

South Warwickshire Local Plan (SWLP): Sustainability Evidence Base

Potential Matters for Examination in Public

Draft Technical Review prepared for Trinity Mead Residents Group (SHAPE)–
version 1

28/08/2026

1. Context & Statutory Framework

Sustainable development

The National Planning Policy Framework (NPPF) places sustainable development at the heart of plan-making. Paragraph 11 requires plans to promote a sustainable pattern of development that meets development needs, aligns growth and infrastructure, improves the environment, mitigates and adapts to climate change, and makes effective use of land. The NPPF identifies three overarching objectives for sustainable development, economic, social and environmental, which should be pursued in mutually supportive ways. Strategic policies should also make effective provision for climate change, biodiversity, landscape, green infrastructure and sustainable transport.

Soundness and justification

The NPPF sets four tests of soundness for Local Plans: positively prepared, justified, effective and consistent with national policy. Of particular relevance is the requirement for a plan to be “an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence.” The plan must also be deliverable over its plan period and enable sustainable development in accordance with national policy. The requirement for an appropriate strategy applies to the choice of spatial strategy and the distribution, location and scale of development, not simply to whether individual proposals can be made acceptable.

Sustainability Appraisal and Strategic Environmental Assessment

Section 19 of the Planning and Compulsory Purchase Act 2004 requires Sustainability Appraisal (SA) during preparation of a Local Plan, assessing its social, environmental and economic effects and informing the plan's preparation.

The SA incorporates the requirements of Strategic Environmental Assessment (SEA). Under the Environmental Assessment of Plans and Programmes Regulations 2004, the environmental report must identify, describe and evaluate likely significant effects and

reasonable alternatives, taking account of the plan's objectives and geographical scope.

Government Planning Practice Guidance requires reasonable alternatives to be considered and compared as the plan evolves, including against the baseline environmental, economic and social characteristics. Alternatives should be assessed at the same level of detail, with the reasons for rejecting alternatives and selecting the preferred approach explained in light of the assessment.

Environmental effects, mitigation and infrastructure

The SEA framework requires likely significant adverse effects and measures to prevent, reduce and, as fully as possible, offset them to be identified. Where a strategic allocation depends on substantial infrastructure or mitigation, the effects of that infrastructure and the measures required to address development impacts are relevant to the overall assessment of the plan. This is particularly relevant to the South Western Relief Road and associated highway infrastructure, including their implications for carbon emissions, landscape, biodiversity, flood risk, agricultural land, recreation and sustainable transport.

Climate change, transport and the environment

The NPPF requires planning to support the transition to a low-carbon future, mitigate and adapt to climate change, reduce greenhouse gas emissions, and align patterns of development with infrastructure. It also requires policies to promote sustainable transport, giving priority to pedestrian and cycle movements and access to high-quality public transport, with transport considerations addressed from the earliest stages of plan-making. For the natural environment, national policy requires plans to contribute to and enhance the natural and local environment, including by protecting and enhancing landscapes, biodiversity and ecological networks and recognising the wider benefits of natural capital and ecosystem services.

Application to strategic growth

Taken together, the policy and regulatory framework requires the spatial strategy to be:

- based on proportionate and up-to-date evidence;
- informed by Sustainability Appraisal and Strategic Environmental Assessment;
- assessed against reasonable alternatives;
- capable of demonstrating why the preferred strategy is appropriate;
- consistent with a sustainable pattern of development;
- aligned with the infrastructure required to support growth;
- responsive to climate-change mitigation and adaptation;
- supportive of sustainable transport; and
- protective and enhancing of the natural environment.

2. Core Lines of Inquiry

2.1 STR.2 and the South Western Relief Road as an Integrated Strategy

Potential policy breach: The proposed spatial strategy may be inconsistent with the NPPF requirements for a **sustainable pattern of development**, an **appropriate strategy based on proportionate evidence**, and the effective alignment of **growth and infrastructure**. This is particularly relevant because STR.2 is dependent on major transport infrastructure, including the South Western Relief Road (SWRR), whose own environmental and sustainability effects form part of the consequences of the strategy.

