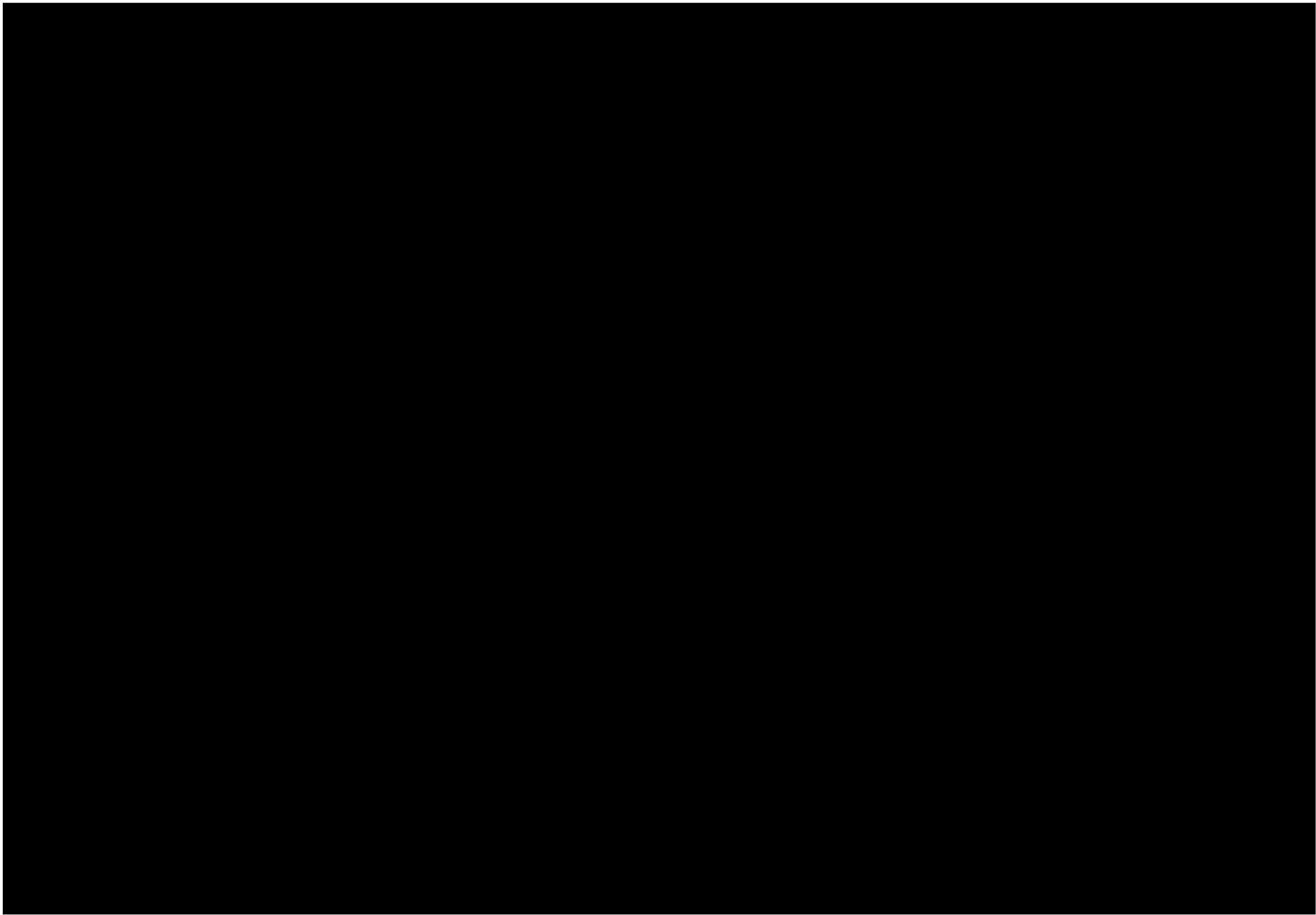




From: Sarah Burrow <Sarah.Burrow@arun.gov.uk>

Sent: 21 December 2021 15:01

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

Cc: Paul Cann <Paul.Cann@arun.gov.uk>; Laura Gibbons <Laura.Gibbons@arun.gov.uk>; Simon Davis <Simon.Davis@arun.gov.uk>

Subject: RE: Planning Consultation on: AL/129/21/OUT

Engineers Comments Regarding Surface Water Drainage

A Flood Risk Assessment and Drainage Statement (FRA) has been supplied to support this application. Groundwater on the site has been observed to be high, peaking at 0.1m below ground level (bgl) at WS102. This rules out infiltration as a means of surface water disposal and that has been agreed with this department in advance of the application. The proposed surface water drainage strategy is to attenuate water in a basin in the centre of the site before discharging it at a restricted rate to one of the bordering watercourses. Water will be treated and conveyed via a mix of permeable paving, filter strips and swales as well as conventional pipes.

We are in agreement with the general strategy and have no objection to the application. However, we would expect a more detailed proposal to be submitted to ensure that flood risk is not increased elsewhere. The following points will require consideration before a discharge of condition application is made (if you are minded to approve the application).

