



### **Sustainability Statement**

Shirley and Alan Stone

# 5 Templewood Avenue

Final

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## **DOCUMENT CONTROL RECORD**

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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.

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# **Executive Summary**

The purpose of this Sustainability Statement is to demonstrate that the proposed development at 5 Templewood Avenue in the London Borough of Camden has considered the principles of sustainable design and demonstrate how these measures have been incorporated.

The proposed development involves the demolition and clearance of an existing rear and side extension that adjoins the flat and construction of residential extensions at side, rear, and basement level, internal reconfiguration, boundary alterations, landscaping, and associated works.

The key features outlined in this statement are listed below:

- > **Water Efficiency:** Water meters and water efficient fixtures and fittings will be installed in the dwelling to target a maximum internal daily water consumption of 105 litres/person/day.
- > Waste and Recycling: Adequate facilities have already been provided on the existing site for domestic waste and will be provided for construction related waste, including segregated bins for refuse and recycling.
- > **Circular Economy:** The principles of circular economy will be incorporated, where possible.
- Materials: Where practical, new building materials will be sourced locally to reduce transportation pollution and support the local economy. New materials will be selected based on their environmental impact and responsible suppliers will be used where possible.
- > **Pollution:** The proposed alterations are not expected to generate additional noise, light, or air pollution to the surrounding the site.
- > **Flood Risk and SUDs:** The site lies in a low risk flood zone and will benefit from sustainable drainage including a water butt and a rain planter.
- > **Sustainable Transport:** The site will be in proximity of London Underground, Overground, and bus services, and will be in proximity of a number of local amenities.
- > **Sustainable Construction:** The site will be registered with the Considerate Constructors Scheme and follow the measures set out in the Construction Management Plan.

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# **1. INTRODUCTION**

- **1.1** This document has been prepared by Hodkinson Consultancy, a specialist energy and environmental consultancy for planning and development, appointed by Shirley and Alan Stone.
- **1.2** This statement sets out the sustainable design and construction measures included in the design for the proposed development at 5 Templewood Avenue in the London Borough of Camden.

#### Aims

- **1.3** The formulation of the strategy for the proposed development has taken into account several important objectives, including:
  - > To address all relevant national and local planning policies and requirements;
  - > To demonstrate the sustainability measures incorporated at the proposed development.
- **1.4** This statement does not duplicate the work of other reports prepared in support of the application but presents the findings in the overall context of sustainability.

# **2. DEVELOPMENT OVERVIEW**

2.1 The current development site arrangement is a detached Edwardian flat set over three storeys and divided into three separate flats. The wider property includes a soft terraced landscape garden to the rear and a tarmac driveway with direct access to Templewood Avenue. The site location is shown in Figure 1 below.



Figure 1: Site Location - Map data  $\ensuremath{\mathbb{C}}$  2024 Google

### **Proposed Development**

- **2.2** The proposed development will comprise residential extensions at side, rear, and basement level, internal re-configuration, boundary alternations, landscaping and associated works.
- **2.3** The proposed first floor plan is shown in Figure 2 overleaf.





Figure 2: Proposed First Floor Plan – Brod Wight Architects (May 2024)

# **3. SUSTAINABILITY CONSIDERATIONS**

**3.1** This section will summarise the sustainability measures that will be incorporated at the proposed development in the aim of reducing the environmental impact of the works.

### **Water Reduction**

- **3.2** Increased frequency of drought across Europe lines up with climate change projections and water companies in the UK capture much less rain for our use than people assume.
- **3.3** The Environment Agency updated their determination of areas of water stress in 2021. The water stress method takes a long-term view of the availability and the demand for public water supply, rather than a snapshot of shorter or peak periods. It accounts for future population growth, climate change, environmental needs, and increased resilience. As of 2021, 15 out of the 23 water companies operating in areas of England were classified as being under 'serious' stress, including Thames Water where the site is located. This indicates the need to reduce internal water use where possible and specify water efficient fixtures and fittings within developments.
- **3.4** Reducing water consumption will not only help to preserve our water sources but will also save energy. Approximately, 15% of a typical gas-heated household's heating bill is from heating water for showers, baths, and taps, and the energy used to heat water for devices and appliance emits an average of 875 kg of CO<sub>2</sub> per household per year (Energy Saving Trust, 2013). As such internal water consumption will be significantly reduced within this development through a range of practical and hygienic water saving measures outlined below.
- **3.5** The dwelling will target the minimum water efficiency standards of 105 litres/person/day in accordance with London Plan Policy S15 and the Building Regulations Approved Document G requirement (110 litres/person/day).
- **3.6** The proposed strategy to minimise internal water consumption is to install fittings with a low flow rate/flush volume and install flow restrictors to reduce the flow rates further where necessary within the proposed extension. The following is an indication of the flow rates and flush volumes that will be achieved:
  - > WC: 6/4 litres dual flush
  - > Taps: 4 litres per minute
  - > Bath: 160 litre capacity
  - > Shower: 8 litres per minute
  - > Kitchen sink taps: 5 litres per minute



