Sustainability Statement
June 2019
PSH

115 - 119 CAMDEN HIGH STREET

Sustainability Statement

115 – 119 Camden High Street

Date:	June 2019	**Issue:**	01
Reference:	3187-190614-JP-115-119 Camden High St-Sustainability Statement-Rev01	**Status:**	Final

EXECUTIVE SUMMARY

The Site is required to comply with the national policies and the local requirements, including The London Plan and Camden Council Local Plan (2017). PSH have been appointed by Demar (BVI) Holdings Ltd. to provide a Sustainability Statement, in accordance with Policy CC2 of Camden Local Plan (2017), in support of the planning application for the Site. Sustainable development is the key consideration for planning authorities and decision makers. The purpose of the statement is to review the sustainable design and construction measures that have been implemented into the scheme and to demonstrate how the requirements of national, regional and local policies will be met.

As per the Mayor's priorities, the proposed development will be delivered on previously developed land. The scale and density aims to maximise the potential of the site, while considering the local context: the site offers an excellent location for the provision of residences and hotel as it is in close proximity to Camden and Morning Crescent tube stops, offering the required connectivity.

The proposals have considered the energy performance of the building and details are provided in a standalone Energy Statement. To summarise the Energy Statement, the proposed strategy will aim to achieve a 47% improvement over the Part L of the Building Regulations (using SAP 10 carbon emission factors).

The strategic approach to the design of the development has been to follow the Mayor's London Plan Energy Hierarchy. The strategy aims to reduce energy demand in the first instance prior to the consideration of integrating low and zero carbon energy sources.

An analysis of the feasibility of on-site renewable energy technologies has been undertaken. Air Source Heat Pump technology (ASHP) has been identified as feasible to provide space conditioning for the hotel. This would be provided via reversible Variable Refrigerant Flow (VRF) units that would provide heating in winter, but also provide cooling in summer months. ASHP technology is also proposed to pre-heat the domestic hot water (DHW). The ASHP pre-heat is expected to provide 60% of the annual DHW heating load.

Furthermore, the Energy Statement considered the GLA cooling hierarchy in an effort to reduce the potential for overheating. This is proposed to be achieved by minimising internal heat generation through energy efficient design; and reducing the amount of heat entering the building in summer.

The Proposed Development will aim to minimise internal potable water consumption for the hotel elements by achieving a 25% reduction in water consumption over a baseline, as defined by BREEAM. This will be achieved through the specification of water-efficient sanitary fittings such as WCs, taps and showers.

Preference will be given to materials with lower environmental impacts. This will be assessed through a whole building life cycle carbon assessment to energy meaningful reductions are sought.

A sustainable procurement plan would be developed by the contractor and new materials, including building elements and finishes will be responsibly sourced with robust environmental information, such as Environmental Product Declarations; and FSC/PEFC Certified timber, where feasible.

During construction, opportunities will be taken to minimise and reduce waste. Waste management arrangements will aim to minimise any potential risks to the environment and human health throughout the demolition and construction phase by the application of appropriate measures. A pre-demolition audit will be undertaken to assess the existing structures and identify materials that can be re-used.

During the operational phase, refuse and recycling bin stores would be located in the building to cater for the separate uses and the anticipated waste quantities.

A blue roof system is proposed to attenuate surface water at the source and discharge this at a reduced flow rate of 5 l/s, compared to the existing 9.6 l/s. year) critical duration storm event plus a minimum + 40% allowance for climate change.

Visual comfort has actively informed the development of the design of the building. Daylight penetration has been carefully balanced to maximise occupant comfort while limiting solar gains.

Finally, in terms of sustainable modes of transport, the site is accessible by a range of modes including walking, cycling and public transport. The nature of the Proposed Development will benefit from high levels of accessibility, while sustainable modes of transport will be further promoted through the provision of a Travel Plan.

The BREEAM New Construction UK 2018 methodology has been used to pre-assess the performance of the proposed development against sustainable issues such as energy, transport, water, materials, waste, pollution, health and well-being, management, and ecology.

In accordance with Policy CC2 of the Camden Local Plan (2017) a BREEAM Pre-assessment has been undertaken by a licensed BREEAM Assessor, based upon the planning proposal for the Site. The current anticipated baseline score is 70.10% which is equivalent to an 'Excellent' rating.

DOCUMENT CONTROL

Issue	Date	Status	PSH Prepared (Date/Initials)	PSH Checked (Date/Initials)	PSH Authorised (Date/Initials)
D01	10.06.2019	Draft revision for review	10.06.2019/JP		
01	14.06.2019	Final revisions for planning submission	14.06.2019/JP		

CONTENTS

1. INTRODUCTION

The 115-119 Camden High Street proposed development, hereafter referred to as 'the Site' or the 'proposed development' is located in the London Borough of Camden.

The Site is required to comply with the national policies and the local requirements, including The London Plan and Camden Council Local Plan (2017). PSH have been appointed by Demar (BVI) Holdings Ltd. to provide a Sustainability Statement, in accordance with Policy CC2 of Camden Local Plan (2017), in support of the planning application for the Site.

Sustainable development is the key consideration for planning authorities and decision makers. The purpose of the statement is to review the sustainable design and construction measures that have been implemented into the scheme and to demonstrate how the requirements of national, regional and local policies will be met.

1.1. What is Sustainable Development?

'Sustainability Development' is defined as development that meets the needs of the present, without compromising those of future generations. It is commonly understood that the three 'pillars' of Sustainability (shown in Figure 1) provide a balanced approach to the Sustainable Development through meeting human development needs, whilst sustaining the ability of the natural environment to provide natural resources and ecosystem services, upon which the economy and society depend.

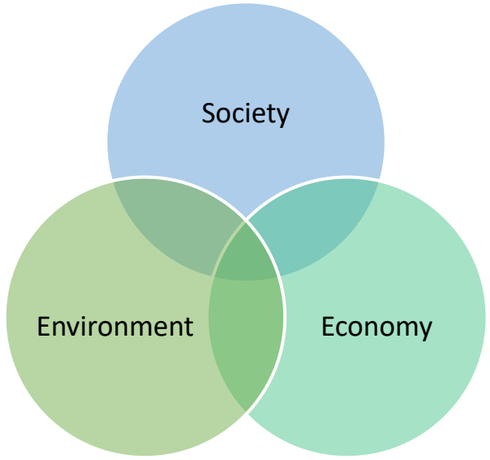


FIGURE 1. THREE PILLARS OF SUSTAINABILITY.

The proposed development's performance has been appraised against industry best practice and standards. A broad range of sustainability issues (environmental, social and economic) have been considered across the full lifecycle of the proposed development including design, construction, operation and demolition.

2. SITE DESCRIPTION

2.1. Existing Site

The Site is located on the corner of Camden High Street and Delancey Street (see Figure 2). Located in a mid-point junction between Camden Town Underground Station and Morning Crescent, the Site is situated within Camden Town Conservation Area.

The existing Site is neighboured by No111-113 - an ornate Victorian public house building (currently Blues Kitchen); No121-123 - an Art Deco building (currently Santander Bank); Grade II Listed No104 Arlington Road - former Tramways Substation; and No100-102 Arlington Road - a two to four storey residential building. The existing building is located at No115-119 and is current occupied entirely by Sports Direct Retail (see Figure 3).

FIGURE 2. SITE PLAN INCLUDING SITE BOUNDARY

2.2. Site Opportunities

The existing building comprises of a two-storey building which dates back to the first half of the 20th century, originally established as a Woolworths store.

Sited within the defined 'commercial area' of Camden, the high-street consists of a traditional wide shopping street linking the Mornington Crescent junction to the Camden Town Centre. This retail and commercial area is powerfully urban in character with few openings between the continuous building lines and an absence of public open spaces and soft landscaping.

The character of the existing building fits well within the conglomerate of architectural styles that make up the High Street and is identified as a 'Positive Building' within the Conservation Area. However, it is dominated by its entirely modern and poor-quality shop front, due to its relatively low height, which is disproportionately low within its immediate context, particularly as it is a corner building at a junction.

FIGURE 3. EXISTING SITE (SOURCE: GOOGLE MAPS).

The project team have considered both the strengths, restraints and negative aspects of the current site and existing building and the opportunity to construct a new building has been pursued with the aim of enhancing the setting of positive buildings and contributing to the conservation area.

2.3. Proposed Development Description

The proposed development comprises of the demolition of the existing two-storey retail building and the erection of a part 4, part 5 storey new building, comprising of a new hotel with 80 bedrooms, 3 affordable residential units, and prime ground floor retail floorspace.

The Gross Internal Areas for the existing and proposed scheme are:

TABLE 1. PROPOSED DEVELOPMENT: GIA AREA SCHEDULE.

	Use	Class	GIA (m^2)
Proposed	Hotel	C1	2,323.1
	Residential	C3	340.6
	Retail	A1	156.2
Existing	Retail	A1	1,266.2

There is no landscaping that will be owned or managed by the proposed development.

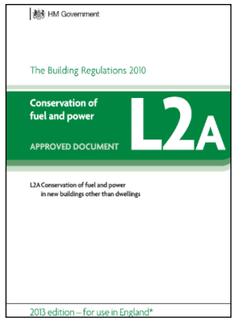
As agreed in pre-application discussions with the council, the scheme intends to have set back entrances, providing wider areas of adjacent public highway. The public highway will be managed by Camden Council once the works are completed.

3. REGULATION AND POLICY CONTEXT

The design of the Proposed Development has been informed by a number of key drivers; namely, policy and legislation, sector and industry guidance and corporate and financial factors. The key drivers are considered in turn below, with reference to key policy, legislation and guidance documents that have helped to shape the sustainability strategy for the Proposed Development. It is against these drivers for sustainability, particularly local planning policy, that the scheme has been assessed.

3.1. National Legislation

UK Building Regulations Approved Document Part L (2013)

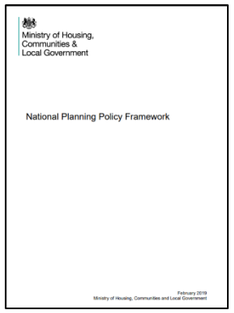


Part L2A of the UK Building Regulations is the mechanism by which government is driving reductions in the regulated CO_2 emissions from new buildings. It consists of 5 criteria (listed below).

- Criterion 1 – Achieving the Target CO2 Emission Rate (TER)
- Criterion 2 – Limits on design flexibility
- Criterion 3 – Limiting the effects of solar gain in summer
- Criterion 4 – Building performance consistent with BER
- Criterion 5 – Providing information

3.2. National Policy

National Planning Policy Framework (2019)

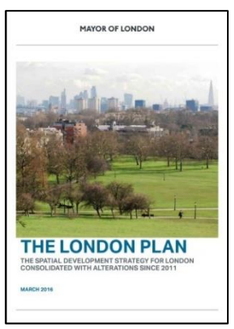


The National Planning Policy Framework (NPPF) sets out the Government's economic, environmental and social planning policies for England. In combination, these policies articulate the Government's vision of sustainable development, which should be interpreted and applied locally to meet local aspirations.

It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities. The NPPF states that: "Proposed redevelopment that accords with an up-to-date Local Plan should be approved and proposed redevelopment that conflicts should be refused unless other material considerations indicate otherwise."

3.3. Regional Policy

The London Plan (2016)



The London Plan sets out the overall strategic plan for London, setting out integrated economic, environmental, transport and social framework for the development of London over the next 20-25 years.

The plan has been produced with consideration of the NPPF and is seen as the expression of national policy for London, tailored to meet local circumstances and to respond to achieve sustainable development in the city. It provides London-wide policy context which boroughs of London should develop their detailed local planning policies in accordance with.

Chapter Five of the London Plan sets out a comprehensive range of policies to underpin London's response to climate change, including the underlying issues of resource management, which are reviewed in relation to the proposed Site in this report.

