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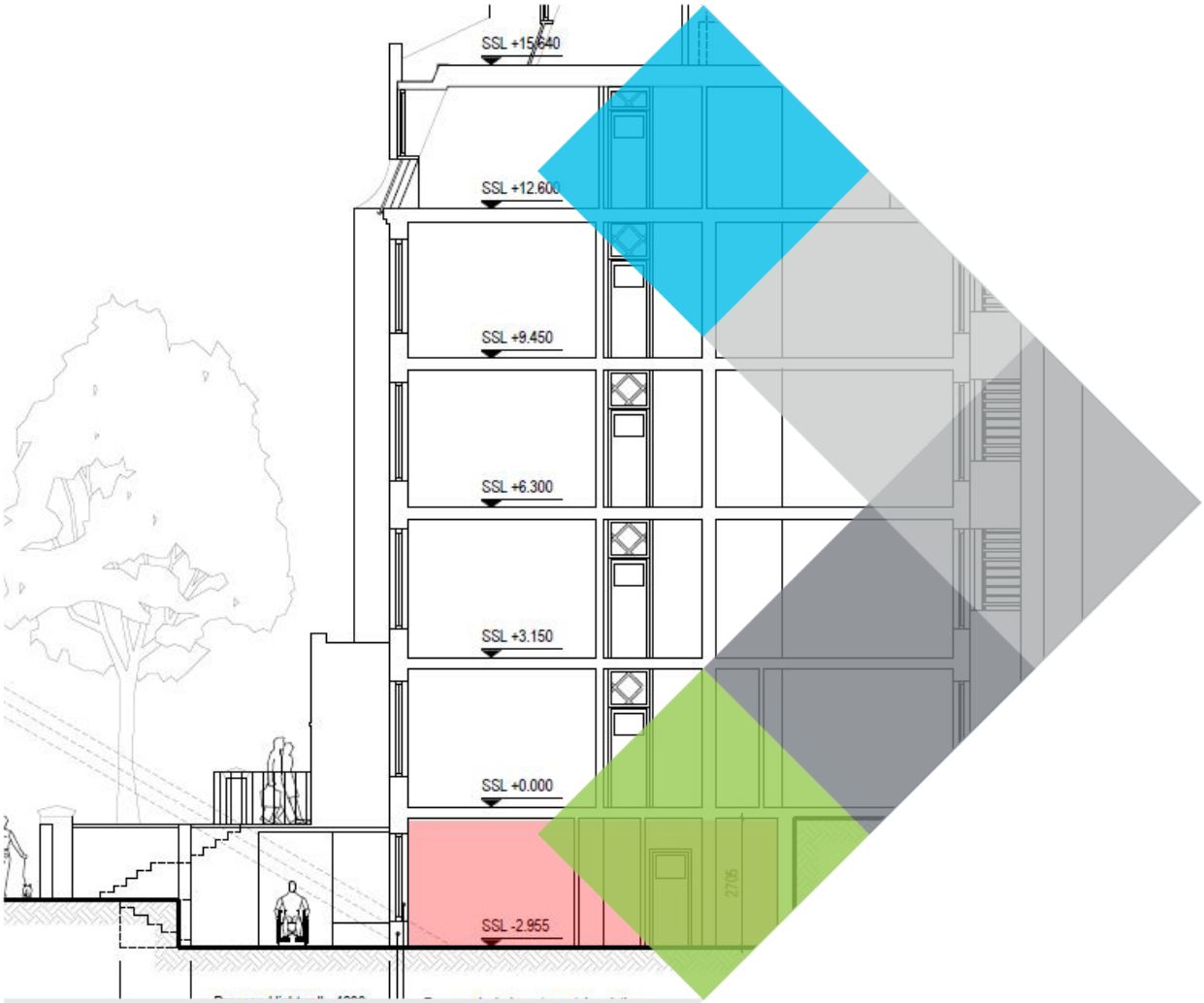

Sustainability Statement

Ornan Court Limited

Ornan Court

Final

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ABOUT HODKINSON CONSULTANCY

Our team of technical specialists offer advanced levels of expertise and experience to our clients. We have a wide experience of the construction and development industry and tailor teams to suit each individual project.

We are able to advise at all stages of projects from planning applications to handover.

Our emphasis is to provide innovative and cost effective solutions that respond to increasing demands for quality and construction efficiency.

Executive Summary

The purpose of this Sustainability Statement is to demonstrate that the proposed development at Ornan Court in the London Borough of Camden is considered sustainable, as measured against local, regional and national planning policies.

The development proposes the development of two wheelchair accessible lower ground apartments in Ornan Court, on Ornan Road in Belsize Park. Through the incorporation of sustainable design and construction methods, energy and water saving measures and waste reduction techniques, a good quality and sustainable development is proposed. The key sustainability features outlined in this Sustainability Statement are listed below:

> Water efficiency measures and devices will be installed in the homes to target a maximum daily water usage of 105 litres/person/day in accordance with the London Plan and the tighter Building Regulations optional requirement;

> Recycling facilities will be provided for domestic and construction related waste;

> The use of sustainable transport modes will be encouraged, and the site benefits from very good connections to a range of surrounding transport services;

> The dwellings will be designed to meet Building Regulation Part M 4(3) Category 3 requirements (wheelchair user dwellings), ensuring they are accessible and can be used by all;

> 100% of the proposed development will be on an existing site. Developing under-used sites is supported by the NPPF;

> Where practical, building materials will be sourced locally to reduce transportation pollution and support the local economy. All timber will be purchased from responsible forest sources. Materials will be selected based on their environmental impact, with preference given to high rated materials from the BRE Green Guide to Specification where possible; and

> Construction impacts will be minimised and monitored where possible.

