

To: Development Management

From: Drainage Team Rohit Singh

**Planning App Ref:
PL/2026/02717**

Service Ref: LLFA

Date: 11/08/2026

PROPOSAL

Full planning permission for residential development (Use Class C3) comprising 135 dwellings with associated private amenity space and car/cycle parking, a comprehensive landscaping scheme to include publicly accessible amenity space, sustainable drainage features, new tree planting and associated works. Alterations to the existing Home Farm access from Boreham Road, including demolition of a section of boundary wall, and new vehicular, cycle and pedestrian routes through the site. All associated infrastructure works.

SITE LOCATION

Land at Home Farm, Boreham Road, Warminster

The FRA identifies that the site is located within Flood Zone 1 and is therefore at low risk of fluvial flooding from rivers. However, site-specific constraints remain relevant to the drainage and flood risk assessment. In particular, areas of elevated groundwater susceptibility have been identified, including along parts of the southern boundary and access corridor, which may influence the performance of SuDS features and affect access during wetter periods. The FRA also highlights surface water flow routes within parts of the site, requiring careful management through layout design, exceedance routing and attenuation measures. Whilst no overriding flood risk constraint to development has been identified, further evidence is required to demonstrate that groundwater conditions, surface water exceedance flows and access arrangements have been fully addressed and that the development will remain safe for its lifetime without increasing flood risk elsewhere.

SUMMARY OF THE CONSULTEE POSITION

Object	
Holding Objection: Further information required	
Support	
No comment	
No objection	
No objection subject to conditions	
Consultation not required	

APPLICATION DOCUMENTS REVIEWED

- Flood Risk Assessment and Drainage Strategy
- 2204791-ACE-XX-XX-DR-C-0601 - Proposed Drainage Strategy (Sheet 1 of 2)
- 2204791-ACE-XX-XX-DR-C-0602 - Proposed Drainage Strategy (Sheet 2 of 2)
- Causeway Flow Hydraulic Modelling Outputs
- SuDS Maintenance Plan
- SuDS Water Quality Assessment
- Site Investigation Information
- Topographical survey Drawing Reference: ENC/200125/3797-S2

RELEVANT PLANNING POLICY & GUIDANCE

National Planning Policy Framework (NPPF) [NPPF December 2024 Link](#)
Planning and Flood Risk (Paras 170–182)

Wiltshire Core Strategy – Adopted January 2015 [Wiltshire Core Strategy Link](#)
Core Policy 67 requires that all new development must address flood risk from all sources and not increase flood risk elsewhere. It supports the use of Sustainable Drainage Systems (SuDS) and requires that developments demonstrate how surface water will be managed sustainably.

Wiltshire Local Plan (emerging) [Local Plan Review Link](#)
Development must avoid high flood risk areas using the sequential approach. Proposals require a Flood Risk Assessment, Surface Water Drainage Strategy, and Groundwater Assessment where relevant. All schemes must include Sustainable Drainage Systems (SuDS), with major developments achieving a 30% reduction in runoff compared to greenfield rates, following the surface water discharge hierarchy.

Culverting and building over watercourses is discouraged, and natural drainage features should be retained or restored. Drainage strategies must ensure safety during extreme flood events (1-in-100-year + climate change) and provide safe access/egress. SuDS should also deliver biodiversity, amenity, and water quality benefits.

Supplementary Planning Documents

Wiltshire Council Drainage Betterment Strategy (2024) [SPD Link](#)
This technical guidance outlines expectations for surface water discharge hierarchy, attenuation, exceedance routes, water quality, and post-development monitoring.

Wiltshire Design Guide (March 2024) [SPD Link](#)
Includes principles of good design, including integration of SuDS and flood resilience.

Other Relevant Policies and Guidance

Planning Practice Guidance (PPG) – Flood Risk and Drainage [Guidance Link](#)
Covers detailed expectations for flood risk assessments, SuDS design, discharge hierarchy, sequential testing and climate change allowances.

Wiltshire SFRA (2024) [SFRA Link](#)

This document underpins the Sequential and Exception Test application and provides site screening evidence.

Section 19 Flood Investigation Reports [Section 19 Reports Link](#)

These documents summarise investigations into significant local flood incidents and establish what caused the flooding, how authorities responded, and actions needed to prevent future floods.

