TO:	Horsham District Council – Planning Dept
LOCATION:	Land To The South of Station Road Warnham West Sussex
DESCRIPTION:	Erection of 8 nos bungalows with associated parking and landscaping utilising the permitted access off Station Road.
REFERENCE:	DC/26/1595
RECOMMENDATION:	More Information – Conditions

SUMMARY OF COMMENTS & RECOMMENDATION:

The following documents have been reviewed:

- Flood Risk Assessment and Preliminary Drainage Strategy, Dated: July 2026, Author: Harbourstone Design.

The proposed drainage strategy is subject to infiltration testing and groundwater monitoring.

The Flood Risk Assessment and Preliminary Drainage Strategy states:

6.2.4. "A conservative value of 1 x 10-6 m/s has been utilised for the site strategy, with invert of proposed drainage features no more than 1.0m below existing ground levels, noting that infiltration may be significantly poorer in the deeper bedrock."

It is to be noted, the drainage strategy, as proposed, is partially reliant on infiltration and has been designed having made the assumption that the infiltration rate on site will meet the minimum acceptable design rate of 1 x 10-6 m/s, and groundwater levels will be acceptably low to consider infiltration as a viable solution for the management of surface water (winter groundwater levels must be a minimum of 1m below the base of all infiltration SuDS features). When further testing is undertaken on site, should there be a variation between the assumed infiltration rate and the actual infiltration rate, the design of the drainage strategy must be reconsidered appropriately. Similarly, should winter groundwater levels be noted to be higher than anticipated, the Drainage Strategy will need to consider an alternative output for the management of surface water. The applicant has acknowledged the nearest ditch/watercourse lies outside of the redline boundary and is considered to be Highways Drainage. HDC Drainage has provided a quote from the Lead Local Flood Authority at West Sussex County Council in the Main Comments section below, for the consideration of the applicant, should the Drainage Strategy need to be revised to discharge surface water into the ditch.

There is one element of the drainage strategy which is not considered to be entirely clear. The applicant has proposed the use of rainwater harvesting. HDC Drainage welcome and encourage the consideration of rainwater harvesting within the proposed development for non-potable use, however, the application of rainwater harvesting must be considered alongside the Drainage Strategy, not as part of it. This is particularly important because in this instance, non-potable demand has not been discussed. It is unclear whether the applicant has intended for the rainwater harvesting units to contribute to the required amount of surface water attenuation on site. If the applicant has considered the rainwater harvesting units as part of the storage on site, this must be amended to exclude the rainwater harvesting units from all calculations. As a result, more attenuation will be required.

It is unclear whether all impermeable areas have been accounted for. The Impermeable Areas Assessment plan has excluded one unit from the plan and has highlighted the attenuation basins as part of the impermeable features. The applicant must amend.

HDC Drainage need **more information** to determine that the site drainage meets the requirements of the NPPF and PPG, National standards for sustainable drainage systems (June 2025), and the Horsham District Planning Framework (2015) – Policy 35 and Policy 38, **which can be provided at conditions**.

MAIN COMMENTS:

West Sussex County Council:

"A new surface water connection from a development site to existing highway drainage assets or systems should only be considered after the drainage hierarchy has been fully explored and where one of the following three scenarios applies:

1. *There is clear evidence that the piped surface water drainage network in question is a culverted ordinary watercourse running adjacent to the road (which may or may not have been culverted by the highway authority) that has a land drainage function beyond just draining the public highway. In such circumstances the owner of the development site is likely to have a riparian right to discharge to the (culverted) ordinary watercourse. (This contrasts with the situation where a piped highway drainage system has been constructed, by the highway authority, for the sole purpose of draining the public highway, which serves no other land drainage function nor carries base flow from non-highway related catchments).*
2. *Clear evidence is produced that there is already an existing formal connection from the site/development to the existing highway drainage systems.*
3. *There is clear evidence that surface water already runs off the site and is then captured by the adjacent highway drainage systems, and both the highway drainage assets and any receiving watercourses have the necessary capacity to accommodate that run-off from the site without causing any downstream flooding issues.*

If any of the three scenarios above apply, any discharge from the site should still be restricted to an appropriate rate that aligns with the National SuDS Standards. If none of the above scenarios apply, then an agreement for a new connection to our highway drainage networks will not be forthcoming. Any connections to highways drainage would need to be agreed with highways, rather than our team.

In the past highways did accept betterment, however they have moved away from the 'betterment' option for the following reasons:

- *the risk of flooding downstream due to increased flow in our system the risk of flooding to the new development / adjacent property due the issues our system"*

HDC Drainage 'Standard Comments' for review:

- The applicant must provide a site-specific assessment of flood risk, even where a full flood risk assessment is not required.
- The applicant must demonstrate an understanding of how surface water currently flows across the site under 'normal' conditions and during rainfall events, providing an assessment of the current and proposed drainage patterns entering the site, within the site and leaving the site.

