Sustainability Statement
14 Blackburn Road

Issue Date: 24.03.2023

IN2 Project. No.: L22014

Rev.01

Revision History

Date	Revision	Description
21.03.2023	00	Draft issue
24.03.2023	01	Updated following NRF comments

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1.0 Executive Summary

1.1 The Application

This sustainability statement, prepared by IN2 Engineering, is submitted on behalf Hampstead Asset management Ltd (HAML) and Builder Depot Limited (BDL) ('The Applicant') to accompany an application for full planning permission for the development at 14 Blackburn Road, London, NW6 1RZ

1.2 Energy & Carbon Emission Reduction

The Development will reduce energy demand through passive design and energy efficiency measures such as best practice levels of insulation and low fabric air permeability.

The Mechanical and Electrical systems will be designed and specified to be as efficient as possible. Space heating will be met by installing high performing air source heat pumps.

In addition, the site is on previously occupied land and the development seeks to optimise the use of the existing site while respecting the local context surrounding the site. The building design is set to contribute to the local area by providing multiple use types.

Thought has been given to climate change adaptation with TM52 analysis being carried out for all occupied office and warehouse spaces in line with London Plan 2021 guidance.

1.3 Water

The Development will be fitted with water efficient fixtures and fittings in order to satisfy local planning policy and applicable assessment methods.

1.4 Materials

Building elements will be selected in accordance with the BRE Green Guide to Specification, with the aim of selecting elements in the range A+ to C to minimise environmental impact where feasible. All timber used will aim to be FSC certified or similar and where possible materials will be locally sourced. Embodied carbon of materials selected will also be considered. The team are working hard to achieve various innovative solutions such as the consideration of reused structural elements from demolition sites, saving significant energy and carbon.

1.5 Waste

The contractor will be required to produce and adhere to a Resource Management Plan which sets out requirements to maximise diversion of demolition, construction and excavation waste from landfill.

The development will be provided with sufficient bin storage capacity for recyclable and non-recyclable waste streams for day to day operational waste.

Wastewater treatment has also been considered and all units will be provided with a connection to the local sewer network.

1.6 Transport

Measures are included to improve low carbon transport options to the site such as electric vehicle charging and cycle storage spaces.

1.7 Biodiversity

The proposed development will lead to a net gain in biodiversity and urban greening, The site achieves an Urban Greening Factor (UGF) score of 0.37 which is in excess of policy requirements. Full details of the UGF calculation can be found in the Design and Access Statement

1.8 Pollution

No combustion plant is being installed for the provision of heating or hot water. Heating and hot water will be provided by air source heat pumps. External luminaires will direct lighting appropriately to minimise light pollution and loss of light to the sky.
The main contractor will minimise the risk of pollution through measures included in the Considerate Constructors Scheme or similar.

3.0 Policies and Drivers

3.1 Current Policy Framework

The policies considered when preparing this statement are contained in the London Plan and the London borough of Camden

3.2 Building Regulations Part L 2021

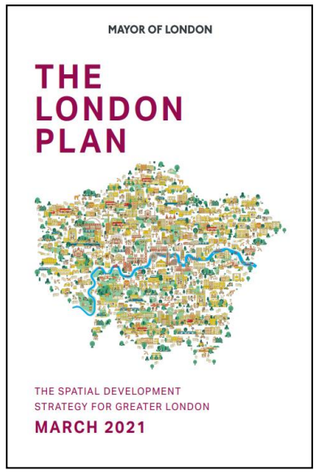
The assessment of the Development against policy targets has been carried out using Part L benchmarks.

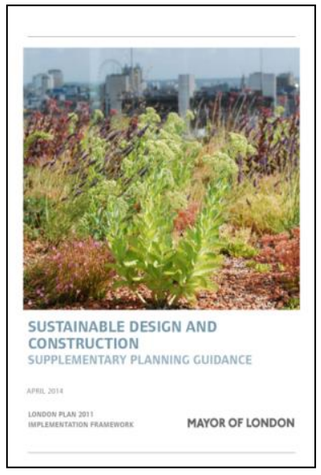
Criterion One of the Building Regulations Part L requires that the development is not anticipated to generate CO2 emissions in excess of that set by a Target Emission Rate (TER) calculated in accordance with the National Calculation Methodology (NCM).

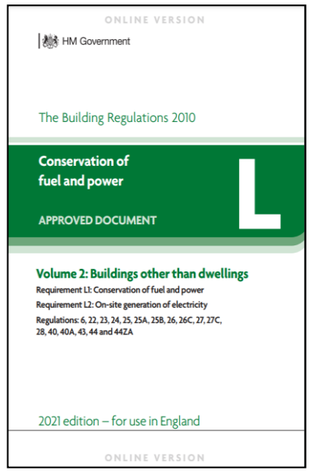
Criterion Two places upper limits on the efficiency of controlled fittings and services for example, an upper limit to an external wall U-value of 0.26W/m².K.

