
Planning Report

Sustainability Statement

North Crescent

eight
associates

+44 (0)207 0430 418

www.eightassociates.co.uk
info@eightassociates.co.uk

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Document prepared by

Liam Taylor & Margarita Shivarova

Quality assured by

Gregory Day

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Executive Summary

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Overview

The proposed project consists of two office space developments: Minerva House and Telephone Exchange– with a total GIA of 8,115m². Each building spans across five floors.

Minerva House is an existing Grade II listed building and includes refurbishment and an additional floor extension to the north side of the building. Telephone Exchange also includes existing areas to be refurbished as well as additional new construction elements, including a one storey extension, plant, minor demolition works associated with internal and external alterations to provide additional office accommodation and associated works.

The development is located in the London Borough of Camden and the associated Sustainability Statement is provided to demonstrate the development's holistic approach to sustainable design and construction. As per local policy requirements the project is to be assessed under BREEAM New Construction 2018 with a target rating of "Excellent". This report summarises the contribution that the design will make to create a more sustainable development, drawing on information provided by specialist consultants and design reports, and identifying key features intrinsic to achieving low carbon developments.

Key sustainability features within the development will include:

- The development will reduce total carbon emissions by 56.84% and 64.29% over Building Regulations using SAP 10.0 carbon dioxide emission factors, for Telephone Exchange and Minerva House respectively.
- Efficient sanitaryware to achieve 50% reduced water consumption in line with BREEAM requirements.
- The inclusion of sustainable transport options such as 140 long stay cycle storage spaces.
- A sustainable materials procurement policy and an efficient waste strategy on site.
- The implementation of health and wellbeing measures through design and operational procedures, including daylight, optimum indoor air quality and thermal comfort; and,
- Protection of ecology on site during construction and biodiversity enhancement measures, such as a green wall in Telephone Exchange lightwell.

Key Sustainability Measures

In summary, the key measures incorporated to meet planning requirements and to achieve a low carbon development address the following key areas of sustainable design and construction:

- Energy and CO₂
- Adaptation to climate change
- Flood risk mitigation and SuDS
- Waste
- Water efficiency
- Transport and connectivity
- Materials
- Health and wellbeing
- Land use and ecology

Introduction

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Sustainability Introduction

The design team has significant experience in delivering schemes that are considered highly sustainable, either through application of formal green building rating systems, such as BREEAM and Home Quality Mark, as well as applying benchmarks from standards such as Passivhaus Design and adopting precedents from industry exemplary sustainable developments.

The scheme will reflect the holistic nature of sustainable development in the London Borough of Camden. The development will provide much needed high-quality housing and will use local labour to boost employment. Health and wellbeing will be incorporated in the design by maximising daylighting, utilising healthy materials and contributing to the alleviation of fuel poverty in the region. The ecological value of the site will be maintained and protected. The development will enhance the ecological value of the site through incorporating measures such as an area of green wall in the lightwell of Telephone Exchange.

Description of Development

The proposed project consists of two office space developments: Minerva House and Telephone Exchange— with a total GIA of 8,115m². Each building spans across five floors.

Minerva House is an existing Grade II listed building and is to be refurbished. Telephone Exchange also includes existing areas to be refurbished as well as additional new construction elements, including a one storey extension, plus plant, minor demolition works associated with internal and external alterations to provide additional office accommodation and associated works.

The development is in the London Borough of Camden and the associated Sustainability Statement will be provided as evidence to the same borough's council, to demonstrate the development's holistic approach to sustainable design and construction. The statement includes reference to a number of credits targeted within the BREEAM New Construction 2018 compliance strategy for the project.

The aspiration for the scheme is to significantly improve the existing site and its immediate environment by providing an efficient and inclusive development, which meets the policy recommendations of the London Borough of Camden.



Figure 1: Existing aerial view of North Crescent.

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Figure 2: Proposed ground floor of Minerva House.



Figure 3: Proposed ground floor of Telephone Exchange.

Policy Context

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National Context: The 2008 Climate Change Act

The UK Government is committed to reducing the UK's carbon emissions by 100% over 1990 levels through the Climate Change Act 2008. Achieving truly sustainable design and construction and forwarding the green agenda within the construction industry across the UK is inherent to meeting these emission targets. This development aims to do both of these.

To help monitor carbon reductions and to plot progress being made for future plans and investments in the UK's low-carbon economy, intermediary targets have been established to ensure that the UK remains on course for meeting the 100% reduction by 2050.

Concurrent with reducing CO₂ emissions by 100% by 2050 is the European Climate Change Policy targets. It sets the objective of ensuring 20% of energy consumption is generated from renewable sources by 2020 whilst also reducing Europe's carbon footprint by 20%. Ensuring a fabric first approach with consideration to renewable energy production fits both the climate change act and the European Commission's 2020 targets for reducing greenhouse gas (GHG) emissions.

National Context: National Planning Policy Framework 2019

The National Planning Policy Framework (NPPF) published in 2019 sets out the UK Government's planning policies for England. Planning law requires that applications for planning permission must be determined in accordance with the local development plan unless material considerations indicate otherwise. The National Planning Policy Framework must be taken into account in preparing the development plan and is a material consideration in planning decisions. Planning policies and decisions must also reflect relevant international obligations and statutory requirements.

