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Sustainability Statement

18-26 Hatton Wall
Camden

On behalf of
Boultbee Brooks (Hatton Wall) Ltd.

10/09/2014
Job Ref: 5289

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EXECUTIVE SUMMARY

I. This Sustainability Statement has been prepared for the proposed refurbishment and extension of the building at 18-26 Hatton Wall in the London Borough of Camden. The proposals include the refurbishment of the existing office building, extension of the third floor level and minor extension at the ground floor entrance area. Proposed new fourth and fifth floors will house 7 new residential units.

II. This Sustainability Statement details how the design team has considered the site's potential environmental impacts and how those impacts can be managed and mitigated in line with the London Borough of Camden's planning policies and the Code for Sustainable Homes (Addendum 2014) environmental assessment scheme.

III. The proposed development has targeted sustainability throughout the lifetime of the building. In particular, energy and water efficiency measures will be integral to the building's design and specification. The building has been designed to avoid excessive requirements for heating and cooling, along with measures to reduce the overall impact of the construction phase. The proposed redevelopment satisfies the high standards of sustainability as prescribed by the London Plan and London Borough of Camden planning policy.

IV. The design will feature on-site renewable energy technologies in the form of a photovoltaic panel array and air source heat pumps, which in conjunction with energy efficiency measures will deliver an overall total regulated carbon emissions reduction of 19.3% against Building Regulations 2013.

V. The Code for Sustainable Homes pre-assessment for the residential units demonstrates that the proposed development can achieve a rating of Level 4 with a score of 69.94%.

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1.0 INTRODUCTION

1.0.1 This Sustainability Statement, which includes a Code for Sustainable Homes (Code) pre-assessment, has been prepared by Metropolis Green on behalf of Boultbee Brooks (Hatton Wall) Ltd, to accompany the planning application submitted to the London Borough of Camden, for the redevelopment of the building at 18-26 Hatton Wall, EC1N 8JH.

1.0.2 This document explains the Code assessment process, describes how the Code requirements will be achieved by the proposed development and also sets out how the sustainability principles found in Camden's Core Strategy Policy CS13 are to be addressed.

1.0.3 This report highlights where a sustainability standard can be met and how the principle will be achieved. This report assumes a basic understanding of the Code assessment process. However, for further information please refer to the Code for Sustainable Homes Technical Guide November 2010[1] and 2014 addendum[2]. A Code for Sustainable Homes Pre-Assessment for the proposed 7 residential units has been prepared and is found in Appendix A. Section 4.0 of this report outlines how the proposed development will address the various issues found within the Code.

1.0.4 The pre-assessment attached in Appendix A to this report shows that the development has the potential to achieve the required Code Level 4 with a score of 69.94%.

1.0.5 A rating under the BREEAM environmental assessment scheme has not been targeted for the refurbishment of the existing office building. It has been deemed not required by the design team, for the reasons set out in Section 3.4. However, it is considered that the energy hierarchy has been applied, significantly improving the energy performance of the non-residential areas. Through these improvements and the measures undertaken through the Code assessment, the proposed redevelopment will undoubtedly deliver a significant environmental performance improvement, which will be above and beyond common practice.

1.0.6 This Sustainability Statement should be read alongside the Energy Strategy prepared by Metropolis Green, the Design and Access Statement prepared by Gpad Architects and other supplemental environmental reports submitted with the application.

[1] https://www.gov.uk/government/publications/code-for-sustainable-homes-technical-guidance
[2]https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/315504/250414__Code_Addedum_2014_Combined_Final_V10.pdf

2.0 SITE AND PROPOSED DEVELOPMENT

2.1 Site and Surrounding Area

2.1.1 The subject site is located in the southern part of the Borough, bordering Islington to the east and the City of London to the South. Leather Lane and Saffron Hill form the west and east boundaries of the Ely Estate, which was constructed in 1292 by the Bishop of Ely to house his Palace. This is the area currently known as Hatton Garden. The Church of St Ethedreda was part of this estate and still remains on Ely Place.

2.1.2 Hatton Wall is a typical street within the Hatton Garden area: narrow, with little space for cars and on a hill. Tall buildings front the pavement, and their mix includes a variety of periods, uses and styles.

2.2 Proposed Development

2.2.1 The proposals respect the mix of scales and characters in the Hatton Garden area, by providing a sympathetic refurbishment with contemporary extensions of the existing B1 space and the introduction of 7 residential dwellings in total, comprising one, two and three bedroom flats with terraces.

2.2.2 For more information regarding the design of the proposal, please refer to the drawings and the Design and Access Statement prepared by Gpad Architects.

3.0 POLICY CONTEXT

3.0.1 Sustainable development is the "golden thread" principle underpinning planning and planning has a key role to play in the creation of sustainable communities. In order to ensure the implementation of sustainable development and to determine the targets and standards to be met by the proposed development, it is necessary to review the relevant national, regional and local planning policies with respect to sustainability and the site's location. A summary of the planning policy context for the site and proposed development is provided below.

3.1 National Policy

National Planning Policy Framework, March 2012

3.1.1 The National Planning Policy Framework (NPPF) was published in March 2012. It sets out the Government's planning policies for England and how these policies are expected to be applied. The policies in the document, taken as a whole, constitute the Government's view of what sustainable development in England means in practice for the planning system.

3.1.2 Paragraph 14 of the NPPF states that:

> At the heart of the National Planning Policy Framework 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

3.1.3 The NPPF outlines a set of core land-use planning principles that should underpin plan-making and decision-taking, three of which are particularly relevant to this report. Under paragraph 17, these principles are that planning should:

> - support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change, and encourage the reuse of existing resources, including conversion of existing buildings, and encourage the use of renewable resources (for example, by the development of renewable energy);
> - contribute to conserving and enhancing the natural environment and reducing pollution. Allocations of land for

> development should prefer land of lesser environmental value, where consistent with other policies in this Framework; and
>
> - encourage the effective use of land by reusing land that has been previously developed (brownfield land), provided that it is not of high environmental value.

3.1.4 Design is addressed in section 7 of the NPPF, and paragraph 56 states:

> The Government attaches great importance to the design of the built environment. Good design is a key aspect of sustainable development, is indivisible from good planning, and should contribute positively to making places better for people.

3.1.5 Meeting the challenge of climate change is addressed in section 10 of the NPPF. In here, paragraph 93 notes that planning plays a key role in helping shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change and supporting the delivery of renewable and low carbon energy and associated infrastructure. This is central to the economic, social and environmental dimensions of sustainable development.

3.1.6 Further to the above, paragraphs 95 and 96 state:

> 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.
>
> In determining planning applications, local planning authorities should expect new development to:
>
> - comply with adopted Local Plan policies on local requirements for decentralised energy supply unless it can be demonstrated by the applicant, having regard to the type of development involved and its design, that this is not feasible or viable; and
> - take account of landform, layout, building orientation, massing and landscaping to minimise energy consumption.

3.1.7 Conserving and enhancing the natural environment is addressed in section 11 of the NPPF. In this section, excerpts from paragraph 109 state that the planning system should contribute to and enhance the natural and local environment by:

- minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures; and
- preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability.

3.1.8 Paragraph 118 notes that when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by encouraging opportunities to incorporate biodiversity in and around developments.

3.1.9 Noise is addressed under paragraph 123 which notes that planning policies and decisions should aim to:

- avoid noise from giving rise to significant adverse impacts on health and quality of life as a result of new development; and
- mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new development, including through the use of conditions.

