

4.5 Council Offices

Work Place Settings

150 Worksettings plus CSC

Cambridge City Council require 150 worksettings to be located in the Guildhall, plus 15 CSC staff. A range of worksetting will be provided, with detailed furniture choices made during RIBA Stage 4 & 5.

The diagrams on the right explain how the worksettings are spread across the Guildhall.

Long term worksetting

A worksetting designed for users to be based at for long portions of their day, typically provided with a 1200mm wide desk, office chair and single wide-screen curved monitor.

Short term worksetting

A worksetting designed for users to be based at for a shorter period of time, perhaps between meetings or if they have come into the Guildhall for a short period of time whilst not out in the community.

It is expected that users will use their laptop and wifi in these settings.

These worksettings can also be utilised for informal catchups/ 1-1 discussions.

Council Chamber & Gallery

With the proposed changes to the Council Chamber there is opportunity for informal use of the space - when not being used for meetings or other functions. If there were a particular need for additional worksettings the proposed Council Chamber could accommodate 40 desks easily.

Summary

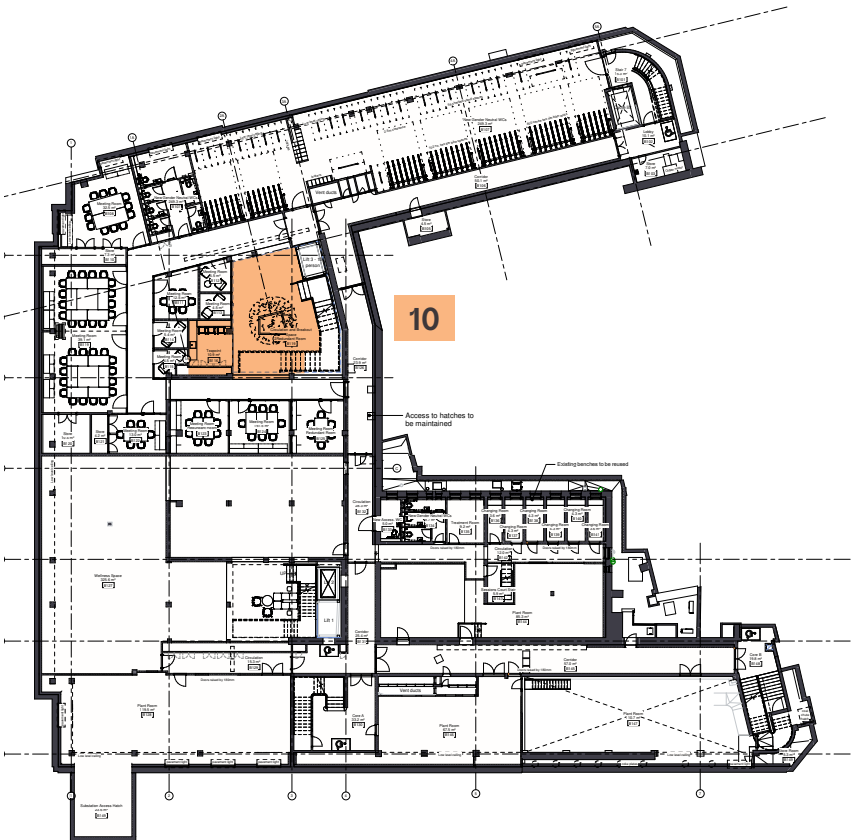
Long Term Worksettings - 107

Short Term Worksettings - 44

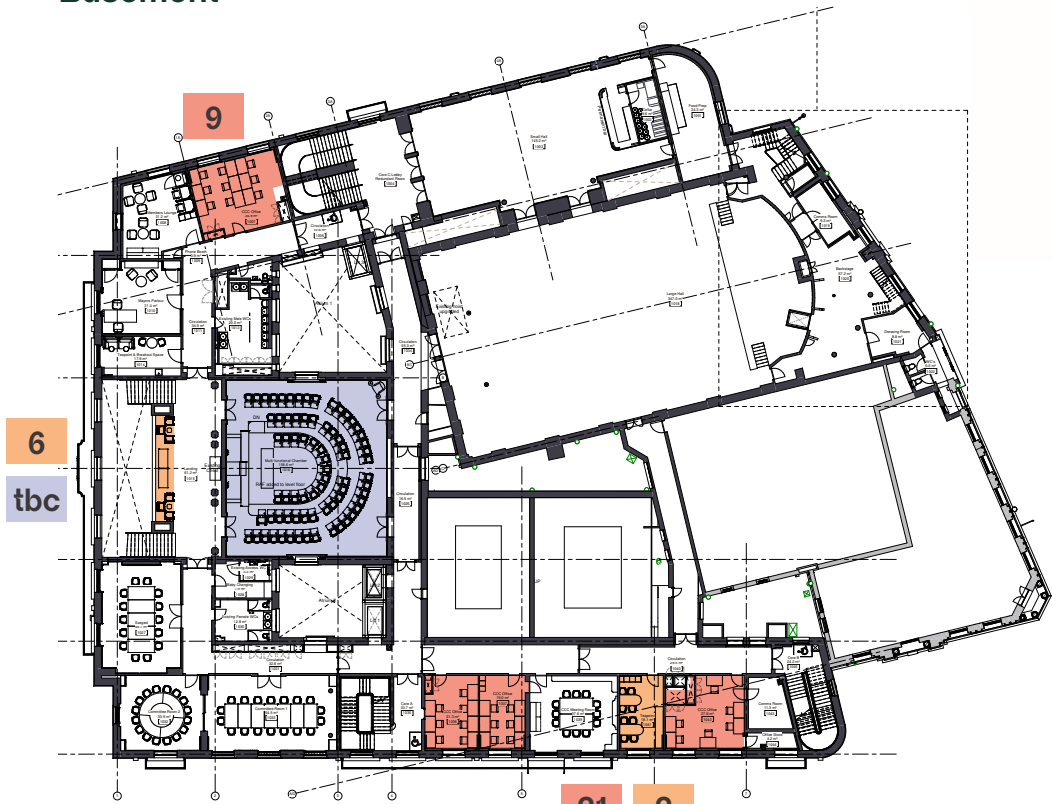
Customer Service Centre - 15

Total = 166*

*This does not include any use of meetings rooms or the Council Chamber.



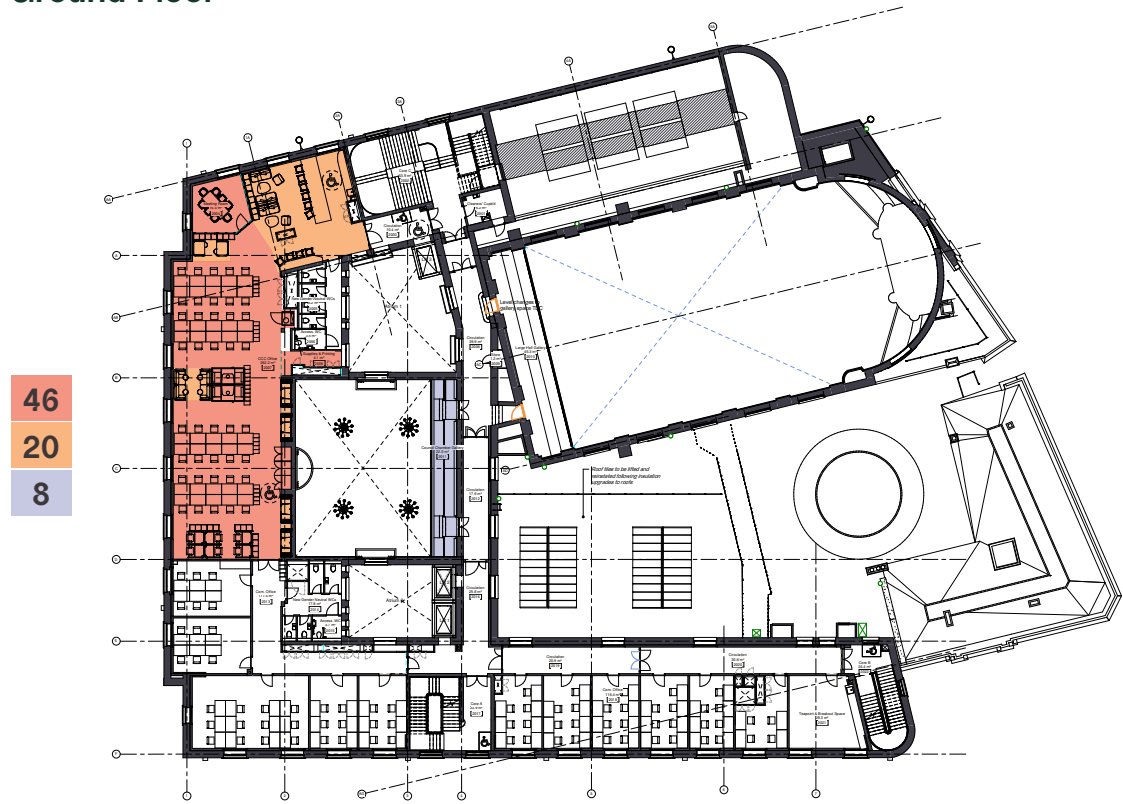
Basement



First Floor



Ground Floor



Second Floor

4.5 Council Offices

Meeting Rooms

Meeting Rooms and Collaboration Space

To meet the requirements of Cambridge City Council a range of meeting room sizes are required across the Guildhall. Following design development the decision was made to focus new meeting room provision at basement level. The utilisation of space in this manner means staff are generally working in above ground spaces, with greater access to natural daylight, and spending less time at basement level.

The following meeting rooms are provided within the Guildhall;

Basement

- 4no. 2 Person meeting rooms
- 3no. 6 Person meeting rooms
- 2no. 8 Person meeting rooms
- 1no. 14 Person meeting room
- 2no. 16 Person meeting rooms - which can be transformed into one large room.

Ground Floor

- 3no. Customer Service Centre interview rooms
- 3no. 1 person 'Zoom' Booths

First Floor

- 1no. 12 Person meeting room
- Committee Room 1 - 18-20 people
- Committee Room 2 - 16-18 people
- Szeged Room - 14 people

Second Floor

- 1no 8 Person meeting room
- 1no. 1 Person 'Zoom' Booth
- 2no. 2 Person meeting booths

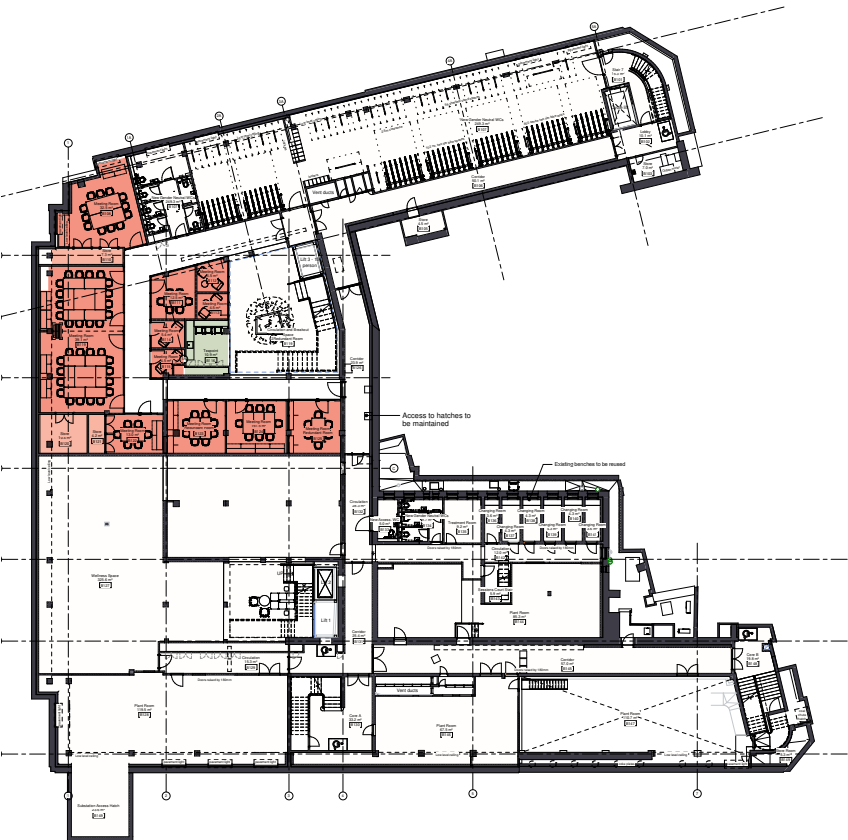
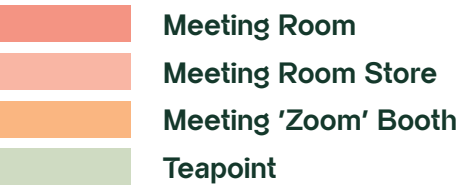
Comparison to Existing Provision

Within Mandela House there are a range of different sized meetings rooms, totalling 91 seats. Current data shows a 41% utilisation rate. The primary meeting rooms in the Guildhall are the Committee Rooms, Szeged Room and Council Chamber.

Newly created meeting rooms in the Guildhall provides 108 seats. We are also proposing to provide 4 additional spaces in the Szeged Room and converting the Chief Executives Office into a 12 person meeting room.

The proposed flexible use of the Council Chamber will also improve the meeting room offer.

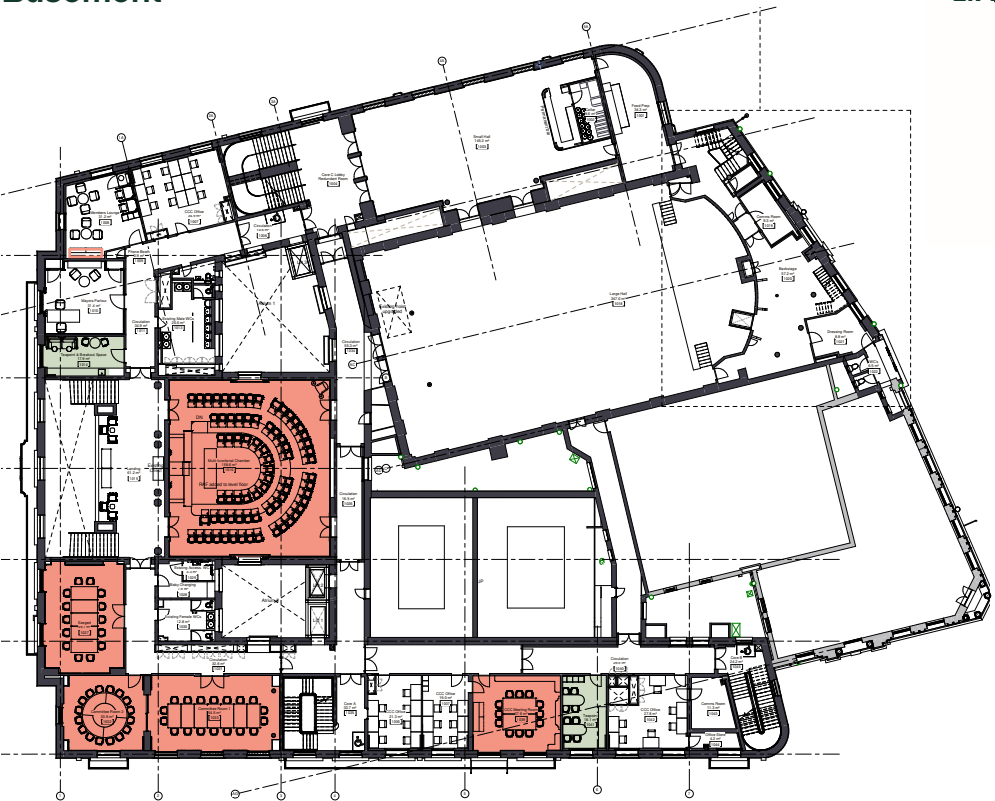
Not factoring informal meeting spaces into the calculations the proposals deliver 21 additional seats over the combined provision of Guildhall and Mandela House.