Technical critique: The sustainability of STR.2 cannot be assessed solely by considering the housing allocation in isolation. The allocation will generate substantial additional movement, while the SWRR forms part of the proposed response to the transport pressures associated with strategic growth around Stratford. The relevant assessment is therefore the **combined effects of STR.2 and the infrastructure required to support it**.

These effects potentially include:

- greenhouse gas emissions from construction and additional traffic;
- car dependency and the prospects for modal shift;
- landscape, biodiversity and ecological-network impacts;
- agricultural land loss;
- flood risk and effects on the River Avon and wider water environment;
- effects on public rights of way and recreation;
- noise, air quality and tranquillity; and
- cumulative effects with other strategic growth around Stratford.

The SWRR also has wider spatial effects: major highway infrastructure can influence travel patterns and the location and form of future development. Its relevance to sustainability therefore extends beyond whether it reduces congestion.

The **reasonable-alternatives assessment** is also material. Where a spatial strategy requires substantial new highway infrastructure, the infrastructure requirement and its associated environmental effects are characteristics of that strategy and should inform comparison with reasonable alternatives. The SA should therefore demonstrate that these effects have been assessed at an appropriate level of detail and have informed the selection of the preferred spatial strategy.

Key question for examination: Does the evidence demonstrate, on a proportionate and comparable basis, that the **combined sustainability effects of STR.2, the SWRR and associated infrastructure** support the conclusion that STR.2 represents an appropriate and sustainable location for strategic-scale growth?

If it does not, there is a potential soundness issue in the justification for the allocation and the wider spatial strategy.

2.2 Whether sustainability actually informed spatial selection

Potential policy breach: NPPF paragraphs 11, 31, 32 and 36(b); Planning and Compulsory Purchase Act 2004, section 19; Environmental Assessment of Plans and Programmes Regulations 2004. The NPPF requires plans to promote a sustainable pattern of development and to be based on proportionate evidence. A sound plan must be **justified**, meaning that it is an appropriate strategy, taking into account reasonable alternatives. Sustainability Appraisal must inform plan preparation and assess the likely significant effects of the plan and reasonable alternatives. Government guidance states that the reasons for rejecting alternatives and selecting the preferred approach should be explained in light of the appraisal findings.

Technical critique: The Regulation 19 SA identifies substantial adverse sustainability effects associated with STR.2, including **significant adverse effects for climate change and landscape**, together with adverse effects relating to flood risk, biodiversity, pollution and natural resources. These effects remain after proposed mitigation is taken into account.

This creates a fundamental issue concerning the **role of sustainability appraisal in the selection of STR.2**. The SA is intended to inform the spatial strategy and assist in determining the most appropriate approach. Yet the available evidence needs to demonstrate a clear chain between:

the sustainability characteristics of alternative locations → comparative appraisal of their effects → the selection and scale of STR.2.

If that chain cannot be demonstrated, the SA risks functioning primarily as an assessment of the environmental consequences of a strategy selected on other grounds, rather than as evidence which materially informed the strategic choice.

The Council's own SA methodology confirms that reasonable alternatives were considered, including alternative strategic growth locations and growth options. This makes the comparative reasoning particularly important. The evidence should show **why the sustainability disadvantages identified at STR.2 were considered acceptable in the context of the alternatives**, and how those disadvantages influenced the eventual allocation of approximately 2,700 homes.

There is a particular concern where the adverse characteristics of STR.2 are addressed through **future mitigation and infrastructure**. The SA incorporates assumptions about sustainable transport, green infrastructure, landscape mitigation, biodiversity measures and other interventions when reaching its conclusions. Such mitigation can be appropriate, but it materially affects the assessed sustainability of the location. The Council therefore needs to demonstrate that the comparison with reasonable alternatives has been made on a **consistent basis**, rather than allowing the preferred

location's constraints to be discounted on the basis of mitigation which was not afforded equivalent weight elsewhere.