Draft New London Plan, (Dec 2017 & Minor Suggested Changes, Aug 2018)

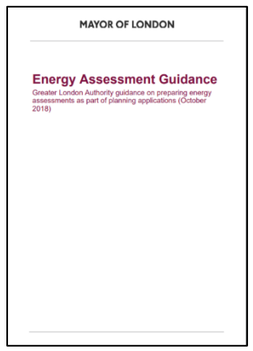
At the time of writing, the current 2016 Plan (The London Plan consolidated with alterations since 2011) is still the adopted Development Plan, but consultation on the Draft New London Plan has recently concluded. The Draft London Plan a material consideration in planning decisions and the significance given to it is a matter for the decision maker. However, the proposed policies have not been specifically addressed in this Sustainability Statement.

The Mayor's Sustainable Design and Construction Supplementary Planning Policy Guidance (2014)

Policy 5.3 of the London Plan relates to Sustainable Design and Construction. This policy is supported by the Sustainable Design and Construction Supplementary Planning Policy Guidance which offers detailed and integrated holistic approach with regards to sustainable design within the built environment to address the following design principals:

a) minimising carbon dioxide emissions across the site, including the building and services (such as heating and cooling systems)
b) avoiding internal overheating and contributing to the urban heat island effect
c) efficient use of natural resources (including water), including making the most of natural systems both within and around buildings
d) minimising pollution (including noise, air and urban runoff)
e) minimising the generation of waste and maximising reuse or recycling
f) avoiding impacts from natural hazards (including flooding)
g) ensuring developments are comfortable and secure for users, including avoiding the creation of adverse local climatic conditions
h) securing sustainable procurement of materials, using local supplies where feasible, and
i) promoting and protecting biodiversity and green infrastructure.

Energy Assessment Guidance (2018)

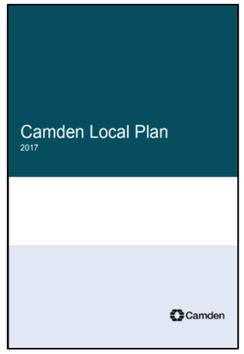


The Energy Assessment Guidance has been produced by the Greater London Authority on preparing energy assessments as part of planning applications. The purpose of the energy statement is to demonstrate that the proposed climate change mitigation measures comply with London Plan energy policies, including the Energy Hierarchy. It also energy remains an integral part of the development's design and evolution.

The Proposed Development has produced an Energy Statement for the planning application, which is referenced with this Sustainability Statement.

3.4. Local Policy

Camden Council Local Plan (2017)

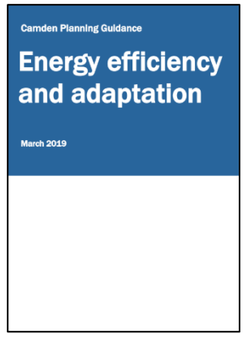


The Camden Local Plan sets out the Council's planning policies, set to ensure development in Camden continues to respond to changing circumstances and the borough's unique characteristics, contributing to the delivery the Camden Plan and other local priorities.

Chapter 8 details how the council aims to tackle the causes of climate change and pollution and resource management in the borough. This Sustainability Statement aims to demonstrate how the Site has implemented the following policies where possible:

- Policy CC1 Climate change mitigation
- Policy CC2 Adapting to climate change
- Policy CC3 Water and flooding
- Policy CC4 Air Quality
- Policy CC5 Waste

Camden Policy Guidance (CPG) Energy Efficiency and Adaption (2019)



The Energy Efficiency and Adaption CPG has been prepared by Camden Council to support the policies in the Local Plan. The guidance forms a Supplementary Planning Document (SPD) which is an additional "material consideration" in planning decisions.

The CPG covers key energy and resources issues in the borough and supports the Local Plan Policies CC1 and CC2. This document was adopted in March 2019 and replaces CPG3 Sustainability July 2015, last updated March 2018.

The following sections of the Sustainability Statement will discuss how the scheme has evolved considering the advised design principles referenced in the CPG.

4. SUSTAINABILITY APPRAISAL

4.1. Approach and Methodology

This Sustainability Statement has been structured around the London Plan and Camden Council's sustainable development aims and objectives. The following sections objectively assess/review the features included in the proposed development to address the following sustainable issues:

- Resource management
- Nature conservation and biodiversity
- Climate change and adaptation
- Pollution management
- Health and Wellbeing
- Sustainable Construction
- Sustainable Transport

The sustainability measures described in this Sustainability Statement were developed in consultation with members of the project team.

4.1.1. BREEAM Pre-assessment

The BREEAM New Construction UK 2018 methodology assesses the performance of buildings against sustainable issues such as energy, transport, water, materials, waste, pollution, health and well-being, management, and ecology.

Policy CC2 of the Camden Local Plan (2017) expects non-domestic developments greater than 500m^2, such as the proposed development, to achieve a BREEAM 'Excellent' rating.

In response to the planning policy, a BREEAM Pre-assessment has been undertaken by a licensed BREEAM Assessor, based upon the planning proposal for the Site. The current anticipated baseline score is 70.10% which is equivalent to an 'Excellent' rating (see Figure 4).

Additionally, Item 11.3 of the Energy Efficiency and Adaption CPG (2019) requires schemes to achieve 60% of all available Energy and Water credits and 40% of the available Materials credits. Camden Council have included these sub-targets as they consider the respective percentage weighting in each category to result in the greatest environmental benefits. The table below summarises the proposed scheme's performance again these sub-targets.

	Camden Council Percentage Requirements	Proposed Development Percentage Score
Energy	60%	61%
Water	60%	56%
Materials	40%	64%
Overall BREEAM Score	70%	70.10%

The proposed scheme is exceeding the target for Energy and significantly surpassing the Camden Council percentage requirement in the Materials category.

The project team have thoroughly assessed the feasibility of the credits in the Water category. However, it is recommended that no more than 56% of the available credits are targeted. The nature of the hotel and functionality of water consuming components e.g. showers, taps, toilets are expected to be of low-flow rates but cannot be significantly reduced, in order to still meet guest expectations. The proposed fixtures and fittings achieve a 25% reduction over the BRE baseline, which is considered to be the most appropriate approach between low flow rates and performance.

Overall, the proposed scheme has demonstrated significant commitment to achieve excellent levels of sustainability, aiming to achieve compliance with Camden Council policy, where possible.

The BREEAM pre-assessment is provided in a separate report detailing all requirements and assumptions. Furthermore, the following sections of this report provide details on the sustainability measures proposed that will contribute to the achievement of the targeted rating.

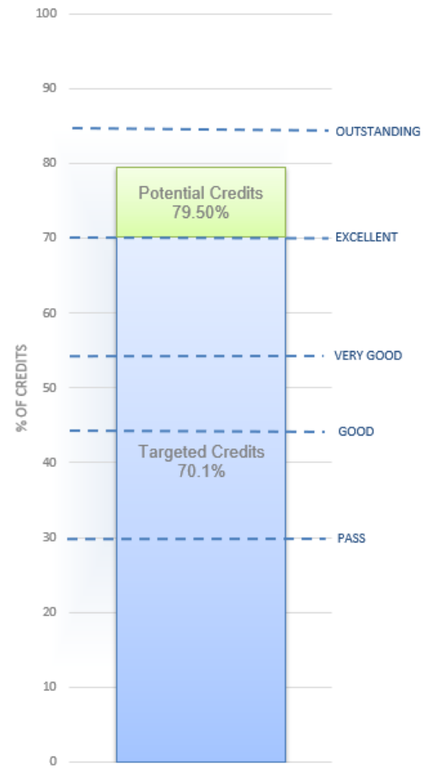


FIGURE 4. PRE-ASSESSMENT SCORING SUMMARY FOR PROPOSED DEVELOPMENT.

5. RESOURCE MANAGEMENT

5.1. Land

Land is required by all aspects of our every-day societal needs, i.e. housing, agriculture, parks etc. However, land is a finite resource which many other ecosystems also rely upon. Therefore, one of the most widely agreed land-use planning principles is encouraging the effective use of land by reusing land that has been previously developed or brownfield land for human development purposes.

The Site selected for the Proposed Development is defined as 'previously developed land' as the BREEAM LE 01 criteria and 'Definitions'. In line with the Mayor's Priorities as set out in the Sustainable Design and Construction SPG and the London Plan, 100% of the Proposed Development will be delivered on land where there is an existing building or hard landscaping. Specifically, the site will replace the existing building housing 'Sports Direct', (see Figure 3), which is expected to vacate shortly.

Map 4 of the Camden Local Plan (2017) shows that the Site is not situated in an archaeological priority area (see Figure 5). However, it is located in the Commercial sub-area of Camden Town Conservation Area (see Figure 6).

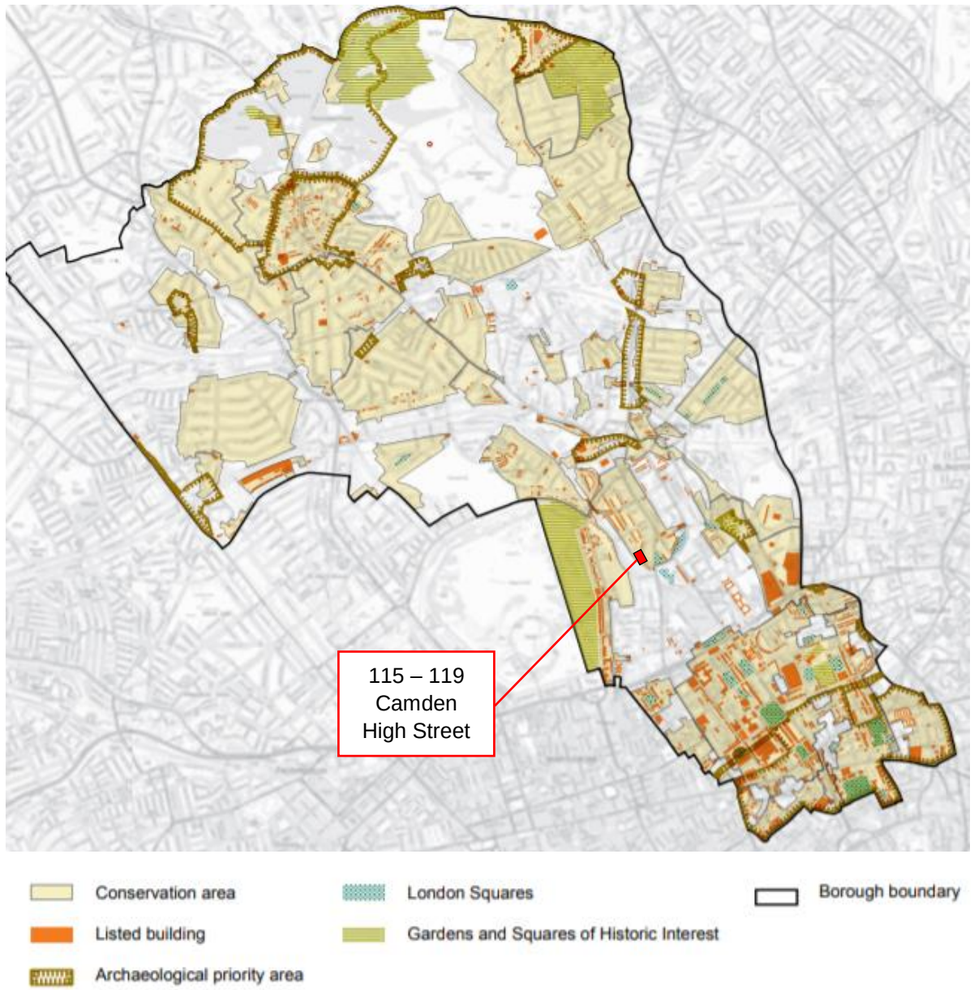


FIGURE 5. ARCHAEOLOGICAL PRIORITY AREAS IN CAMDEN (MAP 4 OF THE CAMDEN LOCAL PLAN, 2017)

The Design and Access Statement details how the design initially stemmed from the character and appearance of the conservation area which is defined by its variety and eclecticism.

