TO:	Horsham District Council – Planning Dept
LOCATION:	85 Timber Mill, Southwater, West Sussex, RH13 9SP
DESCRIPTION:	Approval of Details Reserved by Conditions 3 and 4 to approved application DC/23/2284
REFERENCE:	DISC/24/0071
RECOMMENDATION:	Condition 3: Not satisfied, as more information required. Condition 4: Not reviewed, as subject matter not in the scope of surface water and foul water drainage.

SUMMARY OF COMMENTS & RECOMMENDATION:

We have reviewed the evidence provided by the applicant in support of the planning application and the following **recommendations** to the LPA are made:

Condition 3

Insufficient information has been provided by the applicant. Horsham District Council are also not satisfied with the additional information provided. The applicant should provide the following information prior to the review to Discharge Condition 3;

- The applicant has indicated that the preferred method of discharge at this site is via an existing surface water drain. The Horsham Strategic Flood Risk Assessment 2020 identifies there is potential for high groundwater levels in the surrounding area. Nether the less, potential for discharge to ground and to the existing onsite drainage ditch must be explored, in-line with the requirements of the drainage hierarchy (building regulations part H). The applicant must also provide site drainage patterns – 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 rainfall and exceedance event conditions (see to GOV.UK Long term flood risk mapping).
- The applicant must provide a measurement of pre and post development permeable and impermeable areas with supporting catchment plans and calculations.
- The applicant must provide the following flow and volume rates with supporting evidence, for both greenfield and brownfield rates (see the UKSUDS.com tool): existing runoff rates during a 100% Annual Exceedance Probability (AEP), 3.33% AEP and 1% AEP storm event. The applicant must also provide post development discharge rates during a 100% AEP, 3.33% AEP, 1% AEP, 1% AEP + Climate Change storm events and Greenfield runoff rate (Q_{BAR}). Water storage capacity volumes of the proposed drainage features to attenuate the 1% AEP + Climate Change storm event must be provided.
- The Horsham Strategic Flood Risk Assessment 2020, identifies potential high groundwater levels in the surrounding area. The applicant must provide justification if discharge to ground is not proposed. If discharge via infiltration is proposed, as Per Sections 5.2.2 to 5.2.3 of the West Sussex LLFA Policy for the Management of Surface Water*:*
  -Infiltration structures (to ground) include soakaways, basins, swales and permeable paving. Infiltration rates for soakage structures are to be based on percolation tests undertaken in the winter period at the location and depth of the proposed structures. The percolation tests must be carried out in accordance with

BRE DG 365, CIRIA R156 or a similar approved method, and cater for the 1 in 10 year design storm event between the invert of the lowest entry pipe into the infiltration structure and the base. Tests should be undertaken during winter / early spring when ground water levels are typically highest; if groundwater levels are influenced by the tide then tests should be undertaken over a highwater spring tide. For the purpose of design, the percolation rate must be applied to the sides of the infiltration structure only and the rate for the base must be zero, unless otherwise agreed with the LPA engineer. This does not apply to infiltration basins or permeable pavements, whereby the percolation rate is applied to the base only. The infiltration structure should drain 50% of its total volume in 24 hours or less for the 1 in 10 year event and for the 1 in 100 year event (unless otherwise agreed with the LPA engineer) in order to provide spare capacity for subsequent storms. Flood risk assessments: climate change allowances can be viewed via the following link:
https://www.gov.uk/guidance/floodriskassessmentsclimatechangeallowances
-Any infiltration drainage design must include adequate winter groundwater monitoring data in areas of known groundwater issues, to determine the highest winter groundwater table. Residential developments in excess of five properties will require ground water monitoring to be carried out between October and March inclusive. The extent of monitoring required for smaller developments will be subject to agreement with the District or Borough Council Engineers. Adequate freeboard must be provided between the base of the soakaway structure and the highest recorded groundwater level identified in that location; ideally this should be 1m where possible.

-The LLFA Policy notes the minimum design event for traditional soakaways is the 10 year event + climate change. As per best practice infiltration devices should be 5m from structures and boundaries, in addition to avoiding Root Protection Zones and adhering to any utility easements.

- The applicant must provide a Fully designed surface water management strategy including: the aim to achieve and better greenfield runoff rates and adherence to the drainage hierarchy, rationale for SuDS selected in line with the West Sussex LLFA Policy for the Management of Surface Water (2018), Horsham District Planning Framework (2015) – Policy 38 and Industry best practice, such as The SuDS Manual (C753).
- The applicant must provide evidence of measures to prevent pollution of the receiving groundwater and/or surface water. Evidence of measures to protect groundwater, if discharge to ground is proposed, is especially apparent at this site, given the underlying geology is classified as highly vulnerable to pollution.
- The Drainage Plan provided displays a high-level surface water pipe layout. The applicant must provide a detailed surface water drainage strategy, including supporting calculations, detailing outfall location, runoff rate/s as per the LLFA's SuDS Policy 3, with allowance for urban creep, required and proposed volumes of attenuation storage, freeboard and sizing of all drainage features. A detailed drainage layout plan must reference all assets showing characteristics such as; pipe sizes and materials, gradients, and manhole type, depth, size, SuDS dimensions, materials and depths.
- The applicant must provide evidence of a third-party agreement to discharge surface water into a Southern Water Asset or discharge into the onsite drainage ditch, if discharge to ground is not viable.
- The applicant must 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 must provide drawings showing conveyance routes for flows exceeding the 1 in 100 year plus climate change event and consideration of how exceedance flows for events greater than the 1 in 100 year event with a Climate Change allowance will be managed and mitigated on site without significantly increasing flood risk (both on site and outside the development).
- The applicant proposes to discharge foul to mains sewer and has provided a high-level onsite foul sewer network plan. The applicant must 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. Confirmation of permission to connect to a private/public sewer, if applicable, must also be provided.

The applicant proposes a new access route over the onsite drainage ditch. The applicant should confirm whether the drainage ditch is culverted at the proposed access crossing. Permission will be required for the new access route, if culverting of the drainage ditch is proposed or if any alterations to the existing culvert are required.

Consideration must be given to the potential risk of groundwater flooding at the site.

The new access route to the east of the site, links the proposed development to Timber Mill Road. Timber Mill Road is indicated to be at risk of surface water flooding by the EA. Any new proposed access to Timber Mill Road will therefore be required to demonstrate surface water would not be directed into the development site in times of surface water flooding.

Condition 4

Discharge of Condition 4, was not reviewed as not in the scope of surface water and foul drainage.

MAIN COMMENTS:

As above

ANY RECOMMENDED CONDITIONS:

N/A

NAME:	A Harman P Mennell D Burgess
DEPARTMENT:	Horsham District Council - Drainage
DATE:	30/05/2024