SUSTAINABILITY STATEMENT

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PROJECT ADDRESS: 69 LONSDALE ROAD SW13 9JR

KEY REFERENCE DOCUMENTS: *London Plan (2021), Local Plan (2018), National Planning Policy Framework (2021), National Planing Practice Guidance (2014), Net Zero Growth Plan (2023), LETI Climate Emergency Retrofit Guide (2021), SEDA Sustainable Renovation (2018).*

OVERVIEW

The occupiers are acutely aware of the urgent need to rapidly de-carbonise, both being involved in adjacent industries. They wish for their home to make a positive impact both in the short and long term. The proposal has been designed and specified holistically with issues of, operational energy, upfront carbon cost, material economies and sourcing, and biodiversity all driving decisions.

The existing property is poor in terms of energy efficiency, both in the 2012 ground floor extension and the original building, the Design proposal makes significant improvements to the energy efficiency of the envelope.

The scheme initially appears to require large material input, however this strategy has been selected as it capitalises on opportunities naturally presented throughout remedial improvement works whilst also achieving the occupants design goals.

This design proposal is in-line with the Mayor of London's energy hierarchy, to be **Lean**, **Clean**, and **Green**, and will be exemplary in all of these categories.

This application doesn't require the completion of a Sustainable Construction Checklist, adding 69m^2, not above 100m^2, of additional internal area. However acknowledging the importance of this endeavour the checklist has been considered in detail. This application adheres to all considerations outlined in the Sustainable Construction Checklist in principle, however will not be quantified by consultants because of the disproportionate costs involved at this scale. This statement outlines the top level sustainability strategies and principles employed.

THERMAL ENVELOPE

The property suffers with severe overheating through hot months and heat loss throughout the winter. The poor efficiency not only leads to uneven temperature distribution and discomfort, but considerably higher energy input and usage for climate control systems and appliances.

Beyond the new building fabric of the first and second floor side extension the design proposal extends to all roof surfaces in order to perform remedial works improving the thermal envelope. The owners are making a significant commitment to undergo these improvement works given the opportunity that opening up the roof volume presents.

The thermal envelope will be upgraded in its entirety; windows and doors upgraded, re-sealed, or replaced where necessary, walls built anew will be highly efficient and existing walls will be improved where cavities are present, and the roof, where the largest gains are to be made, will be highly insulated.

SYSTEMS

With any construction work there is a significant energy input, this scheme ensures that the energy input is strategic in order to maximise the reduction in subsequent operational energy consumption. As such the upfront carbon cost is balanced and enables more efficient systems to operate.

Lower carbon systems will be installed as part of the upgrade scheme such as underfloor heating throughout. The property will be prepared for the later addition of an air-source heat pump by installing compatible boiler and hot water tanks. These systems only work with a suitable thermal envelope.

Improved insulation and new heating systems will reduce energy consumption by over 35%.

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EMBODIED CARBON (REDUCE)

This extension strategy is a materially efficient scheme. Investigations have concluded that the foundations of the existing extension are already sufficient to comply with the loading requirements for the addition of two stories. In a classic extension most of the carbon dense materials are involved in building the foundation, here this is entirely mitigated, the strategy maximises the capacity of materials already set in place.

The roofs would anyway require upgrading to meet insulation requirements, and so the timber and clay tile extension is a relatively small addition in terms of carbon input. As roofing works would anyway be undertaken the operational carbon of undertaking such activity would be slightly increased to cover the extension but not novel.

A primary design decision driven by efficiency is to retain the existing end-wall, this decision reduces; activity onsite and waste removal, loading requirement on the new end-wall (and so material input), and the requirement for large timbers in the roofing structure. Existing window opening are utilised in the wall where possible to reduce the need for new lintels.

Materials have been selected to both harmonise with the local context and for their low or neutral embodied carbon, such as the insulation which will be natural wood fibre type, and new bricks which will be locally soured.