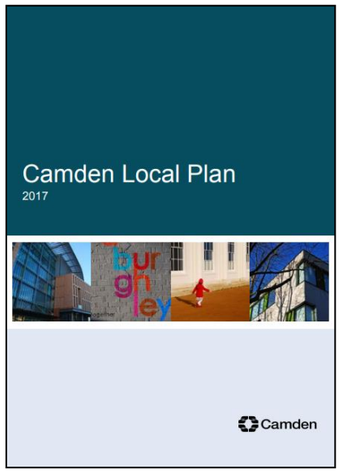
Criterion Three requires that spaces are not subject to excessive solar gains. This is demonstrated using the procedure given in the NCM.

For the purposes of this application calculations have been carried out against Part L 2021, these can be found within the Energy Strategy.









3.3 London Borough of Camden

Current policies relating to energy and sustainability are contained within the Camden Local Plan and complement the London Plan. This report makes reference to CC1, CC2 and CC3 among others.

3.4 The London Plan (2021)/Greater London Authority (GLA) policy

The London Plan (2021)

The GLA Guidance on Preparing Energy Assessments (2022)

The GLA Housing SPG (2016)

GLA Sustainable Design and Construction SPG (2014)

Some of the specific policies from the London Plan 2021 considered in this report can be seen below:

Policy SI 7 Reducing waste and supporting the circular economy

A Resource conservation, waste reduction, increases in material re-use and recycling, and reductions in waste going for disposal will be achieved by the Mayor, waste planning authorities and industry working in collaboration to:

1) promote a more circular economy that improves resource efficiency and innovation to keep products and materials at their highest use for as long as possible
2) encourage waste minimisation and waste prevention through the reuse of materials and using fewer resources in the production and distribution of products
3) ensure that there is zero biodegradable or recyclable waste to landfill by 2026
4) meet or exceed the municipal waste recycling target of 65 per cent by 2030[163]
5) meet or exceed the targets for each of the following waste and material streams:
   a) construction and demolition – 95 per cent reuse/recycling/recovery
   b) excavation – 95 per cent beneficial use[164]
6) design developments with adequate, flexible, and easily accessible storage space and collection systems that support, as a minimum, the separate collection of dry recyclables (at least card, paper, mixed plastics, metals, glass) and food.

163 Based on the EU definition of municipal waste being household waste and other waste similar in composition to household waste. This includes business waste collected by local authorities and by the private sector.

164 All inert excavation waste should be used for beneficial uses.

Policy SI 2 Minimising greenhouse gas emissions

A Major development should be net zero-carbon.[151] 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.

B 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.

C A minimum on-site reduction of at least 35 per cent beyond Building Regulations[152] 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.

D 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.

151 Where zero-carbon is used in the Plan it refers to net zero-carbon – see Glossary for definition.

152 Building Regulations 2013. If these are updated, the policy threshold will be reviewed. https://www.gov.uk/government/publications/conservation-of-fuel-and-power-approved-document-l

GG2 Making the best use of land

To create successful sustainable mixed-use places that make the best use of land, those involved in planning and development must:

A enable the development of brownfield land, particularly in Opportunity Areas, on surplus public sector land, and sites within and on the edge of town centres, as well as utilising small sites

B prioritise sites which are well-connected by existing or planned public transport

C proactively explore the potential to intensify the use of land to support additional homes and workspaces, promoting higher density development, particularly in locations that are well-connected to jobs, services, infrastructure and amenities by public transport, walking and cycling

D applying a design–led approach to determine the optimum development capacity of sites

E understand what is valued about existing places and use this as a catalyst for growth, renewal, and place-making, strengthening London's distinct and varied character

F protect and enhance London's open spaces, including the Green Belt, Metropolitan Open Land, designated nature conservation sites and local spaces, and promote the creation of new green infrastructure and urban greening, including aiming to secure net biodiversity gains where possible

G plan for good local walking, cycling and public transport connections to support a strategic target of 80 per cent of all journeys using sustainable travel, enabling car-free lifestyles that allow an efficient use of land, as well as using new and enhanced public transport links to unlock growth

H maximise opportunities to use infrastructure assets for more than one purpose, to make the best use of land and support efficient maintenance.

4.0 Sustainability Statement

The following assessment has been carried out whilst referencing the Mayor or London's Supplementary Planning Guidance (SPG) on Sustainable Design and Construction as per the requirement of The London Plan 2021. Reference is also made to the local polices of the London Borough of Camden.

