

CLEARBELL CAPITAL LLP

PROJECT ANATOMY

85 GRAY'S INN ROAD LONDON

SUSTAINABILITY STATEMENT

REVISION P02

Document History

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1.0 INTRODUCTION

KJ Tait Engineers have been commissioned to produce a Sustainability Statement for the proposed development at 85 Gray's Inn Road, London.

The London Borough of Camden requires that any non-residential development of 500sqm or more should provide a sustainability statement when submitting a planning application.

The Proposed Development (approx. 3,500sqm) includes the refurbishment of the existing buildings and the construction of a courtyard gantry for a new development including office and laboratory uses.

This report summarises the sustainable design and construction measures that have been incorporated into the project. It also sets out how the energy, water and materials used in design and construction will be reduced to meet the sustainability requirements of London Borough of Camden. Further details can be found in the specific documentation provided by each specialist as part of the Planning application pack.

The assessment has been based on the brief provided by the Client and input from the project team in response to the brief. The proposals have been designed and specified in accordance with the following relevant planning policies where feasible and will demonstrate a high performance in energy efficiency and sustainability.

2.0 PLANNING POLICIES

2.1 The London Plan 2020

The London Plan^[1] and the GLA Energy Assessment Guidance are considered to be the benchmark for Local Planning Regulation. Together they provide the regulatory framework against which to undertake energy and sustainability assessments.

The Greater London Authority (GLA) Supplementary Planning Guidance Document (SPG), Energy Assessment Guidance (October 2018) is required to be used when presenting Energy Strategies within London. This document specifies the method to achieving low carbon design by employing the Energy Hierarchy: Be Lean, Be Clean, Be Green.

Policy SI 1: Improving air quality

Development Plans, through relevant strategic, site-specific and area-based policies, should seek opportunities to identify and deliver further improvements to air quality and should not reduce air quality benefits that result from the mayor's or boroughs' activities to improve air quality.

To tackle poor air quality, protect health and meet legal obligations the following criteria should be addressed:

- 1) Development proposals should not:

^[1] The London Plan (December 2020)

- a) lead to further deterioration of existing poor air quality.
 - b) create any new areas that exceed air quality limits, or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits.
 - c) create unacceptable risk of high levels of exposure to poor air quality.
- 2) In order to meet the requirements in Part 1, as a minimum:
- a) development proposals must be at least Air Quality Neutral.
 - b) development proposals should use design solutions to prevent or minimise increased exposure to existing air pollution and make provision to address local problems of air quality in preference to post-design or retro-fitted mitigation measures.
 - c) major development proposals must be submitted with an Air Quality Assessment. Air quality assessments should show how the development will meet the requirements of B1.
 - d) development proposals in Air Quality Focus Areas or that are likely to be used by large numbers of people particularly vulnerable to poor air quality, such as children or older people should demonstrate that design measures have been used to minimise exposure.

Masterplans and development briefs for large-scale development proposals subject to an Environmental Impact Assessment should consider how local air quality can be improved across the area of the proposal as part of an air quality positive approach. To achieve this a statement should be submitted demonstrating:

- 1) how proposals have considered ways to maximise benefits to local air quality, and
- 2) what measures or design features will be put in place to reduce exposure to pollution, and how they will achieve this.

In order to reduce the impact on air quality during the construction and demolition phase development proposals must demonstrate how they plan to comply with the Non-Road Mobile Machinery Low Emission Zone and reduce emissions from the demolition and construction of buildings following best practice guidance.

Development proposals should ensure that where emissions need to be reduced to meet the requirements of Air Quality Neutral or to make the impact of development on local air quality acceptable, this is done on-site. Where it can be demonstrated that emissions cannot be further reduced by on-site measures, off-site measures to improve local air quality may be acceptable, provided that equivalent air quality benefits can be demonstrated within the area affected by the development.

Policy SI 2: Minimising greenhouse gas emissions

Major development should be net zero-carbon. This means reducing greenhouse gas emissions in operation and minimising both annual and peak energy demand in

accordance with the following energy hierarchy:

- 1) be lean: use less energy and manage demand during operation.
- 2) be clean: exploit local energy resources (such as secondary heat) and supply energy efficiently and cleanly.
- 3) be green: maximise opportunities for renewable energy by producing, storing and using renewable energy on-site.
- 4) be seen: monitor, verify and report on energy performance.