The proposal has been borne out of a full analysis of the architectural styles, massing and status of the different buildings and spaces along the High Street. The articulation of the mass has attempted to reflect and reinterpret the greater variety of building and roof forms observed throughout the Conservation Area.

The choice of materials and detailing have been similarly chosen through a careful consideration of the different material palettes that make up the buildings in the area and have been used in a way that complements the neighbouring properties.

The proposal attempts to not only create a building of quality and integrity fronting Camden High Street, but also to re-engage Delancey Street with an active frontage that recognises the designated secondary frontage.

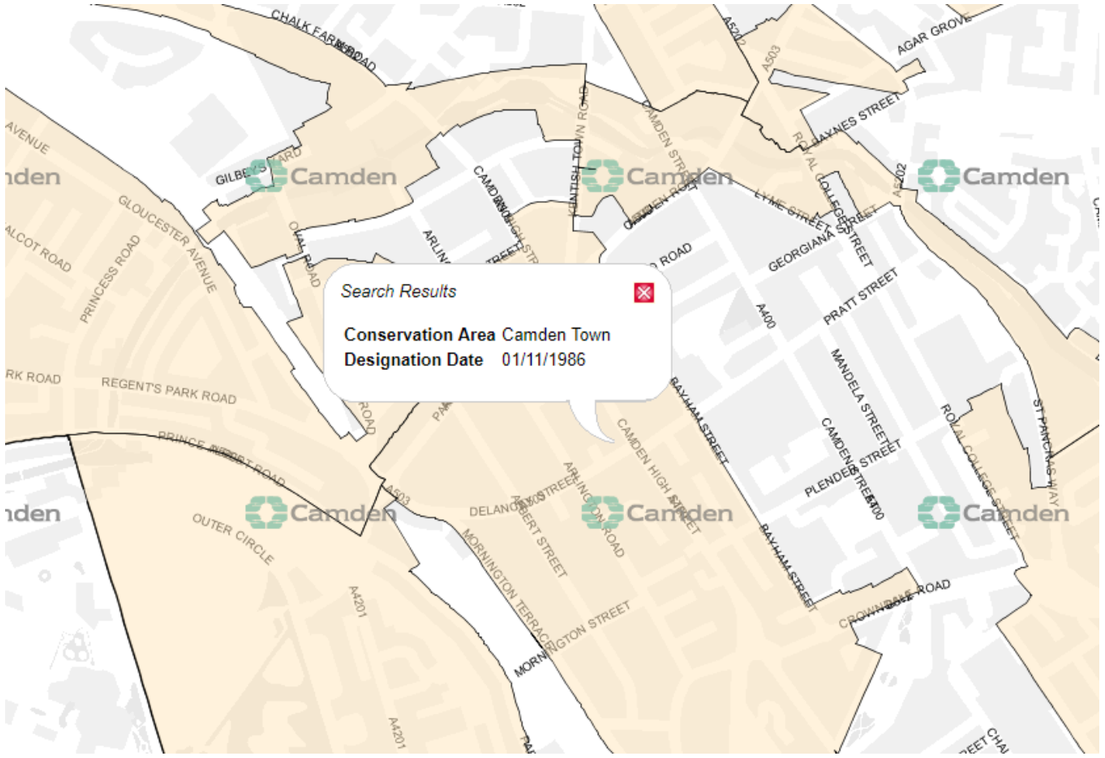


FIGURE 6. CAMDEN CONSERVATION AREAS

This scheme has considered the requirements of Policy H4 Maximising the supply of affordable housing (Camden Local Plan, 2017). The proposed scheme includes 3 affordable housing units which will result in a net gain in housing supply.

5.2. Energy Consumption and Carbon Emissions

An Energy Statement has been prepared under a separate cover in support of the planning application. The statement includes an appraisal of the proposed development's energy performance against the applicable national and local regulatory and planning policies, namely:

- Compliance with Building Regulations Part L 2013
- The London Plan (2016):
  - Domestic areas: achieve a 35% carbon reduction beyond Building Regulations Part L1A 2013 and demonstrate proposals for making up the shortfall to achieve zero carbon
  - Non-Domestic areas: achieve a 35% carbon reduction beyond Building Regulations Part L2A 2013
- Camden Council Local Plan (2017): meet London Plan targets for 35% CO_2 reduction beyond Part L
- Camden Policy Guidance (CPG) Energy Efficiency and Adaption (2019): Achieve a 20% carbon reduction through on-site renewable technologies.

To ascertain the regulated carbon emissions, Part L thermal modelling calculations have been carried out in accordance with the structure required by the Greater London Authority (GLA) document 'Energy Assessment Guidance', (2018). As required by GLA from January 2019, the latest SAP 10 carbon emission factors have been used to influence the development's energy strategy.

The strategic approach to the design of the development has been to follow the Mayor's London Plan Energy Hierarchy. The strategy aims to reduce energy demand in the first instance prior to the consideration of integrating low and zero carbon energy sources. This has been reported through the 'be lean, clean and green' stages of design, summarised further below.

5.2.1. BE LEAN – Demand Reduction

The 'be lean' scenario reduces demand by implementing passive and active design measures to achieve an 12% carbon reduction over the baseline scenario. The following has been incorporated into the scheme:

- Optimised fabric efficiency beyond acceptable limits
- Solar shading using well-designed façade detailing and massing
- Energy efficient services for domestic hot water, lighting and ventilation
- Considered design to adapt to climate change and reduced the requirement for cooling, following the cooling hierarchy in Policy 5.9 of London Plan.

5.2.2. BE CLEAN – Heating Infrastructure

The 'be clean' scenario should demonstrate how energy systems have been developed to supply energy efficiently and reduce CO_2 emissions. Developments are expected to consider the scale of the heating system and how this can be connected or established to create community/district wide heat networks.

There are no 'area-wide' heat networks present or planned in close proximity to the proposed development and as such, there is no connection, or future connection planned. However, high efficiency air source heat pumps (ASHP) are proposed to serve the space heating, cooling, and pre-heat the domestic hot water service. ASHP technology is discussed further in the 'be green' scenario.

5.2.3. BE GREEN – Renewable Energy

The development has maximised on-site renewable energy generation in two ways:

1. High efficiency ASHP technology is being used to pre-heat the domestic hot water (DHW). The ASHP pre-heat is expected to provide 60% of the annual DHW heating load.
2. High efficiency ASHP will be integrated into a high efficiency VRF multi-split system to provide heating and cooling.

The 'be green' scenario demonstrates that a 35% carbon reduction can be achieved for the contribution of the low and zero carbon technology alone.

5.2.4. Resulting Overall Carbon Emissions

As per the GLA 'Energy Assessment Guidance', (2018), all CO_2 emissions have been reported on using the SAP 10 carbon factors, processed using the GLA reporting spreadsheet.

Domestic Results

The domestic units achieve a 21% carbon reduction over the baseline scenario and emit 1.3 tonnes of CO_2 per year, as shown in Table 2. While this does not meet the 35% reduction target required, the Site-Wide assessment does achieve a 47% saving in CO_2 emissions.

Note. The zero values in Table 2 are due to the reporting style of the GLA reporting spreadsheet which does not include for decimal figures but rounds to the nearest whole number. Therefore, each '0' figure, is actually between 0 and 0.9 tonnes of CO_2 per year. The percentage reduction is the key information to be extracted.

As per the GLA 'Energy Assessment Guidance', all domestic developments are to achieve zero-carbon and any shortfall of this target should be off-set by a cash in-lieu payment. Table 2 quantifies the carbon offset payment to be £2,397.

TABLE 2. SUMMARY OF REGULATED CO_2 EMISSIONS REDUCTIONS – **DOMESTIC**

Regulated CO_2 Emissions	Total (tonnes/yr)	Reduction (tonnes/yr)	Reduction (%)
Baseline: 2013 Part L2A Compliant	2	-	-
Be Lean	1	0	12
Be Clean	1	0	0
Be Green	1	0	10
Total Cumulative Savings	-	0	21%
Annual savings from off-set payments	-	1	-
Cumulative saving for off-set payment	-	40	-
Cash in-lieu contribution	-	£2,397	-

Non-Domestic Results

The non-domestic areas achieve a 47% carbon reduction over the baseline scenario and emit 59 tonnes of CO_2 per year, as shown in Table 3.

TABLE 3. SUMMARY OF REGULATED CO_2 EMISSIONS REDUCTIONS – NON-DOMESTIC

Regulated CO_2 Emissions	Total (tonnes/yr)	Reduction (tonnes/yr)	Reduction (%)
Baseline: 2013 Part L2A Compliant	124	-	-
Be Lean	110	14	12
Be Clean	110	0	0
Be Green	66	45	35

Total Cumulative Savings	-	59	47
Total Target Savings	-	44	-
Annual Surplus	-	-15	-
Cumulative Surplus (30 years)	-	-461	-
Cash in-lieu contribution	-	-£27,681	-

The 30year shortfall is -£27,681 under London Plan. The minus figure indicates that the design has surpassed the London Plan target and therefore, no off-set payment is required for the Non-domestic areas.

Site-Wide Results

The overall regulated CO_2 savings for the entire Site (non-domestic and domestic) have been summarised in Table 4 and Figure 7. After applying the principles of the Energy Hierarchy, the scheme can demonstrate potential cumulative CO_2 emission reduction of 47% or 60 tonnes per annum, from the baseline scenario.

The results demonstrate that the current Site-wide design exceeds the London Plan 35% reduction target. This result incorporates an appropriate buffer to ensure the target of London Plan target CO_2 in London Plan can be achieved following the design development at RIBA Stages 3 and onwards.

Whilst the CO_2 percentage reduction target has been met for the Site-Wide calculations, the domestic areas achieve a CO_2 reduction of 21%. Therefore, to meet the zero-carbon target for the domestic areas, the remaining 79% must be offset by a cash in-lieu contribution of £2,397.

As per the Camden Council Local Plan (2017), the strategy has followed the approach of London Plan, and with the domestic off-set payment, is determined to be in compliance.

The 'be green' scenario shows that the CPG Energy Efficiency and Adaptation (2019) requirement to achieve a 20% reduction via on-site renewables has also been surpassed.

TABLE 4. SUMMARY OF REGULATED CO2 EMISSIONS REDUCTIONS – SITE WIDE

Regulated CO_2 Emissions	Total (tonnes/yr)	Reduction (tonnes/yr)	Reduction (%)
Baseline: 2013 Part L2A Compliant	126	-	-
Be Lean	112	15	12
Be Clean	112	0	0
Be Green	67	45	35
Total Cumulative Savings	-	60	47
CO_2 savings off set	-	-421	-

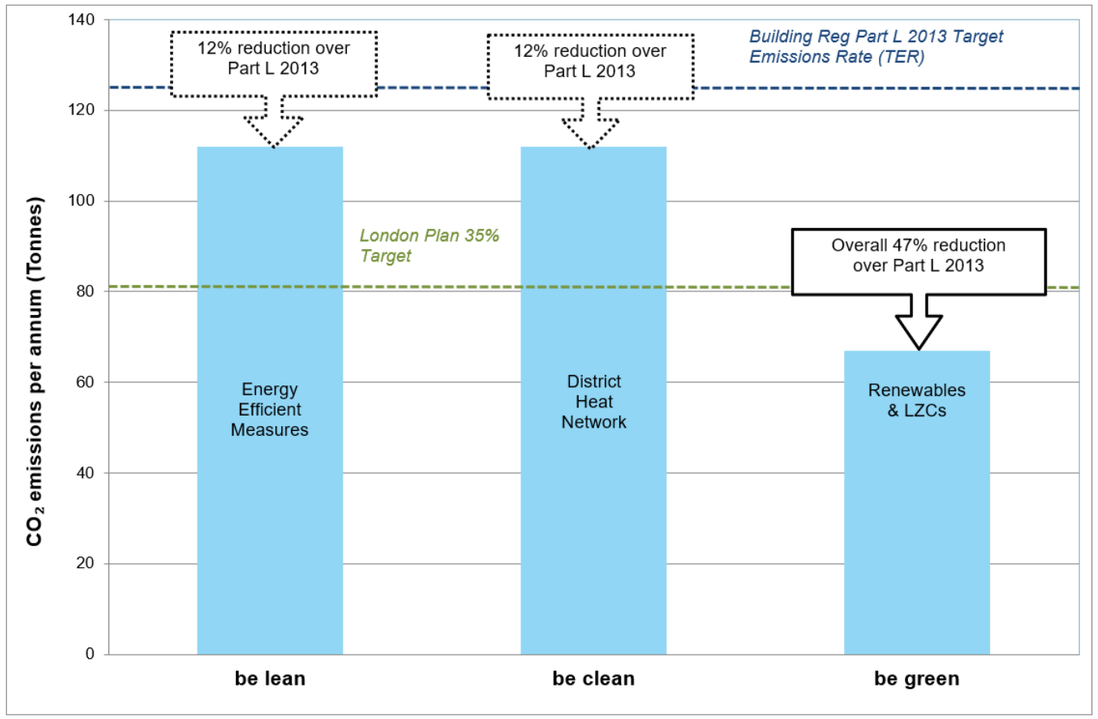


FIGURE 7. SUMMARY OF REGULATED CO_2 EMISSIONS REDUCTIONS (TONNES/YEAR) – SITE WIDE

5.3. Water Resources

The water industry is on the forefront in the fight against climate change as all the main impacts: drought, extreme rainfall/storm events, changing rainfall patterns and sea level rise all directly affect water sources and subsequently, water services providers. According the UK Climate Change Risk Assessment Synthesis (2017), shortages in the UK public water supply is considered an urgent risk that requires more action to be managed.

