

MEMORANDUM

From:	Úna Haran, Lead Sustainability Planning Officer		
Service	WBC Sustainability	App No:	250517
Address:	Land Off Basingstoke Road, To the south and west of Spencers W.		
Proposal:	Outline planning permission is sought with all matters reserved for future determination, save for the means of access via Basingstoke Road, for: up to 420 dwellings (Use Class C3), an 80 bed care home (Use Class C2), 1ha of employment land (Use Class E(g), primary school (Use Class F1), local centre (Use Classes E(a), (b), (c), (f)), GP Surgery (Use Class E(e), sports pitch and changing facility, public open space, SANG provision and associated infrastructure.		
Type of Development:	Major All other developments		
Site Visit Made:	No		

Summary Of Recommendations

- ☐ No comment
- ☐ No objection
- ☒ No objection subject to conditions (and reasons) **stated below**
- ☐ Request further information before determination as **stated below**
- ☐ Objection due to the reason(s) **stated below**

Comments On Proposal

1. Response to evidence submitted.

1.1. Since outline application 250517 deals with development of up to 420 new homes (Use Class C3), an 80 bed care home (Use Class C2), 1ha of employment land (Use Class E(g), primary school (Use Class F1), local centre (Use Classes E(a), (b), (c), (f)), GP Surgery (Use Class E(e), sports pitch and changing facility, public open space, SANG provision and associated infrastructure information is required to demonstrate how the scheme will comply with WBC planning policy on sustainability and energy.

1.1.1. This requirement is set out in the WBC Sustainable Design and Construction Supplementary Planning Document (SPD).¹ It should be noted however that It should be noted that the SPD dates from 2010 and

¹ Wokingham Borough Council. 'Sustainable Design and Construction Supplementary Planning Document'. 2010. p.11

makes reference to the South East Plan: *"Design and Access Statement to set out framework to show how the proposal will achieve the requirements of Policy NRM11 of the South East Plan. Best estimates of energy use at outline application stage will be acceptable."*

1.1.2. The South East Plan was withdrawn in 2013² and its policies covering Sustainability and Energy superseded by those contained in the WBC Managing Development Delivery (MDD) Local Plan which was adopted in 2014. Consequently, applications must now show how they will comply with WBC's policies on sustainable design and construction. This means that at outline stage for a major residential scheme, in addition to outlining how the scheme will comply with the sustainability requirements of Policy CP1 of the WBC Core Strategy 2010, the Design and Access or Sustainability & Energy Statement must show how the scheme will comply with:

1.1.2.1. MDD CC04 part 1, (a) (as clarified by the WBC Climate Change Interim Policy Position Statement, 2022 (CCIPPS)). This policy encourages schemes to aim for the expected carbon reduction levels of the full future homes standard prior to the standard taking effect (expected in 2025).

1.1.2.2. MDD CC04 part 1 (b) (as clarified by the CCIPPS) - requires water consumption of 110L per person per day including a 5L external water allowance.

1.1.2.3. MDD CC05 part 2 (as clarified by the CCIPPS) - requires 10% carbon reduction relative to Target Emission Rates (TERs) arising from the version of the Building Regulations extant at time of full planning or reserved matters application.

1.2. The following comments are based on the information provided in the Energy and Sustainable Design Statement prepared by consultants BWP on behalf of Richborough Estates Ltd and the Design and Access Statement authored by Pegasus

1.3. This note specifically examines the application's approach to LDF policies on sustainable development, energy including any provision of renewables on site, and water use.

2. Response to WBC Core Strategy Policy CP1

2.1. *"12) Contribute towards the goal of reaching zero-carbon developments as soon as possible by:"*

2.1.1. *"a) Including appropriate on-site renewable energy features; and"*

2.1.2. *"b) Minimising energy and water consumption by measures including the use of appropriate layout and orientation, building form, design and construction, and design to take account of microclimate so as to minimise carbon dioxide emissions through giving careful consideration to how all aspects of development form."*

2.2. Renewable energy and low carbon technology. The Energy and Sustainable Design Statement states that *"that the most appropriate recognised on-Site*

² Excluding saved policies not affecting sustainability planning issues.