This is especially important for **carbon and transport**. STR.2 is a substantial greenfield extension whose sustainability depends in part upon future transport infrastructure, including the SWRR. If substantial infrastructure is required to address the transport and accessibility consequences of locating growth at STR.2, those consequences form part of the sustainability characteristics of the strategy itself. The same principle applies to environmental impacts requiring extensive landscape, biodiversity, flood-risk or other mitigation.

The issue is therefore not confined to whether individual mitigation measures are technically possible. It concerns whether **spatial avoidance was given sufficient weight before reliance was placed on mitigation**. The NPPF's approach to sustainable development and the natural environment places emphasis on avoiding significant adverse impacts where possible and pursuing alternatives which reduce or eliminate such impacts.

The later production of detailed evidence for STR.2 also requires scrutiny. If carbon, flood-risk, transport or environmental evidence has been developed substantially after the strategic choice was made, the Council should be able to demonstrate how that evidence informed the choice of strategy rather than simply validating a preferred allocation. Equally, where detailed evidence exists for STR.2 but not for reasonable alternatives, the Examination should establish whether the available evidence permits a sufficiently robust comparison of the competing spatial options.

This is particularly material because **significant residual adverse effects are not merely theoretical**. The SA itself concludes that STR.2 has significant adverse effects in important sustainability categories. The greater the identified sustainability penalty associated with a strategic location, the more important it becomes that the evidence demonstrates why that location was selected over reasonable alternatives.

The potential deficiency is therefore one of **strategic justification and evidential traceability**. The Council needs to demonstrate that sustainability appraisal materially contributed to the decision to concentrate strategic growth at STR.2 and that the identified environmental disadvantages were properly weighed against the sustainability performance of reasonable alternatives.

Potential soundness implication: Justified / Evidence.

If the evidence cannot demonstrate that sustainability considerations materially informed the selection and scale of STR.2, and instead shows that significant sustainability disadvantages were accepted on the basis of subsequent mitigation, there is a credible concern that the spatial strategy is **not adequately justified by the evidence required by the NPPF**.

2.3 Real accessibility and physical severance

Potential policy breach: NPPF paragraphs 11, 31, 32, 114 and 115; SWLP Policy

STC.1. The NPPF requires transport issues to be considered from the earliest stages of plan-making, with development focused in locations which are or can be made sustainable through limiting the need to travel and offering a **genuine choice of transport modes**. Policies should give priority to pedestrian and cycle movements, followed by access to high-quality public transport. The SWLP similarly states that significant development should be focused on locations which are, or can be made, sustainable and that transport opportunities should be identified and pursued from the earliest stages of plan-making.

Technical critique: The sustainability case for **STR.2** appears to place substantial weight on its proximity to Stratford-upon-Avon and the potential to provide walking, cycling and public transport connections into the town. However, geographical proximity does not necessarily equate to **real accessibility**. For a development of approximately 2,700 homes, the relevant issue is whether residents can make everyday journeys to Stratford's employment, services, schools, railway station and town centre conveniently, safely and directly without relying on a private car.

STR.2 is separated from the existing urban area by a combination of significant physical and transport barriers. The **River Avon, A46 and other strategic roads** constrain the available connections between the site and Stratford. The sustainability of the allocation therefore depends heavily upon the quality, directness and deliverability of new crossings and connections.

This matters because the NPPF requires a **genuine choice of transport modes**, not simply the theoretical availability of a route. A walking or cycling connection which is indirect, unattractive, poorly integrated with the existing network or requires difficult crossings may exist on a plan but fail to provide a realistic alternative to the car for everyday journeys.

The distinction is particularly important for access to **Stratford railway station and the town centre**. The existence of destinations within a nominal walking or cycling radius does not establish that they are practically accessible by those modes. The assessment should account for the actual route, including crossings, gradients, junctions, severance and the continuity of the walking and cycling network.