GLA SUSTAINABLE DESIGN & CONSTRUCTION SPG		POLICY REFERENCES		DEVELOPMENT RESPONSE
Priority	Best Practice	London Plan	Camden planning policies	
Resource Management				
Land				
Optimising the Use of Land Through both their Local Plans and planning decisions, boroughs should aim for 100% of development to be delivered on previously developed land.	-	Chapter 2		Optimising the Use of Land The Development will be on previously developed land. The Site is occupied by various warehouses (between one and two storeys). The Site is bound along its northern edge by Blackburn Road and railway land to the south (serving the Metropolitan and Jubilee lines between West Hampstead Underground Station and Finchley Road). The West Hampstead Underground Station, together with retail facing on to West End Lane, lies to the west of the Site.
Optimising the Use of Land Developers should optimise the scale and density of their development, considering the local context, to make efficient use of London's limited land.	-	Chapter 3		Optimising the Use of Land The Development seeks to optimise the use of the existing site whilst respecting the local context surrounding the site. The Development will consist of a number of use types.
Basement and Lightwells When planning a basement development, developers should consider the geological and hydrological conditions of the Site and surrounding area, proportionate to the local conditions, the size of the basement and lightwell and the sensitivity of adjoining buildings and uses, including green infrastructure.	-	Chapter 3		Basement and Lightwells No basement areas to be provided.
Basement and Lightwells When planning and constructing a basement development, developers should consider the amenity of neighbours.	-	Chapter 3		Basement and Lightwells No basement areas to be provided.
Local Food Growing To protect existing established food growing spaces.	-	Chapter 8		Local Food Growing The Site does not contain any existing established spaces for growing food.

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-	Local Food Growing To provide space for individual or communal food growing, where possible and appropriate.	Chapter 8		Local Food Growing The Development is not proposing areas for the growing of crops.
-	Local Food Growing To take advantage of existing spaces to grow food, including adapting temporary spaces for food growing.	Chapter 8		
Site Layout &local Building Design				
	Site Layout & Building Design Any existing buildings that can be practically refurbished, retrofitted, altered, or extended should be retained and reused.	Chapter 3		Site Layout & Building Design Refer to the Circular Economy Statement for further information.
	Site Layout & Building Design A mix of uses, where suitable should be included to provide a range of services commensurate to the public transport accessibility.	Chapter 3		Site Layout & Building Design The site sits within the West Hampstead Interchange area (WHI1) and has a PTAL rating of 6B. Full details on public transport accessibility can be found in the supporting Transport Statement.
Site Layout & Building Design The design of the Site and building layout, footprint, scale and height of buildings as well as the location of land users should consider:	-	Chapter 3	Chapter 8	
Existing Features				Existing Features It has been deemed not appropriate to retain any existing building on site. The development will be of high quality and contribute to the local setting.

GLA SUSTAINABLE DESIGN & CONSTRUCTION SPG		POLICY REFERENCES		DEVELOPMENT RESPONSE
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The possible retention and reuse of existing buildings and structures; The retention of existing green infrastructure, including trees and other ecological features, and potential for its improvement and extension; and Access routes to public transport and other facilities that minimise the use of public transport				Refer to the Design and Access Statement for further information. Existing green infrastructure will be retained where possible. The proposed development will lead to a net gain in biodiversity and urban greening, The site achieves an UGF score of 0.37 which is in excess of policy requirements, full details can be found in the landscape section of the DAS.
New Design of Development The existing landform; The potential to take advantage of natural systems such as wind, sun and shading; The principles set out London Plan policies 7.1 and 7.6; The potential for adaption and reuse in the future; Potential for incorporating green infrastructure, including enhancing biodiversity; Potential for incorporating open space, recreation space and child play space; Energy demands and the ability to take advantage of natural systems and low and zero carbon energy sources; Site wide infrastructure; Access to low carbon transport modes; The promotion of low carbon transport modes, including walking and cycling; Potential to address any local air quality, noise disturbance, flooding and land contamination issues; and The potential effect on the micro-climate.				New Design of Development The development has evolved throughout pre-application discussion with various stakeholders including Camden Council. Measure to enhance biodiversity will be implemented and green spaces will be maintained. Cycle parking spaces will be provided to promote low carbon transport modes in compliance with planning policy. ASHP plant and PV panels will be utilised to provide onsite energy demand. Please refer to the Design and Access Statement accompanying the planning application for further information. The proposed development will lead to a net gain in biodiversity and urban greening, The site achieves an UGF score of 0.37 which is in excess of policy requirements, full details can be found in the landscape section of the DAS.