CONTENTS

1. INTRODUCTION

1.1 This Sustainability Statement has been prepared by Hodkinson Consultancy, a specialist energy and environmental consultancy for planning and development. This statement sets out the sustainable design and construction measures included in the planning application for the proposed development at Ornan Court in the London Borough of Camden.

1.2 The formulation of the Sustainability Strategy for the proposed development has been developed in response to several key priorities, including:

> To achieve a viable reduction in CO_2 emissions with an affordable, deliverable and technically appropriate strategy;

> To address all national and local planning policies and requirements;

> To provide high quality homes that are adaptable to future changes in climate;

> To minimise the negative impact on the proposed development on both the local and wider climate and environment;

> To achieve high levels of sustainable design and construction;

> To minimise emissions of pollutants such as oxides of nitrogen and particulate matter; and

> To create a pleasant, safe and friendly living environment that will be flexible to its residents' needs.

Sustainable Development

1.3 Resolution 42/187 of the United Nations General Assembly defined sustainable development as:

'Meeting the needs of the present without compromising the ability of future generations to meet their own needs.'

1.4 The National Planning Policy Framework (NPPF) and Planning Practice Guidance define three dimensions to sustainable development: economic, social and environmental. These dimensions give rise to the need for the planning system to perform a number of roles. The NPPF and Planning Practice Guidance define these roles as follows:

> **An Economic Role**: Contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time

to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure.

> **A Social Role**: Supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being.

> **An Environmental Role**: Contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.

The Strategy

1.5 In preparing this Sustainability Statement we have worked with the applicant to produce a strategy which recognises the economic, social and environmental roles of the planning system to achieve a sustainable form of development which is both policy compliant and deliverable. In preparing the strategy we have focussed on ensuring that the development is:

Economically Sustainable

> The provision of short term employment opportunities for the local population during construction;

> The provision of transport choice and options to those that live within and visit the development.

Socially Sustainable

> Effective and appropriate consultation of relevant stakeholders to inform the design of the proposed development;

> A inclusive housing mix which is beneficial to the needs of the area;

> Ensuring that the development is accessible to all;

> Incorporating measures to reduce and design out crime;

> Committing to considerate construction practices.

Environmentally Sustainable

> Integrating energy efficiency into the design of the development;

> Incorporating water efficiency measures to reduce consumption;

> Recognising the need to adapt to climate change;

> Sourcing materials in a sustainable way;

> Managing waste through measures to reduce, reuse and recycle.

2. DEVELOPMENT OVERVIEW

Site Location

2.1 The application site is located on the junction of Ornan Road and Haverstock Hill in the London Borough of Camden. The site is the lower ground floor of the existing Ornan Court apartment block.

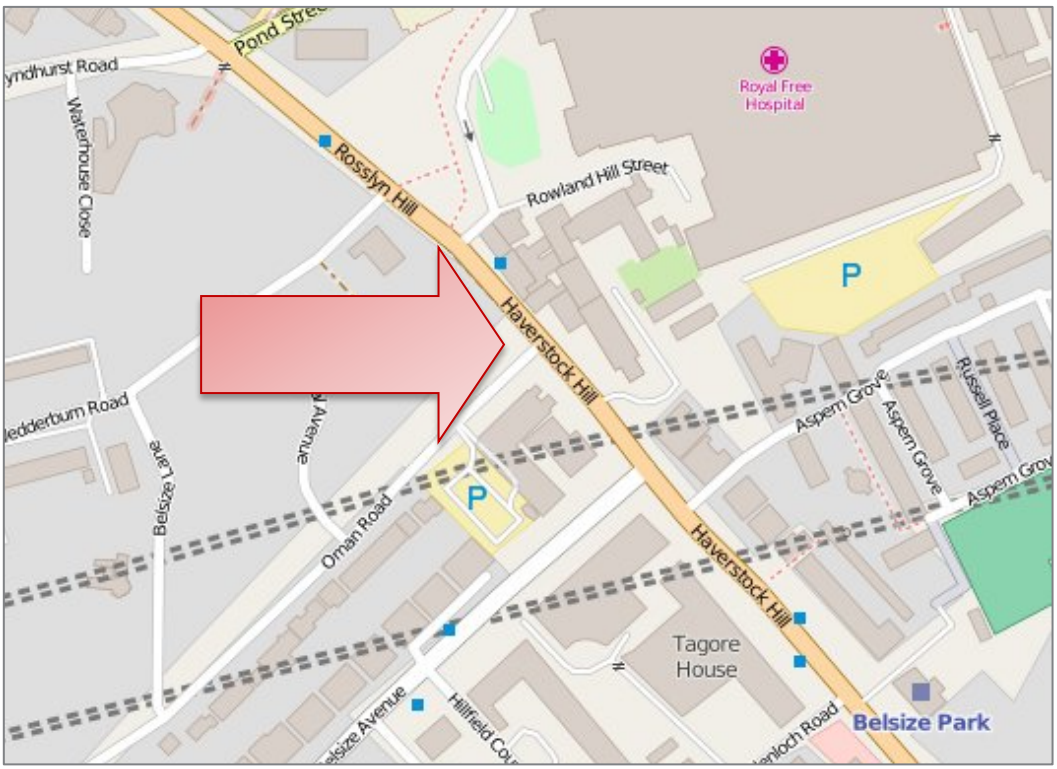

Figure 1: Site Location - © OpenStreetMap Contributors. Go to www.openstreetmap.org/copyright

Proposed Development

2.2 The proposed development consists of the development of 2x two-bed wheelchair accessible lower ground apartments in the existing Ornan Court apartment blocks.

