Method Consulting

Intelligent engineering, sustainable buildings

Imperial Hotel – Super Plant Block

Sustainability Statement

London Borough of Camden

August 2019

Document History

This document has been revised and issued as below:

Revision	Date	Description	Created by	Approved by
P1	20/08/2019	Preliminary issue	GAJ	AB
P2	28/08/2019	Revised following Arch comments	GAJ	AB

Contents

1 Executive Summary

Method Consulting LLP has been appointed to produce a Sustainability Statement as part of the Planning Application for the new 'Super Plant Block' to be located at the existing Imperial Hotel in the London Borough of Camden.

This report outlines the potential environmental impacts of the development and the sustainable features to be incorporated through good building design and construction methods as well as the potential to specify renewable and low carbon technologies. This report is written with particular reference to the London Borough of Camden's Local Plan.

Method Consulting LLP have also been appointed to produce an Energy Statement, which should be referred to for further detail in support of this document.

Compliance with each of the Camden Local Plan policies has been demonstrated as follows:

- Policy CC1 Climate Change Mitigation:
  - The development is expected to reduce energy use and carbon emissions via energy efficient fabric and building services as discussed in Section 4.1.
  - The development is located to minimise the need for travel as discussed in Section 4.7.
  - Resource efficiency with regard to construction waste is discussed in Section 4.6.1.
  - Connection to decentralised energy networks is discussed in Section 4.1.
  - The proposed development includes some demolition of existing poor quality, thermally inefficient buildings. The new block will be significantly more energy and space efficient.

- Policy CC2 Adapting to climate change:
  - Adaptation to climate change is discussed in Section 4.2.
  - The application will not impede on any green spaces on or near the site.
  - Green walls are proposed for the development.
  - It is considered that the application will have no impact on the existing drainage as the area of impermeable surface will stay the same, so surface water run-off will not increase.

  - In line with the cooling hierarchy, exposed thermal mass, and solar control glazing with a low G-value (0.3) glazing are proposed to minimise the cooling load to the spaces, with shading from surrounding buildings also reducing the need for active cooling.
  - Mechanical cooling is proposed so it is not anticipated that overheating will be a problem.
  - Non-Domestic developments of 500m^2 floor space or above to achieve a BREEAM Excellent rating

- Policy CC3 Water and flooding:
  - The site is in Flood Zone 1 according to the EA's Flood Map for Planning (see Section 4.3).
  - The application will have no impact on the existing drainage as the area of impermeable surface will stay the same, so surface water run-off will not increase, as discussed in Section 4.3.
  - Water efficiency measures are proposed as discussed in Section 4.4.
  - Prevention of water pollution during construction is discussed in Section 4.5.2.

- Policy CC4 Air pollution:
  - Measures to reduce the risk of air pollution are discussed in Section 4.5.1.
  - As demolition will be taking place and Air Quality Assessment has been commissioned.

- Policy CC5 Waste:
  - Minimising construction waste and diversion from landfill are discussed in Section 4.6.1.
  - Waste storage is discussed in Section 4.6.2 and it is expected that the hotel will continue to use their existing facilities.

2 Introduction

2.1 Background and Proposal

Method Consulting LLP has been appointed to produce a Sustainability Statement as part of the Planning Application for extension of the existing Imperial Hotel in the London Borough of Camden to provide a new plant and bedroom block.

The new block will consist of a plant room at ground floor level (to house pumps, air handling plant and a standby generator), 10 bedrooms at first and second floor with a link to the President Hotel and erection of a canopy. This is to be located on the site of an existing two storey building and canopy, which will be removed to facilitate the development of the new block.

The total net area is 350m^2 (N.B. this does not include the plant room at ground floor which is not a habitable or heated space).

This report outlines the potential environmental impacts of the development and the sustainable features to be incorporated through good building design and construction methods as well as the implementation of renewable and low carbon technologies. This report is written with particular reference to the London Borough of Camden's Local Plan.

