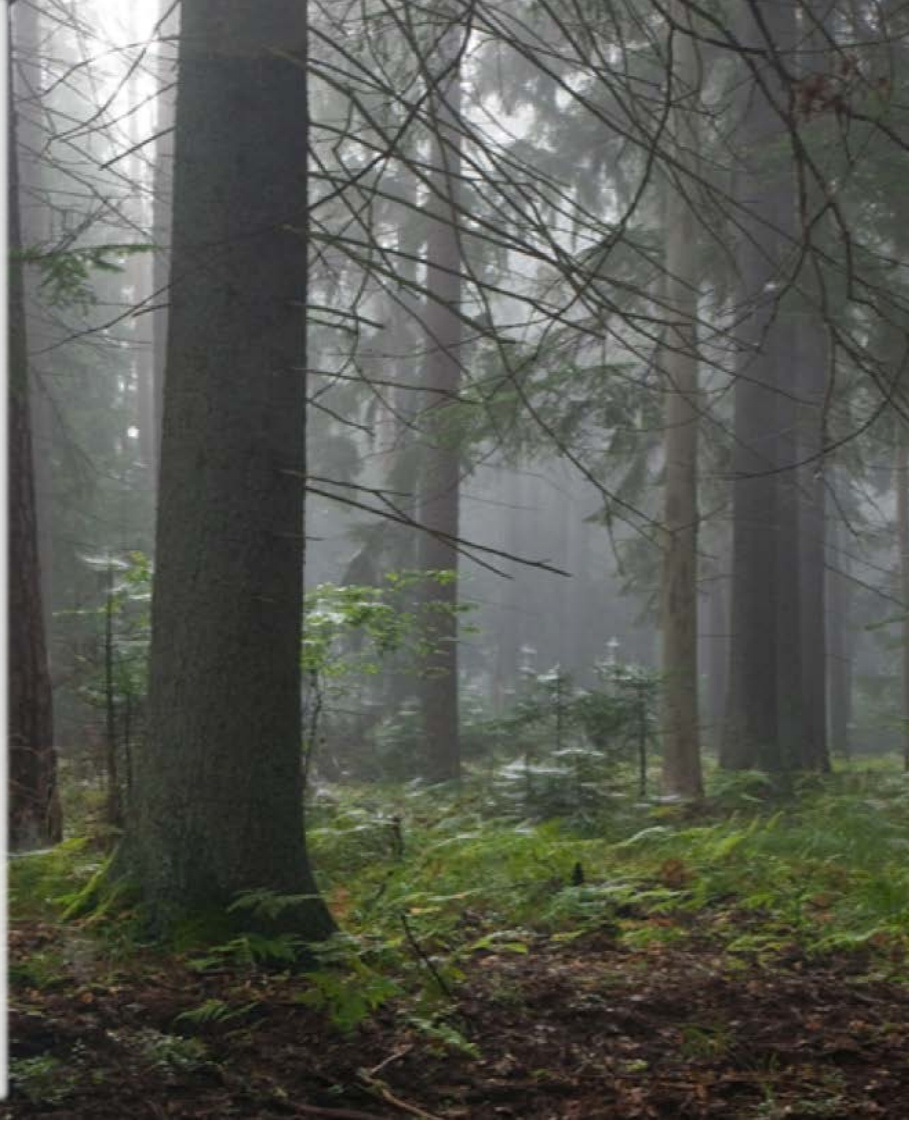


**8-10 Southampton Row & 1 Fisher
Street, Holborn**

Sustainability Statement

Ensphere Group Ltd on behalf of
Idé Real Estate Ltd



Ensphere Group Ltd
10 Greycoat Place, London, SW1P 1SB
+44 (0) 20 7960 6126
www.enspheregroup.com



8-10 Southampton Row & 1 Fisher Street, Holborn

Sustainability Statement

Client Name: Idé Real Estate Ltd

Document Reference: 16-E070-002

Project Number: 16-E070

Quality Assurance Approval Status

This document has been prepared and checked in accordance with Ensphere Group Ltd's Quality Management System.

| Issue: | Version: | Prepared by: | Reviewed by: | Date: |
|--------|----------|--------------|--------------|---------|
| Final | V3 | Pete Jeavons | Pete Jeavons | May2017 |

Contents

| | | |
|-----|---|----|
| 1. | Executive Summary..... | 3 |
| 2. | Introduction..... | 4 |
| 3. | Assessment Methodology | 6 |
| 4. | Sustainable Communities..... | 8 |
| 5. | Planning Policy Context..... | 10 |
| 6. | Other Policy & Regulatory Considerations | 17 |
| 7. | Site Context & Strategic Appraisal..... | 22 |
| 8. | Sustainable Design Proposals & Appraisal | 30 |
| 9. | Sustainable Construction Proposals & Appraisal..... | 33 |
| 10. | Summary | 35 |

Appendices

| | | |
|----|-----------------------------|----|
| A. | Site Plan | 37 |
| B. | BREEAM Pre-Assessment | 40 |
| C. | General Notes | 46 |

1. Executive Summary

- 1.1 This Sustainability Statement presents the sustainability credentials for a proposed scheme at 8-10 Southampton Row, Holborn.
- 1.2 Consideration has primarily been given to the planning policy context and other requirements prior to a review of sustainability in the context of the wider community, design and construction.
- 1.3 The proposed scheme is for the refurbishment and extension of 8-10 Southampton Row to facilitate the redevelopment of the site as a hotel. At a strategic level, the redevelopment of the site in line with its historical use is considered sympathetic to the local character of the area and will likely enhance the living environment. Furthermore, demand for hotel accommodation is likely to increase in line with the direction of historical trends and as a result of forthcoming new transport infrastructure (e.g. Cross Rail). The development is considered to be beneficial to the local community and aligned with socio-economic requirements.
- 1.4 A number of sustainable design features are proposed and construction will be responsibly managed to ensure minimal impact on the environment and local community. It is proposed to assess the scheme against BREEAM with a target rating of “Excellent”.
- 1.5 Overall, the proposals for the scheme are in line with the overarching principles of sustainable development as well as the policy requirements of the planning authority.

2. Introduction

- 2.1 Ensphere Group Ltd was commissioned by Idé Real Estate Ltd to produce a Sustainability Statement for a proposed development at 8-10 Southampton Row, Holborn.

Site & Surroundings

Site

- 2.2 The site is located in central London in the London Borough of Camden. It has an irregular shape and currently comprises an existing building (Carlisle House, 8-10 Southampton Row) of heritage value (Grade II listed and located in the Kingsway Conservation Area) in the western part and an access shaft associated with the Crossrail project in the eastern part. The current use of the building is for Crossrail's construction activities including their offices.
- 2.3 Access to the site is via Southampton Row to the west. The north of the site is bound by Fisher Street and the south by Catton Street. An existing commercial structure lies to the immediate east.

Surroundings

- 2.4 Opposite, to the west, is the Grade II listed 15-23 Southampton Row (within the Bloomsbury Conservation Area) and to the south is the Grade II listed Baptist Church House. To the north is the Grade II listed Central St Martin's College of Art and Design. The Kingsway Tram Subway is also Grade II listed and forms the only underground tunnel in London specifically designed for trams. This part of the tunnel is no longer in use but the tunnel further south along Kingsway has been adapted for buses.
- 2.5 The Southampton Row townscape is an example of early 20th century commercial architecture on a comprehensive scale. Most of the ground floors are commercial with offices above.
- 2.6 The wider area is diverse, and whilst predominantly office and residential in nature; other cultural and commercial (including hotels) are apparent. The site is located in close proximity to numerous major transport nodes; with Holborn Tube Station being the closest and approximately 1-minute walk to the south of the site. A variety of other emblematic places are located within a 20-minute walk, including the British Museum, Somerset House, Sir John Soane's Museum, Covent Garden, Conwall Hall and the Royal Opera House.

Permitted Development

- 2.7 The site benefits from an existing planning permission for Development of Crossrail site for the erection of a part 8/part 9 storey building to provide 22 residential units (Class C3) namely 5 x 1-bedroom, 14 x 2-bedroom, 2 x 3-bedroom and 1 x 4-bedroom self-contained flats with associated entrances, refuse and cycle storage and substation; alterations to ground floor

facade and screening of Crossrail head house building. (ref: 2013/1477/P; Granted 05/01/15).

Proposed Development

- 2.8 Development proposals are for the refurbishment and extension of 8-10 Southampton Row to facilitate the redevelopment of the site as a hotel. Part of the ground floor of the new-build extension will be occupied by Crossrail as Headhouse Facilities.

Report Objective

- 2.9 The objective of the Sustainability Statement is to outline how sustainability and the principles of sustainable development have been incorporated into the development proposals.

3. Assessment Methodology

Sustainability & Sustainable Development

- 3.1 “Sustainability” is a broad concept generally used to describe the ability to perpetuate a particular state of being. It is widely used in the context of development and where there is potential for changing circumstances to cause an impediment to the perpetuation of a phenomenon.
- 3.2 The term is subjective and the understanding of the concept is influenced by perceptions and aspirations. “Sustainability” is therefore variably defined but normally encapsulates a wide range of issues, often characterised by their relationship with the economy, society and the environment (the “three pillars” of sustainability).
- 3.3 These issues are not necessarily mutually exclusive and whilst they are often presented as such, technically, the economy is a function of society; and society concerns the interrelationships and behaviours of one species within the wider environment. Nevertheless, the identification and characterisation of these issues enables a better understanding of the things that matter in decision making, which enable a balance to be struck when priorities compete.
- 3.4 The term “sustainable development” is often used interchangeable with “sustainability” but it is narrower in scope and seeks to promote the perpetuation of human advancement. The “Brundtland Report” (officially titled “Our Common Future” and written by the United Nations World Commission on Environment and Development, Chaired by Gro Harlem Brundtland in 1987), presents perhaps the most widely cited and understood interpretation of this concept:

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”

- 3.5 The definition introduces the concept of “needs” and the generational timeframe for evaluating whether an action is sustainable or otherwise.
- 3.6 Whilst the Brundtland Report has contributed significantly to understanding the core principles of the subject, the definition has been advanced; and in the context of planning and development in England, the term “sustainable development” is defined very broadly within the National Planning Policy Framework (NPPF).

Analysis Methodology

- 3.7 Given the broad definitions associated with the terminology of “sustainability” and “sustainable development”, understanding how these concepts have been interpreted and incorporated

into the local planning regime requires a review of the planning policy as well as the documents upon which the policy is based. The report therefore commences with an overview of the sustainable communities' strategy, planning policy and other considerations.

- 3.8 An appraisal of the sustainability credentials of the scheme then follows. Structure is important when assessing sustainability due to the breadth of issues being considered; and an approach has been created based upon the phases of the development cycle relevant to the planning decision making processes; with consideration given to the “three pillars” (discussed above) and requirements of policy.

Assessment Matrix

| | Economic | Social | Environmental |
|--------------|----------|--------|---------------|
| Strategic | ✓ | ✓ | ✓ |
| Design | ✓ | ✓ | ✓ |
| Construction | ✓ | ✓ | ✓ |

- 3.9 It is recognised that the scale and nature of the scheme will affect the relative importance of the matrix dimensions and entries. For example, a single residential unit is unlikely to be viewed as having a major societal impact on the basis of its scale relative to its context. However, the societal implications of an urban extension may be much more significant.
- 3.10 The emphasis is therefore case specific and the assessment sections of this report seek to highlight the relevant factors in a suitably balanced manner.

