Sustainability Assessment Statement

Abbey Road, Phase 3

29 April 2022

Delivering a better world

Quality information

Prepared by	Checked by	Verified by	Approved by
James Wrixon Sustainable Buildings Strategist	Maddy Smith Building Sustainability Consultant	Ben Spence Associate Building Sustainability Consultant	Tom Sheldrake Principal Building Sustainability Consultant

Revision History

Revision	Revision date	Details	Authorized	Name	Position
Rev 01	29/04/2022	FINAL	TS	Tom Sheldrake	Principal Building Sustainability Consultant

Prepared for:

Wates

Prepared by:

James Wrixon
Sustainable Buildings Strategist
E: james.wrixon@aecom.com

Table of Contents

Figures

Tables

1. Introduction

AECOM has been appointed by Wates to produce a Sustainability Assessment Statement for the London Borough of Camden ("the Applicant") planning application for the Abbey Road Phase 3 development within the London Borough of Camden local planning authority. The application seeks consent for the '*Demolition and redevelopment of Emminster and Hinstock blocks including Belsize Priory Health Centre, Abbey Community Centre, public house and commercial units to provide new residential accommodation (Use Class C3) and ground floor commercial space (Use Class E/Sui Generis) to be used as flexible commercial units, across three buildings ranging from 4 to 11 storeys, along with car and bicycle parking, landscaping and all necessary ancillary and enabling works'* ("the Proposed Development").

1.1 Sustainability Assessments

The sustainability of the Abbey Road Phase 3 development is being robustly assessed and verified using the latest version of the Building Research Establishment's (BRE's) assessment schemes applicable to new homes: Home Quality Mark (HQM) ONE.

[1] BRE (2019) BREEAM New Construction 2018 Technical Manual Version 3.0
[2] A brief guide to the Home Quality Mark V0.0 January 2020

1.2 Home Quality Mark ONE

HQM is an independently assessed certification scheme for new homes. It awards certificates with a simple 1 to 5 star rating for the standard of a home's design, construction and sustainability. Every home with an HQM certificate meets standards that are higher than minimum standards such as Building Regulations[1]. The Home Quality Mark aims to make new homes better. Better for people's health and wellbeing, for their wallets and for the environment[2].

HQM is a holistic scheme, driving best practice across a range of sustainability aspects including financial, wellbeing, environmental and social issues. It has a strong emphasis on consumer care and the provision of information, as well as on quality assurance, helping to ensure that homes perform as intended when occupied[3].

HQM is developed and operated by BRE and it is part of the BREEAM family. As such, it benefits from over 27 years of experience in evaluating and certifying

[3] The Home Quality Mark Uncovered Version 1.0

performance in homes and other buildings within the UK and the rest of the world. HQM builds on best practice in the housing sector, drawing together a range of quality and performance standards and combining this with the latest scientific research[4]. In doing so, it provides a rigorous, credible and achievable performance label of new homes that reflects a broad range of expectations from industry, occupiers and society[4].

The BRE states that a home that has a certified HQM rating will stand out because[4]:

- there is a greater level of confidence in the performance and quality of the home;
- the home has been built to improve performance beyond that required by regulation and standard practices; and
- the home and its surroundings have been built to consider issues that are important to the homeowner and the environment and wider society, but which are not covered by regulations, to reduce the risk of unintended consequences occurring as a result of focusing on a single issue.

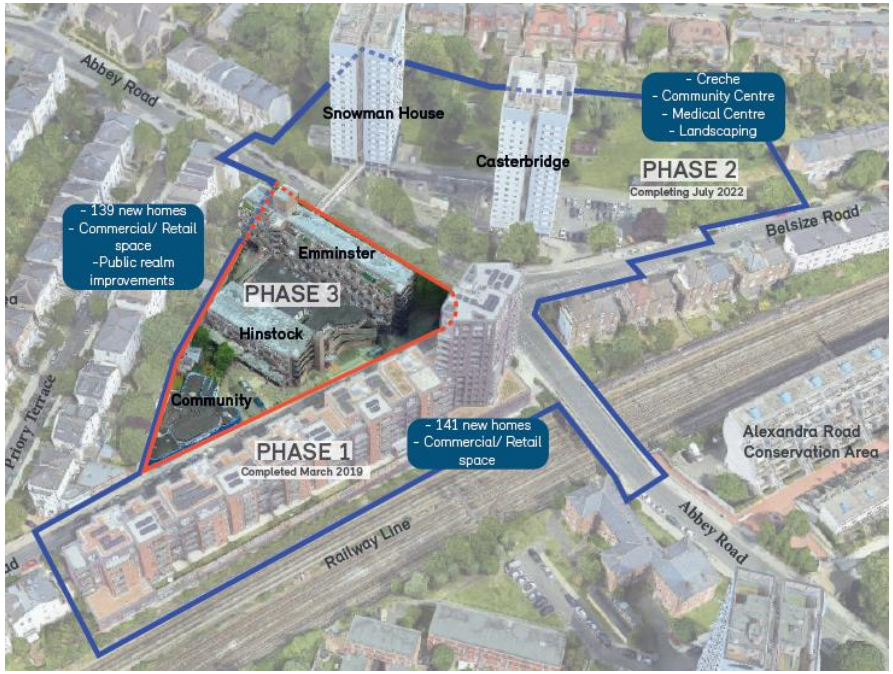


Figure 1 - Site Location

2. Proposed Development

2.1 Site Location

The site is located in the London Borough of Camden. The site falls within the Kilburn Ward, which shares a border with the London Borough of Brent and the London Borough of Westminster.