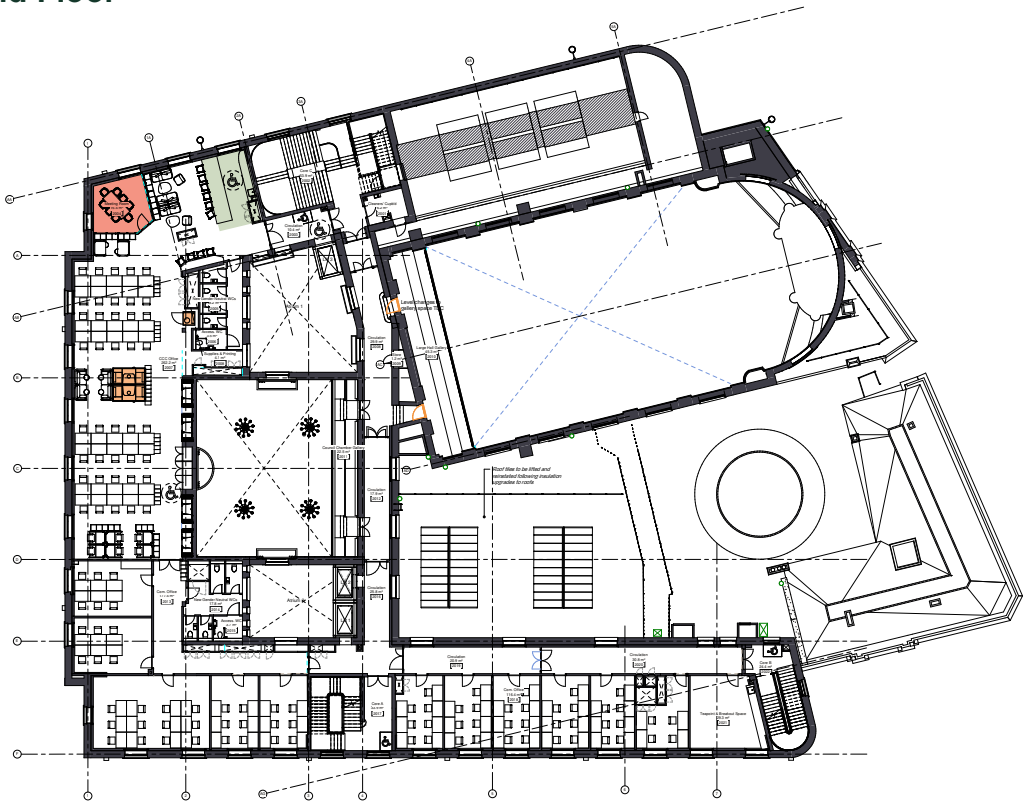
Basement



Ground Floor



First Floor



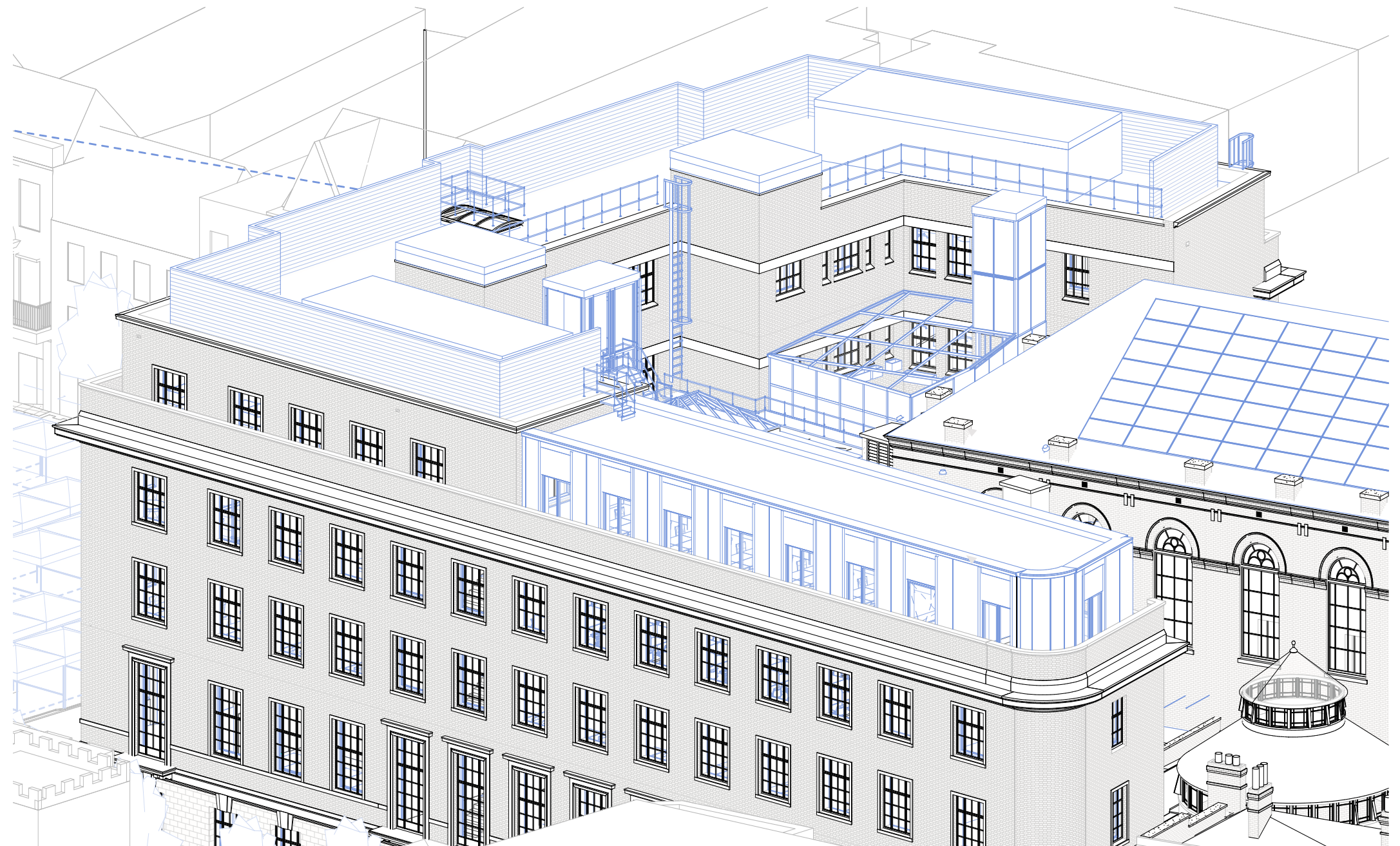
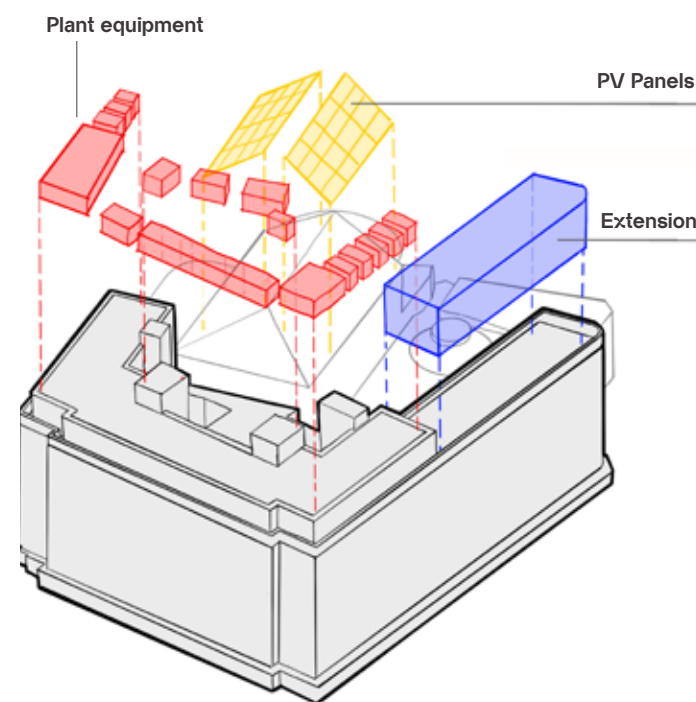
Second Floor

4.6 External Appearance

Fourth floor extension & plant screen

The current 4th floor of the Guildhall does not extend the full length of the Peas Hill façade. Within the original designs for the building this element was due to run all the way to the staircase to the south west corner. In fact the stair in that location extends to roof level but this wing was never built.

Our proposals include a 4th floor extension which realises the original design, albeit in a modern style.



Proposed Interventions

4.6 External Appearance

Fourth floor extension

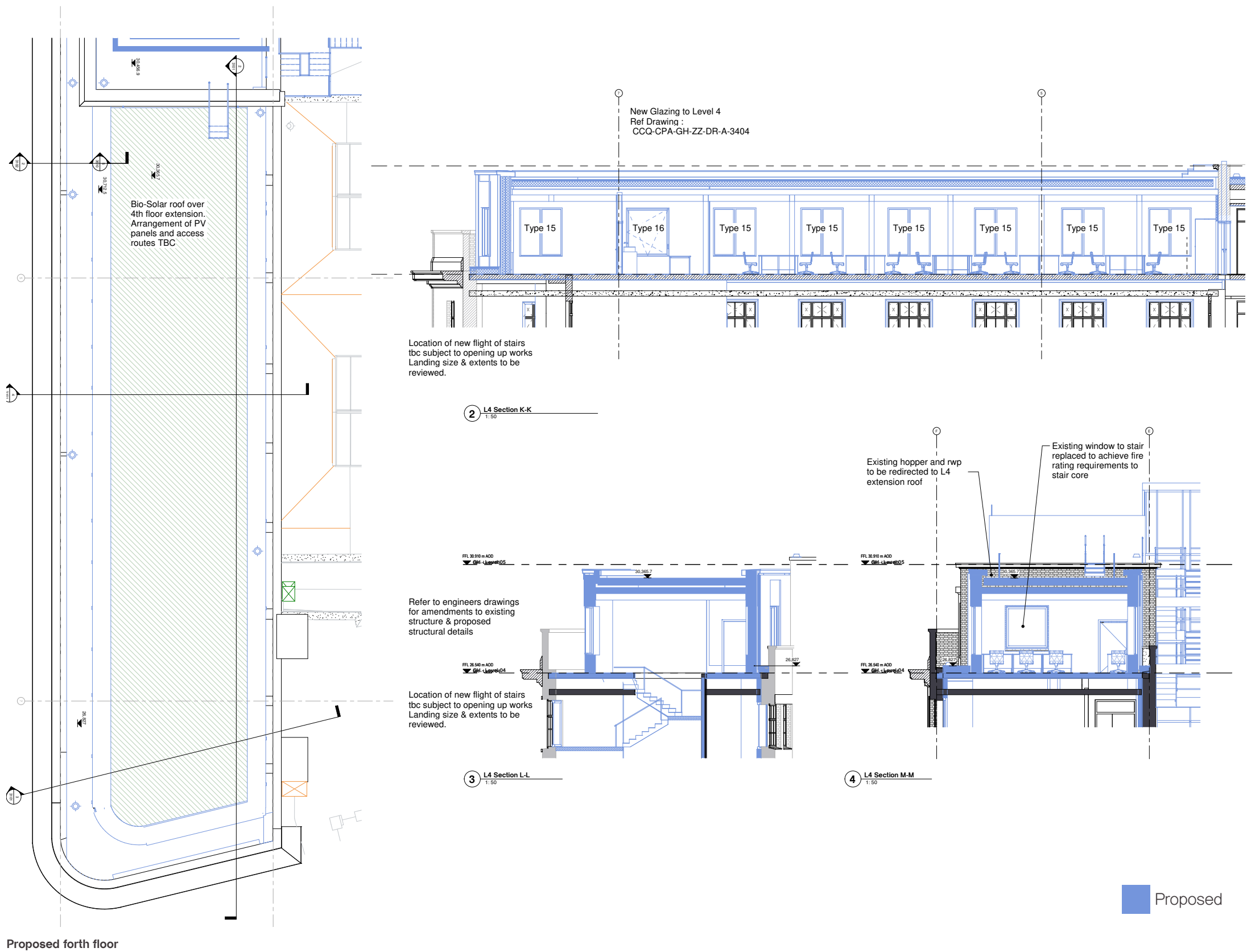
The proposed fourth floor extension will extend the office provision from the existing stair core on Peas Hill and connect to a second core (south Peas Hill) by extending the stair from third floor.

The second stair at the south corner will utilise a section of the existing stair construction part complete, then diverts the stair north for the remaining flights to allow the massing to remain recessed behind the parapet to the west and south façades.

In reference to the existing fourth floor, the proposed massing will be recessed behind the existing parapet across each elevation, turning at the south corner as it does on the lower levels

The proposal is recessed from the existing fourth floor elevation and is lower in height to reduce the visual impact on the original building.

The single storey extension is being developed with a timber framed structure to reduce loading and embodied carbon. New fenestration references the proportion size and arrangement of the existing windows.



4.6 External Appearance

Fourth floor extension

This page shows a bay Study taken through a section of the proposed extension where it abuts the existing 4th floor.

The bronze anodised aluminium metal cladding reference the existing bronze metalwork elsewhere on the elevations, existing windows and balconies.

The fenestration will be framed, in extruded sections of cladding to match the proportions of the masonry framing to the existing windows.

The windows will be sized to respond to the width and height of the existing windows.

Section (Right) taken through the extension shows the new Glulam structure, insulation and cladding, the existing fourth floor and roof will be thermally upgraded.

Images (far right) show examples of dark metal panelled cladding with concealed joints which will be used in varied planes to articulate the elevations.

The bottom right image shows a CLT soffit and Glulam columns that represent the emerging internal finish proposals



Extension repeated module



Proposed interventions



Bronze panel cladding example



Concealed panel joints example



Exposed CLT soffit and Glulam column example

4.6 External Appearance

Plant screen

To provide screening to the new plant equipment required at roof level a screen is proposed.

The form, massing and visual appearance of the screen have been reviewed during Pre-Application meetings resulting in several options being developed and reviewed.

This has resulted in a screen circa 2.4m high and formed from louvres. The screen is proposed to act as a 'veil' to reduce the visual impact of additional massing being placed on top of the Guildhall. The screen is proposed to be formed in light bronze anodised aluminium.

Images on the right show massing from street level within the Market Square. Plant screening is not visible from other locations around the Guildhall.

Some articulation is proposed to the top of the screen, a 'cornice' to cap the panels, taking details from cornices present on the existing Guildhall.

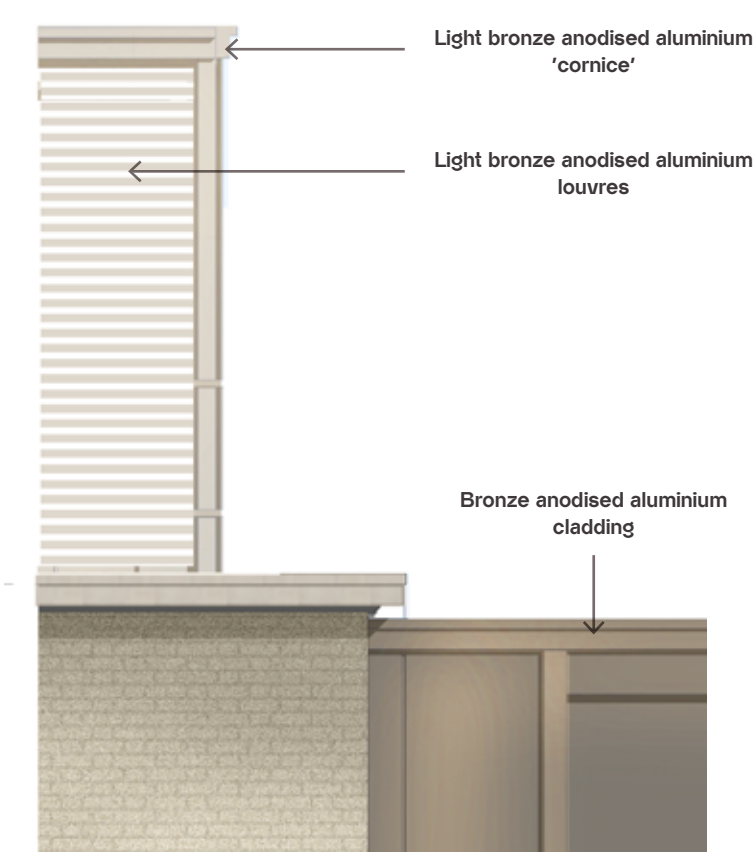
The extent of the plant screen is recessed behind the parapet to reduce the appearance from street level.

