CLIMATE MITIGATION STATEMENT

In support of ***PA/2026/0388*** for the *Erection of 4 detached dwellings with associated access, parking and landscaping.*

Land opposite Highdown west of Mulberry Hill, Chilham

Prepared by Hume Planning Consultancy Ltd.

On Behalf of: GSE Property Investment Ltd

Our Reference: HPC1663

Date: March 2026

1. Introduction

1.1 This Climate Mitigation Statement has been prepared on behalf of the Applicant GSE Property Investment Ltd, in support of the Full Planning Application for the *Erection of 4 detached dwellings with associated access, parking and landscaping* at the Land opposite Highdown west of Mulberry Hill, Chilham.

1.2 The aim of this Climate Mitigation Statement is to outline the climate resilient and sustainability credentials of the proposed development, specifically responding to the LPA's Development Plan. The Development Plan for the purposes of S38 (6) of the Planning and Compulsory Purchase Act (2004) comprises the Ashford Local Plan 2030 (adopted 2019) Chilmington Green Area Action Plan (2013), various Neighbourhood Plans and the Kent Minerals and Waste Local Plan (2024-39).

1.3 The LPA adopts clear strategic objectives which promotes efficient use of natural resources through the promotion of high-quality design across the borough (Policies SP1 (i) and SP6).

1.4 The report considers the measures incorporated into the masterplanning and design of the development to ensure the proposed development is resilient to and mitigates against the effects of climate change. This is done though reducing vulnerability to flooding, promoting development that minimises natural resource and promotes the viability of renewables, reduces pollution and incorporates sustainable construction practices, including water efficiency measures (Policies ENV1, ENV3, ENV6, ENV7,ENV8 and ENV9).

1.5 The submitted drawings demonstrate how energy and water efficiency measures have been sympathetically incorporated into the Site, which is located within the Kent Downs National Landscape as an allocation under Policy S41 in the Local Plan. The proposal would accord with the objectives of the Local Plan Policies resulting in a sustainable form of development achieving social, economic and environmental benefits as outlined with Paragraph 8 of the NPPF.

1.6 The sustainable measures are described in as much detail as possible given the current stage of the planning process. It is important to note that the application is based on the

accepted principle of application 20/00039/AS. A Sustainability Credentials document was submitted in support of the application at Planning Committee (9/12/2020), where the application received a resolution to grant subject to Nutrient Neutrality Mitigation.

1.7 Where specifics have not been possible, the overall approach and design standards have been described to help ensure that there will be a framework in place for ensuring a high quality of sustainable construction. These measures will also be agreed in finer detail and secured at the Building Regulations stage, which is a regulatory requirement to ensure that new homes produce less carbon emissions.

2. Climate Mitigation Measures

Fabric First Approach

2.1 A fabric first approach involves careful consideration of the materials utilised for walls, floors, windows, roofs and doors to allow for improved insultation. Key design components include building orientation, heating and hot water, ventilation, lighting all of which will be matters that are addressed.

2.2 Passive design considerations for the proposal involved:

- Orientating the dwellings to optimise south facing roof space to install solar PV panels,
- Optimisation of daylight and beneficial solar gains through dual aspect and higher floor to ceiling heights and size and depth of windows on different elevations,
- Control of solar gains through carefully selected glazing in order to have a high light transmittance value and a good shading coefficiency, whilst maintaining an excellent thermal transmittance value,
- Retainment and Enhancement of tree planting and landscaping which will serve to provide shading in the summer and facilitate solar gains in the winter,
- Proposed incorporation of green roofs covered in sedum and wildflower will provide latent cooling in the summer through added moisture,
- Instillation of smart meters and controls shall be provided in accordance with the requirements of the Building Regulations to efficiently manage energy use.

2.3 ‘Air tightness’ measures the infiltration of outdoor air into the building, or in other words how ‘draughty’ the building is. To address air tightness, key considerations include the

use of the most sustainable materials to reduce heat loss, the level of window glazing, requiring floorplans to take into account the space necessary for insulation and draught-proofing.

2.4 Each property will likely be ventilated with a heat recovery ventilation system, using a heat exchanger to recover heat from extract air that would otherwise be lost to the outside whilst using this heat to pre-heat the 'fresh air' supply. Mechanical heat recovery ventilation is considered to be more energy efficient than natural ventilation, whilst also providing air quality and acoustics benefits, which is a potential option for the development.