GLA SUSTAINABLE DESIGN & CONSTRUCTION SPG		POLICY REFERENCES		DEVELOPMENT RESPONSE
Priority	Best Practice	London Plan	Camden planning policies	
Energy and Carbon Dioxide Emissions				
Energy and CO2 Emissions The overall carbon dioxide emissions from a development should be minimised through the implementation of the energy hierarchy set out in London Plan Policy 5.2.	-	Chapter 9	Chapter 8	Energy and CO2 Emissions The Development has been assessed in accordance with requirements of LP Policy 5.2,GLA Energy Assessment Guidance (2022), Camden Local Plan policies. The target CO2 emissions reduction applicable to the Development is 35% on site and zero carbon when including carbon offsetting. Please refer to the Energy Strategy submitted in support of this application for further details. An anticipated Carbon Dioxide emissions reduction beyond the requirements of the Building Regulations Part L 2021 will be achieved through a combination of passive design, energy efficiency, air source heat pumps and PV panels.
-	Energy and CO2 Emissions Developments should contribute to ensuring resilient energy infrastructure and a reliable energy supply, including from local low and zero carbon sources.	Chapter 9	Chapter 8	Energy and CO2 Emissions Air source heat pumps are considered for low carbon heating to parts of the development. Refer to the Energy Strategy for further information. These measures are considered to work in tandem to provide resilient energy infrastructure. Please refer to the Energy Strategy submitted in support of this application for further details.
-	Energy and CO2 Emissions Developers are encouraged to include innovative low and zero carbon technologies to minimise carbon dioxide emissions within developments and keep up to date with rapidly improving technologies.	Chapter 9	Chapter 8	Energy and CO2 Emissions As described above, the Development will incorporate a passive design with air source heat pumps and PV panels.
Energy Demand Assessment Development applications are to be accompanied by an energy demand assessment	-	Chapter 9	Chapter 8	Energy Demand Assessment An energy demand assessment has been carried out for the Development. Please refer to the Energy Strategy for further details.
Use Less Energy The design of developments should prioritise passive measures.	Use Less Energy Developers should aim to achieve Part L 2013 Building Regulations requirements through design and energy	Chapter 9	Chapter 8	Use Less Energy The first step to reduce energy demand and CO2 emissions has been to incorporate passive design and energy efficiency measures such as striving to achieve industry best practice U values through the use of enhanced insulation levels and high efficiency plant. Please refer to the Energy Strategy for full details.

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	efficiency alone, as far as is practical.			
Efficient Energy Supply Developers should assess the potential for their developments to: Connect to an existing district heating or cooling network; Expand an existing district heating or cooling network, and connect to it; or Establish a Site wide network, and enable the connection of existing buildings in the vicinity of the developers.	-	Chapter 9	Chapter 8	Efficient Energy Supply The London Heat Map does not display any possible heat or cooling networks that the development can connect to. Communication has been sent to Camden Council to reconfirm that there is no potential to connect to a district heating network. Provisions are provided for future connection in the form of space allowance for future heat exchanger and network connection.
Renewable Energy Major developments should incorporate renewable energy technologies to minimise overall carbon dioxide emissions, where feasible.	-	Chapter 9	Chapter 8	Renewable Energy Heat pumps are providing heating to help minimise overall carbon dioxide emissions. PV panels provide renewable electricity.
Carbon Dioxide Off-setting				
Carbon Off-setting Where developments do not achieve the Mayor's carbon dioxide reduction targets set out in London Plan Policy 5.2, the developer should make a contribution to the local borough carbon dioxide off-setting fund.	-	Chapter 9	Chapter 8	Carbon Off-setting It is anticipated that the Development will reduce CO_2 emissions beyond the requirements of the Building Regulations Part L 2021 including renewables.
Retrofitting				
Retrofitting Where works to existing developments are proposed developers should retrofit carbon dioxide and water saving measures.	-	Chapter 9	-	Retrofitting NA
Monitoring Energy Use				

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-	Monitoring Energy Use Developers are encouraged to incorporate monitoring equipment, and systems where appropriate to enable occupiers to monitor and reduce their energy use.	Chapter 9	Chapter 9	Monitoring Energy Use Systems will be enabled to connect to a Building Management System (BMS) that can record energy use. During detailed design, consideration will be given to the provision of digital meters with connectivity to a central building management / billing system.
Supporting a Resilient Energy Supply				
-	Monitoring Energy Use Developers are encouraged to incorporate equipment that would enable their schemes to participate in demand side response opportunities.	Chapter 9	Chapter 8	Monitoring Energy Use During the detailed design stages, consideration will be given to the installation of ‘smart meters’ which could enable demand side response opportunities in the future.
Water Efficiency				
Water Efficiency Developers should maximise the opportunities for water saving measures and appliances in all developments, including the reuse and using alternative sources of water.	-	Chapter 9	Chapter 8	Water Efficiency The Development will be provided with water efficient fixtures, fittings and appliances. Low flow rate fixtures as well as water reuse systems will be considered. The development will aim to achieve a high score in the BREEAM Wat 01 issue.
Water Efficiency Developers should design residential schemes to meet a water consumption rate of 105 litres per person per day.	-	Chapter 9	Chapter 8	Water Efficiency Not applicable to the application for the proposed scheme.
Water Efficiency New non-residential developments, including refurbishments, should aim to achieve the maximum number of water credits in a BREEAM assessment or the ‘best practice’ level of the AECB (Association of Environment Conscious Building) water standards.	-	Chapter 9	Chapter 8	Water Efficiency Water efficient fixtures and fittings will be installed with a view to achieve maximum credits in the BREEAM Wat 01 issue were viable.