3.1.10 Additionally, paragraph 125 notes that by encouraging good design, planning policies and decisions should limit the impact of light pollution from artificial light on local amenity.

3.2 Regional Policy

The London Plan: Spatial Development Strategy for Greater London, July 2011

3.2.1 The London Plan was published in July 2011 and is the overall strategic plan for London, setting out an integrated economic, environmental, transport and social framework for the development of London until 2031. The policies relevant to this report are found in Chapter 5 (and to a lesser extent in Chapter 7) of the London Plan.

Policy 5.2: Minimising Carbon Dioxide Emissions

3.2.2 Policy 5.2 addresses carbon dioxide emission reductions and energy assessment requirements. The policy states:

> **Planning decisions**
>
> A. Development proposals should make the fullest contribution to minimising carbon dioxide emissions in accordance with the following energy hierarchy:
>
> 1. Be lean: use less energy
> 2. Be clean: supply energy efficiently
> 3. Be green: use renewable energy
>
> D. As a minimum, energy assessments should include the following details:
>
> a. calculation of the energy demand and carbon dioxide emissions covered by the Building Regulations and, separately, the energy demand and carbon dioxide emissions from any other part of the development, including plant or equipment, that are not covered by the Building Regulations at each stage of the energy hierarchy
>
> b. proposals to reduce carbon dioxide emissions through the energy efficient design of the site, buildings and services
>
> c. proposals to further reduce carbon dioxide emissions through the use of decentralised energy where feasible, such as district heating and cooling and combined heat and power (CHP)
>
> d. proposals to further reduce carbon dioxide emissions through the use of on-site renewable energy technologies.
>
> E. The carbon dioxide reduction targets should be met on-site. Where it is clearly demonstrated that the specific targets cannot be fully achieved on-site, any shortfall may be provided off-site or through a cash in lieu contribution to the relevant borough to be ring fenced to secure delivery of carbon dioxide savings elsewhere.

Policy 5.3: Sustainable Design and Construction

3.2.3 Policy 5.3 is the main policy within the London Plan which addresses sustainable design and construction and states:

> **Strategic**
>
> A. The highest standards of sustainable design and construction should be achieved in London to improve the environmental performance of new developments and to adapt to the effects

of climate change over their lifetime.

Planning decisions

B. Development proposals should demonstrate that sustainable design standards are integral to the proposal, including its construction and operation, and ensure that they are considered at the beginning of the design process.

Policy 5.4: Retrofitting

3.2.4 Policy 5.4 addresses retrofitting of buildings and states:

Strategic

A. The environmental impact of existing urban areas should be reduced through policies and programmes that bring existing buildings up to the Mayor's standards on sustainable design and construction. In particular, programmes should reduce carbon dioxide emissions, improve the efficiency of resource use (such as water) and minimise the generation of pollution and waste from existing building stock.

3.2.5 The London Plan contains a number of other policies relevant to this report, which are not outlined in full. These policies can be found in the list below, and reference should be made to the London Plan Chapter 5 (Climate Change) for further information:

- Policy 5.5: Decentralised Energy Networks
- Policy 5.6: Decentralised Energy in Development Proposals
- Policy 5.7: Renewable Energy
- Policy 5.8: Innovative Energy Technologies
- Policy 5.9: Overheating and Cooling
- Policy 5.10: Urban Greening
- Policy 5.11: Green Roofs and Development Site Environs
- Policy 5.12: Flood Risk Management
- Policy 5:13: Sustainable Drainage
- Policy 5.15: Water Use and Supplies

3.3 Local Policy

Camden Core Strategy, November 2010

3.3.1 The London Borough of Camden's Core Strategy sets out the key elements of the Council's planning vision and strategy for the borough. It is the central part of Local Development Framework (LDF) and was adopted in November 2010.

3.3.2 The Core Strategy contributes to achieving the vision and objectives of Camden's Community Strategy and helps the Council's partners and other organisations deliver relevant parts of their programmes. It covers the physical aspects of location and land use but also addresses other factors that make places attractive, sustainable and successful, such as social and economic matters. It plays a key part in shaping the kind of place Camden will be in the future, balancing the needs of residents, businesses and future generations.

3.3.3 Within the Core Strategy, specific policies set out the Council's approach to managing Camden's growth so that it is sustainable, meeting needs for homes, jobs and services, and protecting and enhancing quality of life and the borough's many valued and high quality places. Section 3 focuses on delivering the key elements of Camden's strategy relating to:

- making Camden more sustainable and tackling climate change, in particular improving the environmental performance of buildings, providing decentralised energy and heating networks, and reducing and managing our water use;
- promoting a more attractive local environment through securing high quality places, conserving our heritage, providing parks and open spaces, and encouraging biodiversity;
- improving health and well-being;
- making Camden a safer place while retaining its vibrancy; and
- dealing with our waste and increasing recycling.

CS13: Tackling climate change through promoting higher environmental standards

3.3.4 Policy CS13 sets out the approach that developers should take when considering energy and carbon reductions for developments:

Reducing the effects of and adapting to climate change

The Council will require all development to take measures to minimise the effects of, and adapt to, climate change and encourage all development to meet the highest feasible environmental standards that are financially viable during construction and occupation by:

a) ensuring patterns of land use that minimise the need to travel by car

and help support local energy networks;

b) promoting the efficient use of land and buildings;

c) minimising carbon emissions from the redevelopment, construction and occupation of buildings by implementing, in order, all of the elements of the following energy hierarchy:

   1. ensuring developments use less energy,
   2. making use of energy from efficient sources, such as the King's Cross, Gower Street, Bloomsbury and proposed Euston Road decentralized energy networks;
   3. generating renewable energy on-site; and

d) ensuring buildings and spaces are designed to cope with, and minimise the effects of, climate change.

The Council will have regard to the cost of installing measures to tackle climate change as well as the cumulative future costs of delaying reductions in carbon dioxide emissions.

Local energy generation

The Council will promote local energy generation and networks by:

e) working with our partners and developers to implement local energy networks in the parts of Camden most likely to support them,

f) protecting existing local energy networks where possible (e.g. at Gower Street and Bloomsbury) and safeguarding potential network routes (e.g. Euston Road).

Water and surface water flooding

The Council will make Camden a water efficient borough and minimise the potential for surface water flooding by:

g) protecting our existing drinking water and foul water infrastructure, including Barrow Hill Reservoir, Hampstead Heath Reservoir, Highgate Reservoir and Kidderpore Reservoir;

h) making sure development incorporates efficient water and foul water infrastructure;

i) requiring development to avoid harm to the water environment, water quality or drainage systems and prevents or mitigates local surface water and down-stream flooding, especially in areas up-hill from, and in, areas known to be at risk from surface water flooding such as South and West Hampstead, Gospel Oak and King's Cross.

Camden's carbon reduction measures

The Council will take a lead in tackling climate change by:

j) taking measures to reduce its own carbon emissions;

k) trialling new energy efficient technologies, where feasible; and

l) raising awareness on mitigation and adaptation measures.

3.3.5 Details of how developments are expected to take climate change into account are set out in Camden Development Policies, and discussed further below.

Camden Development Policies, November 2010

3.3.6 Camden Development Policies contributes towards delivering the Core Strategy by setting out detailed planning policies that the Council will use when determining applications for planning permission, to achieve the vision and objectives of the Core Strategy.