*Images taken from point cloud survey data

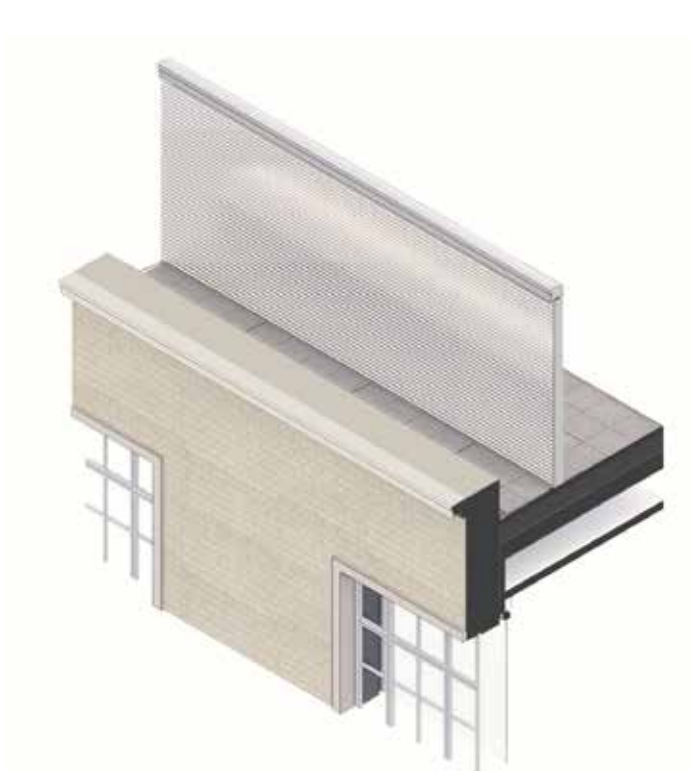
Please refer to CGI Viewpoints for further details.



Example of discreet louvre screening - Doncaster Civic Centre



Bay study showing proposed plant screen



Axonometric section showing proposed plant screen



View of Guildhall from north east corner of the market square



View of Guildhall from north west corner of the market square

4.6 External Appearance

Visual from Peas Hill/ Bene't Street



CGI showing 4th floor extension, updated Peas Hill and Large Hall roof

4.6 External Appearance

Visual from St. Edward's Passage

CGI showing 4th floor extension from St. Edward's Passage

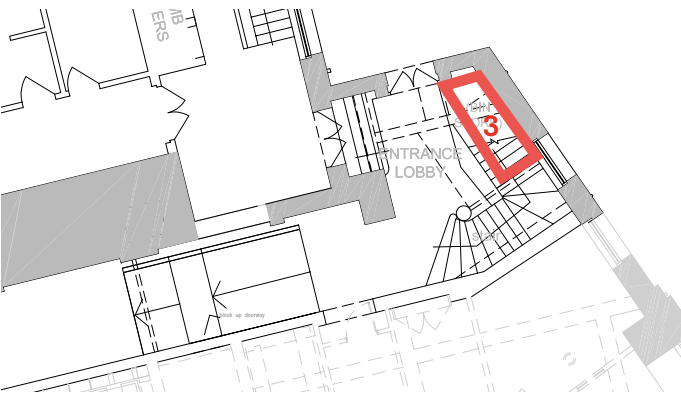
4.7 Supporting Functions

Refuse

Existing

The current arrangement for refuse storage within the Guildhall involves a small internal store, located behind a fire shutter below the service stair, combined with external storage.

This is not a suitable arrangement for a revitalised Guildhall, so an alternative solution has been sought.



Existing Guildhall waste storage

Proposal

The proposal uses the space below the mezzanine store of the Large Hall, this is currently used for cycles but these have been relocated. The refurbishment of the existing lift will allow bins to be wheeled from the store to Guildhall Street for collection.

The table (right) shows waste calculations based on BS 5906: 2005 requirements. If the proposal only takes into consideration waste created within the Guildhall then a twice weekly collection would be suitable (11 bins) within the space allocated on ground floor.

However, to aid with the de-cluttering of the surrounding public realm, our proposal would like to accommodate waste storage Giggling Squid and Sticks 'n' Sushi restaurants (bins are currently stored at grade on Wheeler Street and Parsons Court).

We are therefore proposing to provide space for the waste storage associated with the two restaurants. Based on the calculations on the right this will require 4no. 1100 litre eurobins, collected daily. The diagram below shows how the bins can be accommodated.

Summary

Council, Commercial Office, Large and Small Halls, Heart Space Cafe

11no. 1100 litre eurobins, collected twice a week

This is a worst case calculation and we expect the requirement to be less, dependant on the number of events being held in the Large and Small Halls

The restaurants would produce waste requiring 4no. 1100 litre eurobins, collected daily.

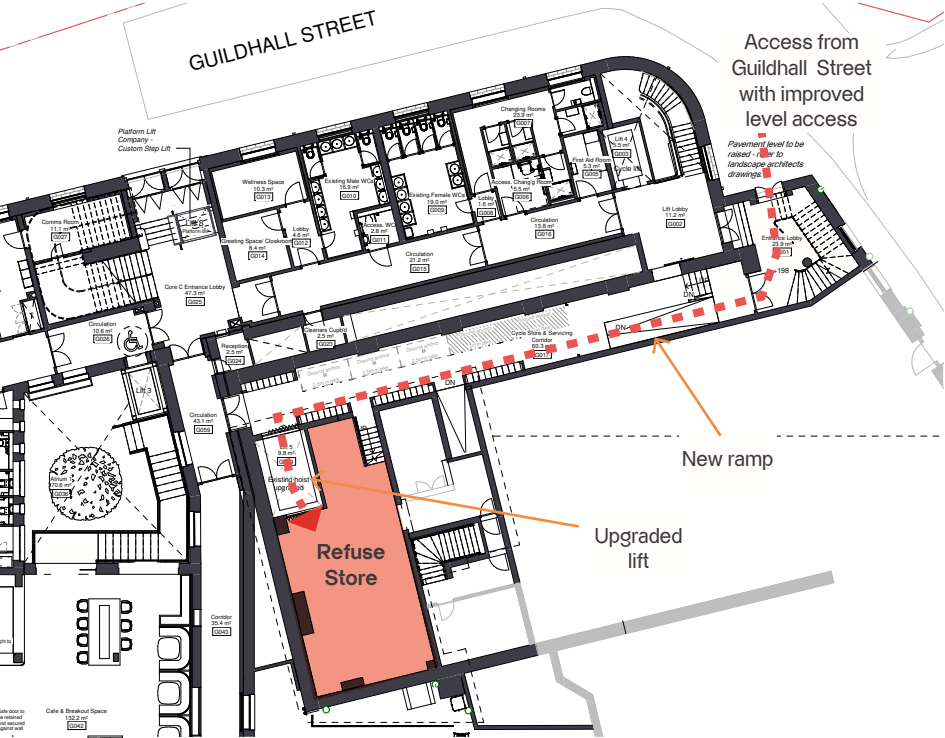
Proposed Waste & Recycling Storage

Waste Storage Calculations		
BS5906:2005 used for calculations		
Space	Measure	Volume of waste
CCC Office	150 occupant	7,500 litres
Commercial Office	219 occupants	10,950 litres
Large & Small Halls	524m ²	2,620 litres
Cafe	35 seats	2,625 litres
Totals		23,695 litres

Waste Volume	23,695L
no. of 1100L eurobin	21.54
Required no. of bins	22
Twice Weekly Collection	11 bins

Restaurant Waste Storage Calculations		
BS5906:2005 used for calculations		
Giggling Squid, Sticks 'n' Sushi		
Restaurants	340 covers	25,500 litres
Totals		25,500 litres

Waste Volume	25,500L
no. of 1100L eurobin	23.18
Required no. of bins	24
Daily Collection	4 bins



Proposed Guildhall waste storage



15no. 1100 Litre Eurobins

4.7 Supporting Functions

Toilets

Analysis of the existing WC provision against current standards, BS 6465, has been undertaken. This analysis has fed into the proposals for the Guildhall.

Changing Places

A Changing Places facility has been located close to the main entrance and Customer Service Centre.

Public Toilets

Along with the Changing Places facility three further publicly accessible WC's have been provided, including one fully accessible facility.

Large and Small Halls

The original toilets associated with the Large and Small Halls are retained and refurbished.

Changing Rooms

An additional WC is provided with the changing rooms located on the ground floor of the Guildhall Street wing.

Existing Toilets

Existing toilets have been retained where possible. Where toilets are retained the terrazzo finishes will be repaired and refurbished. Original sanitaryware will largely be retained and refurbished. Where original sanitaryware has been removed we propose to replace with new. All fittings will be modified to reduce water usage.

Basement and Office WC's

Gender neutral WC's are provided on the upper floors and in the basement to make the most efficient use of space available.

Mandela House Comparison

The Council's current office space provides a total of 31 WC's. This equates to 1 WC per 4.8 member of staff. This is above the provision required by BS 6465-1:2006+A1:2009.

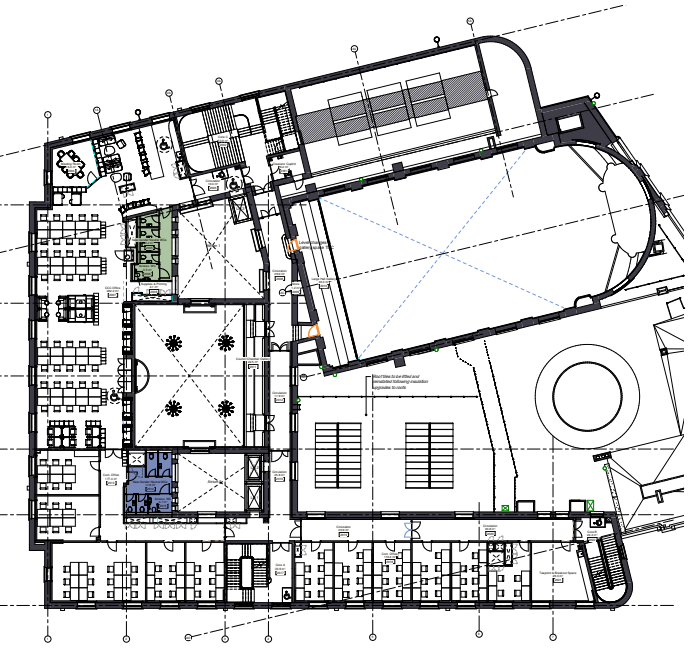
The proposals at the Guildhall provide 23 WC's or 1 WC per 6.5 members of staff. A lower figure but still above the BS requirements.

The Guildhall currently has 42 WC's/urinals across all levels, the proposals increase this figure to a total of 76.



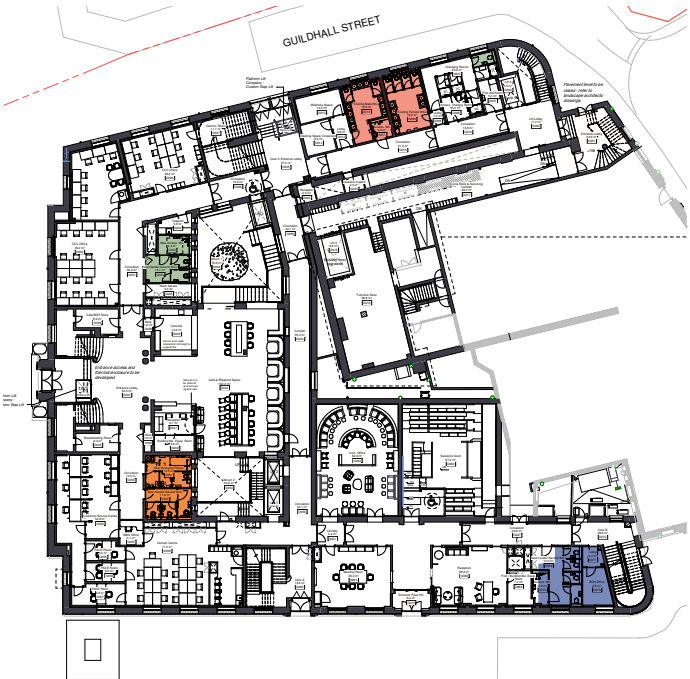
Basement

- CCC 5no. Gender Neutral, 1no. Accessible
- Office 3no. Gender Neutral, 1no. Accessible



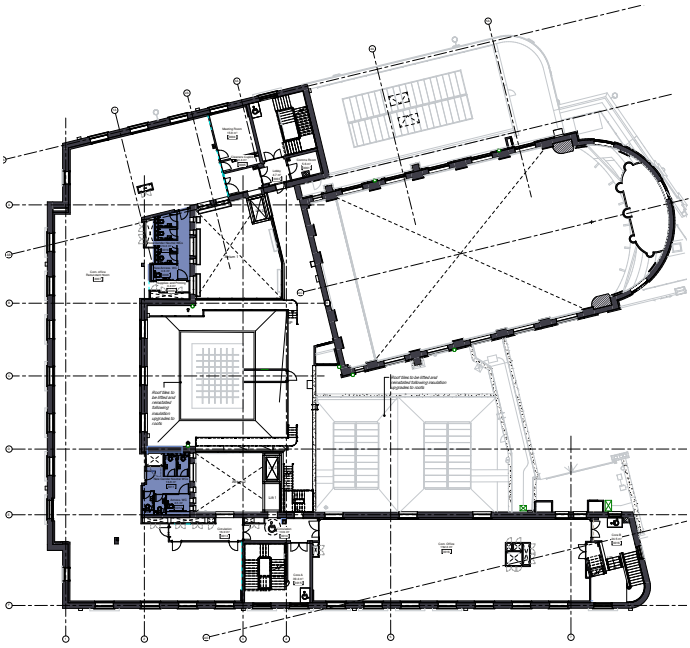
Second Floor

- CCC 4no. Gender Neutral, 1no. Accessible
- Office 4no. Gender Neutral, 1no. Accessible



