TO:	Horsham District Council – Planning Dept
LOCATION:	Greenacres Farm West Chiltington Lane Billingshurst West Sussex
DESCRIPTION:	Change of use for 2No. gypsy residential units along with day room, full drainage, car parking, 2m high bund and soft and hard landscaping
REFERENCE:	DC/24/1290
RECOMMENDATION:	More Information

SUMMARY OF COMMENTS & RECOMMENDATION:

The following information provided by the applicant has been reviewed:

- Drainage Designs (22 June 2025, Drawing reference 192BL 001, Rev …)
- The Bio-Pure- Simple solution sewage systems (We Build It Ltd)
- HR Wallingford - Greenfield Run-off rate estimation tool results (29 June 2025)
- HR Wallingford – Surface water storage volume design tool results (29 June 2025)
- Email (Subject: RE: Greenacres, From M. Bridle to H. Darley, 01 July 2025)

We have reviewed the evidence provided by the applicant in support of the planning application. The information submitted is not sufficient at this full planning stage. The applicant must provide the information as detailed in the Main Comments section. We are not at a stage where we can recommend conditioning the drainage strategy.

Due to insufficient detail, we require more information to support the proposals 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 38 and Policy 23.

MAIN COMMENTS:

Until the following information is received, as previously requested, we are unable to determine the suitability of the proposed scheme with regard to surface water and foul water drainage:

- The proposals are not supported by suitable desk-based analysis or site investigations. This raises concerns regarding the assumptions made about the ground conditions on site. As previously highlighted, the geology as identified by the online British Geological Survey records, and the SuDS Suitability plan (Appendix 1 Figure 4) provided in the Horsham District Council SFRA (January 2020) for the site and surrounding area, indicate there is limited potential for infiltration at this site. Infiltration testing in accordance with BRE Digest 365, CIRIA R156 or another approved method, must be undertaken to determine the suitability for infiltration devices for both surface and foul water systems. If infiltration is to be discounted based on geology, a suitable desk-based study and supporting geotechnical evidence will be appropriate without site testing and will apply to both surface and foul water systems.

- Further to the infiltration test results, an appropriate foul water strategy should be provided in line with current legislation and best practice. The drainage system downstream of the proposed treatment unit should contain a chamber with a shut-off valve and sampling point to ensure that the foul system can be isolated in the event of a treatment failure.

- Evidence should be provided that the applicant has ownership of the ditch and / or has gained permission in principle from the third-party landowner to discharge surface water to the ditch.

- West Sussex County Council Highways may have ownership of the roadside surface water ditch and evidence of communication is required to ascertain the ditch can be used to discharge surface water from the site, as highway drains do not accept residential flows without precedent or agreement.

- The proposed SuDS features and foul drainage field are not located within the application red line boundary. The drainage features should be located within the red line boundary, or confirmation of agreement for the wider site owner of the blue boundary that they accept construction works and drainage within their land parcel.

- The proposed plan does not adequately demonstrate that the surface water drainage system can reach the ditch by gravity. While it is noted that the site falls towards the northern boundary and a detailed design is not required for a minor application, credible evidence that the surface (and potentially treated foul) system can discharge without the requirement for pumping is required to verify there are suitable means to dispose of water from the site.

- Thank you for providing results from the use of HR Wallingford's online tools for calculating both the existing greenfield runoff rate and the surface water storage volume design. These online tools are helpful to gain an understanding of the scale of the design proposals which may be required. Hydraulic modelling of the surface water drainage system using FEH 2022 rainfall data must be provided to verify the suitability of the proposals, which tests the strategy under different rainfall scenarios and whether there is flood risk onsite.

- The Drainage Designs layout shows the car parking and access as 'permeable paving (gravel)'. Due to the anticipated presence of clay, external paving should be considered as hardstanding in the calculations and only designated as permeable if the infiltration testing returns a positive result. If infiltration is not viable, then the porous surface must be positively drained, controlled and attenuated in line with the current legislation and best practice.

- As previously requested, the applicant should provide evidence of measures to prevent pollution of the receiving groundwater and/or surface water assets. Pollution control and water quality measures should be provided in accordance with the Simple Index Approach as outlined in CIRIA C753 The SuDS Manual. All areas of hard standing must comply with the SuDS Manual, in accordance with the Simple Index Approach (p567, Box 26.2), recognising pollution hazard indices (p568, Table 26.2) and SuDS mitigation indices for discharges to surface waters (p569,Table 26.3).