- > Washer: 8.17 litres/kg
- > Dishwasher: 1.25 litres/place setting
- 3.7 Incoming water will also be metered, allowing for considerate water use within the building. Increasing awareness of the amount and cost of water being used helps to incentivise reduced and mindful consumption.

#### **Waste Management**

**3.8** Waste reduction and recycling is a key element and challenge within sustainable development, and something which is strongly encouraged in the London Plan (Policy S17). The waste hierarchy, illustrated in Figure 3 below, prioritises those waste management options which are best for the environment.



Figure 3: Waste Hierarchy

- **3.9** The reduction of construction waste minimises environmental impacts through ensuring the responsible use of resources and waste disposal. It can also significantly reduce construction costs for the developer. The retention of the front façade helps to minimise waste created during construction, also minimising the requirement for new materials.
- **3.10** Household waste will also be managed in line with the waste hierarchy, helping to reduce the amount of waste sent to landfill. As such, adequate waste storage will be provided, where both recyclable and non-recyclable waste can be stored in accordance with the London Borough of Camden's waste collection service.

### **Circular Economy**

- **3.11** Current and future trends point towards the need for a fundamental shift in the way resources are consumed. A shift to a circular economy will provide considerable economic opportunities as a result.
- **3.12** In contrast to a linear economy (take, make, dispose), a circular economy keeps products and materials circulating through the system at their highest value for as long as possible, through reuse, recycling, refurbishment, and remanufacturing. As 60% of total UK waste is generated from construction, demolition, and excavation (Defra and Government Statistical Service, 2019) this transition from linear to circular is essential.



Figure 4: Linear, Recycling and Circular Economies (GLA, 2019).

- 3.13 The circular economy refers to a state whereby resources are kept in a continuous cycle so that:
  - > Virgin resources are no longer extracted;
  - Existing products, once used, are reused or recycled to make new products without loss of value; and
  - > No resources are disposed of, and no value is lost.
- **3.14** Applying circular economy thinking to the built environment is complex, with many overlapping issues and trade-offs to consider. However, there are some core guiding principles that promote a regenerative and restorative whole system approach that should be applied on every project. These are as follows:
  - > Building in layers ensuring that different parts of the building are accessible and can be maintained and replaced where necessary.



- > Designing out waste ensuring that waste reduction is planned in from project inception to completion, including consideration of standardised components, modular build, and reuse of secondary products and materials.
- > Designing for longevity.
- > Designing for adaptability or flexibility.
- > Designing for disassembly.
- > Using systems, elements or materials that can be reused and recycled
- **3.15** Where possible, the principle of the circular economy will be followed during the construction and operational phases of the proposed development.

#### **Materials**

- **3.16** New building materials will be selected, where possible, to ensure that they minimise environmental impact and have low embodied energy from manufacture, transportation, and operational stages, through to eventual demolition and disposal.
- **3.17** All insulation materials will have an Ozone Depleting Potential (ODP) of zero and a Global Warming Potential (GWP) of less than 5. In addition, all decorative paints and varnishes will meet the relevant standards to reduce the emission levels of volatile organic compounds (VOCs).
- **3.18** Where possible, materials will be selected with a preference given to locally sourced manufacturers. This will benefit the local economy as well as having environmental benefits through reduced transportation.
- **3.19** Where feasible, the proposed development will commit to using materials that have been recycled. The use of recycled materials (e.g. crushed concrete from waste, used for hard-standing) has less embodied energy impact, other than that expended in their processing or transport.
- **3.20** Timber used on site, including timber used in the construction phase, such as hoarding, fencing and scaffolding, will be sourced from sustainable forestry sources (e.g. PEFC and FSC) where possible.

