

From: Sarah Burrow <Sarah.Burrow@arun.gov.uk>
Sent: 28 July 2021 14:40
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Kathryn Welch <Kathryn.Welch@arun.gov.uk>; Paul Cann <Paul.Cann@arun.gov.uk>
Subject: RE: Planning Consultation on: CM/33/21/DOC

Engineers Comments Regarding Surface Water Drainage

Comments on Condition 7

Inadequate groundwater monitoring has been undertaken, it was stated that the infiltration trial pits were dry (no groundwater or perched water) to a depth of 2.1mbgl in January 2021. It is understood that the applicant's engineer made contact with Paul Cann regarding the proposed infiltration testing and that Paul stipulated we needed a better understanding of groundwater level. We would expect the applicant or their engineers to agree with us the level of groundwater monitoring required for the site. As a minimum, for a site of this size I would expect to see four observations over two wet months. If the applicant has any further groundwater monitoring observations, even historic ones, from this site or any neighbouring sites please can these be provided to support the design.

Infiltration testing was undertaken in January 2021. A summary of the findings have been given in the Drainage Statement. Please can the full report of the ground investigations be provided, this should include the exact date of each test, the size and locations of trial pits, and the results, including whether or not any were interpolated. The summary provided indicates that at a depth of 0.7mbgl an infiltration rate of 1.48×10^{-6} m/s should be used for the design and that at lower depths infiltration was not viable. The infiltration rate is so low that the soakaways will not meet half drain time requirements (half drain within 24 hours on the 1 in 10 year +40% event). Half drain times are not provided for the full range of events, only for the simulation settings, please provide these.

Given the slow infiltration rate (and half drain times) it is expected that an overflow will be required to the watercourse on the boundary. This will necessitate a redesign of the Drainage Layout and a new application for Ordinary Watercourse Land Drainage Consent. Please also include an allowance for urban creep in the updated calculations. The overflow to the watercourse from the soakaways should ideally be set above the 1 in 100 +40% depth to remove the need to rely on the overflow for most (if not all) events. The discharge rate and overflow level should be agreed with us before a further application is made.

Comments on Layout:

Soakaways are set too deep, the infiltration tests indicated that infiltration was only viable at shallow depths (0.7mbgl) and yet SA1 is set at 2.1mbgl, SA2 at 2.175mbgl, SA3 at 2.275mbgl and SA4 at 2.25mbgl. The depths of all soakaways need to be raised to approximately 0.7mbgl, if this is unachievable please discuss and agree the

soakaway base level with us before a further application is made. In addition the soakaways are located within the tree root areas for two proposed semi-mature trees and one established tree. This is not acceptable. Soakaways should be located a minimum of 5m from the building and highways, and 2.5m from property boundaries.

Please ensure all pipes are a minimum of 100mm diameter.

In addition it seems the pond (which one property boundary appears to dissect) is being retained and a boundary of hedging is proposed directly over SA4. Again this is inappropriate. The infiltration test results clearly showed that infiltration was not viable in close proximity to the pond.

No construction detail drawings have been supplied, please provide these for all components in the revised scheme. These should be site specific, where there are multiple components (ie soakaways and manholes/inspection chambers) the differences in levels etc may be tabulated on the details..

Comments on Condition 8

Ordinary Watercourse Land Drainage Consent has been issued for the culvert. However, due to the issues raised relating to Condition 7, a new application will need to be made to discharge surface water to the watercourse. Therefore it is not possible to recommend that this condition is discharged at present.

Due to the scale of work required (and likely timescales involved) to alter the design and make a new application for Ordinary Watercourse Land Drainage Consent it is recommended that the DOC application is refused and a new application made at a later date.

Kind regards

Sarah Burrow

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Current working pattern: Monday 8am-2:30pm, Tuesday 8am-5:30pm, Wednesday 8am-5pm, Thursday 8am-5:30pm, Friday 8am-11:30am.

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From: Planning.Responses <Planning.Responses@arun.gov.uk>

Sent: 01 July 2021 10:21

To: Land Drainage [REDACTED]

Subject: Planning Consultation on: CM/33/21/DOC

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No: CM/33/21/DOC
Registered: 29th June 2021
Site Address: Land at the Entrance to Waterford Gardens Horsemere Green Lane Climping BN17 5PQ
Description of Works: Approval of details reserved by condition imposed under ref CM/18/19/PL relating to Condition Nos 3 - materials & finishes, 4 - covered & secure cycle parking, 7 - surface water drainage and 8 - discharge flows to watercourses.

The Council have received the above application to discharge conditions. I shall be pleased to receive any observations you may wish to make in respect of those conditions relating to your field of expertise.

[Click here to view the Discharge of Condition application](#)

[Click here to view conditions on original application - click on decision tab](#)

Should you wish to make any comments click on the link www.arun.gov.uk/planning and click into ?Enter Comment? or if this is not possible email your response to planning.responses@arun.gov.uk by **15th July 2021**.

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.

Yours sincerely

Jasmine Kaur Singh

Planning Case Officer- Arun District Council

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