2.5 High efficiency LED lighting will be utilised throughout the development, to ensure quality of lighting with minimum energy input and low internal heat gains. This design component, combined with the efficient orientation of buildings (i.e. the main habitable room to be south facing to capitalise on higher levels of natural light), will minimise the use of lighting and associated electricity usage as a result.

Solar Photovoltaic

2.6 Solar photovoltaic (PV) converts sunlight into electricity for the consumption on site or can be exported to the grid. A PV cell usually consists of 1 or 2 layers of a semi-conducting material such as silicon. The greater the intensity of sunlight, the more electricity is generated. The technology is most efficient when orientated due south, however panels east or west are suitable but generally require a greater surface area to generate a set amount of energy.

2.7 The current plans and elevations portray the location of PV/solar panels on the flat roof elements of the proposal. The number, exact location and energy generation specification of these panels are indicative at this stage and will be informed at the detailed design stage in due course in accordance with the requirements of the Building Regulations.

Ground and Air Source Heat Pumps

2.8 Heat pump technologies use electricity to upgrade thermal energy from low-grade heat resources such as ground and air. This resource is highly compatible with reaching a net zero carbon position which can be available through the development wide approach or to individual dwellings. Heat pumps have the benefit of being able to provide cooling in the summer months, as well as heat in winter.

2.9 A ground/ air source heat pump system will provide the primary heating and hot water for the dwellings. If the ground conditions are not suitable air source heat pumps will be sought to be incorporated.

Sustainable Location and Transport

2.10 The Planning Statement supporting this application assessed the sustainability of the Site in terms of its accessibility to local services, amenities and public transport and should be read alongside this Statement.

2.11 The proposal incorporates sustainable measures which lead to a reduction in emissions and congestion by supporting alternative methods of transport.

2.12 It is proposed that EV charging is to be supplied for each dwelling to encourage the use of electric vehicles as outlined within the supporting plans (within the carports). Energy specifications and design of these can be provided by way of planning condition.

2.13 Each dwelling is also provided with secure cycling storage within the carports.

Water Management

2.14 The current nationally determined standard of water consumption for new developments is an average water consumption limit of 110l/day per person. This target is also set out in Policy ENV7 of the adopted Local Plan and will be met by the proposed development.

2.15 Fixtures, appliances and fittings will be specified for the proposed development which will considerably reduce water use, such as a combination of taps and showers fixed with eco flow limiter aerators, dual-flush toilets and moderately sized baths.

2.16 In addition to internal water efficiency measures, a rainwater harvesting system with underground tanks shall be installed for garden irrigation and maintenance activities to minimise water usage. A leaf filter/bypass arrangement would be used on the outgoing drain. This is below ground solution allows for less visual impact than conventional above-ground water butts and offers greater storage capacity, which is appropriate given the large dwelling sizes.

2.17 The site is at a low risk of flooding, located within Flood Zone 1and is not within an identified area for surface water flooding. Additional planting suggested as per the supporting Landscape Strategy not only provides ecological enhancements but also allows for greater interception of rainfall by the vegetation onsite, reducing the risk of surface run off.

Minimising Pollution & Waste

2.18 Paragraph 192 of the NPPF states that "*opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement*". Construction Management Plans and detailed Method Statements will provide a framework for managing construction activities and their potential impacts relating to air, noise and water quality.

2.19 The legislative requirements for construction waste management are founded in a number of EU Directives and have been actively implemented in the UK. It is recognised that waste needs to be sustainably managed during the construction process. Prior to the commencement of the development, a dedicated and bespoke Construction and Environmental Management Plan will be completed as part of the construction process. This will provide detail as to the processes related to the management of waste through the construction phase with the aim of reducing waste products.

3. Conclusion

3.1 The scheme has been planned to mitigate climate change through design in accordance with Policy SP1 (i) and Policy SP6 of the Local Plan ensuring that the proposed new development promotes efficient use of natural resources and energy use to mitigate against the impacts of climate change. Post planning the proposal will be built out in accordance with sustainable construction practices informed by the building regulations.

3.2 Further details regarding specific energy specifications, locations and design will be submitted for approval to the LPA post planning application stage. We welcome the LPA's feedback on these matters throughout the course of this application.

3.3 This Statement should be read in conjunction with the supporting plans, documents and Planning Statement.