

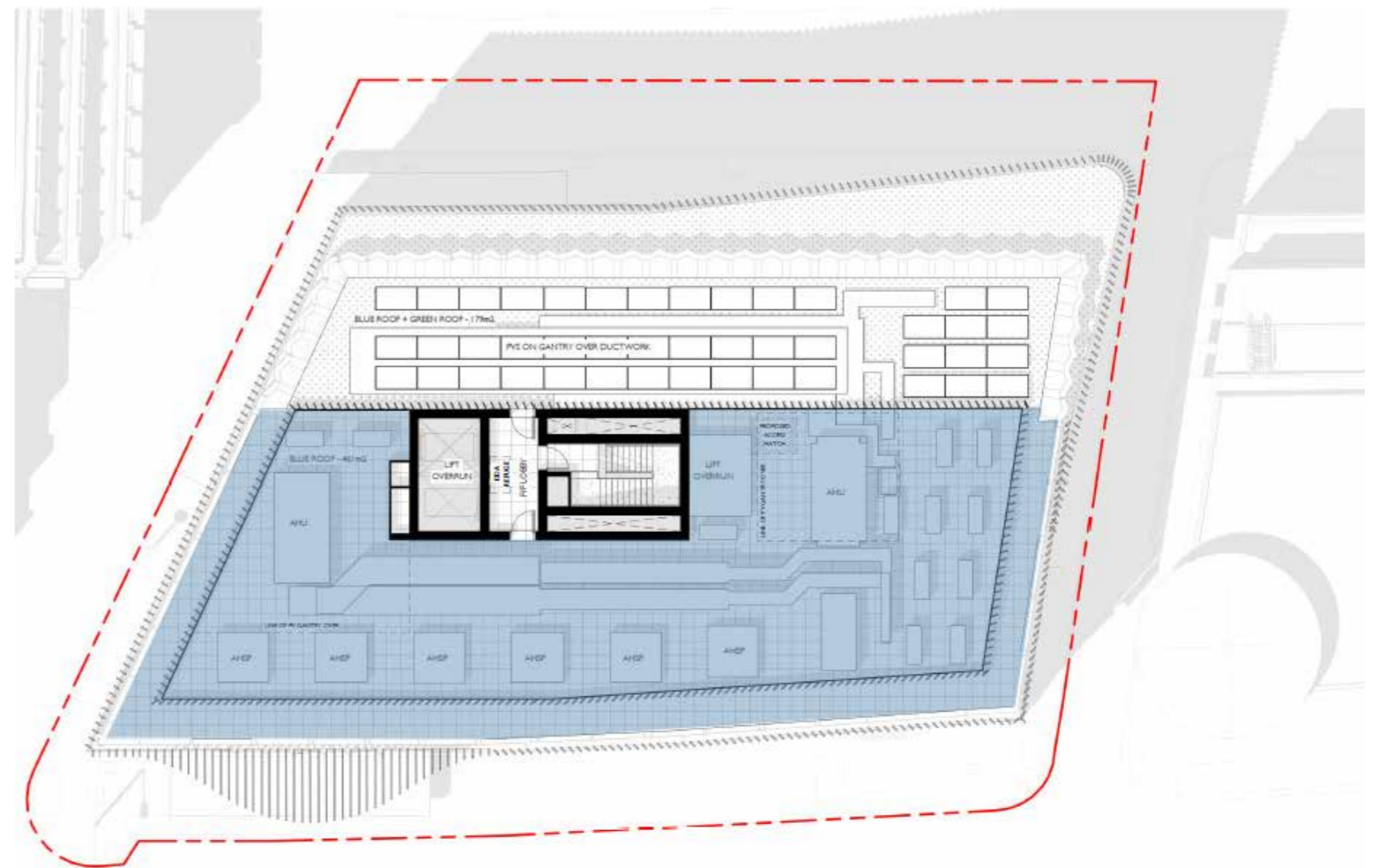
### 8.3 LANDSCAPE DETAILS

#### Landscape Elements Illustration



Blue roof attenuation technology is proposed to store rainfall under permeable paving on the roof to allow a controlled means of discharge.