4. Sustainable Communities

- 4.1 The status quo should not necessarily be interpreted as representative of a sustainable community on the basis that it ignores a need (or desire) to evolve in the context of change and over the course of time.
- 4.2 The aspirations of and for an area are, perhaps, most clearly represented through the democratic process and whilst conflicts of interests can exist between local, national and international priorities, local considerations are considered of greatest pertinence in this instance and in the context of local decision making.

The Camden Plan 2012-2017

- 4.3 The Community Plan presents the strategic objectives that will be the focus for the council for the period of the plan. These are presented below:

Strategic Objectives

We have developed five strategic objectives that will be our focus over the next five years, acting as the framework for this reform. These are summarised here:

1. Providing democratic and strategic leadership fit for changing times – we want to get closer to our communities, supporting them to be self-sustaining by also using our role as the democratically elected voice of Camden to influence national and London government and work with partners to unlock the borough's collective resources for the benefit of all.
2. Developing new solutions with partners to reduce inequality – inequality has many dimensions. There are huge variations in health, education, housing and crime outcomes across the borough. These are long-term problems we have been grappling with for many years. However, we recognise that with severely reduced resources we need to explore new solutions alongside our partners if we are to make a positive difference to people's lives.
3. Creating conditions for and harnessing the benefits of economic growth – although Camden has a strong local economy we need to do all we can to continue to attract businesses, jobs and investment to the borough. We want to bridge the gap between the employment opportunities available in Camden and the increasing levels of unemployment, particularly amongst young people. We will work with the business and education sectors to help ensure residents are in the best position possible to gain employment.

4. Investing in our communities to ensure sustainable neighbourhoods – we should not underestimate the challenge of maintaining a strong and cohesive community in Camden. Being in the centre of a busy world city at a time when the public sector is downsizing creates some real issues that we need to respond to. We want communities across Camden to become more sustainable so that they can do more to help themselves and each other. Our investment in both the physical and social infrastructure will be critical to making Camden a better place to live.
5. Delivering value for money services by getting in 'right first time' – We want to make sure the services that we provide of a high standard and value for money, so everyone is satisfied and those that need support get it. We believe it is possible to improve customer service at the same time as continuing to reduce costs. If we deliver services that are 'right first time' then fewer resources are required to resolve the problems arising from getting it wrong.

5. Planning Policy Context

5.1 National and local planning policy relevant to sustainable development is considered in detail below:

National Planning Policy Framework

5.2 The Department for Communities and Local Government determines national policies on different aspects of planning and the rules that govern the operation of the system.

5.3 The National Planning Policy Framework (NPPF) defines “sustainable development” in the context of the planning system in England as comprising policies 18 to 219, taken as a whole, of the NPPF. A “presumption” is established in favour of sustainable development.

London Planning Policy Framework

5.4 Key London Plan planning policy is detailed below:

The London Plan as Altered (2016)

5.5 The London Plan is the overall strategic plan for London. Chapter five details *London’s Response to Climate Change* and include a number of policies that set the overarching principles for reducing carbon emissions in the built environment, predominant of which is Policy 5.3 as follows:

Policy 5.3 – Sustainable Design & Construction

Strategic

A) The highest standards of sustainable design and construction should be achieved in London to improve the environmental performance of new developments and to adapt to the effects of climate change over their lifetime.

Planning Decisions

B) Development proposals should demonstrate that sustainable design standards are integral to the proposals, including its construction and operation, and ensure that they are considered at the beginning of the design process.

C) Major development proposals should meet the minimum standards outlined in the Mayor’s supplementary planning guidance and this should be clearly demonstrated within a design and access statement. The standards include measures to achieve other policies in this Plan and the following sustainable design principles apply:

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 run-off);
- 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.

D) Within LDFs boroughs should consider the need to develop more detailed policies and proposals based on the sustainable design principles outlined above and those which are outlined in the Mayor's supplementary planning guidance that are specific to their local circumstances.

Local Planning Policy Framework

- 5.6 The relevant planning authority is Camden Council and planning policy for the area is detailed in a number of statutory documents.

Core Strategy (2010)

- 5.7 Camden's Core Strategy sets out the key elements of the Council's planning vision and strategy for the borough. It is the central part of our Local Development Framework (LDF), a group of documents setting out our planning strategy and policies. Policies considered pertinent to this report are presented below:

Policy CS1 – Distribution of Growth [extract]

Overall approach to growth and development:

The Council will focus on Camden's growth in the most suitable locations, and manage it to make sure that we deliver its opportunities and benefits and achieve sustainable

development, while continuing to preserve and enhance the features that make Camden such an attractive place to live, work and visit.

We will promote:

- a. A concentration of development in the growth areas of King's Cross, Euston, Tottenham Court Road, Holborn and West Hampstead Interchange;
- b. Appropriate development at other highly accessible locations, in particular Central London and the town centres of Camden Town, Finchley Road / Swiss Cottage, Kentish Town, Kilburn High Rad and West Hampstead; and
- c. More limited change elsewhere.

[...]

Policy CS5 – Managing the Impact of Growth and Development

The Council will manage the impact of growth and development in Camden. We will ensure that development meets the full range of objectives of the Core Strategy and other Local Development Framework documents, with particular consideration given to:

- a. Providing uses that meet the needs of Camden's population and contribute to the borough's London-wide role;
- b. providing the infrastructure and facilities needed to support Camden's population and those who work in and visit the borough;
- c. providing sustainable buildings and spaces of the highest quality; and
- d. protecting and enhancing our environment and heritage and the amenity and quality of life of local communities.

The Council will protect the amenity of Camden's residents and those working in and visiting the borough by:

- e. making sure that the impact of developments on their occupiers and neighbours is fully considered;
- f. seeking to ensure development contributes towards strong and successful communities by balancing the needs of development with the needs and characteristics of local areas and communities; and
- g. requiring mitigation measures where necessary.

Policy CS13 – Tackling Climate Change Through Promoting Higher Environmental Standards

Reducing the effects of and adapting to climate change

The Council will require all development to take measures to minimise the effects of, and adapt to, climate change and encourage all development to meet the highest feasible environmental standards that are financially viable during construction and occupation by:

- a. ensuring patterns of land use that minimise the need to travel by car and help support local energy networks;
- b. promoting the efficient use of land and buildings;
- c. minimising carbon emissions from the redevelopment, construction and occupation of buildings by implementing, in order, all of the elements of the following energy hierarchy:
 1. ensuring developments use less energy,
 2. making use of energy from efficient sources, such as the King’s Cross, Gower Street, Bloomsbury and proposed Euston Road decentralised energy networks;
 3. generating renewable energy on-site; and
- d. ensuring buildings and spaces are designed to cope with, and minimise the effects of, climate change.

The Council will have regard to the cost of installing measures to tackle climate change as well as the cumulative future costs of delaying reductions in carbon dioxide emissions.

Local Energy Generation

The Council will promote local energy generation and networks by:

- e. working with our partners and developers to implement local energy networks in the parts of Camden most likely to support them, i.e. in the vicinity of:
 - housing estates with community heating or the potential for community heating and other uses with large heating loads;
 - the growth areas of King’s Cross; Euston, Tottenham Court Road; West Hampstead Interchange and Holborn;
 - Schools to be redeveloped as part of Building Schools for the Future programme;

- Existing or approved combined heat and power / local energy networks (see Map 4);

And other locations where land ownership would facilitate their implementation.

- f. Protecting existing local energy networks where possible (e.g. at Gower Street and Bloomsbury) and safeguarding potential network routes (e.g. Euston Road);

Water and Surface Water Flooding

We will make Camden a water efficient borough and minimise the potential for surface water flooding by:

- g. Protecting our existing drinking water and foul water infrastructure, including Barrow Hill Reservoir, Hampstead Heath Reservoir, Highgate Reservoir and Kidderpore Reservoir;
- h. Making sure development incorporates efficient water and foul water infrastructure;
- i. Requiring development to avoid harm to the water environment, water quality or drainage systems and prevents or mitigates local surface water and downstream flooding, especially in areas up-hill from, and in, areas known to be at risk from surface water flooding such as South and West Hampstead, Gospel Oak and King's Cross (see Map 5).

Camden's Carbon Reduction Measures

The Council will take a lead in tackling climate change by:

- j. Taking measures to reduce its own carbon emissions;
- k. Trialling new energy efficient technologies, where feasible; and
- l. Raising awareness on mitigation and adaptation measures.

Policy CS19 – Delivering and Monitoring the Core Strategy [extract]

The Council will work with Camden's Local Strategic Partnership and its other partners to deliver the vision, objectives and policies of this Core Strategy. We will:

- b. Use planning obligations, and other suitable mechanisms, where appropriate, to:
 - Support sustainable development;

Development Policies (2010)

- 5.8 Camden's Development Policies Document sets out detailed planning criteria that the council uses to determine applications for planning permission in the borough. The following is considered pertinent to this report:

DP22 – Promoting Sustainable Design and Construction

The Council will require development to incorporate sustainable design and construction measures. Schemes must:

- a. Demonstrate how sustainable development principles, including the relevant measures set out in paragraph 22.5 below, have been incorporated into the design and proposed implementation; and
- b. Incorporate green or brown roofs and green walls wherever suitable.

The Council will promote and measure sustainable design and construction by:

- c. Expecting new build housing to meet Code for Sustainable Homes Level 3 by 2010 and Code Level 4 by 2013 and encouraging Code Level 6 (zero carbon) by 2016;
- d. Expecting developments (except new build) of 500sqm of residential floorspace or above or 5 or more dwellings to achieve "very good" in EcoHomes assessments prior to 2013 and encouraging "excellent" from 2013;
- e. Expecting non-domestic developments of 500sqm of floorspace or above to achieve "very good" in BREEAM assessments and "excellent" from 2016 and encouraging zero carbon from 2019.

The Council will require development to be resilient to climate change by ensuring schemes include appropriate climate change adaptation measures, such as:

- f. Summer shading and planting;
- g. Limiting run-off;
- h. Reducing water consumption;
- i. Reducing air pollution; and
- j. Not locating vulnerable uses in basements in flood-prone areas.

DP23 – Water [extract]

The Council will require development to reduce their water consumption, the pressure on the combined sewer network and the risk of flooding by:

- a. Incorporating water efficient features and equipment and capturing, retaining and re-using surface water and grey water on-site;
- b. limiting the amount and rate of run-off and waste water entering the combined storm water and sewer network through the methods outlined in part a) and other sustainable urban drainage methods to reduce the risk of flooding;

[...]

DP26 – Managing the Impact of Development on Occupiers and Neighbours

The Council will protect the quality of life of occupiers and neighbours by only granting permission for development that does not cause harm to amenity. The factors we will consider include:

- a. visual privacy and overlooking;
- b. overshadowing and outlook;
- c. sunlight, daylight and artificial light levels;
- d. noise and vibration levels;
- e. odour, fumes and dust;
- f. microclimate;
- g. the inclusion of appropriate attenuation measures;

We will also require developments to provide:

- h. an acceptable standard of accommodation in terms of internal arrangements, dwelling and room sizes and amenity space;
- i. facilities for the storage, recycling and disposal of waste;
- j. facilities for bicycle storage; and
- k. outdoor space for private or communal amenity space, wherever practical.