3. RELEVANT PLANNING POLICY

3.1 The following planning policies and requirements have led the sustainable design of the proposed development.

National Policy: The NPPF

3.2 The National Planning Policy Framework (NPPF) was published on 27 March 2012. This document sets the overarching policies for development in England and states that:

"At the heart of the NPPF is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking.

For decision-taking this means:

- *Approving development proposals that accord with the development plan without delay; and*
- *Where the development plan is absent, silent or relevant policies are out-of-date, granting permission unless:*
  - *Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or*
  - *Specific policies in this Framework indicate development should be restricted."*

3.3 The NPPF states that there are three dimensions to sustainable development; economic, social and environmental. It addresses the key areas in relation to achieving sustainable development, including the following:

- Building a strong, competitive economy;
- Ensuring the vitality of town centres;
- Promoting sustainable transport;

- Delivering a wide choice of high quality homes;
- Requiring good design;
- Promoting healthy communities;
- Meeting the challenge of climate change and flooding;
- Conserving and enhancing the natural environment; and
- Facilitating the sustainable use of materials.

3.4 Paragraph 95 of the NPPF states that:

"To support the move to a low carbon future, local planning authorities should:

- *Plan for new development in locations and ways which reduce greenhouse gas emissions;*
- *Actively support energy efficiency improvements to existing buildings; and*
- *When setting any local requirement for a building's sustainability, do so in a way consistent with the Government's zero carbon buildings policy and adopt nationally described standards*."

3.5 The document also makes it clear that the delivery of a wide choice of well-designed high quality homes is central to delivering sustainable development.

Regional Policy: The London Plan

3.6 **The London Plan** sets out an integrated economic, environmental, transport and social framework for the development of London over the next 20 – 25 years.

3.7 On 10 March 2015, the Mayor adopted the Further Alterations to the London Plan (FALP). Additionally, on 14 March 2016, the Mayor adopted the Minor Amendments to the London Plan (MALP). From these dates respectively, the FALP and MALP are operative as formal alterations to the London Plan and form part of the development plan for Greater London. Where the London Plan is referenced within this document, this comprises the FALP and MALP as published.

3.8 The following outlines key policies set out in the London Plan which are relevant to the Proposed Development and this Sustainability Statement.

3.9 **Policy 3.8 – Housing Choice** requires that ninety percent of new housing meets Building Regulation requirement M4 (2) 'accessible and adaptable dwellings' and ten percent meets Building Regulation requirements M4 (3) 'wheelchair user dwellings'.

3.10 **Policy 5.2 – Minimising Carbon Dioxide Emissions** requires that all residential and non-residential major development between 2013 – 2016 achieve a 40% improvement on 2010 Building Regulations. The London Plan Sustainable Design and Construction SPG (2014) updates this target stating that the Mayor will adopt a carbon dioxide improvement target beyond Part L 2013 of 35%.

3.11 **Policy 5.3 – Sustainable Design and Construction** states that the highest standards of sustainable design and construction should be achieved in London to improve the environmental performance of new developments. Major development should meet the minimum standards outlined in the London Plan Supplementary Planning Guidance and this should be clearly demonstrated. The standards include the following sustainable design principles (summarised):

> Minimising CO_2 emissions;

> Avoiding internal overheating and contributing to the urban heat island effect;

> Efficient use of natural resources (including water);

> Minimising pollution (including noise, air and urban run-off);

> Minimising the generation of waste and maximising reuse and recycling;

> Avoiding impacts from natural hazards (including flooding);

> Ensuring developments are comfortable and secure for users;

> Securing sustainable procurement of materials, using local suppliers where feasible; and

> Promoting and protecting biodiversity and green infrastructure.

3.12 **Policy 5.9 – Overheating and Cooling** seeks to reduce the impact of the urban heat island effect, reduce potential overheating and reduce reliance on air conditioning systems.

3.13 **Policy 5.10 – Urban Greening** encourages new planting in the public realm (including streets, squares and plazas) and green infrastructure, to contribute to the adaptation to, and mitigation of, the effects of climate change.

3.14 **Policy 5.12 – Flood Risk Management** states that new developments must comply with the flood risk assessment and management requirements, and will be required to pass the Exceptions Test addressing flood resilient design and emergency planning.

3.15 **Policy 5.13 – Sustainable Drainage** requires that developments should use sustainable urban drainage systems (SUDS) unless there are practical reasons for not doing so, and should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible.

3.16 **Policy 5.15 – Water Use and Supplies** requires that development should minimise the use of mains water by incorporating water saving measures and equipment and that residential development is designed so that mains water consumption meets a target of 105 litres/person/day or less (reflecting the optional requirement in Part G).

3.17 **Policy 7.3 – Designing Out Crime** requires that development should reduce the opportunities for criminal behaviour and contribute to a sense of security without being overbearing or intimidating.

Housing Supplementary Planning Guidance

3.18 The **London Plan Housing Supplementary Planning Guidance** was adopted in April 2016.

3.19 Updated to reflect the FALP and MALP, Part 2 'Quality' of the document now reflects the Government's preferred approach to housing standards and the new technical national space standards.

Sustainable Design and Construction Supplementary Planning Guidance

3.20 The **London Plan Supplementary Planning Guidance – Sustainable Design and Construction (2014)** was adopted in April 2014.

3.21 The report states that the guidance in this document is intended to:

> Provide detail on how to implement the sustainable design and construction and wider environmental sustainability policies in the London Plan;

> Provide guidance on how to develop more detailed local policies on sustainable design and construction;

> Provide best practice guidance on how to meet the sustainability targets set out in the London Plan;

> Provide examples of how to implement sustainability measures within developments.