*renewable energy technologies with high to medium opportunities for the Proposed Development Site are Solar Photovoltaic (PV), Air Source Heat Pump, Solar Hot Water, Wastewater Heat Recovery, and Ground Source Heat Pump.”*³

2.2.1. Determination of which technologies to specify, along with their specifications, generating capacity and displaced energy will be determined at Reserved Matters stage once detailed design has been carried out. No target is provided for the quantum of carbon reduction the development will achieve.

2.2.2. No details are provided about a targeted capacity for the photovoltaic array, and there is no information regarding the array design or specification in terms of number of panels, panel type and placement.

2.2.3. Roofs will be oriented where practicable to be within 45° of south to facilitate solar thermal collector or PVP mounting.⁴

2.2.4. Energy storage will be considered as part of the renewable energy strategy.

2.2.5. The Design and Access Statement includes a Design Coding objective for *“Maximised onsite renewable energy generation through the installation of roof-mounted photovoltaic (PV) panels”*⁵

2.2.6. Sample SAP and SBEM outputs showing the likely regulated energy demand and related emissions baselines for the homes are not provided at this stage.

2.2.7. It is not possible to assess the suitability or feasibility of any proposed measures to introduce low and zero carbon technologies at this stage as the finalised renewable energy scheme is not provided. In this case, application of a planning Condition to secure a policy compliant approach to renewable energy generation is recommended at the end of this response.

2.3. N.B. Since photovoltaic panels and other externally installed low and zero carbon technologies have an impact on design, the relevant consultees may wish to request further details of these measures pursuant to their responses at the appropriate stage

2.4. Passive design measures

2.4.1. Glazing

2.4.1.1.1. Building designs will be appraised for potential overheating risk through Part O of the Building Regulations only⁶ (rather than via more detailed CIBSE TM52 or TM59 methodologies for example). These regulations provide limits on the amount of hours during which a space is permitted to exceed maximum temperatures for indoor thermal comfort. The comments on potential risks and mitigating factors for

³ BWP, Energy and Sustainable Design Statement, Land off Basingstoke Road, Spencer's Wood 2025. P.46

⁴ BWP, Energy and Sustainable Design Statement, Land off Basingstoke Road, Spencer's Wood 2025. P.22

⁵ Pegasus Group, Design and Access Statement with Design Coding, Land off Basingstoke Road, Spencer's Wood.

⁶ BWP, Energy and Sustainable Design Statement, Land off Basingstoke Road, Spencer's Wood 2025. P.40

overheating provided in this note no not seek to anticipate the outcome of Part O analysis but rather to identify the degree to which passive design measures have been implemented as part of the overall approach to operational energy demand reduction.

2.4.1.1.2. No calculated glazing ratios are provided, however the Energy and Sustainable Design Statement notes that *“To minimise the risk of overheating, the Proposed Development will utilise appropriate overheating mitigation measures (including thermal mass, glazing with low g-value, etc) and if required mechanical ventilation with heat recovery (MVHR) system to supplement or assist natural ventilation. Sufficient window opening area will also be provided in order to deliver additional means of ventilation when required to maintain the internal operative temperature.”*⁷ And wherever feasible *“Proportion and distribution of glazing to ensure good levels of daylight, helping to reduce electricity consumption through artificial lighting”* will be optimised.⁸ The Design and Access Statement includes Design Coding issues in relation to siting and building orientation which state that *“6.103 Dwellings should be carefully sited to ensure that they are sheltered from prevalent winds and benefit from passive solar gain as much as possible.*

6.104 Passive solar gain can enhance the energy and environmental performance of dwellings. Orientating streets in an east-west direction can increase solar access to dwellings and gardens, whilst avoiding overshadowing from adjacent dwellings. Individual houses which are orientated east of south will benefit from early morning sun, and those orientated to the west of south will benefit from late afternoon sun, which can reduce the need for additional heating during the evening period.

