

**From:** Laura Gibbons <Laura.Gibbons@arun.gov.uk>  
**Sent:** 15 September 2020 13:29  
**To:** Planning.Responses <Planning.Responses@arun.gov.uk>  
**Cc:** Anita Gardner <Anita.Gardner@arun.gov.uk>  
**Subject:** LU/214/20/PL- empty supermarket premises Avon Road, Littlehampton

Engineers Comments Regarding Surface Water Drainage

A flood risk assessment has been submitted to support this application, this includes details of the proposed means of surface water drainage. The document states that infiltration is precluded due to the presence of clay, on site infiltration testing must be provided to determine whether infiltration is viable or not.

The proposals are to attenuate surface water prior to discharge to surface water sewer. The proposed discharge rate is 10l/s this is a significant reduction, however WSCC policy is clear that discharge should be limited to greenfield QBar where possible. Therefore, please can the applicant submit details evidencing what the lowest achievable discharge rate is.

Adequate treatment of surface water must be provided prior to discharge.

We would like to see this information prior to determination. If however, it cannot be provided at this time please ensure the following conditions are applied.

**PCENG D2**

*"Development shall not commence, other than works of site survey and investigation, until full details of the proposed surface water drainage scheme have been submitted to and approved in writing by the Local Planning Authority. The design should follow the hierarchy of preference for different types of surface water drainage disposal systems as set out in Approved Document H of the Building Regulations, and the recommendations of the SuDS Manual produced by CIRIA. Winter groundwater monitoring to establish highest annual ground water levels and winter Percolation testing to BRE 365, or similar approved, will be required to support the design of any Infiltration drainage. No building / No part of the extended building shall be occupied until the complete surface water drainage*

*system serving the property has been implemented in accordance with the agreed details and the details so agreed shall be maintained in good working order in perpetuity."*

Reason: To ensure that the proposed development is satisfactorily drained in accordance with policies W SP1, W DM1, W DM2 and W DM3 of the Arun Local Plan. This is required to be a pre-commencement condition because it is necessary to implement the surface water drainage system prior to commencing any building works.

And the accompanying informative:

#### **INFORMD**

*"Infiltration rates for soakage structures are to be based on percolation tests undertaken in the winter period and at the location and depth of the proposed structures. The percolation tests must be carried out in accordance with BRE365, CIRIA R156 or a similar approved method and cater for the 1 in 10 year storm between the invert of the entry pipe to the soakaway, and the base of the structure. It must also have provision to ensure that there is capacity in the system to contain below ground level the 1 in 100 year event plus 40% on stored volumes, as an allowance for climate change. Adequate freeboard must be provided between the base of the soakaway structure and the highest recorded annual groundwater level identified in that location. Any SuDS or soakaway design must include adequate groundwater monitoring data to determine the highest winter groundwater table in support of the design. The applicant is advised to discuss the extent of groundwater monitoring with the Council's Engineers.*

*Supplementary guidance notes regarding surface water drainage are located here*

*<https://www.arun.gov.uk/surfacewater> on Arun District Councils website. A surface water drainage checklist is available on Arun District Councils website, this should be submitted with a Discharge of Conditions Application."*

#### **PCENG4**

*"Development shall not commence until full details of the maintenance and management of the surface water drainage system is set out in a site-specific maintenance manual and submitted to, and approved in writing, by the Local Planning Authority. The manual is to include details of financial management and arrangements for the replacement of major components at the end of the manufacturer's recommended design life. Upon completed construction of the surface water drainage system, the owner or management company shall strictly adhere to and implement the recommendations contained within the manual."*

Reason: To ensure that the proposed development is satisfactorily drained in accordance with policies W DM1, W DM2 and W DM3 of the Arun Local Plan. It is considered necessary for this to be a pre-commencement condition to ensure that the future maintenance and funding arrangements for the surface water disposal scheme are agreed before construction commences.

#### **ENG1**

*"Immediately following implementation of the approved surface water drainage system and prior to occupation of any part of the development, the developer/applicant shall provide the local planning authority with as-built drawings of the implemented scheme together with a completion report prepared by an independent engineer that confirms that the scheme was built in accordance with the approved drawing/s and is fit for purpose. The scheme shall thereafter be maintained in perpetuity."*

Reason : To ensure that the proposed development is satisfactorily drained in accordance with policies W SP1, W DM1, W DM2 and W DM3 of the Arun Local Plan.

Regards,

**Laura Gibbons**

Drainage Engineer

Engineering Services

Please note that I work Tuesdays 08:00-16:00 for Arun only.



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