National Standards for Sustainable Drainage Systems (SuDS) June 2025
[Guidance Link](#)

Establishes mandatory criteria for runoff destination hierarchy, interception, flood resilience, water quality, amenity, biodiversity, and long-term maintenance for all new developments in England.

SuDS Manual (CIRIA C753)

This document set outs design principles, especially where attenuation, exceedance routing, and water quality are discussed.

Infiltration drainage design must be supported by ground investigations, including infiltration testing in accordance with *British Research Establishment (BRE) Digest 365 – Soakaway Design*, and groundwater level monitoring that accounts for seasonal variation.

ASSESSMENT OF THE PROPOSAL

Context

In planning terms, flood risk refers to the potential for development to increase the likelihood or severity of flooding on-site or elsewhere, while drainage considerations relate to the capacity of the site and surrounding infrastructure to manage surface water runoff in a sustainable and effective manner.

The local planning authority must be satisfied that the proposed development will not increase flood risk, either on-site or elsewhere, and that surface water will be managed in a sustainable and coordinated manner.

Where necessary, planning conditions or legal agreements may be used to secure the implementation, maintenance, and monitoring of SuDS and other drainage infrastructure.

Assessment

The assessment below considers flooding, drainage and sustainable drainage matters that fall within the LLFA remit when reviewing a full planning application. Applicant has provided following information:

- Site-specific flood risk assessment.
- Infiltration testing results (2.30×10^{-5} m/s).
- Hydraulic modelling in Causeway Flow.
- Drainage layout drawings.
- Storage volume calculations.
- Water quality assessment using the Simple Index Approach.
- Exceedance routing proposals.
- Maintenance strategy.
- Foul drainage strategy with Wessex Water engagement.

1. Site Constraints and Flood Risk Context

The application site extends to approximately 10.5ha of predominantly greenfield land located east of Warminster and lies wholly within Flood Zone 1, indicating a low risk of fluvial flooding. There are no Main Rivers within the site boundary; however, the River Wylye is located approximately 200m to the south-west. The principal flood risk constraints affecting the site relate to surface water and groundwater. Mapping identifies areas of elevated surface water flood risk within the southern part of the site, whilst the site is also located within an area of high groundwater vulnerability and groundwater emergence potential. Infiltration testing indicates infiltration drainage may be feasible; however, groundwater monitoring was ongoing at the time of submission. These site-specific constraints are fundamental to the assessment because the proposed drainage strategy relies primarily on infiltration-based SuDS features for the management of surface water runoff.

2. Groundwater Flood Risk

The Groundwater represents one of the principal flood risk constraints affecting the site. The FRA identifies the site as being located within an area of high groundwater vulnerability, with Wiltshire Council SFRA mapping indicating a risk of groundwater emergence across much of the site and areas in the south-west where groundwater may emerge at significant rates. The FRA also confirms that groundwater was encountered in nearby boreholes at depths between approximately 1.2m and 2.0m below ground level and that groundwater monitoring was ongoing at the time of submission. As the proposed drainage strategy relies predominantly on infiltration, groundwater conditions are fundamental to both the long-term operation of the drainage system and the safety of the development

Whilst the applicant proposes to maintain a minimum 1m separation between infiltration features and groundwater levels, the completed groundwater monitoring results and supporting assessment have not been presented. Consequently, insufficient evidence has been provided to demonstrate that seasonal groundwater conditions have been fully characterised or that infiltration features, exceedance routes, access arrangements and development platforms will remain effective throughout the lifetime of the development. Further evidence is therefore required to demonstrate compliance with the groundwater-related requirements of DEFRA Standards 1, 3, 4 and 7 and to confirm that groundwater conditions will not increase flood

risk, compromise drainage performance or adversely affect the safety and resilience of the development.

3. Safe Access and Egress

The submission does not currently provide enough information to fully demonstrate that safe access and egress can be maintained throughout the lifetime of the development during extreme rainfall events, exceedance situations or other flood related circumstances. For a full planning permission application, the LLFA would normally expect a clear assessment of residual flood risk, identification of potential hazards and evidence that users of the development can safely enter and leave the site during severe storm events. Consideration should be given to exceedance flow routes, temporary ponding areas, accessibility requirements and emergency response arrangements. Where flooding has the potential to affect access routes, supporting evidence should demonstrate acceptable hazard levels and provide confidence that emergency services and residents are not placed at unacceptable risk during future flood events.