#### LEVEL 11



# ENERGY & SUSTAINABILITY

9.0

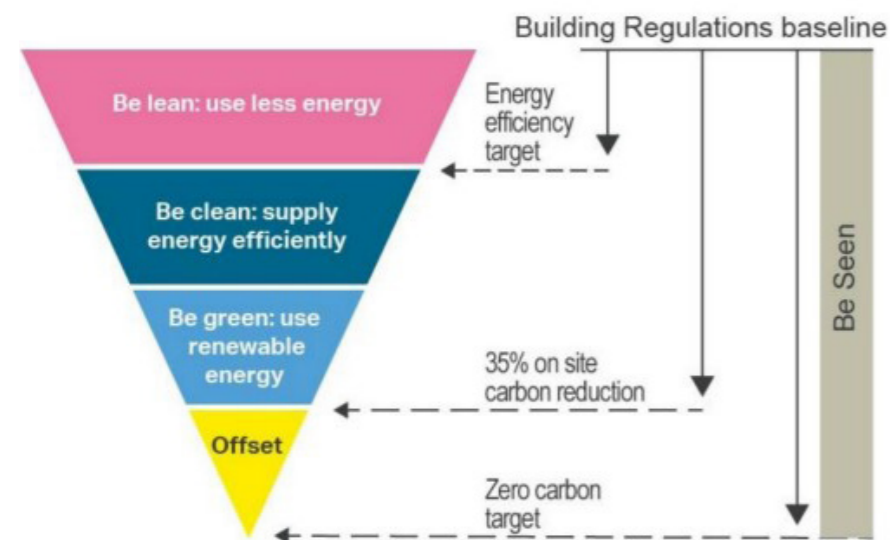
## 9.1 ENERGY STRATEGY

### Energy Strategy

The energy strategy adopted for this project proposes recommendations regarding the approach to reducing carbon dioxide (CO2) emissions and optimising energy efficiency within the development. This strategy summarises the pertinent regulatory and planning policies applicable to the Proposed Development, and sets targets commensurate with these policies, which the Proposed Development will seek to achieve. The Energy Strategy has been developed using a 'fabric first' approach through the 'be lean', 'be clean', 'be green' energy hierarchy.

The strategy will be assessed against the New London Plan (2021) which requires that Non-residential developments should target 'zero carbon' – i.e., 100% reduction in CO2 emissions for regulated uses. Of this target, 15% should be from passive measure and a total 35% reduction should be achieved from on-site measures. Any shortfall is expected to be made up by a cash-in-lieu payment. The London Plan also stipulates that major developments should comply with regulations around selecting heat sources for communal heating supply and must monitor and report their energy performance post construction so as to demonstrate alignment with the net zero target.

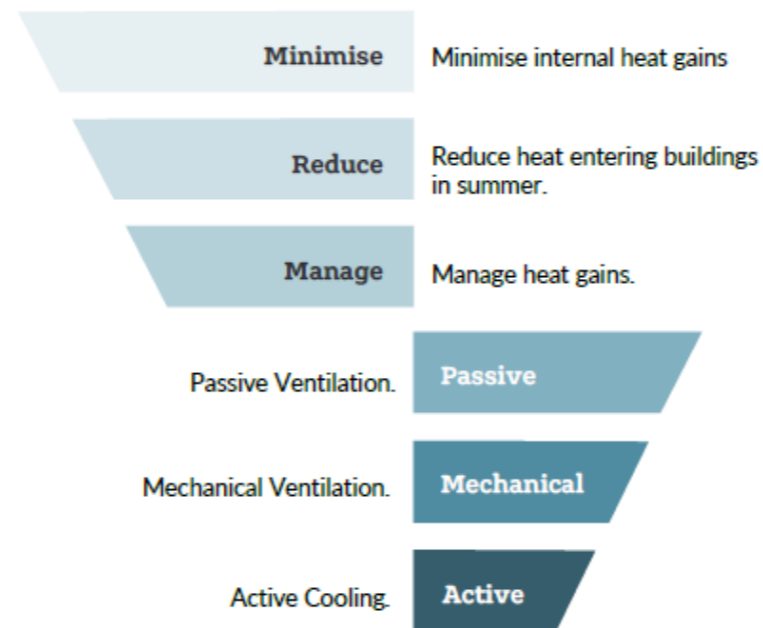
Additionally, the strategy has been formulated to ensure that the development will meet the requirements for both national and local policy with specific consideration of The Camden Local Plan (2017), the Camden SPD Energy Efficiency and Adaption (2021) and Building Regulations Part L (2021).