The site sits on the junction of Abbey Road and Belsize Road (see Figure 1).

2.2 Proposed Development

The redevelopment of the Abbey Road Phase 3 site proposes the demolition of the existing residential buildings, public house, health centre, community centre and retail units on site and the redevelopment of the site. The health and community centre have been re-provided through Phase 2, which is due to be completed in summer 2022.

The Phase 3 proposals comprise three residential buildings ranging in height from four to eleven storeys, with the height stepping up towards the junction of Abbey and Belsize Road. The proposals will provide 139 residential units, with ancillary

[4] Home Quality Mark ONE | Scheme Number: SD239England | Issue: 0.0 | Date: 08/2018

flexible commercial floorspace at ground floor and a private communal garden to the rear which will include children's play space (see Figure 2).

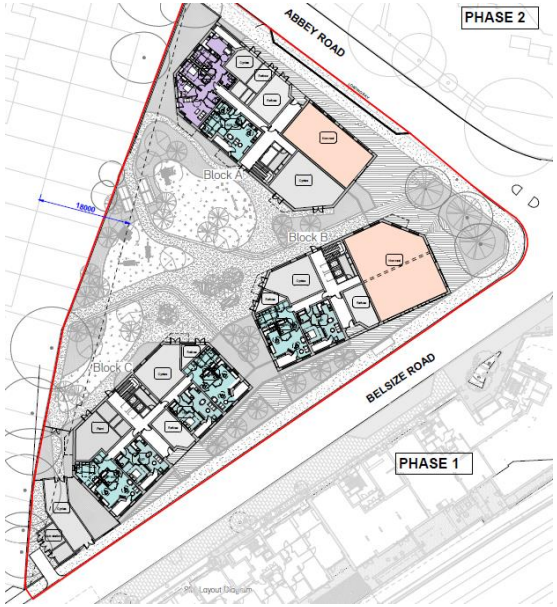


Figure 2 - Proposed Development

3. Home Quality Mark ONE

3.1 Scope

HQM assesses each home individually. For the purpose of HQM, a home is defined as a "self-contained residential unit designed to accommodate a single household. It will therefore contain all the spaces that the household requires for living, sleeping, food preparation and hygiene".

This definition of a home is the same as that used to define a 'dwelling' in The Building Regulations 2010, Approved Document L1A 2013 edition. HQM is not appropriate for new-build projects which contain rooms for multiple residential purposes such as student and key-worker accommodation, care homes, sheltered housing or other types of building which are defined for more than one household to live in. The BREEAM UK Non-Domestic New Construction schemes can be used to assess these types of projects.

HQM is therefore being used to assess all homes and their ancillary spaces (e.g. landscaping / communal areas) within the Abbey Road Phase 3 development. Please note HQM is not applicable to commercial buildings / units, and therefore does not cover the commercial floorspace present within the development.

3.2 Rating System

A HQM Assessment is made up of individual credits (max 500). The total credits achieved (when combined with the minimum performance levels) determine the final HQM rating, from 1 Star to 5 Stars, as set out in Table 1.

Table 1 - HQM Rating System

HQM Rating	No. Credits
1 Star	Minimum Requirements Only
1.5 Star	90
2 Star	100
2.5 Star	120
3 Star	150
3.5 Star	190
4 Star	240
4.5 Star	300
5 Star	400

3.3 Minimum Requirements

To ensure that all HQM certified homes perform consistently on some important issues, the scheme sets out nine minimum performance levels across several key areas. These requirements establish a standard that consumers can expect from all homes which have achieved a HQM certificate.

The minimum requirements have been set in a way that can be achieved on all types of homes, but still require performance which is better than building regulations. A home must meet all minimum requirements to gain a certificate regardless of the overall star rating. The minimum requirements provide a consistent process throughout a home's development from early design through to handover and in-use. They include:

- All homes need to have a compliant building warranty in place; one that's recognised by the Trading Standards Institute or an industry-backed body like the Consumer Code for Home Builders. This helps establish a starting level of assurance, these warranties require:
  - Warranty home inspections during construction;
  - Support if any serious defects emerge during the first 10 or so years of occupation, and
  - Standards around customer service for the first couple years of occupation from the developer.

- Agreeing a plan to outline how quality outcomes are going to be delivered throughout the project.
- Producing a procurement policy to ensure goods and specifications are used that deliver high-quality performance standards, in-practice.
- Clear communication links with trades and site operatives so quality processes are carried out during construction.
- Keeping a transparent record throughout construction that shows the quality assurance measures that have been taken, which occupants will have access to, to help resolve problems if they emerge, with minimal disruption.
- Carrying out good practice commissioning of building systems and services by professionals who are not checking their own work.
- Ensuring each home is finished and habitable by highlighting and resolving any defects via a visual inspection, before occupants move in
- Giving occupants a handover visit to demonstrate how to manage the home in the most comfortable and efficient way, backed up by clear, user-friendly information.

3.4 Credits

Once the minimum standards have been established credits can then be targeted against assessment criteria. The HQM assessment credit criteria address 39 assessment issues which fall under the three sections, as shown in Figure 3.