4. Standard 1 - Runoff Destinations and Drainage Hierarchy

The applicant has undertaken an assessment of the drainage hierarchy and considered surface water reuse, infiltration and discharge to a surface water body. The FRA confirms that infiltration testing has been undertaken and recorded an infiltration rate of 2.30×10^{-5} m/s, which is considered suitable for infiltration drainage. The proposed strategy therefore utilises infiltration basins and infiltration swales as the primary means of surface water disposal, representing the second-highest runoff destination within the DEFRA hierarchy and aligning with the principle of managing runoff close to source. The assessment also considers discharge to the River Wylye but concludes that infiltration represents the preferred option in accordance with the drainage hierarchy.

The LLFA is broadly satisfied that the applicant has appropriately considered the runoff destination hierarchy and has demonstrated a clear preference for higher-order discharge options. However, as infiltration forms the sole discharge mechanism for the development, confidence in compliance with Standard 1 is dependent upon confirmation of groundwater conditions and the long-term suitability of infiltration drainage. Groundwater monitoring was ongoing at the time of preparation of the FRA and the completed monitoring results have not been submitted. Further evidence is therefore required to confirm that infiltration can operate effectively throughout the year, that adequate separation distances to peak groundwater levels can be achieved, and that the proposed strategy will not increase flood risk, groundwater emergence or groundwater pollution. Subject to satisfactory confirmation of these matters, Standard 1 is considered to be largely demonstrated

5. Standard 2 - Management of Everyday Rainfall (Interception)

The submitted drainage strategy incorporates infiltration-based swales and basins which are likely to provide some interception benefit through infiltration and retention of frequent rainfall events. However, the FRA does not include a

dedicated interception assessment or calculations demonstrating compliance with the June 2025 DEFRA requirement that the first 5mm of rainfall is managed within the site for the majority of rainfall events. Whilst the proposed infiltration features have been hydraulically modelled for storage and flood risk purposes, no evidence has been provided to confirm summer and winter interception performance, the proportion of runoff prevented from leaving the site, or the specific contribution of individual SuDS components towards interception. Consequently, compliance with Standard 2 cannot currently be verified and further calculations are required to demonstrate that everyday rainfall is effectively managed using a source-control SuDS approach

6. Standard 3 - Management of Extreme Rainfall and Flooding

The applicant has provided a detailed hydraulic assessment using Causeway Flow and demonstrates that the proposed infiltration basins and swales provide sufficient attenuation storage for events up to and including the 1% annual exceedance probability event plus 45% climate change allowance. The strategy also includes exceedance flow routing towards lower-lying landscaped areas and away from proposed dwellings, with the drainage design based on greenfield conditions and incorporating urban creep allowances. These elements are welcomed and indicate that considerable work has been undertaken to assess surface water flood risk.

However, compliance with Standard 3 has not been fully demonstrated. Whilst the hydraulic modelling indicates that the proposed drainage system can accommodate the 1% annual exceedance probability event plus 45% climate change allowance, model outputs identify a number of locations becoming surcharged during higher return period events. Furthermore, a quantified exceedance assessment demonstrating flood depths, velocities, hazard ratings and impacts upon access and egress has not been provided. Additional information is therefore required to confirm that exceedance flows and residual flood risks can be safely managed throughout the lifetime of the development

7. Standard 4 - Water Quality

The submitted Flood Risk Assessment includes a water quality assessment undertaken in accordance with the CIRIA SuDS Manual using the Simple Index Approach. The assessment identifies the majority of the residential development as presenting a low pollution hazard, with the proposed principal access road classified as a medium pollution hazard due to anticipated traffic movements. The proposed treatment train comprises a series of infiltration swales discharging to infiltration basins, and the submitted calculations demonstrate that the cumulative mitigation indices exceed the required pollution hazard indices for total suspended solids, metals and hydrocarbons. Therefore, the submitted evidence demonstrates that an appropriate SuDS treatment train has been incorporated and that the proposed drainage

strategy is capable of providing adequate treatment of surface water runoff prior to discharge.

Notwithstanding the above, the site is located within an area of high groundwater vulnerability and groundwater emergence risk, and the drainage strategy relies entirely on infiltration. Groundwater monitoring was ongoing at the time of submission and the completed monitoring results have not been presented within the FRA. Whilst no fundamental concerns are raised regarding the proposed treatment train, confirmation is still required that seasonal groundwater conditions will not adversely affect the long-term performance of the infiltration features or increase risks to groundwater quality. Subject to satisfactory confirmation of groundwater monitoring results and groundwater separation distances, Subject to satisfactory confirmation of groundwater monitoring results and groundwater separation distances, Standard 4 is considered to be demonstrated.