3.22 The SPG provides guidance on:

> Energy efficient design;

> Meeting carbon dioxide reduction targets;

> Decentralised energy;

> How to off-set carbon dioxide where the targets set out in the London Plan are not met;

> Retro-fitting measures;

- Support for monitoring energy use during occupation;
- An introduction to resilience and demand side response;
- Air quality neutral;
- Resilience to flooding;
- Urban greening;
- Pollution control;
- Basements policy and developments; and
- Local food growing.

3.23 Each section of the Supplementary Planning Guidance sets out the Mayor's priorities for the particular topic area, which the Mayor seeks developers to address in all development proposals. Some sections also contain best practice ambitions, which the Mayor strongly encourages be delivered in appropriate developments. To support these approaches, the Supplementary Planning Guidance includes detailed guidance for boroughs and developers, signposts to further information and best practice examples.

Local Policy: London Borough of Camden

Camden Core Strategy

3.24 The **Camden Core Strategy** was adopted in 2010. Policies that are considered pertinent to this development include:

3.25 Policy **CS 13 Tackling Climate Change through Promoting Higher Environmental Standards** requires all development to take measures to minimise the effects of, and adapt to, climate change.

3.26 This seeks to minimise carbon emissions from the redevelopment, construction and occupation of buildings by ensuring they use less energy.

3.27 **Camden Development Policies** were also adopted in 2010. **Policy DP22** requires all development to incorporate sustainable design and construction measures. Schemes must demonstrate how sustainable development principles have been incorporated into the design and proposed implementation.

3.28 Development of 500 sqm or more is expected to achieve EcoHomes 'Excellent' from 2013 (EcoHomes has since been replaced by BREEAM Domestic Refurbishment).

3.29 Additionally, the Council requires development to be resilient to climate change by ensuring schemes include appropriate climate change adaptation measures, such as:

> Summer shading/ planting

> Limiting run-off

> Reducing water consumption

> Reducing air pollution

> Not locating basements in vulnerable flood-prone areas.

3.30 **Policy DP23** requires development to incorporate water efficient features and equipment.

3.31 Camden has also published a range of Planning Guidance documents to help provide additional clarity on their policy requirements.

3.32 **Camden Planning Guidance 3: Sustainability** (2015) sets out Camden's approach to securing high quality sustainable design and construction for new developments.

3.33 This states that development of 5 or more dwellings and/or 500sqm floorspace are required to submit an Energy Statement to demonstrate how carbon dioxide emissions will be reduced in line with the energy hierarchy.

3.34 All developments are expected to reduce their carbon dioxide emissions by following the steps in the energy hierarchy to reduce energy consumption.

3.35 Refurbishment projects are expected to reduce their carbon emissions by making improvements to the existing building.

3.36 Development involving a change of use or a conversion of 5 or more properties, or 500sqm of any floorspace, will be expected to achieve 60% of the un-weighted credits in the energy section of BREEAM.

3.37 All new development will be expected to be water efficient, with dual flush toilets, low flow taps and low water consuming white goods where possible.

Summary

3.38 While a sustainable development is proposed in line with the London Plan and Camden policies, a BREEAM Domestic Refurbishment rating is not targeted here. This is compliant with Camden policy (as noted above) which only requires BREEAM for development of 5 or more dwellings and/or development exceeding 500sqm floorspace.

4. ENERGY & CO_2 CONSERVATION

Energy Strategy

4.1 As the project contains fewer than 5 dwellings, and is smaller than 500sqm, a separate energy statement has not been submitted to support the application (as required by CPG3: Sustainability).

4.2 However, as required by policy a number of enhancements will be made to the development to ensure that CO_2 reductions are kept to a minimum.

4.3 This includes the use of energy efficient fabric enhancements (including insulation to walls and floor and high specification glazing) and high-efficiency boilers.

Ventilation

4.4 To avoid problems associated with the build-up of pollutants and humidity levels whilst avoiding excessive heat loss, ventilation will be designed to meet the requirements of Building Regulations Parts L & F.

4.5 All homes will benefit from openable windows allowing natural convective ventilation and night-purging should the occupant desire.

Lighting

4.6 All lighting will be dedicated energy efficient fittings and with appropriate controls.

4.7 Any external lighting, and any security lighting, will be adequately controlled using PIR sensors, daylight cut-off sensors or time switches.

Energy Efficient White Goods

4.8 Where provided by the client, energy efficient white goods will meet the following specification and energy efficient ratings under the EU Energy Efficiency Labelling Scheme:

> Fridges, freezers and fridge-freezers: A+ rating;

> Washing machines and dishwashers: A rating; and

> Tumble dryers and washer-dryers: B rating.

Energy Monitoring

4.9 Energy display devices which monitor consumption data for electricity and primary heating fuel may be provided, empowering the occupants to be more aware of and therefore reduce their energy usage.

Home User Guide / Welcome Packs

4.10 Home User Guides and/or Welcome Packs can be provided to the occupants of the dwellings providing advice and information on how to best operate the services within their dwelling.

4.11 Educating residents on the benefit and means to control their home can be one of the most effective means to reduce energy use, both in the short and long term.

5. WATER REDUCTION

5.1 Conservation of water is crucial to the sustainability debate. The processing of water into fresh, drinking water uses large amounts of energy. Using water in our homes contributes around 35 million tonnes of greenhouse gas a year (on average 1.5 tonnes per family). Additionally, water is a finite resource and during times of drought supplies can run low. Many natural ecosystems in the United Kingdom can suffer as a result of water abstraction.