### Overheating & Cooling

In tandem with the energy and CO2 emissions appraisal, measures for the minimisation of cooling demand and mitigating risk of overheating have been considered.

The London Plan Policy 5.9 (Overheating and Cooling) requests that developments should reduce potential overheating risk and reliance on air conditioning systems. A 'cooling hierarchy' is provided below and the Proposed Development has sought to follow this hierarchy.



#### Minimising internal heat gains:

The following mitigation methods will be implemented to minimise the internal heat generation through energy efficient design at the Proposed development:

- Energy efficient lighting (i.e. LED) with low heat output.
- Insulation to heating and hot water pipework and minimisation of dead-legs to avoid standing heat loss.
- Energy efficient equipment with low heat output to reduce unnecessary heat gain.

#### Reducing the amount of heat entering the building in summer

The following mitigation methods will be implemented to reduce the amount of heat entering the building in summer within the proposed development:

- Facades have been developed with suitable glazing-to-solid ratios, with particular focus on south facing orientations.
- Suitable g-values will be specified to further control solar heat gains as required; and
- Buildings will have the capability for internal blinds to be installed to improve occupant comfort.

#### Manage heat gains

- Opportunities to expose thermal mass to help to further regulate internal temperatures will be explored where possible.

#### Passive ventilation

- The potential for passive ventilation via opening facades to facilitate a mixed-mode ventilation strategy has been considered within the facade design and will be evaluated further during the next stage of design.

#### Mechanical ventilation

- Mechanical ventilation is an important element of building services, to maintain good indoor air quality throughout the day by providing fresh air and extracting vitiated air. Providing fresh air minimises the risk of stale and stagnant air and limits the risk of condensation and mould growth as well as benefitting the occupants' physical and mental wellbeing. Heat recovery mechanisms will be provided to save heating energy. Mechanical ventilation plant will be located away from pollution sources, typically at roof level. It is anticipated that the design flow rates specified will aid the regulation of internal temperatures in summer months.

#### Active cooling

- As the final step active cooling is specified, in order to keep internal temperatures within acceptable limits. The façade and building services have the ability to enable a fan coil unit cooling solution.

## 9.1 ENERGY STRATEGY

### Passive Design

Passive design and energy efficiency measures form the basis for the reduction in overall energy demand and carbon emissions for the proposed development. This energy strategy aims reduce the energy demand initially by optimising the envelope and building services within the development.

Passive design measures are those which reduce the demand for energy within buildings, without consuming energy in the process. These are the most robust and effective measures for reducing CO2 emissions as the performance of the solutions, such as wall insulation, is unlikely to deteriorate significantly with time, or be subject to change by future property owners. In this sense, it is possible to have confidence that the benefits these measures will continue at a similar level for the duration of their installation.

Elements that are typically key considerations for passive design such as siting/ orientation and Layout/Design are less impactful for the proposed development which, as a Grade II listed building in a high density area, is constrained in terms of its existing envelope and orientation. As a result, Passive design is proposed to be achieved within the Development through the implementation of high performance fabric materiality and the specification of energy efficient technology such as low energy lighting and mechanical ventilation with heat recovery.

The Part L 2021 results for the passive design strategy are in line with the GLA position that non-domestic buildings are likely to find the 15% carbon reduction challenging when assessed under Part L 2021, until such time as technology improves.

The GLA guidance states that in the intervening period, applicants should continue to aim to maximise carbon reductions from passive measure as far as possible. This has been demonstrably achieved at the Proposed Development, which has followed the energy hierarchy and exhausted all feasible and practical passive design measures.

Table 2 below shows a breakdown of the anticipated carbon reduction for the new build extension hotel.  
Table 2: Carbon reduction summary- New Build Hotel.

