

STANBURY HOUSE

BASINGSTOKE ROAD, SPENCERS WOOD

SUSTAINABILITY STATEMENT

CONSTRUCTION OF UP TO 63 NEW HOMES

APRIL 2025

1.0 INTRODUCTION

1.1 Policy CC04 of the Managing Development Delivery DPD 2014 (Sustainable Construction) states that all new development should seek to achieve Code for Sustainable Homes Level 4. Unfortunately following the adoption of the DPD the Code for Sustainable Homes standards have ceased to operate.

1.2 Notwithstanding this many of the aims and objectives of seeking to ensure new development adopt sustainable principles remain sound. Further Policy CC05 of the DPD (Renewable Energy and Decentralised Energy Networks) states:

“1. Local opportunities to contribute towards decentralised energy supply from renewable and low-carbon technologies will be encouraged

1. Planning permission will only be granted for proposals that deliver a minimum 10% reduction in carbon emissions through renewable energy or low carbon technology where the development is for:

a) Schemes of more than 10 dwellings (gross), or

b) Non-residential proposals of more than 1,000 sq m gross floorspace.

1.3 Whilst this application is submitted in outline at this stage and so the detailed design of the proposed dwellings is not in such an advanced stage that it is possible to be definitive as to the final proposals it is possible to consider how sustainable objectives can be embedded into the scheme including delivery of 10% of energy needs from renewable sources.

1.4 The statement follows a similar approach as considered acceptable to the Council when determining the previous application at this site in February 2021 reference 192883. In that case the Officers report confirmed:

Sustainable Design:

Policy CC04 of the MDD Local Plan seeks to achieve high quality sustainably designed developments in part by ensuring suitable waste management facilities including on-site recycling are provided. Policy CC05 states that proposals for 10 dwellings or more should demonstrate how a 10% reduction in carbon emissions from a development can be achieved. In light of this, a Sustainability Statement has been submitted with the application. Given that the proposal is outline however, this seeks to provide a framework for how the above objectives could be achieved. In particular, it is highlighted that a suitable

layout taking advantage of solar gain and existing shading as well as appropriate renewable energy technologies could be used. Given that this would be agreed at the reserved matters stage, the statement is considered acceptable and no conflict with policy CC04 or CC05 arises.

1.5 This report is set out as follows:

- 2.0 Reduction in Energy Use / Use of Renewable Energy
- 3.0 Sustainable Design
- 4.0 Summary & Conclusions

2.0 REDUCTION IN ENERGY USE / USE OF RENEWABLE ENERGY

2.1 There are three main ways of reducing energy use.

1. Improved insulation and building design to prevent energy loss
2. To put in place measures to reduce energy consumption
3. To take advantage of renewable energy sources.

2.2 In terms the first element it is proposed that all properties will be constructed using enhanced sound and heat insulation techniques and that wherever practical building materials will be obtained from sustainable sources.

2.3 Reducing U values and improving air tightness provides a good basis from which to reduce energy consumption. Excessive areas of glazing will therefore be avoided.

2.4 In terms of the second element the following measures will be employed:

- Drying areas will be provided with each property to minimise reliance on electric tumble dryers.
- Energy efficient lighting will be installed (internally and externally). External lighting will be fitted with sensors and timers to prevent them being left on unnecessarily.
- High efficiency combination gas boilers will be utilised in all of the houses reducing significantly the energy usage compared to average boiler specifications.
- All white goods will be 'A' rated and all W.C's low water usage specifications.

2.5 In terms of the third element, renewable energy, a number of potential technologies can be considered as follows.

Stand alone or roof mounted wind turbines

- 2.6 Wind energy can provide a useful renewable source of energy within certain forms of development.
- 2.7 However, in this instance it is considered that roof mounted turbines or a single larger turbine would be inappropriate option for two reasons.
- 2.8 Firstly as the site is well related to the existing settlement the visual impact of a turbine or turbines is unlikely to be considered favourably from a planning / visual impact perspective. Secondly the site is well contained by existing boundary trees and landscaping such that it is not a location where wind strengths are likely to be sufficient to generate a significant contribution toward the energy requirements of the proposed development.

Solar

- 2.9 The use of Solar power can be a very cost effect option for heating water in residential developments of this nature.
- 2.10 In principle the option is worthy of consideration at the Stanbury House site as it could be installed without any materially adverse visual impacts within the site or its surroundings.

Photovoltaic

- 2.11 Photovoltaic (PV) systems use energy from the sun and turn it into electricity using semi-conductors. Modules are generally roof mounted in a similar way to solar panels.
- 2.12 Unlike solar systems however PV only requires daylight, (not sunlight) to generate electricity and so energy can still be produced in overcast or cloudy conditions.
- 2.13 Although the system can be costly it is considered worthy of further investigation at the Stanbury House site.