5.2 The proposed development will target water efficiency levels in accordance with the London Plan which requires the internal potable water usage in the dwellings to be no more than 105 litres/person/day. This level of water efficiency will also meet the requirements of the tighter Building Regulations optional requirement.

5.3 In accordance with the London Plan Sustainable Design and Construction SPG and Camden's policies, internal water consumption will be reduced through the use of practical and hygienic water saving measures. An evaluation of the devices to be used will be undertaken based on technical performance, cost and appeal. These may include dual flushes, low flow taps and shower heads and, if white goods are to be provided, they should be best practice with respect to both water use

and energy efficiency. An illustrative suitable strategy to achieve the water efficiency standards is set out in the Water Efficiency Calculator at **Appendix A** and could include the following:

> Dual flush WCs (6/4L per min);

> Wash hand basin tap flows of 3L/min;

> Shower flow rates of 8L/min;

> Bath capacity of up to 150L; and

> Kitchen tap flows of 4L/min.

5.4 Waste water reduction advice can be provided to the occupants within a comprehensive Home User Guide, to enable optimum use to be made of the devices installed.

6. MATERIAL SELECTION

Environmental Impact

6.1 Following the guidance set out in the London Plan Sustainable Design and Construction SPG, the Building Research Establishment (BRE) Green Guide will be used to assess the building materials. As part of this, materials are rated from 'A' to 'E', with the rating reflecting the Life Cycle of the materials in question.

6.2 In accordance with the London Plan Sustainable Design and Construction SPG, new materials required in the development will be sourced where possible to ensure that environmentally friendly and low embodied energy materials are used. Where possible, "A+/A" rated materials and element construction will be selected to enable the development to be as environmentally friendly as possible.

6.3 Preference will be given to the use of local materials and suppliers where viable. This will be considered as part of the detailed design and construction process.

6.4 Timber used on the site, including timber used in the construction phase, such as hoarding, fencing and scaffolding, will be sourced from sustainable sources (e.g. PEFC and FSC) where possible.

Maximising Use of Land

6.5 100% of the proposed development is proposed to be located within an existing developed site. Developing under-used sites is supported by the NPPF.

7. POLLUTION MANAGEMENT

7.1 The London Plan and London Borough of Camden policy seeks to ensure new development proposals do not unacceptably increase pollution.

7.2 Potential pollution sources will therefore be carefully managed from construction through to and during building occupation, and measures to reduce pollution have been incorporated into the proposed development.

Building Materials

7.3 The building materials within the proposed development will all meet the following criteria:

> Use traditional and/or long-established materials that do not emit pollutants;

> Use materials that are stable, durable and appropriate;

> Do not use materials that contain heavy metals, biocides or known toxins such as lead or asbestos;

> Make sure that mineral and other fibres are completely encapsulated;

> Use low or nil-formaldehyde-emitting materials;

> Minimise the use of paints, using organic, water-based or mineral paints wherever practicable;

> Avoid timber preservatives; and

> Avoid harmful cleaning agents, solvents and smoke from open fires.

Air Quality

7.4 An Air Quality Assessment has been prepared by Air Quality Consultants Ltd in support of the application. This has demonstrated that due to the small nature of the development and the lack of additional car parking, the impact of the development on existing air quality has been deemed not significant.

7.5 In terms of air quality for future residents, there is a slight risk of exceedences of the annual mean nitrogen dioxide objective at the façade facing Haverstock Hill. However, as there are no windows on this façade and as it is set well back from the road the overall impacts are not deemed to be significant.

7.6 The Applicant will ensure all plant and machinery is readily accessible to facilitate regular maintenance and inspection. All plant and machinery will be subject to a regular service agreement to maintain operational efficiency and to minimise emissions.

7.7 Where applicable, dwellings will be installed with high efficiency, low NO_x boilers.

Noise

7.8 In terms of construction traffic, this will be minimised by restricting deliveries and arrival times in order to manage potential impacts on existing and future occupants. Work will be limited to appropriate hours to be agreed with the Council, and suppressors will be used to reduce noise from machinery.

8. CLIMATE CHANGE ADAPTATION

8.1 The London Plan SPG discusses how developments should incorporate climate change adaptation taking into account overheating, the urban heat island effect and flood risk.

8.2 In accordance with the London Plan and London Borough of Camden policy DP22, the ability to adapt to climate change has been incorporated into the design of the proposed development.

Overheating

8.3 Minimising the risk of summer overheating is important so as to ensure that homes are adapted to climate change and remain comfortable to occupy in the future. The Applicant commits to ensuring that all dwellings will not have a high risk of summer overheating and will adopt appropriate measures to ensure this is delivered.

8.4 In line with the Cooling Hierarchy within London Plan Policy 5.9, it is proposed to reduce the need for active cooling as far as possible. Both homes will therefore be subject to measures to minimise the risk of summer overheating to an acceptable level. In the first instance, this will be done through the specification of open-able windows to provide natural ventilation and night purging. This will help to will reduce the build-up of heat within homes.

Flood Risk & Drainage

8.5 In accordance with the London Plan Sustainable Design and Construction SPG, flood risk within the context of the proposed development has been considered. According to the Environment Agency Flood Map for Planning, the site is located within Flood Zone 1 and is therefore at low risk of flooding.