6. Other Policy & Regulatory Considerations

- 6.1 This section comprises an overview of other considerations relevant to the Sustainability Statement.

National Planning Practice Guidance

Climate Change

- 6.2 Advises how planning can identify suitable mitigation and adaptation measures in plan-making and the application process to address the potential for climate change.

Design

- 6.3 Design affects how people interact with places and can affect a range of economic, social and environmental objectives. The guidance states that planning policies and decisions should seek to ensure that the physical environment supports these objectives.

Natural Environment

- 6.4 Explains key issues in implementing policy to protect biodiversity, including local requirements.

Renewable and Low Carbon Energy

- 6.5 The guidance is intended to assist local councils in developing policies for renewable energy in local plans, and identifies the planning considerations for a range of renewable sources.

London Planning Practice Guidance

Sustainable Design and Construction Supplementary Planning Guidance (April 2014)

- 6.6 The Mayor has published supplementary planning guidance on Sustainable Design and Construction. The document provides guidance on the implementation of London Plan policy 5.3 as well as a range of policies, primarily in Chapters 5 and 7 that deal with matters relating to environmental sustainability.

Local Planning Policy Guidance

Camden Planning Guidance – Sustainability (CPG3) (2015)

- 6.7 The guidance provides information on ways to achieve carbon reductions and more sustainable developments. It highlights the Council's requirements and guidelines in support of policies CS13, DP22 and DP23.
- 6.8 Includes requirements concerning credits under certain BREEAM categories (60% energy, 60% water and 40% materials);

Sustainability Standards

BREEAM

- 6.9 The Building Research Establishment's Environmental Assessment Method (BREEAM) is an environmental assessment for non-domestic buildings
- 6.10 BREEAM goes beyond Building Regulations requirements to encourage best practice in: Management; Health & Wellbeing; Energy; Transport; Water; Materials; Waste; Land Use & Ecology; and Pollution.
- 6.11 The standard measures sustainability by awarding "credits" against "issues" relevant to nine design categories. An additional Innovation category exists for the purpose of rewarding exemplar performance.
- 6.12 BREEAM uses a rating system to communicate the extent to which performance has been achieved. There are six levels with ratings ranging from "Unclassified" to "Outstanding" and certain issues require a mandatory level of performance depending upon the sought BREEAM rating.

Emerging Planning Policy

Local Plan Submission Draft

- 6.13 On 24 June 2016 the Council submitted the Camden Local Plan and supporting documents to the Secretary of State for Communities and Local Government for independent examination. Draft policies relevant to this report are presented below:

Draft Policy G1 Delivery and Location of Growth [extract]

The Council will create the conditions for growth to deliver the homes, jobs, infrastructure and facilities to meet Camden's identified needs and harness the benefits for those who live and work in the borough.

Delivery of Growth

The Council will deliver growth by securing high quality development and promoting the most efficient use of land and buildings in Camden by:

- a. Supporting development that makes best use of its site, taking into account quality of design, its surroundings, sustainability, amenity, heritage, transport accessibility and any other considerations relevant to the site;

[...]

Draft Policy D1 Design [extract]

The Council will seek to secure high quality design in development. The Council will require that development:

[...]

- c. Is sustainable in design and construction, incorporating best practice in resource management and climate change mitigation and adaptation; is of sustainable and durable construction and adaptable to different activities and land uses;

[...]

Draft 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.

We will:

- a. Promote zero carbon development and require all development to reduce carbon dioxide emissions through following the steps in the energy hierarchy;
- b. Require all major development to demonstrate how London Plan targets for carbon dioxide have been met;
- c. Ensure that the location of the development and mix of land uses minimise the need to travel by car and help to support decentralised energy networks;
- d. Support and encourage sensitive energy efficiency improvements to existing buildings;
- e. Require all proposals that involve substantial demolition to demonstrate that it is not possible to retain and improve the existing building; and
- f. Expect all developments to optimise resource efficiency.

For decentralised energy networks, we will promote decentralised energy by:

- g. Working with local organisations and developers to implement decentralised energy networks in the parts of Camden most likely to support them;
- h. Protecting existing decentralised energy networks (e.g. at Gower Street Bloomsbury, Kings Cross, Gospel Oak, and Somers Town) and safeguarding potential network routes;

and

- i. Requiring all major developments to assess the feasibility of connecting to an existing decentralised energy network, or where this is not possible establishing a new network.

To ensure that the Council can monitor the effectiveness of renewable and low carbon technologies, major developments will be required to install appropriate monitoring equipment.

Draft 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:

- a. The protection of existing green spaces and promoting new appropriate green infrastructure;
- b. Not increasing, and wherever possible reducing, surface water run-off 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.

Any development involving 5 or more residential units of 500sqm or more of any additional floorspace is required to demonstrate the above in a Sustainability Statement.

Sustainable Design and Construction Measures

The Council will promote and measure sustainable design and construction by:

- e. Ensuring development schemes demonstrate how adaptation measures and sustainable development principles have been incorporated into the design and proposed implementation;
- f. Encourage new build residential development to use the Home Quality Mark and Passivhaus design standards;
- g. Expecting developments (conversions / extensions) of 500sqm of residential floorspace or above or five or more dwellings to achieve “excellent” in BREEAM domestic refurbishment; and
- h. Expecting non-domestic developments of 500sqm of floorspace or above to achieve

“excellent” in BREEAM assessments and encouraging zero carbon in new developments from 2019.

Draft Policy DM1 Delivery and Monitoring [extract]

The Council will deliver the vision, objectives and policies of the Local Plan by:

- d. Using planning contributions where appropriate to:
 - i. Support sustainable development;

7. Site Context & Strategic Appraisal

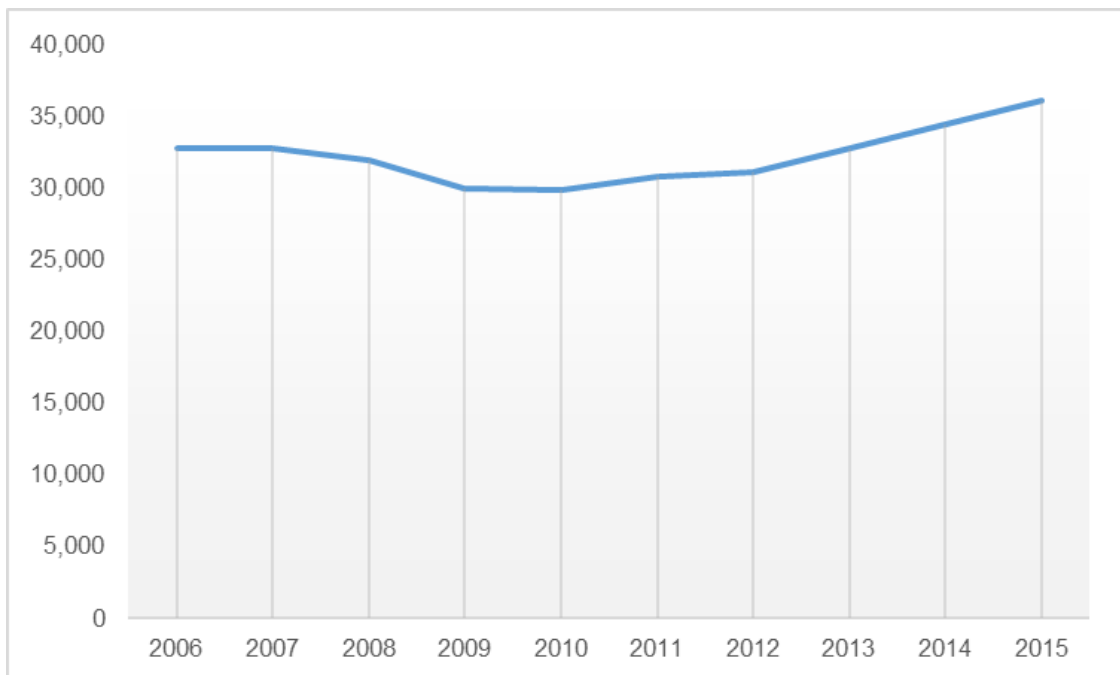
Site Context

- 7.1 In line with the “three pillars” of sustainability discussed within the methodology section, the site context has been considered with regard to its economic, social and environmental context; acknowledging that interrelationships exist between many of these issues.

Socio Economic Context

- 7.2 Data from the Office for National Statistics illustrates a generally positive trend in number of visits to the UK from Overseas Residents. Visit Britain data suggests that approximately 54% of all visits are to London.

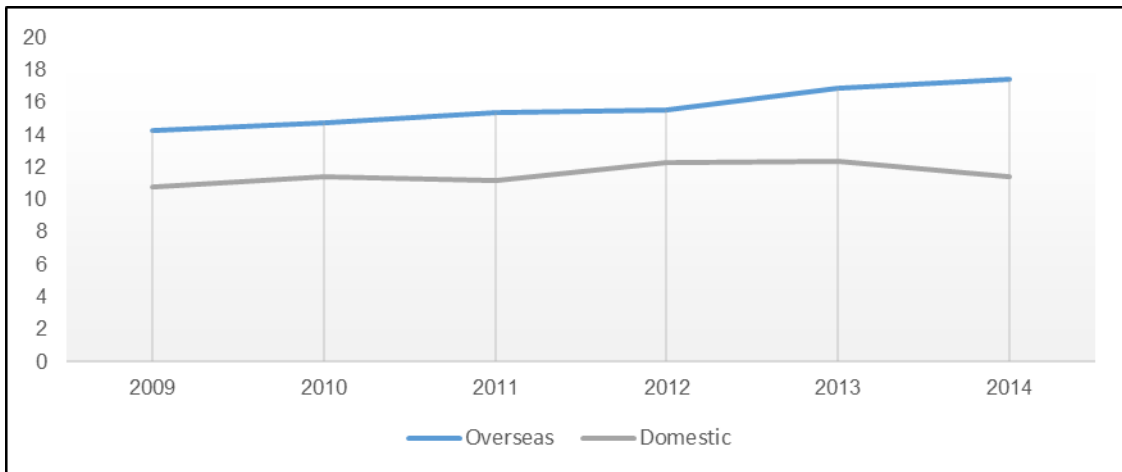
Figure 7.1 Visits to the UK from Overseas Residents



Source: ONS data

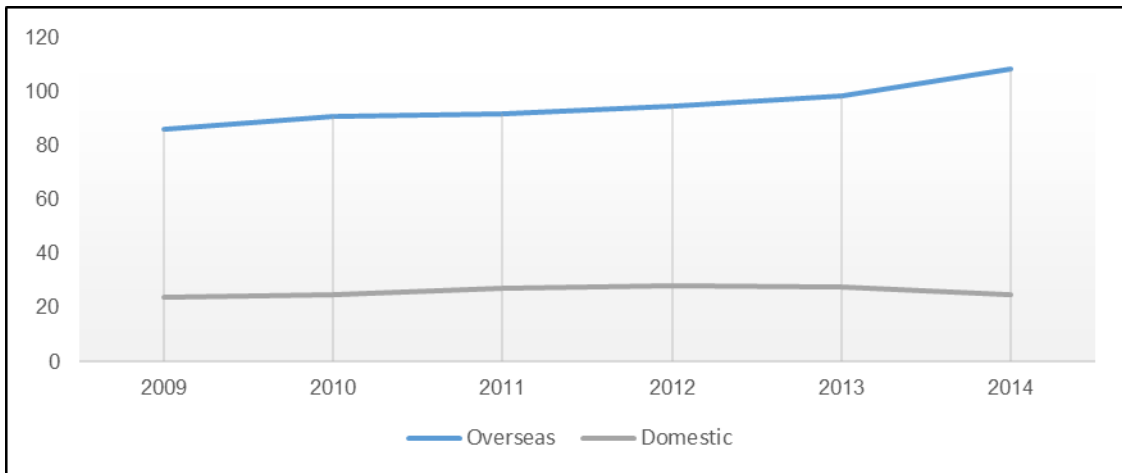
- 7.3 Further data is available from London & Partners, a not-for-profit public-private partnership, funded by the Mayor of London and various commercial partners.
- 7.4 This indicates that the capital received 28.8 million overnight visits from overseas and domestic travellers. Whilst an overall -1% decrease on the number of overnight visits to the city in 2013, the £14.7 billion generated in expenditure represented an increase of 3% on 2013.