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Water Efficiency Where a building is to be retained, water efficiency measures should be retrofitted.	-	Chapter 9	Chapter 8	Water Efficiency NA
Water Efficiency All developments should be design to incorporate rainwater harvesting.	-	Chapter 9	Chapter 8	Water Efficiency The drainage strategy for the site has been considered and allows for sustainable urban drainage systems (SuDS) to be incorporated into the scheme. Green roofs are part of the SuDS Strategy.
Materials and Waste				
Design Phase The design of development should prioritise materials that: Have a low embodied energy, including those that can be re-used intact or recycled; At least three of the key elements of the building envelope (external walls, windows roof, upper floor slabs, internal walls, floor finishes / coverings) are to achieve a rating of A+ to D in the BRE's The Green Guide of specification; Can be sustainably sourced; At least 50% of timber and timber products should be sourced from accredited Forest Stewardship Council (FSC) or Programme for the Endorsement of forestry Certification (PEFC) source; Are durable to cater for their level of use and exposure; and Will not release toxins into the internal and external environment, including those that deplete stratospheric ozone.	-	Chapter 9	-	Design Phase 100% of the timber used at the Development will be FSC or PEFC certified, or similar. It is intended that all insulation materials will have an insulation index greater than 2.5 and based on achieving good Green Guide Ratings. Wherever feasible, selected materials will be in range of A+ to B as confirmed by the BRE Green Guide to Specification. Other LCA information will also be sought as required. Where specified by the developer, finishes and other materials will not contain or emit toxic substances. Materials will be specified that are durable and cater for their use.
Construction Phase Developers should maximise the use of existing resources and materials and minimise	-	Chapter 9		Construction Phase The Development will minimise the waste sent to landfill during construction, by effective management and with regard to the waste management hierarchy.

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waste generated during the demolition and construction process through the implementation of the waste hierarchy.				At least 95% of waste produced during construction phase will be diverted from landfill in line with GLA Circular Economy Guidance. Any waste that does need to be landfilled will be sent to an appropriate facility with sufficient capacity. Full details on waste management can be found in the accompanying Circular Economy statement and Operational Waste Management Strategy which can be found in the Delivery and Servicing Plan.
Occupation Phase Developers should provide sufficient internal space for the storage of recyclable and compostable materials and waste in their schemes. The design of development should meet borough requirements for the size and location of recycling, composting and refuse storage, and its removal.	-	Chapter 9		Occupation Phase The Development will be provided with suitable internal and communal waste storage facilities for the segregation of recyclable materials, designed with consideration of BS5906 (Waste Management in Buildings).
Nature Conservation and Biodiversity				
Nature & Biodiversity There is no net loss in the quality and quantity of biodiversity.	-	Chapter 9		Nature & Biodiversity The Development will result in a positive net gain in biodiversity. The proposed development will lead to a net gain in biodiversity and urban greening, The site achieves an UGF score of 0.37 which is in excess of policy requirements, full details can be found in the landscape section of the DAS.
Nature & Biodiversity Developers make a contribution to biodiversity on their development Site.	-	Chapter 9		

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Climate Change Adaptation				
Overheating Developers should include measures, in the design of their schemes, in line with the cooling hierarchy set out in London Plan Policy 5.9 to prevent overheating over the scheme's lifetime.	-	Chapter 3&9	Chapter 8	Overheating The Development has been designed in accordance with the cooling hierarchy as set out in LP Policy. It is expected that all spaces at the Development will be compliant with criterion 3 of the Building Regulations Part L, limiting the effects of heat gains in summer and CIBSE TM52 as required by The London Plan 2021. Measures proposed to limit the risk of overheating from internal sources include: • Energy efficient lighting (such as LED or compact fluorescent) with low heat output • Insulated heating and hot water pipework and minimisation of dead-legs to avoid standing heat loss Heat gains from external sources will be minimised by providing: • Suitable glazing ratios • High performance solar coatings on glazed elements and including internal blinds • High levels of insulation and low fabric air permeability which will retain cool air within the buildings in summer months • Openable windows / openings with sufficient free area to provide adequate ventilation • Comfort Cooling
-	Heat and Drought Resistant Planting The design of developments should prioritise landscape planting that is drought resistant and has a low water demand for supplementary watering.	Chapter 9	Chapter 6	Heat and Drought Resistant Planting Species selection will be considerate of robustness and resilience to climate change, pollution, waterlogging and drought. The soft landscaping across the site will respond to the built form environment and species will be selected to provide vibrancy to the development, whilst meeting the specific site conditions.
-	Resilient Foundations Developers should consider any long term potential for extreme weather events to affect a building's foundations and to ensure they are robust.	Chapter 9	Chapter 6	Resilient Foundations Consideration has been given to the issue however long-term extreme weather events are not expected to affect the building foundations.