The NPPF is supported by a series of Planning Practice Guidance (PPG) documents. The guidance in relation to air quality provides guiding principles on how planning can take account of the impact of new development on air quality. The following policies are relevant to the Sustainability Statement:

- Achieving sustainable development
- Promoting healthy and safe communities
- Promoting sustainable transport

- Achieving well-designed places
- Meeting the challenge of climate change, flooding and coastal change
- Conserving and enhancing the natural environment

Regional Context: The London Plan 2021

The London Plan (March 2021) is the overall strategic plan (Spatial development Strategy) for London and replaces the previous (2016) iteration. This document, therefore, plays a key role in the planning process in all the 32 London Boroughs and the City of London.

The London Plan aims to shape the planning process and sets out an integrated economic, environmental, transport and social framework for the 32 London Boroughs, the City of London and the Mayoral Development Corporations (MDCs) over the next 20–25 years (2019–2041), including the following key aspects of the Mayor of London's other strategies:

- Transport;
- Economic Development;
- Housing;
- Culture;
- Social issues (such as children and young people, health inequalities and food); and
- A range of environmental issues (such as climate change, air quality, noise and waste).

Within the London Plan there are a number of key targets for 'major developments', not applicable to this scheme:

- Policy SI 2: Development should be net zero-carbon and should include a detailed energy strategy to demonstrate how the zero-carbon target will be met within the framework of the energy hierarchy; and,
- A minimum on-site reduction of at least 35% over Target Emission Rate identified in Building Regulations 2013 is required.

(Continued Overleaf)

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Regional Context: The London Plan 2021 (continued)

The London Plan (2021) also sets out the following targets for major developments. This has been followed as guidance for 'best practice':

- Efficient use of natural resources (including water);
- Minimising pollution (including noise, air and urban runoff);
- Minimising the generation of waste and maximising reuse or recycling;
- Avoiding impacts from natural hazards (including flooding);
- Ensuring developments are comfortable and secure for users;
- Securing sustainable procurement of materials, using local supplies where feasible; and
- Promoting and protecting biodiversity and green infrastructure.

Of particular relevance to this report are the following policies required by the Plan:

- Policy D6 – Housing Quality and Standards
- Policy G4 – Open Space
- Policy G5 – Urban Greening
- Policy G6 – Biodiversity and Access to Nature
- Policy S11 – Improving Air Quality
- Policy S12 – Minimising Greenhouse Gas Emissions
- Policy S13 – Energy Infrastructure
- Policy S14 – Managing Heat Risk
- Policy S15 – Water Infrastructure
- Policy S112 – Flood Risk Management
- Policy S113 – Sustainable Drainage
- Policy T1 – Strategic Approach to Transport
- Policy T3 – Transport Capacity, Connectivity and Safeguarding
- Policy T5 – Cycling
- Policy T6 – Car Parking

Local Context: Camden Local Plan 2017

The Camden Local Plan, published in July 2017, sets out the Council's planning policies. It responds to the Borough's unique characteristics and provides a comprehensive local policy framework to deliver Camden's future sustainable development. The Plan is supported by the supplementary planning documents 'Camden Planning Guidance' adopted in January 2021.

The Camden Local Plan states a key strategic objective as 'investing in our communities to ensure sustainable neighbourhoods'. This is complimented by further objectives embedded in the Local Plan that define the sustainability vision of the council.

Chapter 8 'Sustainability and climate change' within the Camden Local Plan lists key sustainability objectives for the Borough. The following strategic objectives are relevant to the proposed development and compliance with these will be demonstrated in this Sustainability Statement:

8.3 – Policy CC1 Climate Change mitigation – Developments should reduce carbon dioxide emissions in line with the steps in the energy hierarchy. Developments should support this by ensuring the availability of sustainable transport options, optimising resource efficiency and encouraging sensitive energy use.

8.18 – All developments should optimise resource efficiency through waste and energy reduction, minimising materials required, opting for materials with low embodied carbon content and enabling low energy and water demands.

8.33 – Policy CC2 Adapting to Climate Change – All developments should adopt appropriate climate change adaptation measures such as green infrastructure and SuDS where feasible.

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8.53 – Policy CC3 Water and flooding– Developments should incorporate water efficiency measures, consider the impact of development in areas prone to flooding and avoid harm to the water environment. Refurbishments will be expected to meet BREEAM water efficiency credits.

8.75 – Policy CC4 Air Quality – Developments should mitigate the impact of construction and the completed development on air quality in the borough. Construction should adopt sustainable design and construction methods including measures that minimise negative impacts on air quality.

8.90 – Policy CC5 Waste – Developments should include facilities for the storage and collection of waste and recycling.

Further relevant sustainability objectives stated in the Camden Local Plan include the following:

4.84 – Policy C5 Safety and Security– Developments should incorporate design principles that contribute to community safety and security.