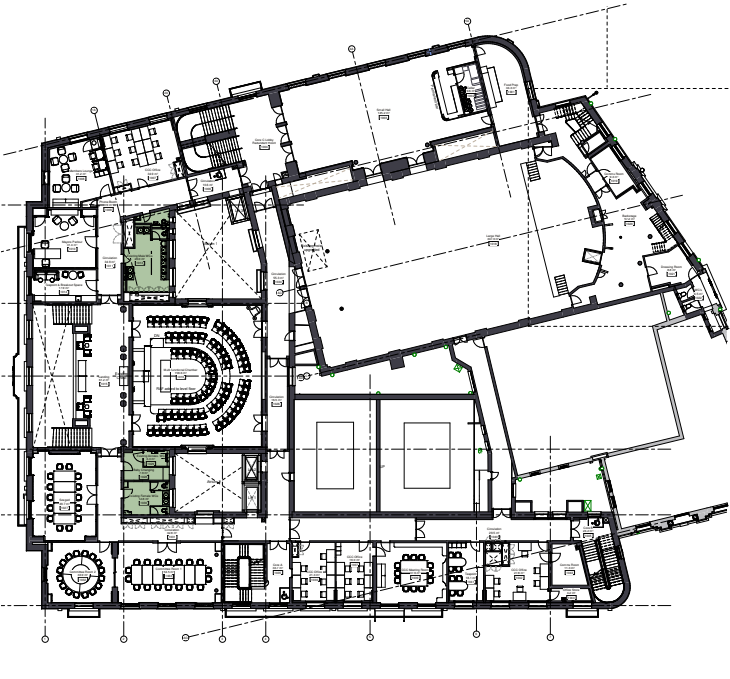
Ground Floor

- CCC 3no. Gender Neutral, 1no. Accessible
- Office 4no. Gender Neutral, 1no. Accessible
- Public 1no. Changing Places, 2no. Gender Neutral, 1no. Accessible
- Halls Male - 2no. WC, 7no. Urinal, 3no. washbasin
- Female - 4no. WC, 6no. washbasin, 1no. Accessible



Third Floor

- Office 8no. Gender Neutral, 2no. Accessible



First Floor

- CCC Male - 1no. WC, 5no. urinals, 4no. washbasins
- Female - 2no. WCs, 2no. Washbasins
- 1no. Gender Neutral
- 1no. Accessible



Fourth Floor

- Office 8no. Gender Neutral, 2no. Accessible

4.7 Supporting Functions

Cycles & Changing

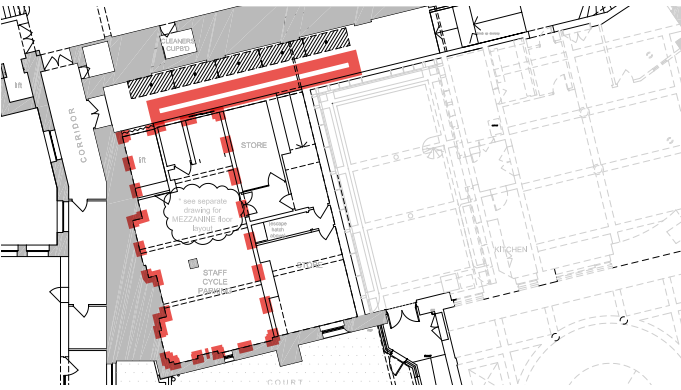
Existing

For staff working in the Guildhall cycle storage in the located on the ground floor within the service corridor. A lower level adjacent room was formerly used but is no longer accessible.

28 cycle spaces are provided in this corridor, the current high-low stands are not always easy to use when bikes are fitted with baskets or child seats and have limited options to lock bikes securely.

For staff working in Mandela House there is space for 60 bikes, plus 4 cargo bikes. The space is shared with 2 vehicle parking spaces and 5 bulk bins.

The spaces are provided by standard sheffield stands which make them easy to use and secure.



Red solid line shows current location in corridor. Dashed line shows space no longer in use for cycle storage.

Proposal

Our brief is to provide excellent cycling facilities within the Guildhall. To achieve this, a high number of bike spaces is provided along with showers, changing facilities and lockers. The storage provided aims to accommodate a range of bikes. From standard cycles, to Bromptons and cargo or hand cycles.

The facilities will be shared by all buildings users, Council staff and commercial tenants with space for 159 bikes is provided. This would allow approximately 43% of the persons within the Guildhall to cycle to work and store their bikes.

The majority of the storage facilities are located within the basement (see drawing right). To provide an accessible route that can be used by all, a new cycle lift is proposed. Recumbent, hand cycles or cargo bikes will be stored at ground floor level in the location of the existing cycle stands but with upgraded facilities (see drawing right). All storage positions will be provided with multiple locking points to ensure bikes can be securely stored. Accessible spaces will have a ground anchor and a half height long sheffield stand to provide multiple options for securing larger cycles. A cycle repair stand is provided at ground floor level adjacent to the main external access point.



Cycle storage and repair station precedents

Cycle, Shower & Locker Provision

Cambridge City Council Cycle Minimum Standards		
1 space per 30m ² GFA - plus visitors or (whichever is higher) 2 cycle spaces per 5 members of staff		
	Staff Numbers	Cycle Spaces
CCC Staff	150	60
Commercial Staff	219 (10m ² NIA per person)	88
Total	369	148

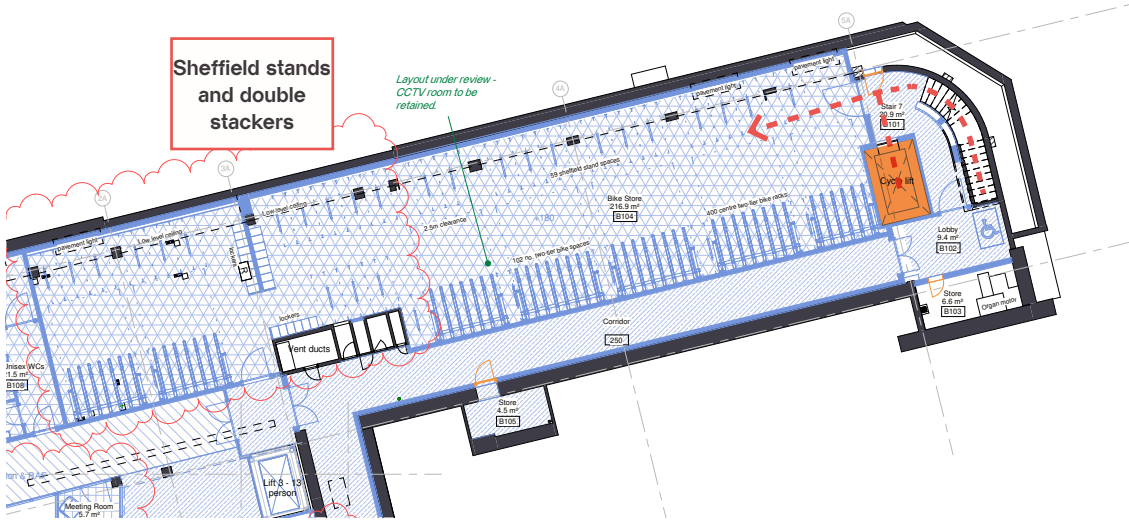
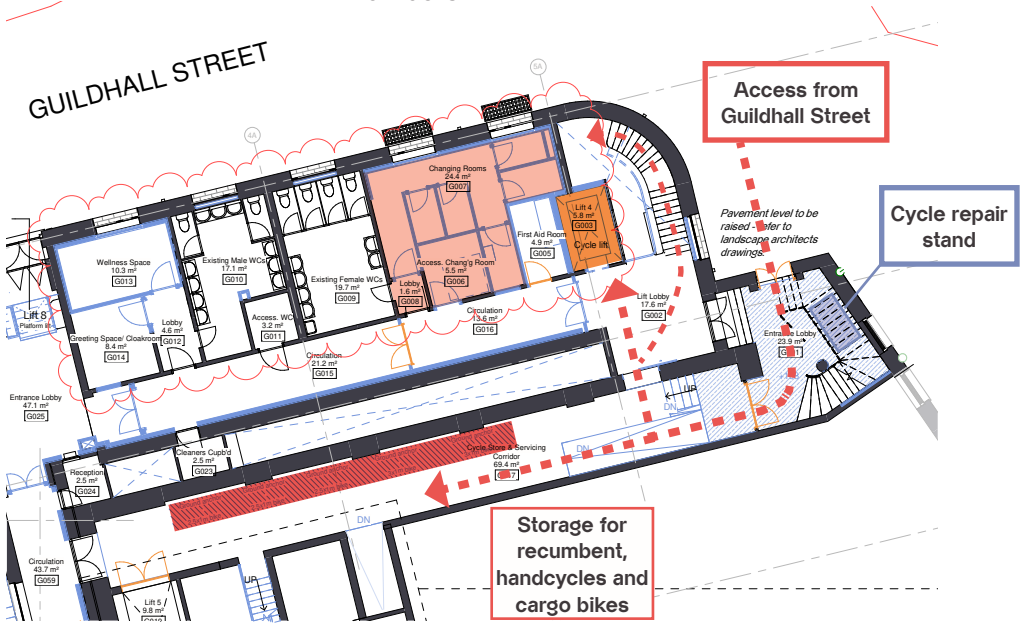
Cycle storage to be provided with a minimum of 20% Sheffield stands and 5% accessible spaces.

Proposed Cycle Storage		
Double Stackers	102	64%
Sheffield Stands	49	31%
Accessible	8	5%
Total	159	

Proposed Showers	
Unisex shower	4
Accessible shower	1
Total	5

The plans show 10 additional cycles than the minimum standard. 159 lockers are provided to match cycle numbers

A cycle repair and maintenance stand, as show in the precedent below, is provided on the ground floor adjacent to the access point off Guildhall/ Wheeler Street.





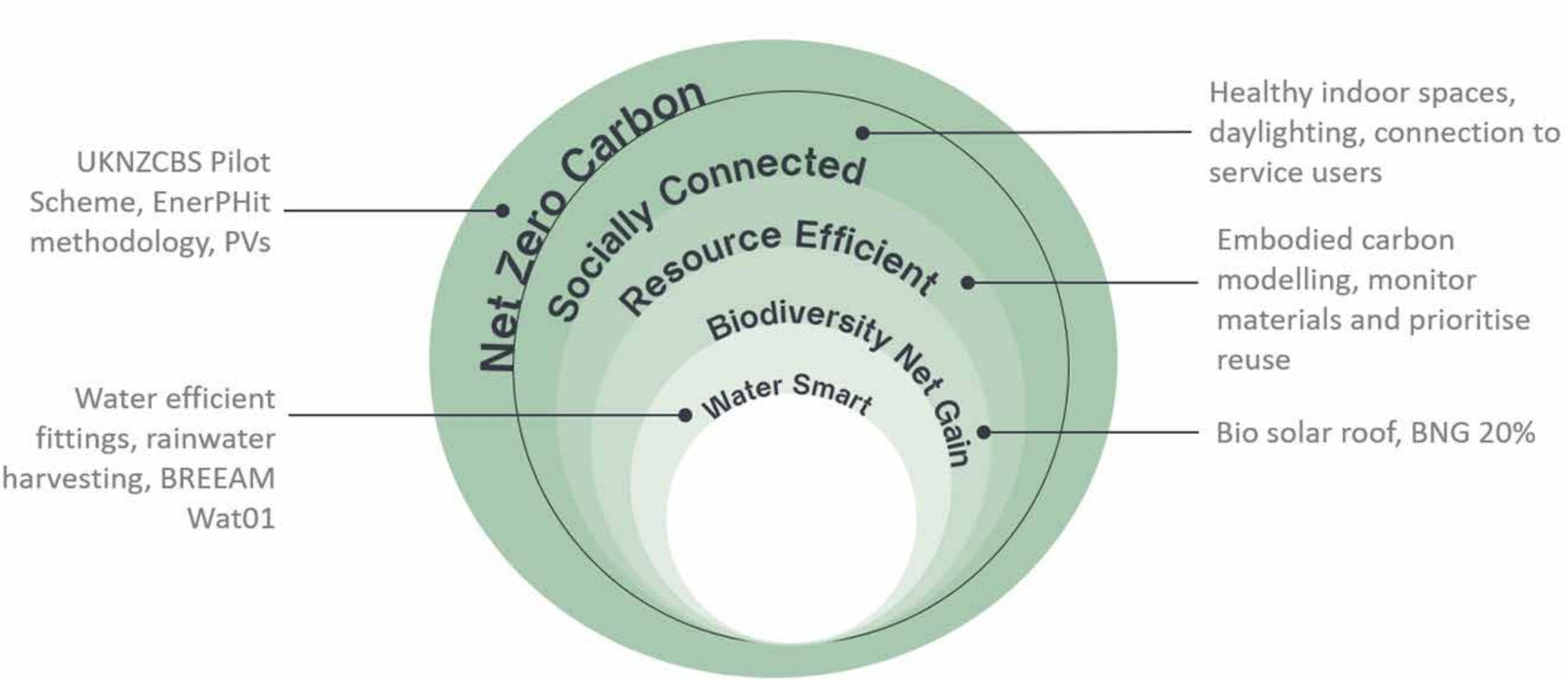
5.0

Sustainability
Summary

5.1 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.



5.1 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

Net Zero Carbon Building Standard Pilot Study

The Guildhall is participating in this pilot scheme as part of the net zero aspiration and will provide feedback on the Standard during the design process. A decision to verify the project as Net Zero Carbon can only be made once the first version of the Standard has been released.

The Net Zero Carbon Building Standard Pilot Scheme was released in Autumn 2024 with the aim to unify the definition of ‘Net Zero Carbon’ and provide a UK wide standard of ‘Net Zero Carbon Buildings’:

“The UK Net Zero Carbon Buildings Standard (‘the Standard’) has been collaboratively developed by a wide range of stakeholders in the United Kingdom’s (UK’s) built environment industry. It creates a unified definition for ‘Net Zero Carbon Aligned Buildings’ in the UK, underpinned by an evidence-based reporting methodology. The Standard is for everyone connected with the UK’s real estate industry. Its development has been led by a coalition of Professional Institutions, industry bodies and leaders in the field who recognise the need for consistent rules, both to reduce spurious claims around net zero carbon, and to accelerate the design, construction and use of buildings that deliver lower-carbon outcomes in line with the UK’s legally binding carbon targets.” From The Standard: Pilot Version

The Standard includes targets/limits for the following:

- Operational energy
- Upfront carbon

- GWP for refrigerant systems
- Renewable electricity generation

Additional Requirements include:

- Monitoring water consumption
- Monitoring energy consumption
- No fossil fuels to be used on-site.
- District heating and cooling network requirements, if applicable
- Heating and cooling delivered to the building, for New Builds only

The targets/limits applicable to each building are based off the year of commencement on-site. For the Guildhall, we anticipate this will be 2026 but we have agreed aspirational targets aligned to 2030. These aspirational targets are also in-line with the proposed EnerPHit performance standards for the project. See Table.1 for a breakdown of the Guildhall’s NZCBS targets.

The verification process of the Standard is not yet developed and participation in the Pilot Scheme does not guarantee or discount the cost of verification once this have been released.

Alongside designing and modelling the building to achieve the NZCBS, the Client is responsible for providing on-going energy monitoring data for 12 months after occupancy* in order to demonstrate compliance. This is call the Operational Reporting Period (ORP).

