Appendix to Report on the Examination of the Remitted Part of the Salt Cross Garden Village AAP

Schedule of Main Modifications – January 2026

The Schedule Includes:

- The paragraph/policy reference of the modification to help the reader identify the areas of the plan proposed for modification
- Main Modifications are underlined, and deletions are shown as strikethrough.

NB: Any reference to paragraph or page numbers relate to the plan as submitted. Final numbering will be set out in the final version of the plan.

Main Modifications (MMs)

Main Modification Reference	Paragraph/Policy Reference	Main Modification
MM1	Paragraph 5.33	Amend paragraph as follows: Their report[1] (hereafter the 'net-zero carbon report') considers two main scenarios; the first a net zero carbon development scenario and second, a low carbon development scenario. ~~adopts the industry consensus definition for zero carbon developed by LETI[2] reproduced at Figure 5.4. Key elements include the need for low energy use in new buildings and a low carbon energy supply with no use of fossil fuels for heating and hot water and opportunities for on-site renewable electricity maximised.~~
MM2	Figure 5.4 - Definition of Net Zero Operational Carbon	Delete

[1] ~~https://www.westoxon.gov.uk/media/hdnjcnnf/trajectory-for-net-zero-buildings-for-the-oxfordshire-garden-village.pdf~~ Policy 2 Net Zero Carbon Development Evidence Base (March 2025)

[2] ~~https://www.leti.london/~~

Main Modification Reference	Paragraph/Policy Reference	Main Modification
MM3	Paragraph 5.34	Amend paragraph as follows: ~~The~~ Under the net zero carbon development scenario, all development at Salt Cross would be required to achieve net zero operational carbon on-site through the use of high-performance building fabric, efficient heating and hot water systems and on-site renewable energy generation. This scenario is based on the use of defined energy use intensity (EUI) targets and space heating demand indicators with predictive energy modelling (e.g. PHPP, CIBSE TM54) required to demonstrate compliance. ~~net zero carbon report considers four carbon scenarios including:~~ ~~1. Building Regulations compliance (current).~~ ~~2. A minimum 35% on-site reduction in CO2 emissions over Building Regulations compliance (current) with carbon offset.~~ ~~3. 75-80% carbon emission reductions with fossil fuel free heating and hot water in line with Government's early proposals for a Future Homes Standard.~~ 4. ~~Net-zero buildings.~~
MM4	Paragraph 5.35	Amend paragraph as follows: ~~For each scenario, the report considers building fabric and specification, potential decentralised, heat network solutions, low- and zero-carbon energy technologies, viability and predicted annual running cost of energy to occupants.~~ Under the second, low-carbon scenario, all buildings would be required to achieve at least a 100% carbon reduction improvement of their respective Target Emission Rate (TER).

Main Modification Reference	Paragraph/Policy Reference	Main Modification
MM5	Paragraph 5.36	Amend paragraph as follows: ~~Modelling was undertaken for a range of different development typologies using 12 different cases with varying fabric performance and systems. Predicted modelling was used to understand how these cases were then likely to perform in-operation, supported by an assessment of both capital cost and running costs to future occupants.~~ The aim of this scenario would be to reduce the carbon emissions attributed to regulated energy uses in all buildings to zero, achieved through a combination of high-performance building fabric, efficient heating and hot water systems and on-site renewable energy generation. Policy compliance would be demonstrated through the use of Part L modelling – SAP for domestic buildings and the National Calculation Methodology – NCM for non-domestic buildings.
MM6	Paragraph 5.37	The report demonstrates that both scenarios are technically feasible and have a relatively modest impact on costs (+6.1% for the zero carbon scenario and +7% for the low carbon scenario.) Importantly however, it demonstrates that the zero carbon scenario has a number of advantages, not least the fact that it takes account of unregulated energy use (i.e. the energy consumed by a building resulting from fixtures or appliances) which can account for 50% of energy in low-energy dwellings. ~~concludes that scenario 4 – zero carbon be pursued as this is the only scenario that achieves the level of energy efficiency and low- and zero-carbon energy generation required to meet climate change targets. It is also the only scenario that aligns with the aspirations of the Council and local communities. If any other scenario is chosen, the report estimates that buildings within the development would need to undergo energy retrofit before 2050 at a cost of up to £80 million.~~
MM7	Figure 5.5 – Comparison of Scenarios 1 - 4	Delete