8. Standard 5 - Amenity

Standard 5 seeks not only to provide amenity through large downstream attenuation features, but to maximise the integration of water management throughout the development through multifunctional SuDS that contribute positively to streets, public spaces, landscape character and placemaking. The submitted scheme provides amenity benefits through the incorporation of public open space, swales and infiltration basins; however, the majority of the amenity value is concentrated within the larger attenuation features located toward the lower parts of the site. Whilst these features contribute to open space provision, the drainage strategy remains predominantly end-of-pipe in nature and provides limited evidence that surface water management has been integrated throughout the development in accordance with a distributed SuDS approach.

9. Standard 6 - Biodiversity

Standard 6 requires SuDS to maximise biodiversity benefits and contribute to habitat creation, ecological connectivity and green infrastructure throughout the development. The proposed drainage strategy includes swales, infiltration basins and areas of public open space which have the potential to provide biodiversity benefits. However, the ecological value of the current drainage strategy is concentrated predominantly within the larger downstream attenuation and infiltration features. Whilst these features may provide habitat opportunities, the submitted information does not demonstrate how biodiversity enhancement has been integrated throughout the wider drainage network using a distributed SuDS approach.

A key objective of the DEFRA National Standards is that SuDS should form part of a multifunctional management train, delivering benefits close to source rather than relying primarily on end-of-pipe infrastructure. Opportunities appear to exist to incorporate street-scale SuDS features such as bioretention

areas, rain gardens, street tree pits, vegetated filter strips and permeable paving with integrated planting throughout the development. These features can provide more continuous habitat corridors, increase urban greening, enhance pollinator resources and strengthen connectivity between the proposed open spaces and surrounding landscape.

10. Standard 7 - Construction, Operation, Maintenance and Structural Integrity

The submitted drainage strategy is supported by a SuDS Maintenance Plan which identifies the proposed maintenance activities, inspection frequencies and management requirements for the infiltration basins, swales, drainage network and associated infrastructure. The applicant has also confirmed that the principal drainage network is intended to be offered for adoption by Wessex Water under a Section 104 Agreement, with the SuDS features and any remaining infrastructure to be maintained by a management company. These arrangements provide a reasonable basis for the long-term operation and maintenance of the proposed drainage system

Notwithstanding this, some uncertainty remains regarding the final adoption, ownership and management arrangements, as these are currently indicative rather than secured. The submitted information confirms that the management company structure has not yet been finalised and that detailed agreements will be established at a later stage. In addition, whilst maintenance activities are identified, there is limited information regarding whole-life management of infiltration assets, ongoing monitoring of infiltration performance, management of potential groundwater interactions and procedures for addressing system deterioration over time. Given the site's reliance on infiltration drainage and its identified groundwater sensitivity, greater confidence would be provided through confirmation of the final management arrangements, asset ownership, monitoring requirements and long-term operational responsibilities. Subject to these matters being secured, Standard 7 is considered to be largely demonstrated.

Overall DEFRA Compliance : LLFA Review Matrix

Standard	Requirement	Applicant Evidence	LLFA Assessment	Status	Further Information Required
1	Runoff destinations and hierarchy	Hierarchy assessment, infiltration testing, infiltration-led discharge strategy	Hierarchy followed and infiltration justified, subject to groundwater confirmation	Largely Demonstrated	Completed groundwater monitoring and confirmation of groundwater separation distances
2	Management of everyday	Swales and infiltration	No dedicated interception assessment demonstrated	Not Demonstrated	Interception calculations and Standard 2

	y rainfall (interception)	basins proposed	ng management of first 5mm rainfall		compliance assessment
3	Extreme rainfall and flooding	Causeway Flow modelling, attenuation storage, exceedance routing strategy	Flood modelling submitted but residual risk, hazard and access assessments require further justification	Partially Demonstrated	Exceedance, hazard and safe access assessment plus clarification of half-drain performance
4	Water quality	Simple Index Approach and treatment train calculations	Treatment train generally acceptable subject to groundwater protection confirmation	Demonstrated Subject to Groundwater Confirmation	Groundwater monitoring results and protection justification
5	Amenity	Swales, basins and public open space provided	Predominantly end-of-pipe SuDS with limited distributed street-scale amenity features	Partially Demonstrated	Demonstrate distributed multifunctional SuDS and placemaking benefits
6	Biodiversity	Landscape corridors, swales and basins proposed	Limited evidence of biodiversity-led SuDS integrated throughout development	Partially Demonstrated	Demonstrate street-scale biodiversity and LNRS-aligned SuDS benefits
7	Maintenance and operation	Maintenance plan and indicative adoption strategy submitted	Generally acceptable but ownership, monitoring and adoption arrangements not finalised	Largely Demonstrated	Confirmation of long-term management, adoption and monitoring arrangements