Each assessment issue has a number of 'credits' available and this number reflects how important the issue is in relation to other issues in the scheme. The assessment issues and associated credits are shown in Figure 4.

Figure 3 - HQM ONE Sections

HQM sections, category, assessment issues and available credits			
Section	Category	Assessment Issue	No. Credits Available
Our Surroundings	1 Transport and Movement	1.1 Public Transport Availability	15
		1.2 Sustainable Transport Options	17
		1.3 Local Amenities	16
	2 Outdoors	2.1 Identifying Ecological Risks and Opportunities	07
		2.2 Managing Impacts on Ecology	09
		2.3 Ecological Change and Enhancement	12
		2.4 Long Term Ecological Management and Maintenance	08
		2.5 Recreational Space	22
	3 Safety and Resilience	3.1 Flood Risk	19
		3.2 Managing Rainfall Impacts	19
		3.3 Security	09
My Home	4 Comfort	4.1 Indoor Pollutants	12
		4.2 Daylight	13
		4.3 Noise Sources	04
		4.4 Sound Insulation	09
		4.5 Temperature	17
		4.6 Ventilation	13
	5 Energy	5.1 Energy and cost	60
		5.2 Decentralised Energy	08
		5.3 Impact on Local Air Quality	15
	6 Materials	6.1 Responsible Sourcing	25
		6.2 Environmental Impact of Materials	25
		6.3 Life Cycle Costing	12
		6.4 Durability	07
	7 Space	7.1 Drying Space	03
		7.2 Access and Space	11
		7.3 Recyclable Waste	10
	8 Water	8.1 Water Efficiency	17
Delivery	9 Quality assurance	9.1 Project Preparation	06
		9.2 Commissioning and Testing	11
		9.3 Inspections and Completion	16
	10 Construction impacts	10.1 Responsible Construction Practices	05
		10.2 Construction Energy Use	05
		10.3 Construction Water Use	05
		10.4 Site Waste Management	15
	11 Customer Experience	11.1 Aftercare	04
		11.2 Home Information	00
		11.3 Smart Homes	08
		11.4 Post Occupancy Evaluation	10

Figure 4 - HQM ONE Assessment Issues

3.5 Stages of Assessment

A HQM assessment is a two-stage process to make sure that opportunities to improve the performance of the home are identified during the design stage (interim assessment and certificate) and put into practice during the construction and commissioning stages and when people move into the home (final assessment and certificate).

Before an application for a certified assessment and rating gained, a pre-assessment is often carried out in the early stages of the design to estimate the likely HQM performance. We (AECOM) have been appointed by Wates to complete a pre-assessment for Abbey Road Phase 3, and this report has been produced by trained and licensed HQM assessors.

4. Pre-Assessment

The HQM ONE scheme has been used to guide and inform the design of the non-domestic buildings / units within the development. To aid in embedding HQM standards into the design from the outset, AECOM HQM Assessors have worked with the project's Design Team, including:

- Wates (Developer & Principal Contractor
- Pollard Thomas Edwards (Architects)
- Norman Bromley (Mechanical, Electrical & Public Health Engineer)
- Stantec (Civil Engineer, Waste Consultant, Ecological Consultant, Transport Consultant)
- AECOM (Building Physics)
- RBA Acoustics (Acoustic Consultant)
- Fabrik (Landscape Architects)

We were appointed early in the design process to help maximise the opportunities and minimise risks of underperformance. Early involvement has meant HQM criteria can be used to guide detailed design and procurement decisions, which ensures that credits only achievable with early involvement remain accessible. This helped to identify practical and achievable routes to compliance early enough to avoid unnecessary barriers that can arise at a later stage by influencing design, construction and project planning to add value at minimal or no extra cost.

To ensure a robust and realistic prediction of performance within the pre-assessment, a number of credits have been withheld or a conservative estimate taken. This is because, being early in design, the level of detail required to complete an assessment is not available at this stage. As the development progresses through detailed design these credits will be reviewed and where possible targeted.

The pre-assessment is also a prediction of the worst-case home within the development, again to ensure that an over estimation is not made at this stage. For example many of the homes will likely be able to achieve the daylight credits, but some will inherently find the criteria more challenging due to proximity of surrounding buildings and as such the worst-case home has been presented within the pre-assessment.

4.1 Target Rating

The currently targeted HQM credits contained in the Pre-Assessment allow the homes to target a score of 279 credits, which equates to a 4 Star Rating. The HQM Scoresheet is shown in Figure 5 below.

Please note as previously mentioned, this represents a worst-case home and in practice it is likely that a number of homes will exceed this target.

