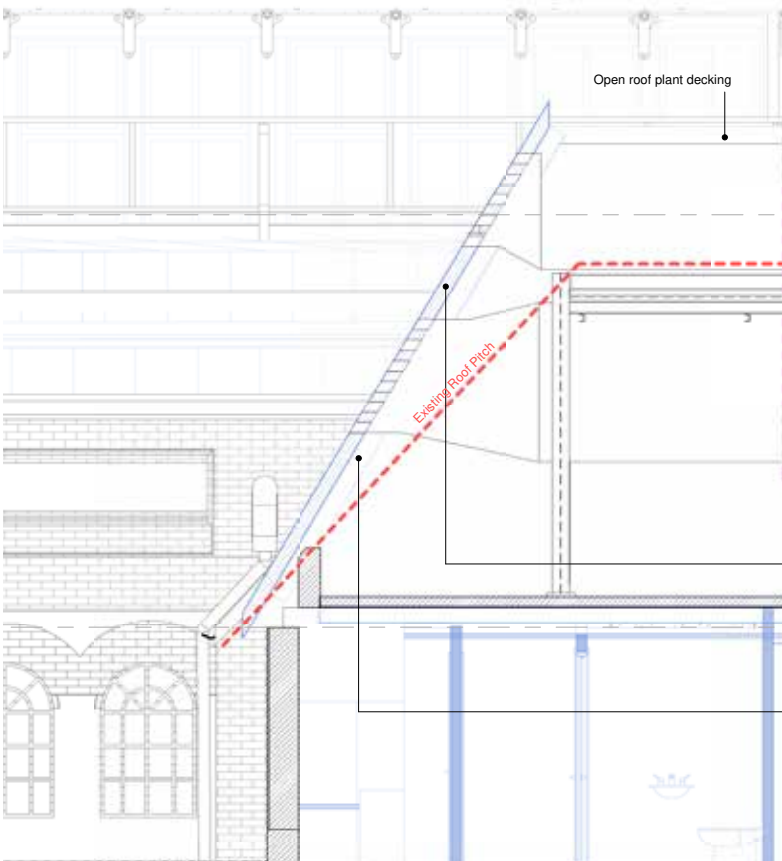
4.6 Extension & Plant Enclosure

Visual Appearance

To improve thermal comfort and air circulation within the auditorium, and working within the constraints of the listed building, new MEP plant equipment (including air handling units, air source heat pumps, and associated ducting) are proposed at roof level on the south-west end of the site, atop the more modern 1980s addition. This location ensures minimal visual impact from Corn Exchange Street.

The proposal removes the existing concrete plant roof at the end of the Parson’s Court block, allowing stacked air handling units to sit lower within an open-air enclosure. To further obscure plant above the existing roof ridge, the roof is extended and its pitch re-raked to a steeper angle, efficiently screening the equipment while maintaining key views from Wheeler Street.

This approach preserves the architectural language of the original building while accommodating functional requirements. A louvred element is introduced to the Parson’s Court elevation for necessary air intake integrated sensitively with the existing form and respecting the surrounding historic context.



Existing view along Parson's Court



Proposed update roof profile

4.6 Extension & Plant Enclosure

Visual Appearance



CGI looking down Parson's Court

4.7 Supporting Functions

Refuse and cycles

Refuse

To unlock Parson’s Court and improve the public realm experience around the Corn Exchange refuse is proposed to be dealt with in a new manner.

Waste containers located in Parson’s Court currently serve the Corn Exchange, Giggling Squid and Sticks ‘n’ Sushi.

Giggling Squid and Sticks ‘n’ Sushi, which occupy parts of the Guildhall building, waste containers will be located within the newly formed refuse store within the basement of the Guildhall. The store will be provided with a large lift to bring waste to street level.

For full details please refer to the Guildhall Design and Access Statement.

Waste generated by the Corn Exchange will be stored externally in a newly created storage area. To facilitate refuse collection the waste containers will be moved, temporarily, to the Wheeler Street end of Parson’s Court, facilitating collection by the waste teams.

Waste Storage Calculations	
BS5906:2005 - Entertainment Complex - 5 litres/m²	
Space	Area
Bars	526m²
Auditorium	876m²
Members/ VIP lounge	146m²
Back of house	352m²
Total areas	1,900m2

Waste Volume	9,500 litres
no. of 1100L eurobin	8.64
Required no. of bins	9
Twice Weekly Collection	5 bins

Cycles

Staff from the Corn Exchange will have access to the cycle storage and end of journey facilities located within the Guildhall ground floor and basement.

The number of staff working in the Corn Exchange varies but the following figures have been used for the purposes of fire evacuation, and are therefore considered worst case.

- Security Staff - 18
- Management - 2
- Stewards - 10
- Bar Staff - 18

A max. number of staff being 48 at any one time.

With the general timings of shows at the Corn Exchange being in the evenings peak staffing at the Corn Exchange will occur during periods of lower demand in the Guildhall.

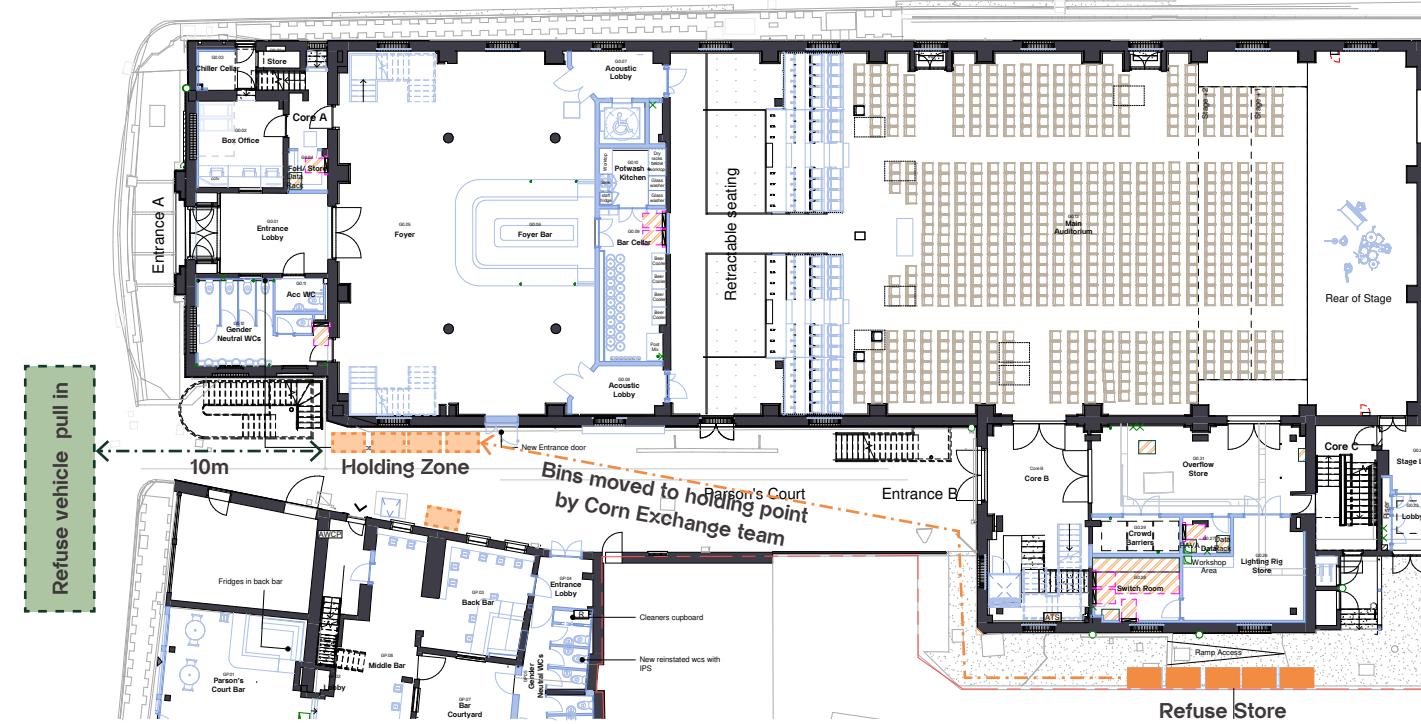
Cycles Storage Calculations

Based on 48 staff the required number of cycle spaces is 20 (2 spaces for every 5 members of staff).

Within the Guildhall we have a total of 161 spaces

- Double stackers - 102
- Sheffield stands - 59
- Accessible spaces - 5

Please refer to the Guildhall Design and Access Statement for full details of these facilities.



4.7 Supporting Functions

Fire and Evacuation

Existing Conditions

The Corn Exchange is currently subject to a prohibition notice issued by Cambridgeshire Fire and Rescue Service which limits the occupancy of the venue.

Current occupancy limits

Standing - 1586

Seating - 1365

Project Aims

A key aim of the project has been to look to increase the allowable occupancy of the Corn Exchange. Doing this would have numerous benefits, including attracting a wider range of performers and increasing revenue generation through ticket and bar sales.