Figure 7.2 London Visits (millions)



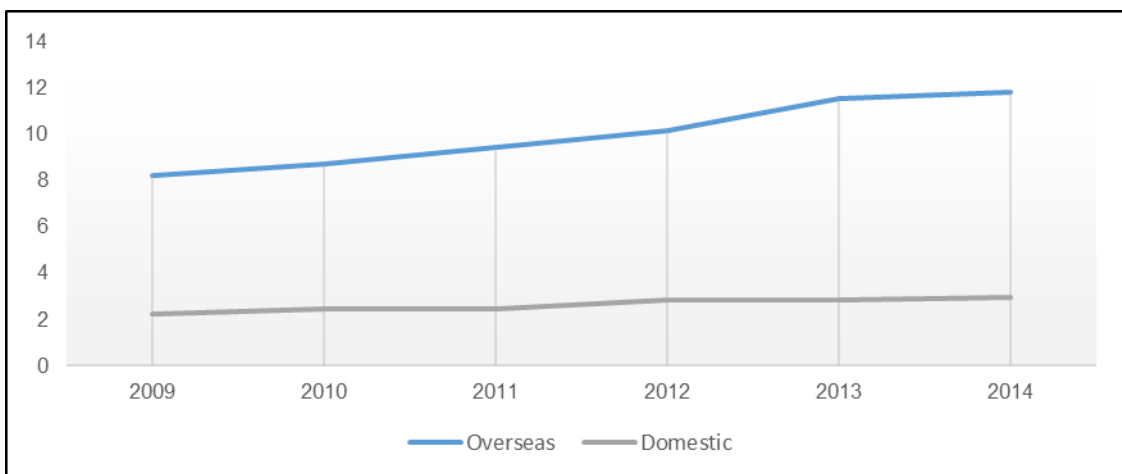
Source: London & Partners

Figure 7.3 London Nights Stayed (millions)



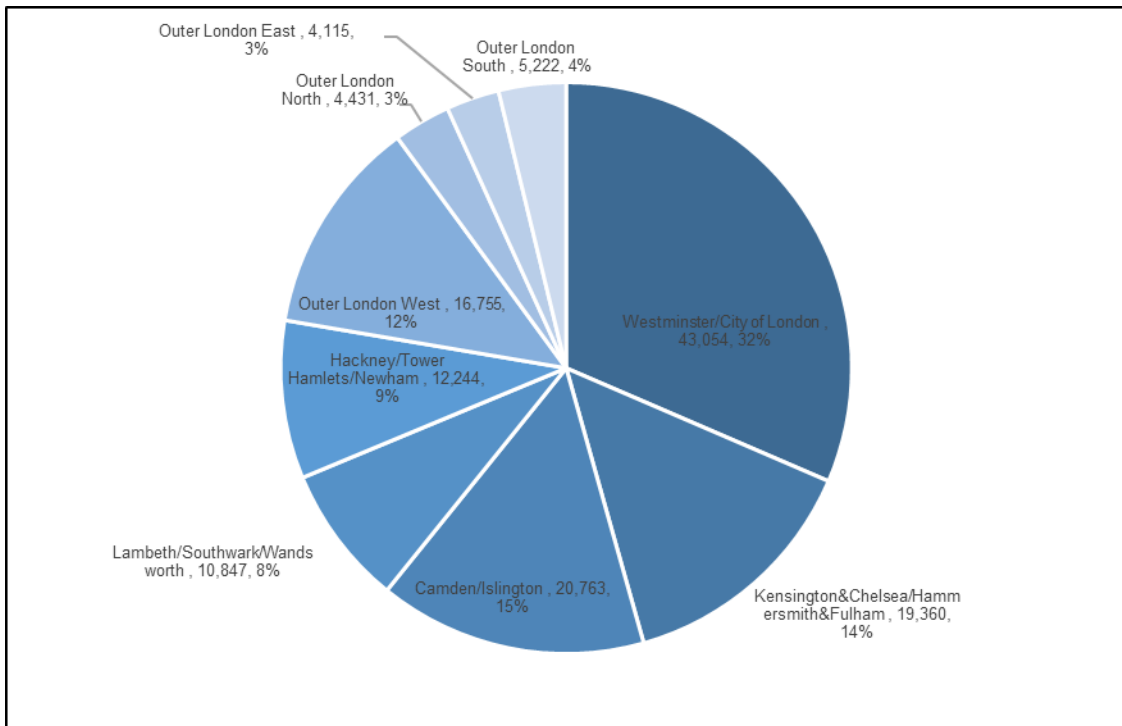
Source: London & Partners

Figure 7.4 London Expenditure (£ billions)



Source: London & Partners

Figure 7.5 London Hotel Profile by Borough (Rooms)

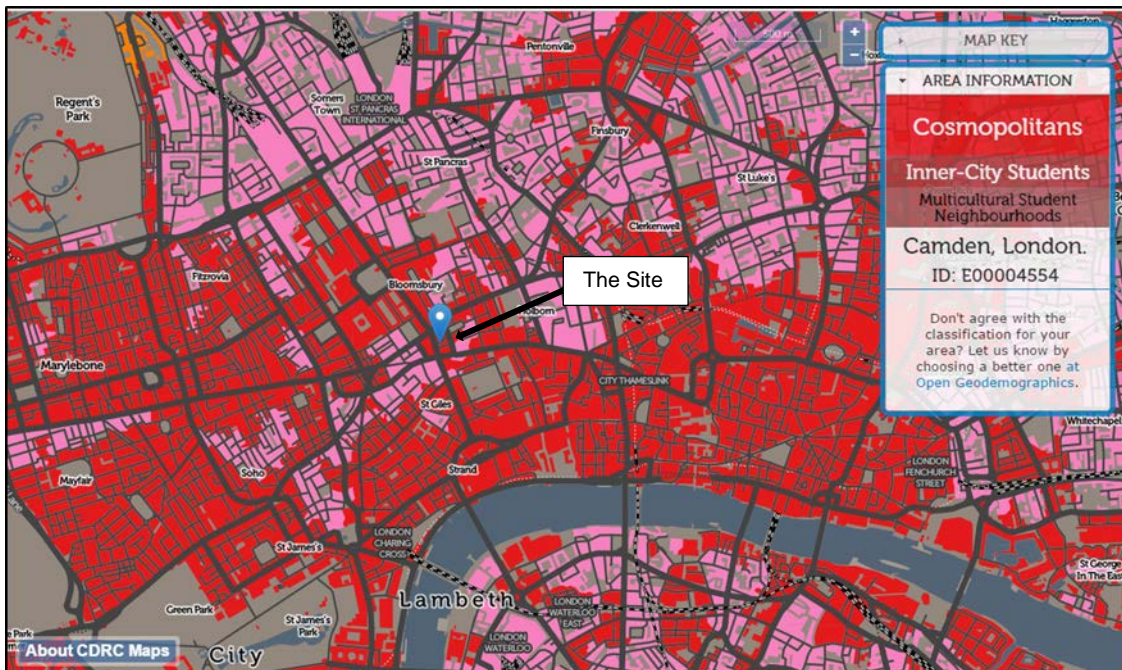


Source: London & Partners

Output Area Classifications

7.5 Area classifications for Great Britain have been produced after every census since 1971, and as of the 2001 Census, they have been extended to cover the UK as a whole.

Figure 7.6 Output Area Classification Map



Source: OAC Interactive Maps

- 7.6 Using socioeconomic and demographic data from each census, the classifications seek to identify areas of the country with similar characteristics. Therefore, the presented information should not be interpreted as an assessment specific to the Application Site and the surrounding area; but rather it is a reflection of the characteristics of areas with a similar socioeconomic and demographic pattern.
- 7.7 Data from the 2011 Census has been released identifying the site as being unclassified. However, adjacent property has an Output Area Code of E00004554 and classified as “Cosmopolitans” (Supergroup Code 2), “Inner City Students” (Group Code 2b) and “Multicultural Student Neighbourhoods” (Subgroup Code 2b2).
- 7.8 The Office for National Statistics provides the following narrative for these groups:

Supergroup 2: Cosmopolitans

The majority of the population in this supergroup live in densely populated urban areas. They are more likely to live in flats and communal establishments, and social renting is more prevalent than elsewhere in the UK. The group has a high ethnic integration, with an above average number of residents from EU accession countries coinciding with a below average proportion of persons stating their country of birth as the UK or Ireland. A result of this is that households are less likely to speak English or Welsh as their main language. The population of the group is characterised by young adults, with a higher proportion of single adults and households without children than nationally. There are also higher proportions of full-time students. Workers are more likely to be employed in the accommodation, information and communication, and financial related industries, and using public transport, or walking or cycling to get to work.

Group 2b: Inner City Students

The age profile of this group shows a high proportion of schoolchildren, full-time students, and people aged 25 to 44, though a lower proportion married or divorced. Households are more likely to live in flats, to live in social rented accommodation, and to have overcrowded conditions. A lower proportion of people provide unpaid care, and a higher proportion work in accommodation or food service activities industries.

