

To:	Ruaridh O'Donoghue	From:	Drainage (Barney Taylor)
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Planning App Ref:	PL/2025/09780
Service Ref:	Drainage
Date:	20/02/2026

PROPOSAL

Outline planning application for the construction of 295 homes; public open space including formal play space and allotments; sustainable drainage systems and associated infrastructure; a 100 place nursery and access points for pedestrians and cyclists. All matters are reserved except for access, the principal point of access is to be provided from a new northern arm onto an improved arrangement of the Eastern Way/A3102 roundabout junction and an emergency access onto the A3102.

SITE LOCATION

Land to the north of the A3102, Melksham, Wiltshire.

SUMMARY OF THE CONSULTEE POSITION

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

APPLICATION DOCUMENTS REVIEWED

- *Application Form*
- *Covering Letter*
- *Drainable Areas – Sheet 1, 2 & 3*
- *Drainage Layout – Sheet 1, 2 & 3*
- *Drainage Strategy*
- *Emergency Access Plan*
- *Green Infrastructure Parameters Plan*
- *Illustrative Masterplan*
- *Location Plan*
- *NPPF- Flood Risk Assessment & Outline Drainage Strategy*
- *Planning Statement*

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.

Existing Watercourses and Flood Risk:

In section 2.14 of the Planning Statement the applicant states there is “an unnamed watercourse that runs broadly south to north centrally within the site. This watercourse is a Main River and a tributary of the River Avon. It conveys flows north from a 600mm culvert along the site’s southern boundary”.

Additionally, in section 2.15 of the Planning Statement there is “a second ‘ordinary’ watercourse conveys flows to the east through the centre of the site from the balancing pond from the existing residential development to the west. It joins the Main River in the centre of the application site. Two land drains are also located on the site’s eastern boundary and convey flows to the north. Several ditches act as informal field boundary ditches within the application site”.

It is noted the applicant has undertaken a hydraulic modelling exercise represented as the baseline scenario to model the current flood risk. It is noted the modelled extents are less than the Environmental Agency flood zones.

Figure 4.2 of the NPPF- FRA & Outline Drainage Strategy document, included below, represents the existing surface water flood risk at the site.

Figure 4.2: Environment Agency Surface Water Flood Outlines



Modelled Flood Risk:

In section 4.5.11 of the NPPF- FRA & Outline Drainage Strategy document the applicant has provided a flood map with the flood extents revealed from their hydraulic modelling exercise of the current flood risk.

Section 4.5.14 provides the proposed scenario model, which includes several alterations to watercourses, namely Ditch E would be shortened, and Ditch C and H would be 'removed'. The applicant proposes two swales to "alleviate flooding across the development". We note Ditch D has been removed 'from the model'. The two figures below from the Technical Note (SHF.102.003.HY.R.005.B) summarise these alterations.

Figure 1.1: Modelled Watercourses

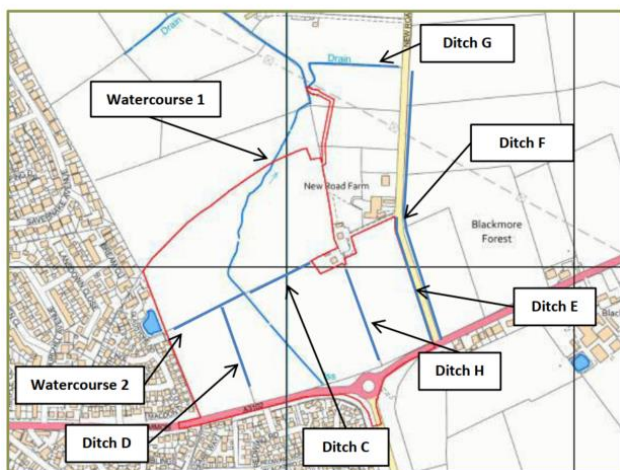
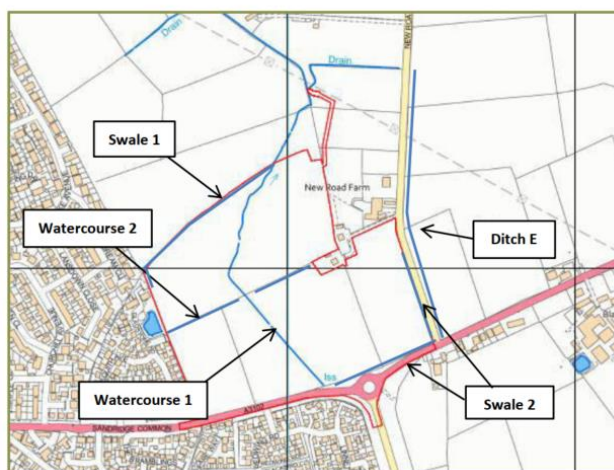


Figure 1.2: Proposed Watercourse Changes



It is noted that in the proposed model, "flows for all return periods remain in channel, apart from some negligible areas on the left bank of Watercourse 1, in open greenspace. The second small area of flooding is shown to be to the north of Swale 2. Though it should be noted that all dwellings within the Site boundary are located outside the mapped extent of flooding". Additionally, all proposed structures to convey flow have been modelled for the worst case scenario – each include a +600mm freeboard above the 100+71%CC event.