6.59 – Policy A3 Biodiversity – Developments should not directly or indirectly result in the loss or harm to a designated nature conservation site or adversely affect the status or population of priority habitats and species. The demolition and construction phase of a development, including the movement of works vehicles, should be planned to avoid disturbance to habitats and species and ecologically sensitive areas, and the spread of invasive species.

6.85 –Policy A4 Noise and Vibration – Developments should not generate unacceptable noise and vibration impacts.

10.16 – Policy T2 Parking and car-free development – Non-residential developments should limit on-site parking to spaces essential for the operation of the development (e.g. designated for disabled people where necessary, and/or essential operational or servicing needs).

10.27 – Policy T4 Sustainable movement of goods and materials – Developments should consider utilising more sustainable means of freight transport and seek to minimise the movement of goods and materials by road. Alternative modes of transportation can include via canal, rail and bicycle where possible.

A number of Camden Planning Guidance (CPG) documents were adopted in January 2021 to support the policies in the Camden Local Plan and form supplementary planning documents (SPDs) for planning decisions. The full list of adopted documents relevant to sustainability include:

- Access for All CPG – March 2019 – All developments should be inclusively designed and useable by all to promote equality of opportunity.
- Air Quality – January 2021 – All developments should protect future occupants from exposure to poor air quality and should limit their impact on local air quality and be at least air quality neutral.
- Biodiversity CPG – March 2018 – Development proposals must demonstrate how biodiversity considerations have been incorporated into the development, how the five-point Mitigation Hierarchy has been addressed and what positive measures for enhancing biodiversity are planned.
- Energy efficiency and adaptation – January 2021– Developments should achieve at least 20% reduction in CO2 from onsite renewables (after all other energy efficiency measures have been incorporated)
- Transport – January 2021 – Developments should demonstrate what measures will be required and implemented in order to mitigate the transport impact of the development.
- Trees CPG – March 2019 – All developments should assist in achieving the aim to preserve existing tree and canopy coverage where possible as well as increase and improve tree coverage in the design of new developments.
- Water and flooding CPG – March 2019 – Refurbishments and other non-domestic development will be expected to meet BREEAM water efficiency credits.

Energy and CO₂ Sustainability Statement

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Energy Strategy

The energy strategy for the scheme is detailed in the Energy Assessment report issued by Thornton Reynolds in June 2021. As shown in Table 1, the new build element of Telephone Exchange will reduce carbon emissions by 22.12% and the refurbished development Minerva House will reduce emissions by a further 27.40% from the fabric energy efficiency measures described in the 'Be Lean' section using SAP 10.0 carbon dioxide emission factors, respectively. Total carbon emissions will be reduced by 56.84% and 64.29% over Building Regulations using draft SAP 10.0 carbon dioxide emission factors, respectively, with the further inclusion of a proposed communal air source heat pump and photovoltaic panels. Therefore, the scheme meets and exceeds the target of overall 35% carbon reduction over Part L building Regulations as set out in the London Plan Policy S12. The scheme also meets and exceeds Policy CC3 requirements from the Camden Local Plan as it is more onerous than the Camden Local Plan.

The Energy Hierarchy

The proposed scheme has followed the energy hierarchy, illustrated in Figure 3 below.

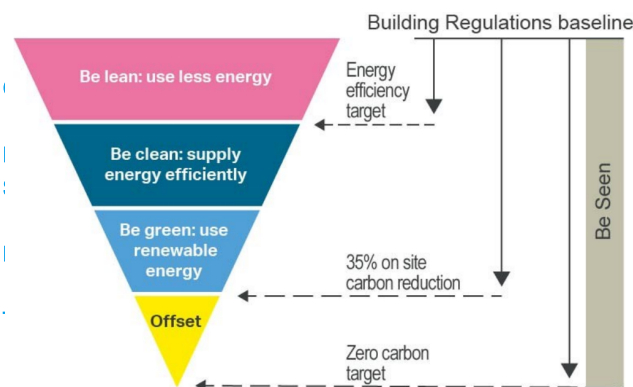


Figure 3: This methodology, widely used in accordance with the Sustainable Design and Construction Supplementary Planning Guidance (SPG) 2014, has been adopted for the scheme using a 'Lean', 'Clean', and 'Green' approach.

Table 1: GLA Energy Hierarchy for the whole development.

GLA's Energy Hierarchy: Regulated carbon emissions – Telephone Exchange (Part L2A & L2B)				
Calculated using SAP10.0 carbon dioxide emission factors				
	Baseline:	Be lean:	Be clean:	Be green:
CO ₂ emissions (tCO ₂ /yr)	86.5	67.4	–	37.3
CO ₂ emissions saving (tCO ₂ /yr)	–	19.4	–	30.03
Saving from each stage (%)	–	22.12	–	34.17
Total CO ₂ emissions saving (tCO ₂ /yr)		49.7		
56.84% total carbon emissions savings over 2013 Building Regulations Part L achieved.				
GLA's Energy Hierarchy: Regulated carbon emissions – Minerva House (Part L2A)				
Calculated using draft SAP10.0 carbon dioxide emission factors				
	Baseline:	Be lean:	Be clean:	Be green:
CO ₂ emissions (tCO ₂ /yr)	60.6	44.0	–	21.6
CO ₂ emissions saving (tCO ₂ /yr)	–	16.6	–	22.35
Saving from each stage (%)	–	27.40	–	36.90
Total CO ₂ emissions saving (tCO ₂ /yr)		38.95		
64.29% total carbon emissions savings over 2013 Building Regulations Part L achieved.				