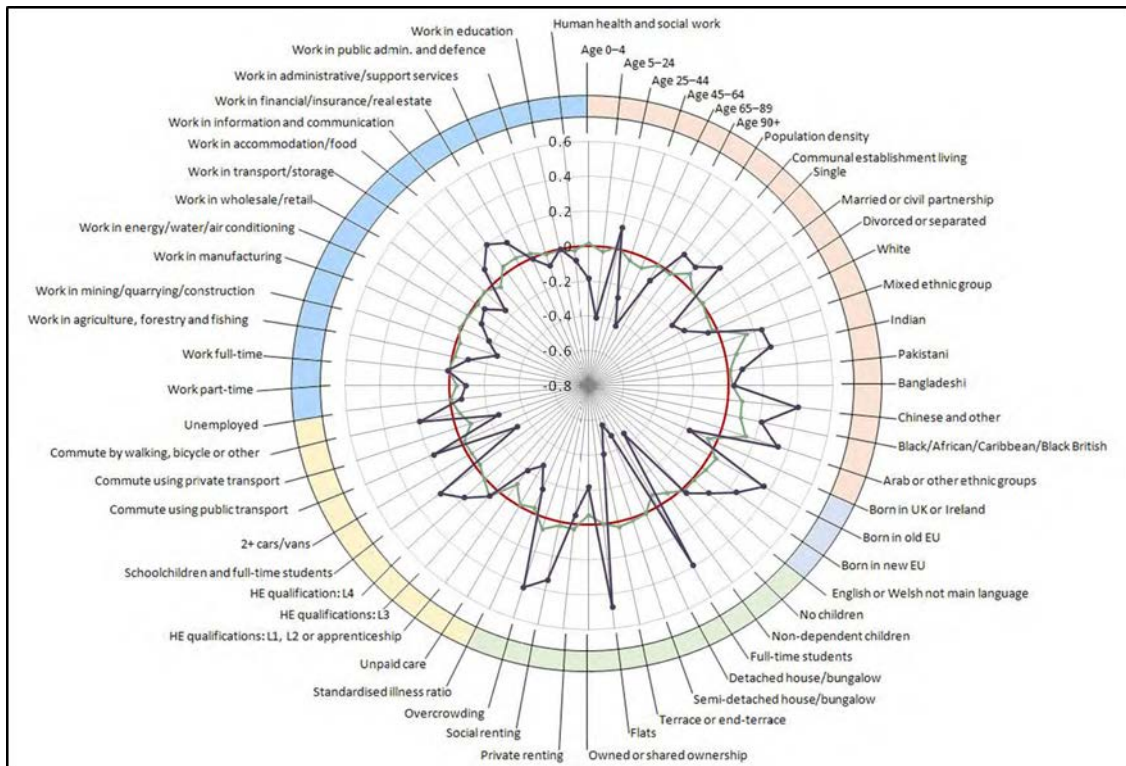
Group 2b2: Multicultural Student Neighbourhoods

The population in this subgroup has a lower proportion of people aged 45 to 89 when compared with the parent group. Its ethnic makeup has a higher proportion of persons of

mixed ethnicity.

- 7.9 Radial Plots are provided by the Office for National Statistics. Each data point on a radial plot displays the value for each one of the 60 standardised and transformed 2011 Census variables used.
- 7.10 Data points with positive values represent variables that have a higher value than the standardised UK mean or the standardised parent cluster mean. Conversely, data points with negative values represent variables that have a lower value than the standardised UK mean or the standardised parent cluster mean.
- 7.11 On each radial plot, a red circle represents the standardised UK mean and the standardised parent cluster mean.
- 7.12 Data points with positive values represent variables that have a higher value than the standardised UK mean or the standardised parent cluster mean. Conversely, data points with negative values represent variables that have a lower value than the standardised UK mean or the standardised parent cluster mean.
- 7.13 On each radial plot, a red circle represents the standardised UK mean and the standardised parent cluster mean.

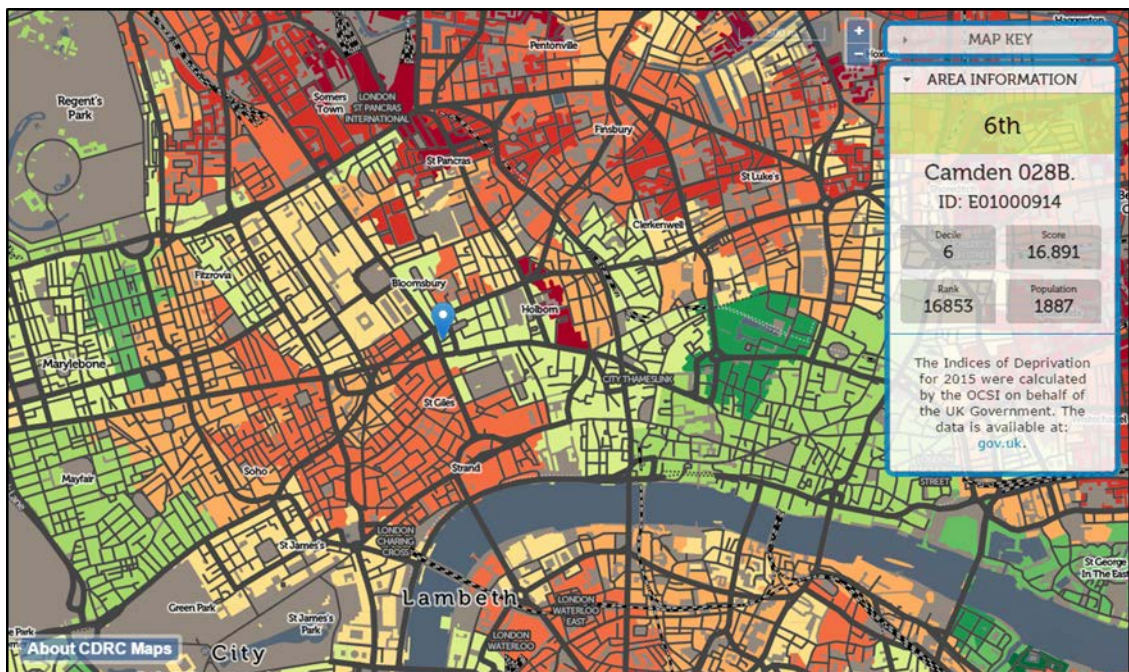
Figure 7.7 Office for National Statistics Radial Plot



Indices of Multiple Deprivation

- 7.14 The English Indices of Deprivation use 38 separate indicators, organised across seven distinct domains of deprivation. The Indices of Multiple Deprivation data are then constructed by combining the seven transformed domain scores, using the following weights; income (22.5%); employment (22.5%); health and disability (13.5%); education, skills and training (13.5%); barriers to housing and services (9.3%); crime (9.3%); and living environment (9.3%).
- 7.15 The IMD can be used to rank every Lower Layer Super Output Area in England according to their relative level of deprivation. The data is not a measure of affluence; therefore the area ranked as the least deprived is not necessarily the most affluent.

Figure 7.8 Department for Communities and Local Government IMD Data Map



Source: OAC Interactive Maps

- 7.16 The IMD data comprise a numeric value in a scale of 1 to 32,844 (1=most deprived) and are represented in a coloured scale of deciles (1=most deprived – dark red; 10=least deprived – dark blue) in the respective maps.
- 7.17 Government data (illustrated below) indicates that the area ranks 16,853 out of 32,844; where 1 is the most deprived. The area is therefore considered to have an average level of deprivation overall.
- 7.18 The table below provides the data for the individual domains:

Table 7.1 IMD Domain Scores

| Domain | Score |
|--|---------------|
| Income Rank | 19,061 |
| Employment Rank | 22,776 |
| Education, Skills and Training Rank | 27,560 |
| Health Deprivation and Disability Rank | 27,115 |
| Crime Rank | 20,505 |
| Barriers to Housing and Services Rank | 18,090 |
| Living Environment Rank | 92 |
| Rank of IMD Score | 16,853 |

Note: Scores out of 32,844, where 1 is the most deprived.

Public Transport

- 7.19 Many of the social and economic issues concern accessibility, which in its broadest sense is regarded as a combination of access to local shops, services, amenities, employment opportunities; as well as access to public and other transport facilities.
- 7.20 Therefore, the accessibility of the proposed scheme to local amenities is a relevant consideration in determining whether the site represents a sustainable location.
- 7.21 According to the Transport for London mapping resource, the site has excellent access to public transport and has a PTAL rating of 6b (Best). In addition, transport links will be further enhanced through the provision of Cross Rail into central London.
- 7.22 Further detail of the transport infrastructure can be found in the accompanying Transport Statement.

Environmental Context

- 7.23 The environmental context is assessed in greater detail in the accompanying environmental reports. The following provides an overview of the pertinent matters:

Land Use

- 7.24 The site constitutes brownfield land, meaning that its development will reduce the pressure to develop elsewhere and on Greenfield.

Flooding / Groundwater

- 7.25 From review of the Environment Agency (EA) Indicative Flood Maps, the site is identified as not being within area at significant risk of flooding from rivers and sea.
- 7.26 According to the Environment Agency (EA) data, the site is not located within a Groundwater Source Protection Zone.

Ecology

- 7.27 In the absence of any existing soft landscaping, the ecological value associated with the area proposed for development is considered to be low.

Strategic Appraisal

Hotel Use

- 7.28 Tourism, both nationally and in London, has grown over recent years both in terms of number of visits, nights stayed and expenditure. Visits by overseas residents have accounted for the majority of these changes, with London consistently the prime market; accounting for circa 54% of all visits. Furthermore, it is anticipated that the Cross Rail project will further enhance tourism in central London; perhaps encouraging more visits from the domestic market.
- 7.29 Locally, the indices or Multiple Deprivation suggest a broadly average level of deprivation overall. However, consideration of the individual indices highlights the score for “Living Environment” to be particularly poor at 92 out of 32,844 and therefore one of the worst in the country.
- 7.30 Output Area Classification data suggested variance from the national average in a number of respects. The population was identified as being younger and more international than average. Population density and overcrowding were relatively high, with prevalence for living in flatted accommodation.
- 7.31 A demand is considered to exist for hotel accommodation in central London on the basis of the tourism trends presented above and proposed improvements to transport infrastructure (e.g. Cross Rail).
- 7.32 Furthermore, the application site is a building of historical character and was original built as a hotel. It is considered that by returning the building to its historical use, the character of the area will be enhanced with corresponding improvements made to the living environment.
- 7.33 The development proposals are therefore considered to be beneficial to the local community, aligned with the local socio-economic requirements and consistent with the principles of sustainable development.

8. Sustainable Design Proposals & Appraisal

- 8.1 This section presents an overview of the proposed sustainable design features for the scheme and is considerate of Camden Planning Guidance CPG3 (*Sustainability*).

Environmental Standards

- 8.2 It is proposed to assess the scheme against BREEAM and, in line with planning policy requirements, target an “Excellent” rating. Furthermore, 60% of the credits will be targeted under the energy and water sections and 40% under materials in line with CPG3. An indicative assessment is presented in the appendices of this report.

Energy

- 8.3 Further detail on energy matters is presented in the Energy Statement accompanying the application.

Energy Efficiency

- 8.4 It is intended to optimise the extent of glazing to improve access to natural daylight whilst preserving heating within the properties.
- 8.5 It is intended that the performance of the building fabric will incorporate relatively low U-Values to reduce the rate at which the building loses heat, preserving the heat within the space and reducing the requirement for mechanical heating.
- 8.6 It has been assumed that the air permeability rate will be less than the required 5m³/hm².
- 8.7 At this stage detailed lighting design calculations have not yet been undertaken, but lighting design is intended to be highly efficient and in excess of Building Standards requirements and considerate of appropriate CIBSE guidance.

Low Carbon & Renewable Technologies

- 8.8 Renewable and low carbon technologies have been considered as part of the design following the prioritisation of efficiency.
- 8.9 Combined Heat & Power (CHP) is considered a potentially feasible and viable technology for the proposed scheme. It is anticipated that a centralised system could be used to provide heat for hot water. This system is compatible with any future district energy network.
- 8.10 Space heating represents a relatively small proportion of the overall heating requirements and, due to the nature of the spaces and occupation, will be required to operate intermittently. A reversible Air Source Heat Pump (ASHP) is therefore proposed for space heating on the basis that it will allow for a significant degree of control (i.e. only applying heating when and where needed), will reduce the risk of uncontrolled and wasteful heat losses in the building

(e.g. distribution losses) and can be coupled with mechanical cooling relatively simply (anticipated to be an expectation of end-users in a high-end hotel).

- 8.11 In line with the London Plan and Council policies, a carbon saving >35% against Part L 2013 baseline has been targeted for the development.