Main Modification Reference	Paragraph/Policy Reference	Main Modification
MM8	Paragraph 5.43	Amend paragraph as follows: The associated uplift in capital cost to achieve net-zero carbon development is estimated at 6.1% on top of the costs of a baseline home (source: Policy 2 Net Zero Carbon Development Evidence Base March 2025). ~~5-7% above current Approved Document Part L (ADL) 2013 Building Regulations~~. The relative uplift in capital cost~~, over and above the current national benchmark,~~ will reduce significantly over time. ~~the closer we move to the proposed date for a Future Homes Standard (originally proposed by Government from 2025). The difference in capital cost between scenarios 3 and 4 is only marginal: a margin that is predicted to further reduce over time as green technologies evolve and design solutions become more commonplace in response to an increase in demand for higher standards.~~
MM9	Paragraph 5.44	Amend paragraph as follows: The report concludes that in order to achieve net-zero carbon at Salt Cross, the energy use associated with the buildings must first be reduced as far as possible. 'Ultra-low energy' building fabric, designed to standards comparable to those achieved through Passivhaus, is recommended, with a view to ensuring that space heating demand for both residential and non-residential developments is less than ~~15~~ 20 kWh/m^2.yr.

Main Modification Reference	Paragraph/Policy Reference	Main Modification
MM10	Paragraph 5.45	Amend paragraph as follows: With improved building-fabric performance, comes the need to ensure appropriate levels of thermal comfort in order to avoid the risk of overheating. At the outline planning stage, where relevant and applicable, broader overheating considerations will need to be addressed such as orientation, massing, passive-design considerations. ~~At the detailed planning stage,~~ Beyond this, in accordance with the relevant regulatory frameworks, overheating modelling will be required to demonstrate compliance with Part O of the Building Regulations for residential uses and CIBSE TM52 for non-residential uses. ~~in line with Chartered Institution of Building Services Engineers (CIBSE) guidance to demonstrate that buildings are not at risk of overheating and are compliant with established standards including TM59 for residential and TM52 for non-residential.~~
MM11	Paragraph 5.46	Amend paragraph as follows: In addition to the space heating standard outlined above, the net-zero carbon report ~~provides~~ identifies a number of Energy Use Intensity (EUI) targets – essentially a budget for how much energy different types of building are allowed to use annually, measured on a kWh/m^2.yr basis. The recommended EUI targets for Salt Cross are as follows: • Residential: <35 kWh/m^2.yr • Office: <70 kWh/m^2.yr • Schools: <65 kWh/m^2.yr
MM12	Paragraph 5.47	Amend paragraph as follows: ~~The recommended EUI targets for Salt Cross are shown in Figure 5.6.~~ The report identifies that for other uses (e.g. research and development and retail) it is very challenging to predict energy use and as such, suggests that energy targets for such uses should be developed and agreed as part of any pre-application discussions with the Council. This is reflected in Policy 2.