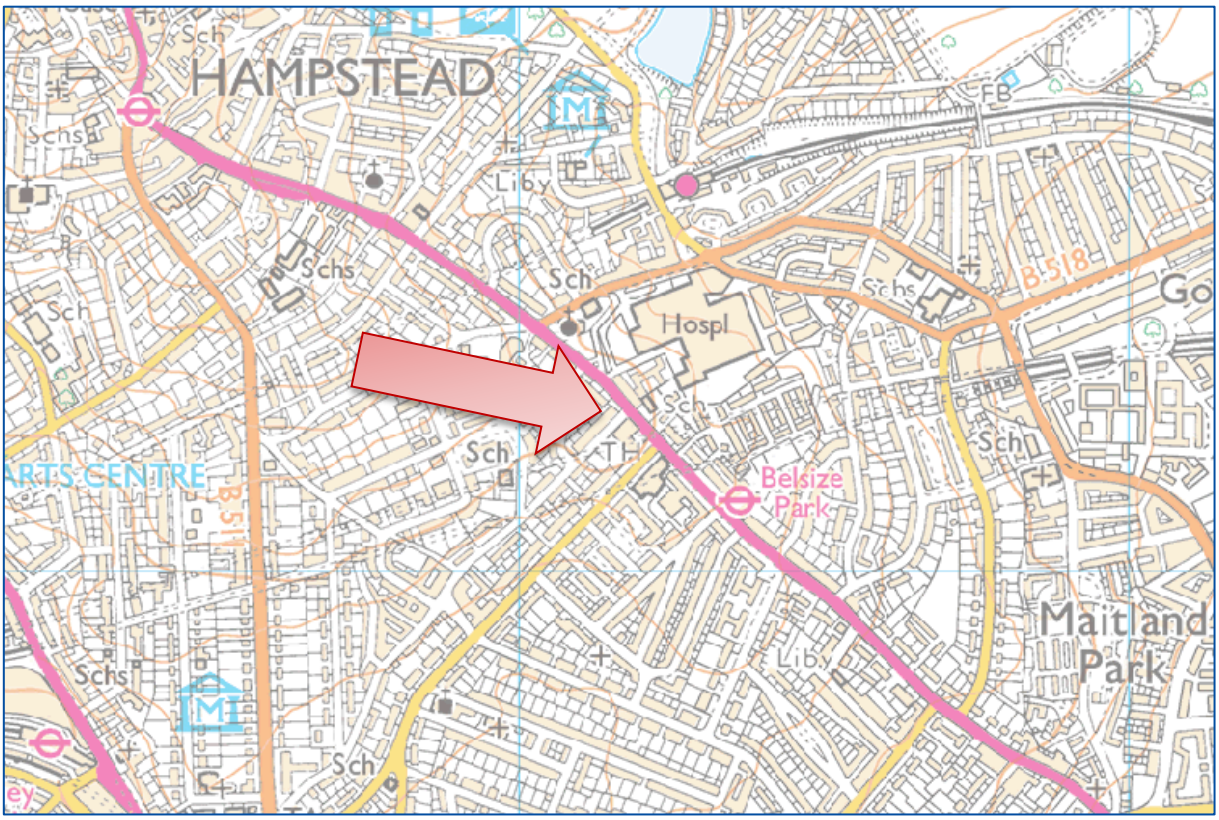

Figure 2: Environment Agency Flood Map for Planning – www.environment-agency.gov.uk

9. WASTE MANAGEMENT

Household Waste

9.1 Adequate internal storage containers for household recycling will be provided within the dwellings to encourage sustainable recycling habits by the occupants.

9.2 External storage for waste and recycling will be provided for the new dwellings. Space for external waste storage will also be provided to work with the London Borough of Camden waste collection service.

9.3 Home User Guides can also be provided to the occupants of the new dwellings which will provide advice and information on the most effective means and methods to recycle and minimise waste.

Construction Waste

9.4 Construction waste is a key element to be considered in achieving a reduction in all waste and has been considered as part of this proposed.

9.5 It is estimated that some 40% of all waste is construction related. It has also been shown on a number of housing sites that as soon as the issue of waste starts to be addressed, significant improvements follow quickly across the site. There are two key elements to be considered:

> Appropriate construction methods and effective management;

> Re-use/recycling of materials on site.

9.6 The amount of waste materials arising from construction can be reduced by introducing regular audits to monitor and control site activities more closely, for example reviewing materials ordering and site practices to prevent damage and cross-contamination. Attention to the quantity of materials purchased and the way that these are offloaded, labelled and stored, can significantly reduce the amount of materials wasted. Wherever possible, the use of packaging and non-returnable pallets should be avoided, or they should be recycled or reused.

9.7 A Site Waste Management Plan (SWMP) will be implemented which will result in various benefits for the development, which include:

> Better control of risks relating to the materials and waste on the site;

> 'Good housekeeping' of waste and improved site safety;

> Demonstrating compliance with the legislative framework;

> A mechanism for demonstrating how waste is managed and minimised and how associated costs are controlled;

> A tool to aid compliance with various environmental management systems e.g. ISO14001;

> Compliance with contractual requirements from public and private sector clients; and

> A system to help make cost savings by better managing the supply chain of materials, and their storage, handling, recovery and eventual disposal.

9.8 Recycling of materials from the construction waste stream can provide valuable construction materials and relieves the existing pressure on landfill sites. By maximising the value extracted from these materials, and extending their life in this way, the demand for such materials from new sources is reduced and there is likely to be a long-term beneficial impact on the conservation of mineral resources such as primary aggregate.

10.BUILDING QUALITY

Daylight & Sunlight

10.1 Daylighting will be maximised throughout the development and where appropriate, solar control glazing will be installed to reduce solar gains.

10.2 Hodkinson Consultancy has undertaken an internal daylight assessment of the development proposals. This study has concluded that all the proposed rooms will achieve the Average Daylight Factor as recommended by the British Standard 8206.