Policy DP22: Promoting sustainable design and construction

3.3.7 Policy DP22 has been developed to provide details on sustainability standards and states:

> The Council will require development to incorporate sustainable design and construction measures. Schemes must:
>
> a) demonstrate how sustainable development principles, including the relevant measures set out in paragraph 22.5, have been incorporated into the design and proposed implementation; and
>
> b) incorporate green or brown roofs and green walls wherever suitable.
>
> The Council will promote and measure sustainable design and construction by:
>
> c) expecting new build housing to meet Code for Sustainable Homes Level 3 by 2010 and Code Level 4 by 2013 and encouraging Code Level 6 (zero carbon) by 2016;
>
> d) expecting developments (except new build) of 500sqm of residential floorspace or above or 5 or more dwellings to achieve "very good" in EcoHomes assessments prior to 2013 and encouraging "excellent" from 2013;
>
> e) expecting non-domestic developments of 500sqm of floorspace or above to achieve "very good" in BREEAM assessments and "excellent" from 2016 and encouraging zero carbon from 2019.
>
> The Council will require development to be resilient to climate change by ensuring schemes include appropriate climate change adaptation measures, such as:
>
> f) summer shading and planting;
>
> g) limiting run-off;
>
> h) reducing water consumption;
>
> i) reducing air pollution; and
>
> j) not locating vulnerable uses in basements in flood-prone areas.

Policy DP23: Water

3.3.8 Policy DP23 contributes to the implementation of the strategy set out in Policy CS13 by seeking to reduce water consumption and limit the amount of waste water entering the combined storm water and sewer network:

> The Council will require developments to reduce their water consumption, the pressure on the combined sewer network and the risk of flooding by:
>
> a) incorporating water efficient features and equipment and capturing, retaining and re-using surface water and grey water on-site;
>
> b) limiting the amount and rate of run-off and waste water entering the combined storm water and sewer network through the methods outlined in part a) and other sustainable urban drainage methods to reduce the risk of flooding;
>
> c) reducing the pressure placed on the combined storm water and sewer network from foul water and surface water run-off and ensuring developments in the areas identified by the North London Strategic Flood Risk Assessment and shown on Map 2 as being at risk of surface water flooding are designed to cope with the potential flooding;
>
> d) ensuring that developments are assessed for upstream and downstream groundwater flood risks in areas where historic underground streams are known to have been present; and
>
> e) encouraging the provision of attractive and efficient water features.

Camden Planning Guidance Sustainability (CPG3), September 2013

3.3.9 The Core Strategy is supported by Supplementary Planning Documents and CPG3 contains advice and guidance for developers on ways to achieve carbon reductions and more sustainable developments. It also highlights the Council's requirements and guidelines which support the relevant Local LDF policies, including DP22 as noted above.

3.3.10 Section 8 notes that developments should aim for at least 10% of the total value of materials used to be derived from recycled and reused sources. Major developments are anticipated to be able to achieve 15-20% of the total value of materials used to be derived from recycled and reused sources.

3.3.11 Section 9 covers sustainability assessment tools, with the Code being of particular relevance to this development. The key message of the document is that:

A new build dwelling will have to be designed in line with the Code for Sustainable Homes

A development of 500sqm or more of non-residential floor space will need to be designed in line with BREEAM.

3.3.12 Developers are strongly encouraged to meet the following standards in accordance with Development Policy DP22 and CPG3:

Building Type	Time period	Minimum rating	Minimum standard for categories (% of un-weighted credits)
Residential	2013 - 2015	Level 4	Energy 50% Water 50%
	2016 +	Level 6 'zero carbon'	Materials 50%
Non Residential	2013 +	Excellent	Energy 60% Water 60% Materials 40%

3.3.13 Section 10 expects all developments to incorporate brown roofs, green roofs and green walls unless it is demonstrated this is not possible or appropriate. This includes new and existing buildings.

3.3.14 Section 11 requires that developments must not increase the risk of flooding, and are required to put in place mitigation measures where there is known to be a risk of flooding.

3.3.15 Section 12 expects all development to consider the impact of climate change and be designed to cope with the anticipated conditions.

3.4 BREEAM

3.4.1 BREEAM is a performance based assessment method and certification scheme for new non-residential buildings. The primary aim of BREEAM is to mitigate the life cycle impacts of new buildings on the environment in a robust and cost effective manner.

3.4.2 As noted above, Policy DP22 requires development of 500sqm or more of non-residential floor space to be designed in line with BREEAM Very Good. In the case of the proposed redevelopment, the floor area of the proposed extension of the existing office building at the ground and third floor levels is less than 500sqm (proposed at 255.1sqm), and thus the policy does not apply in this case.

3.4.3 We further understand that the London Borough of Camden has accepted that B1 (office) use is the current lawful use of the existing building. As such, the refurbishment of the existing building for future B1 (office) use can be undertaken without the need for planning permission.

3.4.4 In light of the above reasons, it is considered that the requirement for a BREEAM assessment does not apply for the proposed redevelopment. Please note that the retention of building façades results in constraints with respect to energy improvements; however, the energy hierarchy has been applied to the proposed redevelopment, in line with London Plan policy regarding retrofitting, and has resulted in significantly improved energy performance. Please refer to the Energy Strategy prepared by Metropolis Green for further information.

3.4.5 The proposed sustainable design and construction measures applied across the proposed redevelopment for the purposes of the Code pre-assessment will undoubtedly still deliver a significant environmental performance improvement for the site, which will be above and beyond common practice. These measures, and analysis of how they seek to comply with London Borough of Camden policies, are presented in Section 4.0 of this report below.

3.5 Code for Sustainable Homes

3.5.1 The Code for Sustainable Homes (Code) is an environmental assessment for rating and certifying the designed performance of new dwellings. It is a national standard and was published by the Department for Communities and Local Government in December 2006. The Building Research Establishment (BRE) are responsible for administering and monitoring the scheme and are also responsible for all certification and quality assurance of this national environmental standard for housing.

3.5.2 The Code measures the sustainability of a new home against 9 categories of sustainable design, rating the ‘whole home’ as a complete package. The Code uses a 1 to 6 star rating system to communicate the overall level of the environmental performance of the new home.

3.5.3 The 9 categories of sustainability under the Code are: Energy, Water, Materials, Surface Water Run-off, Waste, Pollution, Health and Wellbeing, Management and Ecology.

3.5.4 Each category consists of a number of issues, and each issue seeks to mitigate the impact of a new build element of the building against performance targets and assessment criteria. Points in each category are weighted and therefore individual credits across the categories score differently. For example, credits available in the Energy category have a heavier weighting than those in the Pollution category.

3.5.5 The Code assessment is completed in two phases – the Design Stage and the Post Construction Stage (PCS). Only after the PCS assessment has been completed and all the evidence for achieving the target level has been submitted will the final certification for the dwelling be issued by BRE. For the purposes of planning, a Code Pre-Assessment has been submitted to ensure that the design team set a strategy for achieving the target Code level, also demonstrating to the London Borough of Camden that the scheme is able to achieve the specified level of the Code.

3.6 Code for Sustainable Homes Addendum 2014

3.6.1 As of May 2014, alterations were made to the Code in order to bring it in line with regulatory and national guidance changes which have occurred recently, in particular the introduction of Part L 2013 Building Regulations and SAP 2012 methodology. Standards have not changed.

3.6.2 No alterations have been made to the format and layout of the Code. In addition, the weightings and number of credits available for each Code category remain unchanged.