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GLA's Energy Hierarchy – Regulated Carbon Emissions

As demonstrated in Figure 4, the proposed will reduce carbon emissions by 22.12% and 27.40% from the fabric energy efficiency measures described in the 'Be Lean' section and will reduce total carbon emissions by 56.84% and 64.29% over Building Regulations, using draft SAP 10.0 carbon factors.

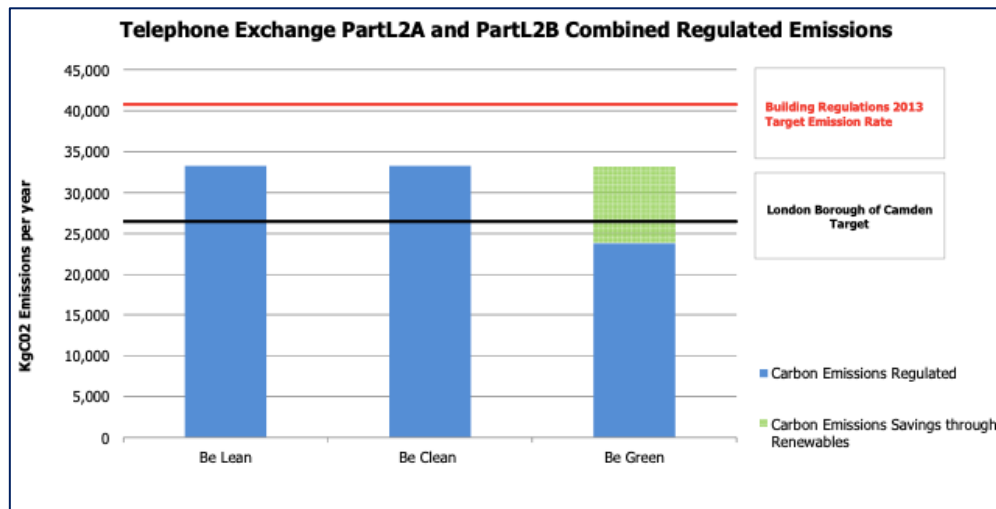


Figure 4: The performance of Telephone Exchange in relation to Building Regulations and the Energy Hierarchy. Carbon dioxide emission factors for draft SAP 10.0 have been used for the calculations.

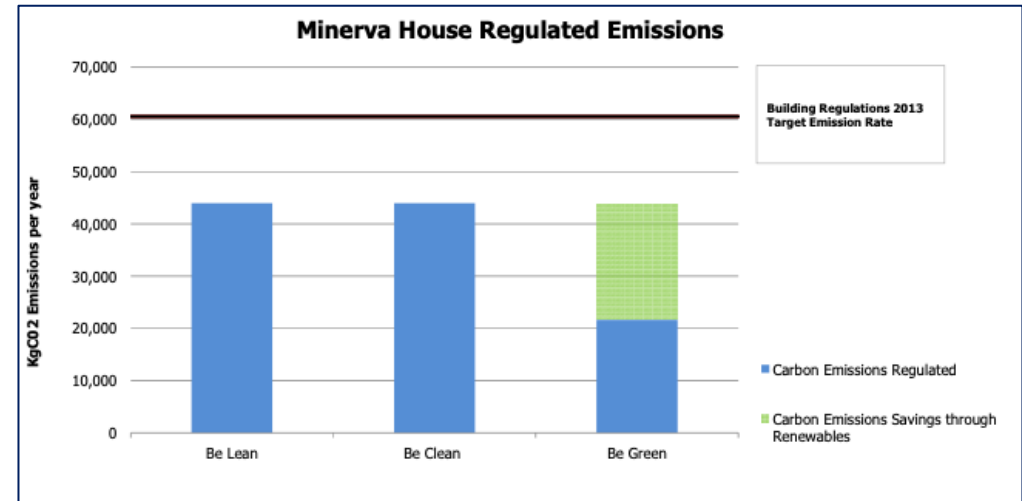


Figure 6: The performance of Minerva House in relation to Building Regulations and the Energy Hierarchy. Carbon dioxide emission factors for draft SAP 10.0 have been used for the calculations.

Energy and CO₂ Sustainability Statement North Crescent

Energy Efficiency Strategies

Energy efficiency measures that will be applied to North Crescent include:

- High insulation standards to reduce transfer of heat through the building fabric;
- Use of a communal air source heat pump system with a COP of 2.90 to provide heating and hot water for the whole development alongside photovoltaic panels installed on the roof of Telephone Exchange;
- Envelope air tightness to reduce unnecessary air infiltration;
- Daylighting and well-planned floor layouts to reduce the need for artificial lighting; and,
- High efficacy lighting of 100 lumens per watt has been specified for the scheme.