Accessibility & Building Regulations Part M

10.3 The Applicant's commitment to inclusivity will ensure that the proposed development is scaled appropriately so as to respond to the needs of all its users. The Applicant will endeavour to incorporate the requirements of the Equality Act (2010) into their design, making reasonable adjustments to enable disabled access, regularly reviewing whether the buildings are accessible and effective, and providing necessary design adjustments where it is practical to do so.

10.4 The Minor Alterations to the London Plan requires 90% of new housing to meet Building Regulation requirement M4 (2) and 10% of new housing to meet Building Regulation requirement M4 (3). The new Building Regulations Part M4 (2) 'accessible and adaptable dwellings' is broadly equivalent to Lifetime Homes standards; Part M4 (3) 'wheelchair user dwellings' is broadly equivalent to London Wheelchair Housing Standards.

10.5 These standards are intended to ensure accessible and adaptable accommodation for everyone; young families, older people, individuals with a temporary or permanent physical impairment, and allow residents to stay in their home despite developing disabilities.

10.6 Both of the proposed dwelling will meet Building Regulation M4(3). This will ensure that the highest standards of accessibility are achieved, for example:

- Approach route to be safe and convenient for everyone and be step-free;
- Principle living area is within the entrance storey;
- Wheelchair accessible entrances which are sheltered and adequately lit;
- Accessible communal stairs and lifts;
- Doorways and hallways with clear opening widths;
- Adequate circulation space;
- Entrance level living space, bedspace, WC and shower drainage;
- Potential for ceiling hoists between a bedroom and bathroom;
- Wheelchair accessible bathrooms; and
- Accessible locations of service controls and window handles.

Home Office

10.7 It is anticipated that the homes will have provisions for a home office where this can be achieved. Encouraging people to live and work in the same locality is central to the sustainability agenda as it reduces the need to travel and creates more lively and vibrant communities.

10.8 It is anticipated that each room which is suitable for use as a home office will have provision of double electrical sockets, a broadband enabled telephone point, good ventilation (preferably through an openable window), good daylighting and sufficient room for a desk and either a filing cabinet or a bookshelf.

11.TRANSPORT

Sustainable Transport Strategy

11.1 Sustainable transport links are central to the sustainability debate. They provide a positive contribution to environmental, societal and economic sustainability of the places they serve.

11.2 The site is well located within close proximity to a number of transport links which include the following:

> Belsize Park Underground station within approximately 350metres, providing Northern Line services to Morden and Edgware;

> Hampstead Heath Overground station within approximately 606metres, providing direct links to Stratford and Clapham Junction.

11.3 A range of bus services also pass close to the site, including the C11, 268, 168, 46 and the 24.

11.4 The very good level of access to public transport is reflected in the Public Transport Accessibility Level (PTAL) rating of 5 which shows a very good level of accessibility to public transport services.