*6.105 Dwellings/areas of the development that could potentially benefit from passive solar gain or the future installation of solar panels (i.e. are orientated within 30 degrees of south) are identified on the Potential Solar Gain Plan, presented opposite. The final location and umbers of dwellings benefiting from solar gain will be set out at the detailed design stage. East and West oriented glazing can cause issues with morning or evening overheating from low-angle light, depending on room size. This should be carefully balanced, by using horizontal glazing at appropriate rations in combination with natural ventilation.”*⁹

⁷ BWP, Energy and Sustainable Design Statement, Land off Basingstoke Road, Spencer's Wood 2025. P.32

⁸ BWP, Energy and Sustainable Design Statement, Land off Basingstoke Road, Spencer's Wood 2025. P.22

⁹ Pegasus Group, Design and Access Statement with Design Coding, Land off Basingstoke Road, Spencer's Wood. P.114

2.4.1.2. Details of the daylight strategy or any modelling including sun-path studies to confirm the stated benefit of shade from trees are recommended to be provided at Reserved Matters stage.

2.4.1.3. The use of low G-values for glazing would be supported as a sustainable measure, with a value in the range 0.3-0.4 recommended for specification.

2.4.1.4. At Outline stage, illustrative masterplans are provided. Plans, elevations and sun path diagrammes created at detailed design stage should consider the above to ensure internal comfort and passive reduction of energy demand.

2.4.2. Natural ventilation is not mentioned in the Energy and Sustainable Design Statement as contributing to mitigation of overheating risk. At Reserved Matters stage, the degree to which thermal comfort is passively achieved will be assessed through floorplans and elevations. It is noted that active ventilation possibly in the form of MVHR will be installed as required.”¹⁰

2.4.3. No details are provided of fabric performance targets, meaning that improvements to building fabric performance relative to the legally allowable minimum performance standards in the Building Regulations at this stage.

2.4.4. The following table is provided as a guide to best practice values for fabric performance.

Building element	Unit	Part L 2021 limiting value	Best practice value
External wall	W/m ² .K	0.26	0.12
Roof	W/m ² .K	0.16	0.10
Floor	W/m ² .K	0.18	0.10
Vertical windows	W/m ² .K	1.60	0.80
Air permeability	m ³ /h.m ³ @ 50 Pa	8.0	<1y.0

2.5. Active building systems.

2.5.1. The use of MVHR and ASHP (potentially with capability for reverse operation) alongside a highly insulated and airtight building fabric, and photovoltaic panels is supported as an appropriate strategy for reducing operational emissions.

2.5.2. Without further details of this strategy such as capacity of proposed solar array, fabric performance goals, energy efficiency of proposed lighting and modelled indications of the levels of emissions reduction expected, the strategy cannot be further assessed at this stage.

2.6. Whole life impacts. The Energy and Sustainable Design Statement notes that *“The use of materials is relevant to both the construction and operational phases of development. The aim of the Proposed Development is to minimise its overall environmental impact through the specification of*

¹⁰ BWP, Energy and Sustainable Design Statement, Land off Basingstoke Road, Spencer’s Wood 2025. P.32

sustainable materials that can be recycled at the end of their lifetime. Using sustainable building materials and products promotes conservation of dwindling non-renewable resources. In addition, integrating sustainable building materials (including the use of recycled materials) into Proposed Development can help reduce the environmental impacts associated with the extraction, transport, processing, fabrication, installation, reuse, recycling, and disposal of these source materials. All timber and timber-based products used on the project shall be Legally harvested and traded timber. The use of products with responsible sourcing certifications such as FSC and BES 6001 shall be actively encouraged. All materials shall also be responsibly sourced and where practical and feasible, materials shall be sourced from local suppliers, reducing the environmental impacts and CO2 emissions associated with transportation to the Site. Scope for increased recycling will be incorporated wherever feasible by specifying recycled materials and materials with a high recycled content.”¹¹

2.6.1. The statements in this section would benefit from more ambitious, defined, verifiable goals. For example, a commitment to undertake Whole Life Carbon Assessment and/or prioritise sourcing materials with Environmental Product Declarations (EPDs), and/or to commit to select insulants with a Global Warming Potential < 5. Legal requirements are minimum standards and do not confer benefit in assessment of sustainable development. The measures as described are supported, however the targets are not sufficiently firm to confer significant benefit at this stage.