Water Conservation, Water Quality and Flooding

- 8.12 Water saving fittings and appliances shall be installed; the following form a basis of the proposals:
- Dual flush toilets of 6/3 litres;
 - Water consumption levels not higher than 4.5 litres/minute in wash hand basins and 5 litres/minute in kitchenette taps;
 - Showers (where present) with a maximum flow rate of 8 litres/minute at 3 bar pressure.
- 8.13 The volume of run-off over the development's lifecycle will be no greater than it would have been prior to the site's proposed development.
- 8.14 A Flood Risk Assessment has been undertaken and further information on the proposed drainage strategy and flood risk mitigation measures can be sourced from the respective report, submitted in support of this application. Overall the proposal for redevelopment will improve existing flood resilience of the site and shall not have any adverse impact on flooding risks for neighbouring properties.

Materials & Waste

- 8.15 The materials strategy for the development shall consider lifecycle environmental impacts, durability, responsible sourcing and pre-fabrication potential, with a view to optimising materials utilisation and safeguarding natural resources. Measures will include:
- The majority of major elements (walls, floors, roof) with an 'A' or 'A+' rating in the BRE's Green Guide to Specification;
 - Use of all timber products that come from an accredited Forest Stewardship Council (FSC) source;
 - Use of suppliers/products that operate Environmental Management Systems (e.g. ISO14001, EMS) as per minimum and BES 6001 certification for major applications; and
 - Consideration of durability, pre-fabrication and dismantling potential in selecting main elements.

- 8.16 The operational waste strategy comprises provision of dedicated space of adequate size and in convenient locations for storage of general refuse, recyclables and food waste. Internal and external storage will be considerate of the Building Regulations and Council requirements.

Pollution

- 8.17 Where conventional backup gas-fired boilers are employed, these will be selected to achieve a NO_x rating of <40mgNO_x/kWh. Low emissions CHP engines shall be selected as appropriate.
- 8.18 Transport emissions shall be minimal, as the site offers excellent connections to public transport services and a wide range of amenities at walking distance; the development shall also promote cycling by providing secure cycle storage spaces.
- 8.19 Measures relating to building design, fabric design and landscaping shall be implemented as appropriate so that internal ambient noise levels are acceptable for the intended use and do not compromise the health & well-being of occupants.
- 8.20 The external lighting strategy shall be designed to minimise light spillage and night time light pollution in line with the ILP's Guidance notes for the reduction of obtrusive light; low illuminance levels, fittings and controls shall be employed accordingly.
- 8.21 Good internal air quality will be achieved through the creation of a building envelope with a low air permeability; meaning that the building fabric will reduce the infiltration of pollution from the external environment.
- 8.22 The developer will also endeavour to avoid the use of materials with a high VOC (volatile organic compound) content; therefore ensuring an improved air quality for the completed development.

Ecology

- 8.23 It is proposed to enhance the scheme in line with the recommendations of a suitably qualified ecologist.

Design Appraisal

- 8.24 Based upon the above, it is considered that the design accords with planning policy and goes significantly beyond standard practice. As a result, the environmental impact of the building will be reduced and building occupants will benefit from improved health and wellbeing.

9. Sustainable Construction Proposals & Appraisal

- 9.1 It is recognised that the construction industry has the potential to cause significant environmental impacts through resource use, waste generation and pollution. It is therefore proposed to manage the construction phase in a sustainable manner to ensure that these impacts are reduced.

Responsible Construction Practices

Impacts on Neighbours, Pedestrians, Road Users and Workforce

- 9.2 The main contractor will register with the Considerate Constructors Scheme to ensure that the contractor carries out the construction operations in a safe and considerate manner, with due regard to local residents, road users, the workforce and the environment. A target of achieving a score of at least 35 and with a minimum score of 7 in each of the five sections shall be set. This represents a high level of performance and a commitment to responsibly manage construction activities.

Environmental Management

- 9.3 It is expected that the principal contractor for the project shall also operate a third party certified Environmental Management System (EMS), demonstrating sound management and systematic control of environmental impacts.

Materials Optimisation and Waste

- 9.4 A pre-demolition audit shall be undertaken to establish the potential for reuse of materials for on-site applications or salvaging for reuse/recycling off-site.
- 9.5 The Site Waste Management Plan (SWMP) will detail the design measures towards optimum use of materials, set specific targets for construction and demolition waste generation and appropriate mechanisms/protocols for segregating waste on-site and monitoring overall waste management.
- 9.6 The development will aim for more than 95% by tonnage of demolition and construction waste to be diverted from landfill as per minimum.

Pollution Prevention

Pollution Prevention Guidelines

- 9.7 The Environment Agency's (EA) Pollution Prevention Guidelines (PPG) shall be followed as appropriate to minimise pollution risks from construction activities; works will also be in line with the Environment Agency's Building a better environment, A guide for developers (2006) guidance.

Air Pollution

9.8 Best practice methods for minimising the formation of dust and emissions from construction activities shall be implemented, as appropriate to the specific site and proposed activities. Control measures may include:

- Appropriate site layout;
- Solid screens/barriers or other physical boundaries around dust/emission generating activities;
- Good site maintenance and regular inspections for liquid spillages; and
- Sealed storage for cement, sand and fine aggregates.

9.9 In addition to the above, the contractor shall comply with the BRE Code of Practice to control dust from construction and demolition activities.

Water Pollution

9.10 Appropriate measures shall be implemented to minimise risks of watercourse and underground water pollution, in line with EA's PPG 5 Works in, near or liable to affect watercourses and the Guide for developers Building a better environment, as stated above. Relevant guidance within the London Plan's SPGs shall also be followed as appropriate. Specific measures shall be outlined in the contractor's CEMP.

Construction Appraisal

9.11 Given that the development proposals are seeking to go significantly beyond standard practice; targeting best practice to mitigate many of the social and environmental impacts, the construction proposals are considered in accordance with sustainable development.

10. Summary

- 10.1 This Sustainability Statement provides an overview as to how the proposed scheme contributes to sustainable development in the context of the strategic, design and construction considerations.
- 10.2 Sustainability is a broad concept and covers a range of environmental, social and economic considerations. A review of Camden Council's planning policies has identified a number of requirements relating to sustainable development. Of these, Core Strategy policies CS1 (*Distribution of Growth*), CS5 (*Managing the Impact of Growth & Development*), CS13 (*Tackling Climate Change through Promoting Higher Environmental Standards*) and CS19 (*Delivering and Monitoring the Core Strategy*) are considered most pertinent along with Development Policies Document policies DP22 (*Promoting Sustainable Design and Construction*), DP23 (*Water*) and DP26 (*Managing the Impact of Development on Occupiers and Neighbours*). Consideration has also been given to CPG3 (*Sustainability*) as well as to the National and London planning policy framework.
- 10.3 The proposed scheme includes the refurbishment and extension of 8-10 Southampton Row to facilitate the redevelopment of the site as a hotel. At a strategic level, the redevelopment of the site in line with its historical use is considered sympathetic to the local character of the area and will likely enhance the living environment. Furthermore, demand for accommodation is likely to increase in line with the direction of historical trends and as a result of forthcoming new transport infrastructure (e.g. Cross Rail). The development is considered to be beneficial to the local community and aligned with socio-economic requirements.
- 10.4 A range of sustainable design and construction features are proposed including:
- Incorporation of Combined Heat and Power (CHP) and Air Source Heat Pumps (ASHPs);
 - Water saving sanitary fittings and appliances to deliver a water efficient development;
 - The use of materials with a low lifecycle environmental impact and embodied energy;
 - Efficient construction and operational waste management;
 - Significant ecology and biodiversity enhancement;
- 10.5 It is proposed to assess the scheme against BREEAM and target an "Excellent" rating.
- 10.6 Overall, the proposals for the scheme are in line with the overarching principles of sustainable development as well as the policy requirements of the planning authority.

Appendices

A. Site Plan

Copyright: All rights reserved. This drawing must not be reproduced without permission. Only the original drawing should be relied upon. Contractors, subcontractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawings. All shop drawings to be submitted to the architect / interior designer for comment prior to fabrication. This drawing is to be read in conjunction with the architect's / interior designer's specification, bills of quantities / schedules, structural, mechanical & electrical drawings and all discrepancies are to be reported to the architect / interior designer. Do not scale from this drawing. Dimensions are in millimetres unless otherwise stated.



**dexter
moren
associates**
architecture urban design
interior design creative media
www.dextermoren.com

57d
jamestown road
london nw1 7db
UK
t: 020 7267 4440
f: 020 7267 6044

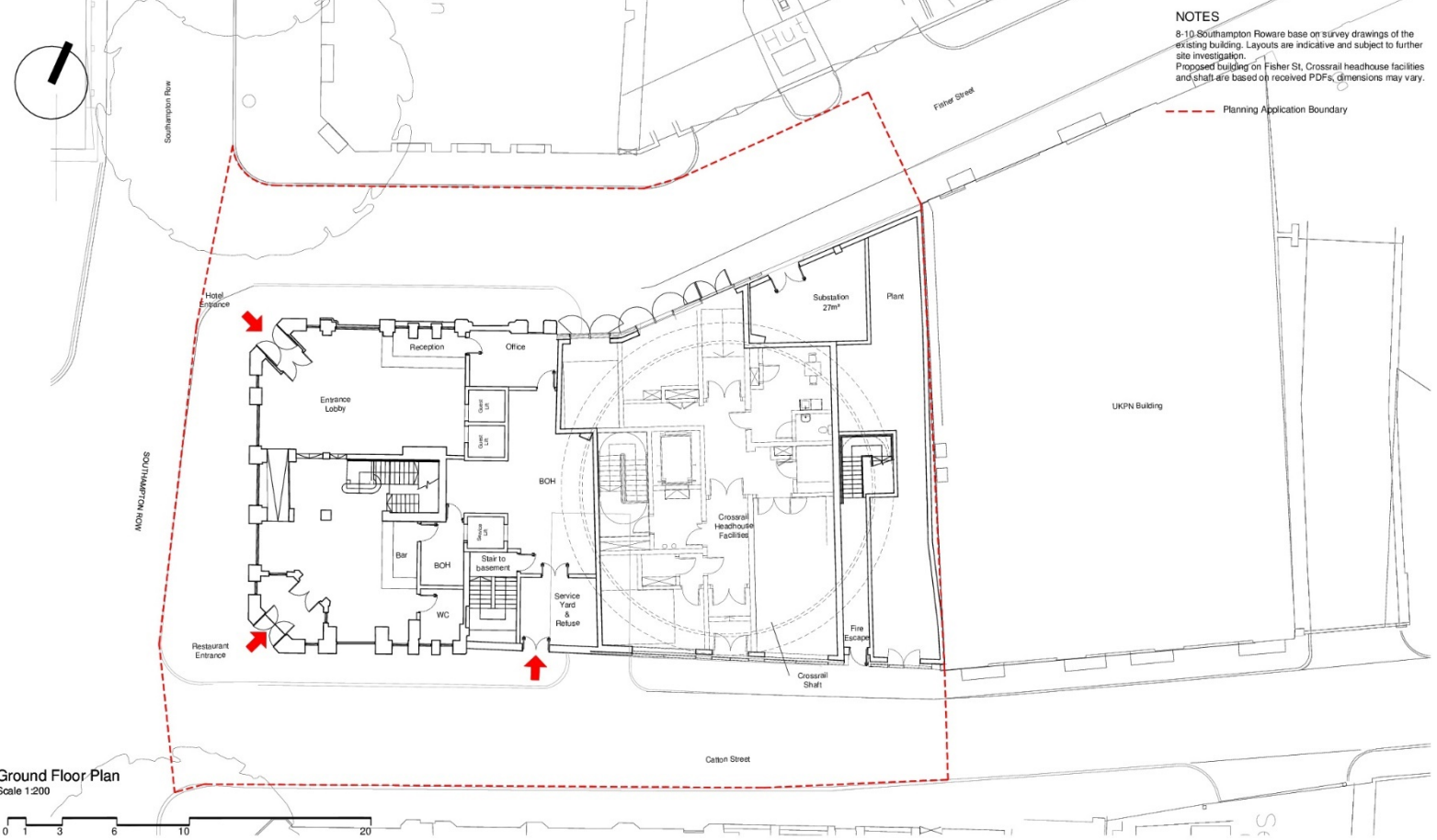
| | | | | | | | | | | | |
|---------|----------------------|----------------|-----------------|---------|-------------------------|-------------|-----------|----------|----|------------|-----------|
| project | Hoborn Fisher Street | drawing title | Location Plan | scale | 1:1250 @ A3 NTS @ A4 | date | 31.10.16 | drawn by | RA | checked by | WY |
| client | | drawing status | PRE APPLICATION | job no. | 1365 | drawing no. | A-000-001 | revision | | | P0 |