Methodology

Due to the complex nature of escape from venues like the Corn Exchange a full evacuation model has been produced to allow a range of scenarios to be tested. This model allows the Fire Engineer, Arup, to assess the number of occupants that can safely be evacuated from the venue.

This exercise is separate to the actual venue capacity. Working with the Theatre specialist, Theatre Plan, and the Corn Exchange team we have developed layouts for the following scenarios:

1. Seated - 1332 persons
2. Standing* with Stage +2 extensions - 1628 persons
3. Standing* with Stage +1 extensions - 1780 persons
4. Standing* - no extensions - 1989 persons

**Standing events include some seated occupants, located on the balcony (484), mezzanine (42) and in the boxes (12).*

Allowable evacuation time

In the worst-case scenario, all occupants must be able to evacuate the Main Auditorium compartment within 3 minutes 47 seconds, this is based on a code compliant time in accordance with BS 9999 for a B2 risk profile with a category L1 fire detection and alarm system with voice alarm, as well as 5.5m high ceilings. Occupants of

the auditorium can either exit directly to the outside or move to a place of relative safety, such as the entrance lobby, bar areas, or protected stairwells, where queuing is acceptable until they ultimately exit the building.

Evacuation Modelling Summary

We have carried out evacuation modelling of the building to simulate worst-case scenarios under full occupancy. The simulations allow us to:

- Visualise the likely evacuation routes taken by occupants
- Identify potential congestion points
- Estimate the times required to evacuate different zones

The four scenarios outlined above have been modelled, full occupancy of other areas of the Corn Exchange have been allowed for, including staff, performers and additional patrons in the bars.

Geometry inputs

The models are based on Revit models and architectural drawings, including door and stair clear widths taken from site measurements and supplemented from measurements taken from the drawings where no site measurement was taken. The models focus on the following key areas:

- Main Auditorium (including stage and tiered seating)
- Main Bar (including mezzanine level)
- Johns bar
- Back of House areas
- The office and backstage area

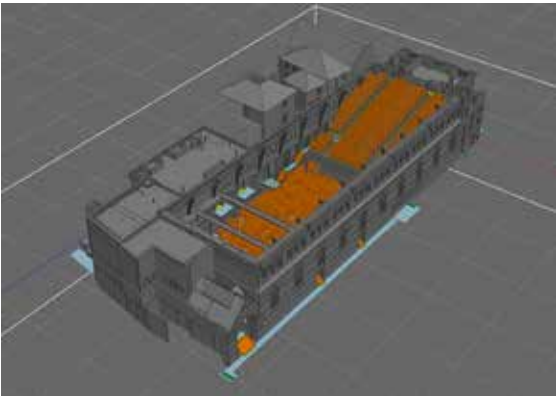
Fire Service

The design team have met with the Fire Service, on two occasions prior to the planning submission, to discuss the modelling approach, proposed occupancy and evacuation capacity.

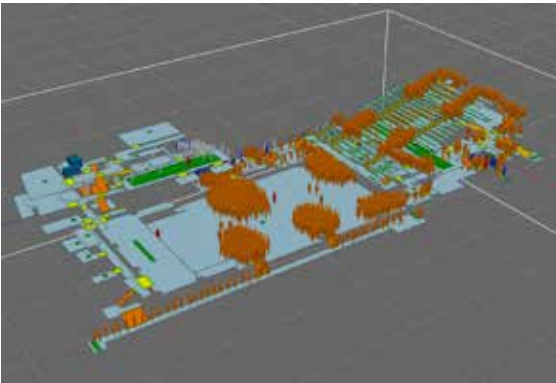
Standing

Modelling shows that a scenarios 2 & 3, (1628 & 1780 persons) can evacuate the main auditorium within the required time.

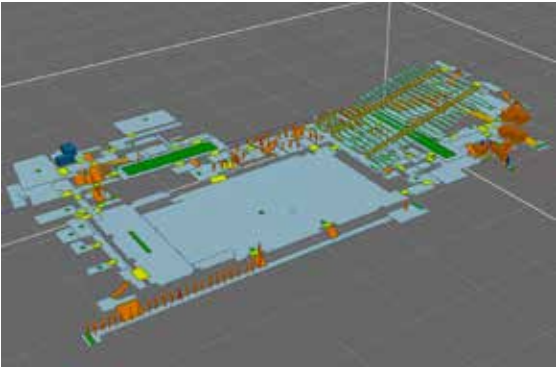
Scenario 4 did not meet the requirements.



Full standing model



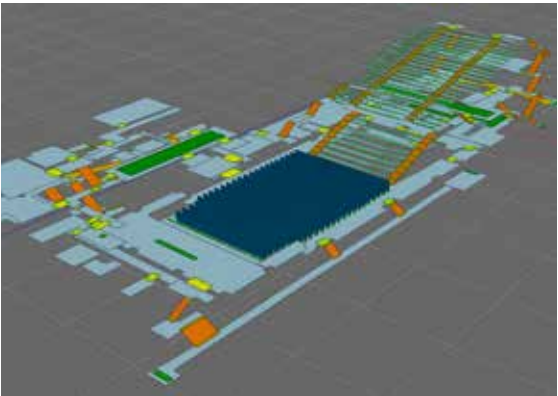
Standing scenario 1 minute into evacuation



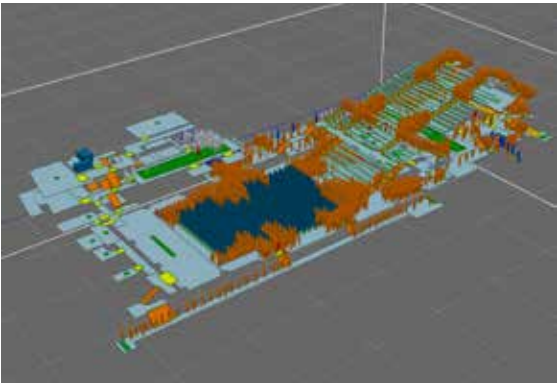
Standing scenario - auditorium fully evacuated

Seating

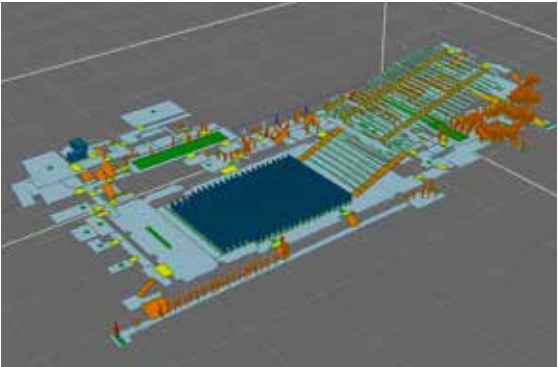
Modelling shows that a seated capacity of 1332 people can evacuate the main auditorium in around 3 minutes and 1 second. Well within the required time.



Seating model



Seating scenario 1 minute into evacuation



Seating scenario - auditorium fully evacuated

4.7 Supporting Functions

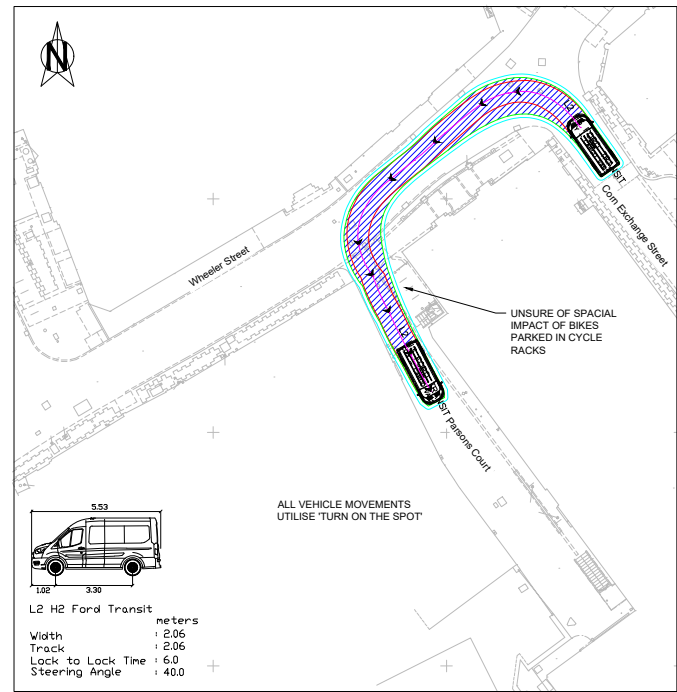
Servicing, deliveries & blue badge

Parson's Court Access

Parson's Court forms a key part of the servicing strategy for the Corn Exchange. The space can only be accessed via Wheeler Street, and due to the constricted nature of this access point the largest vehicle that can be accommodated is a Transit type van.