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Increased Green Cover				
Urban Greening Developers should integrate green infrastructure into development schemes, including by creating links with wider green infrastructure network.	-	Chapter 9	Chapter 6	Urban Greening Species selection of any potential greening will be carried out at detailed design and will look to maximise the ecological value of the site where applicable. A UGF of 0.37 will be achieved which is in excess of policy requirements. Please refer to the Design and Access Statement for further information.
Urban Greening Major developments in the Central London Activity Area (CAZ) should be designed to contribute to the Mayor's target to increase green cover by 5% in this zone by 2030.	-	Chapter 9	Chapter 6	Urban Greening New specimen planting is proposed on the site however the development is not in the Central London Activity Area.
Trees				
Trees Developments should contribute to the Mayor's target to increase tree cover across London by 5% by 2025.	-	Chapter 8	Chapter 6	Trees New specimen planting is proposed on the site.
Trees Any loss of a trees resulting from development should be replaced with an appropriate tree or group of trees for the location, with the aim of providing the same canopy cover as that provided by the original trees.	-	Chapter 8	Chapter 6	The proposals do not involve the loss of an ecological feature or habitat, including a loss of a tree, garden or green space

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Surface Water Flooding and Sustainable Drainage. Developers should maximise all opportunities to achieve greenfield runoff rates in their developments.	-	Chapter 9	Chapter 8	Surface Water / Sustainable Drainage The drainage strategy for the site has been considered and allows for sustainable urban drainage systems (SuDS) to be incorporated into the scheme. Green roofs are part of the SuDS Strategy. It is proposed to utilise Sustainable Drainage Systems (SuDs) to manage surface water locally and reduce the risk of flooding onsite, upstream and downstream where possible. SuDS and onsite drainage will be designed so that there will be no flooding of any building on the Site or any off-Site flooding in a 1 in 100 year rainfall event plus an allowance for 40% increase in rainfall due to climate change.
Surface Water / Sustainable Drainage When designing their schemes developers should follow the drainage hierarchy set out in London Plan Policy 5.13.	-	Chapter 9	Chapter 8	The flood risk calculations undertaken for the Development and design of SuDs systems include an allowance of 40% increase in rainfall due to climate change up to and including the 100 year storm event In line with local and regional planning policy. Please refer to the Flood Risk Assessment and Drainage Strategy for further information.
Surface Water / Sustainable Drainage Developers should design Sustainable Drainage Systems (SuDS) into their schemes that incorporate attenuation for surface water runoff as well as habitat, water quality and amenity benefits.	-	Chapter 9	Chapter 6	
Flood Resilience and Resistance of Buildings in Flood Risk Areas. Development in areas at risk from any form of flooding should include flood resistance and resilience measures in line with industry best practice.	-	Chapter 9	Chapter 8	Flood Resilience Please refer to the Flood Risk Assessment for further details.
Flood Risk Management Developments incorporate the recommendation of the TE2100 plan for the future tidal flood risk management in the Thames estuary.	-	Chapter 9	Chapter 8	Flood Risk Management The flood risk calculations undertaken for the Development and design of SuDs systems include an allowance of 40% increase in rainfall due to climate change up to and including the 100 year storm event In line with local and regional planning policy.

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Flood Risk Management Where development is permitted in a flood risk zone, appropriate residual risk management measures are to be incorporated into the design to ensure resilience and the safety of occupiers.	-	Chapter 9	Chapter 8	Please refer to the Flood Risk Assessment for further details.
Other Sources of Flooding All sources of flooding need to be considered when designing and constructing developments.	-	Chapter 9	Chapter 8	Other Flooding The drainage strategy for the Development has been prepared in consideration of flooding from all applicable sources.
Pollution Management				
Land Contamination				
Land Contamination Developers should set out how existing land contamination will be addressed prior to the commencement of their development.	-	Chapter 2		Land Contamination Contamination will be remediated if required and a Contamination Assessment will be developed as necessary.
Land Contamination Potentially polluting uses are to incorporate suitable mitigation measures.	-	Chapter 2		Land Contamination The Development is not proposing to include uses that would lead to land contamination.
Air Quality				
Air Quality Developers are to design their schemes so that they are at least ‘air quality neutral’.	-	Chapter 3		Air Quality Systems at the Development will be selected to avoid emissions of Nitrous Oxide (NOx) and other pollutants which can lead to adverse air quality impacts.