*a minimum occupancy rate will need to be calculated based off the floor area of occupied spaces and shared occupied spaces

Aspect	Reporting metrics	Pass/fail metrics and requirements	Guildhall Specific Baseline Targets (2026 commencement)	Guildhall Specific Aspiration Targets (2030 NZCBS targets)
Embodied carbon	Life cycle embodied carbon (A1-A3) Upfront carbon with generic material specifications	Upfront carbon limits, Retrofit works Upfront carbon limits for renewables Life cycle embodied carbon limits (future versions only)	For Offices, Whole Building: 585 kgCO2e/m2GIA Photovoltaics electricity generation systems for all project types: 750 kgCO2e/kWp limit	For Offices, Whole Building: 458 kgCO2e/m2GIA Photovoltaics electricity generation systems for all project types: 750 kgCO2e/kWp limit
Operational energy	Annual operational carbon emissions intensity	Energy use intensity limits in kWh/m2GIA/yr Category: Existing Building with One-Go Retrofit, Offices, General	100 kWh/m2GIA/yr	87.5 kWh/m2GIA/yr
On-site renewable electricity generation	Total annual on-site renewable electricity generation Annual on-site renewable electricity generation that is used on site Annual on-site renewable electricity generation that is exported On-site renewable electricity generation capacity	Annual on-site renewable electricity generation targets in kWh/m2 building footprint / year Targets for South England, 'other building types'	Minimum 45 kWh/m2 building footprint / year	Minimum 45 kWh/m2 building footprint / year
Operational water use	Annual operational water use Annual operational water carbon emissions	No Pass/Fail targets or limits	No limits or targets. The carbon emissions from water use from all sources shall be calculated by multiplying the water consumption over the assessment period by The UK Government Conversion Factors for Company Reporting of Greenhouse Gas Emissions, full set (for advanced users) (see section 2) available at the RPEP	No limits or targets. The carbon emissions from water use from all sources shall be calculated by multiplying the water consumption over the assessment period by The UK Government Conversion Factors for Company Reporting of Greenhouse Gas Emissions, full set (for advanced users) (see section 2) available at the RPEP
Fossil fuel free		Confirmation there is no fossil fuel use on site, except under allowed exemptions	No fossil fuels to be used on-site	No fossil fuels to be used on-site
Electricity demand management	Date/time and electricity demand in certain percentiles of energy demand	No Pass/Fail targets or limits	No limits of targets: Electricity demand shall be measured using meter reading data with ≤1 hour between readings	No limits of targets: Electricity demand shall be measured using meter reading data with ≤1 hour between readings
Refrigerants	Annual carbon impact of refrigerant gases – non-Kyoto products Annual carbon impact of refrigerant	Annual carbon impact limit of refrigerant gases for all buildings – Kyoto products only GWP limit of refrigerants	GWP limit for refrigerant systems = 677 kgCO2e/kg (equivalent to R32)	GWP limit for refrigerant systems = 677 kgCO2e/kg (equivalent to R32)
Carbon offsetting	Carbon offsetting is not required			

5.1 Sustainability

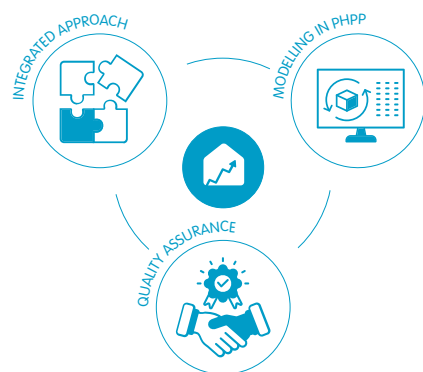
Introduction to Passivhaus/ EnerPHit

Passivhaus is a stringent energy standard proven to deliver low energy buildings over the past thirty years. EnerPHit, a version of Passivhaus standard for existing buildings, has been chosen as a well-established route to achieving net zero operational energy. Furthermore, EnerPHit Components Method allows a sympathetic approach to the historic building fabric while delivering the hallmark Passivhaus quality in design and in construction.



Passivhaus follows several key principles:

- Use building physics principles to design an energy efficient building (this includes the thermal envelope, glazing, and ventilation systems)
- Reduce the heating demand of the building
- Consider all energy uses, both regulated and unregulated, in the building design
- Use tried and tested energy modelling tools, which allow the design to be monitored throughout the project
- Employ stringent quality control during design and construction.



[Passivhaus Principles diagram from "Misunderstanding Passivhaus Principles | Passivhaus Trust"](#)

EnerPHit Component Method Key Criteria

EnerPHit is the Passivhaus institute (PHI) standard for existing buildings which follows the same principles as Passivhaus Classic but relaxes some of the criteria to acknowledge constraints of existing buildings, whilst achieving the same aims of comfortable indoor environment and low energy use.

There are two approaches to achieving EnerPHit criteria:

Component Method. Compliance is demonstrated by showing that the fabric meets limiting values for conductivity ("U-values") & that an efficient MVHR system has been installed. A PHPP of the building including its total heating demand is produced as to demonstrate compliance with the overall energy performance criteria (PER).

Energy Demand Method. This method is similar to the Passivhaus Classic criteria; however the Heating Demand limit is relaxed from 15 kWh/m².a to 25 kWh/m².a.

Irrespective of the route for certification the building must still meet:

- a demanding airtightness target of 1.0 air changes per hour at 50 Pa
- a project specific Primary Energy Renewable (PER) limit,). It is a measure of the building's total energy demand, including consumer electronics and small appliance usage. It is based on a theoretical energy grid supplied entirely by renewable energy and includes factors for energy storage and transmission. For EnerPHit this will typically fall within the range of 75 – 130 kWh/m².a of total energy use per m² of internal floor area per year (kWh/m².a), depending on the type of heating system used and presence of on-site renewables.
- The Component method is generally more suitable for building where opportunities for the fabric upgrade are constrained by the conservation and heritage considerations. Therefore, this method appears to be more appropriate for the Guildhall.

Key Design Strategies

The design for the Guildhall is underpinned by the following principles:

1. High quality well insulated building fabric help control heat loss, and protect the building fabric against mould growth:

- Where possible, Internal wall insulation, verified by the hygrothermal modelling.
- Insulated pitched and flat roofs and insulated basement floor.
- Well-insulated walls of the 4th floor extension.

2. High performance glazing: triple glazing limits unwanted heat transfer, and helps keep people comfortable by avoiding cold surfaces:

- Triple glazing as secondary glazing to most spaces .
- Triple glazing over the two atrium and as new replacement rooflights.

3. Designing out thermal bridges to minimise heat loss and surface moisture risk.

- Careful design of key junctions and details informed by the thermal bridge modelling.

4. Excellent airtightness also avoids cold draughts, protects the building fabric, and limits energy use.

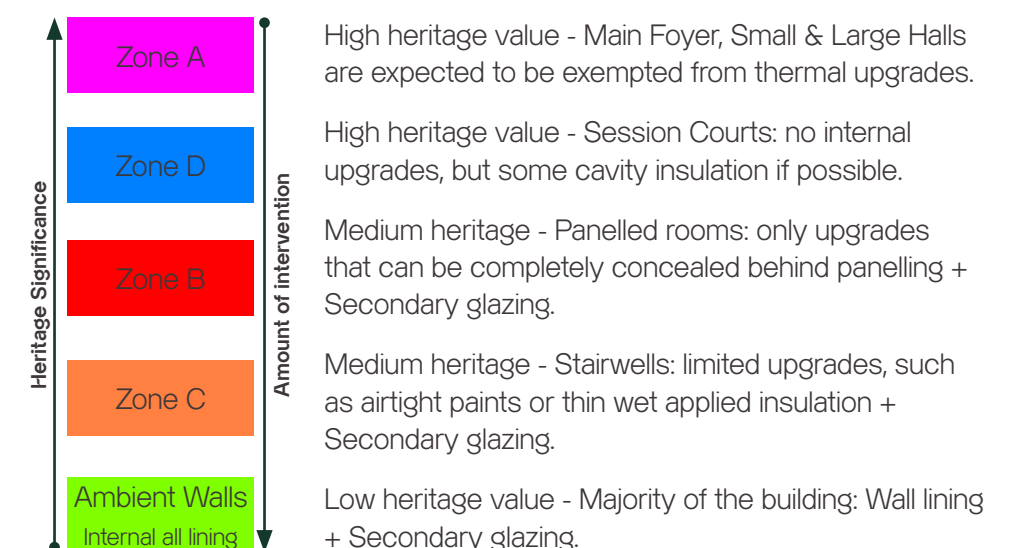
- The building is designed to achieve airtightness <1 ach @50Pa .

5. Low energy reliable ventilation: mechanical ventilation with heat recovery delivers good indoor air quality with minimal energy use, and avoids cold draughts.

- Demand controlled mechanical ventilation with high heat recovery rate to all spaces in the building.



Building fabric upgrades will follow a graded approach based on the heritage significance of the space.



5.1 Sustainability

Introduction to Passivhaus/ EnerPHit

The measures outlined above are designed to significantly reduce the heating demand. These will be complemented by additional strategies aimed at decreasing the overall energy consumption of the building:

- All-electric heating, cooling, and cooking.
- Air source heat pumps (ASHPs) as the primary heating source, set to operate at low temperatures.
- Point-of-use hot water systems to minimise distribution losses.
- Energy-efficient appliances and equipment.
- Smart controls.
- Efficient cooling systems.

The comfort cooling will be available but used only when necessary. Cooling demand will be minimised through passive cooling strategies, including:

- Natural ventilation via openable windows where possible.
- Mechanical ventilation with summer bypass and supply air tempering.
- Solar-controlled glazing.
- Thermal mass.
- Internal blinds.

Modelling results

Design currently meets limiting U-values set for the EnerPHit Component method – Please see the table below for the key elements:

Element	EnerPHit Criteria	Proposed Parameters	Part L 2022(new elements in existing buildings)
Walls (IWI) U-value	<0.35W/m².K	<0.15W/m².K	<0.18W/m².K
Walls (EWI) U-value	<0.15W/m².K	<0.15W/m².K	<0.18W/m².K
Roof U-value	<0.15W/m².K	<0.12W/m².K	<0.15W/m².K
Glazing U-value (horizontal)	<1.1W/m².K (installed)	1.1W/m².K (installed)	<1.4W/m².K (component only)
Glazing U-value (Vertical)	<0.85W/m².K installed	<0.85W/m².K installed	<1.4W/m².K (component only)
Air leakage/ air permeability @50Pa	<1.0 ACH @50 Pa	1.0 ACH @50 Pa	<8m³/m²/h
Total vent system efficiency	>75%	83%	n/a

The final Energy statement will contain further information on modelling assumptions: e.g. Internal heat gains, Occupancy profiles & diversity

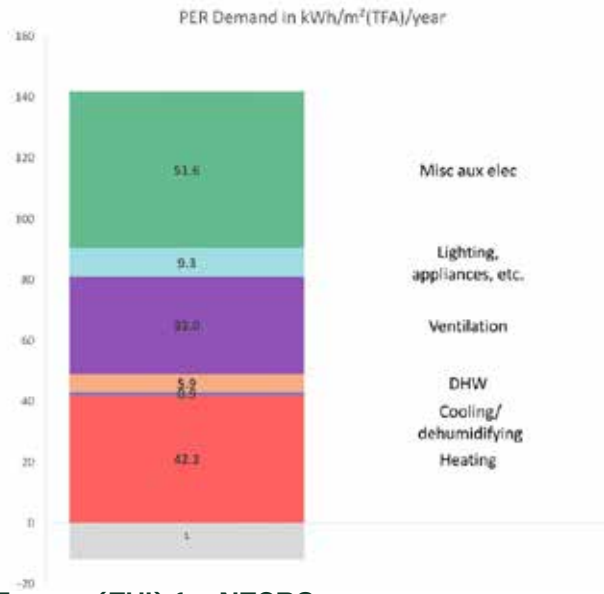
EnerPHit Primary Energy Renewable (PER):

The project PER is currently predicted to be between 130 to 135 kWh/m². a TFA, which is within the project-specific EnerPHit limit.

Even though the energy demand for space heating will be significantly reduced by improving the building fabric and installing low-carbon heating through air source heat pumps, it is anticipated that it will still be the second largest contributor to energy consumption. This is due to the limitations on the amount of fabric upgrades as well as ventilation requirements for a modern office building.

PER includes all energy uses, both regulated and unregulated, including building services and equipment. The modelling of the building services is based on the current M&E design. Where information is yet not available, e.g., on some of the catering and AV equipment, benchmark data from comparable historic projects was used.

The modelling has helped to establish the “energy budgets” available for each use. To achieve energy targets on this project, all equipment must be designed within these “budgets”.



Operational Energy (EUI) for NZCBS

The Pilot NZC Building Standard sets operational energy limits that will gradually decrease over time. Targets are differentiated based on new builds, retrofits conducted “in one go,” step-by-step retrofits, as well as by various building typologies. The Guildhall has been benchmarked against the targets for retrofit “in one go” for general office buildings for 2026 and 2030.

The final Energy statement will contain further information on conversion from PER (based on the TFA) to EUI(based on GIA).

The Guildhall is predicted to achieve an energy use intensity (EUI) between 86 and 91kWh/m2. a GIA. This is well within the 2026 target and can potentially achieve the 2030 target.

The retrofitted Guildhall is predicted to consume 66% less energy than the existing building.

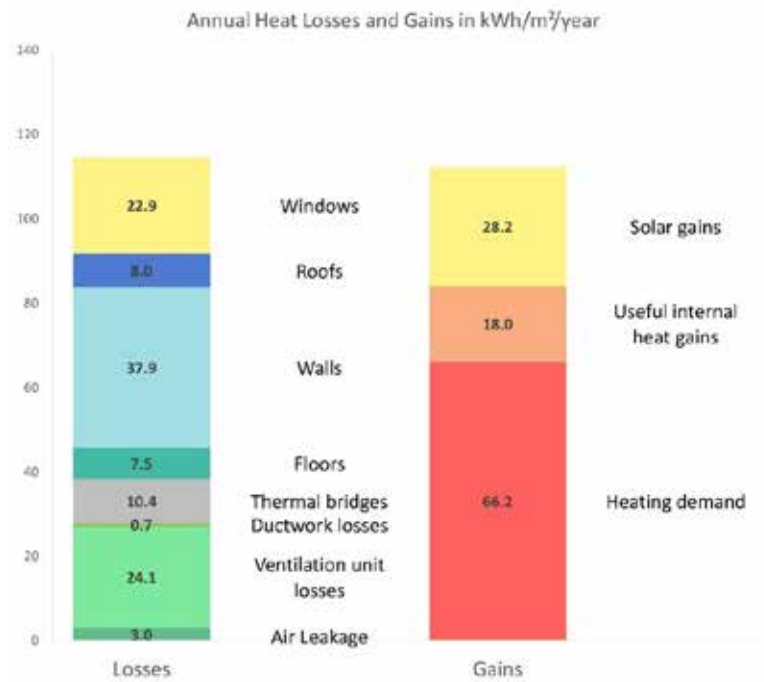
EnerPHit Specific Heating Demand

Predicted heating demand is approx. 66 kWh/m². a (TFA).

- 63kWh/ m².a (TFA) – optimistic case
- 70kWh/ m².a (TFA) – pessimistic case

Specific Heating Demand is not a certification criterion under the EnerPHit Component Method. However, since it is the second largest energy use in the building, it should be reduced as much as possible.

In Passivhaus methodology, SHD is calculated as the sum of all losses minus the sum of all gains, which can be visualized in a “Heating Energy Balance Graphs” below.



Losses include all heat losses through opaque elements, windows, thermal bridges, ventilation, and air infiltration, while gains include solar gains through windows and internal heat contributions from people and equipment.

The key design principle is to minimize losses while optimizing “useful” gains. As long as gains (solar and internal) do not lead to overheating, they can be beneficial in reducing overall energy demand.

The Heating Balance graph reveals that ambient solid walls are the largest contributors to the building’s heat loss, even with internal wall linings applied to all low-heritage-value spaces. It is closely followed by the glazing and ventilation losses.

The focus of the next stage should be further rationalising ventilation design and controls.