Method Consulting LLP has also been appointed to produce an Energy Statement, which should be referred to for further detail in support of this document.

2.2 Site Location

The Site is located on the corner of Russell Square at the junction with Southampton Row, within the London Borough of Camden. Access to the building is directly from the pavement and there is vehicle access via an underpass through the building to the rear.

The Site is currently occupied by the existing hotel and the extension will not affect the footprint of the development.

Aerial imagery of the existing site is shown in Figure 1 below.

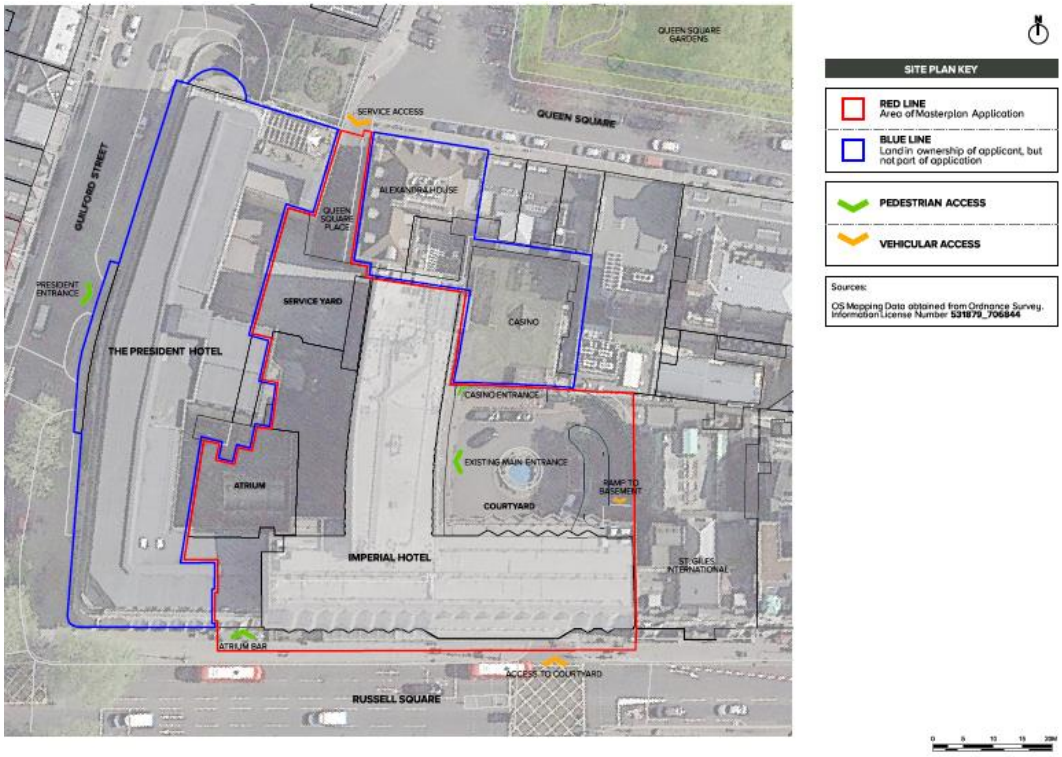

Figure 1: Existing Site

3 Relevant Planning Policy

3.1 National Policy

The National Planning Policy Framework (NPPF) was published on 27 March 2012. This document sets the overarching policies for development in England and states that:

"At the heart of the NPPF is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking."

For decision-taking this means:

- Approving development proposals that accord with the development plan without delay; and
- Where the development plan is absent, silent or relevant policies are out-of-date, granting permission unless:
- Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or
- Specific policies in this Framework indicate development should be restricted.

The NPPF states that there are three key aspects of sustainable development; economic, social and environmental with a focus on:

- Building a strong, competitive economy;
- Ensuring the vitality of town centres;
- Promoting sustainable transport;
- Delivering a wide choice of high quality homes;
- Requiring good design;
- Promoting healthy communities;
- Meeting the challenge of climate change and flooding;
- Conserving and enhancing the natural environment; and
- Facilitating the sustainable use of materials.