	Site-Wide Regulated Carbon Dioxide Emission Savings (tonnes CO <sub>2</sub> /yr.)	
	Regulated	Unregulated
Baseline: Part L 2021	46.41	11.9
After energy demand reduction (Be Lean)	63.85	11.9
After heat network / CHP (Be Clean)	63.85	11.9
After renewable energy (Be Green)	46.06	11.9
	Site-Wide Regulated domestic carbon dioxide savings (tonnes CO <sub>2</sub> /yr.)	
	(tonnes CO <sub>2</sub> /yr.)	(%)
Savings from energy demand reduction	-17.4	-37 %
Savings from heat network / CHP	0.0	0.0%
Savings from renewable energy	17.8	38.3%
<b>Cumulative on-site savings</b>	<b>0.3</b>	<b>0.8%</b>

System parameters	
Ventilation	<b>Mechanical ventilation with heat recovery</b> Heat recovery efficiency: 74.7% - 90% dependant on space type System specific fan power: 1.60 W/(l/s)
Lighting	<b>All low energy LED lighting</b> <b>Hotel Installed Power Density: 100 lm/W</b> <b>Theatre Installed Power Density: 100 lm/W</b> Lighting Controls: Auto on-off with daylight dimming in perimeter areas.

Full simulation inputs depicting the Proposed Development at the be lean stage are provided in Appendix A.

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### Monitoring & Reporting

Effective energy metering will be enabled by the provision of suitable infrastructure within the building's services systems.

The applicant is committed to reporting sustainability performance, methodology and data every year in a transparent way, following the GRI guidelines. An annual Sustainability Report is published which contains agglomerated data concerning the Energy, Water, Waste and Greenhouse Gases reports of their portfolio.

The Proposed Development would therefore fall under the applicant's corporate sustainability monitoring and reporting regime. The developed strategy will allow for an exhaustive metering of all the various energy usage in the facility. This will enable Energy Intensity and Carbon Emissions to be monitored, and the data included within the Annual Sustainability Reports.

Electrical meters will be provided on the main central Air Source Heat Pump(s), providing data on plant energy consumption throughout the year. Each area of high energy load will be sub-metered in order to monitor energy consumption in greater granularity and facilitate reporting. All the main sub-systems (i.e. small power, lighting etc) will be separately monitored and their energy usage separately accounted. Energy intensity and carbon emissions will be monitored and reported annually.

The applicant has also completed the planning stage of the GLA's be seen spreadsheet and at future stages will update the spreadsheet and follow the GLA's suggested be seen energy reporting protocols via the appropriate webs portals once these are available, at the appropriate stage.

## 9.2 SUSTAINABILITY

### Physical

The development will achieve Net Zero Carbon in line with the GLA London Plan, and with the Camden Local Plan goal to achieve a 19% reduction in Whole life Carbon intensity by 2030. WLC emissions will be measured and reduced in line with good practice industry standards laid out by LETI. This will be achieved via a Whole Life Carbon assessment, which will identify areas of improvement and mitigation. Offset upfront emissions and operational emissions will also align with UKGBC Net Zero Definition. Operational energy use will be minimised by using RIBA design principles.

Circular economy principles will be employed, including the development of a circular economy statement and a waste strategy. Waste will be diverted from landfill for reuse and recycling, with at least 65% of operational waste recycled in addition. At least 95% of the construction waste material will be recycled or reused. Once operational, facilities for organic waste will be provided, increasing the potential for circular resource use in the future.

To reduce flood risk, nature based sustainable drainage will be explored with the aspiration for no surface runoff on the site. This will employ the use of rainwater capture and storage for the purposes of irrigating green roofs and walls. Sustainable Urban Drainage Systems (SUDS) used on site will reduce the percentage of rainwater discharged to sewer. Green planting and urban greening will facilitate cooling and carbon sequestration for the development.

### Social

The development will be designed to be a safe, inclusive environment, where local people are involved and communities can work, visit, and be entertained.

The Proposed Development will create permanent local opportunities for employment and create a new source of attraction for tourists and the wider community. Additionally, the development will support the creative arts significantly, providing a setting for its exhibition and development.

The Proposed Development will hold accessibility at its core, not only in physical terms; providing the means and support systems in place so that those with physical ability differences are included, but also of socio and economic accessibility; in which the local community are included throughout the design process to shape their local environment and have the means to engage with the new space financially. This is intended to increase the accessibility of the development to a broader group of people and contribute to a diverse clientele group.