The same applies to public transport. STR.2 is not presently served by an established high-capacity public transport network comparable with a location immediately adjoining a railway station or established urban transport corridor. If the sustainable transport case depends upon future bus services and active-travel infrastructure, those measures need to form a credible and integral part of the spatial strategy rather than being treated as an assumption that development will subsequently generate sustainable travel.

The issue is sharpened by the scale of STR.2. A development of this magnitude has the potential to generate a substantial number of daily trips. If the site's physical relationship with Stratford makes sustainable modes less convenient than the private car, even relatively modest differences in journey convenience can translate into significant additional car use across thousands of households.

There is therefore a potential mismatch between **plan-level accessibility assessments based on proximity** and the much more demanding policy objective of creating a genuinely sustainable pattern of movement. The SWLP itself recognises that significant development should be focused in locations which are or can be made sustainable through limiting the need to travel and offering a genuine choice of transport modes.

The Examination should therefore scrutinise the assumptions underpinning STR.2's sustainability rating and establish whether the proposed connections provide **continuous, direct and realistic routes** to the destinations that matter most. This should include the relationship between STR.2 and the existing Stratford walking and cycling network, the practical route to the railway station, crossings of strategic roads and the River Avon, and the extent to which future infrastructure is required before sustainable travel becomes genuinely attractive.

This is also relevant to the **carbon assessment and modal-shift assumptions**. If STR.2's sustainable transport performance is overstated because accessibility is measured primarily by geographical distance rather than realistic journey conditions, the assumed level of modal shift may be correspondingly optimistic. That would affect not only the transport assessment but the wider sustainability and carbon conclusions for the allocation.

The concern is therefore potentially significant to the **justification of STR.2 and the credibility of its sustainability appraisal**. The evidence needs to demonstrate that the proposed strategic allocation can provide a genuine choice of transport modes at the scale proposed, taking account of the physical barriers between the site and Stratford and the infrastructure required to overcome them.

Potential soundness implication: Justified / Effective / Consistent with national policy.

If the sustainability case for STR.2 depends materially upon future connections which are indirect, incomplete, uncertain or insufficient to overcome existing physical severance, there is a credible concern that the allocation has been assessed as more sustainable than its **real-world accessibility** would support. The Council should be able to demonstrate that the proposed walking, cycling and public transport network will provide a genuinely competitive alternative to private-car travel for the scale of development proposed.

2.4 Environmental avoidance versus post-selection mitigation

Potential policy breach: NPPF paragraphs 11, 31, 32, 187, 188 and 193; Planning and Compulsory Purchase Act 2004, section 19; Environmental Assessment of Plans and Programmes Regulations 2004. The NPPF requires plans to promote a sustainable pattern of development and to contribute to and enhance the natural and local environment. Strategic policies should direct development towards land with the least environmental or amenity value where consistent with other policies, while the biodiversity mitigation hierarchy requires significant harm to be **avoided through locating development on an alternative site with less harmful impacts**, then adequately mitigated and, as a last resort, compensated.

Government SA guidance similarly requires reasonable alternatives to be assessed against the baseline, using the same level of detail, with significant adverse effects and measures to prevent, reduce or offset them identified. The appraisal should inform the development of the plan and the reasons for selecting the preferred approach should be explained in light of the alternatives.

Technical critique: The Regulation 19 SA identifies significant adverse effects associated with **STR.2**, including landscape and climate-change effects, alongside adverse effects relating to biodiversity, flood risk, pollution and natural resources.

This creates a significant issue about **where in the planning process those environmental impacts were addressed**. The evidence appears to rely substantially upon mitigation measures associated with the eventual development of STR.2: landscape buffers, green infrastructure, biodiversity measures, sustainable transport provision, flood-risk measures and other safeguards. Those measures may reduce the effects of development, but they do not remove the underlying question of whether environmental constraints should have carried greater weight in the **choice of location and scale**.

This distinction matters because the national policy framework places **avoidance ahead of mitigation** where significant environmental harm is involved. For biodiversity in particular, the NPPF expressly identifies locating development on an alternative site with less harmful impacts as the first step in the mitigation hierarchy.