Paragraph 95 of the NPPF states that:

"To support the move to a low carbon future, local planning authorities should:

- Plan for new development in locations and ways which reduce greenhouse gas emissions;
- Actively support energy efficiency improvements to AL buildings; and
- When setting any local requirement for a building's sustainability, do so in a way consistent with the Government's zero carbon buildings policy and adopt nationally described standards."

3.2 Regional Policy – The London Plan

It is understood that the development is not referable to the London Plan as the net change in floor area does not classify it as a major development. Camden Council does however require new buildings to follow some aspects of the London Plan, which are reflected in the Camden Local Plan requirements.

3.3 Local Policy – London Borough of Camden Local Plan

Adopted in July 2017, the London Borough of Camden's Local Plan indicates the aims and objectives of the Borough with a vision for its future up to 2031. In particular, there are a number of policies which are relevant to this report. A summary of each is included below.

3.3.1 Policy CC1 Climate Change Mitigation

The Council will require all development to minimise the effects of climate change and encourage all developments to meet the highest feasible environmental standards that are financially viable during construction and occupation.

This requires the following:

- Promotion of zero carbon development and requiring all development to reduce carbon dioxide emissions through following the steps in the energy hierarchy;
- The location of development and mix of land uses should minimise the need to travel by car and help to support decentralised energy networks;
- All proposals that involve substantial demolition should demonstrate that it is not possible to retain and improve the existing building;
- All developments should optimise resource efficiency;
- All major developments should assess the feasibility of connecting to an existing decentralised energy network, or where this is not possible establishing a new network.

- Major developments should install appropriate monitoring equipment to ensure that the Council can monitor the effectiveness of renewable and low carbon technologies.

3.3.2 Policy CC2 Adapting to climate change

The Council will require development to be resilient to climate change.

All development should adopt appropriate climate change adaptation measures such as:

- The protection of existing green spaces and promoting new appropriate green infrastructure;
- Not increasing, and wherever possible reducing, surface water runoff through increasing permeable surfaces and use of Sustainable Drainage Systems;
- Incorporating bio-diverse roofs, combination green and blue roofs and green walls where appropriate; and
- Measures to reduce the impact of urban and dwelling overheating, including application of the cooling hierarchy.

3.3.3 Policy CC3 Water and flooding

The Council will seek to ensure that development does not increase flood risk and reduces the risk of flooding where possible.

We will require development to:

- Incorporate water efficiency measures;
- Avoid harm to the water environment and improve water quality;
- Consider the impact of development in areas at risk of flooding (including drainage);
- Incorporate flood resilient measures in areas prone to flooding;
- Utilise Sustainable Drainage Systems (SuDS) in line with the drainage hierarchy to achieve a greenfield run-off rate where feasible; and
- Not locate vulnerable development in flood-prone areas.

3.3.4 Policy CC4 Air Quality

The Council will ensure that the impact of development on air quality is mitigated and ensure that exposure to poor air quality is reduced in the borough.

Development that involves significant demolition, construction or earthworks will also be required to assess the risk of dust and emissions impacts in an AQA and include appropriate mitigation measures to be secured in a Construction Management Plan.

3.3.5 Policy CC5 Waste

The Council will seek to make Camden a low waste borough.

The parts of the policy that are relevant to this development are:

- Aim to reduce the amount of waste produced in the borough and increase recycling and the reuse of materials to meet the London Plan targets of 50% of waste recycled/composted by 2020 and aspiring to achieve 60% by 2031; and
- Make sure that developments include facilities for the storage and collection of waste and recycling.

4 Sustainability Statement

4.1 Energy and Reduction of CO_2 Emissions

An Energy Statement has been prepared by Method Consulting and accompanies this report as part of this application. A summary of this statement is included below, but the full report should be referred to for further detail.