This site will include natural surveillance design features and pedestrian amenities that support the presence of people in the area for large parts of the day and night.

The development will be the setting of a significant increase in positive social interactions in the area, strengthen community cohesion.

### Economic Capital

People will experience increased income in several ways through living and working in the Shaftsbury Avenue Development. Energy efficiency will lower occupations costs and increased local trade will benefit both business owners and employees. Spending that will benefit a wide range of people is likely to be a consequence of increased levels of pro-income in the area.

The quality of the jobs that are created in the new development, and in the surrounding community, will be associated with good pro-social principles. This includes progressive recruitment policies, supportive management styles and fair pay. Better experiences at work will lead to increased social value for both employers and employees.

Affordable workspaces, and inclusive, equitable and aspirational employment and training opportunities will create a positive impact and strengthen the sense of place and community. Knowledge and skills will be promoted by providing permanent spaces for life-long learning and temporary spaces (in public realm and other outdoor areas) where activities and events can offer continuing support for visitors and the surrounding community.

Maximising appropriate economic growth will be for the benefit of all if it leads to a net increase in job opportunities, reduces inequality and builds prosperity in the area. The scheme will be designed and delivered to maximise economic growth, building on local sector strengths through a coherent economic strategy that aligns with Borough policies and aimed at generating good jobs in sustainable growth sectors at the site and in the wider area. The scale of economic growth will be maximised by attracting businesses that provide skilled jobs and pay a higher average wage. We will achieve this by capitalising on existing assets, attracting strong anchor institutions, and securing inward investment.

### Human

The buildings and open spaces at Shaftsbury Avenue will be designed to encourage active lifestyles and reduce factors that contribute to negative mental health. It will minimise pollution and disturbance and offer opportunities and spaces that improve that way people feel about themselves and the area.

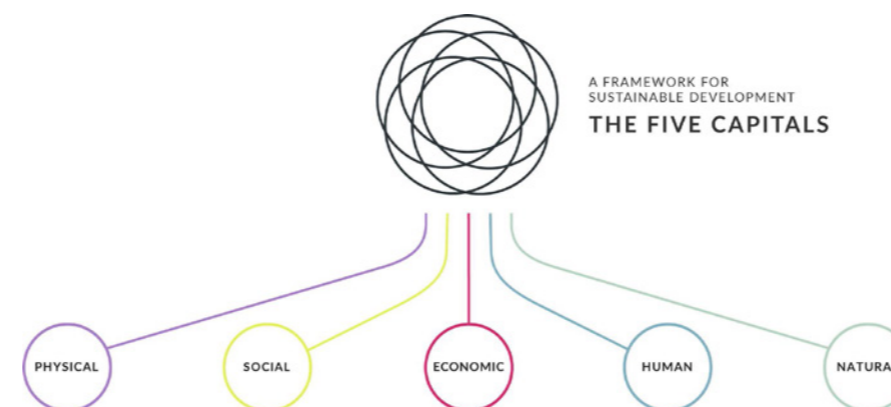
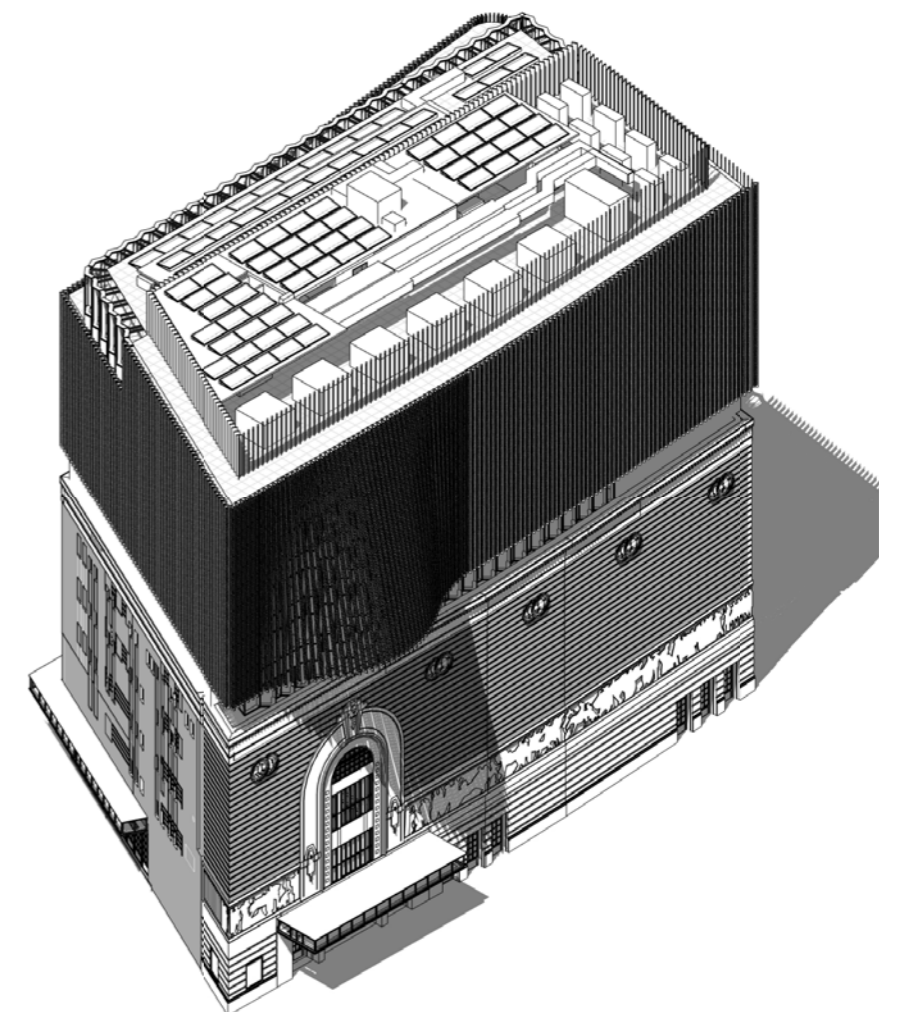
### Natural

