

Engineers Comments Regarding Surface Water Drainage

Application Reference:	AB/64/25/PL	Reviewer Reference:	ADC/SB
Planning Officer:	Harry Chalk	Date of Review:	26/09/2025
Site Name:	Land Adjacent 18 Queens Lane Arundel BN18 9JN		
Application Description:	Demolition of existing garage and erection of mixed use building comprising wood workshop to ground floor with single, self-build dwelling above. This application is in CIL zone 2 and is CIL liable as a new dwelling.		
Assessment Number:	1 of 1		

Policy and Guidance Information

Arun District Council Surface Water Drainage Guidance - <https://www.arun.gov.uk/surfacewater>

Land Drainage Consent – <https://www.westsussex.gov.uk/fire-emergencies-and-crime/dealing-with-extreme-weather/flooding/flood-risk-management/ordinary-watercourse-land-drainage-consent/> and <https://www.arun.gov.uk/land-drainage-consent/>

Arun District Council surface water pre-commencement conditions - <https://www.arun.gov.uk/planning-pre-commencement-conditions>

National Standards for Sustainable Drainage Systems (SuDS) - <https://www.gov.uk/government/publications/national-standards-for-sustainable-drainage-systems/national-standards-for-sustainable-drainage-systems-suds>

The SuDs Manual [C753] by CIRIA

Response	No objection subject to conditions
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Critical Items for Surface Water Drainage Design Conditions

The failure to adequately address the following items will result in an objection to a surface water drainage design.

If any of these items are inadequately addressed by the submission, then their correction may result in a redesign of the surface water drainage scheme. A redesign is likely to have site wide implications such as the potential for storage structures to increase in volume or plan area.

Critical Item	Reason	Status
Winter groundwater monitoring data.	<p>Adequate winter groundwater monitoring data must be supplied to evidence that infiltration designs have sufficient freeboard from the base of structures and the peak groundwater level.</p> <p>The same data is necessary to ensure that the potential for buoyancy has been adequately considered in attenuation designs.</p>	Compliant

<p>Winter infiltration testing data.</p>	<p>Adequate winter infiltration testing must be supplied to justify the proposed discharge method and design infiltration rates.</p> <p>Infiltration tests must be completed strictly in accordance with BRE DG 365, CIRIA R156 or a similar approved method. Testing depths must account for peak groundwater levels and correspond with the location and depth of proposed infiltration features.</p> <p>Designs must be based upon the <u>slowest</u> infiltration rate evidenced closest to a proposed infiltration feature. Average design rates will not be accepted.</p> <p>The results of incomplete tests should not be extrapolated to obtain design values for infiltration rates.</p>	<p>Compliant</p>
<p>The hierarchy for sustainable drainage.</p>	<p>The proposed discharge method must accord with the SuDS hierarchy as given below. Evidence must be supplied to justify the proposed discharge method.</p> <ol style="list-style-type: none"> 1. Rainwater reuse where possible. 2. Complete discharge into the ground (infiltration). 3. Hybrid infiltration and restricted discharge to an appropriate water body or surface water sewer. 4. Restricted discharge to an appropriate water body. 5. Restricted discharge to a surface water sewer. 6. Restricted discharge to a combined sewer. <p>A water body may be defined as a river, watercourse, ditch, culverted watercourse, reservoir, wetland or the sea.</p> <p>Engineers cannot support any proposed connection of surface water to the foul sewer.</p>	<p>Compliant</p>
<p>Calculations</p>	<p>Calculations for pre-development run off rates must be based upon the positively drained area only.</p> <p>Proposed discharge rates must not increase flood risk on site or elsewhere. Discharge</p>	<p>Compliant</p>