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Air Quality Developments should be designed to minimise the generation of air pollution.	-	Chapter 3		All electric plant is proposed, therefore there will be no onsite combustion.
Air Quality Developments should be designed to minimise and mitigate against increased exposure to poor air quality.	-	Chapter 3	Chapter 8	Air Quality All occupied areas will have mechanical ventilation where possible to reduce risk of being exposed to poor air quality.
Air Quality Developers should select plant that meets the standards for emissions from combined heat and power and biomass plants set out in Appendix 7.	-	Chapter 3	Chapter 8	Air Quality Air source heat pump (ASHP) plant is to be implemented on site. As such no combustion plant is expected to be included in the development for the day-to-day energy needs.
Air Quality Developers and contractors should follow the guidance set out in the emerging The Control of Dust and Emissions during Construction and Demolition SPG when constructing their development.	-	Chapter 3	Chapter 8	Air Quality It is intended that contractors will comply with The Control of Dust and Emissions during Construction and Demolition SPG. Contractors will be required to identify potential sources of dust and other air pollution and appropriate dust control measures will be implemented. It is also intended that the main contractor shall register under the Considerate Constructors Scheme and achieve a best practice score.
Noise				
Noise Areas identified as having positive sound features or as being tranquil should be protected from noise.	-	Chapter 3	Chapter 6	Noise The Site does not include areas identified as having positive sound features or as being tranquil.
Noise Noise should be reduced at source, and then designed out of a scheme to reduce the need for mitigation measures.	-	Chapter 3	Chapter 6	Noise The external envelope of the building will be designed to achieve appropriate internal noise levels based upon industry guidance. Internal building elements (party walls and floors) will be designed to achieve an enhanced level of both airborne and impact sound insulation, above the minimum requirements of Building Regulations Part E. Noise from new noise generating equipment installed as part of the scheme will be controlled to achieve noise levels significantly below the existing background noise, in line with Camden policy. This will be achieved by the selection of low noise equipment where possible, in combination with additional noise attenuation measures as necessary.

GLA SUSTAINABLE DESIGN & CONSTRUCTION SPG		POLICY REFERENCES		DEVELOPMENT RESPONSE
Priority	Best Practice	London Plan	Camden planning policies	
Light Pollution				
Light Pollution Developments and lighting schemes should be designed to minimise light pollution.	-	Chapter 3	-	Light Pollution All external lighting provided as part of the Development will be energy efficient. It is anticipated that suitable controls such as daylight detection and time-switches will be provided to minimise inappropriate use. Luminaires will be selected with suitable light output ratio and direction to ensure light is distributed appropriately and not directly into the sky.
Water Pollution				
Surface Water Runoff In their aim to achieve a greenfield runoff rate developers should incorporate sustainable urban drainage systems (SuDS) into their schemes which also provide benefits for water quality.	-	Chapter 9	Chapter 8	Surface Water Runoff The drainage strategy for the site has been considered and allows for sustainable urban drainage systems (SuDS) to be incorporated into the scheme. Green roofs part of the SuDS Strategy. It is proposed to utilise Sustainable Drainage Systems (SuDs) to manage surface water locally and reduce the risk of flooding onsite, upstream and downstream where possible. SuDS and onsite drainage will be designed so that there will be no flooding of any building on the Site or any off-Site flooding in a 1 in 100 year rainfall event plus an allowance for 40% increase in rainfall due to climate change. Please refer to the Flood Risk Assessment and Drainage Strategy for further information.
-	Surface Water Runoff Encourage good environmental practice to help reduce the risk from business activities on the London water environment.	Chapter 9	Chapter 8	Surface Water Runoff It is intended that occupants will be advised of good environmental practice to reduce risk on the London water environment.
-	Surface Water Runoff Encourage those working on demolition and construction –Sites to prevent pollution by incorporating prevention measures and following best practice.	Chapter 9	Chapter 8	Surface Water Runoff It is intended that the main contractor will be required to operate in an environmentally conscious manner to prevent pollution. It is also intended that the main contractor shall register under the Considerate Constructors Scheme and achieve a best practice score. Please refer to the Outline Construction Plan for further information.

GLA SUSTAINABLE DESIGN & CONSTRUCTION SPG		POLICY REFERENCES		DEVELOPMENT RESPONSE
Priority	Best Practice	London Plan	Camden planning policies	
Wastewater Treatment				
Wastewater Treatment Commercial developments discharging trade effluent should connect to the public foul sewer or combined sewer network where it is reasonable to do so subject to a trade effluent consent from the relevant sewerage undertaker.	-	Chapter 9	Chapter 8	Wastewater Treatment All spaces at the Development will be provided with suitable connections to the sewer network.
Wastewater Treatment Developments should be properly connected and post construction checks should be made by developers to ensure that misconnections do not occur.		Chapter 9	Chapter 8	All spaces at the Development will be provided with suitable connections to the sewer network. Post-Construction checks to be carried out on possible misconnections.

5.0 Conclusion

In conclusion, the development has been designed with sustainability principles at its core. A range of measures have been proposed across different areas of design in order to achieve the developments sustainability aspirations. The measures include

- **Energy and carbon emission reduction**-Use of LZCs for energy demand.
- **Water**- The development will use water efficient equipment throughout.
- **Materials**- Materials to be responsibly sourced and to take account of embodied carbon.
- **Waste**- development will achieve targets set out for waste in circular economy statement.
- **Transport**-provision of active travel facilities to promote healthy travel.
- **Biodiversity**- An urban greening factor of 0.37 is to be achieved which is in excess of policy requirement.
- **Pollution**- All electric plant proposed therefore no onsite effect on air quality.