REUSE AND RECYCLING

The works pursuant to this application will prioritise reuse of materials on site and engage with a wider circular material economy.

BIODIVERSITY

69 Lonsdale Road is fortunate to be situated in and amongst an abundance of fauna and flora, this proposal will not impinge or intrude on any green spaces or existing habitats in any way.

A sedum tray system will be installed on the flat roof sections of the existing extension as part of an overheating mitigation strategy, these will have the added benefit of supporting insect habitats, delaying storm surge rainwater run off, protecting waterproof membranes thus extending the expected lifetime of that material, and providing a degree of insulation in and of itself.

GREENER TRANSPORTATION

The location of the property is particularly well served by London's cycling and walking infrastructure, with swift access to the river-front, pleasant and safe routes are available directly into the city centre.

The current occupants use the cities cycling infrastructure as a primary means of transportation and there is ample provision for cycle storage on the property.

Public transport is also readily accessible with buses stopping just meters from the front garden.

Non of these amenities are set to change with the approval of this planning application and their ready access make this location appropriate for development.

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NOTABLE GUIDANCE

From **LOCAL PLAN 2018 - 2033 POLICY 2.3**

In outlining the *"Strategic Objectives"* for the Local Plan the first point under *"A Sustainable Future"* vision is:

"Minimise and mitigate the effects of climate change by requiring high levels of sustainable design and construction including reductions in carbon dioxide emissions by minimising energy consumption, promoting decentralised energy and the use of renewable energy as well as requiring high standards of water efficiency."

From **LOCAL PLAN 2018 - 2033 POLICY LP20**

Points A and C of the headline commitments to *"Climate Change Adaptation"* are applicable to this application and should be followed, from section 6.1:

"A. The Council will promote and encourage development to be fully resilient to the future impacts of climate change in order to minimise vulnerability of people and property.

B. New development, in their layout, design, construction, materials, landscaping and operation, should minimise the effects of overheating as well as minimise energy consumption…

C. Opportunities to adapt existing buildings, places and spaces to the likely effects of climate change should be maximised and will be supported."

From **LOCAL PLAN 2018 - 2033 POLICY 6.3.22**

"Retrofitting existing properties, particularly residential buildings, presents a significant opportunity to help meet the carbon emission reduction target. Adapting and retrofitting existing homes provides the opportunity to make them more comfortable, marketable, resource efficient, and fit for purpose in the present and the future. Compliance with the energy and water saving sections of the Sustainable Construction Checklist SPD is encouraged for all schemes that do not meet the size threshold for the Checklist to be submitted, such as householder extensions."

From **THE LONDON PLAN 2021 POLICY 1.2 MAKING THE BEST USE OF LAND**

"1.2.4 Making the best use of land means directing growth towards the most accessible and well-connected places, making the most efficient use of the existing and future public transport, walking and cycling networks."

From **THE LONDON PLAN 2021 POLICY 1.6 INCREASING EFFICIENCY AND RESILIENCE**

"1.6.1 Successful cities must adapt to a changing world, and a focus on Good Growth provides an opportunity to become more efficient and resilient. A responsible city must limit its impact on climate change while adapting to the consequences of the environmental changes that human behaviour is already creating."

From **MAYOR OF LONDON'S LONDON HOUSING DESIGN GUIDE 2010**

"[T]he London Plan requires that all developments adopt the following hierarchy of priorities for providing energy for heating, lighting, and cooling the home[46]:

- *Lean: using less energy in construction and operation by incorporating sustainable design and construction measures, and by specifying energy-efficient lighting and appliances;*
- *Clean: supplying energy efficiently by prioritising decentralised energy generation47; and*
- *Green: using renewable energy"*

From **NATIONAL PLANNING POLICY FRAMEWORK DECEMBER 2023**

This proposal offers no conflicts with existing local plans and as such the NPPF stipulates that decisions should favour sustainable development:

"11. Plans and decisions should apply a presumption in favour of sustainable development."