	<p>rates must be restricted to QBAR or 2 l/s/ha, depending on whichever is higher.</p>	
	<p>Designs must be based on the most recently available rainfall data at the time of conditions being applied. <u>FSR rainfall data will not be accepted.</u> FEH rainfall data is based upon more recent records and continues to be updated.</p>	Compliant
	<p>Designs must use the correct climate change allowances at the time of determination of the outline or full planning application.</p> <p>CV values for all events must be set to 1. This includes summer, winter, design, and simulation events.</p> <p>The correct allowance for urban creep must be applied.</p> <p>Additional storage must be set to zero unless it can be evidenced where this is provided.</p> <p>Infiltration half-drain times must be less than 24 hours.</p> <p>Infiltration design rates must be applied to the sides of soakaways, or to the base of infiltration blankets. Design rates must not be applied to both the base and sides of infiltration structures.</p> <p>A surcharged outfall must be modelled.</p>	Compliant
Natural catchments design.	<p>The submission must define the natural drainage characteristics within, and hydraulically linked to, the site and demonstrate that the drainage proposals will integrate with and not compromise the function of the natural and existing drainage systems.</p> <p>The condition, performance (including capacity where appropriate) and ownership of any existing site surface water drainage infrastructure must be accurately reported.</p> <p>Appropriate easements to watercourses and other services must be shown on all plans.</p> <p>Where there are areas of flood risk from any source on the site, it must be shown how a sustainable surface water drainage design can</p>	No objection – the conflict remains however the SuDS scheme is designed to compensate for this.

	<p>be accommodated on the site without conflicting with those areas of flood risk.</p> <p>Designs must replicate the natural drainage catchments of the site. All surface water drainage designs must therefore drain via gravity to corresponding points of discharge.</p> <p>The use of pumps for surface water drainage is not sustainable and will only be considered where the designer has fully demonstrated that they are proposed as a last resort.</p>	
Plans	Plan areas, depths and levels of drainage infrastructure must accurately correspond with the supporting calculations.	Compliant
Water quality benefits.	An assessment of water quality is necessary to evidence that the proposed design provides adequate treatment of surface water.	Compliant
Biodiversity and amenity benefits.	The surface water drainage design must provide biodiversity and amenity benefits.	Compliant
Trees and planting	<p>There should be no conflict between surface water drainage infrastructure and existing or proposed trees or planting.</p> <p>The design must consider the potential growth of proposed trees and adequate mitigation must be provided to protect drainage infrastructure where conflict cannot be avoided.</p>	Compliant
Not applicable	No critical design items have been identified as missing or insufficient.	

Drainage Impact on Other Planning Matters

This application has been assessed with regards to surface water drainage design only.

Other planning matters occasionally effect the surface water drainage design. If plans relating to other matters have been assessed for their impact on the proposed drainage, then it must not be assumed that they have been assessed for any other purpose. The planning officer is advised to check for conflicts with any existing approved plans and to consult any relevant consultees as appropriate.

It has been identified that the following consultees may have comments about the plans that have been submitted and reviewed for this application:

Landscaping officer (proposed trees and landscaping)

- Tree officer (existing trees)
- Environment Agency (main rivers and fluvial/tidal flood risk, groundwater source protection zones)
- Southern Water (foul drainage and surface water disposal to public sewer network)
- Portsmouth Water (groundwater source protection zones)
- Lead local flood authority (all other sources of flooding and ordinary watercourses)
- Other:
- None

Additional comments to the planning officer

The NPPF states that when determining any planning application, local planning authorities should ensure that flood risk is not increased elsewhere (paragraph 181, 182 and 187e). The PPG guides local planning authorities to refer to 'Sustainable drainage systems: non-statutory technical standards' and detailed industry guidance like The SuDS Manual [C753] by CIRIA to guide decisions about the design, maintenance, and operation of sustainable drainage systems for non-major development.

This consultation has been primarily informed by The SuDS Manual.

The following documents have been submitted and reviewed to inform this consultation with reference to surface water drainage:

- Flood Risk Assessment, reference 13341, second issue, dated 11 September 2025.
- Topographical plan

Comments:

The full site and surface water design is in an area of flood risk. Storage features should not be in these areas. It is not believed that a fully compliant SuDS scheme can be achieved on this site due to the risk of flooding, in particular of the permeable paving. However, the designer has proposed enough storage that the 1% AEP + an allowance for climate change may be stored on site when it is in flood conditions without that volume impacting flood risk elsewhere.