Major development proposals should include a detailed energy strategy to demonstrate how the zero-carbon target will be met within the framework of the energy hierarchy.

A minimum on-site reduction of at least 35 per cent beyond Building Regulations is required for major development. Residential development should achieve 10 per cent, and non-residential development should achieve 15 per cent through energy efficiency measures. Where it is clearly demonstrated that the zero-carbon target cannot be fully achieved on-site, any shortfall should be provided, in agreement with the borough, either:

- 1) through a cash in lieu contribution to the borough's carbon offset fund, or
- 2) off-site provided that an alternative proposal is identified and delivery is certain.

Boroughs must establish and administer a carbon offset fund. Offset fund payments must be ring-fenced to implement projects that deliver carbon reductions. The operation of offset funds should be monitored and reported on annually.

Major development proposals should calculate and minimise carbon emissions from any other part of the development, including plant or equipment, that are not covered by Building Regulations, i.e. unregulated emissions.

Development proposals referable to the Mayor should calculate whole life-cycle carbon emissions through a nationally recognised Whole Life-Cycle Carbon Assessment and demonstrate actions taken to reduce life-cycle carbon emissions

Policy SI 4 – Managing heat risk

Developments should minimise adverse impacts on the urban heat island through design, layout, orientation materials and the incorporation of green infrastructure.

Project proposals should indicate how they will reduce the potential for internal overheating and reliance on air conditioning systems in accordance with the cooling hierarchy.

- Reduce the amount of heat entering the building through orientation, shading, high albedo materials, fenestration, insulation and the provision of green infrastructure

- Minimise internal heat generation through energy efficient design
- Provide passive ventilation
- Provide mechanical ventilation
- Provide active cooling systems.

CIBSE Guide TM52 – Limits of thermal comfort: Avoiding overheating in European buildings should be used to assess the overheating risk in non-domestic buildings.

2.2 Camden Local Plan (June 2017)

The Camden Local Plan (June 2017) sets out the council's strategic planning policy. Section 8; Sustainability and climate change of the Camden Local Plan, and more specifically policies CC1 to CC4, relate to the subject of reducing carbon emissions, LZC technologies and air quality. Camden's environmental sustainability plan (2018- 2020) commits Camden to a 40% borough wide Carbon Dioxide (CO2) reduction by 2020 (London carbon reduction target) and an 80% reduction by 2050. Within this document, there are a number of areas that the proposed development will need to meet with respect to energy and sustainability.

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.

Development 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 development to demonstrate how London Plan targets for carbon dioxide emissions have been met;
- c. ensure that the location of 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.

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

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 runoff through increasing permeable surfaces and use of Sustainable Drainage Systems;
- c. incorporating bio-diverse roofs, combination green and blue roofs and green walls where appropriate; and
- d. measures to reduce the impact of urban and dwelling overheating, including application of the cooling hierarchy.

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. expecting non-domestic developments of 500 sqm of floorspace or above to achieve "excellent" in BREEAM assessments and encouraging zero carbon in new development from 2019.

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:

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

Where an assessment of flood risk is required, developments should consider surface water flooding in detail and groundwater flooding where applicable. The Council will protect the borough's existing drinking water and foul water infrastructure, including the reservoirs at Barrow Hill, Hampstead Heath, Highgate and Kidderpore.

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. The Council will take into account the impact of air quality when assessing development proposals, through the consideration of both the exposure of occupants to air pollution and the effect of the development on air quality. Consideration must be taken to the actions identified in the Council's Air Quality Action Plan.

Air Quality Assessments (AQAs) are required where development is likely to expose residents to high levels of air pollution. Where the AQA shows that a development would cause harm to air quality, the Council will not grant planning permission unless measures are adopted to mitigate the impact. Similarly, developments that introduce sensitive receptors (i.e. housing, schools) in locations of poor air quality will not be acceptable unless designed to mitigate the impact.

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.

3.0 SUSTAINABLE DESIGN & CONSTRUCTION MEASURES

The criteria set out by the local borough council and the London Plan have been adopted for the proposed development where applicable.

3.1 Energy & CO₂

The approach to reducing energy used by the proposed development has been to consider strategies and technologies to achieve a low energy and carbon footprint for the scheme.

The development follows the energy hierarchy:

- Use less energy through passive design measures (Be Lean)
- Supply and consume energy efficiently (Be Clean)
- Utilise renewable energy sources to reduce carbon emissions (Be Green).