Developments in Camden are expected to minimise energy use and CO_2 emissions in operation through the application of the Energy Hierarchy, as defined in the London Plan:

- **Be Lean:** Use less energy through energy-efficient building fabric and systems;
- **Be Clean:** Provide heating and cooling efficiently with a preference of communal heating and cooling networks, and;
- **Be Green:** Incorporate suitable renewable energy technologies as appropriate to the site.

In order to establish the performance of the building, the development has been modelled using the approved software IES Virtual Environment, which is reliant on the National Calculation Method (NCM 2013). IES calculates the regulated energy demands associated with hot water, space heating, and fixed electrical items, along with the unregulated energy demands.

4.1.1 Be Lean – Energy Efficiency measures

A range of appropriate Be Lean energy efficiency measures are proposed, which will enable the proposed development to reduce energy usage in operation, including low fabric U-values and high-efficiency building services.

The building fabric is proposed to be significantly better-performing than both the minimum backstop values of external elements as defined in Part L2A, as well as the notional values as defined in the BRUKL assessment. The performance of these building elements is anticipated to result in a reduction in energy demand. Targeted element U-values and air permeability are shown below.

Element	Limiting 2013 U-value ($W/m^2/K$)	Notional building U-value ($W/m^2/K$)	Target U-value ($W/m^2/K$)	% improvement on Notional
Ground Floor	0.25	0.22	0.22	0%
External Walls	0.35	0.26	0.18	30.7%
Roof	0.25	0.18	0.15	16.7%
Windows (Double glazed)	2.2	1.6	1.2	25%
Doors	2.2	2.2	2.2	0%
	Limiting ($m^3/h/m^2$)	**Notional ($m^3/h/m^2$)**	**Target ($m^3/h/m^2$)**	
Air Permeability	10	3/5	3	-

Table 1: Limiting, notional building and target U values and air permeability Be Clean – Decentralised energy networks

4.1.2 Be Clean – Decentralised energy networks

For the Be Clean case, the energy systems required on-site have been evaluated based on the development's type and scale, with a hierarchal approach to energy supply following:

- Connection to existing heating or cooling networks;
- Site-wide Combined Heat and Power (CHP) networks, and;
- Communal heating and cooling.

The Energy Statement identified that there are no local district heating networks available to serve the site. However, as discussed in the Energy Statement, the building already has two existing gas-fired CHP machines to meet the heating baseload of the building. These are appropriately sized for the current load and are thus already contributing to significantly reducing CO_2 emissions for the hotel. Because the heating demand will not significantly change as a result of the extension, it is not proposed to alter or add to the existing CHP installation. No additional savings are therefore anticipated in this stage of the Energy Hierarchy.

4.1.3 Be Green – Low or zero carbon technologies

In the final stage of the Energy Hierarchy, the potential for the development to achieve the considerations of the Be Green stage via incorporation of solar photovoltaics has been considered. All other appropriate renewable technologies

have also been considered for the development, and most have been excluded due to limitations on-site, planning restrictions, and potential cost relative to the development's budget.

The potential to install a 13.2 kWp PV array to the roof of the building has been explored, which would act to provide a total of only 0.7% of the building's energy requirements. This is anticipated to equate to overall CO_2 emissions saving of 2.3%.

The potential PV array could be approximately 80m^2 and this is the practical maximum area of PV which can be accommodated on the roof areas whilst still allowing for safe access for maintenance. However, as the roof area is heavily shaded throughout the year by surrounding buildings being 9-10 storeys high, the efficacy is significantly compromised, with a predicted payback of more than 87 years for the PV installation.