Main Modification Reference	Paragraph/Policy Reference	Main Modification
MM13	Figure 5.6 – Recommended EUI Targets	Delete
MM14	Paragraph 5.50	Amend paragraph as follows: The net-zero carbon report identifies the need for each building at Salt Cross to generate as much renewable energy as possible, the aim being to achieve a balance between predicted annual energy use and annual renewable energy generation. If this can't be achieved, then it must be achieved elsewhere, either within the building plot, or across the wider site. ~~considers the potential for on-site renewable energy and concludes that photovoltaic (PV) panels that generate electricity are likely to be the most appropriate form of renewable energy generation at Salt Cross and that between 70%-100% of the electricity demand at Salt Cross can be generated on the roofs of the buildings, depending on orientation and massing. If not all PV panels can be accommodated on roofs, the remainder of the energy required will need to be supplied via other means, such as PV installed on empty fields or on top of car parking canopies.~~
MM15	Paragraph 5.51	Amend paragraph as follows: The report concludes that buildings at Salt Cross must not connect to the gas network, or more generally use fossil fuels on-site and must use low carbon heating systems (e.g. heat pumps). ~~fossil fuels, such as oil and natural gas, should not be used to provide space heating, hot water or used for cooking in both residential and non-residential developments. A development cannot be zero carbon without eliminating the use of fossil fuels.~~

Main Modification Reference	Paragraph/Policy Reference	Main Modification
MM16	Paragraph 5.52	Amend paragraph as follows: ~~It also concludes that 100% of the energy consumption required by buildings on-site can be generated using on-site renewables, for example through solar PV. This conclusion is supported by the Garden Village Energy Plan with energy modelling undertaken by the Energy & Power Group (University of Oxford) and EDF Energy R&D UK demonstrating that with roof top solar PV alone, sufficient capacity could be installed to meet the modelled energy demand for the development~~.
MM17	Paragraph 5.54	Amend paragraph as follows: The net-zero carbon report highlights the importance of reducing embodied carbon and suggests that development proposals will need to demonstrate attempts to reduce embodied carbon to meet the upfront carbon limits in the UK Net Zero Carbon Buildings Standard. Calculations will be required at the outline and detailed planning stages, proportionate to the level of information available, with full lifecycle modelling strongly encouraged at the detailed planning stage. ~~recommends that embodied carbon calculations are carried in support of any outline and detailed planning submissions, reconfirmed pre-commencement and validated pre-occupation. The report identifies a specific target for upfront embodied carbon emissions for residential and non-residential buildings of < 500 kg CO2/m^2.~~

Main Modification Reference	Paragraph/Policy Reference	Main Modification
MMM18	Paragraph 5.55	Amend paragraph as follows: ~~*Measurement and verification*~~ *Monitoring and Reporting* ~~It is important that buildings designed to be net-zero operational carbon also perform to this standard when complete. This is to minimise the risk of a performance gap, when the as-built design does not perform to the standards of the original, designed performance submitted at planning stage. The net-zero carbon report recommends post-occupancy energy monitoring carried out every year for the first five years of use of each building to verify the energy consumption of the development in-use.~~ To ensure new development performs as intended, Policy 2 includes a requirement for post-occupancy evaluation (POE), monitoring and reporting. These arrangements should enable measurement of actual building performance and help address the performance gap between 'as designed' and 'as built' outcomes.
MM19	New Paragraph 5.56	Insert new paragraph as follows: A representative sample of buildings will be subject to POE within an agreed period after occupation, with subsequent monitoring and reporting undertaken for a proportionate period thereafter. Verified performance data will be provided to the Council at intervals to be agreed. Where evaluation or monitoring identifies a material performance gap against the approved Energy Strategy, the developer will work with the Council to agree appropriate remedial measures, which may include adjustments to later phases of development.
MM20	New Paragraph 5.57	Insert new paragraph as follows: The District Council intends to publish a guidance note setting out how this and other aspects of Policy 2 can be addressed and implemented in practice.

