



LEWIS & CO

SUSTAINABILITY STATEMENT

THE BYRE, THE STREET, BOLNEY

ON BEHALF OF SHIRE BARNS DEVELOPMENTS



1.0 INTRODUCTION

1.1 This Statement is submitted in respect of the application for full planning permission for the redevelopment of land at the rear of the Byre to create 5 new residential dwellings.

1.2 Policy DP39 of the District Plan requires developments to consider incorporating the following sustainability features:

- Minimise energy use through the design and layout of the scheme including through the use of natural lighting and ventilation;
- Explore opportunities for efficient energy supply through the use of communal heating networks where viable and feasible;
- Use renewable sources of energy;
- Maximise efficient use of resources, including minimising waste and maximising recycling/ re-use of materials through both construction and occupation;
- Limit water use to 110 litres/person/day in accordance with Policy DP42: Water Infrastructure and the Water Environment;
- Demonstrate how the risks associated with future climate change have been planned for as part of the layout of the scheme and design of its buildings to ensure its longer term resilience.

1.3 Policies within the Bolney Neighbourhood Plan also support sustainable development including the preservation of ecological features and networks and use of Sustainable Urban Drainage Systems (SUDS) under Policy BOLE1.

1.4 This statement considers the sustainability of the proposed development with regard to:

- Location
- Building Fabric
- Building Standards
- Environmental Sustainability
- Fixtures and Fittings



2.0 LOCATION

- 2.1 The site benefits from a sustainable location, within a Category 3 settlement and close to the village's main services and facilities.
- 2.2 The site is served by bus stops within 150m walk of the site along The Street, served by the 2 and 89. The 273 service also stops at Ryecroft Road (approximately 5 minutes walking distance) four times a day. The Handcross Community bus also provides a service from Bolney to Burgess Hill on Thursday afternoons.
- 2.3 The majority of the villages local services are located on The Street within five minutes' walking distance of the site, including Bolney C of E primary school, the Rawson Hall, Batchelors Field and playspace, the Eight Bells public house and St Mary Magdalene church.
- 2.4 Other services located elsewhere within and surrounding the village are still reasonable walking distance including The Bolney Stage (1.05km), Morrisons Daily and other services at Bolney Cross (1.05km) and Bolney Wine Estate (800m).
- 2.5 In addition to the facilities that are available through walking and public transport, the development provides dedicated cycle storage and electric vehicle and bike charging facilities.
- 2.6 As a result, the location of the development offers genuine alternatives to private vehicle use and the development also ensures that any trips by private vehicle do not require the use of petrol/diesel vehicles.
- 2.7 Where possible, the project will utilise local contractors, reducing travel distances associated with the construction of the dwellings and benefiting the local economy.



3.0 BUILDING FABRIC

- 3.1 The developer will take a fabric-first approach to building design and will use locally sourced materials wherever possible. Materials with high thermal values for insulation and airtightness will be prioritised. Double glazed windows will be used throughout.
- 3.2 The new dwellings will be all-electric, with air source heat pumps and solar photovoltaic panels integrated into the design as shown on the submitted drawings. Mechanical ventilation with heat recovery (MVHR) is also proposed.
- 3.3 As all proposed dwellings are detached and set in spacious plots with south-facing rear facades, this allows for both excellent levels of natural light and cross-ventilation throughout – maximising the passive design benefits arising from the layout of the development in accordance with Policy DP39 (Sustainable Design and Construction).

4.0 BUILDING STANDARDS

- 4.1 The scheme will limit water use to 110 litres/person/day in accordance with Policy DP42: Water Infrastructure and the Water Environment (as encouraged by Policy DP26).
- 4.2 All new dwellings will be accessible for all users in accordance with Policy DP28 (Accessibility).
- 4.2 The scheme will also comply with the mandatory building regulation standards in relation to energy consumption under Part L.

5.0 ENVIRONMENTAL SUSTAINABILITY

- 5.1 The development will deliver in excess of 10% biodiversity net gain, through onsite improvements as part of the development. In addition to new habitat creation and tree planting, the works will also improve the condition of existing areas of habitat – including the existing drainage ditch onsite.



- 5.2 The surface water drainage design includes an allowance of a 45% increase in rainfall intensity over the lifetime of the development – accounting for potential changes to weather systems arising from climate change.
- 5.3 The development incorporates a SuDS design following best practice guidance that will ensure the site is mitigated and future-proofed against future flood risk from surface water. The works include the use of permeable paving, which will drain into an attenuation layer that will allow water to be stored and discharged to the drainage ditch at a controlled rate that matches the greenfield drainage rate of 4 L/s.
- 5.4 Water butts will also be provided for each of the five dwellings, capable for reuse for garden irrigation and other tasks – in accordance with the SuDS hierarchy.

6.0 FIXTURES AND FITTINGS

- 6.1 In order to contribute to the energy and water saving standards set out in Section 4, the following features will be incorporated within the development:
- Fully electric using ASHPs and Solar PVs
 - Energy Efficient lighting installed through the building
 - Energy efficient “white goods” will be installed throughout
 - Dual Flush toilets will be installed
 - Secure cycle sheds are provided
 - Electric vehicle charging points will be installed

7.0 CONCLUSIONS

- 7.1 The proposed dwellings adopt a fabric-first approach to energy efficiency, prioritising high levels of insulation, airtightness and efficient glazing in order to reduce overall energy demand at source.
- 7.2 The layout and orientation of the dwellings have been designed to maximise natural daylight and opportunities for passive solar gain, whilst allowing for effective natural ventilation to assist with overheating mitigation. The integration



of solar photovoltaic panels, air source heat pumps, electric vehicle charging infrastructure and water efficiency measures ensures that the development responds positively to the transition toward lower-carbon living.

- 7.3 The scheme has also been designed having regard to future climate resilience, including sustainable drainage measures incorporating climate change allowances and water reuse features such as water butts.
- 7.4 Collectively, these measures ensure that the development accords with Policy DP39 and DP42 of the District Plan and Policy BOLE1 of the Bolney Neighbourhood Plan by delivering sustainable and future-resilient new homes.