

To:	James Taylor	From:	Drainage team
------------	--------------	--------------	---------------

Planning App Ref:	PL/2026/04823
Service Ref:	Drainage
Date:	17/09/2026

PROPOSAL

Outline planning permission: Some matters reserved
Outline planning application with all matters reserved except access from the A4/London Road for up to 600 dwellings, together with land for a local centre (Use Classes E and F), areas of open space and landscaping, and associated infrastructure.

SITE LOCATION

Land at Forest Farm, Chippenham

SUMMARY OF THE CONSULTEE POSITION

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

APPLICATION DOCUMENTS REVIEWED

- Application form (*Aug 2026*)
- Design & Access Statement (*Aug 2026*)
- Planning Statement (*Aug 2026*)
- Parameter plan site location (*Aug 2026*)
- Parameter plan Land use & Landscape (*Aug 2026*)
- Environmental Statement - Technical Appendix A Scoping (*Aug 2026*)
- Contamination Assessment Statement (*Aug 2026*)
- Illustrative master plan (*Aug 2026*)
- Environmental Statement - Chapter 2 Site and Proposed Development (*Aug 2026*)
- Environmental Statement - Chapter 10 Water Environment (*Aug 2026*)
- Environmental Statement Technical Appendix H - Flood Risk Assessment and Drainage Strategy - Part 1 to 6 (*Aug 2026*)

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 application has been supported with a Site-Specific Flood Risk Assessment (FRA). It should be noted that our comments below are reliant on the accuracy and completeness of the FRA and we do not take any responsibility for incorrect data or interpretation made by the authors.

The proposal comprises the development of up to 600 dwellings, together with land for a local centre (Use Classes E and F), areas of public open space and landscaping, green infrastructure, and associated supporting infrastructure. Access is proposed from the A4/London Road, with the development incorporating drainage, utility and highway work necessary to serve the site.

The Design and Access Statement states that the site is located entirely within Flood Zone 1 and is therefore at a low risk of fluvial flooding and groundwater flooding.

Due to the poor infiltration potential of the site and the presence of shallow groundwater, infiltration drainage is not considered feasible. Recorded groundwater levels (FRA Appendix D Section 4.8) across three dates in October and November 2023 ranged from 0.05 m to 4.21 m below ground level across the site. Whilst deeper groundwater levels were observed in isolated locations, groundwater was typically encountered at depths of around 1 m or less in the majority of monitoring wells. The monitoring also identified standing water levels as shallow as 0.05 m to 0.30 m below ground level within the lower-lying areas and along the north-eastern boundary of the site. Consequently, the minimum 1 m freeboard required between the base of infiltration features and the groundwater table cannot be achieved. Observations made during the site investigation (FRA Appendix D Section 4.7) also identified seepages within the Kellaways Clay Member and at the interface between the Kellaways Sand and Clay Members across a number of exploratory locations, together with perched groundwater, moist soil conditions and localised groundwater inflows.

Furthermore, infiltration testing undertaken within four trial pits demonstrated permeability rates that were too low to calculate, owing to the clayey nature of the underlying soils. As set out in Section 6 of Appendix C in FRA, these findings demonstrate that formal infiltration drainage is not a viable discharge option at the site. This conclusion is further supported by the email correspondence between the LLFA and applicant dated 2 May 2025 (FRA Appendix P), which confirms that the identified groundwater levels and infiltration testing results provide sufficient evidence to discount formal soakaway features and that additional soakaway calculations were therefore not required. Surface water runoff will instead discharge to the existing watercourse network, whilst SuDS features will continue to provide interception drainage and associated water quality benefits where groundwater conditions permit.

The applicant has stated in the FRA that most of the site is outside the Environment Agency's mapped surface water flood extent and is therefore at very low risk of surface water flooding. However, several localised areas within the centre and east of the site are identified as being

at medium to high risk due to existing topographic low points and surface water flow paths draining towards the on-site watercourse. The assessment concludes that the flood risk in Area A is generated primarily by runoff from within the site itself, while Areas B, C and D are associated with existing overland flow routes from surrounding agricultural land. Consequently, the proposed drainage strategy relies on five attenuation basins located adjacent to the existing watercourse, which will provide storage and attenuation of runoff before discharging to the watercourse at a controlled rate of 70% of the greenfield runoff rate, thereby delivering a reduction in runoff compared to existing conditions.

The applicant has addressed the LLFA's previous request to clarify the drainage catchment arrangement. Sections 6.3 and 6.14 of FRA explain that the site currently functions as a single catchment draining to the existing ordinary watercourse but has been subdivided into five drainage catchments based on development parcels and outfall locations. The applicant further confirms in paragraphs 6.16 and 6.22 that all catchments continue to discharge to the same receiving ordinary watercourse and that no catchment transfer will occur as a result of the development.

Surface water runoff will be managed through a range of interconnected SuDS features. Runoff from driveways will be collected through permeable paving, roof runoff will be directed to an underground piped network via downpipes, and runoff from roads will be collected through drainage kerbs. Swales located within the site's green corridors will convey water through the development before flows are discharged to the attenuation basins for storage and controlled release. Slow drain down water butts will be included in the gardens of houses. The slow drain down type is proposed to provide interception storage benefits, reduce peak surface water runoff rates and facilitate the reuse of rainwater. The inclusion of these blue-green, source-control SuDS components demonstrates how Standard 2 of National Standard for SuDS will be achieved by providing runoff reduction, interception and treatment close to source. At the detailed design stage, the applicant will be required to provide supporting calculations demonstrating that the proposed source-control measures can achieve, as a minimum, the capture and management of the first 5 mm of rainfall. This is required to comply with Standard 2 of National Standard for SuDS.