Consequently, the modelling demonstrates the alterations to existing watercourses provides betterment on the existing modelled flood risk scenario on the site. Moreover, as a result of the restricted discharge rate from the site, betterment will be provided for downstream areas of the site.

However, a holding objection has been recommend as there is modelled increased flood risk post-development to the upstream western existing pond. The applicant is required to demonstrate there will be no increase to flood risk elsewhere as a result of the development.

In section 2.14 of the Planning Statement the applicant states the modelled extents are less than the Environmental Agency flood zones. The LLFA are satisfied the applicant has accurately modelling the flood zones, and can be adopted for drainage design.

We would still recommend the EA are consulted on this application, and offered the opportunity to comment on the modelling undertaken.

Drainage Strategy:

In section 3.35 of the Planning Statement the applicant states that surface water will be discharged into the main river at a restricted rate, following attenuation via source control SuDS, swales and attenuation ponds.

It's noted in section 2.3 of the Drainage Strategy that infiltration testing was undertaken in six locations across the extent of the development site in October 2023, however it was found that infiltration is not a feasible means of surface water disposal at the site. The infiltration

testing is provided within the Site Investigation report REF: 48309-ECE-XX-XX-RP-C-0002, attached as Appendix C of the Drainage Strategy

Greenfield rates are provided in section 2.10 of the Drainage Strategy, and volume in Section 2.11. This is summarised in the table below (rate in blue, volume in orange):

	Catchment 1	Catchment 2	Catchment 3	Catchment 4
Qbar (l/s)	12.42	5.59	3.17	32.48
1 in 1 year (l/s)	9.69	4.36	2.47	25.33
1 in 30 year (l/s)	24.22	10.89	6.18	63.34
1 in 100 year (l/s)	30.18	13.57	7.70	78.93
Volume 1 in 100yr 6hr event (m³)	755.398	334.583	189.712	1945.408

Post-development runoff rates are provided in section 4.6 of the Drainage Strategy, and volume in Section 4.5 – all comply with Wiltshire Council's Betterment Strategy.

Foul Drainage:

Correspondence with Wessex Water has been provided in Appendix D. It is noted there will be a pump station in the north of the site, before discharging into WW MH ref 6224.

LLFA Correspondence:

We note the applicant has included correspondence with the LLFA from February 2024 in Appendix 4 of the NPPF- FRA & Outline Drainage Strategy document. Several key points were noted by the LLFA:

- Ponds / Basins and swales are provided around the site in order to manage water quality and quantity
- The northern attenuation basin may become a hybrid feature of a basin and a geocellular tank (although preference would be for this to just be an open basin feature for ease of future maintenance)
- Exceedance routes, including from the proposed attenuation features will be shown
- A SW pumping station is proposed on site – this was deemed by yourselves to be the most holistically sustainable solution when considering the impact of level raising across the site (which would also have a significant impact on flood risk elsewhere). I advised that we would expect to see Duty Standby pumps and would want to see a sensitivity analysis for potential flooding in case of pump failure.
- Discharge to be limited in line with Wiltshire Council's betterment policy to the Ordinary Watercourse – this will require LDC (which will need to be applied for separately and outside of the planning process).

RECOMMENDATION: Holding Objection:

Observing the modelled pre-development and post-development flood extents below, the flood risk to the existing western pond is increased post-development. The applicant must provide details outlining how this has been justified, and demonstrate that flood risk will not be increased elsewhere as a result of the development

Figure 4.1: Baseline Flood Outlines - Overview

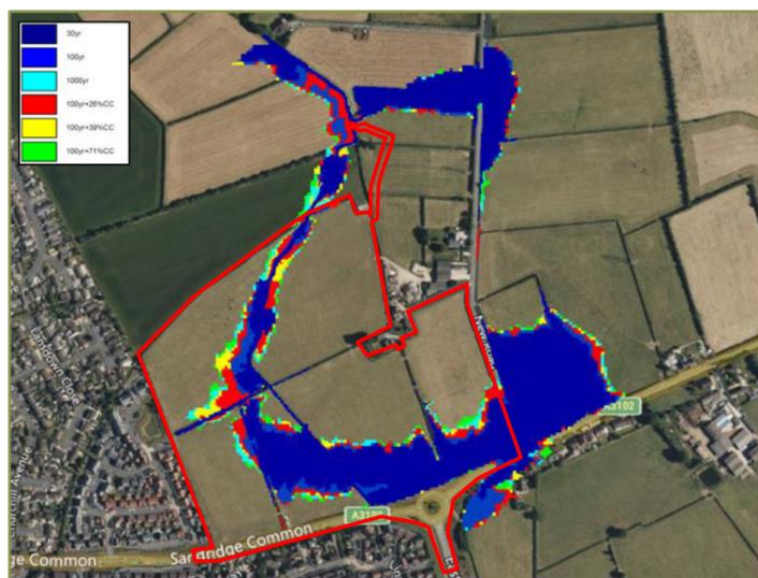
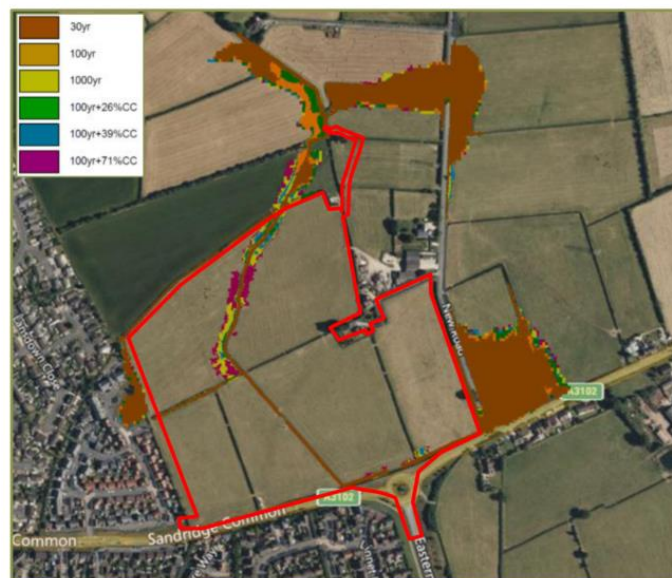