Stage of Assessment	HQM Score	HQM Rating
Pre-Assessment	279	4 Star

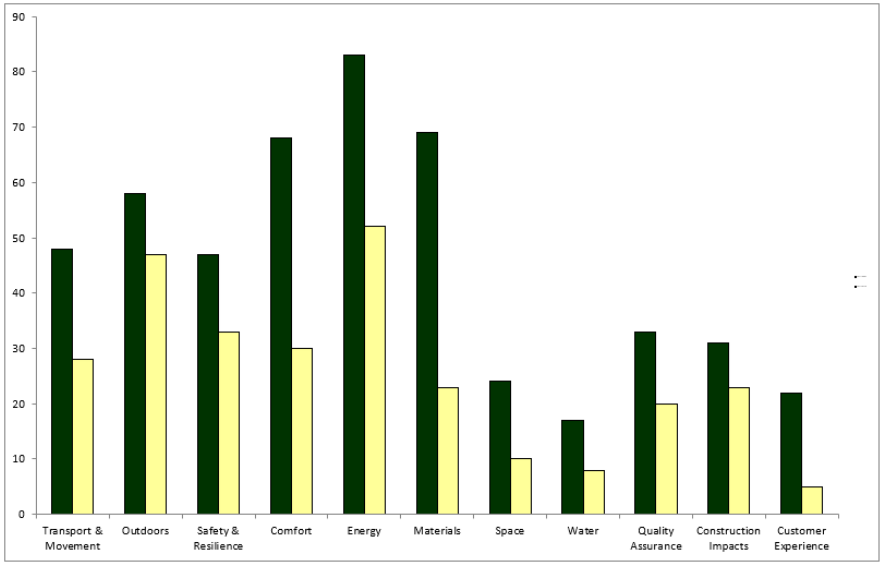


Figure 5 - HQM Scoresheet

5. Sustainability Summary

5.1 Energy & Water Use

An Energy Statement has been produced for the development which details the carbon emission savings of the buildings. The energy modelling that informs the Energy Strategy is then used within the HQM pre-assessment to inform the number of credits that can be targeted. The modelling indicates that the homes perform well under the HQM criteria.

The Energy Strategy is following the GLA Energy Hierarchy and adopting the 'Be Lean' approach to use less energy and manage demand during operation through fabric and servicing improvements and the incorporation of flexibility measures. The development is also maximising opportunities for renewable energy from PV and Heat Pumps. Full details can be found within the Energy Statement that accompanies the planning application.

The water fixtures and fittings specified for each home will collectively deliver no more than 105 litres/person/day per home (as calculated for Building Regulations Approved Document G).

The Principal Contractor will also be encouraged to reduce the energy and water they consume during the construction process. The Contractor will be required to complete the HQM Energy Efficiency and Water Efficiency Checklists prior to commencing on site and operate in accordance with them.

5.2 Whole Life Carbon & Circular Economy

A Whole Life Cycle Carbon (WLCC) Assessment has been produced for the development in accordance with the GLA requirements, and full details of the measures taken to reduce carbon can be found in the WLCC Statement that accompanies the planning application.

Wates have adopted a HQM Product Procurement Policy for the Abbey Road Phase 3 development, which:

- Encourages the procurement of construction materials and products from organisations certified under an appropriate Responsible Sourcing Certification Scheme (RSCS), e.g. BES 6001, ISO 14001 etc.
- Encourages the procurement of construction materials and products with a certified Environmental Product Declaration (EPD)
- Encourages the procurement of construction materials and products which inherently produce less construction waste (e.g. from organisations who operate take-back schemes / use recyclable packing etc.).

A Circular Economy Statement (CES) has been produced for the development and outlines the measures that have been taken to:

- Reduce virgin material usage.
- Reduce the amount if construction waste generated and sent to landfill.
- Increase the amount of recoverable materials from the eventual deconstruction of the buildings at the end of their life.

Full details can be found within the CES that accompanies the planning application.

An Operational Waste Strategy has been produced for the development which outlines the measures taken to facilitate and encourage homeowners / residents to separate and recycle all non-residual waste streams that are likely to be generated, including food waste. Full details can be found within the Operational Waste Statement that accompanies the planning application.

5.3 Biodiversity & Local Environment

A Preliminary Ecological Assessment has been produced for the development, which summarises the survey work undertaken as well as the proposed construction mitigation and ecological enhancement measures. Full details can be found within the PEA that accompanies the planning application.

The Biodiversity Net Gain (BNG) has been calculated for the proposed development and shows a 100.6% net gain. Please see the Biodiversity Net Gain Assessment that accompanies the planning application for full details.

The Urban Greening Factor (UGF) has been calculated for the proposed development and shows a factor score of 0.42. Please see the Urban Greening Factor calculations that accompany the planning application for full details.

Figure 6 – Urban Greening Factor, Fabrik

An Air Quality Assessment (AQA) has been produced for the proposed development and summarises the measures taken to improve the air quality for the residents. To support this the development is fully electric and does not include any combustion heating / cooling which would increase local NOx emissions. Please see the AQA that accompanies the planning application for full details.

5.4 Transport & Movement

The homes are provided with cycle storage in line with the New London Plan requirements.

The development site is located in an area with a Public Transport Accessibility Level (PTAL) of 6a, which shows that there is a high level of public transport available to the residents and will encourage them not to use combustion vehicles.

The development is ‘car-free’ with the exception of 6 blue badge parking spaces. 20% of the blue badge parking spaces will be provided with active Electric Vehicle Charging Point (EVCP).

A Transport Assessment (TA) has been produced for the development and summarises all the sustainable design measures and initiatives that have been incorporated into the development. Please see the TA that accompanies the planning application for full details.

5.5 Climate Change Resilience

A Flood Risk Assessment (FRA) has been produced for the development which shows that the site is at low risk of flooding from all sources. Please see the FRA that accompanies the planning application for full details.

The FRA also includes a Drainage Statement which addresses how Sustainable Drainage Systems (SuDS) have been incorporated into the development, and that the system accounts for the anticipated increase in rainfall predicted to arise from climate change. Please see the FRA that accompanies the planning application for full details.