Tracking for such a vehicle is shown below.

With the proposed use of Parson's Court changing as previously described in this document, it will be key that servicing continues to occur outside of show timings.



VEHICLE TRACKING PARSONS COURT - FORWARD MANOEUVRE - L2 H2 FORD TRANSIT

General Vehicle Access

Access to the Corn Exchange will be controlled through the proposed introduction of two Traffic Regulatory Orders.

Please refer to the Market Square and Public Realm Design and Access Statement for further details.

Access for large vehicles

The designs allow large vehicles to access the Corn Exchange, Cambridge Arts Theatre and Guildhall in the same manner as present day.

The proposed designs for Peas Hill can accommodate up to three articulated vehicles and the space for tour buses will remain on Corn Exchange Street.

With a reduction in general traffic, which will be banned between the hours of 10am - 4pm, the vehicles required to service the cultural venues will have more space to manoeuvre and, with improved enforcement, less chance of being blocked parked vehicles.

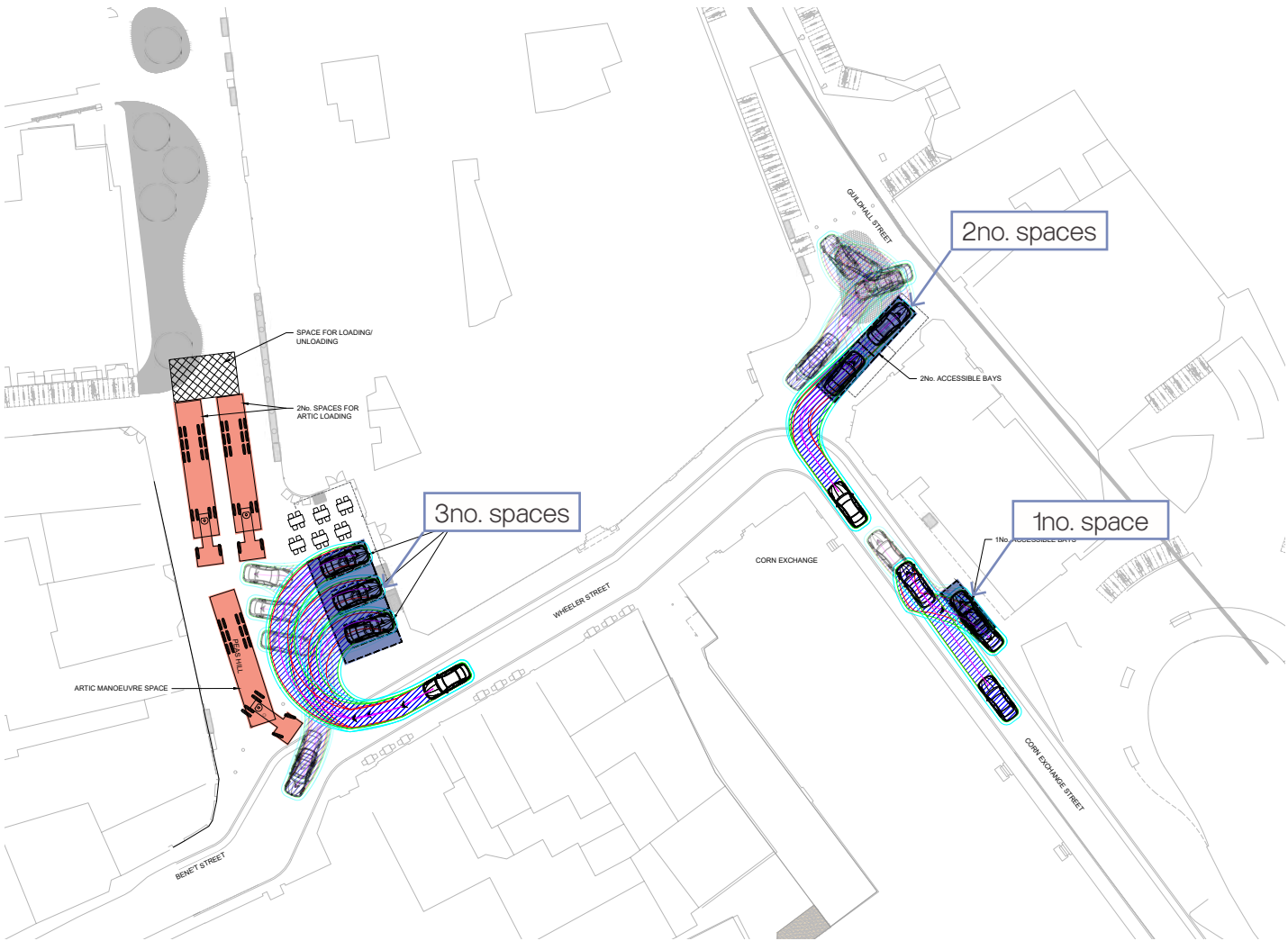
There will be a small piece of additional administration involved. As vehicles will be entering a TRO area the venues will need to do one of two things;

- if the same vehicle is regularly used then the vehicle registration can be 'white listed'
- should different vehicles be used, most likely scenario, then vehicle registrations will need to be logged and shared with County Highways team on a regular basis in order to avoid fines being levied.

Taxis

To improve accessibility to the Civic Quarter and the Cultural venues in this area of the City Centre it is important that access for taxis is maintained. It is therefore proposed that as part of the TRO's taxis will be able to apply for an exemption.

This will allow taxi's to continue to drop visitors off in this area.



Articulated Lorry Access and Blue Badge Parking



Existing Blue Badge Parking

Corn Exchange St, Wheeler St, Peas Hill and Guildhall St.

Five designated Blue-Badge bays for all Blue-Badge Holders (three on Peas Hill, two on Guildhall Street).

In addition to designated bays, all Blue-Badge holders can park within the area for up to three hours, including on single or double yellow lines where no loading restrictions are in place or loading access is not obstructed.

Proposed Blue Badge Parking

Quantum

Our proposals will increase the current provision to six by introducing an additional blue badge space on Corn Exchange Street, please see plan diagram above.

As these bays will be located within the TRO zone, Blue Badge holders will be required to register with the County Council, details of these arrangements will be developed with the TRO, separate to this planning application.

5.0

Heritage



5.1 Heritage

Heritage Significance and impact of Proposed Works

Summary of Heritage Significance

This summary has been produced by Turley, Heritage experts, advising the design team and Council on all heritage aspects of the interventions and proposals. Turley have a history of advising on historic building within Cambridge.

1.1

The Corn Exchange is a Grade II listed building designed by Richard Reynolds Rowe in 1875. Rowe had beaten a local architect, John Edlin, in an architectural competition judged by Alfred Waterhouse, though some, including Waterhouse himself, penned some concern at the decision.

1.2

The original use of the building, the association with Reynolds Rowe who was the Ely Diocesan architect and the records of the original architectural competition all add to the building's historic significance, though that is unaffected by the proposed development.

1.3

The building was converted to a public hall in the early 1980s and has undergone several interventions and alterations since.

1.4

Its architectural interest derives from its attractive Venetian Gothic design with good use of polychromatic brickwork to add character. The 3-bay façade to Wheeler Street is particularly attractive with a fine gabled centrepiece which gives a dignified entrance to the building. The side bays incorporate stone panels carved with agricultural scenes. The main door and first floor windows are all within Venetian arched heads of red and blue brick. The first floor windows are plate glass sashes with carved spandrel panels. At roof level are gablets, the west dormer now with louvres replacing the sash windows.

1.5

The side elevations which run the length of the hall are more repetitive but nicely handled with large arched windows with plate tracery, set below an upper arcade with smaller windows arranged in groups of three. The Corn Exchange Street elevation has a large single storey porch in similar design at its south end and the granite foundation stone at the north end.

1.6

The upper part of the main hall has a recessed attic storey and then a zinc clad roof, understood to have replaced earlier slates, as part of the 1980s conversion and alteration works, which included later safety gantries.

1.7

The Parson's Court elevation is similar, though some emergency / loading doors have been inserted below the sills. A half level external fire escape has been added and the south end window replaced by a modern timber door. At the south end is a return single storey range, of similar materials and features and again used for loading. This has a later / modern door. There is also a first floor extension added at the end of the C20.

1.8

The interior of the Corn Exchange has been significantly altered in its conversion to a concert hall. As a result, many of the fittings are from the 1980s. The main aspects contributing to the architectural significance are the impression and spatial qualities of the original space, together with the exposed ironwork work, glazed lantern roof over and the exposed fair-faced polychromatic brickwork of the walls.

1.9

The original elements of the building are considered to be of high architectural significance. The 1980s and later additions are of low / no significance, which includes the majority of the lobby / entrance space which comprises later, functional and plain fabric of new interest, used to suit the changing arrangements since the 1980s.