PO ISSUED FOR PRE APPLICATION
rev. amendments

31.10.16
date by

architecture

Copyright: All rights reserved. This drawing must not be reproduced without permission. Only the original drawing should be relied upon. Contractors, subcontractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawings. All shop drawings to be submitted to the architect / interior designer for comment prior to fabrication. This drawing is to be read in conjunction with the architect's / interior designer's specification, bills of quantities / schedules, structural, mechanical & electrical drawings and all discrepancies are to be reported to the architect / interior designer. Do not scale from this drawing. Dimensions are in millimetres unless otherwise stated.



NOTES
 8-10 Southampton Row are based on survey drawings of the existing building. Layouts are indicative and subject to further site investigation.
 Proposed building on Fisher St, Crossrail headhouse facilities and shaft are based on received PDFs, dimensions may vary.

--- Planning Application Boundary

Ground Floor Plan
 Scale 1:200

**dexter
 moren
 associates**
 architecture urban design
 interior design creative media
 www.dextermoren.com
 architecture

57d
 Jamestown Road
 London NW1 7DB
 UK
 T: 020 7267 4440
 F: 020 7267 6044

P0 ISSUED FOR PRE APPLICATION
 rev. amendments

31.10.16 RA
 date by

| | | | | | | | | | | | |
|---------|-----------------|----------------|-------------------|---------|------------------------|-------------|-----------|----------|----|------------|----|
| project | PRE APPLICATION | drawing title | Ground Floor Plan | scale | 1:200 @ A3 NTS @ A4 | date | 31.10.16 | drawn by | RA | checked by | WY |
| client | Ide Real Estate | drawing status | PRE APPLICATION | job no. | 1365 | drawing no. | A-100-002 | revision | P0 | | |

B. BREEAM Pre-Assessment

BREEAM 2014 - Other (Hotels)

| Issue ID | Description | Aim | Issue Part | Available Credits | Predicted Credits | Weighted Score (%) |
|-------------------------------|---|--|---|-------------------|-------------------|--------------------|
| Management | | | | | | 12% |
| Man 1 | Project Brief and Design | <i>To recognise and encourage an integrated design process that optimises building performance.</i> | Stakeholder Consultation (project delivery) | 1 | 1 | 0.57 |
| | | | Stakeholder Consultation (third party) | 1 | 1 | 0.57 |
| | | | Sustainability Champion (design) | 1 | 1 | 0.57 |
| | | | Sustainability Champion (monitoring progress) | 1 | 1 | 0.57 |
| Man 2 | Life Cycle Cost and Service Life Planning | <i>To deliver whole life value from investment and promote economic sustainability by recognising and encouraging the use and sharing of life cycle costing and service life planning to improve design, specification and through-life maintenance and operation.</i> | Elemental Life Cycle Cost | 2 | 2 | 1.14 |
| | | | Component Level LCC Plan | 1 | 1 | 0.57 |
| | | | Capital Cost Reporting | 1 | 1 | 0.57 |
| Man 3 | Responsible Construction Practices | <i>To recognise and encourage construction sites which are managed in an environmentally and socially considerate, responsible and accountable manner.</i> | EMS | 1 | 1 | 0.57 |
| | | | Sustainability Champion | 1 | 1 | 0.57 |
| | | | Considerate Construction | 2 | 2 | 1.14 |
| | | | Monitoring of construction-site impacts: | | | |
| | | | Energy/Water | 1 | 1 | 0.57 |
| Transport | 1 | 1 | 0.57 | | | |
| Man 4 | Commissioning and Handover | <i>To encourage a properly planned handover and commissioning process that reflects the needs of the building occupants.</i> | Commissioning/Testing Schedule & Responsibilities | 1 | 1 | 0.57 |
| | | | Commissioning Building Services | 1 | 1 | 0.57 |
| | | | Testing and Inspecting Building Fabric | 1 | 0 | 0.00 |
| | | | Handover | 1 | 1 | 0.57 |
| | | | | | | |
| Man 5 | Aftercare | <i>To provide post-handover aftercare to the building owner/occupants during the first year of occupation to ensure the building operates and adapts, where relevant, in accordance with the design intent and operational demands.</i> | Aftercare Support | 1 | 1 | 0.57 |
| | | | Seasonal Commissioning | 1 | 1 | |
| | | | Post Occupancy Evaluation | 1 | 1 | |
| | | | | 21 | 20 | 11.43 |
| Health & Wellbeing | | | | | | 15% |
| Hea 1 | Visual Comfort | <i>To ensure daylighting, artificial lighting and occupant controls are considered at the design stage to ensure best practice in visual performance and comfort for building occupants.</i> | Glare Control | 1 | 1 | 0.83 |
| | | | Daylighting | 1 | 0 | 0.00 |
| | | | View Out | 1 | 0 | 0.00 |
| | | | Internal & External Lighting | 1 | 1 | 0.83 |
| Hea 02 | Indoor Air Quality | <i>To recognise and encourage a healthy internal environment through the specification and installation of appropriate ventilation, equipment and finishes.</i> | Minimising Sources of Air Pollution | | | |
| | | | IAQ Plan | 1 | 1 | 0.83 |
| | | | Ventilation | 1 | 0 | 0.00 |
| | | | VOC Products | 1 | 1 | 0.83 |
| | | | VOC Emissions Testing | 1 | 1 | 0.83 |
| Adaptability | 1 | 1 | 0.83 | | | |
| Hea 03 | Safe Containment Laboratories | | | | | |

| Issue ID | Description | Aim | Issue Part | Available Credits | Predicted Credits | Weighted Score (%) |
|-------------------------------|--|--|---|-------------------|-------------------|--------------------|
| Health & Wellbeing | | | | | | 15% |
| Hea 04 | Thermal Comfort | <i>To ensure that appropriate thermal comfort levels are achieved through design, and controls are selected to maintain a thermally comfortable environment for occupants within the building.</i> | Thermal Modelling | 1 | 1 | 0.83 |
| | | | Adaptability to a climate change scenario | 1 | 1 | 0.83 |
| | | | Thermal Modelling Controls | 1 | 1 | 0.83 |
| Hea 5 | Acoustic Performance | <i>To ensure the building's acoustic performance including sound insulation meet the appropriate standards for its purpose.</i> | Sound Insulation | 4 | 4 | 3.33 |
| | | | Ambient Noise Levels | | | 0.00 |
| | | | Reverberation | | | 0.00 |
| Hea 6 | Safety and Security | <i>To recognise and encourage effective measures that promote safe and secure use and access to and from the building.</i> | Safe Access | 1 | 1 | 0.83 |
| | | | Security of the site & building | 1 | 1 | 0.83 |
| | | | | 18 | 14 | 11.82 |
| Energy | | | | | | 15% |
| Ene 1 | Reduction of Energy Use and Carbon Emissions | <i>To recognise and encourage buildings designed to minimise operational energy demand, primary energy consumption and CO2 emissions.</i> | N/A | 12 | 7 | 4.38 |
| Ene 2 | Energy Monitoring | <i>To recognise and encourage the installation of energy sub-metering that facilitates the monitoring of operational energy consumption.</i> | Major Energy Uses | 1 | 1 | 0.63 |
| | | | High Energy Load/Tenancy Areas | | | |
| Ene 3 | External Lighting | <i>To recognise and encourage the specification of energy-efficient light fittings for external areas of the development.</i> | N/A | 1 | 1 | 0.63 |
| Ene 4 | Low Carbon Design | <i>To encourage the adoption of design measures, which reduce building energy consumption and associated carbon emissions and minimise reliance on active building services systems.</i> | Passive Design | | | |
| | | | Passive Design Analysis | 1 | 0 | 0.00 |
| | | | Free Cooling | 1 | 0 | 0.00 |
| | | | LZC Technologies | | | |
| | | | LZC Feasibility Study | 1 | 1 | 0.63 |
| Ene 5 | Energy Efficient Cold Storage | | | 2 | 0 | |
| Ene 6 | Energy Efficient Transportation Systems | <i>To recognise and encourage the specification of energy efficient transportation systems.</i> | Energy Consumption | 1 | 1 | 0.63 |
| | | | Energy Features | 2 | 2 | |
| Ene 7 | Energy Efficient Laboratory Systems | | | | | |
| Ene 8 | Energy Efficient Equipment | <i>To recognise and encourage procurement of energy efficient equipment to ensure optimum performance and energy savings in operation.</i> | N/A | 2 | 2 | 1.25 |
| Ene 9 | Drying Space | | | | | |
| | | | | 24 | 15 | 8.13 |
| Transport | | | | | | 9% |
| Tra 1 | Public Transport Accessibility | <i>To recognise and encourage development in proximity of good public transport networks, thereby helping to reduce transport-related pollution and congestion.</i> | N/A | 5 | 5 | 4.09 |
| Tra 2 | Proximity to Amenities | <i>To encourage and reward a building that is located in proximity to local amenities, thereby reducing the need for extended travel or multiple trips.</i> | N/A | 1 | 1 | 0.82 |

| Issue ID | Description | Aim | Issue Part | Available Credits | Predicted Credits | Weighted Score (%) |
|----------|------------------------------|--|------------|-------------------|-------------------|--------------------|
| Tra 3 | Cyclist Facilities | To encourage building users to cycle by ensuring adequate provision of cyclist facilities. | N/A | 2 | 0 | 0.00 |
| Tra 4 | Maximum Car Parking Capacity | To encourage the use of alternative means of transport other than the private car to and from the building, thereby helping to reduce transport-related emissions and traffic congestion associated with the building's operation. | N/A | 2 | 2 | 1.64 |
| Tra 5 | Travel Plan | To recognise the consideration given to accommodating a range of travel options for building users, thereby encouraging the reduction of user reliance on forms of travel that have the highest environmental impact. | N/A | 1 | 1 | 0.82 |
| | | | | 11 | 9 | 7.36 |

| Water | | | | | | 7% |
|-------|---------------------------|--|-----------------------|---|---|------|
| Wat 1 | Water Consumption | To reduce the consumption of potable water for sanitary use in new buildings from all sources through the use of water efficient components and water recycling systems. | N/A | 5 | 3 | 2.33 |
| Wat 2 | Water Monitoring | To ensure water consumption can be monitored and managed, and therefore encourage reductions. | N/A | 1 | 1 | 0.78 |
| Wat 3 | Water Leak Detection | To reduce the impact of major water leaks that may otherwise go undetected. | Leak Detection System | 1 | 1 | 0.78 |
| | | | Flow Control Devices | 1 | 1 | 0.78 |
| Wat 4 | Water Efficient Equipment | To reduce unregulated water consumption by encouraging specification of water efficient equipment. | N/A | 1 | 1 | 0.78 |
| | | | | 9 | 7 | 5.44 |