5.6 Health & Wellbeing

A Thermal Comfort Assessment has been undertaken on the proposed homes in accordance with the CIBSE TM59 methodology and GLA requirements. Please see the Overheating Assessment that accompanies the planning application for full details.

Each home will be provided with external private space in the form of a balcony at least 1.5m deep.

Each home is targeting internal noise levels and sound insulation (between homes) that exceeds Building Regulations Part E requirements.

The ventilation systems are being designed to achieve ventilation rates that exceed Building Regulations Part F 2021 requirements.

The development is aiming to specify low VOC and formaldehyde finishes for all homes where viable. This will be reviewed in detail at the appropriate detailed design stage.

A Daylight and Sunlight Assessment has been undertaken by Devla Patman Redler LLP in accordance with BRE guidelines. The overall daylight adherence within the development is 74% for Average Daylight Factor and 71% for No-Sky Line (NSL). The overall daylight adherence considering the impact on neighbouring properties is 91% for Vertical Sky Component and 88% for NSL.

5.7 Quality Assurance

The homes will undergo pre-completion testing to demonstrate compliance with the design intent. The testing being considered at this stage include:

- Full commissioning of building services.
- Internal acoustic testing.
- Internal air quality testing.

Each home will be covered by a warranty from a provider that complies with The Consumer Code for Home Builders. In addition, detailed construction records will be kept, and each home will undergo a visual defects inspection prior to completion.

6. Planning Policy Summary

This section provides an overview of key National, Regional and Local Planning policies relevant to sustainability in the context of the proposed development.

6.1 Policy Overview

6.1.1 National Policy

National Planning Policy Framework

At a national level, Central Government adopted the National Planning Policy Framework (NPPF) in February 2019, which had a minor amendment in June 2019. It provides guidance for local planning authorities drawing up local plans and is a material consideration for those determining planning applications.

The NPPF sets out the role that planning plays in sustainability. Paragraph 7 states that:

> "*the purpose of the planning system is to contribute to the achievement of sustainable development".*

Paragraph 10 states that:

> "*at the heart of the Framework is a presumption in favour of sustainable development*".

Paragraph 134 states that:

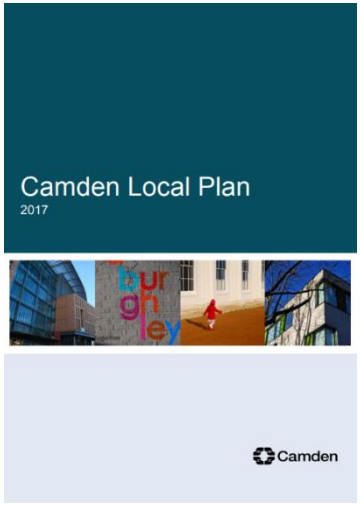
> "*in determining applications, significant weight should be given to outstanding or innovative designs which promote high levels of sustainability, or help raise the standard of the design more generally in an area, so long as they fit in with the overall form and layout of their surroundings*".

6.1.2 Regional Policy

The London Plan

The Greater London Authority's (GLA's) London Plan (2021) was adopted in March 2021 and is the spatial development strategy for Greater London. It sets out a framework for how London will develop over the next 20-25 years and the Mayor's vision for 'Good Growth'. The Plan is part of the statutory development plan for London, meaning that the policies in the Plan should inform decisions on planning applications across the capital.

The London Plan and each of its policies are underpinned by the vision for 'Good Growth' – "growth that is socially and economically inclusive and environmentally sustainable". Local Policy



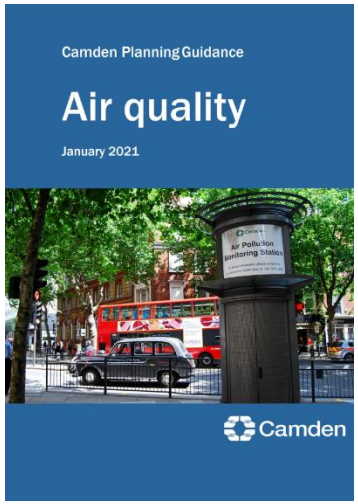
6.1.3 Local Policy

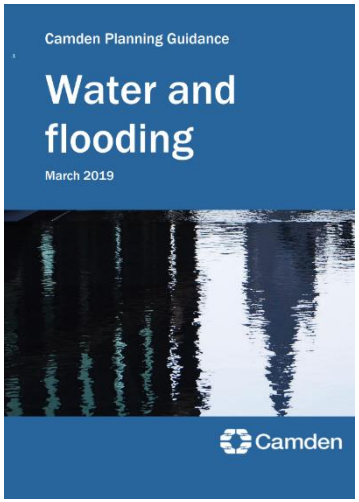
Camden Local Plan (2017)

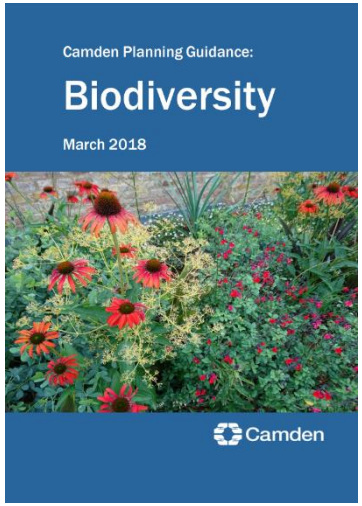
The Camden Local Plan was adopted on 3 July 2017 and is the key strategic document in Camden's development plan. The Local Plan will help deliver the objectives of creating the conditions for harnessing the benefits of economic growth, reducing inequality and securing sustainable neighbourhoods. It sets out the vision for shaping the future of the borough and contains policies for guiding planning decisions.