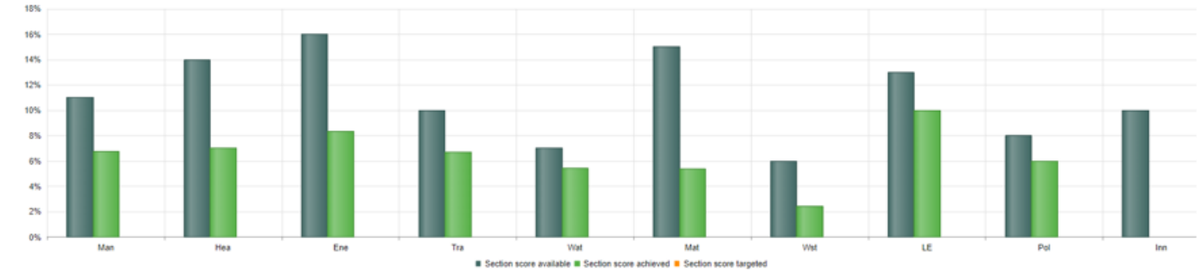
Appendix A- BREEAM Office pre assessment

Baseline

BREEAM Rating

	Credits available	Credits achieved	Credits targeted	% Credits achieved	Weighting	Category score
Man	18.0	11.0	0.0	61.11%	11.00%	6.72%
Hea	18.0	9.0	0.0	50.00%	14.00%	7.00%
Ene	23.0	12.0	0.0	52.17%	16.00%	8.34%
Tra	12.0	8.0	0.0	66.67%	10.00%	6.66%
Wat	9.0	7.0	0.0	77.78%	7.00%	5.44%
Mat	14.0	5.0	0.0	35.71%	15.00%	5.35%
Wst	10.0	4.0	0.0	40.00%	6.00%	2.40%
LE	13.0	10.0	0.0	76.92%	13.00%	10.00%
Pol	12.0	9.0	0.0	75.00%	8.00%	6.00%
Inn	10.0	0.0	0.0	0.00%	10.00%	0.00%
Total	139.0	75.0	0.0	53.96%	-	57.93%
Rating	-	-	-	-	-	★★★☆☆ Very Good

Performance by environmental category

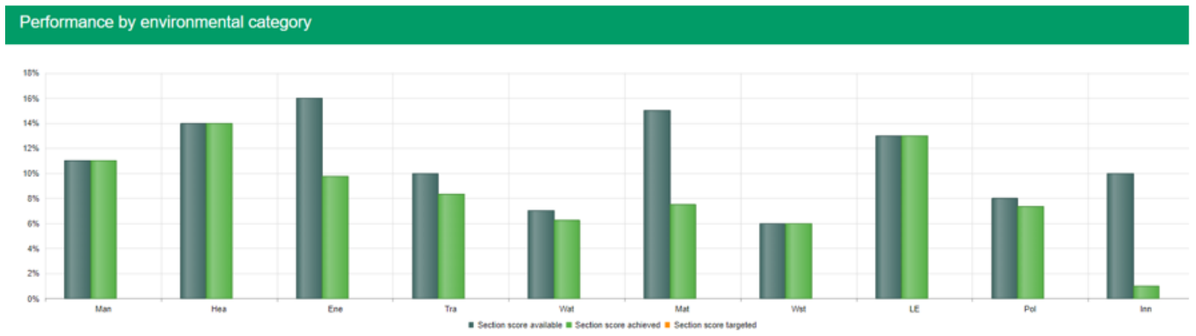


Potential

BREEAM Rating

	Credits available	Credits achieved	Credits targeted	% Credits achieved	Weighting	Category score
Man	18.0	18.0	0.0	100.00%	11.00%	11.00%
Hea	18.0	18.0	0.0	100.00%	14.00%	14.00%
Ene	23.0	14.0	0.0	60.87%	16.00%	9.73%
Tra	12.0	10.0	0.0	83.33%	10.00%	8.33%
Wat	9.0	8.0	0.0	88.89%	7.00%	6.22%
Mat	14.0	7.0	0.0	50.00%	15.00%	7.50%
Wst	11.0	11.0	0.0	100.00%	6.00%	6.00%
LE	13.0	13.0	0.0	100.00%	13.00%	13.00%
Pol	12.0	11.0	0.0	91.67%	8.00%	7.33%
Inn	10.0	1.0	0.0	10.00%	10.00%	1.00%
Total	140.0	111.0	0.0	79.29%	-	84.12%
Rating	-	-	-	-	-	★★★★☆ Excellent

Performance by environmental category



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