Climate projections forecast half as much rainfall in summer in the South East of England by 2080 The UK is expected to be in deficit by up to 16% of the total water demand in the 2050s and of up to 29% in the 2080s leading to major impacts on cost and resource levels. Under these scenarios and with the expected high population growth, unless adaptation interventions are made, deficits are expected to be widespread by the 2050s. Therefore, it is important to build water efficiency into our building stock and minimise the need for major infrastructure enhancements to meet these pressures as well as growing demands.

In England, the average person uses about 150 litres of water a day for a range of uses including sanitation. This is a substantial amount which offers the opportunity for reduction and improving water efficiency. The Camden Local Plan (2017) Policy CC3 requires new development applications to incorporate water efficiency measures. The following measures have been sought after through compliance with issues in the BREEAM Water Category.

5.3.1. Efficient Sanitaryware Specification

The Proposed Development will aim to minimise internal potable water consumption for the hotel elements by achieving a 25% reduction in water consumption over a baseline, as defined by BREEAM. This will be achieved through the specification of water-efficient sanitary fittings such as WCs, taps and showers.

It is recommended for the Site, that no more than two credits are targeted for the proposed development. Achieving anymore credits under Wat 01 would require very low rates which can lead to operational problems. In previous experience, this has resulted in the fixtures and fittings being ripped out and replaced which is not an environmentally friendly method of achieving low potable water use. The fixtures and fittings which achieve a 25% reduction over

the BRE baseline, which is considered to be the most appropriate compromise between low flow rates and performance.

Furthermore, the nature of the building type i.e. hotel, will not be able to reduce the flow rates of the sanitary fittings by a substantial amount in comparison to other building types, such as an office, where the flow rate of showers and taps are not required to meet the expectations of hotel clientele. This would reflect negatively on the hotel and impact the success of the new proposal.

5.3.2. Managing Consumption

It is well established that in order to encourage the reduction of water use, it must first be understood how much water is consumed. The Proposed Development will be fitted with a pulsed meter on the mains water supply and sub-meters to any areas/plant consuming more than 10% of the building's total water demand. This will enable the building operators and facilities managers to monitor water use and encourage the setting of targets to reduce water consumption.

In addition, the scheme is currently targeting recognition under BREEAM for the provision of operational infrastructure and resources which enable the coordination, collection and monitoring of water consumption for a minimum of 12 months once the building becomes occupied. The aim of this is to enable the future users to analyse the discrepancies between actual and predicted performance, with a view to adjust the systems and user behaviours as required.

The importance of understanding how much water is typically used can also help distinguish when there are performance problems or leaks within the systems installed. In a development such as hotel where domestic water usage is considerable and the provision of pipework is greater than an office for example, a water leak detection system that is capable of detecting a major water leak may be installed to reduce the impact of leaks that would otherwise go undetected. The Proposed Development will implement a mains water leak detection system that will notify the building operators if there is a leak between the building boundary and the utility meter.

Non-potable water consumption, such as irrigation systems are not expected within the scheme as there is major soft landscaping proposed. The proposal does include the planting of a few trees in the public realm at the front of the building; however, the species will be selected to rely solely on precipitation during all seasons of the year.

5.3.3. Sustainable Use of Water during Construction

To recognise and encourage the construction site to be managed in an environmentally friendly way, the current BREEAM assessment requires the Principal Contractor to monitor and record data for the potable water consumption (m^3) arising from the use of the construction plant, equipment and site accommodation. This could enable the Principal Contractor to monitor and set continued performance targets for the consumption of water on Site.

5.4. Materials and Supply Chain

The use of construction materials leads to a wide range of environmental and social impacts across the life cycle through initial procurement, wastage, maintenance and replacement. Taken together, construction materials make a highly significant contribution to the overall life cycle impacts of a building. In some cases, they may even outweigh operational impacts (such as energy consumption).

Legislation in building regulations has led to reductions in the operational energy consumption of buildings and these regulations are being progressively tightened. As a result, greenhouse gas emissions from other aspects of buildings, such as embodied emissions from materials, are becoming increasingly important in terms of reducing the overall emissions that lead to climate change and arise from the procurement, maintenance and replacement of construction products over the building's lifetime.

The materials selected for the proposed scheme are undergoing a whole building life cycle assessment are per the BREEAM Mat 01 criteria under the Mat 01 methodology. A Concept Stage Life Cycle Analysis of the proposed the materials has been carried out and a set of recommendations to reduce the embodied carbon of the scheme has been produced. The recommendations will be reviewed by the Project team at the beginning of RIBA Stage 3 to identify where improvements can be made and the environmental impact of the development can be minimised.

In addition to climate change, there are several other embodied environmental impacts associated with construction products and the processes that occur during and after construction that should be considered during design, for example corporate social responsibility and other regulatory obligations.

The Contractor will be required to implement a sustainable procurement plan. The plan should demonstrate that new materials are sourced with robust environmental information such as Environmental Product Declarations (EPDs) and the following certification where possible:

- BES6001 (preferred) or ISO14001 (product manufacturer and supply chain);
- FSC (Forest Stewardship Council) or PEFC (Programme for the Endorsement of Forest Certification) for solid timber and timber products.

Furthermore, use of recycled and secondary aggregates will be explored during detailed design stages.

When selecting construction products, the lifespan of the building and its materials should be considered for durability, particularly considering the environment they will be specified in. The project team will be expected to demonstrate how vulnerable parts of the building have been protected from damage.

In accordance with Mat 06 on the BREEAM methodology, the project team will carry out a review of the material resource efficiency measures that can be implemented at each key RIBA Stage.

5.5. Waste

Camden Council recognise that the amount of waste produced is increasing and the traditional ways of dealing with it (for example, exporting it to landfill sites outside London) are becoming increasingly unacceptable, financially and environmentally.

Significant amounts of waste arise from the construction and operation of new developments. Waste & Resources Action Programme (WRAP) confirm that the construction industry is the largest contributor of waste in the nation. One-third of all waste in the UK, i.e. 120 million tonnes of waste per year, is generated by the construction and demolition sector, of which up to 13% is delivered and unused, it therefore produces on average three times more waste than all UK households combined. 60 million tonnes of construction/demolition waste go straight to waste collection facilities due to inappropriate or over-ordering and damage resulting from poor storage. Around 25 million tonnes of construction waste are also disposed to landfill each year.

Therefore, it is important for new schemes to minimise waste through optimised design methods, which consider current and future needs, and respond to functional requirements and climate change adaptation.

Camden Council are aiming to make Camden a low waste borough by reducing the amount of waste produced and increase recycling and the reuse of materials to meet the London Plan targets of 50% of household waste recycled/composted by 2020 and aspiring to achieve 60% by 2031.

5.5.1. Construction Waste Management

Camden CPG Energy Efficiency and Adaption details the management of construction waste that should be implemented. During construction of the proposed scheme, opportunities will be taken to minimise and reduce waste.

A pre-demolition audit of the existing building and hard landscaping has been carried out at RIBA Stage 2 to determine whether any of the materials can be recovered for subsequent application. The Pre-demolition audit has identified the following best practice opportunities for reuse and recycling:

- All soft strip waste will be taken to a recycling centre for recycling into the relevant waste streams (target 90%)
- All hard/core and concrete will be recycled and crushed for reuse in the piling mat (100%) also reduces lorry movements (environmental)
- All scrap will be recycled at a licenced re-cycling centre (100%)

The Pre-demolition audit identifies the waste streams and quantities likely to be generated as a result of the proposed demolition works and describes how these should be managed. The Pre-demolition audit will be given to

the Demolition Contractor/Principal Contractor upon appointment for inclusion in the Site Waste Management Plan (SWMP).

A SWMP will be produced, setting construction resource efficiency targets. As part of the BREEAM assessment for the Site, the Principal Contractor should abide by the SWMP which will include:

1. A target benchmark for resource efficiency, i.e. m³ of waste per 100m² or tonnes of waste per 100m²
2. Procedures and commitments for minimising hazardous and non-hazardous waste in line with the target benchmark
3. A waste minimisation target and details of waste minimisation actions to be undertaken
4. Procedures for estimating, monitoring, measuring and reporting hazardous and non-hazardous site waste. If waste data is obtained from licensed external waste contractors, the data needs to be reliable and verifiable, e.g. by using data from EA Waste Return Forms
5. Procedures for sorting, reusing and recycling construction waste into defined waste groups, either on-site or through a licensed external contractor
6. Procedures for reviewing and updating the plan
7. The name or job title of the individual responsible for implementing the above

The current BREEAM assessment requires the Principal Contractor to produce ≤ 6.5 tonnes of waste per 100m^2 (gross internal floor area). This will continue to be reviewed as the design progresses with the aim of targeting the higher benchmark of ≤ 3.2 tonnes of waste per 100m^2 (gross internal floor area).

80% of non-hazardous construction and 90% of demolition waste (in tonnage) is required to be diverted from landfill in order to achieve compliance with the BREEAM criteria.

5.5.2. Operational Waste

Policy 5.17 of London Plan (2016) and Policy CC5 Waste of the Camden Local Plan (2017) require all new applications to demonstrate that suitable waste and recycling storage facilities have been provided.

Residential refuse/recycling stores are located at lower ground floor level and are readily accessible from Delancey Street. Distances from front doors to refuse stores are kept to minimums for convenience. The block is provided with a refuse store to limit sharing and incorporates space allowance for general refuse, dry recycling and food waste. Bulk items can be temporarily stored prior to their specifically scheduled collection.

Waste management for the residential block has been designed with consideration of BS 5906:2005 Waste Management in Buildings – Code of Practice. The Residential bin store has been designed to accommodate an amount of 720l (510l required for the 3 dwellings) in separated refuse / recycling bin stores.

The hotel bin store area has been designed by AXIOM (interior architects) as determined on the hotel specification. Specific recyclable waste storage space will be provided in accordance with the BREEAM criteria for WST 03. This will include:

- Clear labelling, to assist with segregation, storage and collection of the recyclable waste streams
- Of a capacity appropriate to the building type, size, and predicted volumes of waste that will arise from daily or weekly operational activities and occupancy rates.