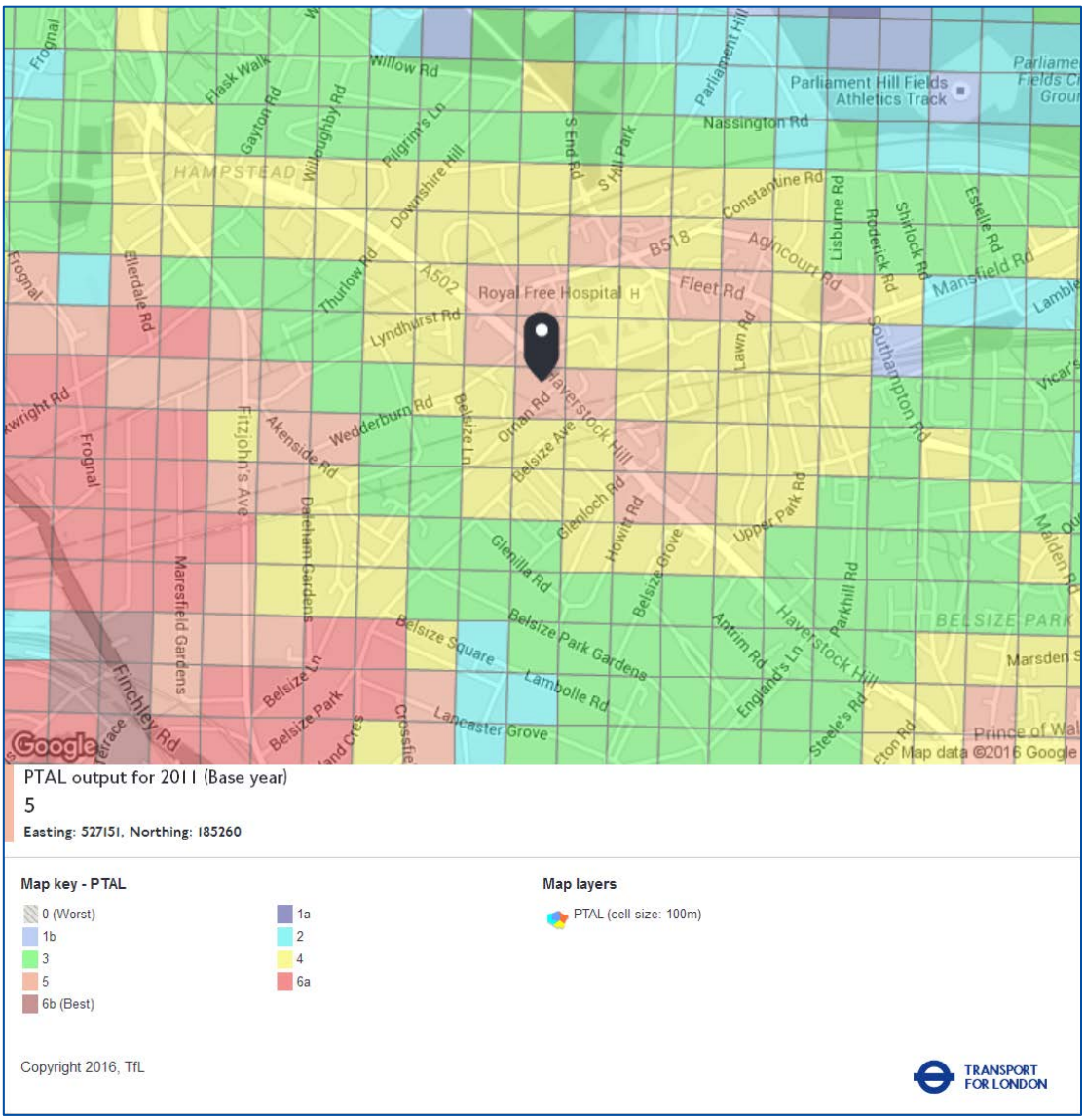

Figure 3: PTAL Map - www.tfl.gov.uk

11.5 The location of the site is therefore considered to be sustainable in terms of its transport links and accessibility.

Working from Home

11.6 As discussed in the previous chapter, the concept of working from home will be promoted by the provision of internal services and infrastructure, enabling the potential for home offices to be established in each dwelling. This will contribute to the vibrancy of this scheme, whilst offering additional environmental benefits in terms of potential reduced demand for transportation.

12.REDUCING CONSTRUCTION IMPACTS

Monitoring Construction Site Impacts

12.1 During the construction processes, control procedures will be put in place to minimise noise and dust pollution and roads will be kept clean. The management systems will generally comprise procedures and working methods that are approved by the development team together with commercial arrangements to ensure compliance.

12.2 Further to the above, additional measures will be adopted to minimise the impact on the local area during construction. This will include the limiting of air and water pollution in accordance with best practice principles, as well as the recording, monitoring and displaying of energy and water use from site activities during construction.

13.CONCLUSION

13.1 The purpose of this Sustainability Statement is to demonstrate that the proposed development at Ornan Court in the London Borough of Camden is considered sustainable, as measured against local, regional and national planning policies.

13.2 The development proposes the development of two wheelchair accessible lower ground apartments in Ornan Court, on Ornan Road in Belsize Park. Through the incorporation of sustainable design and construction methods, energy and water saving measures and waste reduction techniques, a good quality and sustainable development is proposed. The key sustainability features outlined in this Sustainability Statement are listed below:

> Water efficiency measures and devices will be installed in the homes to target a maximum daily water usage of 105 litres/person/day in accordance with the London Plan and the tighter Building Regulations optional requirement;

> Recycling facilities will be provided for domestic and construction related waste;

> The use of sustainable transport modes will be encouraged, and the site benefits from very good connections to a range of surrounding transport services;

> The dwellings will be designed to meet Building Regulation Part M 4(3) Category 3 requirements (wheelchair user dwellings), ensuring they are accessible and can be used by all;

> 100% of the proposed development will be on an existing site. Developing under-used sites is supported by the NPPF;

> Where practical, building materials will be sourced locally to reduce transportation pollution and support the local economy. All timber will be purchased from responsible forest sources. Materials will be selected based on their environmental impact, with preference given to high rated materials from the BRE Green Guide to Specification where possible; and

> Construction impacts will be minimised and monitored where possible.

HODKINSON

Appendix A
Water Efficiency Calculator

Water Efficiency Calculator (Internal: 105 litres/person/day)
Ornan Court

	Internal Water Consumption			
Installation Type	**Unit of Measure**	**Capacity / Flow Rate**	**Litres/person/day**	**Notes**
WC	Full Flush Volume (Litres)	**6**	8.76	Low flush WCs will be installed to reduce the volume of water consumed during flushing. All WCs will have dual flush cisterns which will provide both part (4L) and full (6L) flushes.
	Part Flush Volume (Litres)	**4**	11.84	
Bath	Capacity (Litres to overflow)	**150**	16.50	All baths will have reduced capacities of 150 litres (excluding displacement). The bath taps are not included in this calculation as they are already incorporated into the use factor for the baths.
Shower	Flow Rate (Litres/min)	**8**	34.96	Shower flow rates will be reduced to 8 litres/minute using flow restrictors fixed to the shower heads. These contain precision-made holes or filters to restrict water flow and reduce the outlet flow and pressure.
Kitchen Tap	Flow Rate (Litres/min)	**4**	12.12	Kitchen taps will be reduced to 4 litres/minute using flow restrictors which will be fitted within the console of the tap or in the pipework.
Basin Tap	Flow Rate (Litres/min)	**3**	6.32	All taps (excluding kitchen taps) will be reduced to 3 litres/minute using flow restrictors. Where multiple taps are to be provided the average flow rate will be used.
Washing Machine	Water Consumption (Litres/kg)	**8.17**	17.16	Water efficient washing machines or washer-dryers will be specified. The make and model numbers of the appliances are unknown at this stage therefore a default figure of 8.17 litres/kg has been assumed.
Dishwasher	Water Consumption (Litres/place setting)	**1.25**	4.50	All dishwashers will be water efficient. The make and models numbers are unknown therefore a default figure of 1.25 litres/place setting has been assumed at this stage.
Net Internal Water Consumption (Litres/person/day)			**112.2**	
Normalisation Factor			**0.91**	
Total Water Consumption (Litres/person/day)			**102.10**	The internal water consumption target of ≤105 litres/person/day will be achieved.