However, the applicant has not currently provided sufficient details of the proposed SuDS features, and the drainage layout does not include design information for the proposed swales, such as cross-sections, dimensions, depths, side slopes, longitudinal gradients or supporting hydraulic modelling. This is not expected at this stage of design development and therefore does not represent a significant technical issue at this stage. While modelling information and freeboard details have been provided for the pipe network and attenuation basins, cross sectional details are not provided. In addition, the need for the proposed culverts has not been adequately justified, and no information has been submitted regarding their design, dimensions, cross-sections, hydraulic capacity, blockage risk, maintenance requirements or potential impacts on existing flow paths and flood risk. This information is necessary to satisfy Standard 3 of the National SuDS Standards and to demonstrate that the proposed drainage strategy will not increase flood risk either on or off site. The applicant has also not provided water quality treatment calculations for the proposed drainage strategy, nor details relating to the ownership, adoption and long-term maintenance of the proposed drainage system and associated SuDS features. Water quality calculations are required to demonstrate compliance with Standard 4 of the National SuDS Standards, and details of maintenance arrangements are required to comply with Standard 7.

A revised drainage layout is hence required including the design details and technical evidence for further evaluation by the LLFA.

The applicant is required to mitigate the surcharge predicted in the storm network model during the 1 in 1 year storm event.

RECOMMENDATION

No objection subject to conditions

1. **No development shall take place until a surface water drainage strategy, complying with Wiltshire Council requirements, NPPF, PPG and the National Standards for SuDS has been submitted to and approved in writing by the Local Planning Authority.**

In order to discharge the above drainage condition the following additional information must be provided:

- The applicant shall overlay the site's surface water flood risk mapping with the proposed layout at Reserved Matters stage and demonstrate that flood risk to proposed dwellings and infrastructure has been appropriately mitigated.
- At Reserved Matters stage, the applicant shall provide calculations demonstrating the storage benefits of the proposed rainwater harvesting/water butt systems.
- Given the shallow groundwater conditions identified across the site, the applicant shall provide a groundwater flotation assessment for any below-ground drainage infrastructure, where required.
- The applicant shall provide updated catchment plans clearly identifying different drainage catchments, impermeable areas and the corresponding greenfield QBAR runoff rates for each catchment, to demonstrate that the proposed drainage strategy and attenuation requirements have been appropriately derived.
- The applicant shall provide justification for the proposed culverts and submit detailed information on their design, including locations, dimensions, cross-sections, hydraulic capacity, blockage and maintenance considerations, together with an assessment demonstrating that the culverts will not increase flood risk, adversely affect existing flow paths, or result in upstream or downstream flooding within or beyond the site.
- Calculations for the drainage system showing no surcharging for the 1 in 1 year rainfall event
- At Reserved Matters stage, cross-sections and long sections of all proposed swales and attenuation basins, together with detailed hydraulic modelling and storage calculations, shall be provided to demonstrate conveyance capacity, storage volumes, hydraulic performance, appropriate freeboard, and functionality during both design and exceedance storm events.
- The first 5mm of rainfall from the majority of rainfall events will be managed by interception features and will not result in runoff from the site to surface water or piped systems.
- The applicant is required to submit calculations which demonstrate that the proposed drainage design provides a sufficient level of water treatment to prevent pollution of the receiving watercourse/groundwater in accordance with Standard 4 of the National Standards for SuDS.
- Evidence demonstrating that the proposed attenuation basins achieve a minimum 9-minute residence time in accordance with CIRIA C753 guidance shall be submitted to and approved in writing by the Local Planning Authority.
- At the reserved Matters stage, detailed exceedance plans shall be provided demonstrating how exceedance flows will be managed through highways, open spaces and rear garden areas without increasing flood risk to people, property, or the surrounding highway network.
- The applicant shall demonstrate that the attenuation basin sizing includes allowance for any modelled surface water flooding volumes and that sufficient storage is provided for all design events.

- The applicant shall provide details of how surface water runoff will be managed during construction, including temporary drainage, pollution prevention measures and discharge arrangements within the Construction Management Plan.
- At Reserved Matters stage, the applicant shall confirm the proposed permeable paving type (A or C) and demonstrate its suitability with regard to the site's ground conditions and groundwater levels.
- The applicant shall submit clear arrangements for the ownership and ongoing maintenance of the proposed drainage system (including SuDS features) over the lifetime of the development.

INFORMATIVES

- The applicant should note that if the intention is to offer the roads for adoption, the LLFA does not provide for the approval of drainage suitable for adoption by the Highway Authority. Further approval should be ascertained from the Highway Authority
- Wiltshire Council is the land drainage authority under the Land Drainage Act 1991. Land drainage consent is required if a development proposes to discharge flow into an ordinary watercourse or carry out work within 8m of an ordinary watercourse.

An ordinary watercourse is a watercourse that does not form part of a main river. The term watercourse includes all rivers and streams and all ditches, drains, cuts, culverts, dikes, sluices, sewers (other than public sewers within the meaning of the Water Industry Act 1991) and passages, through which water flows.

Wiltshire Council's land drainage bylaws can be downloaded [here](#). The land drainage consent application form and guidance notes can be found on our website [here](#)

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.