The proposed development follows the energy hierarchy based on the following methodology:

The performance of the development in terms of energy consumption and carbon emissions is calculated at each stage of the assessment, ensuring that both regulated and unregulated energy is considered when determining the performance of the proposed energy strategy.

The Client Brief defines that the building is to achieve a minimum EPC rating of B, an increase on the current building's performance.

Passive Design & Building Fabric

As part of the Be Lean approach, passive design measures have been considered throughout the design of the scheme to reduce energy demand.

*Where party walls have a cavity, these are to meet the following requirements:

- Sealed to prevent air going in and out of any cavity
- Sealed at the top, bottom and vertically
- All cavities are to be fully filled

In addition to the passive design measures identified above, energy efficient equipment and strategies have been proposed where possible to support the services strategy.

District Energy Systems

District energy systems produce low temperature hot water, domestic hot water or chilled water using central plant. The steam or water is distributed in pre-insulated pipework to individual buildings for space heating, domestic hot water and cooling.

Due to the project being a refurbishment, there are currently no plans to provide district energy systems for the building. The development will utilise its own heating and cooling infrastructure, served by central plant.

Low and Zero Carbon Technologies

The development will incorporate air source heat pump technology.

3.2 Water Management

Water use will be reduced to a target maximum of 105 l/person/day through the use of low flow equipment such as dual flush WCs and low flow taps and showers. Water fittings will be specified with the following target flow rates to meet the target water consumption:

- Wash basin taps - 4 l/min
- Showers - 10 l/min
- Dishwasher - 1.1 l/place setting
- WC - 4/2.6 litre dual flush
- Kitchen taps - 6 l/min

Water meters are to be installed in each tenant demise to manage their usage and limit their consumption.

During the next project stages, water management will be further explored with water savings gained wherever possible. Additional water saving improvements to be considered include:

- Flow regulators for taps, mixers and showers.
- Low flush WCs.

Façade cleaning

Carefully managed systems such as water fed pole systems are currently being reviewed with access from external gantries or the street level. These will be fed from onsite taps or limited volume containers therefore the water use is monitored with the desire to use less.

Rainwater Harvesting

A rainwater harvesting system located at roof level of the building will provide irrigation to

planters on the terrace area.

3.3 Materials

All the new building elements will achieve the highest feasible rating on the BRE Green Guide to Specification. Materials will be specified to have a low embodied energy, taking into account whole life cycle analysis. All materials will be sourced from manufacturers who employ environmental management systems such as ISO 14001 or BES 6001. All timber used in construction will be FSC or PEFC certified.

Insulating materials will be specified to maximise thermal performance whilst considering the environmental impact of the materials used. The use of recycled products will be pursued wherever feasible and the use of other low embodied energy products will be further investigated.

Responsible sourcing will be pursued. All timber used on site during the construction phase and within the building will be from FSC sources or equivalent. Other materials, including insulation, will be sourced from manufacturers who employ environmental management systems such as ISO 14001 or BES 6001. Where possible, materials will be sourced locally.

Non-toxic materials will be used wherever possible, including the specification of products with low VOC content in line with European testing standards.

3.4 Surface Water and Flood Risk Management

Flood Risk

The site is wholly located in Flood Zone 1 in the Flood Map for Planning and is not at risk of fluvial or tidal flooding, as such the Sequential Test is satisfied and from a flood risk perspective the site is appropriate for any type of development including commercial properties.

The flood risk from surface water is also shown to be very low for the site in the .gov.uk mapping with an associated risk of surface water flooding less than 0.1% in any year. The mapping shows Greys Inn Road to the east of the site and Roger Road to the south of the site is at high-risk of flooding in excess of 3.3% in any year due to the natural low point of the catchment falling in this location. Surface water runoff ponds in this area before following the natural conveyance route to the east.

The site is outside to the maximum extent of flooding from reservoirs, and is therefore not at risk in the event of failure of any reservoir.

The existing basement structure fills the entire site area and will form a barrier below ground and will prevent the emergence of ground water. The basement is constructed with suitable materials to form a waterproof barrier and prevent the ingress of groundwater.

Large combined public sewers which surround the site are in the order of 4m below the surface. There is no significant risk of flooding from the public sewer.

There are no significant risks of flooding on the site.

Drainage

The existing site has a total area of 0.07ha of which the existing building covers the entire site area. Post-development the built-on areas will remain unchanged and consequently there will be no increase in the volume of runoff.