1.10

To the west side of Parson's Court, No.3 – which is part of the Corn Exchange proposals – comprises a separately designated Grade II listed building. This was built in the late Georgian period and was originally a house. It is plain but attractive building, arranged two bays wide and three storeys high. Other than because of its age, there is no known historic interest. Its architectural interest stems mostly from its simple, balanced proportions and sash windows, which reduce in height at second floor level. The most notable feature is the attractive Tuscan door-case and panelled door which occupies the right-hand ground floor bay.

1.11

Internally, the building has been re-purposed as office accommodation and few features of any architectural interest remain. Consequently, whilst the exterior is considered to be of high heritage significance, the interior is comparatively low, though it is possible that more interesting features hidden behind the later office fixtures and fittings.

Impact of Proposed Works on Heritage Significance

1.12

The main external changes proposed to the Corn Exchange comprise a first floor level extension at the south end (with louvred plant screen above), the replacement of the main roof covering and inclusion of PVs, together with the removal and replacement of the mansard roof to the later side extension within Parson's Court.

1.13

The proposed extension to the south end is designed with a carefully considered set back behind the roof pitch over the south porch which borders the Corn Exchange Street carriageway. This designed set back avoids any direct impact or loss of historic fabric or form to this important porch structure and helps to ensure that the later extension is minimally visible in ground level views for pedestrians and road users travelling along Corn Exchange Street. Views of this later extension and louvred plant screen above would be more visible from the raised walkway opposite leading into and out from the Grand Arcade car park, however, this would be experienced in context with the much taller, modern buildings adjacent, including the David Attenborough Building to the immediate south and taller principal range of the Corn Exchange to the north.

1.14

In this way, and in combination with the sympathetic choice and warm colour palette of materials, as well as the simpler but visually interesting detail, the proposed design approach will ensure that the overall aesthetic and arrangement of the extension and louvred plant screen will read subserviently to the architectural significance of the historic porch structure. Indeed, the porch is an attractive and prominent feature in the same architectural style of the rest of the Corn Exchange and this careful approach to the siting and detailed design of the proposed extension ensures that it would exist as a subservient and neutral back-drop which avoids competing with the porch architecturally. Thus, it is considered that the proposed extension could be

5.1 Heritage

Heritage Significance and impact of Proposed Works

successfully integrated with no adverse impact to the architectural or historic interest of the Corn Exchange as a designated heritage asset.

1.15

As noted earlier, whilst the principal roof structure is a very important component of the building's heritage significance, particularly in terms of its overall form, the existing roof zinc covering is understood to have been introduced as part of the 1980s conversion works – historically this roof was covered with slate. The replacement of this non-original roof covering with a more efficient and better insulated material and the addition of PVs will therefore have a very limited impact on the building's heritage significance, but a significant impact on its thermal performance and sustainability credentials. It should be noted that the proposed PVs have been carefully arranged/position to form a consistent pattern, to avoid visually distracting pattern or ad-hoc aesthetic on the roof structure. These are also proposed to be fixed to raised brackets attached to standing seams of the new roof covering, which will ensure the PVs could be easily removed and/or changed if/when required in the future to accommodate improvements in PV technology.

1.16

To the side extension within Parson's Court, it is proposed to carefully remove the existing slate covering to the north and west roof pitches and demolish the existing roof structure. This will facilitate the creation of an enlarged plant area to this less sensitive part of the building. To the Parson's Court side, the existing northern roof pitch will be rebuilt in a similar manner, but with an increased/steeper pitch to screen the double stacked plant area in views along Parson's Court. This new roof pitch will include discreet louvres for air intake, but otherwise will be finished in the previously removed slates to maintain a similar overall visual appearance, character and aesthetic of this part of the building. This aspect of the proposals is considered to have a very limited impact on the building's heritage significance, with the potential impact further minimised by the retention and re-use of existing slates.

1.17

The main internal changes to the Corn Exchange relate to the rationalisation and upgrading of the existing entrance foyer/lobby and bars area. These works largely relate to later fabric introduced as part of the 1980s conversion works (and since), with these areas presently plain and devoid of any character. The opening up of the two side bar areas, through the removal of the later partitions and storage areas, in combination with a replacement mezzanine deck and centralised bar, will create a more visually interesting and enhanced arrival space. Indeed, the opening up of the bars will once again reveal more of the internal fair-faced polychromatic brickwork, which is such a characteristic aesthetic of the building. This is a considerable benefit for understanding and better appreciating the architectural quality and historic fabric of the building, where this brickwork is largely covered at present with the foyer and circulation spaces, with this fabric often less readily appreciated due to lower light levels in the auditorium at events.

1.18

Proposals for new secondary glazing will be sympathetic to existing windows (and fabric) and for the most part will replace existing poor quality secondary glazing. This new glazing has been designed to have as minimal physical impact as possible and to ensure that the secondary glazing could be removed in the future with no lasting or adverse impact to existing historic fabric. All existing historic windows will be retained unaffected by the proposed works.

1.19

Other internal works generally include the betterment of the auditorium seating and arrangement; improvement to back of house facilities (as part of the proposed extension) and stage access; general upgrades to services, WC provision, MEP, acoustics and thermal comfort, together with over access improvements for all users, including a new second entrance providing level access from Parson's Court.

1.20

It is also proposed to create a new members lounge / bar area in No.3 Parson's Court. This former house has been re-purposed in the C20 as offices and little of internal character survives. The external form is retained unaltered, thus this change of use and modest upgrade of internal fabric to suit the proposed use would be achieved with little impact on heritage significance. Indeed, it is also possible that the removal of later C20 office fixtures/fittings may reveal hidden aspects of historic fabric and/or the building's original form, which could be incorporated into the resulting layout/use.

1.21

These works would sit in tandem with the 'stopping up' of Parson's Court which would help transform the unsightly and negative service area-character of the lane, which is highly visible from Wheeler Street. Thus, making this area more attractive, in and of itself, in combination with activating this area for users/visitors to the Corn Exchange would benefit the setting of both the Corn Exchange and No.3 Parson's Court. Indeed, the dwell time in these spaces would allow for a greater visual appreciation of the architectural quality and character of these buildings over what currently exists, with users/visitors passing by on entering or existing after an event.

1.22

Overall, it is considered that the proposed works to the Corn Exchange and No. 3 Parson's Court are sympathetic, carefully considered and will maintain (preserve) the architectural and historic interest of the building as a designated heritage asset. The proposals are led by the desire to improve the day-to-day operation of the building, in a manner which is appropriate to its conservation as a designated heritage asset and will ensure its continued active and long-term sustainable use as an event space into the future.

6.0

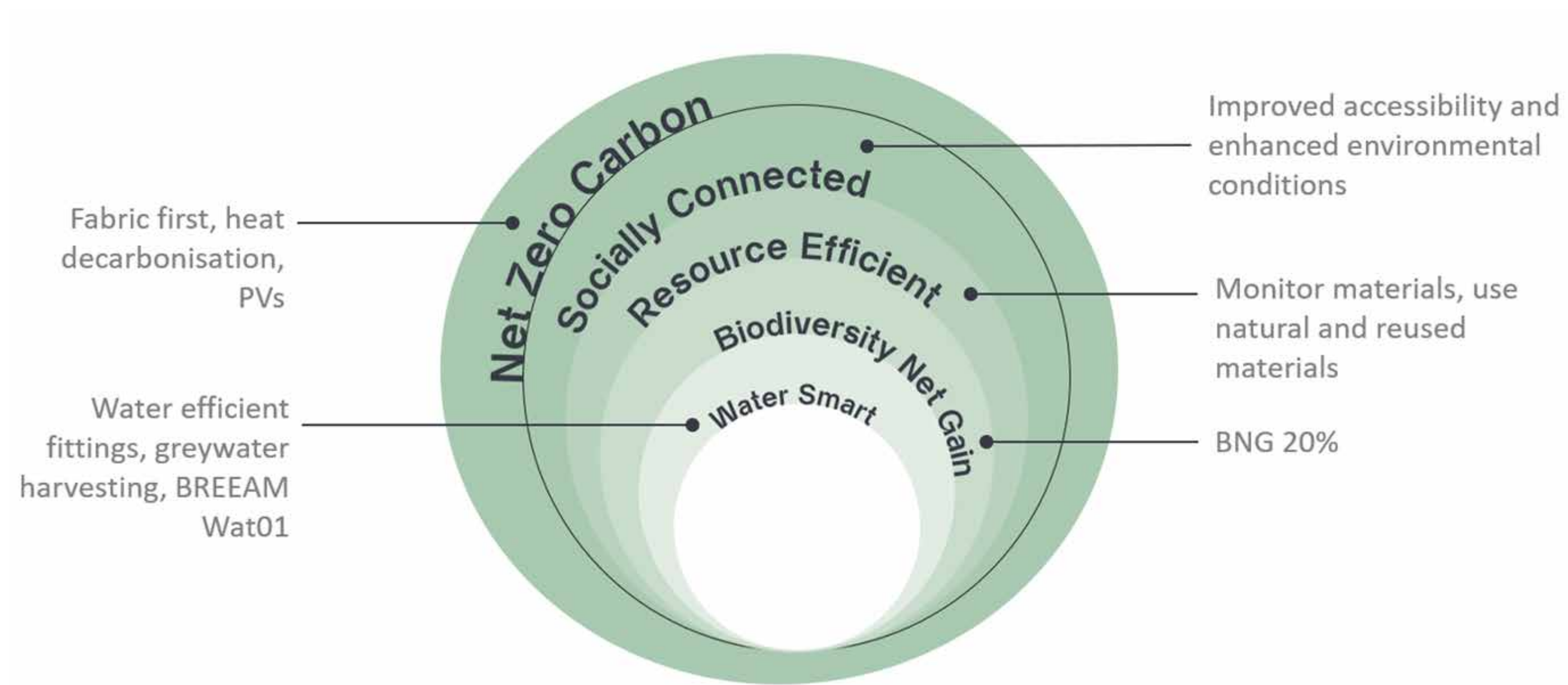
Sustainability



6.1 Sustainability

The Vision

This document provides a design update as of 8th August 2025 to support the draft DAS that is being prepared by Cartwright Pickard Architects. The design is ongoing and subject to further development for the remainder of Stage 3/the time of Planning submission.