5.1 Sustainability

Renewable Energy

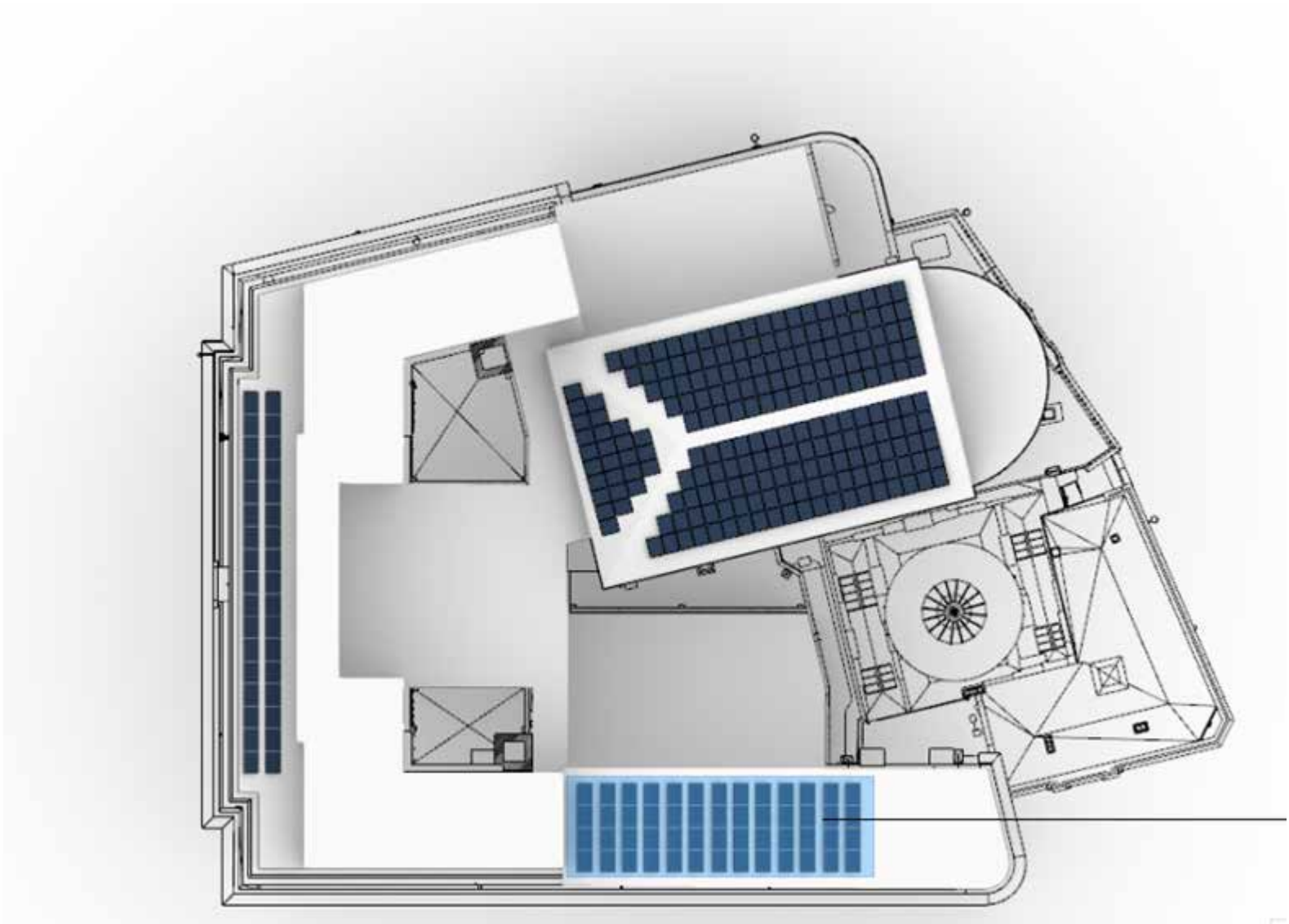
The NZCBS requires the Guildhall to generate at minimum, 45 kWh/m2 building footprint / year, equating to 85050 kWh/yr. the existing PVs are estimated to produce ~26966 kWh/yr at peak efficiency.

In order to meet the NZCBS targets, without compromising additional sustainability targets such as waste and embodied carbon, a proposed PV strategy using a mix of new and existing PVs has been designed. The remaining existing PV no longer needed on the Guildhall should be reused on other council buildings, including the Corn Exchange.

The reuse of existing PVs must be carried out by the original installer in order for their warranty to remain in place. Utility Trade Group has been contacted regarding the removal and reuse of the Guildhall's existing PVs and is able to reinstall and retain the warranty of them. Successful reuse of the existing PVs is subject to project phasing.

	PV area (m2)	Average Solar Exposure of area (kWh/m2)	Energy arriving on PV (kWh)	Energy generated by PV (Kwh)
PV on North edge	59	800	47200	9865
PV on East pitch Hall Roof	158	825	130350	27243
PV on North pitch Hall Roof	45	650	29250	6113
PV on West pitch Hall Roof	158	950	150100	31371
PV on New Build Roof	85	950	80750	11507
Total	505		437650	86099

kWh generation needed	85050
Potential kWh generation secnario 2	86099



Reusing 50% of existing PV on the new build roof area

New Build - 85m²

5.1 Sustainability

Embodied Carbon and Circular Economy

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

Upfront carbon

The project is taking part in the UK Net Zero Carbon Building Standard Pilot and targeting an upfront carbon limit of 575kgco2e/m2, for projects commencing in 2026, with an aspiration to meet the 2030 target limit of 410 kgco2e/m2. These target limits are for the whole building i.e. includes base build, Cat A and Cat B of tenant fitout.

The biggest upfront carbon contributors are MEP and architectural elements. Targeted carbon optioneering studies are ongoing to facilitate the project in succeeding these targets. A whole building embodied carbon model is to be produced to support the planning application to report against these targets. Tracking and monitoring design decisions through to completion is integral part of delivery.

MEP design balancing operational and embodied carbon challenges

Heat pump choice and location has been carefully considered to offer the best operational energy performance and at the same time reduce material relate upfront carbon emissions.

3 different plant arrangement options, using 8 different unit combinations - all using either R32/R290 (NZC compliant refrigerants) - were studied for both operational energy performance and upfront carbon impact. The proposed strategy balances both the aspects.

Ventilation layout options were driven by the inherent limitations of the existing building. Each of these options were explored, with different zone combinations. Material specific upfront carbon impacts were calculated to identify the lowest carbon layout for AHUs and riser sizing. This is to reduce distribution plant upfront carbon impact whilst also, delivering effective air distribution.

Individual office floor plate emitters choice is driven by comparison of operational energy implications alongside upfront carbon impact. Both active multi-service chilled beams and Fan Coil Units (FCUs) were considered. The proposal is for chilled beams, which have a high upfront carbon in comparison to FCUs. Even accounting for the difference in replacement cycles over a RICS 60-year building life still results in FCU strategies having a lower embodied carbon. The UKNZCBS targets are based on upfront carbon only, where opting for the FCU strategy is the clear choice. This somewhat overlooks the benefits of lifespan but highlights the

importance of carbon we spend today. Opting for chilled beams will result in higher upfront carbon associated with MEP plant and equipment.

Roof top extension with optimum structural and facade strategy

Optioneering studies are being carried out for the structural and façade strategies for the extension. This study aims to consider specific structural strategies (Cross Laminated Timber vs Timber Frame) as well external metal finish choices.

Circular Economy

Circularity Objectives

The circular economy objectives for the proposed scheme are as follows:

- Mitigation of demolition and strip out waste impacts.
- Specification of circular and low environmental impact materials
- Designed for long term flexibility and resource efficiency.
- Using the project as a springboard to support local jobs and skills to enable circular business models

Targets

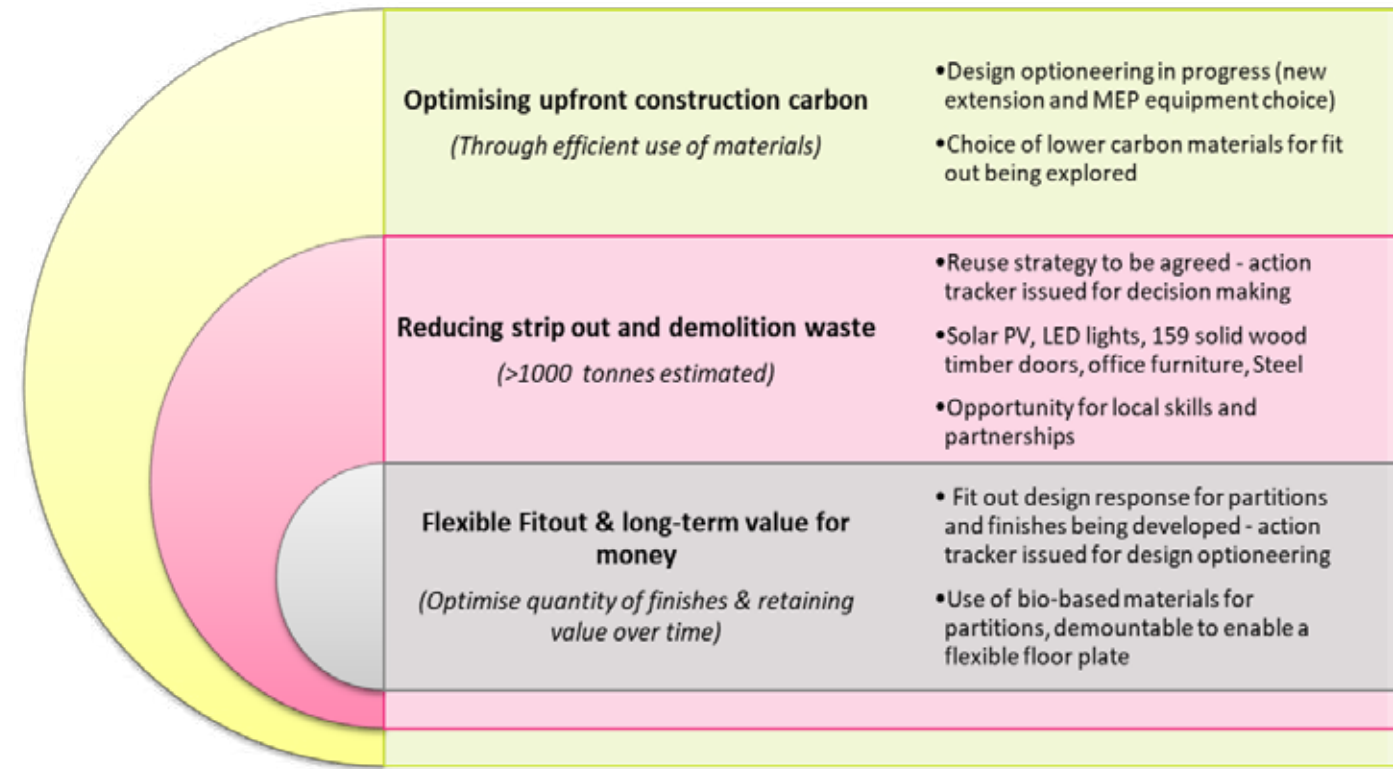
- A minimum of 95% (by weight) of demolition, construction and excavation waste to be recycled. Prioritising material reuse on site and onward reuse of strip out and demolition waste (achieving <1.2t per 100k waste).

- Aim to reuse of 0.5-1% by weight of stripped out materials on/off-site – specifically, doors carpets, secondary glazing, PV and furniture.

One of the primary objectives is to be resource efficient and reduce waste. A summary of the emerging circularity strategy for the Guildhall is outlined below.

Designing a scheme for material efficiency as well increasing the level of material reuse are important steps in reducing the embodied carbon as well as circular in design. This was also highlighted as a key desired approach in the consultation.

The following key circular economy principles are explored in developing the circularity strategy for the emerging scheme:



Low carbon design and reducing construction waste

5.1 Sustainability

Embodied Carbon and Circular Economy

Propose Circular Design Measures

- 1. Reuse existing structural steel on the 5th floor, support for new plant, local structural strengthening works, forming plant enclosure



- 2. Design partitions that are demountable to enable a flexible floor plate for multiple – tenant types and use, over time e.g. Have partitions start at 800mm high with a planter at the bottom so it's more easily adaptable, with flexible head and base details or standard bulkhead which could be changed.



- 3. Design for lower whole life carbon services strategy, reducing the quantity of equipment required. Therefore, reducing cost of maintenance and replacement over service life. Design in floor plate flexibility for multiple tenant use.

- 4. Prioritise reclaimed raised access floor – subject to availability to source. Followed by lower embodied carbon new product.



- 5. Limit the amount of bespoke internal fit out elements – e.g. design partitions with standard door height glass modules that can be handled easily for dismantling. Similarly, avoiding thinner frame partitions that can get warped in the deconstruction process.

Enabling reuse of existing building elements

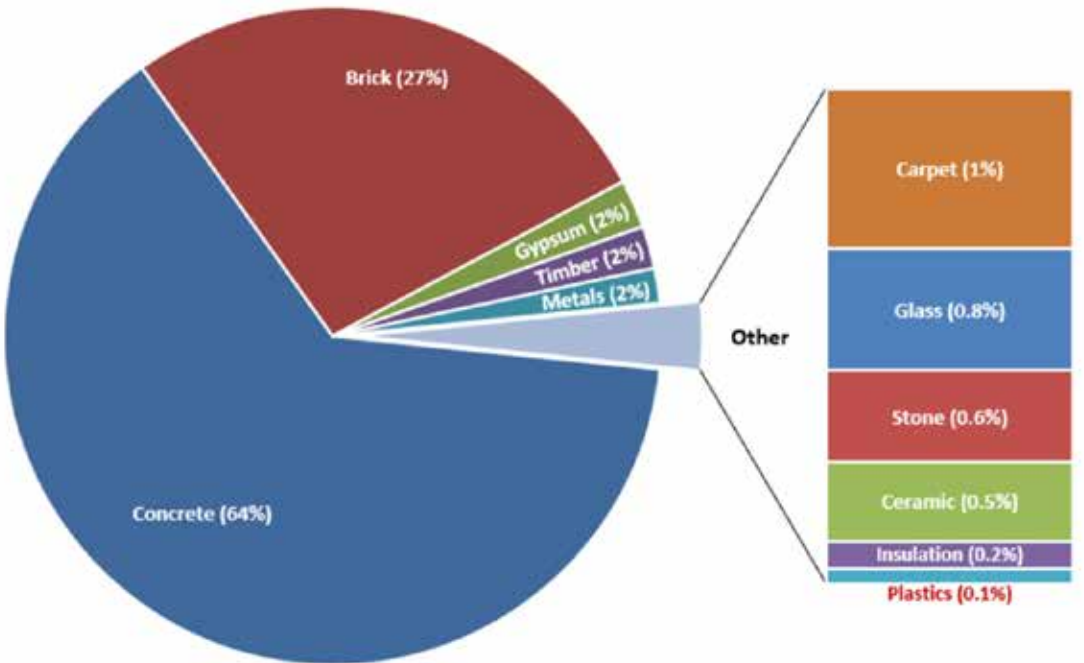
A pre-demolition audit has been carried out and a re-use and circular economy workshop was carried out to maximise waste reduction, and to ensure that circular economy principles are embedded within the design.

The total weight of demolition and strip out materials arising is calculated to be 1,056 tonnes.

The estimated Key Demolition Products (KDP) by weight are Concrete (64%), Brick (27%), Gypsum (2%), Timber (2%), and Metals (2%), with smaller amounts of Carpet, Glass, Stone and Ceramic.

See 1 below for a visual breakdown of this metric.

The audit has highlighted promising materials for reuse such as doors, furniture, light fittings, floor finishes and Solar PV. A strategy for reuse on-site and off-site is being developed.



Summary of key demolition products (KDP) by percentage weight

Reuse of existing solar PVs

Reuse existing solar PV – on site or, off-site.

Installer engagement has confirmed that warranty will be honoured if they are to reinstall elsewhere.

Large hall roof tiles that are proposed for removal for new PV, to be recovered for reuse off-site

5.1 Sustainability

Waste and Water

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 pre-demolition audit has taken place to inform the reuse of existing material and integrate them into the design. This includes furnishings and fittings such as office desks, chairs, lighting fixtures, and doors.



Waste Hierarchy

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.