RECOMMENDATION : Holding Objection

At this stage, the LLFA is unable to conclude that the proposed drainage strategy complies with DEFRA National Standards 1 to 7 for Sustainable Drainage Systems (June 2025), nor that the development will remain safe for its lifetime without increasing flood risk elsewhere. Whilst substantial drainage information has been submitted, further evidence is required regarding

groundwater conditions, interception, exceedance management, safe access and egress, multifunctional SuDS provision and long-term management arrangements. Accordingly, the LLFA maintains a **Holding Objection** pending receipt and review of the information listed below.

The following information is required:

1. Completed groundwater monitoring results and supporting groundwater assessment to demonstrate that the proposed infiltration-based drainage strategy remains suitable throughout the year and maintains the minimum groundwater separation distances required by Standards 1, 3 and 4.
2. Interception assessment and supporting calculations demonstrating compliance with DEFRA Standard 2, including confirmation that the first 5mm of rainfall is managed on site for the majority of rainfall events through infiltration, retention, evapotranspiration or reuse.
3. Residual flood risk and exceedance assessment demonstrating compliance with DEFRA Standard 3, including exceedance flow routes, flood depths, velocities, hazard ratings and confirmation that flooding from events exceeding the design standard can be safely managed within the development.
4. Safe access and egress assessment demonstrating that flood risks to site users remain acceptable during extreme rainfall and residual flood events and that access routes remain safe throughout the lifetime of the development. This information is required to support compliance with Standard 3.
5. Clarification of half-drain time performance and infiltration system operation to demonstrate compliance with Standard 3 and confirm that infiltration features provide sufficient resilience between storm events.
6. Further evidence demonstrating how the drainage strategy delivers the amenity and biodiversity objectives of DEFRA Standards 5 and 6, including consideration of distributed source-control SuDS measures and opportunities for biodiversity enhancement throughout the development rather than primarily within downstream attenuation areas.
7. Confirmation of long-term ownership, maintenance, monitoring and adoption arrangements to demonstrate compliance with DEFRA Standard 7 and ensure that the drainage system will continue to operate effectively throughout the lifetime of the development.

Informatives

1. Any works within, over, under or adjacent to an ordinary watercourse may require separate Ordinary Watercourse Consent under the Land Drainage Act 1991 from the Lead Local Flood Authority. Planning permission does not remove the need to obtain any required consents.

2. The applicant is advised that the surface water drainage strategy should be supported by completed groundwater monitoring data and a groundwater assessment demonstrating that proposed SuDS features and drainage infrastructure will operate effectively throughout the lifetime of the development.
3. The applicant should provide detailed hydraulic calculations and supporting design information demonstrating that the proposed drainage system can accommodate the 1 in 100 year rainfall event plus the appropriate climate change allowance without causing flooding to property.
4. The applicant should demonstrate that exceedance flows generated during events greater than the design standard can be safely managed on site and directed away from buildings, access routes and neighbouring land.
5. The applicant should provide a safe access and egress assessment demonstrating that site users can safely access and leave the development during extreme rainfall events and residual flood risk scenarios.
6. The applicant should provide evidence that the proposed drainage strategy delivers appropriate water quality treatment in accordance with current SuDS guidance and incorporates a suitable treatment train.
7. Details of the long-term ownership, maintenance, inspection and management arrangements for all drainage infrastructure should be provided to ensure that the drainage system remains operational for the lifetime of the development.
8. The applicant should confirm the proposed discharge arrangements and provide evidence that any third-party agreements, utility company approvals, easements or environmental permits required to implement the drainage strategy can be secured.
9. The final drainage design should demonstrate compliance with national and local planning policy relating to flood risk, climate change adaptation and sustainable drainage.
10. The applicant is encouraged to maximise opportunities for multifunctional SuDS that provide water quantity, water quality, biodiversity and amenity benefits in accordance with best practice guidance.