The concern for STR.2 is therefore whether the evidence demonstrates that its environmental constraints were genuinely considered as factors capable of influencing the spatial strategy, or whether the strategy was effectively established and the resulting impacts then addressed through mitigation.

The distinction is particularly important given the **scale of STR.2**. A strategic allocation of approximately 2,700 homes inevitably involves more than the loss of individual development parcels. It changes the character and function of a substantial area of

countryside and generates associated infrastructure, movement and urbanisation effects. Where significant landscape, biodiversity, agricultural-land and climate effects arise from the scale of development itself, mitigation within the site cannot necessarily address the strategic consequences of having selected that location.

The SA therefore needs to demonstrate a sufficiently robust relationship between the **environmental constraints identified at STR.2, the assessment of reasonable alternatives and the decision to allocate the site at the proposed scale**. This is particularly important where other potential locations may have presented different environmental constraints or required different infrastructure interventions.

There is a further concern where mitigation depends upon **future infrastructure or detailed masterplanning**. Measures which are presently expressed as requirements for subsequent development stages may not have the same evidential status as environmental characteristics which can be assessed directly at the strategic-plan stage. The more heavily the sustainability conclusion relies upon future measures, the greater the importance of demonstrating that those measures are realistic, capable of being secured and sufficient to address the identified effects.

This is particularly relevant to the **SWRR and associated infrastructure**. A major road can itself generate landscape, biodiversity, agricultural-land, carbon, noise and tranquillity impacts. If the infrastructure is necessary to accommodate the growth strategy, those effects form part of the environmental consequences of STR.2 and cannot simply be treated as an external mitigation measure. The same applies to other major infrastructure required to make the allocation function.

The issue is therefore whether the SA's mitigation assumptions have **materially reduced the apparent environmental penalty of STR.2 without a corresponding assessment of whether the impacts could have been avoided through a different spatial strategy**. Government guidance specifically identifies avoidance through an alternative site with less harmful impacts as part of the mitigation hierarchy and requires reasonable alternatives to be assessed in a way that permits meaningful comparison.

This matters particularly because the SA itself records **significant residual adverse effects after mitigation**. Where substantial residual effects remain, the justification for selecting STR.2 becomes more demanding: the evidence should clearly establish why those effects are acceptable in the context of the reasonable alternatives and the wider benefits of the strategy.

Potential soundness implication: Justified / Consistent with national policy.

If the evidence demonstrates that significant environmental constraints at STR.2 were principally addressed through post-selection mitigation, without a sufficiently robust

demonstration that avoidance through spatial choice was considered and rejected on evidence, there is a credible concern that the Plan has **underweighted the environmental consequences of its spatial strategy**. That could materially weaken the justification for STR.2 and the Council's demonstration that the allocation represents an appropriate sustainable strategy.

2.5 Cumulative effects of STR.2 and other Stratford growth

Potential policy breach: NPPF paragraphs 11, 31, 36(b), 187 and 188; Planning and Compulsory Purchase Act 2004, section 19; Environmental Assessment of Plans and Programmes Regulations 2004. The NPPF requires plans to be based on proportionate evidence, while the SEA framework requires the likely significant environmental effects of the plan to be assessed, including cumulative effects.

Technical critique: STR.2 forms part of a much wider concentration of strategic growth around Stratford-upon-Avon, including **SG18, Long Marston Airfield and associated infrastructure**. The combined sustainability effects may therefore be materially greater than those identified for individual allocations.

The key concern is whether the SA adequately assesses the **specific cumulative consequences of this concentration of growth**, rather than simply identifying cumulative effects in general terms.

This is particularly important for:

- **landscape and settlement character**, including the cumulative urbanisation of Stratford's surrounding countryside;
- **transport and carbon**, including the combined effect on vehicle movements, modal split and the need for major highway infrastructure such as the SWRR;
- **biodiversity and ecological connectivity**;
- **flood risk, drainage and the River Avon**;
- **agricultural land and green infrastructure**;
- noise, air quality and tranquillity; and
- the capacity of shared infrastructure and services.