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 Neutrality

The Environment Agency’s (EA) definition of water neutrality is: “For every new development, the predicted increase in total water demand in the region due to the development should be offset by reducing demand in the existing community” (EA, 2009)

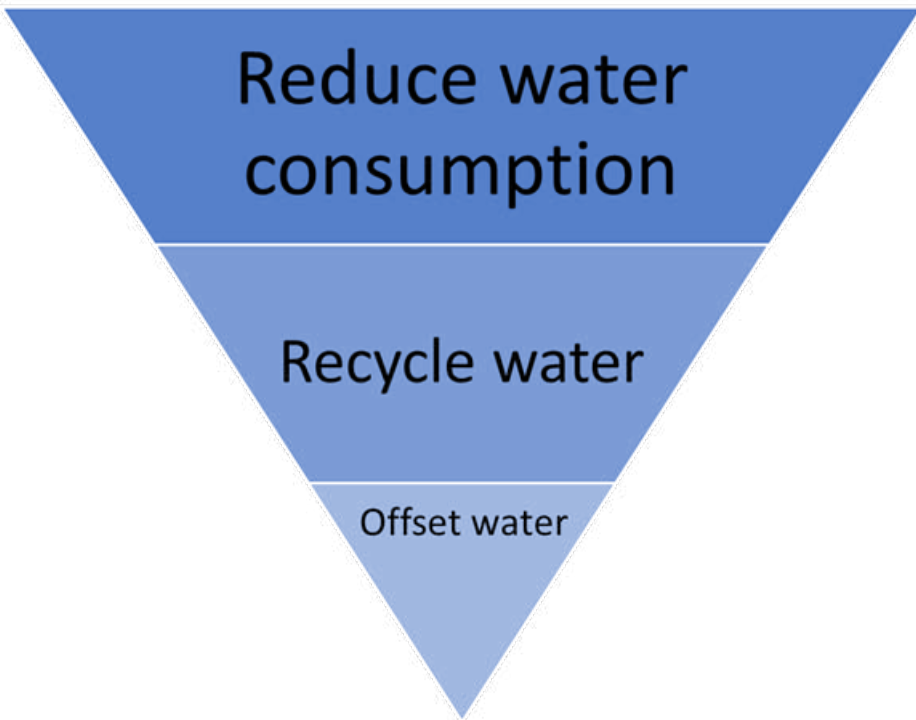
The Guildhall’s existing building water usage baseline is 4945m³/year. Through the use of water efficiency fittings and water recycling, it is proposed that the refurbishment will result in a decrease in potable water usage despite an increase in building use intensity.

This is aimed to be achieved on the Guildhall through following the water hierarchy, as seen in Figure.6, and via the following measures:

- 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)
- Rainwater harvesting has been maximised in the design to provide toilet and urinal flushing with recycled water.

Using the BREEAM Wat01 calculator and proposed sanitaryware information, we are currently achieving 5/5 credits with a 55% improvement over baseline.

Further analysis is being conducted into what real percentage of flushing demand this equates to using the size of the tanks designed and proposed occupancy diversity. We anticipate these calculations will reveal that >70% of total flushing demand will use recycled water.



Water Hierarchy



Higher than average temperatures in UK



Lowest average rainfall in UK

Thriving East Report, Anglian Water

5.1 Sustainability

Adaptation to Climate Change and Biodiversity

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

Mitigation of summer overheating

The project will use 'CIBSE TM52 The limits of thermal comfort: avoiding overheating' as the standard for assessing the building's resilience to summer overheating.

It is proposed that the developed design will meet the TM52 overheating criteria when tested against the 'CIBSE 2050 Medium Emissions DSY1 50th Percentile' weather file. (The CIBSE 2050 weather files cover the climate period from 2040 – 2069)

It is also proposed that the design will be stress tested using the 'CIBSE 2080 Medium Emissions DSY1 50th Percentile' weather file, and a suitable adaptation strategy will be suggested in response. (The CIBSE 2080 weather files cover the climate period from 2070 – 2099)

The overheating control measures incorporated in the design follow the hierarchy below, as far as possible within the limitations imposed by the existing and historic nature of the building:

- Providing openable sections in the refurbished windows to afford the occupants access to natural ventilation. The expectation is that the occupants will open the windows to promote ventilation and the removal of heat gains in response to comfort levels.
- Opportunities to use the building layout to promote cross ventilation will be maximised, including using stack effect ventilation by the provision of motorised openings at the top of the atriums.
- Making use of the exposed thermal mass of the building. The building management team will be encouraged to leave the windows open at night during warm weather to cool the building's thermal mass by natural ventilation.
- All spaces will be provided with background ventilation (with heat recovery when beneficial) which is a key element of the Passivhaus approach. The fresh air will be pre-cooled when needed via a cooling coil in the airstream. Chilled water for be generated by air cooled chillers on the roof of the building.

- The mechanical background ventilation system will work in the background to maintain good air quality levels. Its operation will be extended to run overnight to purge/passively cool the rooms when outdoor conditions are beneficial.
- The provisions above will be supplemented by in-room mechanical comfort cooling where necessary.

Heritage spaces either do not have access to natural ventilation or in-room solutions and are constrained by the limitations imposed by the need to preserve the historic finishes. These spaces will be provided with mechanical supply and extract ventilation. The existing ventilation systems serving these spaces will be upgraded and provided with a cooling coil in the airstream to cool down the air when needed to maintain comfortable internal conditions. As a priority the fans will be operated at night to cool down the rooms' thermal mass, when it is beneficial to do so. Motorised blinds are also proposed in the architectural design, which can be used to limit solar gain, especially when these spaces are not in use.

In keeping with the project's Net Zero Carbon objectives and the recommendation of paragraph 3.4.13 of the SPD, the use of the passive cooling measures described above will be prioritised. The design will allow the council to operate the building as passively as possible for as much of the summer as possible. However, due to the nature of the building it will not be possible to avoid the use of mechanical cooling. At the point of releasing the draft DAS, local mechanical comfort cooling is being proposed in the following areas:

- Rooms in the basement as they do not have access to natural ventilation.
- Ground floor rooms due to security risks with leaving the windows open at night.
- Other heritage spaces such as the council chamber, the small hall and the main hall where the use of natural ventilation is limited.

The design proposals currently include the provision of chilled beams in the office spaces as the primary heating and ventilation devices. Whether cooling will be made available through the chilled beams from the outset, or just as a future climate adaptation provision, is currently under review; and will be confirmed by the time the final DAS is released.

Water Neutrality

See Section 2.5: Water for details on how the Guildhall is targeting water neutrality and reducing total potable water demand.

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 Guildhall must achieve a Biodiversity Net Gain (BNG) of 10%. A BNG assessment of the Guildhall 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 Parsons Court and green roofs or green walls in the Guildhall are also being explored.

5.1 Sustainability

Health & Wellbeing and Transport

Health and Wellbeing

In response to:

Greater Cambridge Sustainable Design and Construction Supplementary Planning Document 2020

- 4.2 Health and wellbeing

Daylighting

Adequate daylighting in office spaces is crucial for employee’s productivity and wellbeing. Natural light boosts mood, morale, focus and short-term memory as well as regulating circadian rhythms and minimising the energy associated with artificial lighting.

Within the Guildhall, daylighting has been increased throughout the building through opening up the floor plan, creating dual aspect spaces. Furthermore, the capping of the internal courtyards and opening access to the basement has increased light levels and the usability of the basement level.

Indoor Air Quality

Indoor air quality is a key indicator of occupant health. Improve indoor air quality in office environments supports employee health, increases focus and productivity and reduces absenteeism. To maintain a low level of air pollutants in the Guildhall the design currently includes:

- MVHR throughout the building
- Meet BREEAM Hea02 TVOC requirements for furnishings.

Noise

Suitable noise levels are important for health and wellbeing, as well productivity. The design balances the sustainability aspirations (reducing the need for cooling) with the acceptable noise ingress into the building.

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 a solid noise barrier to screen the air source heat pumps (ASHPs), thereby reducing the noise levels at the noise-sensitive receptors.

Social Sustainability

The Guildhall provides both council office and amenities and services for the community. Providing the local community with private and comfortable spaces to talk to their council members as well as amenities to use whilst within the city is a key objective of the project.

Across the first floor, the space includes:

- Community café and seating area
- Changing places toilet for public use
- Breast feeding room for public use.
- Reception area to welcome and direct users.
- Customer service area with private meeting rooms
- Inclusive unisex bathroom facilities

Transport

In response to:

Greater Cambridge Sustainable Design and Construction Supplementary Planning Document 2020

- 2.3 Transport, movement and accessibility

Cycle Provisions

Bike parking and facilities for cyclists have been expanded within the refurbishment of the Guildhall to facilitate active travel and encourage occupants to cycle to work.

The basement has been designed to include 49 Sheffield stands, 102 two-tier bike racks and 8 accessible space. These bike parking spaces are accessed via a cycle stair and cycle life provision, designed to also accommodate oversized bikes such as cargo bikes.

Facilities for cyclists to shower and change have also been provided for. Lockers have been placed alongside the bike parking on the east side of the basement. One floor up on the first floor, changing rooms, showers and WCs have been located. Additional individual changing rooms have been located on the west side of the basement as well.

6.0

Heritage



6.1 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.

2.1

The Guildhall is a Grade II listed building erected in two phases, either side of the Second World War to the designs of the architect Charles Cowles-Voysey (1889-1981). He was an accomplished designer of public buildings (including town halls in Watford, Bognor Regis, Bromley and Worthing). The job architect was John Brandon-Jones (1908-1999) who had joined the practice in 1933.

2.2

The west side of the building was completed first and allowed the earlier civic buildings to remain. The original public hall (now large hall) and library form a separately Grade II listed building designed by Peck and Stephens in 1862). These remain to the rear of the Guildhall and include additions of 1884 by G MacDonnell. When Cowles-Voysey's Guildhall was completed to the east, it included a new small hall which could act as a foyer to the large hall which was incorporated into the new building (though the former library buildings onto Wheeler Street remained separate). It had originally been proposed to demolish all the C19 buildings and replace them with a larger assembly hall.

2.3

The historic interest of the Guildhall derives from its standing on a site which has been occupied by municipal buildings probably since the C14. The building and its predecessors have been at the heart of matters affecting the City for many centuries. The historic interest of the building will not be affected by proposals for the building.

2.4

The architectural interest is more vulnerable to change through proposed works. The architectural interest of the Guildhall derives from its stripped-Classical 1930s form and symmetry (particularly the north elevation and despite its two-phase construction, visible in the slight change in brick colour). The rather austere external detail is enlivened by the entrance doorways, rusticated plinth and balconies and the attic storey with deep cornice and partly balustraded pediment. The homogeneity of the building materials (Clipsham stone, Williamson Cliffe brick and bronze windows) adds to the architectural quality and character of the building. The associations with Cowles-Voysey and Brandon-Jones, very accomplished architects of their era, also adds to the architectural interest.

2.5

Part of both the architectural and historic interest of the building stems from the planning and the way the large hall was incorporated whilst excluding but retaining the earlier library buildings. The plan also allowed for the formal suite of Council rooms to be accessed directly off the market square, but with the two courts given their own entrance off Peas Hill. The use of the atria allowed light to the Council Chamber and the link corridors behind it, whilst the Chamber and the two courts needed to be top-lit due the nature of the site.

2.6

The interior adds much to the architectural interest of the building, as reflected in the list description and identified on the previously prepared plans of heritage significance produced by Cartwright Pickard and agreed with the council officers earlier in the detailed design process. Of particular note are the entrance / stair hall with its accomplished use of marble and bronze and the Council Chamber which leads from it. The Committee Rooms, Members' Rooms and also the Chief Executive's office all have walnut used for wall panels and in the furniture (not part of the listing). The small hall with its barrel-vaulted roof and Neoclassical detailing is also of note as are the two former Courts at ground floor level on the Peas Hill side of the building.

2.7

The decoration of the Council Chamber includes the coffered ceiling with glazing, leather-panelled walls and oak benches together with original curtains and hangings and the City's coat of arms behind the raised dais. Some of this detailing was reflected in the ground floor court rooms, though the Police Court has been stripped of features since the building was listed.

2.8

The building was designed with a clear hierarchy and with an eye on the level of use. The principal entrance and rooms are therefore of the highest quality materials. The secondary entrance and other spaces, rather than having marble, therefore have terrazzo, whilst the Guildhall Street entrance and stairs, which gave access to the public halls, were covered with rubberised finishes by Dunlop.

2.9

Beyond the main civic spaces, the standard offices were rather plainer. Walls were plastered with plaster cornices and windows had tiled surrounds. The grained timber doors were perhaps the main features and they accessed long corridors with WCs, small kitchens off in the interior of the site. In places, the 1930s WCs survive with their terrazzo finishes and occasional original sanitaryware.

2.10

Whilst the building retains many of its original features, there are areas which have been altered and are of little architectural interest. These include the ground floor reception area, which has been altered several times over its history, some of the altered WCs, the lifts (added later), the atria and basement areas. Although the latter has not been particularly heavily altered, it was never built with any architectural pretension. Exceptions in the basement, which are of higher significance include the steps down from the dock in the Sessions Court and surviving cells.

2.11

The exterior of the Guildhall, its principal rooms, stairs and lobbies to the civic spaces are considered to be of high heritage significance. The service areas and much altered spaces are of low significance whilst the general offices and other secondary areas are considered of moderate significance.

Impact of Proposed Works on Heritage Significance

2.12

The proposed works have been carefully considered throughout the detailed design process, including through various rounds of engagement/pre-application meetings with LPA officers and Historic England (and Design Review Panel), seeking to minimise as far as possible, impacts arising to the heritage significance of the listed building. There is however a balance to be struck between maintaining (preserving) its significance and ensuring that the building is brought back into more active and long-term sustainable use, which meets the future requirements of the building, with the building in a state of considerable disuse at present.

2.13

The main impact on the external appearance of the building will be the proposed introduction of a new extension at level 4 on the west side of the building together with the roof plant enclosure over the main roof area. The proposed extension would effectively continue the mass of the existing top floor further to the south along the Peas Hill elevation towards Wheeler Street. Thus, the only place this extension would be readily visible from ground floor level would be from the Wheeler Street / Peas Hill / Bene't Street junction and when looking east along the southern leg of St Edwards Passage (from where some of the roof-top telecommunications plant is currently visible above the parapet). The visual impact and height of the increased mass to this elevation can be gauged with reference to views of the existing fourth floor of the building to

6.1 Heritage

Heritage Significance and impact of Proposed Works

the northern end. Specifically, this can be experienced from the northern leg of St Edwards Passage (e.g. adjacent to David’s Bookshop) where the existing taller fourth floor can be seen. From within/along the majority of Peas Hill, the narrowness of the street, imposing height of the Guildhall and the prominent cornice and parapet means that the recessed upper floor would not be readily apparent.

2.14

Furthermore, the proposed fourth floor extension is set back behind the parapet and similarly recessed from the building line of the existing fourth floor element, as well as being lower in overall height. This creates an element of subservience to the existing building, which in combination with the contemporary choice of bronze metal cladding, as opposed to a brick finish, clearly distinguishes this as a complementary later element and extension to the building. In sympathetic reference, and to ensure that the proposed extension is successfully and visually integrated with the existing building, the proposal does replicate the ordered/ rhythmic fenestration arrangement to maintain the horizontal and vertical lines/emphasis of the existing building.

2.15

At roof level towards the northern end of the Guildhall, it is proposed to introduce a new louvred plant screen around a new roof top plant area, with this new plant necessitated by the enhanced environmental performance of the building. As the symmetry of the main elevation of the Guildhall is an important aspect of its architectural form, it was considered better to design the roof line with a consistent new roof-level plant screen as proposed. Additionally, similar to the fourth floor extension, the proposed louvred screen will be set back from the parapet and stepped in to respond to the recesses and changes in the existing building. The screen will be visible in long views, particularly across the Market Square, but is designed with a materials and colour palette which responds contextually to the existing building, comprising a bronze effect metal finish similar to the existing metal work/windows of the building. Thus, notwithstanding the additional height, it is considered that the plant screen will read as a sympathetic and subservient later addition.