Thermal Comfort and Overheating Risk

To minimise energy loss, the building fabric performance will be designed to achieve a balance between retaining heat during winter and allowing the building to dissipate heat during the summer months. Further measures to reduce overheating and the need for cooling include:

- Energy efficient lighting and appliances have been recommended to reduce internal heat gains;
- The building fabric will be insulated over and above the standards set out by Building Regulations and reduced solar gains from a glazing solar factor of 0.39 will help to keep heat out of the building;
- Internal shading devices to further limit solar gains in the south facing kitchen will be installed;
- Reduced air permeability rate and maximised insulation levels;
- Mechanical ventilation with heat recovery and summer bypass to provide fresh air and purging of heat; and,
- Passive ventilation measures will include openable windows.

Adaptation to Climate Change

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Climate Change Mitigation

The proposed development will utilise a communal air source heat pump, PV panels and mechanical ventilation with heat recovery. Mechanical ventilation using fans will remove heat from the building during summer months.

Flood Risk and Sustainable Drainage

North Crescent is located within Flood Zone 1 of the Environment Agency's Flood Map for Planning, as shown in Figure . This is defined as an area with little or no risk to flooding where the annual probability of river, tidal and coastal flooding (with defences where they exist) is <0.1% i.e. less than 1 in 1,000 years.

A Flood Risk Assessment and Sustainable Drainage Systems strategy have been developed by Heyne Tillett Steel in July 2021 where the above low risk of flooding from all sources has been confirmed. Surface water attenuation will be provided in the form of blue and blue green roofs. The areas that cannot be routed to blue roofs are proposed to discharge under gravity at an unattenuated rate to the sewer. The runoff from the blue and blue-green roofs will be limited to 2.8 l/s, for a contributing area of 1,343m². The peak surface water run-off rate from the site will be restricted to 25.5 l/s for the 1 in 100-year storm event with 40% climate change. For the whole site, the proposed sustainable drainage measures will provide a 76% betterment on the existing surface water run-off rates. This results in a significant reduction in peak run-off rates compared to the existing situation. The scheme is therefore expected to meet the requirements of Policy CC2.

The project will also develop a climate change adaptation strategy in line with BREEAM New Construction Wst 05 credit.

Flood Map

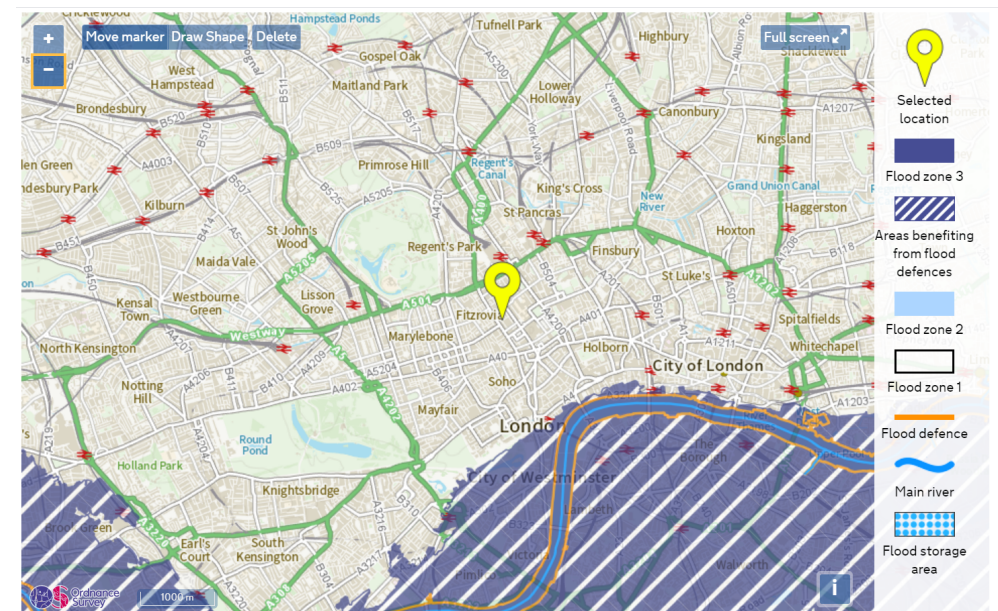


Figure 7: Flood map showing the approximate location of the development within Flood Zone 1.

Waste

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eight
associates

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www.eightassociates.co.uk
info@eightassociates.co.uk

Construction Waste Management

Resource efficiency will be promoted through effective and appropriate management of demolition and construction site waste.

In line with the waste hierarchy and Policy CC5, during the construction phase, the approach will be the following:

- Use reclaimed materials;
- Use materials with higher levels of recycled content; and,
- Use new materials.

For any demolition, the following approach will be adopted:

- Prioritise the on-site reuse of demolition materials;
- Adopt on site recycling and, where required, use off site recycling; and,
- The least preferred option – disposal to landfill.

A site waste management plan will be developed which adopts best practice benchmarks for resource efficiency, details procedures and commitments to minimise non-hazardous and hazardous waste at the design stage and monitors/measures waste production on site. The plan will apply to the location of the building.