The Saville Theatre on Shaftsbury Avenue will minimise the use of natural resources and production of waste, whilst maximising the integration of nature on-site. It will also contribute to wider growth of urban natural habitats and access to green space.

The design will harness nature for climate resilience; to mitigate overheating and flooding, create biodiversity net gain and provide long term habitat for wildlife.

Water efficiency will be maximised, and a circular approach to waste management will be taken, prioritising reuse and recycling after minimising waste as far as possible. Initiatives such as consolidation in procurement will reduce emissions through reduced number of deliveries and less packaging required.

The design will encourage interaction with nature, through biophilic elements, natural sensory spaces, and signage to inform visitors about the nature on-site.



**SUMMARY**

10.0

## 10.1 SCHEME SUMMARY

### Introduction

The heritage led approach of bringing the former Saville Theatre use back to the building will support the economic, social and environmental well-being of the residents of Camden.

These public benefits are substantial and include:

- To give an important heritage asset of national importance back its original intended use;
- Repair, refurbish and enhance a site that is currently underutilised and fails to positively contribute to the surrounding Conservation Areas and its surrounding neighbours;
- The delivery of an exemplar development ensuring the remodelled Grade II listed building and its additions are of the highest quality to successfully cohabit with the heritage fabric of the former Saville Theatre within the existing robust urban framework of the neighbouring Seven Dials and Denmark Street Conservation Areas;
- Deliver sustainable development, good urban design and strong architectural detailing;
- Ensure that through the layout and detail, each element of the scheme will create a sense of place and sustainable destination for those that work and visit the building;
- Create active spaces and an animated streetscape fronting Shaftesbury Avenue, Phoenix Gardens and Stacey Street through the reimagining of a fully publicly accessible ground floor;
- Create a welcoming environment to establish a positive relationship with the resident, community and business uses of the area;
- Create an inclusive environment which caters for diverse users, including the disabled and visually impaired;
- Create a building and an environment that enables visitors and the public alike to achieve a high quality of life;
- Create a new series of public spaces to complement and reflect the established street pattern of the area;
- The heritage led design response builds on the opportunity to create townscape strength and provide fresh opportunities for new uses and activities to take place within a currently under utilised site;
- Create a new cultural destination that aligns and links to the wider aspirations of Camden's economic and cultural strategy;
- Maximise the use of natural daylight as an integral part of the buildings servicing strategy;
- Through careful orientation the scheme considers the relationships with the external environment and neighbours;
- Capitalise on the inherent qualities of the site with the reworking of the Grade II Listed Building for all visitors to enjoy;
- Provide integration with technology to achieve efficiency and effectiveness;

- Use a compatible architectural thematic palette of high quality materials selected to have minimum impact on the environment for each of the modern interventions;
- Reduce heating and cooling loads through considered detailing and layout;
- Utilise robust constructions details to ensure longevity;
- Create a building that will age with dignity for future generations to enjoy.