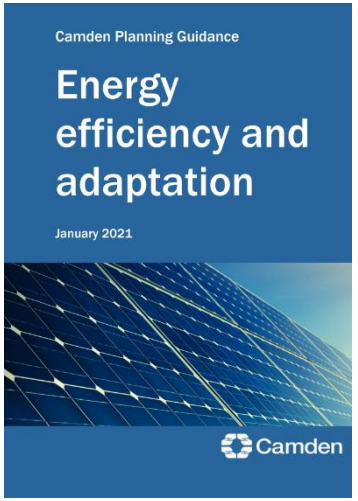
Camden Planning Guidance

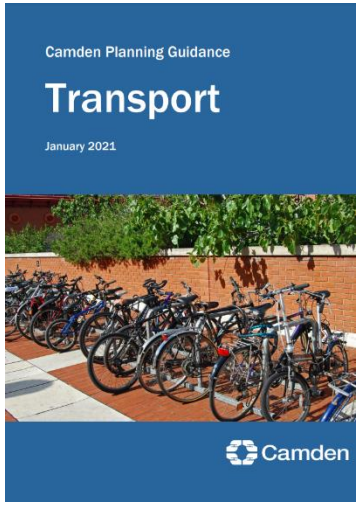
The Camden Planning Guidance (CPG) provides advice and information on how to apply the planning policies. The CPG documents can be 'material considerations' in planning decisions. The following CPG documents support the sustainable planning policies in the local plan and are considered in further detail in the applicable planning submission documents:











6.2 Design Response

Table 2 - Sustainable Planning Policies and Design Response

Planning Policy	Sustainability Requirements	Design Response
Urban Greening and Biodiversity		
The London Plan (2021) Policy G5 Urban Greening	Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping, green roofs, green walls and nature-based sustainable drainage.	The development includes new landscaping and green roofs. The development is targeting an Urban Greening Factor of 0.42. Please refer to the Landscape Statement produced by Fabrik for further details.
Camden Local Plan (2017) Policy CC2 Adapting to Climate Change	All development should adopt appropriate climate change adaptation measures such as the protection of existing green spaces and promoting new appropriate green infrastructure and incorporating bio-diverse roofs, combination green and blue roofs and green walls where appropriate.	
The London Plan (2021) Policy G6 Biodiversity and Access to Nature	Development proposals should manage impacts on biodiversity and aim to secure net biodiversity gain. Proposals which reduce deficiencies in access to nature should be considered positively.	The development is targeting a Biodiversity Net Gain (BNG) of 100.6%. Please refer to the BNG Assessment produced by Stantec for further details. The development is incorporating a number of ecological enhancements including bird and bat boxes, mature trees, bee bricks and species rich habitat. Please refer to the Ecological Assessment produced by Stantec for further details. Construction (including demolition) biodiversity protection and mitigation measures have been determined in accordance with the mitigation hierarchy. Please refer to the Ecological Assessment produced by Stantec for further details.
Camden Local Plan (2017) Policy A3 Biodiversity	The Council will assess developments against their ability to release benefits for biodiversity through the layout, design and materials used in the build structure and landscaping elements of a proposed development, proportionate to the scale of the development. The demolition and construction phase of the development must be planned to avoid disturbance to habitats and species and ecologically sensitive areas, and the spread of invasive species. Developments should incorporate additional trees and vegetation wherever possible.	

Planning Policy	Sustainability Requirements	Design Response
Sustainable Transport		
The London Plan (2021) Policy GG2 Making the Best Use of Land	To create successful and sustainable mixed-use places that make the best use of land, those involved in planning and development must prioritise sites which are well-connected by existing or planned public transport and plan for good local walking, cycling and public transport.	The development site has a Public Transport Accessibility Level (PTAL) of 6a. Please refer to the Transport Assessment produced by Stantec for further details.
The London Plan (2021) Policy T5 Cycling	Development proposals should help remove barriers to cycling and create a healthy environment in which people chose to cycle. This should be achieved through the provision of appropriate levels of cycle parking.	The development includes accessible footpaths and has provided cycle storage in line with the New London Plan requirements. Please refer to the Transport Assessment produced by Stantec for further details.
Camden Local Plan (2017) Policy T1 Prioritising Walking, Cycling and Public Transport	Developments should be easy and safe to walk through and provide high quality footpaths that are wide enough for the number of people expected to use them. Developments should provide accessible, secure cycle parking facilities exceeding minimum standards outlined within the London Plan.	
The London Plan (2021) Policy T6 Car Parking	Car-free development should be the starting point for all development proposals in places that are well-connected by public transport. Car-free development has no general parking but should still provide the required disabled persons parking.	The development is 'car-free' with the exception of 6 blue badge parking spaces (5 residential and 1 commercial). Provision for 9 additional spaces was investigated and are only to be provided if demand dictates. Please refer to the Transport Assessment produced by Stantec for further details.
Camden Local Plan (2017) Policy T2 Parking and Car-free Development	All new developments are required to be car-free.	