3.6.3 The Code 2014 pre assessment tool has been used for this report.

4.0 CODE FOR SUSTAINABLE HOMES PRE-ASSESSMENT SUMMARY

4.0.1 This section of the report describes how the design team intends to achieve credits in each of the nine Code categories. It is important to note that as the project progresses some of the scores indicated in this report may change. However the design team are aware of the sustainability requirements of Camden Development Policy DP22 and paragraph 22.7, and will ensure that at all times the proposed development will remain above the threshold for Code Level 4.

4.0.2 The pre-assessment appended to this document shows that the proposed dwellings on the site have the potential to achieve Code Level 4 certification with a total predicted score of 69.94%.

4.0.3 The pre-assessment shows that the project team has clearly demonstrated how the proposed development aligns with the Core Strategy's intention to improve the environmental performance of buildings. In particular, energy and water efficiency measures will be integral to the development's design and specification.

4.0.4 The following sections summarise the credits that have been allocated in each category.

4.1 Energy

4.1.1 The Energy category is arguably one of the most important impact areas of the Code. The improvement of Dwelling Emission Rate (DER) over Target Emission Rate (TER), when calculated according to Building Regulations Part L1A, will be achieved through high quality construction standards, high quality windows, energy efficient pumps, fans and ventilation equipment, along with high levels of insulation, air source heat pumps (ASHPs) and photovoltaic (PV) panels. This will result in very energy efficient dwellings with high fabric energy efficiency. Such methods will be implemented to achieve best practice in thermal performance and heat loss parameters achieving beyond Building Regulations requirements.

4.1.2 Standard Assessment Procedure (SAP) calculations have been completed as part of the Energy Strategy for the proposed development, prepared by Metropolis Green. The approach is a combination of highly efficient fabric, efficient services and low/zero carbon technologies, ensuring reduced CO_2 emissions over the lifetime of the building. The SAP calculations have indicated that the proposed development can achieve: 5.7 credits for Ene 1 – Dwelling Emission Rate; 4.1 credits for Ene 2 – Fabric Energy Efficiency; and a minimum of 1 credit for Ene 7 – Low and Zero Carbon Technologies.

The SAP calculations have demonstrated that the proposed development is able to meet the mandatory requirements of Code Level 4 in the Energy category. Further credits may be available under issues Ene 1, Ene 2 and Ene 7 upon the completion of more detailed SAP calculations at a further design stage.

4.1.3 For further information regarding energy, please refer to the Energy Strategy prepared by Metropolis Green for the proposed development.

4.1.4 The design team have made a commitment to provide meters that inform occupants of their energy consumption, enabling them to make decisions and manage the dwellings in a way that reduces energy consumption. This commitment ensures 2 of the 2 available credits for issue Ene 3 – Energy Display Devices.

4.1.5 Compliant drying space will be provided to ensure that 1 credit is achieved for issue Ene 4 – Drying Space.

4.1.6 The design team has committed to providing the dwellings with compliant white goods that meet the requirements set out in the Code technical guidance. As such, 2 credits are allocated for issue Ene 5 – Energy Labelled White Goods.

4.1.7 External Lighting is addressed by issue Ene 6. The design team have committed to complying with the requirements and as such the dwellings will score maximum credits for this issue.

4.1.8 As part of the drive for more sustainable transport solutions, Code compliant cycle storage spaces will be provided for the dwellings in the rear courtyard. As a result of this provision, 2 credits have been allocated under issue Ene 8 – Cycle Storage.

4.1.9 A Code compliant home office will be provided in each dwelling, minimising the need to travel by car, required by Policy CS13. 1 credit has been allocated for Ene 9 – Home Office.

4.1.10 Overall, 20.8 of the 31 credits available in the Energy category can be achieved, which as a result of the weighting factors will deliver 24.42 points to the scheme in total.

4.2 Water

4.2.1 Achieving the mandatory element of the Water category is a challenging area of the Code. The scheme will aim to reduce internal water consumption through the careful specification of water efficient fixtures and fittings including taps, WCs, baths and showers that consume less potable water in use than standard specifications for the same type of fittings throughout the dwellings. This approach complies with Policy DP22, requiring development to include appropriate climate

change adaptation measures such as reducing water consumption, and Policy DP23, requiring development to incorporate water efficient features. Through the above noted measures the scheme will achieve 3 out of the 5 credits for issue Wat 1 – Indoor Water Use.

4.2.2 Overall the scheme can achieve 3 of the 6 credits available in the Water category which as a result of the weighting factors will deliver 4.50 points to the scheme in total. This will ensure the proposed development meets the mandatory requirements of Code Level 4 in the Water category.

4.3 Materials

4.3.1 The Materials category of the Code promotes the sustainable procurement and use of materials, taking into account the environmental impacts of materials and the responsible sourcing of basic building and finishing elements by using the BRE Green Guide to Specification (Green Guide).

4.3.2 For every Code level there is a mandatory requirement of the Code to achieve an A+ to D rating for at least three out of five building elements, which include; the Roof, External Walls, Internal Walls, Upper and Ground Floors, and Windows. Thereafter the higher the Green Guide rating, the more points are awarded. This supports the selection of new materials in the proposed development to be allocated with low life cycle impacts and is rewarded under Code issue Mat 1 – Environmental Impact of Materials.

4.3.3 The design team have committed to achieving a high percentage of credits for this issue. Therefore, new building elements will be specified with regard to their low environmental impact and high environmental performance and should achieve an ‘A’ or ‘A+’ rating in the Green Guide. Subsequently 10 out of 15 credits have currently been allocated for Mat 1.

4.3.4 Issues Mat 2 and Mat 3 target responsible sourcing of basic and finishing building materials throughout the design and construction stage. At this stage, 3 out of 6 credits are currently anticipated for issue Mat 2 and 2 out of 3 credits are anticipated for issue Mat 3. Pursuing these credits will enable the development to achieve the target of at least 10% of the total value of materials used to be derived from recycled and reused sources, required in Section 8 of CPG3. There is potential for flexibility within these issues and they can therefore be revisited at the detailed design stage.

4.3.5 Overall 15 of the 24 credits available in the Materials category can be achieved, which as a result of the weighting factors will deliver 4.50 points to the scheme in total.

4.4 Surface Water Run-Off

4.4.1 The Surface Water Run-off category of the Code deals with the increased risk of localised flooding caused by new development and addresses wider issues of flood risk associated with climate change.

4.4.2 In order to meet the mandatory criteria for this credit area, Sur 1 – Management of Surface Water Run-off from Developments, the post construction conditions can be no worse than the existing conditions. In order to demonstrate compliance with the criteria an appropriately qualified drainage engineer will be required to carry out calculations as prescribed in the Code and in line with the guidance in the Sustainable Drainage Systems (SUDs) Manual (CIRIA C697, 2007) and Preliminary Rainfall Run Off Management for Developments (EA/DEFRA, 2007) or for at least the 1 year and 100 year return period events. Alternatively, if there is no increase in the man-made impermeable area as a result of the new development, then the peak rate and volume of run-off criteria do not apply.

4.4.3 The site currently contains only existing buildings and hardstanding surfaces. The proposed redevelopment will not increase the impermeable area on site, and the proposals include green roofs on both the main building and ground floor reception extension, as required by Policy DP22. As such, the development will efficiently manage its run-off and meet the mandatory requirements of Code issue Sur 1 – Management of Surface Water Run-off from Developments by default.

4.4.4 Drainage arrangements for the residential units will be via the main core. This will contain the required rainwater pipes and soil and vent pipes to link to the existing ground drainage system, providing efficient water and foul water infrastructure as required by Policy CS13.