4.1.4 Energy Hierarchy Summary

	Regulated CO_2 Emissions ($kgCO_2$ per m^2 per Annum)	Regulated CO_2 Savings	
		$kgCO_2$ per m^2 per Annum	
Base case	48.2		
After Be Lean Measures	46.7	1.5	3.11%
After Be Clean Measures	40.7	6.0	13.90%
After Be Green Measures	40.7	0	0%
Cumulative On-Site Savings		**7.5**	**15.56%**
Unregulated Carbon Dioxide Emissions (Tonnes CO_2 per Annum)	23.3		

Table 2: Predicted Site-Wide CO_2 Emissions and Cumulative Savings

This shows how the development is addressing the requirements of Policy CC1 in terms of reducing CO_2 emissions via application of energy efficiency measures. The measures taken at this stage are thought to be reasonable actions to help maintain an energy-efficient building, with the limitation of the heavy overshadowing of the

roof limiting the scope to install a PV array that could deliver any extra meaningful reduction in CO_2 emissions.

It is noted, however, that a 150m^2 PV array is proposed elsewhere on site, to the proposed 9th and 10th floor extension, which is subject to a separate planning application, and already maximises the potential for installing PV to other areas on site.

4.2 Adaptation to Climate Change

In line with Policy CC2, the extension proposes to reduce its impact on climate change and be resilient to the effects of climate in a number of ways.

4.2.1 Green infrastructure

The hotel is located adjacent to Russell Square which is an existing green space and will remain. This application will not impede on any green spaces on or near the site. A green roof has not been proposed as this would potentially increase the height and loadings of the building which is not considered favourable. However, green walls are proposed to the south west elevation of the building as shown on the Architect's drawings (ref: 1289-P4016-A).

4.2.2 Surface water run-off

This application will not impact on the footprint of the development in that the new build areas will be on the site of existing buildings. It is therefore considered that the application will have no impact on the existing drainage as the area of impermeable surface will stay the same, so surface water run-off will not increase.

To mitigate the risk of increased rainfall the rainwater drainage pipework will be designed to cater for high levels of rainfall and weir overflows will be included in the gutters so that if the gutters overflow then water can run off freely without causing flooding or damage inside the building.

4.2.3 Overheating and Thermal Comfort

As described in the Energy Statement report, it is proposed that the accommodation in the super plant block is heated and cooled via local fan coil units, as appropriate and expected for a building of this type and use. Ventilation is provided via Mechanical Ventilation with Heat Recovery (MVHR).

In accordance with the cooling hierarchy, energy efficient systems (as described above and in the Energy Statement) have been proposed to reduce internal heat generation and the passive cooling measures have been incorporated into the design to minimise heat gains and reduce the risk of overheating and the requirement for cooling as far as possible. The measures included are:

- Thermal mass – the extension will incorporate exposed thermal mass in some areas via exposed concrete soffits which will provide passive cooling
- Local overshading – the tall buildings surrounding the super plant block provide a good amount of shading to minimise overheating risk
- Solar control glazing – high specification solar-control glazing with low g-values are proposed throughout and again this is very effective in reducing solar gain and reducing the risk of overheating and the requirement for cooling.

These measures will act to reduce the cooling demand in the extension so that the mechanical cooling can be minimised and this is in line with the cooling hierarchy.

As described in the Energy statement, an analysis of solar gain was carried out using IES modelling to check that the solar gain limits set out in the Building Regulations Part L were not exceeded. The results show that by using the passive solar control measures described all areas comfortably meet the solar gain requirement.

Area	Solar gain limit exceeded? (%)	Internal blinds used?
Bedroom 1	NO (-77%)	NO
Bedroom 2	NO (-81.7%)	NO
Bedroom 3	NO (-87.4%)	NO
Bedroom 4	NO (-95.8%)	NO
Bedroom 5	NO (93.9%)	NO
Bedroom 6	NO (-76.5%)	NO
Bedroom 7	NO (-81.3%)	NO
Bedroom 8	NO (-90.6%)	NO
Bedroom 9	NO (-95.5%)	NO
Bedroom 10	NO (-93.7%)	NO

4.3 Flood Risk and Drainage Strategy

The Environment Agency Flood Map for Planning confirms that the site is located in Flood Zone 1, and so is in an area with a low probability of flooding.

The application does not include any proposed changes to the existing drainage strategy or network at the site and it is considered that as the area of impermeable surface will not change, there will be no net effect on surface water run off or flood risk of surrounding areas as a result of the development.