The site waste management plan will also include procedures and commitments to sort and divert waste from landfill through the following:

- Re-use on site;
- Salvage/ reclaim for re-use off-site;
- Return to supplier via a 'take-back' scheme;
- Recovery and recycling using an approved waste management contractor; and
- Compost.

Operational Waste

The communal refuse store provides safe and convenient access to the occupants and is located on the ground floor. The store holds specifications are in accordance with Policy CC5 as well as the labelling and area requirements outlined in BREEAM New Construction 2018 credit Wst 03.

Construction Management Sustainability Statement North Crescent

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Construction Environmental Management

Environmental impacts of the construction works will be mitigated as far as possible. This will include the incorporation of the following:

- Contractor following environmental management system processes (under ISO14001), including the development of a construction environmental management plan (CEMP) specific to the sites;
- Training and site induction of all site operatives;
- Monitoring of energy, water and transport to and from site during construction;
- Management of waste on site;
- Following best practice pollution guidance from the Environment Agency;
- Ensuring all site timber is responsibly sourced in line with the UK Government's Timber Procurement Policy;
- Minimising vehicle emissions through the use of catalytic converters and the regular maintenance of vehicle engines;
- Damping down of brick walls etc. during any building demolition;
- Regularly inspecting and wet suppressing materials/soil stockpiles where necessary (including wind shielding or completely enclosing, storing away from site boundaries, and restricted height of stockpiles);
- Appropriate orientating of material stockpiles;
- Providing wheel washing and wet suppressing during the loading of wagons vehicles;
- Covering vehicles carrying dry soil and other wastes;
- Shielding of dust-generating construction activities;
- Providing suitable site hoarding;
- Restricting vehicle speeds on haul roads and other unsurfaced areas of the site; and,
- Inspecting unsurfaced haulage routes, and wet suppressing should this be necessary (in times of prolonged dry periods).

Considerate Constructors

The scheme will adopt the principles of the Considerate Constructors Scheme (CCS). The CCS scheme aims to recognise and encourage construction sites that are managed in an environmentally and socially considerate, responsible and accountable manner.

Water Efficiency Sustainability Statement North Crescent

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info@eightassociates.co.uk

Water Conservation

The development proposal recognises the need to create a scheme that is efficient and adaptable to future climatic scenarios.

The design team is committed to achieve a significant reduction in internal water use for the development over typical performance, equating to a water consumption target of a 50% improvement in line with the BREEAM New Construction Wat 01 Water Consumption criteria. Therefore, the scheme will meet the requirements set out in Policy CC3.

Water consumption will be reduced through the use of water efficient components for all specified domestic water-consuming components (including low-flow showerheads and taps, dual flush toilets and low water consuming washing machines and dishwashers), water meters per floor or per tenancy, water recycling systems where appropriate and flow control devices that regulate the supply of water to each facility according to demand.

A permanent automated water leak detection system that alerts the building occupants to a major water leak on the mains water supply within the building and between the building and the utilities water meter will be installed. Flow control devices such as sanitary shut-off valves will also be applied to the core sanitary areas.

Transport and Connectivity

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+44 (0)207 0430 418

www.eightassociates.co.uk
info@eightassociates.co.uk

A Transport Assessment will be produced by Momentum Transport Consultancy for the scheme as required by Policy T2.

Public Transport

The development has a PTAL rating of 6B which represents the best possible connectivity as the network of public transport routes accessible from the site is extensive. There are ten different bus stops located within 500m of the building site, serving nine different bus routes. The closest bus stop is reachable in 2 minutes by foot and is served by bus routes 24, 29, 73, 390, N5, N20, N29, N73, N253 and N279.

Goodge Street underground station can be reached in 1 minute by foot and is served by bus routes 37, 39, 87, 156, 170, 337, 639, 670 and N87. Camden Town Rail Station is within 750m and is served by the Northern railway line.

Cycling and Car Provision

Cycle parking will be provided in accordance with the London Plan, Policies DMH 4 and DMT 2. 140 secure and covered cycle spaces are proposed, including accessible Sheffield stands, two tier bike racks and Brompton cycle lockers.

No dedicated parking will be provided for occupants in line with the London Plan recommendations and Policy DMT 2, although 'pay and display' parking spaces are available along Chenies Street, including in front of the proposed development.

Accessibility and Security

Creating a secure but fully accessible development is a key part of the proposed development, in line with Policy C5. To ensure this is achieved, the design team will adopt, where feasible, the key principles of "Secured by Design" within all elements of the scheme. An Architectural Liaison Officer (ALO) or a Crime Prevention Design Advisor (CPDA) will be consulted at an early stage to provide a set of bespoke security recommendations for the development. The recommendations of the CPDA will be implemented within the development's design and layout.

Materials

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info@eightassociates.co.uk

Materials and Waste Introduction

Sustainable material sourcing and waste management will be considered throughout the life of the building to ensure the scheme's environmental footprint is minimised as far as possible. The scheme will also ensure low embodied carbon is employed throughout the procurement, transport and construction of building materials, together with end of life emissions.