For consistent and large amounts of operational waste generated, provide:

- Static waste compactors or balers; situated in a service area or dedicated waste management space
- Vessels for composting suitable organic waste or adequate spaces for storing segregated food waste and compostable organic material for collection and delivery to an alternative composting facility
- A water outlet provided adjacent to or within the facility for cleaning and hygiene purposes where organic waste is to be stored or composted on site.

Collections for retail and hotel would be privately contracted and undertaken as per their respective delivery / servicing arrangements.

Waste and recycling collections for the residential units would be serviced by a kerbside collection (as per Camden's guidance for developments of 6 units or fewer). Residents would be responsible for transferring waste and recycling to street level in advance of the scheduled collection time.

5.5.3. Design for Disassembly

The scheme is targeting the BREEAM WST 06 credit for designing for disassembly and adaption. This will require the design team to produce a study, exploring the ease of disassembly and the functional adaptation potential of different design scenarios.

Prior to the commencement of RIBA Stage 3, a set of recommendations or solutions will be produced off the back of the study, with the aim to enable and facilitate disassembly and functional adaptation. These solutions are expected to be incorporated into to the Technical Design and a 'Building Adaptability and Disassembly Guide' for the building owners/prospective tenants.

6. NATURE CONSERVATION AND BIODIVERSITY

Biodiversity can be defined as the variety of species of plants, animals and microorganisms that exist on the earth. A healthy biodiversity could provide a number of natural services for everyone, ranging from ecosystem services such as pollution breakdown and soil formation, to biological resources such as providing food, medicinal resources and pharmaceutical drugs, wood products and social benefits such as research and education, recreation and tourism and cultural values.

In accordance with BREEAM, London Plan and Local policy requirements, the proposed development will aspire to ensure that no negative chance in the Site's existing ecological value will occur as a result of the proposed scheme.

The existing Site features hard landscaping or building structure throughout. On Delancey Street, a few trees are located on the pedestrian highway. The scheme is reviewing the potential to replace these with species that may offer more ecological value to the area.

An ecologist has been appointed to carry out an Ecological Appraisal and work with the project team to maximise the number of BREEAM credits the Site can achieve through implementing the Strategic Ecological Framework (2016).

All relevant UK and EU legislation relating to the ecology of the Site will be implemented. Negative impacts that may occur from Site preparation and construction works will be managed according to the following hierarchy:

1. A voidance of negative impacts of habitats and features of ecological value on the site.
2. If it is not possible for avoidance of negative impacts, protect habitats and features of ecological value from damage in accordance with best practice guidelines during development works.
3. If it is not possible for avoidance of all negative impacts or to protect habitats and features of ecological value, reduce, limit or control negative impacts as far as possible.
4. Where it is not possible for avoidance, protection, limitation or control of the negative impacts on features of ecological value on site, compensation has taken place to ensure the existing ecological value is maintained during and after the project.

7. CLIMATE CHANGE ADAPTATION

One of the key requirements for the proposed development is that it has the ability to adapt to future changes in the environment. The phenomenon of climate change is a global problem, affecting both existing and proposed developments as well as all aspects of life on earth. Due to the complex nature of climatology, it is difficult to predict the exact course that the global climate will take, although there are a number of key trends, for example rising global temperatures, which are generally agreed upon.

There are two key approaches that can be taken with regards to climate change:

- Mitigate the factors which lead to increased climate change.
- Implement adaptation measures to enable buildings to cope with the changing climate.

Usually, a combination of these two approaches is adopted; offering the best compromise between effectiveness and required investment.

Camden Local Plan (2017), Policy CC2 Adapting to climate change requires all new development to be resilient to climate change. All development should adopt appropriate climate change adaptation measures such as:

a) the protection of existing green spaces and promoting new appropriate green infrastructure;
b) not increasing, and wherever possible reducing, surface water runoff through increasing permeable surfaces and use of Sustainable Drainage Systems;
c) incorporating bio-diverse roofs, combination green and blue roofs and green walls where appropriate; and
d) measures to reduce the impact of urban and dwelling overheating, including application of the cooling hierarchy.

This section discusses the Site's ability to adapt to the predicted effects of climate change in relation to Camden Council Policy CC2.

7.1. Tackling Increased Temperature and Drought

As required by London Plan Policy 5.9 and Camden Council Policy CC2, the cooling hierarchy has been applied to the development to reduce the demand for cooling. Appendix G of the Energy Statement includes a cooling and overheating sub-report which details how solar and internal gains have been reduced limit the annual cooling load of the non-domestic areas. Additionally, a TM59 analysis has been carried out for the residential spaces.

7.1.1. Reduction of Solar and Internal Gains

This section deals only with the non-domestic elements.

The architectural and services strategy has set out to minimise heat generation through efficient design. The measures taken are as follows:

- Heat distribution pipework has been minimised where possible
- Very efficient lighting is proposed to heat gain from lighting
- The building fabric is of a medium weight construction, utilising a brick façade to absorb direct solar gain, rather than allow it to permeate directly through a lightweight structure
- The façade of the building uses façade features, such as overhangs to the ground floor and recessed and cranked guest room windows, to offer extra shade during summer months.

The image in Figure 8 below depicts the southern elevation, demonstrating how shade is provided to the hotel reception and lounge area's to the ground floor, whilst the recessed guest room windows benefit from various levels of shade as the sun moves through its arc.

FIGURE 8. RENDER IMAGE OF SOLAR SHADING FROM BUILDING FAÇADE (SOURCE: D&S STATEMENT, JUNE 2019)

Results

The results of the dynamic thermal modelling carried out for the Energy Statement have been extracted, to compare:

- Solar gains between the 'baseline' notional building and 'lean' actual building
- Internal gains between the 'baseline' notional building and 'lean' actual building

The comparison in Table 5 demonstrates that internal equipment and lighting gains have been reduced by 33% overall. Internal equipment and lighting gains are reduced from 42 MWh per annum in the baseline notional building to 28 MWh per annum in the 'be lean' actual building.

The comparison in Table 6 demonstrates that the architectural measures reduce solar gain by 80% when compared to the Baseline notional building. The baseline notional building experiences 52.4 MWh of solar gain per annum, whereas the actual 'be lean' scenario experiences 9 MWh of solar gain per annum.

TABLE 5. EQUIPMENT AND LIGHTING GAINS IN ACTUAL 'BE LEAN' (LEFT) AND NOTIONAL 'BE LEAN' (RIGHT) SCENARIOS

	Equipment gain & Lighting gain (MWh)
	62 rooms
Date	a_(Part L2 2013)_Infinity Tower A - SBEM.aps
Jan 01-31	2.4371
Feb 01-28	2.1903
Mar 01-31	2.3946
Apr 01-30	2.3029
May 01-31	2.3675
Jun 01-30	2.2852
Jul 01-31	2.3643
Aug 01-31	2.3722
Sep 01-30	2.3219
Oct 01-31	2.4250
Nov 01-30	2.3512
Dec 01-31	2.4388
Summed total	28.2511

	Equipment gain & Lighting gain (MWh)
	62 rooms
Date	n_(Part L2 2013)_Infinity Tower A - SBEM.aps
Jan 01-31	3.5710
Feb 01-28	3.2165
Mar 01-31	3.5573
Apr 01-30	3.4377
May 01-31	3.5477
Jun 01-30	3.4257
Jul 01-31	3.5425
Aug 01-31	3.5507
Sep 01-30	3.4396
Oct 01-31	3.5594
Nov 01-30	3.4495
Dec 01-31	3.5735
Summed total	41.8711

TABLE 6. SOLAR GAINS IN ACTUAL 'BE LEAN' (TOP) AND NOTIONAL 'BE LEAN' (BOTTOM) SCENARIOS

	Solar gain (MWh)
	62 rooms
Date	a_(Part L2 2013)_Infinity Tower A - SBEM.aps
Jan 01-31	0.1581
Feb 01-28	0.2620
Mar 01-31	0.5711
Apr 01-30	0.9549
May 01-31	1.2217
Jun 01-30	1.3636
Jul 01-31	1.3173
Aug 01-31	1.2177
Sep 01-30	0.8117
Oct 01-31	0.4054
Nov 01-30	0.1875
Dec 01-31	0.1203
Summed total	8.5915

	Solar gain (MWh)
	62 rooms
Date	n_(Part L2 2013)_Infinity Tower A - SBEM.aps
Jan 01-31	1.7903
Feb 01-28	2.1438
Mar 01-31	3.6384
Apr 01-30	4.6187
May 01-31	5.3651
Jun 01-30	6.1052
Jul 01-31	5.7467
Aug 01-31	5.3884
Sep 01-30	4.6205
Oct 01-31	3.1981
Nov 01-30	1.9504
Dec 01-31	1.6578
Summed total	46.2232

7.1.2. Residential CIBSE TM59 Analysis

The residential dwellings are located at the first, second and third floor of the Delancey Street elevation and benefit from shade afforded by the adjacent low-rise buildings located to the West, South and East. The adjacent buildings are generally as tall or taller than the proposed apartments. Particularly, the South West windows are shaded from the low evening summer-time sun, which significantly improves evening and night-time comfort in the bedrooms.

Furthermore, the large picture windows are shaded by a balcony above, enabling plenty of daylight but sufficient shade from the mid-day to mid-afternoon solar gains.

The main living areas will be mechanically ventilated but will also have patio doors that fully open onto the balcony, thus enabling external air to purge the dwelling of internal warm air.

Every room has at least one opening window to at least a 15° opening angle, to ensure Part F purge vent is achieved.

The scheme as described above meets the criteria of CIBSE TM59 for all bedrooms and living spaces and the results are listed in Table 7 below. TM59 is a standardised approach to predicting overheating risk for residential building designs using dynamic thermal analysis.

TABLE 7. RESULTS OF CIBSE TM59 ANALYSIS

	Criteria 1 Criteria 1 (%Hrs Top-Tmax>=1K)	Pass/ Fail	**Criteria 2** Hours over 26°C between 2200hrs and 0700hrs	Pass/ FAIL
01 Resi - Living	1.5	✓	n/a	
01 Resi - Bedroom 2	0.8	✓	20	✓
01 Resi - Bedroom 1	0.6	✓	24	✓
02 Resi - Living	1.4	✓	n/a	
02 Resi - Bedroom 2	1.1	✓	22	✓
02 Resi - Bedroom 1	0.7	✓	30	✓
03 Resi - Living	1.4	✓	n/a	
03 Resi - Bedroom 2	1.1	✓	23	✓
03 Resi - Bedroom 1	0.7	✓	30	✓

This provision is sufficient to enable CIBSE TM59 to be complied with without the need for active cooling.

7.2. Increasing Green Cover and Trees

As a minimum, the proposed scheme intends to ensure there is no negative net change in green cover within the Site boundary.

There are some existing trees on Delancey Street in front of the development that are proposed to be replaced with trees that may offer more of an ecological benefit to the Site.

7.3. Flooding and Surface Water Management

Policy CC2 of Camden Local Plan (2017) closely relates to Policy CC3 Water and flooding. The latter is set to ensure that development applications do not proposed to increase the flood risk and reduce the risk of flooding where possible by:

a) incorporate water efficiency measures;
b) avoid harm to the water environment and improve water quality;
c) consider the impact of development in areas at risk of flooding (including drainage);
d) incorporate flood resilient measures in areas prone to flooding;
e) utilise Sustainable Drainage Systems (SuDS) in line with the drainage hierarchy to achieve a greenfield run-off rate where feasible; and
f) not locate vulnerable development in flood-prone areas.

A Flood Risk Assessment (FRA) and proposed drainage strategy for the Site is included in the Structural Engineering and Basement Impact Assessment, to support the planning application.

The FRA confirms that the Site is located in a Flood Zone 1 location (see Figure 9) which means there is a low risk of flooding from the following sources:

- tidal and fluvial;
- surface water – overland flow;
- ground water;
- artificial sources – reservoirs;
- on-site drainage systems.