6.1 Sustainability

Response to Sustainability Planning Policies

Energy

In response to:

Cambridge Local Plan 2018:

- Policy 29: Renewable and low carbon energy generation,

Greater Cambridge Sustainable Design and Construction Supplementary Planning Document 2020:

- 4.5 Smart technologies

TM54 Modelling

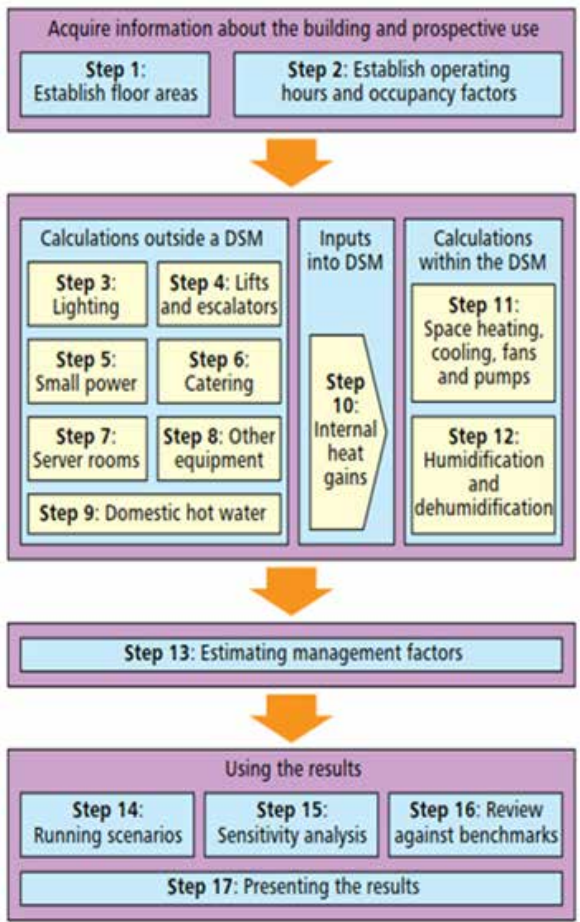
The scope of this study is to provide an estimate of the likely operational energy use for the proposed refurbishment of the Corn Exchange Theatre as part of the Cambridge Civic Quarter development, and to assess the expected performance against industry benchmarks. CIBSE Technical Memorandum 54 (TM54) describes a methodology for estimating a building’s operational performance and has been used to make the operational energy estimate. The results of this study can be used to inform energy-saving strategies, agreed between the client, design team and contractor for the refurbishment and operation of the building .

This interim estimate is being provided midway through stage 3 to feed into the Design and Access Statement. This is relatively early in the design process, and consequently, many of the inputs required are yet to be determined or finalised. This should be considered a preliminary estimate, and the uncertainties will be quite significant. As the design proceeds and more detail defined, the calculation and estimate can be updated, and the uncertainty will reduce.

Methodology

The methodology described in CIBSE TM54 has been used to estimate the operational energy consumption of the Corn Exchange building. This involves engagement with the client and users of the buildings through operational energy workshops and questionnaires, with the information gleaned used to inform steady-state spreadsheet calculations and a CIBSE AM11 compliant dynamic simulation model . Two workshops have been held so far, one focusing on the general usage patterns and occupancy in the building and the other looking more specifically at the specialist theatre equipment. Using these tools, the estimate of overall operational energy consumption, along with analysis of potential variance, is produced.

The process described in CIBSE TM54 is illustrated below:



Step 1, Establish floor areas

The areas used in the calculation have been determined from the draft issue architectural information .

Step 2, Establish operating hours and occupancy factors

Operating hours, no. of occupants, and usage patterns of the building have been formed based on feedback from the operational energy questionnaire and during the workshops.

Step 3, Lighting

A detailed lighting design has not been developed at this stage. The lighting estimate has been determined based on target lux levels and luminaire efficacy for each space type, with assumptions also made regarding the lighting control strategy .

Step 4, Lifts and escalators

Analysis of the lift energy consumption was made using the simplified estimation method from CIBSE Guide D. No information is currently available for the lift. Motor power based on previous similar schemes.

Step 5, Small power

Standard energy consumption data taken from CIBSE Guide A has been used for the small power estimate. Equipment type and quantity based on feedback from the workshops and questionnaire.

Step 6, Catering

The catering estimate based on kWh per meal figures as given in CIBSE TM50. Number of meals served to the performers per show estimated based on feedback from the workshops and questionnaire.

Step 7, Server rooms

The size of the server racks is an unknown at this point and so power figures have been based on previous similar schemes.

Step 8, Other equipment

Initial feedback from the theatre consultant has been used to inform the power consumption estimate of the theatre equipment, coupled with experience of similar schemes.

Step 9, Domestic hot water

The DHW energy was calculated from first principles based on an estimated no. of hand washes and shower uses per year.

Step 10, Internal heat gains

Internal heat gain contributions from people, equipment and lighting have been included in the IES VE model that will generate figures for space heating and cooling.

Step 11, Space heating, cooling, fans and pumps

The estimate of energy use for space heating, cooling and auxiliary energy was undertaken by using a dynamic simulation model in IES VE 2024.1.0.0 software. Systems are based on proposed equipment and arrangements in the MEP design; with manufacturer’s data used for the technical parameters. Norwich TRY weather file has been used in the dynamic simulation. For further details on the HVAC strategy please refer to the MEP design information.

Renewable Energy Generation

The proposed PV array has been modelled within the dynamic simulation as per the MEP design and manufacturer’s data and the energy generated is included in the energy consumption breakdown.

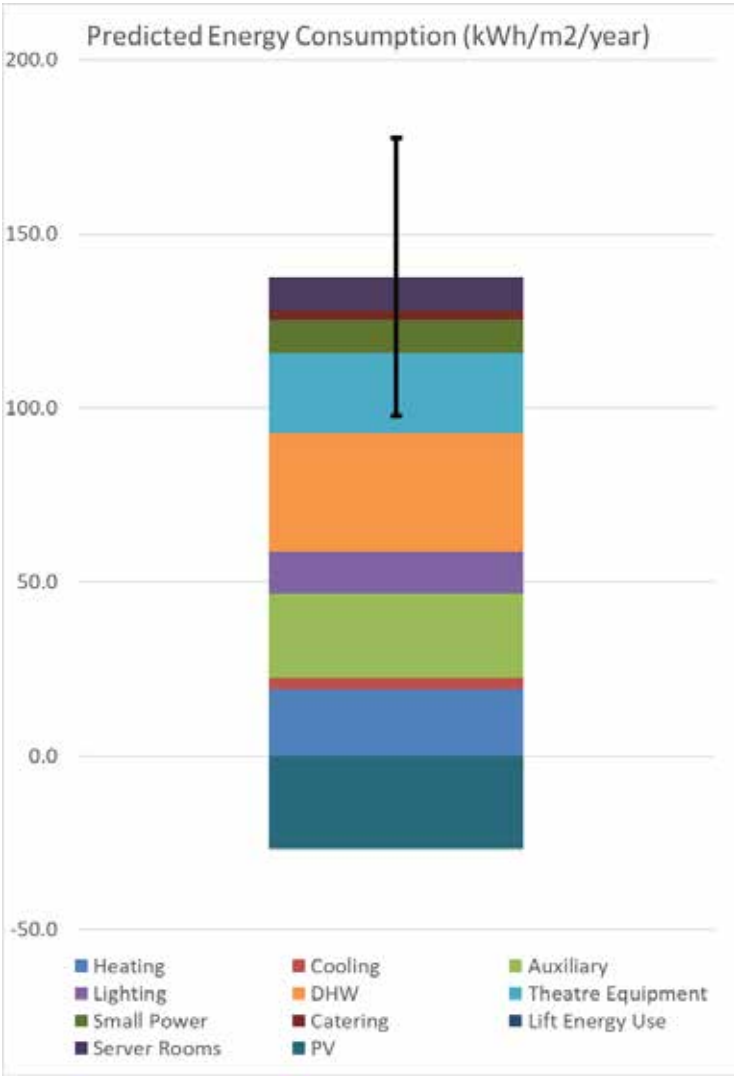
Results

The table below presents the predicted energy consumption. The same results are presented graphically .