4.4.5 The site is located in a zone with low annual probability of flooding, as noted by the Environment Agency flood risk map tool. As such, this site has a low risk of flooding and should achieve full credits for issue Sur 2 – Flood Risk. A flood risk assessment is required to award these credits as part of the full Code assessment.

4.4.6 Overall 2 of the 4 credits available in the Surface Water Run-off category can be achieved, which as a result of the weighting factors will deliver 1.10 points to the scheme in total.

4.5 Waste

4.5.1 The Waste category of the Code deals with waste and recycling issues for both the construction stage and the occupation stage of the development, ensuring the waste hierarchy is addressed.

4.5.2 The mandatory requirements for this category of the Code will be met by providing the required volume and space for external waste and recycling facilities. Compliant external storage space will be provided for the proposed development in the dedicated Residential Bin Store at the ground floor level. All dwellings will be provided with dedicated internal storage containers for recyclable waste with a total capacity of 30 litres.

4.5.3 The requirement in this category for a Site Waste Management Plan (SWMP) will be met through contractual agreements with the selected construction contractor. Credits have been allocated for this issue on the basis that the SWMP will be prepared in line with best practice and will include commitments and procedures for sorting, recycling and diverting at least 85% of waste from landfill. As such, 3 out of the 3 available credits have been allocated for this issue.

4.5.4 The London Borough of Camden provides a food waste collection service and compliant internal and external storage space for food waste will be provided in the proposed dwellings. Accordingly, 1 credit has been allocated under Was 3 – Composting.

4.5.5 Overall, all of the 8 credits available in the Waste category can be achieved, which as a result of the weighting factors will deliver 6.40 points to the scheme in total.

4.6 Pollution

4.6.1 All new insulation materials will be specified with a Global Warming Potential (GWP) of less than five, which have low embodied impact relative to their thermal properties. The proposed development has been allocated 1 credit for issue Pol 1 – Insulant GWP.

4.6.2 Code issue Pol 2 – NO_x Emissions, seeks to reduce the amount of nitrogen oxides (NO_x) released into the atmosphere by heating plant. Due to the specification of Air Source Heat Pumps, no credits will be achieved for this issue.

4.6.3 Overall 1 of the 4 credits available in the Pollution category can be achieved, which as a result of the weighting factors will deliver 0.70 points to the scheme in total.

4.7 Health and Wellbeing

4.7.1 The Health and Wellbeing category of the Code covers factors that can contribute to the overall comfort and welfare of the occupants.

4.7.2 Based on the layout and location of assessed rooms and the size and location of windows, it is considered that it is possible to achieve 2 of the 3 available credits for the issue Hea 1 – Daylighting. Further detailed daylighting calculations can be undertaken in line with the Code methodology at the detailed design stage for the full Code assessment.

4.7.3 As separating walls and floors exist between habitable spaces, it is anticipated that airborne sound insulation values will be at least 5db higher, and impact sound insulation values will be 5db lower, than the performance standards set out in the Building Regulations Approved Document Part E. Compliance will be shown via pre completion sound testing and 3 credits for sound insulation have been allocated for issue Hea 2 – Sound Insulation.

4.7.4 Accessible and sufficiently sized private balconies and terraces will be provided to all dwellings. As a result, 1 credit has been allocated under issue Hea 3 – Private Space.

4.7.5 It is anticipated that the Lifetime Homes criteria can be achieved in the proposed units. Therefore, 4 credits have been allocated for issue Hea 4 – Lifetime Homes.

4.7.6 It is anticipated that 10 of the 12 credits available in the Health and Wellbeing category can be achieved, which as a result of the weighting factor will deliver 11.66 points to the scheme in total. Please note, there may be scope to gain further points in this category once detailed average daylight calculations have been completed.

4.8 Management

4.8.1 The Management category of the Code targets both the construction stage and the way dwellings are used during occupation.

4.8.2 A Home User Guide will be developed to provide the occupants of the dwelling with information relating to the operation and environmental performance of the building and wider sustainability issues. A Home User Guide compliant with Code criteria will achieve 3 credits for issue Man 1 – Home User Guide.

4.8.3 The contractor will operate under the Considerate Constructors Scheme's Code of Considerate Practice (CCP) and will be required to achieve a score that represents achievement beyond best practice under the CCP scheme. As a result, full credits have been allocated for issue Man 2 – Considerate Constructors Scheme. In addition, the contractor will be required to achieve 4 of the 6 actions under Man 3 - Construction Site Impacts.

4.8.4 A commitment to achieving the required CCP score will achieve 2 credits under Man 2, whilst setting targets and monitoring construction site impacts will achieve 2 credits for Man 3.

4.8.5 An Architectural Liaison Officer or Crime Prevention Design Advisor will be consulted at an appropriate time and credits for a secure design will be achieved. Full credits have been allocated for Secured by Design Section 2 compliance in Man 4 - Security.

4.8.6 Overall 9 of the 9 credits available in the Management category can be achieved, which as a result of the weighting factors will deliver 10.00 points to the scheme in total.

4.9 Ecology

4.9.1 Ecology is an important and heavily weighted category of the Code, and as such the points available in this category are invaluable to help the scheme achieve Code Level 4.

4.9.2 The site currently contains only the existing buildings and hardstanding surfaces. It is considered that the site is of low ecological value; therefore credits have been allocated for issues Eco 1 - Ecological Value of Site and Eco 3 - Protection of Ecological Features. However, this credit allocation can be confirmed by a suitably qualified ecologist (SQE) at the time of the full Code assessment.

4.9.3 The landscaping proposals include planting beds in the courtyard, and green roofs will be installed on the main building and ground floor reception extension. A commitment to appoint an ecologist at the time of the full Code assessment has been made, and the SQE will make recommendations for ecological enhancement. The design team will follow their recommendations in order to ensure that 1 credit is achieved for issue Eco 2.

4.9.4 Code issue Eco 4 – Change in Ecological Value rewards development which does not impact too negatively on the ecological value of the site. It is anticipated at this stage a minimum of 2 credits can be allocated for a neutral impact. At the detailed design stage, and at the time of the full Code assessment, further credits may be available pending confirmation by a SQE.

4.9.5 At this stage it is possible to obtain a minimum of 5 of the 9 credits available in the Ecology category, which as a result of the weighting factors will deliver 6.66 points to the scheme in total.

5.0 CONCLUSION

5.1 This Sustainability Statement demonstrates that the proposed redevelopment of 18-26 Hatton Wall has targeted high standards of design and building quality, maximising a site with the opportunity for sustainable redevelopment.

5.2 The sustainability strategy focuses on the implementation of sustainable systems for energy, water, waste management, materials and construction management. Much attention has been given to reducing the environmental impact throughout the whole lifetime of the proposed new residential units, from construction through to occupation.

5.3 Following the energy hierarchy has enabled carbon reductions to be calculated for the proposed development, including the refurbishment and extension of the existing office building, and the proposed new residential units. The overall carbon reduction is calculated to be 19.3% through high fabric and services efficiency and the inclusion of renewable energy technology in the form of ASHPs and a PV array.

5.4 The total overall carbon reduction associated with the proposed dwellings has been determined following detailed SAP calculations. These calculations will demonstrate how the development will meet the Ene 1 credits required to achieve Code Level 4. The design team have considered energy efficiency and predicted carbon emissions, and identified opportunities to improve the fabric energy efficiency and thermal performance of the new dwellings.