2.6.2. The Design and Access Statement includes a Design Coding issue encouraging the following measures: *“Materials selected for construction, including hard and soft landscaping elements, should be carefully chosen to ensure that they are high-quality, durable and that ‘whole life costs’ are manageable. Sustainable choices will reduce initial manufacturing environmental impacts, long-term maintenance costs and waste from construction, whilst maximising resilience and buildings lifespans.”¹²*

2.6.3. These measures are supported in principle, and any future commitments in alignment with these intentions will be taken into account at Reserved Matters stage.

3. Response to WBC MDD Local Plan Policy CC04 and CC05

3.1. No commitment to achieve a defined level of carbon reduction against the TERs for the new homes is made in the application materials reviewed. As such there is insufficient evidence to determine whether a credible strategy to comply with Part 1 of Policy CC04 (as clarified per the WBC Climate Change Interim Policy Position Statement) and CC05 exists at this stage, although the intention to integrate the low and zero carbon technologies assessed as feasible is supported.

3.1.1. Details of the level of carbon reduction targeted are required as part

¹¹ BWP, Energy and Sustainable Design Statement, Land off Basingstoke Road, Spencer's Wood 2025. P.33

¹² Pegasus Group, Design and Access Statement with Design Coding, Land off Basingstoke Road, Spencer's Wood. P.114

of the Energy and Sustainable Design Statement. Since these are not provided at Outline stage, Energy Statements will need to be submitted at Reserved Matters stage with each application to confirm the carbon reduction strategies.

3.1.2. Application of the standard condition ensuring that the provision for onsite renewable energy is delivered at a policy compliant level is recommended.

3.2. The Design and Access Statement states a Design Coding issue that the following measures must be incorporated into the proposed development *“The following must be incorporated into the proposed development:*

Water specification: Integration of water-efficient fixtures and fittings, ensuring compliance with water consumption targets set by local policies. All residential units will aim to achieve a water consumption rate of no more than 105 litres per person per day.”

Rainwater harvesting: Collection and reuse of water for non-potable purposes, such as landscape irrigation and toilet flushing, further reducing the reliance on mains water. “

Flow control devices: Devices to control flow must be installed to regulate water pressure and ensure efficient water usage across the site, minimising waste and optimising consumption.”

Leak detection: Smart leak detection systems must be implemented to monitor and identify any leaks early, ensuring prompt repairs and reducing unnecessary water loss.”

Irrigation: Irrigation systems must be utilised in landscape areas, incorporating drip irrigation technology and the use of harvested rainwater to minimise potable water usage.”¹³

3.2.1. These measures are appropriate and supported.

3.2.2. No proposed flow rates for water appliances are included in the statement at this stage. The below table is provided for information on best practice.

Fitting type	Non low-flow consumption	Best practice consumption
WC	5 - 9 L	< 4 L
Shower	13 L / minute	6 L / minute
Handwash basin taps	8 L / minute	2 L / minute
Sink taps	10 L / minute	4 L / minute
Dishwasher	1.25 L / place setting	< 0.7 L / place setting
Washing machine	14 L / kg	6 L / kg

3.2.3. A commitment to rainwater harvesting is noted as beneficial to the

¹³ Pegasus Group, Design and Access Statement with Design Coding, Land off Basingstoke Road, Spencer’s Wood. P.115

sustainability of the development. Rates of provision are not defined at this stage.

3.2.4. Application of the a planning condition ensuring water efficiency measures are specified at detailed design at a policy compliant level is recommended.

3.2.5. The Energy and Sustainable Design Statement notes that *“The Proposed Development will adhere to Policy CC04 of the Managing Development Delivery Document, ensuring that non-domestic buildings achieve BREEAM “Excellent” certification.”*¹⁴

3.2.6. Application of a planning condition ensuring sufficient information to ensure that non-residential buildings are delivered to comply with the policy requirement for BREEAM ‘Excellent’ certification is recommended.