Biomass

- 2.14 Biomass boilers burn wood pellets as a fuel and are considered to represent a 'renewable energy' technology.
- 2.15 Whilst biomass is a very good method for generating energy from renewable sources it works best as part of a grouped solution or where larger buildings are involved rather than individual houses as proposed at Stanbury House.
- 2.16 It is considered that biomass is unlikely to be an efficient and cost effective option in this case.

Ground Source Heat Pumps (GSHP)

- 2.17 GSHP's extract latent heat from the ground and compress it to provide heat which can be used within the home.
- 2.18 Whilst it is not a technology that can be considered for developments comprising three or more storeys it is in principle feasible at Stanbury House where only two storey development is proposed.
- 2.19 GSHP's do however only generate a limited maximum temperature and so are generally used only in conjunction with other sources to make up for any shortfall.
- 2.20 The proposals at Stanbury House are not yet sufficiently developed to determine the feasibility of GSHP in terms of viability and likely depths required for boreholes. The potential could however be revisited at the detailed design stage.

Air Source Heat Pumps (ASHP)

- 2.21 ASHP's use external condensers linked to internal coils and can generate high temperatures sufficient for underfloor heating systems and with assistance from a top up system (emersion or similar) can service a domestic hot water system.
- 2.22 ASHP's are also reasonably economic to install and so should be considered further in respect of the Stanbury House proposals.

3.0 **SUSTAINABLE DESIGN**

Layout

- 3.1 An indicative layout has been provided with the outline application and designed with the need to achieve sustainable development as one of its key objectives.
- 3.2 The layout demonstrates the following principles
- Careful orientation of dwellings where possible to maximise solar gain.
 - Exploitation of the natural shading provided by the existing site landscaping.
 - Provision of open green spaces.
 - Retention of existing boundary and site trees.
 - Encouragement of walking and the use cycles by providing a permeable layout.
 - Provision of drying space with each property.
 - Provision of flexible internal layouts to enable home working.
 - Provision of over-sized garages to allow storage of recyclable and standard waste separately.
 - Reduction in the extent of hard surfacing and where required the use of permeable paving to allow greater filtration into the sub soil.

Water Conservation

- 3.3 The proposed development will address the need to minimise water use and wastage as follows:
- Water flow restrictors will be fitted to taps and shower heads to reduce flow and pressure

- Low flush WC's will be fitted to reduce the level of water consumption during flushing
- Rainwater harvesting will be employed at the site where possible to ensure that run off from hard surfaces is trapped and re-used.
- Water butts will be provided at each property for use in gardens.

3.4 Such measures will ensure that a target of 105 litres use per person per day is met.

Use of Sustainable Materials

- 3.5 The development will seek to utilise materials from sustainable sources wherever possible and practical.
- 3.6 Where possible materials will be sourced locally to minimise the distances travelled from suppliers to the site.

Surface Water Runoff

- 3.7 The development proposes a sustainable surface water drainage system utilising on site storage basins which will encourage biodiversity enhancements and ensure that run-off from the site discharges at existing greenfield rates.
- 3.8 The accompanying Flood Risk Assessment and Drainage Strategy demonstrates how this will be achieved.

Waste

- 3.9 The design of the houses will provide adequate internal and external storage space for non-recyclable waste and recyclable household waste.
- 3.10 The applicant will seek to minimise over ordering of materials and therefore minimise site waste during the construction stage.

- 3.11 Material waste during construction will be disposed of in separate receptacles to facilitate recycling. This will include separation of inert building materials, timber products, glass, plastic and chemical products (including cement board and plasterboards). This process will minimise waste to landfill.

Health & Wellbeing

- 3.12 The indicative layout demonstrates how it will be possible to promote good daylighting and so improve quality of life of future residents by reducing the need for energy to light the home.
- 3.13 All kitchens will achieve a minimum average daylight factor of at least 2%. All living rooms, dining rooms and studies will achieve a minimum Average Daylight Factor of at least 1.5%
- 3.14 Where possible the orientation of the development will take account of natural shading from on site and boundary trees and landscaping. It also seeks to promote good levels of natural daylight and solar exposure.

Management

- 3.15 All residents will be provided with a Home User Guide. This will include information regarding the features of the home including the energy efficient white goods, sustainable elements such as the low water use WC's, showers, water butts etc. and advice on how new sustainable goods can be purchased.
- 3.16 The guide will also include information relating to the site and its surroundings, footpaths, public transport etc.

4.0 **SUMARY & CONCLUSIONS**

- 4.1 This application has been submitted in outline. It is not therefore reasonable to expect that the detailed design or the final layout of the proposed new homes should be fixed at this stage.
- 4.2 However, in the preparation and consideration of this planning application it is appropriate to consider issues of sustainable design and construction, how these may be accommodated at the site in the future and how relevant planning policy requirements can be addressed.
- 4.3 This report provides a general summary of the initiatives to which the applicant is committed and demonstrates that the requirements of Policy CC05 will be met.
- 4.4 The report is as previously agreed when the Council considered a similar application at the site in February 2021.