

From: Sarah Burrow
Sent: 20 March 2020 11:54
To: Planning.Responses
Cc: Simon Davis
Subject: RE: Planning Consultation on: Y/18/20/PL

Engineers Comments Regarding Surface Water Drainage

The application is within the Lidsey Treatment Catchment. It is acknowledged that the applicant has submitted a preliminary surface water drainage strategy. Comments on the strategy are listed below for consideration.

1. None of the 1 in 10 year storm calculations account for climate change (40%). This is asked for on the Drainage Checklist. Once applied, the half drain times for SO1b and SO2b, plus SO3 will likely exceed 24 hours. In which case the design will need to be amended.
2. For SO1b and SO2B the depth of the soakaways on the calculations for the 1 in 10 and 1 in 100 year +40% are different, and these are also different to the depth stated on the Drainage Layout. (1 in 10: 1.1m, 1 in 100: 1.2m, DL: 1m).
3. For SO3 the impermeable areas in the calculations are different for the 1 in 10 and 1 in 100 +40% storm events. 0.01ha for 1 in 10 (assumed to be correct) and 0.005ha for the 1 in 100 +CC.
4. For SO3 the soakaway sizes also appear to be different for the two different storms: 1 in 10 year; 20m x 0.8m, 1 in 100 +40%; 12m x 1m
5. For both SO3, and SO4,5,6 the depths of the soakaways on the calculations are greater than the Drainage Layout, and for SO3,4,5 the depths are different for the two storms (1 in 10: 1.1m, 1 in 100: 1.2m) Drainage Layout: 1m.
6. Why is the porosity different for the two access road calculations?
7. I am not convinced by the depth of 1.64m for the Access Road (0-40m chainage). Long section Road 1
8. I echo Laura's comments on the neighbouring application; please confirm weep holes will be included in the retaining walls at the access road.
9. Please include a construction detail drawing for the Aquacell soakaways.
10. Although not requested on Y/21/19/DOC I think a construction detail drawing of the baffles would be beneficial.
11. As previously noted, the depths of soakaways vary between the calculations and the Drainage Layout. However, they are also greater than the depth of the infiltration testing. When a further 300mm of cover is applied the depth of the soakaways will be a minimum of 1.3m which is nearly double the depth of testing. This is concerning given that the only other infiltration tests at a (far) greater depth found the ground to be essentially impermeable (SOILS Phase 2 Ground Investigation Report).

Based on the additional information required, if you are minded to approve the application it is suggested that 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.

Kind Regards

Sarah Burrow
Engineering Assistant

From: Planning.Responses <[REDACTED]>
Sent: 07 February 2020 14:04
To: Land Drainage <[REDACTED]>
Subject: Planning <[REDACTED]>

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL
Town & Country Planning Act 1990 (as amended)
Town and Country Planning (Development Management Procedure) (England) Order 2015
Planning Permission

APPLICATION NO: Y/18/20/PL

Registered: 7th February
2020

Site Address: Land east of North End Road & West of Church Lane Nursery
Yapton

Grid Reference: 497912 103731

Description of Works: 6 No. residential dwellings & associated infrastructure. This application is a Departure from the Development Plan.

The Council have received the above application. I shall be pleased to receive any observations you may wish to make.

[Click here to view the application details](#)

Should you have any comments to make, these should be sent by replying to this email by 12-MAR-20.

You can also monitor the progress of this application through the Council web site:

www.arun.gov.uk/planning

Please be aware that any comments you may make will be available on our website so please do not insert personal details or signatures on your reply.

In the absence of a reply within the period stated, I shall assume that you have no observations to make.

The application will be determined having regard to the development plan policies (if any are relevant) and other material considerations. The development plan can be accessed via the website as can the leaflet which deals with material planning considerations.

Should the application go to appeal the Planning Inspectorate will publish any comments made to the Council on their website: www.planningportal.gov.uk/planning/appeals/ but they will protect personal details.

The officer dealing with this application is Mr S Davis who can be contacted on telephone number [REDACTED].

Regards
Planning Officer

consultee_email