Main Modification Reference	Paragraph/Policy Reference	Main Modification
MM21	AAP Delivery and Monitoring Framework	In relation to Policy 2 – Net Zero Carbon Development under the column heading 'How will the policy be implemented on the ground?' amend the text as follows: It is anticipated that the key requirements of ~~Policy 1~~ Policy 2 will be addressed at the outline and detailed planning application stages through a robust and thorough energy strategy. This will be reconfirmed at pre-commencement and validated pre-occupation. ~~and monitored post-completion.~~
MM22	AAP Delivery and Monitoring Framework	In relation to Policy 2 – Net Zero Carbon Development under the column heading 'How will we measure success?' amend the text as follows: Overheating assessments undertaken in accordance with the relevant regulatory frameworks including Part O of the Building Regulations for residential uses and CIBSE TM52 for non-residential uses. ~~submitted in support of detailed planning applications, demonstrating that passive measures have been prioritised to ensure there is no risk of overheating within the development and levels of thermal comfort are expected to be compliant with CIBSE guidance.~~ KPIs aligning with net-zero carbon development~~,~~ and supported by appropriate post-occupancy evaluation (POE) monitoring and reporting with the scope and methodology to be agreed with the District Council and secured by planning condition or Section 106 agreement. ~~five-year post-construction energy monitoring, required as a condition.~~

Main Modification Reference	Paragraph/Policy Reference	Main Modification
MM23	Policy 2 – Net Zero Carbon Development	Policy 2 – Net-Zero Carbon Development ~~Proposals for development at Salt Cross will be required to demonstrate~~ All development at Salt Cross is expected to contribute to the delivery of net zero operational carbon on-site through ultra-low energy building fabric ~~specification~~, low carbon technologies and ~~on-site~~ renewable energy generation. ~~An energy strategy will be required with outline and detailed planning submissions, reconfirmed pre-commencement, validated pre-occupation and monitored post-completion demonstrating alignment with this policy.~~ The specific policy requirements outlined below are expected to be met in full unless there are clear and demonstrable technical or viability constraints. In such circumstances, applicants must provide robust justification for any departure and demonstrate that: - All reasonable steps have been taken to comply with the policy; - The approach represents the maximum feasible delivery of net-zero outcomes; and - Particular priority has been afforded to achieving the stated space heating and energy efficiency targets. ***Ultra-Low Energy*** *Building Fabric* ~~Proposals will need to use ultra-low energy fabric to achieve the KPI for~~ Buildings must be designed to achieve a space heating demand of less than ~~<15~~ 20 kWh/m2.yr verified via predictive energy modelling at the detailed planning stage and monitored post-completion. ~~, demonstrated through predicted energy modelling. This should be carried out as part of any detailed planning submission, reconfirmed pre-commencement, validated pre-occupation and monitored post-completion.~~ Proposals that achieve exemplary performance (<15 kWh/m2.yr) will be particularly supported. *Overheating*

		Thermal comfort must be addressed from ~~and the risk of overheating should be given full consideration in~~ the earliest ~~stages of~~ design stages, with passive cooling measures optimised before any mechanical solutions are considered. ~~to ensure passive-design measures are prioritised over the use of more energy-intensive alternatives such as mechanical cooling.~~ At the outline planning stage, where relevant and applicable, mitigation should focus on building orientation and massing. ~~overheating should be mitigated through appropriate orientation and massing and at the detailed planning stage, a modelling sample proportionate to development density will be required to demonstrate full compliance with CIBSE TM59 for residential and TM52 for non-residential development, addressing overheating in units considered at highest risk. Overheating calculations should be carried out as part of the detailed planning submission and reconfirmed pre-commencement.~~ *Energy Efficiency* ~~Energy budgets (EUI targets) must be demonstrated using predicted energy modelling. The following KPI targets will apply:~~ All residential properties, offices and schools should achieve the following sector specific energy use intensity (EUI) targets at the design and construction stage: - Residential <35 kwh/m2.yr - Office <70 ~~55~~ kwh/m2.yr ~~- Research labs <55-240 kwh/m2.yr*~~ ~~- Retail <80 kwh/m2.yr~~ ~~- Community space (e.g. health care) <100 kwh/m2.yr~~ ~~- Sports and Leisure <80 kwh/m2.yr~~ - Schools <65 kwh/m2.yr EUI targets for other uses will be agreed with the District Council through pre-application discussions. A validated, predictive energy modelling approach must be agreed with the District Council and applied consistently across all building types. This modelling should be carried out as part of any detailed planning application, re-confirmed pre-commencement and confirmed pre-occupation, based on as-built information.