The issue is particularly acute where mitigation is considered **allocation by allocation**. Landscape buffers, ecological measures or sustainable transport infrastructure may reduce the effects of STR.2 in isolation while failing to address the wider consequences of the combined development footprint.

The SA should therefore demonstrate how the **combined spatial footprint, infrastructure requirements and environmental effects of Stratford's strategic growth** have been assessed, including the interaction between STR.2, SG18, LMA and the SWRR.

Potential soundness implication: Justified / Effective / Consistent with national policy.

If the cumulative assessment does not adequately capture these interactions, there is a credible concern that the SA **understates the environmental consequences of the spatial strategy**, particularly for landscape, carbon, transport, biodiversity and flood risk. The Council should be able to demonstrate what the cumulative effects are, how they differ from individual site effects, and whether the proposed mitigation remains effective at the scale of the combined strategy.

2.6 Carbon methodology and whether recent evidence cures earlier deficiencies

Potential policy breach: NPPF paragraphs 11, 31, 36(b) and 164; Planning and Compulsory Purchase Act 2004, section 19; Environmental Assessment of Plans and Programmes Regulations 2004. The NPPF requires plans to promote a sustainable pattern of development and to take a proactive approach to mitigating and adapting to climate change. Plans should support patterns of development which help to reduce greenhouse gas emissions, while the soundness test requires the spatial strategy to be justified by proportionate evidence and to take reasonable alternatives into account.

Technical critique: The Council has produced additional carbon evidence in May 2026 through Bioregional's **Net-Zero Spatial Planning Support: Carbon Implications of Spatial Scenario Golf** and **Cumulative Carbon Impact by Site: Scenario Golf Site-by-Site Analysis**. These reports provide important additional information, including estimates of transport-related carbon emissions for the major sites within the final Scenario Golf strategy.

However, there is a significant question as to whether this later evidence **cures the deficiencies in the carbon assessment underpinning the spatial strategy and STR.2.**

First, the Bioregional work was undertaken for the **preferred Scenario Golf sites**, rather than being applied consistently across the reasonable spatial alternatives. The Regulation 19 SA Appendix E reportedly confirms that the detailed Bioregional carbon work was prepared for the preferred allocations and was not applied to the comparative appraisal of reasonable alternatives. This matters because carbon performance is potentially a material characteristic of the location and scale of STR.2. Evidence showing the carbon consequences of STR.2 after it has been selected is materially different from evidence demonstrating that STR.2 performed better than reasonable alternatives when the spatial strategy was being determined.

Second, the available critique identifies a potentially important **scope limitation**. The Bioregional reports appear not to include the embodied carbon associated with major enabling infrastructure, including the SWRR and associated highway structures. The

SCA¹ review identifies the bypass as a major infrastructure commitment involving substantial construction works, including bridges, floodplain crossings and associated highway infrastructure, and argues that its embodied emissions should form part of the assessment of the Plan's significant environmental effects.

For STR.2, this is particularly material because the allocation forms part of a wider growth strategy requiring substantial strategic transport infrastructure. If the carbon assessment captures emissions arising from the homes and their operational travel but excludes significant emissions arising from infrastructure required to support the growth strategy, the resulting carbon footprint may not represent the **full carbon consequence of the spatial choice**.

Third, there are concerns about the **transport-emissions methodology** used by Bioregional. The published critique states that trip distances were derived from nationally averaged commuting distances associated with settlements with comparable road-network integration, rather than modelling likely destinations from the individual strategic sites. It also identifies the absence of railway-station proximity as a modelling factor and questions assumptions concerning the future decarbonisation of electric vehicle travel.

These assumptions matter particularly for STR.2 because its carbon performance is closely connected to **where residents travel and how they travel**. A nationally averaged trip-distance assumption cannot necessarily capture the consequences of STR.2's specific relationship with Stratford-upon-Avon, its employment and service locations, the railway station, existing road network and proposed strategic highway infrastructure.