Therefore, whilst we cannot support the design, due to the location of SuDS features in flood areas, we have no objection to it.

However, the suggested design is inadequately detailed for design approval purposes. This is because the design of the rainwater harvesting system has not been submitted and nor have construction detail drawings of the drainage features. These are necessary to ensure that the design is constructed as approved and does not increase flood risk but do not affect the decision making with regards to scale and layout.

Therefore, if you are minded to grant planning permission it is advised that the following condition is applied to the permission to ensure that the surface water drainage of the site does not increase flood risk.

Suggested condition

Prior to the commencement of development, full details of the proposed surface water drainage scheme must be submitted and approved in writing by the local planning authority. The detailed design must be based upon and build on the surface water information within the Flood Risk Assessment, reference 13341, second issue, dated 11 September 2025. The full details submitted for approval shall include:

1. Detailed drainage plans conforming to Local Planning Authority guidance,
2. Specifications for all surface water drainage components and associated infrastructure or flow control mechanisms (including rainwater harvesting),
3. Any relevant permissions relating to the discharge location, works to watercourses or adoption of the SuDS scheme.

The scheme shall then be constructed as per the approved plans. No building shall be occupied until the complete surface water drainage system serving that building has been implemented in accordance with the agreed details. The surface water drainage scheme shall remain for the lifetime of the development unless agreed in writing by the local planning authority. The local authority shall be granted access to inspect the sustainable drainage scheme for the lifetime of the development.

Reason: In order to comply with (W DM 3) of the Arun Local Plan and the NPPF.

From: Nicola Oktay on behalf of Planning.Responses
Sent: 29 September 2025 09:36
To: Planning Scanning
Subject: FW: Planning Consultation on: AB/64/25/PL
Attachments: AB-64-25-PL - Adjacent to 18 Queens Lane 1.docx

Drainage Engineers response

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 Improving the wellbeing of Arun	 Delivering the right homes in the right places	 Supporting our environment to support us	 Fulfilling Arun's economic potential	
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From: Sarah Burrow <Sarah.Burrow@arun.gov.uk>
Sent: 26 September 2025 13:20
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Harry Chalk <Harry.Chalk@arun.gov.uk>; Paul Cann <Paul.Cann@arun.gov.uk>
Subject: RE: Planning Consultation on: AB/64/25/PL

Hi Harry,

Please find my consultation – no objection subject to condition – attached. Apologies for the delay in response, I am aware that this allowed an update to the FRA which avoided the need for reconsultation later.

Kind regards

Sarah Burrow
Flood Risk and Drainage Engineer, Coastal Engineers and Flood Prevention

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From: Planning.Responses <Planning.Responses@arun.gov.uk>
Sent: 03 June 2025 12:34
To: Land Drainage <Land.Drainage@arun.gov.uk>
Subject: Planning Consultation on: AB/64/25/PL

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: AB/64/25/PL
Registered: 27th May 2025
Site Address: Land Adjacent 18 Queens Lane Arundel BN18 9JN
Grid Reference: 501890 106812
Description of Works: Demolition of existing garage and erection of mixed use building comprising wood workshop to ground floor with single, self-build dwelling above. This application is in CIL zone 2 and is CIL liable as a new dwelling.

The Council have received the above application.

[Click here to view the application and documents](#) The website is updated once a day in the evening, so you may need to wait until the day after this notification to view the documents.

This application has been identified as CIL Liable. Therefore please be aware that, in accordance with Appendix 2 of the Arun CIL Charging Schedule, your consultation response should only include requests for Section 106 for onsite mitigation, Pagham Harbour Management Contributions (if applicable) or Affordable Housing. "Off" Site mitigation measures directly related to this development should be dealt with by condition if possible to ensure the scaling back of Section 106 if possible. CIL contributions will be used for "off" site infrastructure mitigation schemes. Therefore if this proposal triggers the need for "off" site mitigation, please ensure that you engage in the CIL Infrastructure List Consultation process upon receipt of a consultation letter.

Should you have any comments to make, these should be sent by replying to this email by 26th June 2025 . 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://acp.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

Harry Chalk

Planning Officer- Arun District Council

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