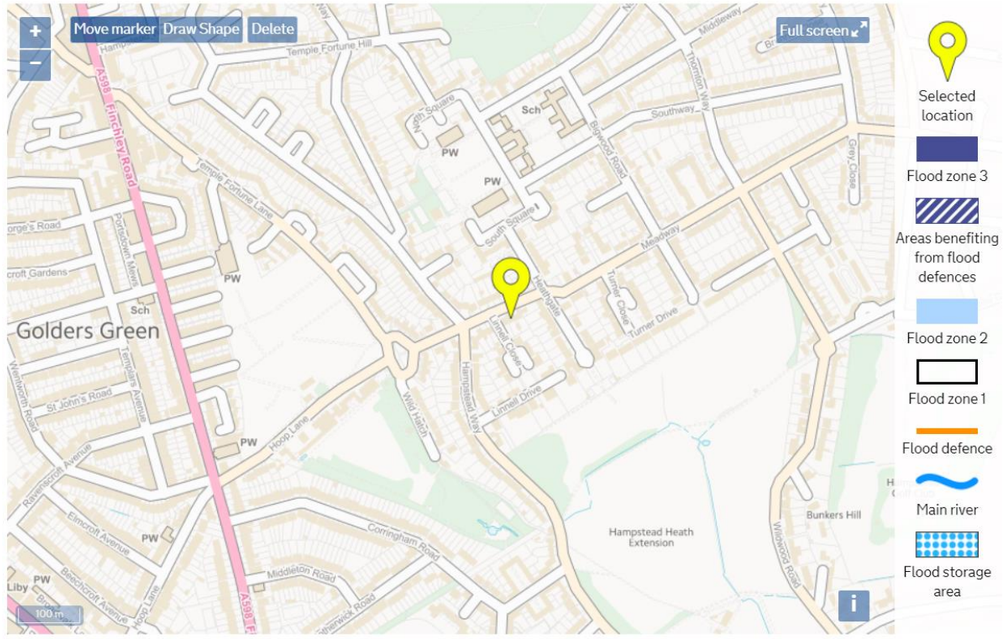


FIGURE 9. FLOOD MAP FOR PLANNING (GOV.UK, JUNE 2019)

The proposed drainage strategy has considered the disposal of surface water in the following order of priority;

1. Infiltration into the subsoil via soakaways or permeable paving.
2. Discharge to a water course or the sea.
3. Discharge to a surface water sewer.
4. Discharge to a combined sewer.

If it is not possible to discharge to a soakaway, then surface water should be controlled with the use of Sustainable Drainage Systems (SuDS) and considered using the SuDS Hierarchy.

The entirety of the Site is currently classed as impermeable and therefore, infiltration opportunities are limited. A blue roof system is proposed to attenuate surface water at the source and discharge this at a reduced flow rate of 5 l/s, compared to the existing 9.6 l/s.

This is a 48% reduction it is also the lowest practical discharge rate without causing flooding for all storm events up to and including the 1 in 100 year event + 40% climate change. Whilst the London plan requires a 50% reduction, a flow rate of less than 5 l/s would increase the chances of blockages occurring. Therefore, to avoid blockages, a max flow rate of 5 l/s will be used.

8. POLLUTION MANAGEMENT

Pollution is the process of making land, water, air or other parts of the environment dirty, unsafe or unsuitable for use. Any substance that is not naturally found in an environment could cause environmental pollution. A significant issue with environmental pollution is that the effects are not always immediate or completely understood, furthermore, mitigation measures are not always completely effective. The prevention of environmental pollution should therefore always be considered rather than mitigation.

It is therefore important to recognise the importance and value of incorporating pollution prevention measures into the building design, construction and operation to prevent the effects of mitigation.

This section will consider the measures incorporated into the design of the building to minimise the building impact with regard to pollution on the surrounding communities and environment.

8.1. Land Contamination

The reclamation and reuse of previously developed sites aligns with UK Government policies to increase the uptake of brownfield land and allows the preservation of existing biodiversity by reducing reliance on greenfield land. Remediation removes threats to health and safety, and enables land, to be improved that would otherwise be left.

A site-specific Phase 2 Geotechnical investigation has not been carried out at this stage due to access restrictions into the Site. However, a site-specific Phase 1 Geo-Environmental desk study has been carried out and is included in the Structural and Drainage strategy submitted as part of the planning application.

The Phase 1 Risk Assessment and Preliminary Conceptual Site Model have identified potential contamination sources, pathways and receptors. The following further works and a Phase 2 investigations are recommended to be undertaken as a minimum:

- Cary out a detailed UXO Risk Assessment for the Site to further investigate the potential for unexploded ordinance beneath the Site.
- Enquiries to be made with the relevant operating authority in regard to potential railway tunnels beneath or within close proximity to the Site.
- Carry out an intrusive Site investigation to confirm ground conditions at the Site. The ground investigation should allow for excavations/boreholes to be taken through any Made Ground soils and into the underlying natural strata.
- In-situ testing / geotechnical soil sampling should be carried out during intrusive investigation to provide adequate recommendations for foundation design.
- Soil samples should be recovered from selected exploratory holes and tested for potential contaminants. This should include a minimum of pH, metals, asbestos screening, PAH and TPH.
- Installation of gas monitoring wells and provision of a gas risk assessment to comprise 6 return visits over a minimum 2 month period (in line with CIRIA Report C665) to assess the risk posed from hazardous ground gases or provision of continuous ground gas monitoring over a period to be agreed with the local authority.
- Groundwater monitoring should be carried out to confirm groundwater levels and assist with the detailed design and construction of the basement.

Once the Site is vacant and access is permittable, a structural inspection of the existing property will be carried out to gain a full understanding of the existing structure and the existing loads to fully inform the geotechnical considerations and the demolition plans.

8.2. Air Pollution

Camden Council Local Plan (2017) Policy CC4 Air quality requires development proposals to consider both the exposure of occupants to air pollution and the effect of the development on air quality.

As of 20 September 2002, DEFRAs Air Quality Management Area Interactive Map shows that the Site appears to be located in an Air Quality Management Area, for Nitrogen Dioxide NO_2 and Particular Matter PM_{10}, (see Figure 10).

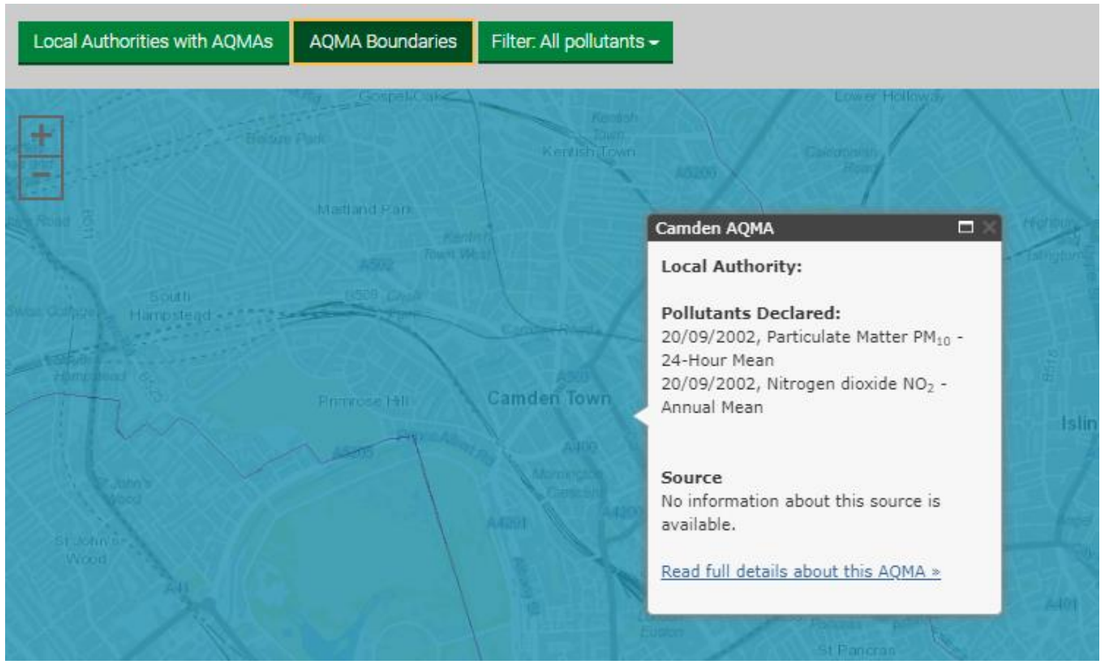


FIGURE 10. CAMDEN AQMA (DEFRA, 2019).

More specifically, the Site is located in the 'Camden High Street, from Mornington Crescent to Chalk Farm and Camden Road, Air Quality Focus Area' (AQFA).

An Air Quality Assessment (AQA) has been carried out for the Site and documented under a separate report cover as part of the planning application. The main conclusions from the AQA included:

- Concentrations across the site in 2021, the year of anticipated opening, are predicted to be below the relevant Air Quality Standards for PM_{10} and $PM_{2.5}$. However, in the context of long term AQS, there was one marginal exceedance of the 38µg.m3 WHO limit value at the location of the proposed first floor residential dwelling. As such, mitigation has been proposed to mitigate the impact of exposure.
- It is anticipated that the proposed development will achieve air quality neutral standards, in line with the requirements of the London Plan.
- During construction, adopting appropriate mitigation measures should prevent any significant air quality effects on the surrounding area.
- With mitigation in place to protect the amenity and health of future users / occupiers, the proposed development is expected to comply with all relevant air quality policy. As such, air quality should not pose any significant obstacles to the planning process.

The scheme is reviewing the feasibility of achieving 1 credit under the BREEAM Pol 02 criteria through the reduction NO_x emissions from the gas-fired water heaters, in line with the BREEAM benchmarks.

8.3. Noise and Vibration

Excessive noise can have a detrimental effect on the use and enjoyment of private property such as dwellings and business premises. It can also cause disruption for wildlife. Noise can have a major impact on the mental and physical wellbeing of individuals within, and neighbouring, a building.

Legislation is in place to control buildings and other noise-producing processes. It is important to consider the noise that will be produced by developments at an early stage, plan the development in a way that minimises it, and seek to design and specify the building and its services in a way that limits its impact.

8.3.1. Construction Noise Management

During the construction phase, the Considerate Construction Scheme will be followed to minimise noise and vibration effects. The Planning Stage Construction Methodology has been submitted under a separate cover as part of the planning application. The document requires the Principal Contractor to carry out risk assessments and method statements prior to any works likely to result in noise or vibration. Suitable measures must then be put in place to reduce or eliminate the risk where possible. It is also stated in the aforementioned document that all contractors will be required to comply with 'The Control of Noise (Codes of Practice for Construction and Open Sites) England, 2015'.

8.3.2. Operational Noise Management

A Noise Impact Assessment has been carried out as part of a separate study for the planning application. The report presents the results of the environmental and vibration measurements undertaken and provides preliminary recommendations for acoustically rated glazing and alternative means of ventilation to the proposed hotel bedrooms and apartments.

Maximum external noise levels for building services plant serving the development have been established. Rating noise levels from any new building services plant are expected to be controlled to 10 dBA below the typical background level in order to comply with Camden Local Plan (20127) requirements.

Measured vibration levels were found to be acceptable in the context of BS 6472. The risk of re-radiated noise, from underground trains, occurring within the proposed habitable rooms is considered low.

8.4. Light Pollution

Artificial light does much to safeguard and enhance upon our environment at night, however where not properly controlled light pollution can present some physiological and ecological problems. The external lighting strategy should therefore be designed so that it minimises upward lighting, reduces unnecessary light pollution, energy consumption and nuisance to neighbouring properties and animals (such as bats). As part of the current BREEAM Assessment for the Site, the external lighting strategy is being designed in accordance with Table 2 (and its accompanying notes) of the ILP Guidance notes for the reduction of obtrusive light which provides limits on the light intensity, light operating hours, the upward light ratio and where the lighting is permitted.