The reported modelling outputs warrant particular scrutiny where they produce counter-intuitive results between locations. The SCA review identifies, for example, a very large modelled vehicle-kilometre figure for Hatton despite its proximity to an operational railway station. Such outputs do not, by themselves, establish that the model is wrong, but they provide a legitimate reason for the Examination to scrutinise the assumptions sufficiently to establish whether the results provide a reliable basis for comparing the carbon consequences of different spatial choices.

The issue is therefore particularly acute for **STR.2's justification**. The Regulation 19 SA identifies significant adverse effects for climate change associated with the strategic growth strategy, while the Council's later carbon evidence is being relied upon to provide greater quantitative understanding of those effects. If that later evidence does not capture the full infrastructure consequences, does not provide a comparable assessment of reasonable alternatives, or relies upon transport assumptions which

¹ <https://www.stratfordclimate.org/swlp-reg-19-consultation/>

materially distort the relative carbon performance of different locations, its ability to support the spatial strategy is weakened.

Potential soundness implication: Justified / Consistent with national policy.

The Examination should establish whether the May 2026 carbon evidence provides a **complete and sufficiently robust carbon assessment of STR.2**, including the infrastructure required to support it, and whether the methodology provides a reliable comparison with reasonable spatial alternatives. If significant infrastructure emissions and relevant transport effects remain outside the assessment, the Council may not have demonstrated that the proposed scale and location of STR.2 represent an appropriately justified response to the Plan's climate and net-zero objectives.

2.7 Dependence on infrastructure delivery for sustainability

Potential policy breach: NPPF paragraphs 11, 31, 32, 36(c), 114 and 115.

STR.2's sustainability assessment relies materially upon future infrastructure to deliver sustainable transport and mitigate the impacts of strategic growth. Where the sustainability performance of an allocation depends upon infrastructure delivered at a later stage, the Plan needs to demonstrate that the infrastructure will be available when required and that the resulting pattern of development will genuinely support sustainable travel.

The concern is particularly acute where early phases of development could be occupied before the infrastructure on which the sustainability case depends is operational. A strategy cannot achieve its intended sustainable pattern of development if the infrastructure required to support that pattern systematically follows rather than accompanies growth.

Potential soundness implication: Effective / Justified.

2.8 Flood resilience and unresolved climate-change risk

Potential policy breach: NPPF paragraphs 11, 31, 32, 36(c), 161–165 and 187; Planning and Compulsory Purchase Act 2004, section 19; Planning Practice Guidance on Flood Risk and Coastal Change. National policy requires plans to take account of climate-change impacts, direct development away from areas at highest risk of flooding, and ensure that development is appropriately flood resilient and resistant. Strategic policies should also ensure that flood risk is not increased elsewhere and that development is supported by sustainable drainage and appropriate infrastructure.

Technical critique: The latest Level 2 Strategic Flood Risk Assessment identifies **material flood-risk constraints affecting STR.2**, including both fluvial and surface-water risk. Although the majority of the allocation lies within Flood Zone 1, the SFRA identifies Flood Zone 3b within the site and notes that the Flood Map for Planning does **not represent fluvial flood risk in the upper reaches of Rush Brook**.

Surface-water risk is more extensive. All three STR.2 parcels are affected, with **4.9% of the site within the high-risk surface-water category** and 10.3% affected when the low-risk category is included. The modelling identifies locations where flood depths could reach **1.2m or more**, with hazard classified as **“Danger for most.”**

The position becomes materially worse under climate-change conditions. The SFRA estimates that the area affected by surface-water flooding increases from **6.2% to 10.3%** under the climate-change scenario and describes STR.2 as **“highly sensitive” to increases in rainfall due to climate change**.

There are also unresolved questions concerning the behaviour of **Rush Brook and existing culverts**. The SFRA states that a detailed **1D–2D hydraulic model is likely to be required at FRA stage**, including assessment of culvert blockage. Three culverts within or close to STR.2 could result in water backing up and flowing onto the site if blocked.