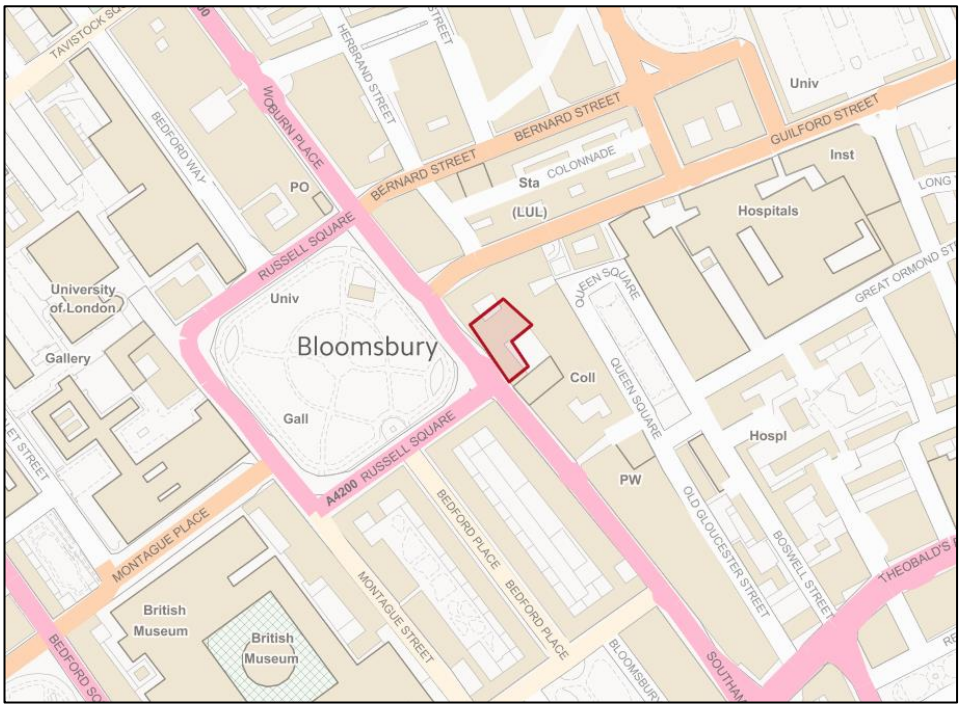

Figure 2: Environment Agency Flood Map for Planning

This is considered to demonstrate compliance with part of Policy CC3 regarding flood risk and the drainage strategy.

4.4 Water Use

In line with the water efficiency measures part of Policy CC3, low flow water fittings are recommended throughout in order to reduce water consumption in the en suite bedrooms.

Whilst the final specification of fittings is yet to be determined (including what fittings will be present in each bathroom), it is proposed that water fittings are specified to achieve good levels of water efficiency, with flow restrictors fitted as

necessary to taps and showers to achieve this. The following range of fittings will be subject to water efficient specification:

- WCs
- Wash Hand Basin Taps
- Shower
- Baths

4.5 Pollution

4.5.1 Air Pollution

In line with Policy CC4, the existing high efficiency gas CHP and boiler installation will provide space and water heating with low NOx emissions.

In addition, whilst the hotel does have an existing underground car park for guests, this is a paying car park and the hotel is situated in an area with high public transport accessibility. This should encourage staff and guests to use alternative sustainable modes of transport, which helps to reduce air pollution associated with travel via cars.

With regard to the construction/demolition period and the risk to air pollution from dust, procedures for minimising pollution from dust will be implemented in accordance with best practice principles including consideration of the use of dust sheets and dampening down. The proposed procedures for minimising air and dust pollution will be detailed by the Contractor in their Construction Management Plan.

A new emergency stand-by generator for life safety systems is to be installed into the plant room. As the exhausts will discharge at roof level of the adjacent hotel building, an AQA has been commissioned, which will be available shortly in support of this application and this should be referred to for further information. It is not considered that the development will significantly change road traffic and no new biomass or CHP installation is proposed.