Materials Selection and Sourcing

The design team has confirmed that efforts will be made to reuse materials where feasible and that where required, new materials will be responsibly sourced. New construction materials will be selected, where feasible, with a low environmental impact. In addition, the project will aim for new materials to come from a recycled or reused source, including a high-recycled content in steel. Minimum standards apply to new timber, which must be sourced in accordance with the UK Government's Timber Procurement Policy.

In addition, all timber will be FSC/ PEFC certified, all concrete will be BES 6001 certified and any other material will be ISO 14001 certified for both key processes and supply chain/ extraction processes where feasible to do so. This is also reflected in the credits targeted in Mat 03 Responsible Sourcing of construction products under the BREEAM New Construction 2018 assessment of the scheme.

The Green Guide for Specification is a reference tool, providing guidance on the relative environmental impacts for a range of different building elemental specifications, based on Life Cycle Assessment and the Environmental Profile Methodology. The design team will reference the Green Guide to Specification to help specify materials with a low environmental impact, where feasible. The design will incorporate at least 5 build-up elements that will be A-C rated on the Green Guide.

Insulation specifications will eliminate hydrochlorofluorocarbons (HCFCs) and ozone depleting materials, wherever possible. All insulation specified will have a Global Warming Potential (GWP) of less than 5 and be responsibly sourced to have a low embodied impact.

Embodied Carbon Analysis

The development will utilise a number of opportunities to cut embodied carbon, as follows:

- A materials efficiency strategy will be followed throughout the design, procurement and construction stages of the development, to ensure the scheme produces less waste on site. For example, adjustment of some sizes will be made to minimise offcuts of materials, and some bespoke materials will be developed off-site;
- Materials will be procured from the local area where possible, to reduce carbon through transportation;
- Materials and products with a higher recycled content will be preferentially procured where feasible, as these have a low embodied carbon;
- Consideration has been made to use timber as a low embodied carbon alternative to steel and concrete where possible; and,

The scheme will therefore meet and exceed the requirements set out in 8.18 of Chapter 8 'Sustainability and climate change' as well as Policy T4 within the Camden Local Plan.

Health and Wellbeing Sustainability Statement North Crescent

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info@eightassociates.co.uk

Occupant Wellbeing

The development has been designed to ensure the wellbeing of occupants in terms of levels of fresh air, thermal comfort and reduction of overheating, access to natural light, good lighting levels internally and externally, acoustic performance and access to safe drinking water. The development will seek to achieve certification against WELL v2, a globally recognised framework for incorporating health and well-being within building design. An example of design considerations for health and wellbeing include openable windows alongside the North and South elevations of Telephone Exchange which will contribute to the occupants' controllability of the thermal comfort environment.

The building services strategy has been carefully considered in order to balance the need for energy-smart, low carbon technologies with the need for adequate and controllable ventilation, heating and cooling.

Internal Air Quality

The design team will specify only low volatile organic compounds (VOC) finishing products, including sealants and paints. All composite wood products will contain no added urea formaldehyde.

External Air Quality

An Air Quality Assessment report was produced by Air Quality Consultants in July 2021 in line with Policy CC4. The development site is located in an Air Quality Management Area (AQMA), which has been declared due to continued exceedances of National Air Quality Objectives (NAQOs) for NO₂ and PM₁₀.

The proposed development will not, generate any significant emissions during its operation as it will not generate a significant number of additional vehicle movements, and heat and hot water will be provided by air source heat pumps.

Construction Impacts

The unmitigated risk to local sensitive receptors from emissions of dust and pollution from construction is deemed to be low. With the mitigation measures in place, the residual effects arising from the construction phase of the proposed development would be deemed 'not significant'.

Air Quality Neutral (AQN)

The scheme has been assessed for both the impacts of transport and building operation against the AQN guidance and they were found to meet the requirements for AQN.

Daylight

The design has been developed to allow the use of daylight within the office space to be maximised as far as practical. Visual comfort for occupants will also be ensured as per the Hea 02 View out requirements targeted within the BREEAM assessment of the project.

In addition, Avison Young undertook a daylight and sunlight impact assessment report in June 2021 to evaluate the potential impact of the proposed development on the daylight and sunlight received by the neighbouring buildings. The results of the analysis indicate that the majority of windows and rooms tested within the neighbouring properties will satisfy the recommended BRE Guidelines values for sky visibility (VSC) and daylight distribution (NSL). Those below that fall below the recommended BRE values either represent minor deviations; relate to less sensitive bedroom or non-habitable/secondary spaces; or arise due to the inherent design constraints of the buildings concerned.

Acoustic Performance

Temple were commissioned by Thornton Reynolds Ltd in January 2021 to undertake a noise impact assessment to demonstrate compliance to Policy A4.

Camden Council has expressed their requirement that the external rating noise level LA_{eq} emitted from this building services plant to be lower than the background sound level LA_{90,15mins} by 10dBA (15dB if tonal components are present) at the most noise sensitive receptors at surrounding premises. Based on the manufacturer's data for the noise levels of the proposed roof level plant, it is predicted that noise emissions will be adequately controlled during both the daytime and night-time as they are at least 10dB below background sound level LA_{90,15mins},

Inclusive Design

The guidance in the Approved Document M (March 2016) will be incorporated to achieve an inclusive built environment that enables users to maximise their individual abilities and enjoy a safe and independent participation.