Planning Policy	Sustainability Requirements	Design Response
Pollution		
The London Plan (2021) Policy GG3 Creating a Healthy City	Developments should seek to improve London's air quality and reduce public exposure to poor air quality.	All heating and cooling will be provided by non-combustion sources. Please refer to the Air Quality Assessment produced by Hilson Moran for further details.
The London Plan (2021) Policy SI1 Improving Air Quality	Development proposals must be at least air quality neutral and where it can be demonstrated that emissions cannot be further reduced by on-site measures, offsite measures to improve local air quality may be acceptable.	
Camden Local Plan (2017) Policy CC4 Air quality	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. 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 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.	All heating and cooling will be provided by non-combustion sources. An Air Quality Assessment has been produced by Hilson Moran which addresses construction and demolition impacts. Please refer to the Air Quality Assessment for further details.
Camden Local Plan (2017) Policy A4 Noise and Vibration	Developments should have regard to Camden's Noise and Vibration Thresholds. The council will not grant permission for: 1. development likely to generate unacceptable noise and vibration impacts; or 2. development sensitive to noise in locations which experience high levels of noise, unless appropriate attenuation measures can be provided and will not harm the continued operation of existing uses.	Please refer to the Noise Impact Assessment has been produced by RBA Acoustics and addresses the noise impacts and mitigation measures needed for the construction and operational phases of the development. Please refer to the Noise Assessment for further details.

Planning Policy	Sustainability Requirements	Design Response
Camden Local Plan (2017) Policy A1 Managing the Impact of Development	The council will grant permission for development unless it causes unacceptable harm to amenity. The council will consider artificial lighting levels, noise and vibration levels and odours, fumes and dust.	Please refer to the Air Quality Assessment and Noise Assessment for details on how this has been addressed.
Materials and Waste		
The London Plan (2021) Policy GG6 Increasing Efficiency and Resilience	To help London become a more efficient and resilient city, those involved in planning and development must seek to support the move towards a low carbon circular economy.	A Whole Life Carbon Assessment (WLCA) and Circular Economy Statement (CES) have been produced by AECOM and detail the measures taken to reduce carbon and implement the principles of the circular economy. Please refer to the WLCA and CES for further details. A Pre-Demolition Audit has been undertaken by KaNect to review the potential and viability of reusing demolition waste within the new construction. The Audit is contained with the CES. A review of the potential for refurbishment has been undertaken and is summarised in the Design and Access (D&A) Statement. Please refer to the D&A Statement for further details.
Camden Local Plan (2017) Policy CC1 Climate change mitigation	All proposals that involve substantial demolition are required to demonstrate that it is not possible to retain and improve the existing building. All developments are expected to optimise resource efficiency.	
The London Plan (2021) Policy SI7 Reducing Waste and Supporting the Circular Economy	Developments should have 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. Referable applications should promote circular economy outcomes and aim for net zero-waste.	An Operational Waste Strategy has been produced for the development by Stantec, which outlines the measures taken to facilitate and encourage homeowners / residents to separate and recycle all non-residual waste streams that are likely to be generated, including food waste.
Camden Local Plan (2017) Policy CC5 Waste	Developments should include facilities for the storage and collection of waste and recycling. Facilities for home composting is encouraged in appropriate development schemes.	

Planning Policy	Sustainability Requirements	Design Response
Energy		
The London Plan (2021) Policy GG6 Increasing Efficiency and Resilience	To help London become a more efficient and resilient city, those involved in planning and development must seek to improve energy efficiency, support the move towards a low carbon circular economy, and ensure that buildings are designed to adapt to a changing climate.	An Energy Statement has been produced by AECOM which follows the energy hierarchy and incorporates energy efficiency measures as well as renewable technologies. Please refer to the Energy Statement for further details. A Whole Life Carbon Assessment (WLCA) and Circular Economy Statement (CES) have been produced by AECOM and detail the measures taken to reduce carbon and implement the principles of the circular economy. Please refer to the WLCA and CES for further details.
The London Plan (2021) Policy SI2 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. A minimum on-site reduction of at least 35 per cent beyond Building Regulations is required for major development.	
Camden Local Plan (2017) Policy CC1 Climate Change Mitigation	All developments are required to reduce carbon dioxide emissions through following the steps in the energy hierarchy and demonstrate how London Plan targets for carbon dioxide emissions have been met. All major developments are required 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.	An Energy Statement has been produced by AECOM which follows the energy hierarchy and incorporates energy efficiency measures as well as renewable technologies and has also assessed the feasibility of connecting to any available heat networks. Please refer to the Energy Statement for further details.