Rainwater harvesting in the form of water butts at roof level is proposed in order to provide irrigation for the planters on the roof terrace. This arrangement will reduce the runoff from the site, although as the planters will have a variable level of saturation the reduction in surface water runoff cannot be quantified. The planters will help towards increasing biodiversity and amenity while reducing the urban heat island effect.

Runoff rates from the site will remain unchanged as a result of the proposed development, and will therefore result in no additional load on the public sewer or increase in flood risk downstream.

3.5 Pollution

Construction site impacts

The construction site will be managed in such a way that the environmental impact is minimised. This includes following best practice policies for dust pollution by using dust sheets, covering skips and damping down where appropriate and following best practice policies to minimise noise pollution, including the use of quieter machinery where possible. Site working hours will be managed to mitigate the possibility that they will cause a nuisance to the surrounding properties.

The contractor will be enrolled on the Considerate Constructors Scheme and achieve a best practice score of at least 35 (with a minimum score of 7 in each section). They will also investigate the feasibility of achieving a CCS score of 40+.

Effective wheel/body washing facilities to be provided and used as necessary also spraying areas with water to dampen down dust when conditions dictate. Use of road sweepers whenever the need for road cleaning arises and sheeting of vehicles carrying waste materials off-site.

Plant and machinery

All plant and equipment installed will be appropriately sized and selected for efficiency in order to reduce greenhouse gas emissions.

Insulating materials for heating and cooling systems will be specified to keep pollutants to a minimum. All insulation will have a low Global Warming Potential (GWP) and zero Ozone Depletion Potential (ODP).

All heating and cooling systems employing the use of refrigerants shall ensure they have a

low Global Warming Potential (GWP) and zero Ozone Depletion Potential (ODP) and are in compliance with current F-Gas regulations.

All equipment will be frequently maintained to ensure it continues to run efficiently and cleanly. Insulating materials and heating systems will be specified to keep pollutants to a minimum. Insulation will have a low Global Warming Potential (GWP)

There are no boilers or CHP plant proposed for the development.

3.6 Noise Pollution

Construction site impacts

The construction site will be managed in such a way that the environmental impact is minimised. Further details will be established by the Main Contractor once appointed.

Noise impact of the development

Limiting noise levels will be specified for items of plant serving the development, in line with the local authority's requirements. These limits will ensure any a negligible impact on nearby receptors.

It is not envisaged that internal noise breaking out of the development would be of concern, however, tenant's activity noise to be controlled via suitable acoustic wording provided in the tenant handbook.

3.7 Waste

Construction site waste will be monitored through a Site Waste Management Plan.

A high-quality controlled waste management system will be put in place encompassing a comprehensive and appropriate waste recycling scheme, it is hoped that these implemented systems will be both cost effective and progressively more sustainable in environmental terms.

In accordance with relevant guidance and legislation the following protocol shall be adopted on site:

- Project will be audited at design stage to assess the potential for waste prevention, reduction, re-use and recycling during demolition and construction phases. A Schedule of Waste Arisings (Bill of Quantities) will be prepared
- Waste management will be planned at the earliest stage of the Project design (e.g. where to locate mini skips, skips and roll on roll offs as applicable and at which stages of works they will be required)
- Waste re-use and recycling schemes will be considered and implemented at all stages of works
- Waste will only be removed by registered carriers, in accordance with waste transfer notes and disposed of at a licensed transfer station for sorting and recycling
- All waste from the site shall be dealt with in accordance with the waste duty of care in

section 34 of the Environmental Protection (Duty of Care) Regulations 1991(4).

The contractor shall ensure that all wastes produced on site are appropriately stored. Appropriate waste labels, using the national colour coding system, shall be used as applicable for each waste category. Different wastes streams shall be segregated using different containers, where space permits; however, as a minimum skips / container for hazardous and non-hazardous wastes should be provided. If space for the provision of multiple skips is limited, consideration should be given to the use of a licensed waste management company who may be able to recover recyclable materials from mixed skips.

The contractor will target to divert at least 98% of construction waste from landfill. Waste will either be segregated on site into at least 5 different streams for recycling or collected, sorted and recycled by an external recycling contractor. Re-use of construction waste will also be encouraged.

3.8 Contaminated Land

A preliminary risk assessment was carried out by Delta-Simons and the findings are noted in the report extract below.