Land Use and Ecology Sustainability Statement North Crescent

Protection of Biodiversity

A preliminary ecological appraisal was carried by Eight Associates in February 2021. The site was found to have low ecological value, providing limited habitat for roosting bats and nesting birds. It has been advised that one bat detector survey should be carried out between May and August 2021. The development is expected to have negligible impact on statutory sites near to the development.

The proposed development will promote the protection of the retained ecology from damage during site demolition and the completion of the construction works.

The design team is committed to protecting biodiversity on site and will implement the following measures:

- Confirm that all relevant UK and EU legislation relating to protection and enhancement of ecology has been complied with during the design and construction process;
- Ensure that any affected trees and shrubs are cleared out of bird breeding season (March–August). Alternatively, a suitably qualified ecologist should check for the presence of active nests prior to the commencement of works;
- Implement working methods in line with best practice to manage dust and water runoff; and,
- During the construction phase a Biodiversity Champion will be appointed to monitor and limit environmentally detrimental activities. They will also train the workforce on the project to raise their awareness of environmental impacts during construction.

Ecological Enhancements

The design team is also committed to enhance biodiversity on site in line with Policy A3.

The proposed development will aim to incur no negative change in ecological value. The suitably qualified ecologist has provided early design stage advice on negative impact mitigation and this includes:

- Demolition and vegetation clearance work should be undertaken outside of the bird nesting season (March–August). If trees in close proximity to the building on the east of the site are to be pruned/removed as part of the works, a nesting bird watching brief will be needed where clearance/demolition works are to commence within the bird nesting season (March–

August). An ecologist should visit to inspect the site within 24 hours prior to confirm the presence/absence of nesting birds. If birds are found to be nesting, then works in the area around the nest must be delayed until after the young have fledged.

General advice concerning mammals during construction should be followed as below:

1. Any man-made excavations, trenches or pits relating to the development are either securely fenced off or covered up overnight to avoid entrapment mammals or, if left open, an egress point (e.g. mammal ladders or a roughened plank) will be placed within the excavation to form a ramp to allow any mammals to escape.
2. Any excavations should be inspected each morning to ensure no mammals have become trapped overnight. If a mammal is found within any excavations, an ecologist should be contacted immediately for appropriate advice.
3. If evidence of mammal digging indicative of sett creation is seen within the site during construction, work in this area should cease and an ecologist should be contacted immediately for the appropriate advice.

The project team have liaised and collaborated with representative stakeholders early enough to influence key planning decisions, to identify the optimal ecological outcomes for the site and appraise and select measures to meet the optimal ecological outcomes for the site.

The recommended ecological enhancements include the installation of bat boxes, bird boxes, invertebrate houses and native planting of a diverse mix of species.

A landscape and ecology management plan will be produced by Eight Associates for this site.

Conclusions

Sustainability Statement

North Crescent

Conclusions

This Sustainability Statement has responded to the London Borough of Camden's local planning policy requirements.

In summary the scheme will adopt the following sustainable features:

- In line with the London Plan Policy SI2 and Camden Local Plan Policy CC3 the development will reduce total carbon emissions by 56.84% and 64.29% over Building Regulations using SAP 10.0 carbon dioxide emission factors, for Telephone Exchange and Minerva House respectively.
 - In line with the London Plan Policy SI2 and Camden Local Plan Policy CC3 the development will reduce energy consumption by targeting improved U-values and airtightness. Low energy lighting will also be specified.
 - In line with Camden Local Plan Policy CC5 the developer will implement a site waste management plan and stringent resource efficiency benchmarks.
 - In line with Camden Local Plan Policy CC4 the design team will follow best practice policies in terms of air, water and ground pollution and appoint a contractor who will register for the Considerate Constructors Scheme.
 - In line with Camden Local Plan Policy CC3 the development will achieve a water consumption target of 50% efficiency improvement over the BREEAM New Construction 2018 baseline through the implementation of low water-consuming fittings.
 - In line with Camden Local Plan Policies T2 and T4 the development will utilise sustainable transport, including access to public transport and inclusion of cycle storage facilities.
 - In line with Camden Local Plan Policies CC1, CC2 and T4 the development will minimise embodied carbon through efficient design, procurement of materials from a local source, or with a high-recycled content.
 - In line with Camden Local Plan Policies C5 and A4 the development will be of high build quality, surpassing the minimum Building Regulations for security and acoustic comfort.
 - In line with Camden Local Plan Policies CC1 and CC2 the developer will ensure all materials are responsibly sourced and of low environmental impact where feasible.
- In line with Camden Local Plan Policies CC1, CC4, C5, A4 the design team has considered health and wellbeing through design and operational procedures, including daylight, optimum indoor air quality, noise and thermal comfort.
 - In line with Camden Local Plan Policy A3 the developer will protect and enhance the ecological value of the site by introducing landscaping designs as well as a green wall.