- The applicant should provide a measurement of the total site area, all pre-development permeable and impermeable areas within the red line boundary, all post-development permeable and impermeable areas within the red line boundary, with supporting catchment plans and calculations.
- A fully designed surface water management strategy should include:
    - The aim to achieve and better greenfield runoff rates and adherence to the drainage hierarchy.
    - Rationale for SuDS selected in line with the Horsham District Planning Framework (2015) – Policy 38, and industry best practice such as The SuDS Manual (C753).
- The method of foul and surface water disposal must be confirmed in line with the drainage hierarchy (Building Regulations Part H).
- If connections to Southern Water Utilities are proposed as part of the development/ redevelopment, supporting plans and assumed points of connection must be provided as well as expected flow rates. Connection to the public sewerage network is advised, wherever it is reasonable to do so.
- The following flow and volume rates must be provided:
    - existing runoff rates during a 100% Annual Exceedance Probability (AEP), 3.33% AEP, 1% AEP storm events
    - post development discharge rates during a 100% AEP, 3.33% AEP, 1% AEP and 1% AEP + 45% for Climate Change storm events
    - greenfield runoff rate (QBAR)
    - water storage capacity volumes of the proposed drainage features, to attenuate the 1% AEP + climate change storm event (see details below).
- The runoff from the proposed development should, where possible, be restricted to the greenfield 1 in 2 year runoff rate (100% AEP) or 3l/s/Ha (whichever is higher) during all events up to and including the 1 in 100-year rainfall event (1% AEP) + 45% allowance for climate change. Where this is not possible, the runoff from the proposed development should restrict flows to as close as reasonably practical to the greenfield runoff rate for the site.
- The surface water drainage strategy must demonstrate that the proposed SuDS attenuate all runoff from <u>all</u> impermeable areas (with an additional area equivalent to +10% of the area of any residential development, factored into the sum of the total impermeable areas on site, allowing for urban creep) for the 1 in 100-year rainfall event (1% AEP) + 45% allowance for climate change (upper end). Attenuation should be provided on site to ensure that:
    - The 100% AEP storm event does not generate excessive surcharging in the drainage system.
    - The 3.33% AEP storm event is safely contained underground with no flooding.
    - The 1% AEP + climate change storm event is safely contained within the site without risk to persons or property.
- Where infiltration discharge methods are proposed (soakaways/swales etc…), the applicant must provide testing in accordance with BRE365, at the location and depth of the proposed devices.
- Where infiltration testing has not been undertaken, provide an infiltration assessment, supported by a desk-based assessment of soil types, geology and suitability for infiltration potential (See the Horsham District Council Local Plan evidence base), together with an alternative option for surface water disposal.

- If a ditch and/or watercourse is present on site, an assessment of each feature must be provided, to identify whether the feature is expected...
    - to contain flowing water throughout the year (unless there is a drought or an unusually long period of dry weather). The range of expected water levels should be provided.
    - to seasonally dry up
    - to stay dry for most of the year.
- If a ditch and/or watercourse is present on site, context must be provided regarding the connectivity of the ditch and/or watercourse to waterways within in the wider landscape, as well as influences which might affect water levels in the feature, both upstream and downstream.
- If a ditch and/or watercourse is present on site, the applicant must demonstrate that a visual inspection of the ditch and/or watercourse has been undertaken, providing a detailed summary of site conditions on the day of assessment with supporting photographs.
- If a ditch and/or watercourse is present on site or along the boundary of the site, the applicant must demonstrate ownership of the ditch/ watercourse.
- If a ditch and/or watercourse is to be the intended outfall location for surface water and/or treated effluent from a Package Treatment Plant (PTP) / Sewage Treatment Plants System, the applicant must obtain permission from the landowner for use of that feature.
- The applicant must provide evidence of measures to prevent pollution of the receiving groundwater and/or surface water.
- The applicant must provide plans which indicate the expected exceedance routes for storm events greater than the 1% AEP + climate change storm event. The Drainage Strategy must demonstrate that the surface water runoff from these events can be controlled, to confirm there is no adverse flood risk to the development or elsewhere. Evidence of appropriate management and mitigation of exceedance flows are expected within the Drainage Strategy, to demonstrate that the proposed conveyance systems have considered the risks associated to nature, people and property during the event of failure and/or exceedance.
- Supporting foul flow calculations, in line with Sewerage Sector Guidance and/or Building Regulations Part H, is to be provided. It should be noted that any proposed foul water system and foul water treatment unit should be in line with current legislation and best practice for the management of domestic waste, with any method for disposal justified and appropriate permits sought.
- Maintenance and Management Plans must be provided for both the proposed Foul and Surface Water Drainage Strategy, including access requirements, maintenance frequency and responsibility, and proprietary device manuals, for all drainage features and SuDS devices.
- The proposed Site Plan and Landscape Strategy, including all considerations for planting design, should be reconciled alongside/ against the design of the Drainage Strategy. These plans should not contradict. Planting must be appropriate.

Further evidence in addition to that requested above may be required once the additional information is submitted.

Advisory notes:

- In addition to Planning Permission, the applicant may additionally require Ordinary Watercourse Consent (OWC) from the Lead Local Flood Authority at West Sussex County Council, to consent to any works adjacent to or within an ordinary watercourse.
- Whilst not a mandatory requirement, HDC Drainage welcome and encourage the consideration of rainwater harvesting within the proposed development, for non-potable use.

ANY RECOMMENDED CONDITIONS:

Pre-Commencement Condition: No development shall commence until a drainage strategy detailing the proposed means of foul and surface water disposal has been submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved scheme.

Reason: As this matter is fundamental to ensure that the development is properly drained and to comply with Policy 35 & 38 of the Horsham District Planning Framework (2015).

NAME:	A.Furness
DEPARTMENT:	Horsham District Council - Drainage
DATE:	20/11/2026