In addition, in accordance with the current BREEAM Assessment, all external lighting (except safety and security lighting) can be automatically switched off between 23:00 and 07.00. And where safety and security lighting is provided and will be used between 23.00 and 07.00, this part of the lighting system will comply with the lower levels of lighting recommended during these hours in Table 2 of the ILP's Guidance notes. The external light fittings will also be automatically controlled for prevention during daylight hours and presence detection of intermittent pedestrian traffic.

8.5. Water Pollution

Diffuse pollution in rivers and waterways is a typical characteristic of urban areas where road runoff, poorly plumbed drainage systems, old deposits of polluted sediment and runoff from industrial areas damage ecosystems in rivers, streams and ponds. The impacts may be individually small but when added together can be damaging, resulting in polluted water which makes urban areas less pleasant places to live and work in.

The proposed development is not expected to have any significant impact on water quality. No damaging activities are likely to occur throughout the construction and operational phases, provided that standard mitigation measures and pollution control best practices are applied.

During the Construction stage, the main contractor will be required to implement the PPG06 'Guidelines for Pollution Prevention'. The Construction Methodology will also require all contractors to comply with the following environmental legislation:

- Pollution Prevention Control Act (1999)
- Pollution Prevention and Control Regulations (2000)
- Control of Pollution (Oil Storage) (England) Regulations (2001).

9. HEALTH AND WELLBEING

9.1. Designing Inclusive Environments

The principles of inclusive design, including the specific needs of disabled people, have been integrated into the design of the proposed development through consideration of relevant guidance. Inclusive design has been an integral part of the design philosophy and will continue to inform the design process as it develops.

Details of features that have been incorporated in the design are included in the Design and Access Statement which is submitted under a separate cover as part of the planning application.

9.2. Safety and Security

The Design and Access Statement confirms that reference has been made to Section 1 Secure by Design standards for best practice guidance for designing out crime. Particular attention has been paid to creating widespread passive surveillance and positive adjacencies around the perimeter of the buildings. The design takes care to create active frontage to Camden High Street and Delancey Street - thus creating a positive arrangement for hotel visitors and resident overlooking street and also having privacy.

The security specialist has been appointed to carry out a Security Needs Assessment (SNA) for the proposed development at RIBA Stage 2. The recommendations of the SNA will be implemented in the design in order to secure the BREEAM Hea 07 credit.

9.3. Indoor Comfort

The design of the building will promote a healthy living environment that will reduce environmental stresses and promote mental well-being, through adequate indoor air quality, daylight penetration, quality views and well-designed acoustics.

To promote internal air quality, mechanical ventilation fresh air inlets will be located as far away from sources of external pollution as possible.

Healthy indoor air quality will be further promoted in all areas of the proposed development through the specification of internal finishes and fittings with low emissions of volatile organic compounds (VOCs).

An Indoor Air Quality Plan will be produced for the hotel in accordance with the BREEAM 2018 criteria to consider issues such as removal of contaminant sources, dilution and control of contaminant sources, procedures for pre-occupancy flush out and analysis and maintaining indoor air quality in-use.

Visual comfort has actively informed the development of the design of the proposed development. Daylight and sunlight will be maximised where possible through a daylight design process to lower artificial lighting energy consumption and increase the sense of wellbeing for occupants. A glare control strategy will be implemented to avoid occupants suffering from glare whilst carrying out any close-up work.

10. SUSTAINABLE TRANSPORT

Transport accounts for around a quarter of UK greenhouse gas emissions, significantly affecting air quality at the roadside. Public transport offers a route to addressing transport-related greenhouse gas emissions as the emissions from trains and buses can be up to eight times lower than car travel.

Sustainable transport offers several improvements benefiting the environment and society by:

- Reducing energy consumption and carbon emissions
- Reducing air pollution by reducing the number of private cars in use
- Reducing congestion and improve safety on the site and local roads
- Encouraging healthy active travel such as walking and cycling
- Increasing provision of local amenities
- Encouraging improvement of public transport provision

The National Planning Policy Framework places significant emphasis on sustainable transport options, stating that planning should “make the fullest possible use of public transport, walking and cycling, and focus significant development in locations which are or can be made sustainable”. While the role of strategic policies is key, the need to address these issues with careful planning and design remains key to the creation of urban environments that are healthier and more pleasant to live.

The National Planning Policy Framework indicates that the existing transport accessibility should be considered, and travel plans should be developed in parallel to development proposals. They should assess the anticipated transport impacts of the new development and provide a long-term management strategy for implementing mitigating measures.

Chapter 10 of the Camden Local Plan (2017) includes policies on sustainable transport that the Proposed Development will be expected to comply with:

- Policy T1 of LBC’s Local Plan outlines the Council’s objectives to prioritise walking, cycling and public transport. New developments should meet the needs of pedestrians and cyclists to assist in creating a safe and accessible environment to promote active modes of transport.
- Policy T2 of LBC’s Local Plan states that “the Council will limit the availability of parking and require all new developments in the borough to be car-free”.
- Policy T4 of LBC’s Local Plan states that “Developments of over 2,500sqm likely to generate significant movement of goods or materials by road (both during construction and operation) will be expected to… accommodate goods vehicles on site.”

10.1. Transport Assessment

A Transport Assessment has been submitted under a separate cover as part of the planning application for the Site.

TRICS data has been used to determine the number or traffic/people movement for the existing Site (non-food retail) and is provided in detail in Appendix D of the Transport Assessment. In order to establish the trip generation credentials of the proposed development, survey data from the comparably located ‘hub by Premier Inn’ at St Martin’s Lane, Westminster, has been interrogated. This was summed with TRICS data for the residential units to calculate the total number of anticipated journeys to and from the Proposed Development.

Considering the location of the Site it is likely that public transport and active modes of travel such as walking and cycling would be the primary choice for all users to access the site, as well as for use by guests during their stay.

Public Transport

The Transport Assessment confirms that the Site is well located to benefit from London’s provision of existing public transport infrastructure and services. The Public Transport Accessibility Level (PTAL) is a method of measuring accessibility to the public transport network, considering walk access time and service availability. The rating is from 1 (very poor) to 6 (excellent). The Site has a PTAL score of 6b, which indicates the Site has an ‘excellent’ level of accessibility. This is demonstrated in Figure 11, sourced from the Transport for London WebCAT planning tool on 03 June 2019.

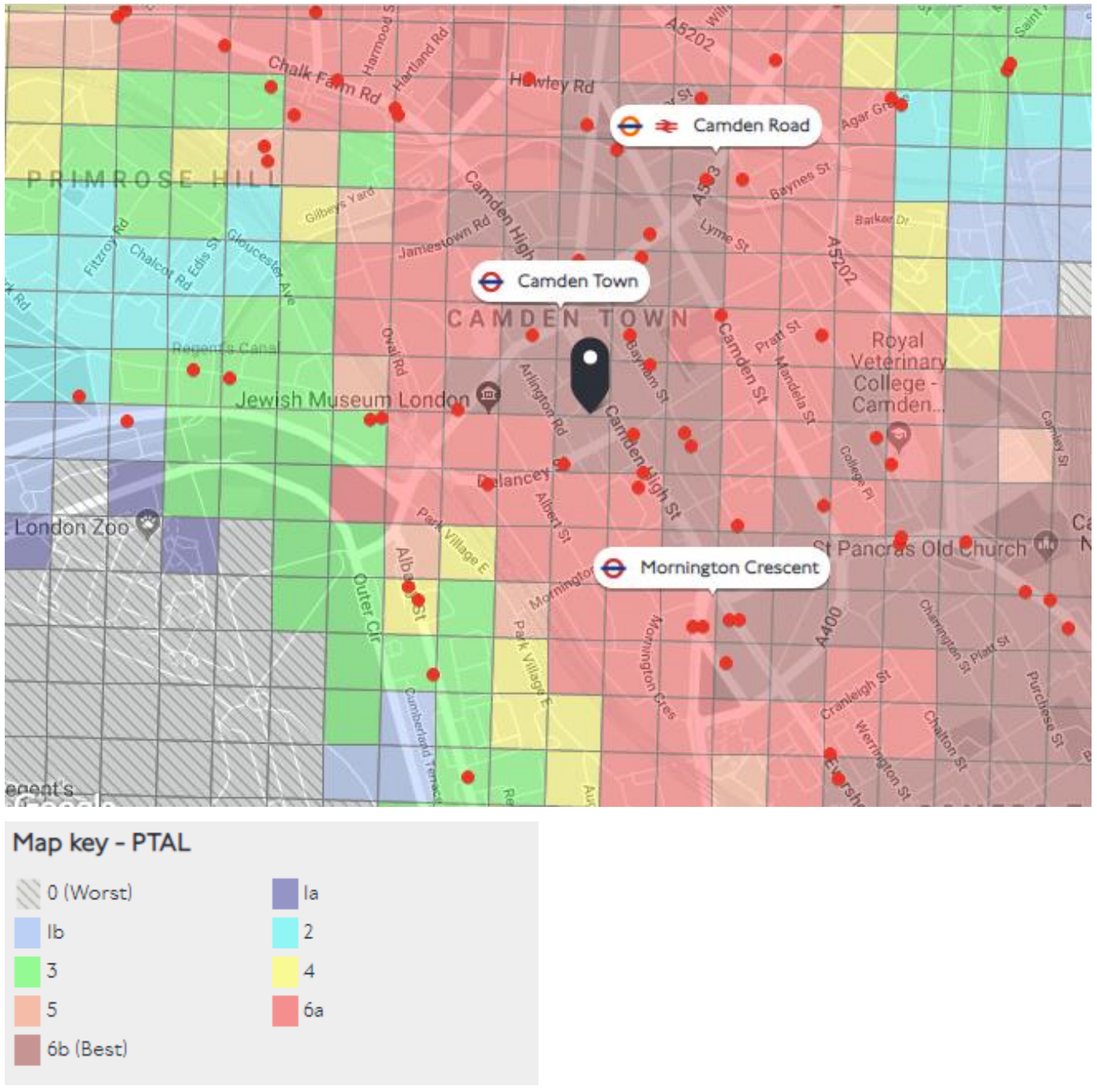


FIGURE 11. PTAL MAP (TRANSPORT FOR LONDON, JUNE 2019).

As identified above, there are a range of night buses operating through the local area which would be particularly attractive to staff working night shifts for example.

Pedestrian Access

The Transport Assessment confirms that there is an excellent standard of pedestrian infrastructure provided throughout the local area. The existing pedestrian available include:

- generally wide and well-lit footpaths
- a number of designated crossings which comprise dropped kerbs with tactile paving
- good way-finding signage is also available within the immediate vicinity of the site, including a Legible London signage at the site's eastern frontage

The existing footways on Delancey Street are of a reasonably good quality, although the effective footway width along the site frontage is relatively narrow in places. The overall footway width at the south-western corner or the site is approximately 2.0m, although street furniture and trees reduce the effective width to less than 1.5m in places.

As part of the Site redevelopment, the proposed building line will be pulled back, resulting in an increased footway width on both Delancey Street and Camden High Street. On Delancey Street, the footway width would be increased by approximately 600m – 700mm along the majority of the site frontage.

During pre-application discussions, Highway Officers confirmed that the Council / TfL would be happy to formally adopt the strip of pavement on the respective frontages. This would therefore provide an improved pedestrian environment around the site.

Cyclist Access

There are several cycle routes available within the vicinity of the site. These routes are likely to be of significance to staff travelling to / from the site, and to guests during their stay, when making journeys throughout the local area.

Based on the proposed development mix and floor areas, cycle parking provision has been included as part of the Proposed Development. The Site has provided the required number of spaces to meet compliance with the Draft New London Plan standards, as shown in Table 8.

TABLE 8. DRAFT NEW LONDON PLAN – CYCLE STORAGE SPACES REQUIREMENT

Use Class	Long Stay	Short Stay
C1 Hotel	4	2
C3 Residential	6	1
A1 Non-food retail	1	2
Total	11	5

A number of Santander cycle docking stations are also located within the vicinity of the Site:

- Greenland Road: ~250m to the north (36 cycle spaces);
- St Martins Close: ~300m to the east (18 cycle spaces);
- Parkway: ~350m to the north-west (33 cycle spaces);
- Gloucester Avenue: ~400m to the north-west (24 cycle spaces).