6.1 Sustainability

Response to Sustainability Planning Policies

Energy End Use	Estimate Energy Consumption/kWh/m ² (GIA)
Heating	19.1
Cooling	3.1
Auxillary	24.5
Lighting	11.8
DHW	34.1
Theatre Equipment	23.0
Small Power	9.8
Catering	2.9
Lift Energy Use	0.2
Server Rooms	9.1
PVs (-)	-26.9
Total Energy	137.6



As can be seen, the major energy consumers stand out as heating, auxiliary energy associated with fans and pumps, domestic hot water consumption and the theatre equipment. The error bars represent the uncertainty in the calculation at this stage, with the eventual value likely to fall somewhere within this range.

Conclusions & Next Steps

This DRAFT Stage 3 TM54 estimate incorporates the latest design information available, and there is a good degree of confidence in many of the calculation inputs. It is expected that further information will become available to refine this current estimate. The following are the main areas where it is known that further development is required:

- The lift energy is currently based on a simple calculation method. Once a preferred specialist contractor has been selected it is expected they will be able to feed into a more accurate assessment of the likely lift energy consumption.
- The final selection of some plant equipment remains, and it may be possible to refine the operational hours of all plant through study of the DSM. The design progress should be monitored, and any further detail available input into the next TM54 iteration .
- More detailed, component based HVAC simulation of the auditorium system will be undertaken during the next iteration of modelling to refine and optimise the MEP controls.
- The extent and usage patterns of the auditorium equipment has not yet been fully developed at this stage and so the energy estimate for this equipment is an uncertainty. As the design develops, and more information is made available this energy estimate should be updated so a more accurate assessment can be made.
- Once more information regarding the size of the server racks in the IT/Server rooms has been established the estimate for this energy consumption will be updated.
- Once a catering consultant has been appointed more detailed information will be fed into the catering consumption estimate.
- General design development should be monitored, and where changes occur that may affect the operational energy prediction, these should be incorporated into the calculations.
- The extent of the upgrades to the building fabric is still being worked through. As more detailed design information becomes available, the model will be updated to reflect this.
- Scenario modelling will be undertaken to establish an estimated range of energy performance.
- Sensitivity testing will be carried out to assess the impact of extreme and future weather on energy performance

Fabric Upgrades

A series of fabric upgrades have been proposed across the Corn Exchange to increase the buildings energy efficiency through improved heat loss and air tightness. A summary of the proposals are listed below, please see the full mark-ups for detailed fabric upgrade information.

Windows:

- Auditorium windows to have new secondary glazing
- Historic office to have new secondary glazing
- Back of house windows to have a mix of new secondary glazing or replacement new windows

Doors:

- Doors in the entrance lobby, foyer and main auditorium to be replaced to replicate the existing doors
- Doors in the back of house and bar areas to be repaired or replaced

Floor:

- Main auditorium to be insulated with UFH (U-value of 0.51 W/m2.K)
- Main auditorium removable stage to have u-value of 0.60 W/m2.K
- Foyer to be insulated no UFH, u-value of 0.39 W/m2.K
- Back of house piano store to have insulation to the void below the raised deck, u-value of 0.16 W/m2.K
- Back of house dressing rooms to have insulation laid on top of the slab, u-value of 0.16 W/m2.K
- Basement floor slab to be insulated, u-value of 0.33 W/m2.K

Main auditorium roof – Pitched roof

The following suggestions aim to reduce mass while achieve a high level of thermal performance.

- Suggest U-value to 0.15 W/m2.K for this part of the roof while improving clerestory glazing.
- U-value of 0.15 W/m2.K will require 240mm of insulation at 0.032W/m.K fitted b/w I-joists.

Main auditorium roof – plenum

- The whole plenum will be within the thermal envelope.
- U value of 0.18 W/m2. K can be achieved with 150mm of PIR (0.022W/m.K) fitted between timber structure (assumed fraction 12.5%) and 50% of acoustic insulation between battens

6.1 Sustainability

Response to Sustainability Planning Policies

Renewable Energy/Energy Reduction Strategies

As part of the energy strategy, the integration of photovoltaic (PVs) as a source of renewable energy has been investigated for the Corn Exchange. It has been proposed that both sides of the main hall roof are utilised for PVs in order to maximise energy generation.

The east side of the main roof is a protected historic view from Corn Exchange Street and should therefore contain one single array of PVs as to disturb the view as little as possible.

A strategy to utilise part of the existing array from the Cambridge Guildhall has been investigated with the original installer and it would be possible to repurpose the array on the west side of the Main Roof or Parson's court. This will be developed further as part of the detailed design and the maximum amount of PV area transferred as part of the refurbishment.

The heating and cooling demand of the building will be met utilising high efficiency Air Source heat Pumps (ASHPs). These units will make use of the PV array to offset the energy required from the grid.

As the heating and cooling to the auditorium space would typically be provided through the ventilation systems a strategy to provide underfloor heating to this space as part of the refurbishment has been developed such that during periods of low occupancy for, rehearsals, show set up and for background heating out of hours the air handling equipment does not have to run.

The ventilation systems will all be provided with heat recovery modules to allow both heating and cooling depending on the demand at the time, to be recovered and keep overall energy demand as low as possible. The units will feature integral bypass to allow free cooling to be utilised whenever possible.

Due to the nature of the use of the Corn Exchange its energy demands will have large peaks during shows/events and much lower background demands placed on the services when outside of showtimes. Due to the limited nature of the available plant space and a desire to keep the ASHP's running in cooling only mode when active, to maximise their efficiency (as the predominant load). The domestic hot water strategy is utilising high efficiency point of use electric water heaters and semi storage units local to the sanitary facilities and the green rooms which greatly reduces the standing loss associated with long recirculation loops which would otherwise be the case for this building

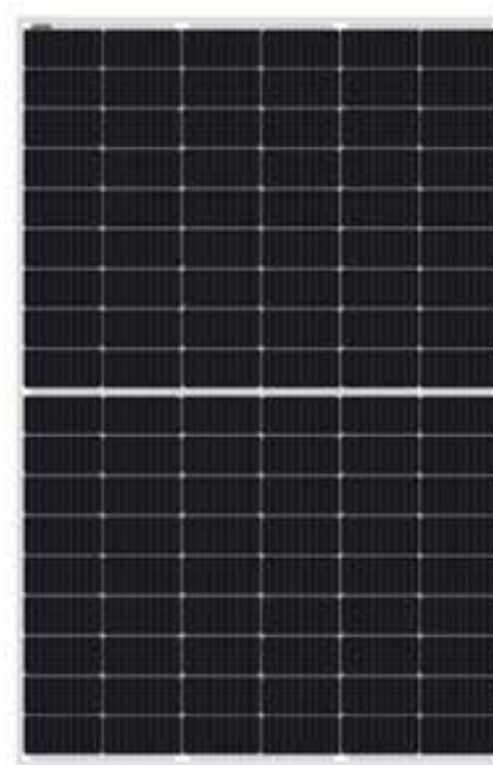
The existing lighting installations will be replaced throughout, and high efficiency LED fittings will be utilised for both house and performance lighting (save for any very specific effect lighting). Any non- managed spaces will be provided with absence detection to allow users to interface

with the lighting in the conventional way but should a room be unoccupied for a defined period of time then the lighting will switch off automatically. Preventing lights being left on for extended periods in the back of house areas.

Photovoltaic Installations

The current proposal is a system comprising off 206 panels providing 486m² array area to the East and west pitches of the upper roof.

The panels proposed are Solar watt H2.0 Pure 35mm panels with black appearance. As the following image.



Energy Use

To establish existing energy used by the Corn Exchange, data from the published Display Energy Certificate (DEC) has been used as a baseline, converting the gas and electricity consumption to an equivalent carbon emission using the 2025 UK Government GHG (Green House Gas) Conversion Factors. The same process has been carried out on our TM54 operational energy estimate to arrive at the predicted carbon reduction.

The refurbishment of the Corn Exchange is predicted to bring about a carbon saving of **61-79%** over the current annual carbon emissions of the building.