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### Flood Risk and Surface Water run off

**3.21** According to the Environment Agency's Flood Risk Map shown in Figure 5 below, the development lies in a low-risk flood zone (Flood Zone 1).



Figure 5: Environment Agency Flood Map - https://flood-map-for-planning.service.gov.uk

- **3.22** The extensions will be located within areas that are currently hardstanding and there will be no increase in hardstanding areas as a result of the proposals. As such, the proposals will not increase surface water runoff from the site.
- **3.23** The following sustainable drainage methods are proposed:
  - > **A water butt** which will enable future occupants to reuse water collected in the water butt, for example when watering the garden or washing cars.
  - > A rain planter which will include a 100mm freeboard, a 300mm layer of topsoil, a 400mm subbase, and an underdrain at 550mm below ground level. This will allow shrubs, wildflowers, or flowering plants to be planted.



### **Transport and local amenities**

- **3.24** Sustainable transport links are central to the sustainability debate. They provide a positive contribution to environment, societal and economic sustainability of the places they serve.
- **3.25** There is already a provision of cycle parking on site, and this will be utilised by the future residents of the proposed development.
- **3.26** The site's location within the London Borough of Camden means that it is well connected to existing transport services. These include:
  - > Hampstead Underground Station which provides access to London Underground services on the Northern Line.
  - > **Hampstead Heath Station** which provides access to the London Overground, providing services to Clapham Junction, Richmond, and Stratford.
  - > Local bus services within the immediate vicinity of the site, providing frequent trips in all directions.
- **3.27** The dwelling also has access to key local amenities which help to reduce the dependency on private transport. These include:
  - > Health services including the Royal Free Hospital;
  - > Administrative services including Barclays Bank and the Hampstead Post Office;
  - > Retail services including a Tesco Express and a Sainsburys Local and numerous shops, restaurants, and pubs in Hampstead;
  - > Recreation and leisure facilities including Hampstead Heath, Hampstead Community Centre, the Hampstead bathing ponds, and a cinema;
  - > Educational facilities including a number of primary and secondary schools; and
  - > Cultural attractions such as Burgh House, Keats House, and Kenwood House.
- **3.28** The provision of alternative sustainable transport options and associated facilities reduces dependency on traditionally fuelled cars and has the following benefits:
  - > Encourages active travel and helps improve people's health and wellbeing;
  - > Reduces congestion and encourages clean travel which helps to improve the air quality of the local area; and

> Provides cost savings compared with maintaining and running traditionally fuelled cars.

### **Sustainable Construction**

- **3.29** Sustainable construction involves the prudent use of existing and new resources and the efficient management of the construction process. This includes the following measures:
  - Reducing waste during construction and demolition and sorting waste on the site where practical;
  - Reducing the risk of statutory nuisance to neighbouring properties as much as possible through effective site management;
  - > Controlling dust and emissions from demolition and construction; and
  - > Complying with protected species legislation.
- **3.30** The development will be registered with the Considerate Constructors Scheme. This is designed to encourage environmentally and socially considerate ways of working, to reduce any adverse impacts arising from the construction process. As commonly known, the Considerate Constructors Scheme aims are as follows:
  - > Respecting the community (includes appearance);
  - > Care for the environment; and
  - > Value their workforce (includes site safety).



- **3.31** Throughout the construction process, 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 arrangement to ensure compliance.
- **3.32** Air and water pollution will be monitored in accordance with best practice principles, as well as the recording, monitoring, and displaying of energy and water use from site activities during construction.
- **3.33** 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.
- **3.34** A Construction Management Plan has been produced by Campbell Reith (August 2024). This document outlines the strategies to reduce the impact during the construction phase. The Contractor will follow all safety and environmental standards and programmes, adhere to



designated routes, implement a delivery schedule management system, and retime for out of peak deliveries. Please refer to the full document for further detail.

# 4. CONCLUSION

- **4.1** This report has demonstrated how the proposed development has considered the principles of sustainable design and demonstrated how these measures have been incorporated.
- **4.2** The proposed development involves the demolition and clearance of an existing rear and side extension that adjoins the flat and construction of residential extensions at side, rear, and basement level, internal re-configuration, boundary alterations, landscaping, and associated works.
- **4.3** The key features outlined in this statement are listed below:
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