1. We will require an impermeable area plan so that the QBAR calculations can be accurately checked – 3.5l/s seems reasonable but has not been scrutinised.
2. One of the swales appears to conflict with a tree root protection area, this will need to be relocated.

3. All site plans submitted at Reserved Matters stage must all clearly show the 3m easement from the top of the bank of the watercourses. This must include all boundary treatments including fences.
4. Calculations will need to be submitted to show that the effects of buoyancy have been counteracted. For this purpose groundwater must be assumed to be at ground level as there was not a groundwater monitoring point in the vicinity of the proposed basin.
5. Calculations will be requested to show that the design accounts for a surcharged outfall. These will need to show surcharge equivalent to the top of the receiving watercourse bank.
6. There are receiving watercourses on some of the boundaries of the site which require further investigation and remediation works. Please contact Paul Cann of this department (copied in) to arrange a site meeting to discuss this.
7. The drainage layout will require further detail, this is covered within Note 10 of the Drainage Checklist included within the FRA appendices. Please contact me if this is unclear.
8. We will require construction detail drawings for all components of the surface water drainage scheme. This is also in the drainage checklist (under Note 11).

It is noted that the proposed attenuation basin is located within the public open space, it is assumed that this does not contribute to the public open space allocation for the site.

If you are minded to approve the application please apply the following conditions to ensure that the development is adequately drained and does not increase flood risk elsewhere.

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:

INFORM D

“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 event plus 40% on stored volumes (allowance for climate change) 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 storm event plus 40% on stored volumes. 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 [Drainage Planning Consultations | Arun District Council](#) 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.”

PCENG D3

“The development shall not proceed until details have been submitted to and approved in writing by the Local Planning Authority for any proposals: to discharge flows to watercourses; or for the culverting, diversion, infilling or

obstruction of any watercourse on or adjacent to the site. Any discharge to a watercourse must be at a rate no greater than the pre-development run-off values and in accordance with current policies. No construction is permitted, which will restrict current and future landowners from undertaking their riparian maintenance responsibilities in respect to any watercourse or culvert on or adjacent to the site. “

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. And to ensure that the duties and responsibilities, as required under the Land Drainage Act 1991, and amended by the Flood and Water Management Act 2010, can be fulfilled without additional impediment following the development completion. It is considered necessary for this to be a pre-commencement condition to protect existing watercourses prior to the construction commencing.

And the accompanying informative:

INFORMD2

“Under Section 23 of the Land Drainage Act 1991 Land Drainage Consent must be sought from the Lead Local Flood Authority (West Sussex County Council), or its agent (Arun District Council land.drainage@arun.gov.uk), prior to starting any works (temporary or permanent) that affect the flow of water in an ordinary watercourse. Such works may include culverting, channel diversion, discharge of flows, connections, headwalls and the installation of trash screens.

The development layout must take account of any existing watercourses (open or culverted) to ensure that future access for maintenance is not restricted. No development is permitted within 3m of the bank of an ordinary watercourse, or 3m of a culverted ordinary watercourse.”

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.

And the accompanying informative:

INFORMD4

A surface water drainage verification condition guidance note is available at <https://www.arun.gov.uk/drainage-planning-consultations>, this clearly sets out our requirements for discharging this condition.

Kind regards

Sarah Burrow
Engineering Assistant, Engineering Services

T: 01903 737815

E: sarah.burrow@arun.gov.uk

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

Arun District Council, Civic Centre, Maltravers Rd, Littlehampton, West Sussex, BN17 5LF
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From: Planning.Responses <Planning.Responses@arun.gov.uk>
Sent: 12 November 2021 16:19
To: Land Drainage <Land.Drainage@arun.gov.uk>
Subject: Planning Consultation on: AL/129/21/OUT

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

Town & Country Planning Act 1990 (as amended)

Town & Country Planning (Development Management Procedure) (England) Order 2015 - Article 5

Outline Consent

Application No: AL/129/21/OUT
Registered: 10th November 2021
Site Address: Land adjacent to Woodgate Nurseries Lidsey Road Aldingbourne PO20 3SU
Grid Reference: 493703 103888
Description of Works: Outline planning application with all matters reserved (except access) for residential development with up to 95 No dwellings (Use Class C3), informal and formal public open space, landscaping, drainage and other associated works. This application is a Departure from the Development Plan.

The Council have received the above application.

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

Should you have any comments to make, these should be sent by replying to this email by 16th December 2021 . You can also monitor the progress of this application through the Council web site:

<https://www.arun.gov.uk/planning-application-search>

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

<https://www.arun.gov.uk/development-plan> as can information on what comments we can consider
<https://www.arun.gov.uk/planning-application-comments>

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.

Should the application go to appeal the Planning Inspectorate will publish any comments made to the Council on their website: <https://app.planninginspectorate.gov.uk/> but they will protect personal details.

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

Yours sincerely

Mr S Davis

Planning Officer- Arun District Council

Telephone: 01903 737874

Email: Simon.Davis@arun.gov.uk

PLCONSULT (CDS) 2020