4.5.2 Water Pollution

In line with Policy CC3, any works undertaken on site which are near a watercourse will be properly designed and implemented, to ensure that the risk of polluting watercourses is reduced or removed entirely.

Implementation of pollution prevention measures onsite will be monitored in part by the Considerate Constructors Scheme. Please refer to Section 4.8 for further details.

4.6 Waste Management

4.6.1 Construction Waste

In line with Policy CC5, the development will seek to minimise the impacts of construction waste by applying the waste hierarchy.

Measures to prevent waste will include designing out waste wherever possible, including the use of off-site production methods where possible, and the use of materials that minimise waste. As an extension, this application also proposes to reuse the existing hotel below Level 9. This is considered a sustainable form of development in that it does not use additional land and minimises waste from demolition and construction. Minimising materials use also helps to minimise the depletion of natural resources and optimises resource efficiency.

Minimising construction waste will be achieved by ensuring that correct quantities/sizes/volumes of materials are ordered and appropriate storage for materials will minimise wastage through damage/spoiling.

Liaison with suppliers will seek to minimise packaging and to set-up arrangements for return of unused materials/off-cuts and packaging materials such as pallets.

Opportunities for re-use of surplus materials on or off site will be reviewed before segregation for off-site recycling to divert materials away from landfill.

Toolbox Talks will provide training and awareness for site operatives on the importance of minimising waste, and the site procedures for segregating and managing waste. It is also advisable to set targets for waste minimisation and diversion from landfill and monitor this via the implementation of a Site Waste Management Plan and regular reporting.

4.6.2 Operational Waste

It is proposed that the extension will use the existing waste storage facilities at the hotel. It is understood that these existing facilities are in line with Camden's waste collection and comprise storage for recyclables as well as general waste. Therefore, the Waste Management Strategy for the main hotel should be referred to.

4.7 Transport

4.7.1 Local amenities

The development is centrally located within easy reach of many local amenities, including food outlets, Great Ormond Street Hospital, University College Hospital, cash points and leisure facilities (e.g. gyms). The development is also adjacent to Russell Square which provides an outdoor space for staff to use during breaks if desired. These local amenities will minimise the need for car travel by allowing building users to access facilities within walking distance of the building or to travel by public transport.

4.7.2 Public Transport

The site is located on Russell Square at the junction with Southampton Row. Numerous bus stops are within close walking distance with the closest stops being within 100m of the hotel entrance south-bound and 250m north-bound, allowing for easy access to services in both directions.

The hotel is also located very close to Russell Square tube station which is approximately 150m away.

The site has a very high Public Transport Accessibility Index rating of 53.54, which indicates that it is very well-served by local transport options.

Euston train station is also located 1km from the proposed site entrance when measured via a safe pedestrian route, providing a reasonable walking distance from the station with an approximate walk time of 15 minutes.

4.7.3 Walking and Cycling

Southampton Row/Russell Square are considered to be well-lit by street lighting at regular intervals, with wide footpaths on either side of the road. Areas for cyclists are present along Southampton Row (e.g. at the traffic lights).

4.7.4 Car Parking

The hotel is served by an existing underground car park for guests; this is a paying car park so it is considered that this will encourage uptake of more sustainable methods of transport. As detailed above, the hotel is situated in an area with high public transport accessibility which should encourage staff and guests to use sustainable transport.

4.8 Reducing Construction Impacts

4.8.1 Considerate Constructors Scheme

The Considerate Constructors Scheme encourages developers and contractors to implement best practice on site beyond statutory requirements in line with a five-point Code of Considerate Practice consisting of the following sections:

- Care about Appearance
- Respect the Community
- Protect the Environment
- Secure everyone's Safety
- Value the Workforce

The development site will be registered with the Considerate Constructors Scheme and should aim to achieve a score 'Beyond Best Practice' i.e. a score of at least 36 points. As mentioned above, this will help to ensure that pollution prevention measures onsite are being implemented.