Servicing

Currently, deliveries to the existing retail Site are received either from the loading bay on Camden High Street or from the edge of carriageway on Delancey Street (as permitted outside of the peak highway hours).

Under the proposals, deliveries to the retail unit would continue to be accommodated from the loading bay on Camden High Street, whilst deliveries to the hotel would be accommodated from the service yard at Signmakers Yard. No delivery activity would take place on Delancey Street. These delivery arrangements have been agreed in principle with Camden Council as part of the pre-application process.

Based on extensive experience servicing their sites, Whitbread have advised that the hotel would require a total of 14 delivery / refuse collection visits over the course of a week, which is not considered to represent a 'significant' level of activity. Given that delivery vehicles would be travelling to other nearby Premier Inn hotels as part of a link journey, these visits would not necessarily represent new vehicle trips on the network.

The proposed retail unit would generate a reduced level of servicing activity compared to the existing retail unit given the net reduction in floorspace.

To minimise the impact of deliveries, Whitbread are committed to ensuring:

- Their principal suppliers are signed up to Transport for London's Fleet Operator Recognition Scheme (FORS). FORS is a voluntary industry-led scheme which aims to raise the standard of the fleet and freight

industry by improving operators' performance with regards to safety, fuel efficiency, economical operation and vehicle emissions.

- Deliveries are coordinated regionally to enable one delivery vehicle to serve several Whitbread hotels. The number of deliveries is constantly reviewed to ensure that the minimum number of deliveries occur for each site.
- Journeys are carefully planned, making most efficient use of each delivery vehicle and minimising the number of journeys, distances required to travel and associated CO_2 emissions.
- Each Whitbread vehicle aims to achieve the lowest possible emissions, with Whitbread committed to operate below current emission standards with many of the vehicles operating at Euro 5 standards, and all new vehicles to the fleet being of this standard.
- A delivery schedule will be prepared in order to ensure deliveries do not overlap and hence ensure only one delivery vehicle is present on-site at any given time. Delivery vehicle arrivals are carefully planned, with the arrival time fixed to within an hour taking allowance for traffic disruptions for example.

Car Parking

With regards to car parking at hotel developments, the current London Plan states that "in locations with a PTAL of 4–6, on site provision should be limited to operational needs, parking for disabled people and that required for taxis, coaches and deliveries/servicing". Similarly, Policy T2 of Camden's Local Plan states that "the Council will limit the availability of parking and require all new developments in the borough to be car-free".

In accordance with the above London Plan and Camden Local Plan policies, and owing to its highly accessible nature, the Proposed Development will not provide any car-parking spaces.

Paragraph 10.18 of Camden's Local Plan states that "parking for disabled people for both residential and non-residential developments should be provided where it can be demonstrated as necessary, taking into account existing availability of on-street parking for Blue Badge holders".

There is no identified need for dedicated disabled parking within the site; therefore, in the infrequent event of disabled parking being needed, this would be accommodated within existing on-street public provision. It is noted that blue badge holders are permitted to park free of charge and with no time limit in resident permit holder and pay & display parking bays within Camden.

Coach Parking

Whitbread hotels discourage and rarely accept coach party bookings and there is no incentive offered to coach operators, hence this decreases the attractiveness. Owing to the proposed hotel concept, coach parties would not be anticipated and therefore no dedicated coach parking will be provided.

Taxi Drop-Off

The proposed hotel would not be anticipated to generate a significant level of taxi pick-up / drop-off activity. This is evidenced by the comparable 'hub by Premier Inn' survey data which identifies there would be a total of 13 taxi visits at the site on a typical weekday.

It is therefore anticipated that local taxi ranks on Camden High Street and appropriate kerb-side locations could be safely and conveniently utilised for the limited pick-up / drop-off purposes of the hotel. The closest taxi rank to the site is located on Greenland Street, approximately 120m to the north, although the loading bay at the site frontage is likely to be used for drop-off purposes and could be safely utilised.

10.2. Travel Plan

A Travel Plan has been developed under a separate cover and will be submitted as part of the planning application for the Proposed Development.

The Travel Plan seeks to achieve modal shift towards sustainable transport, particularly increasing active travel (walking and cycling) and discouraging single occupancy car travel associated with the site. The preparation of the Travel Plan has been based on the outcomes of the Transport Assessment which identifies the potential highway implications (trip generation, parking demand and servicing arrangements) of the proposals.

The Travel Plan demonstrates the opportunities for sustainable travel to / from the site, targeting both staff and guest travel. The following measures and initiatives to be implemented should planning permission be granted:

Site Measures

1. The 'hub by Premier Inn' will offer a deli-style food and beverage service integrated into the hotel; reducing the need for travel off-site. Furthermore, a number of eateries are available within a short walk from the hotel.
2. With the on-going development of smartphone technology, it is envisaged that guests will be able to access hotel facilities through the use of their mobile phones to include check-in and remote room unlocking, thereby reducing the requirement for staff to be present.
3. Showers, lockers and cycle parking will be fully installed prior to occupation of the hotel as part of the construction. Adequate shower and changing facilities will be available on-site, by way of a dedicated shower and changing area for staff; guests have access to a bathroom within their own room. Lockers would also be provided in the staffroom for the storage of clothing and cycle equipment i.e. helmets.
4. Secure 'Sheffield' style cycle stands will be installed on-site in accordance with London Plan and BREEAM standards. The use of this facility will be monitored by the Travel Plan Coordinator (TPC) and if it regularly reaches capacity additional provision will be sought.
5. Access ramps, dropped kerbs and tactile paving (where applicable) will be provided, to ensure access for all.
6. Cycle maintenance tools to include a bicycle pump and puncture repair kit will be made available at reception.
7. Reception Information Point – the 'hub by Premier Inn' reception will be equipped with a video wall banner displaying a live underground feed as well as touch screens with the following apps pre-loaded: City Mapper, Sky Scanner, Google Maps, Tube Map and Trainline. These touch screens along with tablets located within the communal areas will also permit access to an internet browser where a wealth of travel information (maps. timetables, directions etc.) can be obtained.

Whitbread Corporate Initiatives

1. Local Recruitment Policy – Whitbread aims to recruit 95% of staff through local job centres; by virtue of this most staff reside within a 5-mile radius of their place of work, meaning that alternative modes of travel to the car, such as train, bus, cycling and walking will offer realistic travel choices.
2. Website Information / Booking Confirmation – sustainable transport information is available on the 'hub by Premier Inn' website, this enables guests to plan their journey in advance and/or consider available travel choices prior to booking. Booking for 'hub by Premier Inn' hotels is exclusively through https://www.premierinn.com/gb/en/hub.html and the hub smartphone app.
3. A detailed local area guide with interactive maps is incorporated within the 'hub by Premier Inn' app, which is enhanced through augmented reality technology. Guests can point their device at the map on the wall of their room and see it come to life, providing a list of things to see and do as well as places to eat and drink in the surrounding area.
4. Staff Voucher Scheme – a 10% discount can be obtained at Halfords when purchasing vouchers in advance, this can be used to purchase bicycles/ cycle equipment, thereby encouraging their use,

Implementation

A vital element is to ensure that staff are aware of the Travel Plan and the information contained within, to encourage them to use sustainable modes of transport. The concept of the Travel Plan will be reinforced on a day-to-day basis via training, staff communications and promotion of the Travel Plan initiatives to include the associated financial incentives.

1. Staff Welcome Pack – all new recruits will be informed of the Travel Plan during their interview / the induction process.
2. Travel Plan Notice Board – an information board displaying up to date information on sustainable travel will be erected within a communal area i.e. the staff room. The noticeboards will provide up-to-date information, such as:
    a. Walking and cycling maps, detailing safe routes to/from the site;
    b. The health benefits of walking and cycling;

c. Routing, ticketing and timetable information for local public transport services;
d. Contact details for local taxi firms;
e. Details of car sharing schemes, to include promotion of www.londonliftshare.com and details of potential cost savings; and
f. A summary of the available travel initiatives, to include the Halfords voucher scheme.

3. Reception Staff will be trained to ensure they have an understanding of the site's location and surrounding neighbourhood; enabling them to respond to a guest's queries.
4. Event Organisation – activities planned to coincide with national events (see 'Travel Events Calendar') can raise the profile of the site's Travel Plan.
5. Promotion of Car Sharing – Whilst the site is well located in terms of public transport accessibility, some guests and staff may choose to travel by car, therefore it may be appropriate to promote car sharing. Potential cost savings can be calculated here: https://liftshare.com/uk/savings-calculator, while national websites such as 'liftshare' and 'blablacar' allow users to find a car share budi for free.

An important part of any Travel Plan is the collection of data relating to the modes of travel used by both staff and guests of the site. In order to identify and understand travel habits and how the site operates. Monitoring will be undertaken annually by the TPC. The TPC will be responsible for comparing the results year on year and adjusting the targets and initiatives accordingly, they will also take into account travel related feedback received from staff and guests through the year.

10.3. Sustainable Transport during Construction

The principal contractor will implement the Construction Management Plan which will be required to adhere to the Site Logistic Plan, which will help to reduce the transport impacts of the proposed development during construction.

To recognise and encourage the construction site to be managed in an environmentally friendly way, the current BREEAM assessment requires the Principal Contractor to:

- monitor and record data for the transportation movements
- report separately for materials and waste, the total transport-related carbon dioxide emissions ($kgCO_2$-eq), plus total distance travelled (km) to the BREEAM Assessor
- set targets for transportation movements and impacts resulting from delivery of construction materials to site and construction waste from site.

11. CONCLUSIONS

This Sustainability Statement demonstrates that the proposed development meets a number of key policy objectives and considers a broad range of sustainability aspects.

This Sustainability Statement has assessed the Proposed Development against the standards set out in the CPG Energy Efficiency and Adaptation (2019) and the Camden Council sustainability objectives, outlined in the Borough's Local Plan (2017).

The key benefits of the scheme in relation to sustainability can be summarised as follows:

- Use of and maximisation of the potential of previously developed land via provision of a mixed-use development, appropriate for the context and site location;
- Provision of water efficient sanitary ware to reduce the potable water demand;
- A development that has been designed to adapt to changing climate conditions through:
  - A design that aims to reduce the potential for overheating and the reliance on air conditioning systems. This has been achieved by minimising internal heat generation through energy efficient design and well-designed passive shading measures reducing the amount of heat entering the building in summer; and
  - Reducing the rate of run-off and therefore the potential of flooding through the incorporation of a blue roof.
- Overall Site-wide reduction in CO_2 emissions of 47% over a Part L compliant baseline in line with the London Plan requirements via the Energy Hierarchy;
- Further improvements to the building's energy performance through utilisation of air source heat pumps to serve the space conditioning and hot water demands of the hotel;
- Adherence to sustainable construction Site management practices including:
  - Signing up to the CCS and going beyond best practice; and
  - Reducing environmental impacts of the construction Site.
- Waste and resource management strategies for design, construction, operation and disassembly;
- Maximise of diversion of waste to landfill during construction and for the operation of the building with the provision of recycling facilities and an easily accessible and adequately sized communal waste storage area;
- Good practice environmental design, including good daylight, ventilation and acoustics;
- Responsibly sourced materials with robust environmental information, where feasible;
- Provision of a Site that is accessible to all, including the disabled and promotes pedestrian and bicycle access;
- Cyclist provision to accommodate appropriate number of cycle spaces for the proposed occupancy as well as end-of journey facilities to further promote comfortable and safe access to the site by bicycle;
- Design of a safe and secure development;
- Develop a proposal that is capable of achieving a BREEAM 'Excellent' rating.

The sustainability strategy described in this report sets out the proposed measures and commitments that have been and will continue to be incorporated into the design process and the construction and operation of the proposed development. The objective is to optimise the building's environmental performance and result in a scheme that can be designed, constructed and operated in a sustainable way.

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