Planning Policy	Sustainability Requirements	Design Response
The London Plan (2021) Policy SI4 Management heat risk	Major development proposals should demonstrate through an energy strategy how they will reduce the potential for overheating and reliance on air conditioning systems in accordance with the cooling hierarchy.	A Thermal Comfort Assessment has been produced by AECOM which demonstrates how the development will maintain adequate comfort conditions. Please refer to the Thermal Comfort Assessment for further details.
The London Plan (2021) Policy GG3 Creating a Healthy City	Developments should seek to ensure new buildings are well-insulated and sufficiently ventilated to avoid health problems associated with damp, heat and cold.	
Camden Local Plan (2017) Policy CC2 Adapting to Climate Change	All development should adopt appropriate climate change adaptation measures such as measures to reduce the impact of urban and dwelling overheating, including application of the cooling hierarchy.	
Water Management		
The London Plan (2021) Policy SI5 Water Infrastructure	In order to minimise the use of mains water, water supplies and resources should be protected and conserved in a sustainable manner. Development proposals should achieve mains water consumption of no more than 105 litres per head per day (excluding allowance of up to five litres for external water consumption). Development proposals should incorporate measures such as smart metering, water saving and recycling measures, including retrofitting, to help achieve lower water consumption rates and to maximise futureproofing.	The water fixtures and fittings specified for each home will collectively deliver no more than 105 litres/person/day per home (as calculated for Building Regulations Approved Document G).

Planning Policy	Sustainability Requirements	Design Response
The London Plan (2021) Policy SI13 Sustainable Drainage	Development proposals should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible. Drainage should be designed and implemented in ways that promote multiple benefits including increased water use efficiency, improved water quality, and enhanced biodiversity, urban greening, amenity and recreation.	A Flood Risk Assessment and Surface Water Drainage Strategy has been produced by Stantec and shows the site is at low risk of flooding from all sources and has implemented a drainage design in accordance with the SuDS hierarchy that reduces run-off and takes account of the predicted impacts from climate change.
Camden Local Plan (2017) Policy CC2 Adapting to Climate Change	All development should adopt appropriate climate change adaptation measures such as not increasing, and wherever possible reducing, surface water runoff through increasing permeable surfaces and use of Sustainable Drainage Systems.	
Camden Local Plan (2017) 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. Developments are required 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.	

7. Conclusions

7.1 HQM

The currently targeted HQM credits contained in the Pre-Assessment allow the homes to target a score of 279 credits, which equates to a 4 Star Rating. The HQM Scoresheet is shown in Figure 6.

Stage of Assessment	HQM Score	HQM Rating
Pre-Assessment	279	4 Star

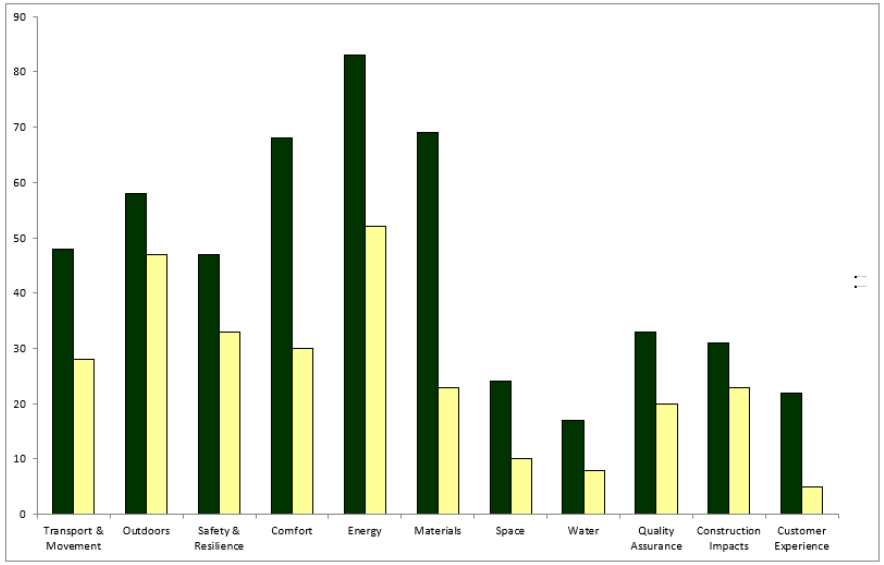


Figure 7 - HQM Scoresheet

In targeting a 4 Star rating the development is reviewing a wide range of sustainable initiatives, measures and practices as summarised in Section 6, and which:

- Contribute to reducing energy and water demand.
- Contribute to reducing whole life carbon and implement the principles of the circular economy.
- Mitigate impacts on biodiversity and the local environment, as well as enhance the biodiversity and landscape value of the site.
- Reduce reliance on combustion vehicles and encourage the use of more sustainable modes of transportation.
- Implement measures to increase resilience to the predicted effects of climate change.
- Contribute to the improvement of the health and wellbeing of building users.
- Provide quality assurance to building users.

7.2 Planning Policy

The key National, Regional and Local Planning policies relevant to sustainability in the context of the proposed development have been reviewed, and the proposed development has addressed each of them within the documents submitted with the planning application.

7.3 Next Steps

The next step is to commence with the HQM Design Stage Assessments of each home. Best practice is to undertake Design Stage Assessments based on the completed RIBA Stage 4 design information. Subsequently, due to the timescales involved within certifying the assessments with the BRE, Design Stage certificates are typically achieved early in RIBA Stage 5 construction phase (c.3 months after commencement of main works, i.e. excluding any enabling works that overrun with the Stage 4 design process).

Once Design Stage certification has been achieved, the Final (Construction) Stage Assessments would commence and run throughout RIBA Stage 5 (construction phase). These assessments require post construction testing to be undertaken and so, when factoring in the timescales involved with certifying the assessment with the BRE, typically final certificates are achieved c.3 months after handover / occupation of the development.

aecom.com