4.9 Sustainability assessment tools

Section 11 of the CPG requires that development of over 500m^2 are assessed using BREEAM with a requirement to achieve a BREEAM Excellent rating.

The relevant development areas that would fall into the scope for a BREEAM assessment for this application are shown below:

Area	Existing GIA (m^2)	Proposed GIA (incl. retained)	Net increase (decrease) (m^2)
First	238	184	-54
Mezzanine	105.8	166	+60.2

Area	Existing GIA (m^2)	Proposed GIA (incl. retained)	Net increase (decrease) (m^2)
Totals	**343.8**	**350**	**6.2**

This shows that the total proposed area of the habitable areas (bedrooms) is 350m^2 the net increase in floor area is only 6.2m^2. Both figures are substantially less than the threshold for requiring a BREEAM assessment of 500m^2.

For this reason, we have not carried out a BREEAM pre-assessment for the proposed development. Nonetheless this report demonstrates that the principles of sustainable development have been applied throughout the planning and design of the scheme.

5 Conclusion

This Sustainability Statement is submitted as part of the Planning Application for the extension of the existing Imperial Hotel in the London Borough of Camden. The new block will provide a plant room to the ground floor with 10no bedrooms accommodated at first and second floor levels.

This report has outlined the approach to ensuring the design of the new block fulfils the sustainability criteria of Camden's Local Plan as far as technically possible.

Compliance with each of the Camden Local Plan policies has been demonstrated as follows:

- Policy CC1 Climate Change Mitigation:
  - The development is expected to reduce energy use and carbon emissions via energy efficient fabric and building services design.
  - The development is located to minimise the need for travel as discussed in Section 4.7.
  - Resource efficiency with regard to construction waste is discussed in Section 4.6.1.
  - Connection to decentralised energy networks is discussed in Section 4.1.
  - The proposed development includes some demolition of existing poor quality, thermally inefficient buildings. The new block will be significantly more energy and space efficient.

- Policy CC2 Adapting to climate change:
  - Adaptation to climate change is discussed in Section 4.2
  - The application will not impede on any green spaces on or near the site.
  - Green walls are proposed for the development.
  - It is considered that the application will have no impact on the existing drainage as the area of impermeable surface will stay the same, so surface water run-off will not increase.
  - In line with the cooling hierarchy, exposed thermal mass and solar control glazing with a low G-value (0.3) are all proposed to minimise the heat gains and significantly reduce cooling load to the spaces. Local shading from other buildings also contributes to passive cooling.

- Mechanical cooling is proposed so it is not anticipated that overheating will be a problem.

- Section 4.9 demonstrates that the relevant development areas that would fall into the scope of a BREEAM assessment (i.e. the accommodation floors) are well below 500m^2 floor area, and therefore below the threshold for the requirement to carry out a BREEAM assessment to achieve an Excellent rating.

- Policy CC3 Water and flooding:
  - The site is in Flood Zone 1 according to the EA's Flood Map for Planning (see Section 4.3).
  - The application will have no impact on the existing drainage as the area of impermeable surface will stay the same, so surface water run-off will not increase, as discussed in Section 4.3.
  - Water efficiency measures are proposed as discussed in Section 4.4.
  - Prevention of water pollution during construction is discussed in Section 4.5.2.

- Policy CC4 Air pollution:
  - Measures to reduce the risk of air pollution are discussed in Section 4.5.1.
  - An AQA has been commissioned to review potential impacts and required mitigation measures resulting from the demolition of the existing block and installation of a new generator. The report will be available shortly to support this application.

- Policy CC5 Waste:
  - Minimising construction waste and diversion from landfill are discussed in Section 4.6.1.
  - Waste storage is discussed in Section 4.6.2 and confirms that the existing facilities of the main hotel will be sufficient to support the new accommodation, and the approved Waste Management Strategy will also be implemented.

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