- The proposals include the construction of a linear bund 2m in height to the east of the site along the site boundary. An understanding of how surface water is expected to drain from the catchment to the east of the bund and the materials the bund will be constructed from must be provided as part of the surface water drainage strategy.

- As previously requested, the applicant should provide a measurement of pre and post development permeable and impermeable areas with supporting catchment plans and calculations. All impermeable areas will need to be considered within the

drainage calculations in this instance, this includes all roof areas and areas of proposed paving. As this is a residential development, an additional 10% of the total impermeable area needs to be factored into the calculations to allow for urban creep.

- The HR Wallingford greenfield runoff tool shows that the greenfield runoff rate for the total site area of 0.93ha is 4.5 l/s for the 1 in 2 year event. The proposals show two outfall connections, limited to 3.0 l/ and 2.0 l/s. This greenfield runoff rate must be adjusted pro-rata for the proposed impermeable area (0.033 ha).
    - For appropriate discharge rates, please read the National standards for sustainable drainage systems (June 2025), Standard 3: Runoff rates and volumes to surface waters or sewers.

      "The peak allowable discharge rate from the development to surface waters or sewers for the 50% AEP event shall be limited to the equivalent 50% AEP greenfield runoff rate, or 3 l/s/ha, whichever is the greater.

      When discharging to an above ground surface water body, sewer or other piped drainage system, the surface water runoff rate for the 50% AEP event shall be controlled to ensure development runoff from an event of this magnitude has no negative impact."

      Summary: runoff rate = 1 in 2 year (or Qbar) or 3 l/s/ha (whichever is greater)

- The applicant should provide flow and volume rates with supporting evidence, for greenfield sites as appropriate:
    - Existing runoff rates should be provided for the 100% Annual Exceedance Probability (AEP), 3.33% AEP and 1% AEP storm event and include the value of Qbar.
    - The applicant should also provide post development discharge rates for the 100% AEP, 3.33% AEP, 1% AEP, 1% AEP + Climate Change storm events.

- The drainage strategy must demonstrate that SuDS attenuation rainwater from impermeable areas for the 1 in 100 year rainfall event plus an additional 45% allowance climate change (Upper End). The HR Wallingford surface water storage design tool has only included an assessment of the 1 in 100 plus 20% allowance for climate change. The +45% allowance must be assessed. 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 storm event with climate change is safely contained within the site without risk to persons or property.

- The applicant should provide an assessment of the current and proposed drainage patterns entering, within, and leaving the site, including an understanding of how surface water would flow across the site in normal and rainfall event conditions.

- The applicant should provide a detailed surface water drainage strategy, including supporting calculations. A detailed drainage layout plan should reference all assets showing characteristics such as; pipe sizes and materials, gradients, and manhole type, depth, size, SuDS dimensions, materials and depths.

- The applicant should provide a Maintenance and Management Plan including access requirements, maintenance frequency and responsibility, and proprietary device manuals, for all drainage features and SuDS devices.

- The applicant should provide drawings showing conveyance routes for the 1 in 100 year plus climate change event and consideration of how exceedance flows for events greater than this will be managed and mitigated on site without significantly increasing flood risk (both on site and outside the development).

- The applicant should provide a foul water drainage strategy, with supporting flow calculations in line with Sewerage Sector Guidance and/or Building Regulations Part H, including a detailed drainage layout, showing pipe sizes, materials, gradients and outfall location.

- It should be noted that any proposed foul water system 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.

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

Advisory note:

- In addition to Planning Permission, the applicant may additionally require a permit to discharge treated foul water to a water body or to ground from the Environment Agency.
- In addition to Planning Permission, the applicant may additionally require Ordinary Watercourse Consent (OWC) from the LLFA, to consent to any works adjacent to or within an ordinary watercourse.

ANY RECOMMENDED CONDITIONS: Conditions are not recommended at this stage. The applicant is yet to provide the required information, and until such time as this information is received, we cannot determine the suitability of the proposed scheme with regards to surface water and foul drainage.

NAME:	A. Furness
DEPARTMENT:	Horsham District Council - Drainage
DATE:	12/07/2024