3.3. The Energy and Sustainable Design Statement notes that *“In accordance with the principles of the waste hierarchy the Proposed Development Site will make provision for the storage of non-recyclable waste and recyclable waste including dedicated storage to encourage the recycling of waste materials. Full consideration will be given to the Council’s waste management infrastructure and services to ensure that occupants have the necessary infrastructure to participate in any kerbside recycling services. The proposed strategy is also expected to include designated bin areas as the future occupier see fit. Wheelie bins will be clearly marked to identify recyclable waste and general waste.”* Further details of the operational waste strategy should be provided at Reserved Matters stage.

4. Conclusion

4.1. In summary, the outline application materials show an appropriate approach to sustainable development. For an application of this scale with several use classes and likely development phases involved, detailed information to show how WBC’s sustainable development policies will be complied with is to be received at Reserved Matters stage in the Energy and Sustainability Statements accompanying each application.

4.2. Recommendations for best practice sustainable development measures for new development are provided in a separate document for information.

4.3. No objection is raised to approval of this application subject to the provision of the evidence as stated and application of the below conditions.

Conditions & Reasons (if required)

Domestic water consumption

Prior to the commencement of development, a scheme achieving a maximum domestic water consumption of 110L per capita per day (including 5L allowance for external water) shall be submitted to and approved in writing by the local planning authority. This shall be evidenced by submission of a suitable water consumption calculator. The approved scheme shall be

¹⁴ BWP, Energy and Sustainable Design Statement, Land off Basingstoke Road, Spencer’s Wood 2025. P.33

implemented before the development is first occupied and shall remain operational for the lifetime of the development.

Reason: To ensure developments contribute to sustainable development. Relevant policy: NPPF Section 14 (Meeting the Challenge of Climate Change, Flooding and Coastal Change), WBC Climate Emergency Action Plan, Core Strategy policy CP1, Managing Development Delivery Local Plan policy CC04 & the Sustainable Design and Construction Supplementary Planning Document.

Low and zero-carbon technology

Prior to the commencement of development, a scheme for achieving a 10% reduction in the predicted carbon emissions arising from operation of the development through the use of decentralised renewable and/or low carbon sources (as defined in the glossary of Planning Policy Statement: Planning and Climate Change (December 2007) or any subsequent version) shall be submitted to and approved in writing by the local planning authority. The minimum 10% reduction shall be achieved in addition to the levels of reduction in carbon emissions required through the Building Regulations in force at the time of the submission of the Full or Reserved Matters planning application. The approved scheme shall be implemented before the development is first occupied and shall remain operational for the lifetime of the development.

Reason: To ensure developments contribute to sustainable development in accordance with NPPF Section 14 (Meeting the Challenge of Climate Change, Flooding and Coastal Change), WBC Climate Emergency Action Plan, Core Strategy policy CP1, MDDL policy CC05 & the Sustainable Design and Construction Supplementary Planning Document.

BREEAM Excellent

a) Prior to works proceeding beyond the slab level, appropriate documentation prepared by a qualified assessor for each non-residential building comprised in the development, shall be submitted to and approved in writing by the Local Planning Authority. This shall demonstrate that that the building(s) will achieve a minimum BREEAM (or equivalent) rating of 'Excellent'.

b) Within three months of first occupation of each relevant building comprised in the development, a Post-Construction Certificate in respect of that building shall be submitted to and approved in writing by the Local Planning Authority. The Post-Development Certificate shall be prepared by an accredited assessor and shall demonstrate compliance with BREEAM rating of 'Excellent' as a minimum.

Reason: To ensure developments contribute to sustainable development in accordance with NPPF Section 14 (Meeting the Challenge of Climate

Change, Flooding and Coastal Change), Core Strategy policy CP1 and Managing Development Delivery Local Plan policy CC04 and CC05.

Date:

02.04.2025

Signed:



Una Haran
BSc (Hons), MArch
Lead Sustainability Planning
Officer