This variance in potential savings is due to sourcing the baseline annual energy use figures for gas and electricity from the published DEC while further analysis is carried out on the current operational energy consumption data, part of which is still being collected. Furthermore, there are still many aspects of the design and operation that are unknown at this stage which will affect the performance of the building in-use and thus the variance in predicted energy use. As we receive actual in-use energy data and the design of the building is further refined, this variance and uncertainty will reduce.

What is TM54?

CIBSE Technical Memorandum 54 describes a methodology for estimating a building's operational energy performance accounting for all energy end uses. A detailed model of the building is produced, including building fabric, HVAC services, controls and internal gains (occupants, lighting and equipment) as well as the building's operating hours. Information on the proposed fabric and mechanical and electrical systems are gathered from the architectural and MEP design information. Inputs relating to the use and operation of the building, occupancy figures, and equipment are established through feedback from representatives of the building and the wider design team.

Once the model has been populated with the relevant inputs a dynamic simulation is used to predict the operational energy usage of the building under expected conditions, hour by hour over a year. Sensitivity analysis and scenario testing is then carried out to help understand which energy performance measures have the greatest impact on energy use and to assess the resilience of the energy performance against plausible changes in the way the building is used and occupied. The results from the modelling can be used to inform energy end use targets which can be compared to operational energy data to identify opportunities to tune and optimise the building in use.

6.1 Sustainability

Response to Sustainability Planning Policies

Embodied Carbon

In response to:

Cambridge Local Plan 2018:

- Policy 28: Carbon reduction, community energy networks, sustainable design and construction, and water use

Greater Cambridge Sustainable Design and Construction Supplementary Planning Document 2020

- 4.6 Responsible sourcing of building materials and embodied carbon

Optioneering studies

As part of the materials scope, two embodied carbon optioneering studies will be carried out. It was deemed that it would be most beneficial to focus on the MEP strategies within the proposal as there is limited architectural and structural work being undertaken within the scheme. It has been identified that these studies should focus on the choice of ASHP, and the domestic hot water strategy.

The ASHP study will consider different manufacturer data to understand if the whole life carbon impact of the system would be greater if multiple units were installed, with the option of not running all at one time, and with the option of running all when a peak load is needed, vs installing one unit that will run at capacity consistently.

The domestic hot water strategy will consider a centralised system, compared to point of use units. The embodied carbon associated with the distribution systems between the two strategies is likely to impact the results so it was felt that this would be a worthy study to lower the overall embodied carbon of the scheme. The results from the respective studies will be fed back to the design team and considered against other constraining factors to make the optimum decision for the proposal.

Circular Economy

Circular economy (CE) is an economic model that seeks to enable high value reuse of construction resources. It aims to keep materials within the construction loop, rather than downgrading materials into recycling before their full potential has been expended. In a Circular Economy model, materials are retained in use for as long as possible and then re-used or recycled, leaving a minimum residual waste, as illustrated in Figure 2.

As a result of following this model, the environmental impact and carbon emissions from sourcing raw materials and manufacturing of new products are minimised.

Reuse Schedule

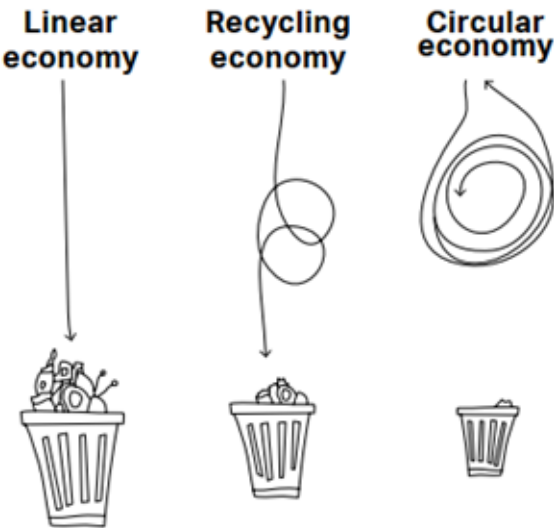
Max Fordham undertook a site walk on 4th July 2025 to identify opportunities for reuse throughout the Corn Exchange. A reuse schedule was created to identify and outline end of life options for each material category identified. It is the responsibility of the Architect and the Contractor to investigate the incorporation of high value items for reuse within the project or off-site.

High value items identified for reuse within the project:

- Flooring in the Main Hall
- Bar equipment
- Theatre seat and structure

Areas to be investigated in Stage 4 for reuse:

- Lighting
- Theatre equipment
- Accessible lift



Waste

In response to:

Cambridge Local Plan 2018:

- Policy 28: Site Waste Management:

Greater Cambridge Sustainable Design and Construction Supplementary Planning Document 2020

- 3.11 Construction waste & recycling and waste facilities

A hierarchical waste management strategy of “Prevent, Reduce, Reuse, and Recycle” will be employed during the design, construction and operation of the development. During the design phase, this means striving for material efficiency and eliminating excessive material usage through minimising new construction and where possible re-using materials on-site.

A site visit and reuse schedule has been created to inform the reuse of existing material and integrate them into the design. This includes furnishings and fittings such as theatre, office and catering equipment, lighting fixtures, flooring and doors.



Construction Waste

The management, disposal and recycling of waste generated during the construction phase will be managed by the Contractor who will put in place a Site Waste Management Plan. The contractor will be required to meet the following requirements:

- The Contractor will be required to set waste targets (diversion and absolute generation) and to report their waste
- At least 95% of non-hazardous waste should be diverted from landfill

Operational Waste

In order to utilise Parson’s Court as an external amenity, existing bins are to be relocated behind Parson’s Court and within the Corn Exchange. This will provide direct access from the back of house to the bins and aim to eliminate the antisocial behaviour associated with the space at night. Waste streams will continue to be separated, isolating recyclable waste from general waste.

6.1 Sustainability

Response to Sustainability Planning Policies

Water

In response to:

Cambridge Local Plan 2018:

- Policy 28: Water Management:
- Policy 31: Integrated water management and the water cycle
- Policy 32: Flood risk

Greater Cambridge Sustainable Design and Construction Supplementary Planning Document 2020

- 3.3 Water efficiency
- 3.7 Sustainable drainage systems (SuDS) and flood risk

Water

Cambridge is a water scarcity area due to increasingly low and sporadic rainfall and increasing demand from an expanding population. Following the water hierarchy to reduce water consumption and recycle water where possible is a key project objective.

The Corn Exchange’s current water usage baseline is 7012m3/year.
Parson’s Court’s current water usage baseline is 433 m3/year.

The following measures have been integrated into the design of the Corn Exchange and Parson’s Court to reduce potable water consumption:

- Fit water efficiency fittings in line with BREEAM Wat01 5/5 credits to reduce water consumption (if thought not technically achievable, 4 Wat 01 credits)
- Options for recycling water have been explored although space limitations prohibit the integration of large rainwater harvesting tanks. The use of condensate recycling has been proposed for use for a proportion of the toilet flushing demand. Further investigation into condensation tank location and proximity to the FCU are to be investigated further to understand its viability.



Higher than average temperatures in UK

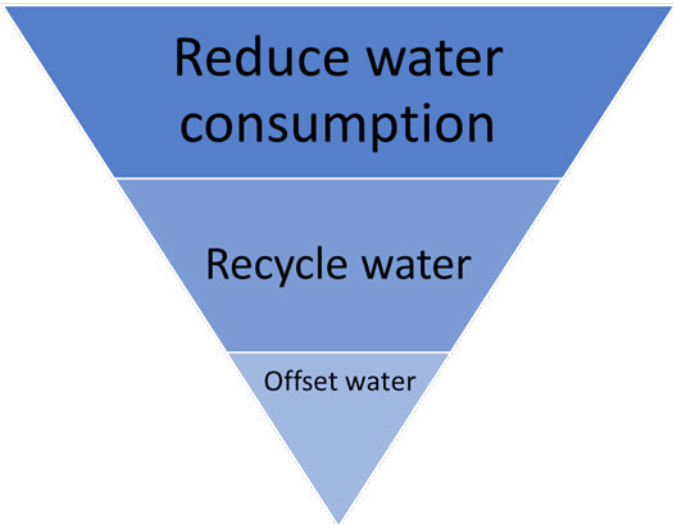


Lowest average rainfall in UK

Thriving East Report, Anglian Water

Component	Performance levels (quoted numbers are minimum performance required to achieve the targeted level)		
	4 Credits	5 Credits	Unit
WC (effective flush)	3.5	3	Litres
Wash hand basin tap	3.5	3	Litres/min
Shower	4	3	Litres/min
Communal Kitchen Sink	5	5	Litres/min
Domestic Washing Machine	35	30	Litres/use
Domestic Dishwasher	11	10	Litres/cyle
Rainwater harvesting	50%	75%	% of buildings flushing demand

BREEAM Wat 01 Performance Levels



Water Hierarchy

6.1 Sustainability

Response to Sustainability Planning Policies

Adaptation to Climate Change

In response to:

Cambridge Local Plan 2018:

- Policy 28: Adaptation to Climate Change:

Greater Cambridge Sustainable Design and Construction Supplementary Planning Document 2020

- 3.4 Climate change adaptation

Adaption to Climate Change

The refurbishment of the Corn Exchange aims to improve the current environmental conditions whilst reducing the energy intensity of the building and enable usage into the future.