5.5 Water consumption can be substantially reduced through the specification of water efficient fixtures and fittings, including low flow showers, low flow taps and dual flush toilets. This specification will meet the minimum requirements in the Water category for Code Level 4.

5.6 Existing building materials will be reused where practicable in the redevelopment and new environmentally friendly and responsibly sourced materials will be specified to the greatest extent possible. The scheme will incorporate best practice design principles with regards to noise pollution and the recommendations of appointed professionals will be adopted.

5.7 Waste and recycling facilities will be provided for all uses on the site and the reuse and disposal of demolition and construction waste will be guided by a Site Waste Management Plan. In addition, the site will be registered with the Considerate Constructors Scheme which will ensure that the site's impacts on the environment, the workforce and the general public are minimised.

5.8 The Code for Sustainable Homes pre-assessment demonstrates that the residential apartments can achieve Code Level 4 certification with a score of 69.94%. It should be noted that the pre-assessment has been undertaken early in the design process and is therefore subject to change. It is also important to note that the threshold for Code level 4 could be achieved by attaining a combination of credits other than those allocated in the pre-assessments.

5.9 In conclusion, the design team has considered the site's potential environmental impacts and this report details how those impacts will be managed and mitigated. The Code Assessor and the design team are satisfied that the approach to designing and constructing a sustainable development will result in a development that will achieve Code Level 4 certification.

APPENDIX A: CODE FOR SUSTAINABLE HOMES PRE-ASSESSMENT

Results

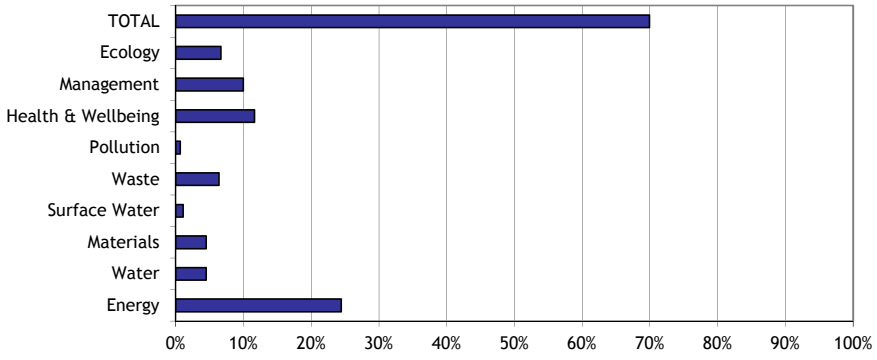
Development Name:	Hatton Wall
Dwelling Description:	7 New Build apartments
Name of Company:	Metropolis Green
Code Assessor's Name:	Miranda Pennington
Company Address:	4 Underwood Row London N1 7LQ
Notes/Comments:	Pre-assessment for Sustainability Statement, September 2014.

PREDICTED RATING - CODE LEVEL: 4

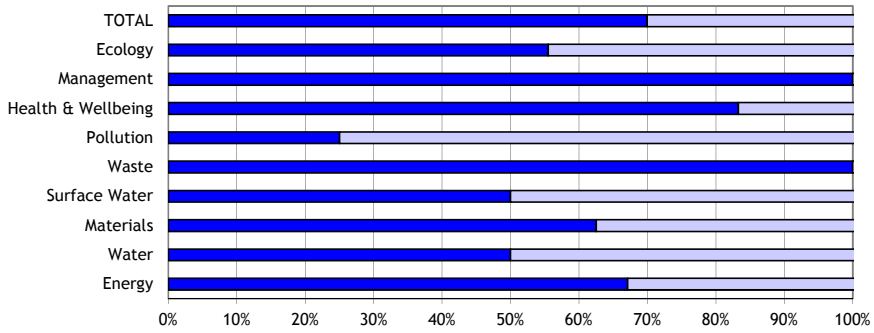
Mandatory Requirements: **All Levels**

% Points:	**69.94%**	**- Code Level: 4**
Breakdown:	**Energy**	**- Code Level: 4**
	Water	**- Code Level: 4**

Graph 1: Predicted contribution of individual sections to the total score and percentage of total achievable score



Graph 2: Predicted percentage of credits achievable: Total and by Category



NOTE: The rating obtained by using this Pre Assessment Estimator is for guidance only. Predicted ratings may differ from those obtained through a formal assessment, which must be carried out by a licensed Code assessor.

CATEGORY 1 ENERGY	Overall Level: 4	Overall Score	69.94
% of Section Credits Predicted: 67.09		Credits	Level
Contribution to Overall % Score: 24.42 points		20.8 of 31 Credits	Level 4
Ene 1 Dwelling Emission Rate	Credits are awarded based on the percentage improvement of the Dwelling Emission Rate (DER) over the Target Emission Rate (TER) as calculated using SAP 2012. Minimum standards for each Code level apply. The Code energy calculator can be used to calculate a predicted score. Enter the predicted score What is the predicted number of credits? 5.7 OR Are zero net CO_2 emissions achieved? ☐	5.7 of 10 Credits	Level 4
Ene 2 Fabric Energy Efficiency	Credits are awarded based on the Fabric Energy Efficiency (kWh/m^2/yr) of the dwelling. Minimum standards apply at Code levels 5 and 6. The Code energy calculator can be used to calculate a predicted score. Enter the predicted score Apartments, Mid-terrace ◉ OR End terrace, Semi and Detached ○ OR Staggered Mid terrace ○ What is the predicted number of credits? 4.1	4.1 of 9 Credits	-
Ene 3 Energy Display Devices	Credits are awarded where a correctly specified Energy Display Device is installed monitoring electricity and/or primary heating fuel consumption. Select whether the EDD monitors electricity and/or fuel None Specified ○ Primary Heating only ○ OR Electricity only ○ OR Electricity and primary heating fuel ◉	2 of 2 Credits	-

Issue		Credits	Level
Ene 4 Drying Space	One credit is awarded for the provision of either internal or external secure drying space with posts and footings or fixings capable of holding 4m+ of drying line for 1-2 bed dwellings and 6m+ for dwellings with 3 bedrooms or greater. Will drying space meeting the criteria be provided? Yes (●) OR No ( )	**1 of 1 Credits**	-
Ene 5 Energy Labelled White Goods	Credits are awarded where each dwelling is provided with either information about the EU Energy Labelling Scheme, White Goods with ratings ranging from A+ to B or a combination of the previous according to the technical guide. Select the appropriate option below EU Energy labelling information **only** ( ) A+ rated appliances (✓) A rated washing machine and dishwasher (✓) B rated tumble dryer or washer dryer ( ) EU Energy labelling information provided (✓)	**2 of 2 Credits**	-
Ene 6 External Lighting	Credits are awarded based on the provision of space lighting* with energy efficient light bulbs/lamps and security lighting fittings with appropriate control systems. Space Lighting None provided ( ) OR Non Code compliant lighting ( ) OR Code compliant lighting (●) Security Lighting None provided ( ) OR Non Code compliant lighting ( ) OR Code compliant lighting and controls (●) Dual lamp luminaires Compliant with both above criteria ☐ * Statutory safety lighting is not covered by this requirement	**2 of 2 Credits**	-