Objective of Report	To carry out a preliminary risk assessment (PRA) in accordance with the risk assessment framework presented in CLR11, in order to assess whether the area is potentially contaminated or whether there are other potential geo-environmental liabilities.
Site Description	The Site is located in the Holborn district of the London Borough of Camden, approximately 570 m north-west the nearest London underground station (Chancery Lane). The Site is occupied by a multi-storey commercial office building arranged over a lower ground, ground and four upper floor levels, with a small courtyard area in the north of the Site. It is noted that the lower ground level appears to cover the building footprint.
Proposed Development	The existing building is to be redeveloped to comprise mixed use offices and laboratory facilities.
Geology	From Geology Mapping within the Envirocheck® Report, the Site is indicated as being underlain by superficial deposits of the Hackney Gravel Member comprising sand and gravel. The underlying bedrock of the London Clay Formation comprises clay, silt and sand. It is also understood that beneath the London Clay will be the Lambeth Group, Thanet Sand and Chalk at depth. Given the current development, Made Ground is likely to be present overlying the Hackney Gravel Member at the Site.
Hydrology	The nearest surface water feature is listed as being located approximately 825 m north-east of the Site and appears to be a water feature to the west of Rosebery Avenue.

	<p>Also, a watercourse is listed 255 m east of the Site, which is not evident from available OS mapping and is likely to be culverted, possibly associated with one of London's 'lost waterways' and it is understood from hiddenhydrology.org that the Fleet (now a sewer) is situated in this locality.</p> <p>According to the Envirocheck® Report, there are no licensed abstraction records from surface water located within 1 km of the Site.</p>
Hydrogeology	<p>The EA classifies the Hackney Gravel Member as a Secondary A Aquifer and the London Clay as Unproductive Strata.</p> <p>The Chalk at depth beneath the Site is understood to be classified as a Principal Aquifer, however, this is considered to be at limited risk of impact from contamination at the Site given the thickness of the low permeability London Clay deposits.</p> <p>The EA data also indicates that the Site is not in a designated groundwater Source Protection Zone. According to the Envirocheck® Report, there are twenty licensed abstraction records from groundwater located within 1 km of the Site, of which the closest is located approximately 710 m north-east for public potable water supply. There are further potable water supply boreholes located approximately 720 m 930 m north-east of the Site. Whilst not stated, these are likely to be from the Chalk aquifer at depth, below a significant thickness of low permeable London Clay.</p> <p>Groundwater was identified at 6.45 m bgl within the above mentioned BGS boreholes.</p>
Major Ecological Receptors	<p>It is understood from information provided within the Envirocheck® Report, there are no designated ecological receptors located within 1 km of the Site.</p>
Flood Risk	<p>The Environment Agency's Flood Risk Map for Planning indicates that the Site is within Flood Zone 1 (Low Probability). The Environment Agency's Long-Term Flood Risk Map indicates the Site to be at very low risk from rivers or the sea.</p> <p>The topography of the Site is slightly sloped, ranging from approximately 20 m AOD in the south to 22 m AOD in the north-east. The Environment Agency's Long-Term Flood Risk Map indicates the Site to be at very low risk from surface water flooding. Whilst Gray's Inn Road and Roger Street to the east and south of the Site, respectively, are indicated to be at low to high risk of surface water flooding, the risk appears to be associated with localised topographic</p>

	<p>depressions and ponding as a result of direct rainfall; there are no flow paths towards the Site associated with this risk area. From information from the Camden Council's Strategic Flood Risk Assessment and Management Strategy, the area is not in a surface water risk hotspot and there are no incidents of historic flooding. It should also be noted that this mapping does not take into account specific drainage infrastructure, which is likely to reduce the potential for surface water flooding to occur.</p> <p>The hydrogeology of the Site, including groundwater recorded in on-Site BGS borehole information, is mentioned in Section 2.2. According to BGS mapping, the Site is located within an area considered to be at potential risk from groundwater flooding at the surface. However, generally built-up areas are considered to be of a lower risk and would only be of a higher concern for the below ground/ basement should this not be appropriately tanked/ waterproofed.</p> <p>There is no flood risk from canals and no known flood risk from sewers. The EA's Long-Term Flood Risk Map indicates the Site is not at flood risk from reservoirs.</p> <p>It should be noted that all the flood maps are indicative. Surface water flooding is typically difficult to predict as it depends on localised heavy rainfall, localised topography and the adequacy of the local drainage network. Also, Envirocheck and BGS mapping provides only whether the Site is potentially susceptible to groundwater flooding, not the level of risk.</p>
Brief Site History	<p>From the earliest reviewed mapping dated 1874, the Site was developed with several small unspecified properties. The Site appears to remain predominately unchanged until the 1942 building plan when a residential property and garage (likely domestic) were present in the north-west, an electrical goods warehouse in the south-west, a restaurant and a vacant property in the north-east, with the remaining areas undeveloped.</p> <p>From historical aerial photography in 1946, buildings in the north and west of the Site appear to have suffered bomb damage with these areas illustrated as cleared due to enemy action on the building plan from 1951. A single building remained in the north-east of the Site by 1953.</p> <p>By the historical building plan dated 1960, the Site was redeveloped with a single building situated across the western three quarters of the Site noted as a garage and</p>