2.16

Overall, the impact on the external appearance of the building is considered to be limited and would give consistency to the respective elevations from the Market Square and along Peas Hill, preventing views of the proposed rooftop accretions. It is however important to acknowledge that existing views to the roofline already comprise an unfortunate awareness of existing plant/telecommunications equipment rising in an ad-hoc manner above the parapet, particularly from the Market Square. The plant screen therefore, whilst increasing the overall visible height of built form, would create a sympathetic and consistent building line atop the building. The set back screen would also read as a background element and draws less focus away from the important architectural quality and character of the front elevation from the Market Square than the existing situation.

2.17

An aspect of how the building helps respond to climate change will be from roof-level PVs. The plant enclosure will necessitate the removal of some of the existing PVs. It is therefore proposed to replace these on the roof of the Large Hall which, as noted, is separately Grade II listed from the Guildhall itself. The PVs would be placed on the main roof slopes only and not the apsidal end to Wheeler Street which is more visible. Additionally, it should be noted that the proposed PVs have been carefully arranged/position to form a consistent pattern to the respective roof slopes, to avoid visually distracting pattern or ad-hoc aesthetic on the roof structure – particularly in any longer views where the main roof is visible from street level at the end of Bene’t Street where it meets Wheeler Street / Peas Hill. These are also proposed to be fixed to a raised framework/brackets, which will ensure the PVs could be easily removed and/or changed if/when required in the future to accommodate improvements in PV technology.

2.18

Another change to the external appearance is within the internal lightwells. Currently these are not attractive spaces, functional rather than of any aesthetic merit. The proposed works would utilise these spaces and

allow them to bring light more effectively into the new foyer and basement spaces. To achieve this, some internal walls will need to be removed as will the lift shafts, the latter being replaced with more attractive glazed lifts. New lightweight glazed roofs will enclose the atria. These areas are of low heritage significance whilst the reception space (i.e. the area behind the stair hall and lobby) has been much altered. These works are considered, in overall terms, to enhance the internal quality and environment of the building with minimal impact on heritage significance.

2.19

To enhance accessibility through the main entrance, it is proposed to install a new platform lift within the steps in the entrance way, which will allow all users to access the building via its main entrance without being visually intrusive. This will cause a degree of impact to existing stairs/fabric, but is a necessary intervention and the most sensitive approach to providing unassisted, step free access into the building. Alternative options considered, including a ramped access, would require a greater degree of intervention into the lobby area and thus impact on existing fabric.

2.20

Generally, proposed changes to the interior of the building relate mostly to the removal of walls in the basement and upper floors to rationalise the layouts to suit the proposed new offices and other uses of the building. These areas are of less heritage significance. A desire to create a more adaptable, open plan form in some of these areas will mean the loss of the original character of smaller, cellular offices accessed from corridors, which will cause some ‘harm’ in heritage terms. However, there will be a greater retention of this cellular character at first floor level, together with retaining the general plan form of the more significant spaces within the building, including to the main civic rooms, together with the stairs and corridors. This in contrast therefore would preserve a key aspect of the building’s heritage significance.

2.21

The exception to this relates to the fixtures within the Council Chamber, which currently retains the vast majority of its original fittings. However, the fixed furniture and stepped floor make this a particularly difficult space to access for all users for its primary function. It is therefore proposed to carefully remove this furniture to open up the space and make this more flexible, both for its primary function, but also to provide future flexibility within this key space at the heart of the building, to meet future requirements. The carefully removed furniture will be replaced with contemporary alternatives, which are free moving to accommodate changing seating requirements and functions of this key space. The historic seats to be removed will be retained within the Guildhall, with some repurposed as seating within the proposed ‘lounge’ use of the former Police Court with others to be stored on-site under the large hall and/or used within the large and small halls.

2.22

Other alterations within the Council Chamber include the introduction of a new raised floor level mechanism/ or manual flooring approach, which will allow for changes in the tiered arrangement/use of the space, subject to the function being held. Similarly, a discreet new platform lift will be introduced to provide access to the dais. Additionally a glazed balustrade will be introduced at the gallery level, primarily to increase/ provide fall protection and allow this space to become usable again by the general public as part of the use of the Council Chamber.

2.23

Overall, the proposed interventions to the Council Chamber are considerable and will have an adverse impact/cause heritage ‘harm’ to the historic fabric, plan form and general arrangement of this key space within the building, which is largely unaltered. However, the harm arising to the significance of this space is to a degree minimised by the retention/careful storage of the original seating/historic fabric within the Guildhall,

6.1 Heritage

Heritage Significance and impact of Proposed Works

together with the reinterpretation/re-use of some of this historic fabric as new seating within the former Police Court (and in possible other locations within the Guildhall). Other aspects of historic fabric within the space, namely the coffered ceiling with glazing, leather-panelled walls, original curtains and hangings, the City's coat of arms and the raised dais would all be retained unaffected. The public gallery would also be largely retained with only the aforementioned modest alterations, for safety reasons.

2.24

Therefore, whilst the proposed removals/changes to the existing seating arrangement will cause a degree of heritage harm to this space, the changes will however facilitate the longer-term continued use of this space for its original (and historic) function as the seat of democracy for Cambridge. Without such interventions, it is likely that in the future, this key space will become increasingly incompatible for its original function and use, such that Council meetings need to be relocated. In such a scenario, this space would likely become significantly unused, given that the current seating arrangement does not lend itself to many other uses/functions. Accordingly, whilst there will be some heritage harm to this individual part of this listed building, this needs to be carefully considered as part of the overall planning balance, weighing heritage harms against the cumulative public benefits of the proposals. This includes securing the optimum viable use of this building, in support of its conservation as a designated heritage asset.

2.25

Within the other main civic spaces, the Sessions Court retains the majority of its original fixtures/fittings, together with the dock and stairs down to the cells in the basement, which will be retained, with minimal alterations to this space. Specifically, the judges raised dais, dock and stairs, wall finishes and coat of arms together with the benching, will all be retained to allow the original form and use of this space to be understood. Conversely, the adjacent former Police

Court has however been stripped of almost all its original fittings. Thus, it lends itself to the proposed new commercial lounge offering, with the introduction of seating relocated from the Council Chamber.

2.26

Other proposals internally include better insulation and providing better secondary glazing to the windows, replacing the present secondary glazing installed in the early 2000s.

2.27

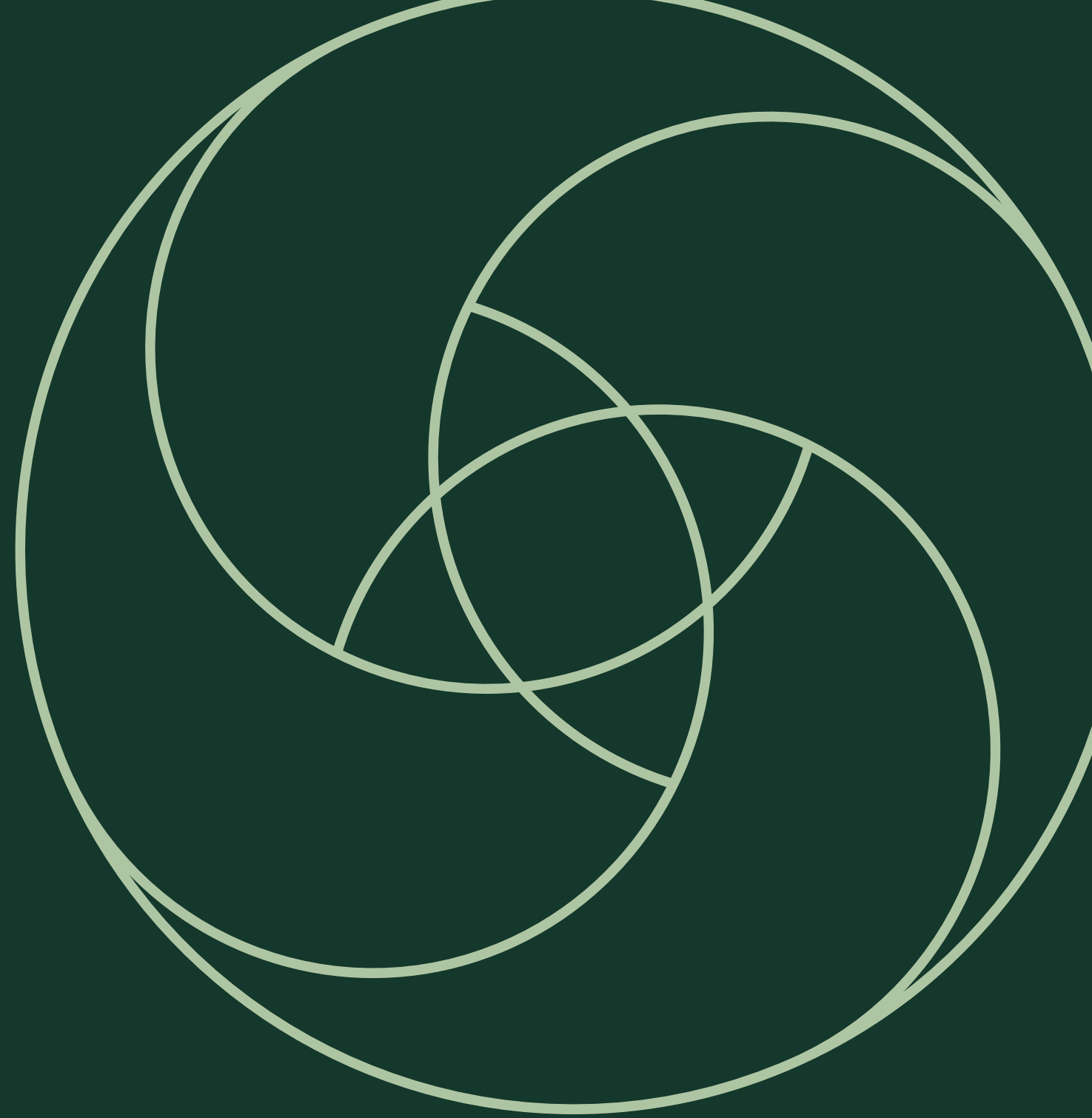
In overall terms, the proposals to the Guildhall will cause a degree of less than substantial harm to significance of this listed building, primarily arising from the impact of opening up parts of the present cellular plan and the proposed alterations, including removal and/or relocation of the present fixed seating from the Council Chamber. This harm, in overall terms, is considered to be unavoidable in order to secure the optimum viable use for this listed building as a whole.

2.28

The applicant has given great weight and importance in seeking to avoid this harm in the first instance, and then minimising and mitigating such harm where it is unavoidable, in order to deliver the overall public benefits that the scheme offers for this important designated heritage asset at the civic heart of Cambridge. Nonetheless, the proposed development would cause a minor degree of less than substantial harm to the significance of the listed building as a whole. As required by the NPPF, and in light of the great weight and importance to be placed on the relevant statutory duties, this harm falls to be weighed in the balance against the overall public benefits of the proposed development.

7.0

Conclusions

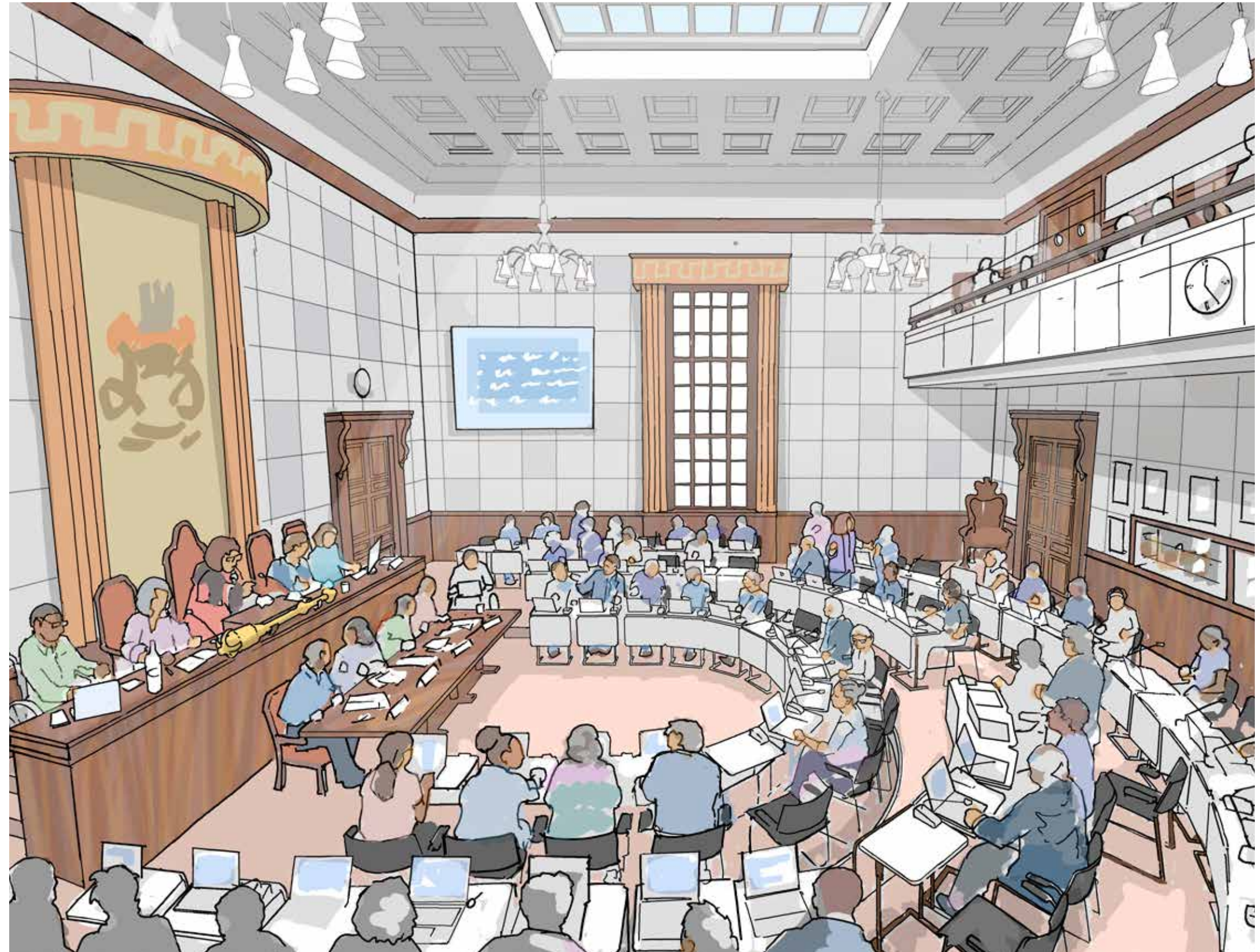


7.1 Conclusions

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 Guildhall is a key component of the Civic Quarter project and will deliver the following key benefits;

- The reinvigoration of a thriving, sustainable, accessible and welcoming seat of democracy
- A refurbishment which will enable a net zero carbon in operation Guildhall, leading the way for Cambridge City Council's Net Zero 2030 pledge
- Reducing predicted energy use by 66% through the implementation of EnerPHit principles
- Future proofing the Guildhall to enable it to continue to act as the seat of democracy in light of Local Government Reform and the introduction of a Combined Authority
- Opening up the Guildhall to the public and making it a welcoming, accessible and inclusive place
- Providing a much improved set of Civic facilities, with refurbished Large and Small Hall, Committee rooms and Council Chamber, enabling greater use by the community
- The proposed works will protect a valuable and much loved Listed heritage asset
- The upgraded Guildhall will contribute greater revenue, through the letting of commercial office space, and therefore help protect the Council budgets and frontline services.



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