Issue		Credits	Level
Ene 7 Low or Zero Carbon Technologies	Credits are awarded where there is a 10% or 15% reduction in CO_2 emissions resulting from the use of low or zero carbon technologies. Select % contribution made by low or zero carbon technologies Less than 10% of demand ○ OR 10% of demand or greater ◉ OR 15% of demand or greater ○	**1 of 2 Credits**	-
Ene 8 Cycle Storage	Credits are awarded where adequate, safe, secure and weather proof cycle storage is provided according to the Code requirements. Fill in the development details below Number of bedrooms: 1 Number of cycles stored per dwelling* 1.0 * if you have storage for 1 cycle per two dwellings insert 0.5 in number of cycles stored per dwelling	**2 of 2 Credits**	-
Ene 9 Home Office	A credit is awarded for the provision of a home office. The location, space and services provided must meet the Code requirements. Will there be provision for a Home Office? Yes ◉ OR No ○	**1 of 1 Credits**	**-**

CATEGORY 2 WATER	Overall Level: 4	Overall Score	69.94
% of Section Credits Predicted: 50.00		Credits	Level
Contribution to Overall Score: 4.50 points		3 of 6 Credits	Level 4
Wat 1 Indoor Water Use	Credits are awarded based on the predicted average household water consumption, calculated using the Code Water Calculator Tool. Minimum standards for each code level apply. Select the predicted water use / Mandatory Requirement greater than 120 litres/ person/ day ○ OR ≤ less than 120 litres/ person/ day ○ OR ≤ less than 110 litres/ person/ day ○ OR ≤ less than 105 litres/ person/ day ◉ OR ≤ less than 90 litres/ person/ day ○ OR ≤ less than 80 litres/ person/ day ○	**3 of 5 Credits**	**Level 3** AND **Level 4**
Wat 2 External Water Use	A credit is awarded where a compliant system is specified for collecting rainwater for external irrigation purposes. Where no outdoor space is provided the credit can be achieved by default. Select the scenario that applies No internal or communal outdoor space ○ OR Outdoor space with collection system ○ OR Outdoor space without collection system ◉	**0 of 1 Credits**	-

CATEGORY 3 MATERIALS	Overall Level: 4	Overall Score	69.94
% of Section Credits Predicted: 62.50		Credits	Level
Contribution to Overall Score: 4.50 points		15 of 24 Credits	All Levels
Mat 1 Environm-ental Impact of Materials	Mandatory Requirement: At least three of the five key building elements must achieve a Green Guide 2008 Rating of A+ to D. Tradable Credits: Points are awarded on a scale based on the Green Guide Rating of the specifications. The Code Materials Calculator can be used to predict a potential score. Mandatory Requirement Will the mandatory requirement be met? ☑ Enter the predicted score What is the predicted number of credits? 10	10 of 15 Credits	All Levels
Mat 2 Responsible Sourcing of Materials - Basic Building Elements	Credits are awarded where materials used in the basic building elements are responsibly sourced. The Code Materials Calculator can be used to predict a potential score. Enter the predicted Score What is the predicted number of credits? 3	3 of 6 Credits	-
Mat 3 Responsible Sourcing of Materials - Finishing Elements	Credits are awarded where materials used in the finishing elements are responsibly sourced. The Code Materials Calculator can be used to predict a potential score. Enter the predicted Score What is the predicted number of credits? 2	2 of 3 Credits	-

CATEGORY 4 SURFACE WATER RUN-OFF	Overall Level: 4	Overall Score	69.94
% of Section Credits Predicted: 50.00%		Credits	Level
Contribution to Overall Score: 1.10 points		2 of 4 Credits	All Levels

Sur 1 Management of Surface Water Run-off from developments	Mandatory Requirement: Peak rate of run-off into watercourses is no greater for the developed site than it was for the pre-development site and that the additional predicted volume of rainwater discharge caused by the new development is entirely reduced as far as possible in accordance with the assessment criteria. Desiging the drainage system to be able to cope with local drainage system failure. Tradable Credits: Where SUDS are used to improve water quality of the rainwater discharged or for protecting the quality of the receiving waters. Mandatory Requirement Will the mandatory requirement be met? ☑ Select the appropriate option No SUDS ☐ No runoff into watercourses for the first 5 mm of rainfall ☐ Runoff from hard surfaces will receive an appropriate level of treatment ☐	0 of 2 Credits	All Levels
Sur 2 Flood Risk	Credits are awarded where developments are located in areas of low flood risk or where in areas of medium or high flood risk appropriate measures are taken to prevent damage to the property and its contents in accordance with the Code criteria in the technical guide. Select the annual probability of flooding (from PPG*) Zone 1 - Low ◉ OR Zone 2 - Medium ○ OR Zone 3 - High ○ Select the apropriate option(s) Low risk of flooding from FRA** ☑ All measures of protection are demonstrated in FRA ☐ Ground floor level and access routes are 600 mm above design flood level ☐ * Planning Practice Guidance - Planning and Flood Risk ** FRA - Flood Risk Assessment	2 of 2 Credits	-

CATEGORY 5 WASTE	Overall Level: 4	Overall Score	69.94
% of Section Credits Predicted:	100.00%	Credits	Level
Contribution to Overall Score:	6.40 points	8 of 8 Credits	All Levels

Was 1
Storage of non-recyclable waste and recyclable household waste

Mandatory Requirement: The space provided for waste storage should be sized to hold the larger of either all external containers provided by the Local Authority or the min capacity calculated from BS 5906. Tradable Credits are awarded for adequate internal and/ or external recycling facilities.

Mandatory Requirement

Will the minimum space be provided and be accessible to disabled people? ☑

Internal Recyclable household waste storage

Where there is no external recyclable waste storage and no Local Authority collection scheme

Internal storage (capacity 60 litres) ☐

0 of 2 Credits

Local Authority collection Scheme

Post Collection sorting

Internal storage (capacity 30 litres) ☑

Pre-collection sorting

Internal storage (3 separate bins, capacity 30 litres) ☐

4 of 4 Credits — **All Levels**

External Storage, no Local Authority collection scheme

3 separate internal storage bins (capacity 30 litres) ☐

AND

Houses

External Storage(capacity 180 litres) ☐

Flats

Private recycling operator ☐

3 or greater types of waste collected ☐

0 of 4 Credits

Issue		Credits	Level
Was 2 Construction Site Waste Management	A credit is awarded where a compliant SWMP is provided with targets and procedures to minimise construction waste. Credits are available where the SWMP include procedures and commitments for diverting either 50% or 85% of waste generated from landfill. SWMP details Does the SWMP include: + No SWMP ○ + SWMP with targets and procedures to minimise waste? ○ + SWMP with procedures to divert 50% of waste ○ + SWMP with procedures to divert 85% of waste ◉	**3 of 3 Credits**	
Was 3 Composting	A credit is awarded where individual home composting facilities are provided, or where a community/ communal composting service, either run by the Local Authority or overseen by a management plan is in operation. Select the facilities available No composting facilities ○ Individual composting facilities ◉ OR Communal/ community composting*? ○ Local Authority ☑ OR Private with management plan ☐ * including if an automated waste collection system is in place	**1 of 1 Credit**	-

CATEGORY 6 POLLUTION	Overall Level: 4	Overall Score	69.94
% of Section Credits Predicted: 25.00%		Credits	Level
Contribution to Overall Score: 0.70 points		1 of 4 Credits	All Levels