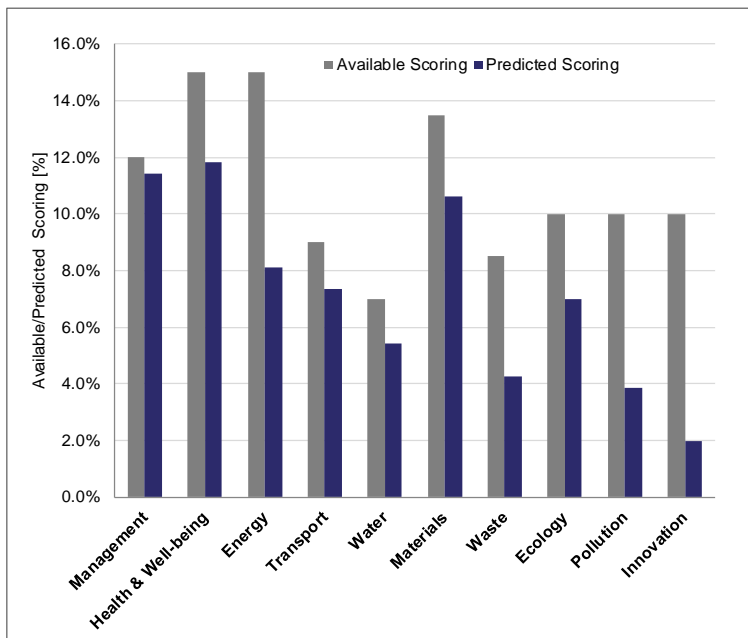
| Materials | | | | | | 13.50% |
|-----------|--|--|-----------------------------------|----|----|--------|
| Mat 1 | Life Cycle Impacts | To recognise and encourage the use of construction materials with a low environmental impact (including embodied carbon) over the full life cycle of the building. | N/A | 6 | 4 | 3.86 |
| Mat 2 | Hard Landscaping and Boundary Protection | To recognise and encourage the specification of materials for boundary protection and external hard surfaces that have a low environmental impact, taking into account of the full life cycle of materials used. | N/A | 1 | 1 | 0.96 |
| Mat 3 | Responsible Sourcing of Materials | To recognise and encourage the specification and procurement of responsibly sourced materials for key building elements. | Sustainable Procurement Plan | 1 | 1 | 0.96 |
| | | | Responsible Sourcing of Materials | 3 | 2 | 1.93 |
| Mat 4 | Insulation | To recognise and encourage the use of thermal insulation which has a low embodied environmental impact relative to its thermal properties. | Embodied Impact | 1 | 1 | 0.96 |
| Mat 5 | Designing for Durability and Resilience | To recognise and encourage adequate protection of exposed elements of the building and landscape, therefore minimising the frequency of replacement and maximising materials optimisation. | N/A | 1 | 1 | 0.96 |
| Mat 6 | Material Efficiency | To recognise and encourage measures to optimise material efficiency in order to minimise environmental impact of material use and waste. | N/A | 1 | 1 | 0.96 |
| | | | | 14 | 11 | 10.61 |

| Issue ID | Description | Aim | Issue Part | Available Credits | Predicted Credits | Weighted Score (%) |
|-------------------------------|--|--|--------------------------------------|-------------------|-------------------|--------------------|
| Waste | | | | | | 8.50% |
| Wst 1 | Construction Waste Management | <i>To promote resource efficiency via the effective management and reduction of construction waste.</i> | Construction Resource Efficiency | 3 | 1 | 1.06 |
| | | | Diversion of Resources from Landfill | 1 | 1 | |
| Wst 2 | Recycled Aggregates | <i>To recognise and encourage the use of recycled and secondary aggregates in construction, thereby reducing the demand for virgin material and optimising material efficiency in construction.</i> | N/A | 1 | 0 | 0.00 |
| Wst 3 | Operational Waste | <i>To recognise the provision of dedicated storage facilities for a building's operational-related recyclable waste streams, so that such waste is diverted from landfill or incineration.</i> | N/A | 1 | 1 | 1.06 |
| Wst 4 | Speculative Floor and Ceiling Finishes | | | | | |
| Wst 5 | Adaptation to Climate Change | <i>To recognise and encourage measures taken to mitigate the impact of extreme weather conditions arising from climate change over the lifespan of the building.</i> | Structural and Fabric Resilience | 1 | 1 | 1.06 |
| Wst 6 | Functional Adaptability | <i>To recognise and encourage measures taken to accommodate future changes of use of the building over its lifespan.</i> | N/A | 1 | 1 | 1.06 |
| | | | | 8 | 5 | 4.25 |
| Land Use & Ecology | | | | | | 10% |
| LE 1 | Site Selection | <i>To encourage the use of previously developed land and/or contaminated land and avoid land which has not been previously disturbed.</i> | Previously Occupied Land | 1 | 1 | 1.00 |
| | | | Contaminated Land | 1 | 0 | |
| LE 2 | Ecological Value of Site and Protection of Ecological Features | <i>To encourage development on land that already has limited value to wildlife and to protect existing ecological features from substantial damage during site preparation and completion of construction works.</i> | Ecological Value of Site | 1 | 1 | 1.00 |
| | | | Protection of Ecological Features | 1 | 1 | |
| LE 3 | Minimising Impact on Existing Site Ecology | <i>To minimise the impact of a building development on existing site ecology.</i> | | 2 | 2 | 2.00 |
| LE 4 | Enhancing Site Ecology | <i>To recognise and encourage actions taken to maintain and enhance the ecological value of the site as a result of development.</i> | Ecologist's Report & Recommendations | 1 | 1 | 1.00 |
| | | | Increase in Ecological Value | 1 | 0 | 0.00 |
| LE 5 | Long Term Impact on Biodiversity | <i>To minimise the long term impact of the development on the site's, and surrounding area's, biodiversity.</i> | N/A | 2 | 2 | 2.00 |
| | | | | 10 | 8 | 7.00 |
| Pollution | | | | | | 10% |
| Pol 1 | Impact of Refrigerants | <i>To reduce the level of greenhouse gas emissions arising from the leakage of refrigerants from building systems.</i> | N/A | 3 | 1 | 0.77 |
| Pol 2 | NOx Emissions | <i>To contribute to a reduction in national Nox emission levels through the use of low emission heat sources in the building.</i> | N/A | 3 | 0 | 0.00 |

| Issue ID | Description | Aim | Issue Part | Available Credits | Predicted Credits | Weighted Score (%) |
|----------|-----------------------------------|--|----------------------------------|-------------------|-------------------|--------------------|
| Pol 3 | Surface Water Run-Off | <i>To avoid, reduce and delay the discharge of rainfall to public sewers and watercourses, thereby minimising the risk and impact of localised flooding on and off-site, watercourse pollution and other environmental damage.</i> | Flood Risk | 2 | 2 | 1.54 |
| | | | Surface Water Run-Off | 2 | 1 | |
| | | | Minimising Watercourse Pollution | 1 | 0 | |
| Pol 4 | Reduction of Night Time Pollution | <i>To ensure that external lighting is concentrated in the appropriate areas and that upward lighting is minimised, reducing unnecessary light pollution, energy consumption and nuisance to neighbouring properties.</i> | N/A | 1 | 1 | 0.77 |
| Pol 5 | Reduction of Noise Pollution | <i>To reduce the likelihood of noise from the new development affecting nearby noise-sensitive buildings.</i> | N/A | 1 | 1 | 0.77 |
| | | | | 13 | 6 | 3.85 |

| Innovation | | | | 10% |
|------------|--|--|--|-----|
| Inn 1 | Man03 Responsible Construction Practices | | | 1 |
| | Man05 Aftercare | | | 1 |
| | Hea01 Visual Comfort | | | 0 |
| | Hea02 Indoor Air Quality | | | 0 |
| | Ene01 Reduction of Energy Use and Carbon Emissions | | | 0 |
| | Wat01 Water Consumption | | | 0 |
| | Mat01 Life Cycle Impacts | | | 0 |
| | Mat03 Responsible Sourcing of Materials | | | 0 |
| | Wst01 Construction Waste Management | | | 0 |
| | Wst02 Recycled Aggregates | | | 0 |
| | Wst05 Adaptation to Climate Change | | | 0 |
| | | | | 10 |
| | | | | 10 |
| | | | | 2 |

BREEAM 2014



| | FINAL SCORE | |
|---------------------|--------------------|---------------|
| | Available | Predicted |
| Management | 12.00% | 11.43% |
| Health & Wellbeing | 15.00% | 11.82% |
| Energy | 15.00% | 8.13% |
| Transport | 9.00% | 7.36% |
| Water | 7.00% | 5.44% |
| Materials | 13.50% | 10.61% |
| Waste | 8.50% | 4.25% |
| Ecology | 10.00% | 7.00% |
| Pollution | 10.00% | 3.85% |
| Total | 100.00% | 69.88% |
| Innovation | 10.00% | 2.00% |
| Score | 71.88% | |
| Rating | 'Excellent' | |
| Rating Scale | % score | |
| Unclassified | <30 | |
| Pass | ≥30 | |
| Good | ≥45 | |
| Very Good | ≥55 | |
| Excellent | ≥70 | |
| Outstanding | ≥85 | |

C. General Notes

The report is based on information available at the time of the writing and discussions with the client during any project meetings. Where any data supplied by the client or from other sources have been used it has been assumed that the information is correct. No responsibility can be accepted by Ensphere Group Ltd for inaccuracies in the data supplied by any other party.

The review of planning policy and other requirements does not constitute a detailed review. Its purpose is as a guide to provide the context for the development and to determine the likely requirements of the Local Authority.

No site visits have been carried out, unless otherwise specified.

This report is prepared and written in the context of an agreed scope of work and should not be used in a different context. Furthermore, new information, improved practices and changes in guidance may necessitate a re-interpretation of the report in whole or in part after its original submission.

The copyright in the written materials shall remain the property of Ensphere Group Ltd but with a royalty-free perpetual licence to the client deemed to be granted on payment in full to Ensphere Group Ltd by the client of the outstanding amounts.

The report is provided for sole use by the Client and is confidential to them and their professional advisors. No responsibility whatsoever for the contents of the report will be accepted to any person other than the client, unless otherwise agreed.

These terms apply in addition to the Ensphere Group Ltd "Standard Terms of Business" (or in addition to another written contract which may be in place instead thereof) unless specifically agreed in writing. (In the event of a conflict between these terms and the said Standard Terms of Business the said Standard Terms of Business shall prevail.). In the absence of such a written contract the Standard Terms of Business will apply.



Ensphere Group Ltd
10 Greycoat Place, London, SW1P 1SB
+44 (0) 20 7960 6126
www.enspheregroup.com