	<p>petrol filling station, with sunk petrol tanks present to the east of the building.</p> <p>The garage remained present at the Site until at least 1991, and from 1992 mapping, the Site was shown as redeveloped with a single building which appeared to be consistent with the current building.</p>
UXO	<p>Whilst information provided by bombsight.org indicates the Site does not appear to have been directly impacted by the Blitz bombing raids of WWII, information from layersoflondon.org, shows the buildings in the north and west of the Site to have been either totally destroyed or damaged beyond repair during the blitz.</p>
Mineral Extraction	<p>The Site is not located within an area that is potentially affected by coal mining activity. It is therefore considered unlikely that subsidence due to mineral extraction could affect the proposed development.</p>
Asbestos	<p>Given the age of the Site, there is the potential for asbestos containing materials to be present within the building fabric. Any ACMs present will require ongoing management, and it is recommended that a copy of the current asbestos register/ previous survey report(s) is requested from the Vendor.</p>
Radon Gas	<p>The Site lies within an area where less than 1% of homes are above the Public Health England recommended "action level" for radon. The Envirocheck® Report indicates that no radon protective measures are necessary in the construction of new buildings or extensions at the Site.</p>
Summary of Main Risk Items	<p>A summary of the main risk items identified by the Delta-Simons is included in Section 4.0 of their report. This is not exhaustive and should be read in conjunction with the main text of their report.</p>
Limitations	<p>The limitations are highlighted in Appendix B of the Delta-Simons report.</p>

3.9 Health and Wellbeing

The scope of health and wellbeing is broad, ranging from acute health impacts and comfort and performance to fulfilment, joy and happiness. Health and wellbeing are influenced by indoor environmental factors, including thermal conditions, humidity, air quality, light and lighting, acoustic comfort, water quality and availability, and electric, magnetic and electromagnetic fields. An integrated approach is required to respond to users' needs and balance various constraints to deliver buildings that are energy efficient, and provide a healthy, comfortable environment with a level of adaptability and resilience

An integrated approach will be taken to the building design in order to address the broad scope of health and wellbeing and respond to the needs of building users. A high-quality,

healthy, comfortable environment will be provided, which addresses a range of indoor environmental factors, including thermal conditions, humidity, air quality, light and lighting, acoustic comfort, water quality and availability.

3.10 Management

During construction the site will be managed in such a way that the environmental impact is minimised. Contractors will register with the Considerate Constructors scheme and follow best practice.

3.11 Ecology

It is very unlikely that any non-statutory protected sites will be affected by the potential development due to the isolated nature of the site by dense urban networks.

To enhance the site for biodiversity the following enhancements to the site are recommended including:

- Planting plans for the site should include a wide variety of native plants of local provenance which will benefit pollinators

3.12 BREEAM

BREEAM, the Building Research Establishment's Environmental Assessment Method, is an internationally recognised procedure for reviewing and improving the environmental design and performance of building. It is a widely used environmental assessment method for buildings in the UK. Points are awarded in nine categories according to performance and added together to produce a single overall score on a scale of Pass, Good, Very Good, Excellent (70%-85%) and Outstanding (over 85%).

Through the careful design measures mentioned within this report and working closely as a team with the Contractor, the development will achieve a Very Good BREEAM rating.

4.0 CONCLUSION

The proposed development employs the sustainable design and constructions measures through various stages of the project in line with the London Plan and The London Borough of Camden Local Plan.

The project team have made all reasonable endeavours to achieve the minimum requirements of The London Borough of Camden.

By incorporating these measures, the environmental impact and energy use associated with the project will be considerably lower than for a project that is built to standard Building Regulations compliance.