The addition of cooling will reduce the internal temperatures and humidity during performances, creating a more comfortable environment for users and performers.

Although the intensity of the building is designed to be increased, the impact of this on potable water usage will be offset through the integration of water efficient fittings.

Biodiversity

In response to:

Greater Cambridge Sustainable Design and Construction Supplementary Planning Document 2020

- 3.5 Biodiversity

Biodiversity

As part of national planning policy, the Corn Exchange must achieve a Biodiversity Net Gain (BNG) of 10%. A BNG assessment of the Corn Exchange and Parson’s Court is being undertaken by MKA Ecology and will provide recommendations on how to meet 10% BNG.

The project aspires to meet a BNG of 20% for each Cambridge Civic Quarter project. The market square provides the greatest opportunities to meet this aspiration but opportunities such as external planting in Parson’s Court and green roofs or green walls in the Guildhall are also being explored.

Health and Wellbeing

In response to:

Greater Cambridge Sustainable Design and Construction Supplementary Planning Document 2020

- 4.2 Health and wellbeing

User Experience

A key objective of the refurbishment of the Corn Exchange is to improve the user experience and offering. This includes enhancing the accessibility, providing better flow and direction around the bar and to and from people’s seats, refurbishing backstage facilities for performers and staff, and enhancing the environmental conditions and comfort levels provided.

Measures integrated into the design to address the above include:

- Widening staircases for wheelchair access and installing new accessible lifts
- Unifying and centralising the bar, enabling users to filter to their seat at either side
- Providing an accessible dressing room and adjoining accessible WC and shower
- Increasing and improving the in-house catering facilities for traveling performers
- Installing MVHR and cooling to increase ventilation and provide improved comfort levels
- Renovation of Parson’s Court will also discourage antisocial behaviour currently associated with the area, whilst providing new external amenity space

Noise

Suitable noise levels are important for health and wellbeing, as well as being crucial in a critical listening environment. The auditorium will be mechanically ventilated and noise ingress is considered to be suitably controlled, particularly with the upgraded glazing. The mechanical ventilation is designed so as to provide a suitable environment for listening to rock/ pop music or speech events and is, therefore, well below the levels where it would be considered to have an impact on health and wellbeing.

With regards to plant noise emission from mechanical services, this has been designed to be 5dB below the pre-existing background noise levels at the nearest noise-sensitive receptors. Mitigation to achieve this includes, induct attenuation to the air handling units (AHUs) and an acoustically louvred enclosure around the ASHPs to achieve the noise targets.

Transport

In response to:

Greater Cambridge Sustainable Design and Construction Supplementary Planning Document 2020

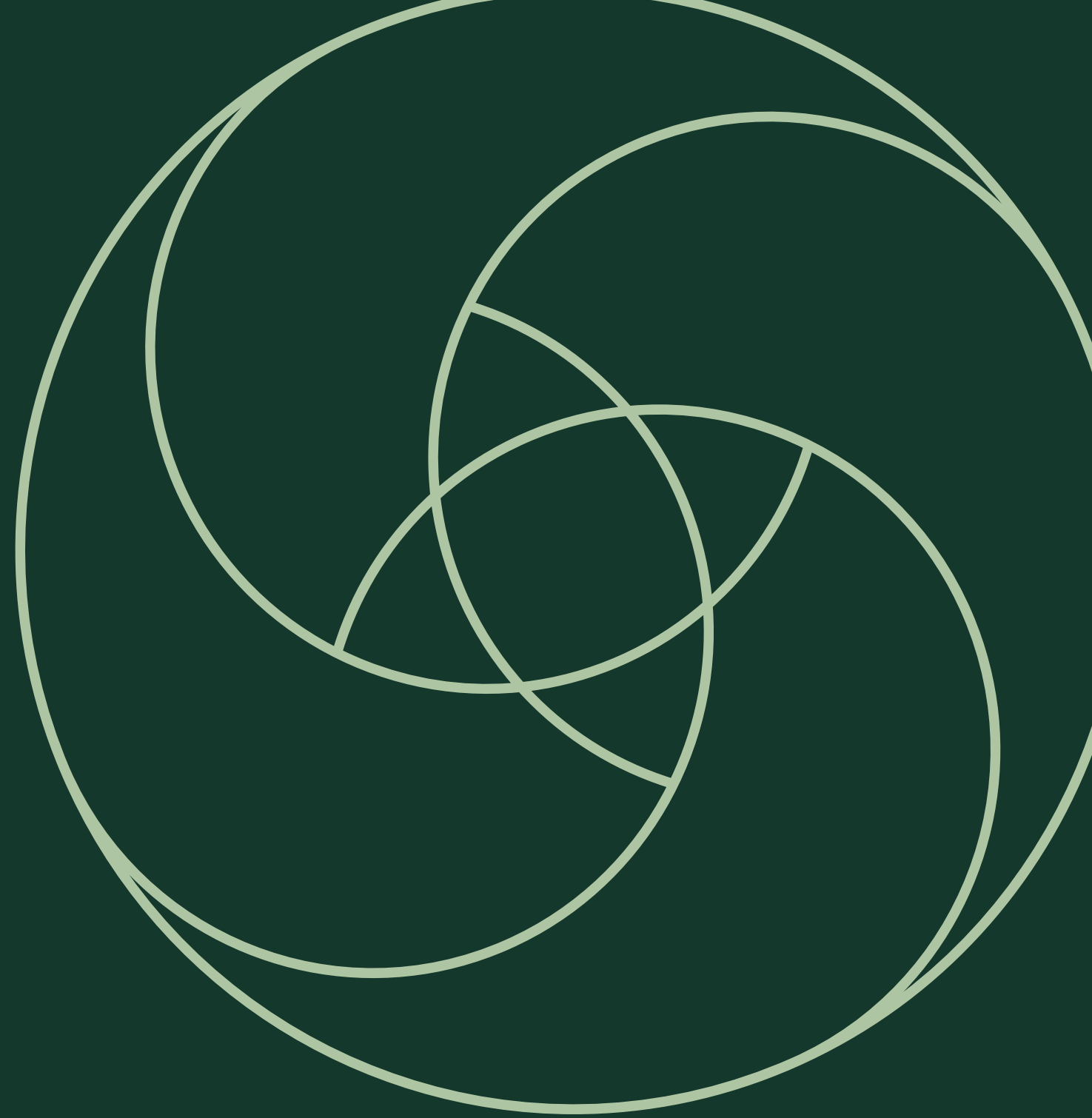
- 2.3 Transport, movement and accessibility

During busy shows, many users are required to queue up outside the Corn Exchange as people filter to their seats. Improving the safety of these users along Corn Exchange Street and Wheeler Street has been improved through the design by:

- Improving the internal flow and direction of users through the box office, foyer and bar area
- Restricting access to the end of Corn Exchange Street and Wheeler Street at certain times to minimise traffic outside the Corn Exchange and increase accessibility and safety to users

7.0

Conclusions



7.1 Conclusions

The proposed designs have been informed by a comprehensive pre-application process and significant and wide ranging stakeholder engagement. While a wide range of comments have been received, the plans have sought to respond positively to the key themes raised. As set out within the Planning Statement, the planned works are found to comply with the Development Plan.

The Corn Exchange is a key components of the Civic Quarter project and will deliver the following key benefits;

- The reinvigoration of a thriving, sustainable, accessible, welcoming cultural venue, one fit for the world class city of Cambridge.
- A venue that attracts a high-quality, wide range of performers and contributes to the cultural quarter, along with Cambridge Arts Theatre and the Guildhall.
- A Cultural Quarter that supports a wide range of other businesses in the area, from food and beverage to hotels.
- A Corn Exchange that is accessible to all, with new lifts, better wayfinding and improved wheelchair seating positions.
- The proposed works will protect a valuable and much loved Listed heritage asset, exposing more of the original Corn Exchange and removing insensitive later additions.
- The upgraded Corn Exchange will contribute greater revenue to Cambridge City Council and therefore help protects Council budgets and frontline services.
- The creation of a new social space in Parson's Court.
- A sustainable future Corn Exchange, with the works reducing carbon and energy consumption by a predicted 61-79%.



cartwrightpickard.com

📷 cartwrightpickard

🐦 @CartPickArch

London Studio

1 Canal Side Studios
8–14 St Pancras Way
London NW1 0QG
T 020 7554 3830

Manchester Studio

Unit 310, Ducie House
Ducie Street
Manchester M1 2JW
T 0161 914 7444

Leeds Studio

Studio 4, Cross York Street Studios
Cross York Street
Leeds LS2 7BL
T 0113 360 9444