Pol 1 Global Warming Potential (GWP) of Insulants	A credit is awarded where <u>all</u> insulating materials only use substances (in manufacture AND installation) that have a GWP of less than 5. Select the most appropriate option All insulants have a GWP less than 5 (●) OR Some insulants have a GWP of less than 5 (○) OR No insulants have a GWP of less than 5 (○)	1 of 1 Credits	-
Pol 2 NOx Emissions	Credits are awarded on the basis of NOx emissions arising from the operation of the space and water heating system within the dwelling. Select the most appropriate option Greater than 100 mg/kWh (●) OR Less than 100 mg/kWh (○) OR Less than 70 mg/kWh (○) OR Less than 40 mg/kWh (○) OR Class 4 boiler (○) OR Class 5 boiler (○) OR All space and hot water energy requirements are met by systems who do not produce NOx emissions (○)	0 of 3 Credits	-

CATEGORY 7 HEALTH & WELLBEING	Overall Level: 4	Overall Score	69.94
% of Section Credits Predicted: 83.00%		Credits	Level
Contribution to Overall Score: 11.66 points		10 of 12 Credits	No level

Hea 1 Daylighting	Credits are awarded for ensuring key rooms in the dwelling have high daylight factors (DF) and a view of the sky. Select the compliant areas Room Kitchen: Avg DF of at least 2% ☑ Living Room*: Avg DF of at least 1.5% ☑ Dining Room*: Avg DF of at least 1.5% ☑ Study*: Avg DF of at least 1.5% ☑ 80% of working plane in all above rooms receive direct light from the sky? ☐ Any room used for Ene 9 Home Office must also achieve a min DF of 1.5%.	**2 of 3 Credits**	-
Hea 2 Sound Insulation	Credits are awarded where performance standards exceed those required in Building Regulations Part E. This can be demonstrated by carrying out pre-completion testing or through the use of Robust Details Limited. Select a type of property Detached Property ○ Attached Properties: - Separating walls and floors only exist between non habitable spaces ○ - Separating walls and floors exist between habitable spaces ◉ Select a performance standard Performance standard not sought ○ Airborne: 3db higher; Impact: 3dB lower ○ OR Airborne: 5db higher; Impact: 5dB lower ◉ OR Airborne: 8db higher; Impact: 8dB lower ○	**3 of 4 Credits**	-

Issue		Credits	Level
Hea 3 Private Space	A credit is awarded for the provision of an outdoor space that is at least partially private. The space must allow easy access to all occupants. Will a private/ semi-private space be provided? Yes, private/semi-private space will be provided (◉) OR No private/semi-private space (○)	**1 of 1 Credits**	**-**
Hea 4 Lifetime Homes	Mandatory Requirement: Lifetime Homes is mandatory when a dwelling is to achieve Code Level 6. Tradable credits: Credits are awarded where the developer has implemented all of the principles of the Lifetime Homes scheme. Mandatory Requirement Dwelling to achieve Code Level 6? (☐) Lifetime Homes Compliance All Lifetime Homes criteria will be met (◉) OR Exemption from LTH criteria 2/3 applied (○) Credit not sought (○)	**4 of 4 Credits**	**No level**

CATEGORY 8 MANAGEMENT	Overall Level: 4	Overall Score	69.94
% of Section Credits Predicted: 100.00%		Credits	Level
Contribution to Overall Score: 10.00 points		9 of 9 Credits	All Levels

Man 1 Home User Guide	Credits are awarded where a simple guide is provided to each dwelling covering information relevant to the 'non-technical' home occupier, in accordance with the Code requirements. Tick the topics covered by the Home User Guide Operational Issues? ☑ Site and Surroundings? ☑ Is available in alternative formats? ☑	**3 of 3 Credits**	-
Man 2 Considerate Constructors Scheme	Credits are awarded where there is a commitment to comply with best practice site management principles using either the Considerate Constructors Scheme or an alternative locally/ nationally recognised scheme. Select the appropriate scheme and score No scheme used ○ Considerate Constructors OR Best Practice ○ OR Significantly Beyond Best Practice ◉ Alternative Scheme* OR Mandatory + 50% optional requirements ○ OR Mandatory + 80% optional requirements ○ * In the first instance, contact a Code Service Provider if you are considering to use an alternative scheme.	**2 of 2 Credits**	-
Man 3 Construction Site Impacts	Credits are awarded where there is a commitment and strategy to operate site management procedures on site as following: Tick the impacts that will be addressed Monitor, report and set targets, where applicable, for: - CO_2/ energy use from site activities ☑ - CO_2/ energy use from site related transport ☐ - water consumption from site activities ☑ Adopt best practice policies in respect of: - air (dust) pollution from site activities ☑ - water (ground and surface) pollution on site ☑ 80% of site timber is reclaimed, re-used or responsibly sourced ☐	**2 of 2 Credits**	-

Issue		Credits	Level
Man 4 Security	Credits are awarded for complying with Section 2 - Physical Security from Secured by Design - New Homes. An Architectural Liaison Officer (ALO), or alternative, needs to be appointed early in the design process and their recommendations incorporated. Secured by Design Compliance Credit not sought ○ OR Secured by Design Section 2 Compliance ◉	**2 of 2 Credits**	-

CATEGORY 9 ECOLOGY	Overall Level: 4	Overall Score	69.94
% of Section Credits Predicted: 55.00%		Credits	Level
Contribution to Overall Score: 6.66 points		5 of 9 Credits	All Levels

Eco 1 Ecological Value of Site

One credit is awarded for developing land of inherently low value.

Select the appropriate option

	Credit not sought	○
OR	Land has ecological value	○
OR	Land has low/ insignificant ecological value*	◉

1 of 1 Credits | **-**

* Low ecological value is determined either a) by using Checklist Eco 1 across the whole development site; or b) where an suitably qualified ecologist is appointed and can confirm or c) produces an independent ecological report of the site, that the construction zone is of low/ insignificant value; AND the rest of the development site will remain undisturbed by the works.

Eco 2 Ecological Enhancement

A credit is awarded where there is a commitment to enhance the ecological value of the development site.

Tick the appropriate boxes

	Will a *Suitably Qualified Ecologist* be appointed to recommend appropriate ecological features?	☑
AND	Will all key recommendations be adopted?	☑
AND	30% of other recommendations be adopted?	☑

1 of 1 Credits | **-**

Eco 3 Protection of Ecological Features

A credit is awarded where there is a commitment to maintain and adequately protect features of ecological value.

Type and protection of existing features

	Site with features of ecological value?	○
OR	Site of low ecological value (as Eco 1)?	◉
AND	All* existing features potentially affected by site works are maintained and adequately protected?	☐

1 of 1 Credits | -

*If a suitably qualified ecologist has confirmed that a feature can be removed due to insignificant ecological value or poor health conditions, as long all the rest have been protected, then this box can be ticked.

Issue		Credits	Level
Eco 4 Change of Ecological Value of Site	Credits are awarded where the change in ecological value has been calculated in accordance with the Code requirements and is calculated to be: Change in Ecological Value Major negative change: fewer than -9 ○ Minor negative change: between -9 and -3 ○ OR Neutral: between -3 and +3 ◉ Minor enhancement: between +3 and +9 ○ Major enhancement: greater than 9 ○	**2 of 4 Credits**	-
Eco 5 Building Footprint	Credits are awarded where the ratio of combined floor area of all dwellings on the site to their footprint is: Ratio of Net Internal Floor Area: Net Internal Ground Floor Area Credit Not Sought ◉ OR Houses: 2.5:1 OR Flats: 3:1 ○ OR Houses: 3:1 OR Flats: 4:1 ○ OR Houses & Flats Weighted (2.5:1 & 3:1) ○ OR Houses & Flats Weighted (3:1 & 4:1) ○	**0 of 2 Credits**	