Flood risk also has implications for the **practical resilience and accessibility of the allocation**. The SFRA identifies climate-change scenarios in which routes serving STR.2 experience significant surface-water hazard. Westbound access along Trinity Road is predicted to experience depths of at least 0.6m and a hazard rating of at least 0.75, classified as **“Danger for some”**; Alveston Hill is also identified as having a hazard rating of at least 1.25, classified as **“Danger for most.”**

This is significant for a strategic allocation of approximately 2,700 homes. Flood resilience concerns extend beyond whether individual dwellings can ultimately be designed to withstand flood risk. The SFRA itself requires **safe access and escape to be demonstrated**, while the drainage strategy must ensure that flood risk is not increased on or off the site.

The evidence therefore leaves important matters to subsequent site-specific assessment, including detailed modelling of Rush Brook, culvert blockage and the precise implications for access and drainage. Those matters are potentially material to the **strategic suitability and climate resilience of STR.2**, particularly given the scale of development proposed and the increasing rainfall intensity associated with climate change.

Potential soundness implication: Justified / Effective / Consistent with national policy.

The Council should demonstrate that the identified flood constraints, climate-change effects and requirements for further hydraulic modelling have been adequately reflected in the strategic assessment and **phasing of STR.2**. If material aspects of flood behaviour and safe access remain unresolved until later FRA stages, there is a credible concern that the evidence base does not yet demonstrate that STR.2 constitutes a sufficiently **flood-resilient and climate-resilient location for strategic-scale growth**.

2.9 Wastewater capacity and water-quality resilience

Potential policy breach: NPPF paragraphs 11, 31, 32, 36(c) and 187; Planning Practice Guidance on water supply, wastewater and water quality. Planning guidance requires plan-makers to consider the sufficiency and capacity of wastewater infrastructure, the capacity of the receiving environment to accept effluent without preventing statutory objectives being met, and the phasing of development so that wastewater infrastructure is in place when needed.

Technical critique: STR.2 would add substantial growth to a wastewater catchment which the Council's own latest Water Cycle Study identifies as already under pressure. The Stage 2 WCS forecasts 11,142 dwellings being served by Stratford-Milcote WwTW during the Plan period and concludes that the works are likely to be close to or exceed its permitted flow. It identifies zero estimated spare hydraulic capacity following planned development and states that upgrades and/or a change to the permitted limit may be required.

The constraint is not purely hydraulic. The WCS's water-quality modelling identifies Stratford-Milcote as capable of experiencing a greater than 10% deterioration in water quality for one or more assessed pollutants under the future-growth scenario. The WCS concludes that this can be addressed through treatment at the technically achievable limit, but its detailed assessment identifies phosphate as an amber constraint, requiring a tighter permit and treatment upgrade.

There is also evidence of existing pressure on the wastewater system. Stratford-Milcote STW recorded an average of 35.7 storm-tank overflow spills per year during 2023–25, placing it above the WCS's threshold for investigation.

This is material to the sustainability of STR.2 because the environmental performance of the allocation depends upon additional wastewater infrastructure and treatment capacity being available as growth comes forward. The WCS itself states that development in areas with limited wastewater network capacity increases pressure on the network and the likelihood of storm-overflow operation, and recommends that strategic infrastructure requirements are incorporated into development phasing.

The receiving water environment is also relevant. The WCS identifies Stratford-Milcote's receiving waterbody as part of the River Avon system and includes specific monitoring actions for the Stratford-Milcote works.

Potential soundness implication: Effective / Justified / Consistent with national policy.

The Council should demonstrate that the wastewater infrastructure and treatment upgrades required to accommodate STR.2 within the cumulative Stratford growth strategy will be available at the point they are needed, and that their delivery will prevent deterioration of the receiving water environment and avoid increased pressure on storm overflows. The fact that the WCS identifies zero spare hydraulic capacity following planned growth and requires further intervention is a material sustainability constraint which should be reflected in the allocation's phasing and overall justification.