Figure 3.2: Modelled Flood Outlines – Proposed



Following the removal of the holding objection, the following points can be resolved via condition No objection subject to the following conditions

1. The applicant must provide further details at detailed design related to the surface water drainage strategy:
 - a. The applicant must provide a clearly labelled drainage layout plan showing the pipe networks and any attenuation ponds. The plan should show any pipe node numbers referred to within the drainage calculations.
 - b. The applicant must provide a pre-development, and post-development catchment plan once the site layout is finalised, to demonstrate there is no catchment transfer as a result of the proposed development. This is required to demonstrate there is no adverse impact on flood risk downstream of the development, in line with National Standards for SuDS: [Standard 3: management of extreme rainfall and flooding](#).
 - c. The applicant is proposing several new culverts introduced on watercourses. The applicant must confirm the culverting has been considered and included within the modelling undertaken – and if not, the modelling should be updated to include all culverts.
 - d. The applicant is required to provide a drainage layout drawing, overlaying the modelled flood zones to represent how they interact, and to demonstrate flood risk is appropriately mitigated to people & property.

- e. It is noted the applicant has stated at detailed design further source control will be proposed. The applicant must provide calculations that demonstrate the sizing of any attenuation/ SuDS features.
- f. The applicant must provide calculations and detailed modelling of the surface water network once design is finalised to demonstrate that:
 - i. The 1 in 30 year rainfall event is contained within the drainage system without causing flooding to any part of the site.
 - ii. The 1 in 100 year plus climate change rainfall event does not cause flooding to any building (including a basement) or utility plant.
- g. The applicant must provide detailed cross and long section drawings of all SuDS features proposed, including all swales and basins.
- h. The applicant must provide calculations to demonstrate that the runoff from each positively drained surface, for at least 5mm of rainfall, is either collected for use, infiltrated into the ground, or else captured, conveyed and stored within SuDS features. Calculations that demonstrate compliance with these interception requirements should be provided, in line with National Standards for SuDS: [Standard 2: interception](#). It is anticipated that the design will comply noting additional source control SuDS are proposed.
- i. The applicant must provide detailed overland exceedance routes for the 1 in 100+CC storm event. This must include exceedance from all attenuation features and swales, rear gardens and cover the extent of the development. This is required to demonstrate flood risk is safely managed onsite, without increasing flood risk elsewhere in accordance with National Standards for SuDS: [Standard 3: management of extreme rainfall and flooding](#).
- j. The applicant must confirm the finished floor levels for all properties on a plan overlaying modelled pluvial flood risk, and a separate plan with fluvial flood risk to demonstrate flood risk is appropriately mitigated in line with the National Standards for SuDS: [Standard 3: management of extreme rainfall and flooding](#).
- k. A SW pumping station is proposed on site. The applicant must demonstrate that Duty Standby pumps are proposed, and the applicant must provide details of the sensitivity analysis undertaken to account for potential flooding in the event of pump failure.
- l. The applicant must provide a detailed maintenance plan, outline the type, frequency and who is responsible for completing maintenance, in accordance with the National Standards for SuDS: [Standard 7: design of drainage for construction, operation, maintenance, decommissioning and structural integrity](#).
- m. The applicant must provide a construction management plan to demonstrate how flood risk to people & property, and pollution to groundwater & watercourses will be mitigated throughout construction (National Standards for SuDS: [Standard 7: design of drainage for construction, operation, maintenance, decommissioning and structural integrity](#)).

INFORMATIVES

- 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](#).

- An environmental permit is required for any works within 8m of a main river. Consult the [Environment Agency's main river map](#) to see if a river/watercourse is designated as a main river. For more guidance on environmental permits, consult the [website](#).

The Environment Agency issues environmental permits, however, as Wiltshire Council is the Lead Local Flood Authority that has the lead responsibility for surface water management, **the discharge rate from the site must be agreed with Wiltshire Council** as part of agreeing the surface water drainage strategy for the site.

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.