Hoch-Bau Architecture

Sustainability Statement –

78 Syreford Road, Whittington, Cheltenham GL54 4HE

Ty Milsom

Hoch Bau Architecture

	1346	**78 Syreford Road, Whittington, Cheltenham GL54 4HE**
	Document Number	**1346_HBA_XX_XX_A_ST_S3**

Code	Revision	Date of issue	Comments	Prepared by	Checked by
S3		15/01/2024	For Planning Submission	TM	JD

Should you have any queries relating to this document please contact:

Ty Milsom
Hoch Bau Architecture
Studio 54
54 Parton Road
Churchdown
GL3 2AF

T: +44 (0)7814 172 699
E: ty@hbarchitecture.co.uk

Contents

1.0 Introduction

The following Sustainability Statement sets out the approach that will be adopted to the proposed works at the subject property. This is in response to Cheltenham's Joint Core Strategy, Strategic Objective 6 – Meeting the challenges of Climate Change.

2.0 The Property

The property is a two storey semi detached dwelling, constructed of traditional load bearing cavity masonry, with concrete tiled pitched roofs, constructed c. early C20. The property currently has a single storey addition to the rear of the property, and a single storey extension to the side. The rear extension was erected within the last 10 years. The side extension would be closer to construction date of the main dwelling. The loft has also been converted.

3.0 The Proposal

The proposed works comprise a small enlargement of the existing side extension, a first floor extension over, and a loft room within the new roof space. The works would be classified as "Extensions and Retrofitting of Homes" as described in the Climate Change SPD.

4.0 Orientation

The orientation is unchanged to that of the original form and so overheating has been considered and not a concern.

5.0 Building Form

The proposed conversion has a very simple form to reduce the exposed surface area and increase energy efficiency.

6.0 Building Fabric, Detailing and Materials

The proposal will be designed to the highest standards with excellent levels of insulation. The following elemental fabric U-values will be specified.

Roof - <= 0.12W/m2.K
Walls - <=0.18W/m2.K
Ground Floor Slab - <=0.15W/m2.K
Windows - <=1.0W/m2.K
Doors - <=1.0W/m2.K
Thermal Bridging will be well considered and targeted at 0.1W/m2.K

Airtightness will be paramount and maximised. Membranes will be installed to the superstructure to assist air tightness. All insulation to roof pitches and dormer walls will be foil faced rigid phenolic foam with close butted taped joints. Sealing around all perimeters and joints between walls /floors /roofs and around edges of windows and external doors etc. Sealing joints at all service penetrations of the external envelope (plumbing /electrical /ventilation etc) with sealants or

gap fillers appropriate to the size of gap /likely degree of movement; close vertical ducts (SVPs etc) top and bottom; follow the recommendations of relevant Robust Details (ref. Part L 1.33 1.35)

7.0 Sustainable Sourcing

All timber will be FSC or equal sustainably sourced.

8.0 Water Efficiency

The following will be adopted inline with AECB water standards.

Basin Taps; 4 to 6 l/min measured at installation (per pillar tap or per mixer outlet). All mixers to have clear indication of hot and cold with hot tap or lever position to the left.

Kitchen Taps; 6 to 8 l/min measured at installation. All mixers to have clear indication of hot and cold with hot tap or lever position to the left.

WC/s; ≤ 6 l full flush when flushed with the water supply connected. All domestic installations to be dual flush. All valve-flush (as opposed to siphon mechanism). WCs to be fitted with an easily accessible, quarter turn isolating valve with a hand-operated lever. Where a valve-flush WC is installed, the Home User Guide must include information on testing for leaks and subsequent repair.

9.0 Flooding Measures

No other areas of impermeable hardstanding will be introduced to the proposal.

10.0 Embodied Carbon

The construction works will be tendered to local contractors, with a local workforce. Materials where possible will be sourced from local areas, and/or with a highly recycled content. The design is simple using easily sourced materials which allow LEAN Construction approaches.

A Construction Waste Management Plan will be requested from the appointed contractor to minimise waste, apply targets for recycling, and minimising landfill.

Integrated Recycling Storage will be designed into the new Kitchen and Utility Plans.

11.0 Summary

The proposed conversion and general works will be constructed to the highest standards with vastly improved thermal performance over the exposed side walls, and the house as a whole. The design and construction process adopted

demonstrates a best practise approach to climate and biodiversity to the proposed development.