## 10.2 SUMMARY OF BENEFITS

### Summary of Benefits

The proposals will deliver significant and wide-ranging public benefits which would outweigh any harm caused by the proposals.

These benefits can be broadly categorised under environmental, social and economic groups, and are summarised below:

#### ENVIRONMENTAL

- Opportunity to enhance quality, value and character of the historic environment through the provision of new uses within an underutilised heritage asset that includes repair to facades and the reinstatement of the original intended building use that has been vacant from the site for over 50 years;
- Preservation and enhancement of the few remaining heritage assets including the reveal of the original glazed arch window fronting Shaftesbury Avenue;
- Restoration of three elevations and a faithful recreation of the blitz damaged rear façade of the historic Grade II listed building;
- Reinstatement of a long term, viable, and publicly accessible use;
- Introduce public access to and within the Saville theatre including the hotel lobbies and terrace;
- Improving the ability to appreciate heritage assets through the new high quality interior lobby;
- Enhancing the character and appearance of all Grade II listed building with the removal of the existing Odeon signage, metal canopy and ceramic tiles that mask the arched window;
- Creation of significant new areas of publicly accessible space influenced by the ambitions of the buildings internal programme;
- Creation of an integrated landscape design to the façade of the Phoenix Gardens elevation, which will improve the setting of the building and, respond to the growing importance of urban greening and biodiversity, the proposals will enhance these aspects;
- Incorporation of energy efficiency and sustainability measures to deliver development which addresses climate change pressures; and
- Enhancement of servicing and logistics arrangements.

#### SOCIAL

- Provide a welcoming environment within each of the building uses to establish a positive relationship between the land uses and users including residents, local businesses and community groups;
- Reinvigorating the former theatre building into a new world class performance space as an attractive place to visit;
- Creation of an inclusive environment which caters for diverse users, including disabled users and visually impaired; and
- Enhanced access with legible routes and spaces into and around the building at ground level.

#### ECONOMIC

- Securing long term viability of a Grade II listed buildings by reinstating its original intended use and complementing it with high quality, affordable visitor accommodation;
- Commitment to investment to secure the future success of the Saville Theatre as a place of entertainment for another 100 years;
- Investment in heritage assets to preserve their future
- Significant jobs and employment creation during construction and operational phases;
- Continued growth due to enhanced image and perception in the Borough.





**APPENDIX**

11.0

## 11.1 AREA SCHEDULES

### Existing Area Schedule

LEVEL	Cinema		ANCILLARY / PLANT		TOTAL GEA	
	GEA sqm	GEA sqf	GEA sqm	GEA sqf	GEA sqm	GEA sqf
Roof	12	129	26	280	38	409
Level 05	82	883	16	172	98	1,055
Level 04	193	2,077	203	2,185	396	4,263
Level 03	288	3,100	0	0	288	3,100
Level 02	509	5,479	0	0	509	5,479
Level 01	611	6,577	0	0	611	6,577
Ground Floor	534	5,748	12	129	546	5,877
Basement 01	639	6,878	0	0	639	6,878
Basement 02	792	8,525	0	0	792	8,525
<b>TOTAL</b>	<b>3,660</b>	<b>39,396</b>	<b>257</b>	<b>2,766</b>	<b>3,917</b>	<b>42,162</b>