		~~To ensure best practice, an accurate method of predictive energy modelling, agreed in consultation with the District Council, will be required for a cross-section of building typologies (e.g. using Passive House Planning Package - PHPP or CIBSE TM45 or equivalent). This modelling should be carried out with the intention of meeting the target EUIs as part of the detailed planning submission, be reconfirmed pre-commencement, validated pre-occupation and monitored post-completion.~~ *Fossil Fuels* The development ~~will be expected to~~ **must** be fossil-fuel free. ~~Fossil fuels, such as oil and natural gas should not be used to provide space heating, hot water or used for cooking.~~ *Zero Operational Carbon Balance* 100% of the development's energy demand must be met through on-site renewable energy, such as solar PV. Developers will be expected to demonstrate through an Energy Strategy (see below) that all opportunities to maximise renewable energy generation on individual buildings have been identified. Where it can be shown that this is not technically feasible, it should be maximised on plot or across the wider site. ~~energy consumption required by buildings on-site should be generated using on-site renewables, for example through Solar PV. The quantum of proposed renewable energy for the whole site (outline planning) and each phase (detailed planning) should be shown in kWh/yr. The amount of renewable energy should equal or exceed the total energy demand for the development in order to achieve net zero operational carbon as a whole.~~ ~~The energy strategy should state the total kWh/yr of energy consumption of the buildings on the site and the total kWh/yr of energy generation by renewables to show that the zero-carbon operational balance is met. An explanation should be given as to how these figures have been calculated.~~ ~~Renewable energy contribution calculations should be carried out as part of the outline and detailed planning submissions, be reconfirmed pre-commencement, validated pre-occupation and monitored post-completion.~~

		~~A detailed low- and zero-carbon viability assessment should be carried out in support of the energy strategy detailing the selection of on-site low- and zero-carbon energy technologies.~~ *Embodied carbon* Development proposals will need to demonstrate attempts to reduce embodied carbon with embodied carbon calculations to be carried out at the outline and detailed planning stages. These calculations should be proportionate to the level of information available, with full lifecycle modelling strongly encouraged at the detailed planning stage. ~~to meet the following KPI:~~ ~~< 500 kg CO2/m² Upfront embodied carbon emissions (Building Life Cycle Stages A1-A5). Includes Substructure, Superstructure, MEP, Facade & Internal Finishes.~~ ~~As part of the submission of any planning application, a report should be prepared which demonstrates the calculation of the expected upfront embodied carbon of buildings. Full lifecycle modelling is encouraged.~~ ~~Embodied carbon calculations should be carried out as part of the outline and detailed planning submission, be reconfirmed pre-commencement, and validated pre-occupation.~~ ~~*Measurement and verification*~~ *Energy Strategy* An energy strategy must be submitted at the outline and detailed planning stages, reconfirmed pre-commencement and validated pre-occupation. It should demonstrate compliance with net-zero carbon objectives, detailing energy consumption and renewable energy generation. The energy strategy must specify: - Total energy demand (kWh/yr) - Energy use intensity (kWh/m2.yr) - Space heat demand (kWh/m2.yr) - Total renewable energy generation (kWh/yr) - Calculation methodology

		Monitoring and Reporting The Energy Strategy must include arrangements for Post-Occupancy Evaluation (POE) monitoring and reporting, with the scope and methodology to be agreed with the District Council and secured by planning condition or Section 106 agreement. ~~Applicants should confirm the metering, monitoring and reporting strategy as part of the detailed planning application. Post-occupancy energy monitoring should be carried out every year for the first five years of use of each building to understand the energy consumption of the development in-use. The results should be stored centrally and shared between developers, design teams and contractors on-site.~~