TO:	Horsham District Council – Planning Dept
LOCATION:	Henfield Sports Centre Northcroft Henfield West Sussex
DESCRIPTION:	Application for Approval of Details Reserved by Condition 4, 6 & 7 to approved application DC/23/1177
REFERENCE:	DISC/24/0058
RECOMMENDATION:	Advice / More Information

SUMMARY OF COMMENTS & RECOMMENDATION:

The following supporting documents have been reviewed:

- Flood Risk and Drainage Statement (MEC Development Technical Consultants, dated May 2023, first issue, reference: 27951-FLD-0101)

The applicant has not provided any further details in support of Condition 4, following the Decision Notice issued in January 2024 to application DC/23/1177 which states that "*No development shall commence until a drainage strategy detailing the proposed means of surface water disposal has been submitted to and approved in writing by the Local Planning Authority*".

The infiltration rate assumed in the document for the Henfield Leisure Centre site is 1×10^{-6} m/s. The specific choice of this infiltration rate, however, is described as an assumption that will need to be validated through detailed infiltration testing according to BRE365 standards. This testing is necessary to accurately determine the site's actual infiltration capacity and to ensure that the drainage system's design will be effective under real conditions. The results from these tests will either confirm the assumed rate or lead to adjustments in the design to accommodate the actual infiltration rate found during testing.

Therefore, the following **recommendations** to the LPA are made:

- Where infiltration discharge methods are proposed, the applicant must provide device calculations together with infiltration and groundwater testing at the proposed infiltration device location, in order to provide a higher level of confidence in the proposed method of discharge.
- Provide infiltration testing in accordance with BRE365, at the location and depth of proposed devices. Minimum proven infiltration rates are 1x10-6 m/s, as per The SuDS Manual (C753). Any infiltration structure should have half drain down times less than 24 hours for the critical 10 year event + climate change, and be constructed a minimum of 1.0m above the highest groundwater level. In Source Protection Zone 1 areas (see the Magic Map Application*), Environment Agency consent is required, and additional protection to ground water may be required.
- Evidence of groundwater levels will be required at the proposed infiltration device location, in the form of a desktop study, and if there is a risk of maximum historic groundwater levels being close to the 1m buffer depth, ground water monitoring to be carried out between October and March inclusive.

Once this information is provided, and soakaway design calculations provided accordingly, Condition 4 can be discharged.

No information provided by the applicant in support of Conditions 6 or 7 has any impact on flood risk or drainage at the site, and therefore Discharge of Condition 6 and 7 should not be held back on the grounds of flood risk and drainage.

MAIN COMMENTS:

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.*

ANY RECOMMENDED CONDITIONS:

N/A

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DEPARTMENT:	Horsham District Council - Drainage
DATE:	24/04/2024