LEVEL	Cinema		ANCILLARY / PLANT		TOTAL GIA	
	GIA sqm	GIA sqf	GIA sqm	GIA sqf	GIA sqm	GIA sqf
Roof	9	97	22	237	31	334
Level 05	67	721	13	140	80	861
Level 04	162	1,744	182	1,959	344	3,703
Level 03	241	2,594	0	0	241	2,594
Level 02	471	5,070	0	0	471	5,070
Level 01	552	5,942	0	0	552	5,942
Ground Floor	492	5,296	11	118	503	5,414
Basement 01	610	6,566	0	0	610	6,566
Basement 02	749	8,062	0	0	749	8,062
<b>TOTAL</b>	<b>3,353</b>	<b>36,091</b>	<b>228</b>	<b>2,454</b>	<b>3,581</b>	<b>38,546</b>

**Note:** All scheme options, assumptions and area calculations are an initial assessment only based on the very limited third party information available and may change subject to survey verification of the existing site, identification of any legal restrictions/site constraints, further design development and obtaining the required statutory consents.

## 11.1 AREA SCHEDULES

### Proposed Area Schedule

LEVEL	THEATRE		HOTEL		ANCILLARY / PLANT		TOTAL GEA	
	GEA sqm	GEA sqft	GEA sqm	GEA sqft	GEA sqm	GEA sqft	GEA sqm	GEA sqft
Level 10		0	51	549	16	172	67	721
Level 09		0	733	7890	16	172	749	8062
Level 08		0	809	8708	16	172	825	8880
Level 07		0	810	8719	16	172	826	8891
Level 06		0	784	8439	16	172	800	8611
Level 05		0	673	7244	16	172	689	7416
Level 04		0	810	8719	22	237	832	8956
Level 03		0	588	6329	180	1938	768	8267
Level 02		0	580	6243	189	2034	769	8277
Level 01	127	1,367	603	6491	41	441	771	8,299
Ground Floor	572	6,157	206	2,217	46	495	824	8,869
B1 Mezzanine	708	7,621		0	296	3,186	1,004	10,807
Auditorium Technical	316	3,401		0	14	151	330	3,552
Basement 01	813	8,751		0	14	151	827	8,902
Basement 02	825	8,880		0	14	151	839	9,031
Basement 03	990	10,656		0	14	151	1,004	10,807
Basement 04	559	6,017		0	445	4,790	1,004	10,807
<b>TOTAL</b>	<b>4,910</b>	<b>52,851</b>	<b>6,647</b>	<b>8,708</b>	<b>1,371</b>	<b>14,757</b>	<b>12,928</b>	<b>139,156</b>

LEVEL	THEATRE		HOTEL		ANCILLARY / PLANT		TOTAL GIA	
	GIA sqm	GIA sqft	GIA sqm	GIA sqft	GIA sqm	GIA sqft	GIA sqm	GIA sqft
Level 10		0	44	474	10	108	54	581
Level 09		0	710	7642	15	161	725	7804
Level 08		0	783	8428	15	161	798	8590
Level 07		0	783	8428	15	161	798	8590
Level 06		0	754	8116	15	161	769	8277
Level 05		0	650	6997	15	161	665	7158
Level 04		0	581	6254	159	1711	740	7965
Level 03		0	530	5705	156	1679	686	7384
Level 02		0	530	5705	156	1679	686	7384
Level 01	115	1,238	541	5,823	29	312	685	7,373
Ground Floor	501	5,393	202	2,174	42	452	745	8,019
B1 Mezzanine	476	5,124			294	3,165	770	8,288
Auditorium Technical	201	2,164			14	151	215	2,314
Basement 01	581	6,254			12	129	593	6,383
Basement 02	593	6,383			12	129	605	6,512
Basement 03	758	8,159			12	129	770	8,288
Basement 04	460	4,951			310	3,337	770	8,288
<b>TOTAL</b>	<b>3,685</b>	<b>39,665</b>	<b>6,108</b>	<b>65,746</b>	<b>1,281</b>	<b>13,789</b>	<b>11,074</b>	<b>119,199</b>

**Note:**

All area calculations are preliminary based on the architectural design information currently available and will be subject to change following the required cross discipline coordination with the MEP, structural, facade, fire and accessibility consultants, identification of any unknown legal restrictions, continued collaboration with the exhibition business, further design development and obtaining the required statutory Planning and Building Control consents.

**Note:** All scheme options, assumptions and area calculations are an initial assessment only based on the very limited third party information available and may change subject to survey verification of the existing site, identification of any legal restrictions/site constraints, further design development and obtaining the required statutory consents.

