

Engineers Comments Regarding Surface Water Drainage

Application Reference:	FP/139/25/PL	Reviewer Reference:	ADC/KW/PC
Planning Officer:	Harry Chalk	Date of Review:	16/01/2026
Site Name:	22 Davenport Road, Felpham, PO22 7JR		
Application Description:	Demolition of outbuilding and erection of 1 No self-build detached dwelling (resubmission following FP/52/24/PL). This application is in CIL Zone 4 and is CIL Liable as a new dwelling.		
Assessment Number:	2 of 2		

Policy and Guidance Information	
Arun District Council Surface Water Drainage Guidance (including design checklists) - 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/ Arun District Council Land Drainage Byelaws - https://www.arun.gov.uk/byelaws/ Arun District Council surface water pre-commencement conditions - https://www.arun.gov.uk/planning-pre-commencement-conditions The National Standards for 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	Objection
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References
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' [NsTS] 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. The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025. This consultation has been primarily informed by the NSfS and The SuDS Manual.

Summary

This summary highlights if critical items aligning with each of the standards have been met. Critical items are highlighted in **bold** on our surface water drainage design checklist (linked above). A failure to address these will likely result in an **objection** to an objection to a full or reserved matters planning application.

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, or the provision of other important infrastructure to satisfy the NSfS set out below.

A full written explanation of the assessment and response is given in the consultation comments to the planning officer.

Standard	Assessment	Response
1. Runoff destination	Insufficient	Objection
2. Interception drainage	Insufficient	No objection subject to conditions
3. Extreme Rainfall and Flooding	Insufficient	Objection
4. Water Quality	Insufficient	No objection subject to conditions
5. Amenity	Insufficient	No objection subject to conditions
6. Biodiversity	Insufficient	No objection subject to conditions
7. Construction, operation, maintenance, decommissioning and structural integrity	Insufficient	No objection subject to conditions

Reviewed Plans

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

Surface Water Drainage Strategy AEG0733_PO22_Felpham_05 – Second Issue
Flood Risk Assessment AEG0733_PO22_Felpham_01

Consultation comments to the planning officer

0. General

0.1.

1. Runoff destination

1.1. Discharge to the ground is proposed via permeable paving and a soakaway located in the rear garden. We support this approach in principle, as infiltration is the highest priority in the drainage hierarchy after water reuse and aligns with Standard 1 of the National Standards for SuDS (NSfS).

- 1.2. Two groundwater monitoring boreholes were installed and monitored at approximately fortnightly intervals over 3 months. Results collected indicate a peak groundwater level of 2.68m bgl. Details have now been provided stating that a high spring tide occurred on the 16/01/2025 which peaked at 5.57m AOD. On the 14/01/2025 (when monitoring occurred) the tide peaked at 5.53m AOD, which is not a significant difference. Given monitoring occurred within 48h of the spring tide and the tide level was not significantly different, this is now acceptable.
- 1.3. Furthermore, infiltration testing does not accord with BRE DG 365 or CIRIA R156. It has been indicated to us that due to time constraints, only 2 tests have been undertaken. This is not appropriate, and the applicant is required to undertake testing strictly in accordance with the relevant guidance i.e. 3 tests in quick succession. No further testing has been undertaken and this comment remains outstanding. As BRE365 requires three tests to occur in quick succession, and a third test was not undertaken, it cannot be guaranteed that the slowest infiltration rate has been achieved.
- 1.4. It has been confirmed that the base of infiltration features will not go any lower than 1.68m AOD. The infiltration test pit used breached the required 1m of unsaturated ground by 22cm. Had a complete set of tests been undertaken this irregularity (given the soil strata is confirmed as the same) would have been acceptable. However, with the outstanding issue of the testing it is recommended that testing is undertaken at the correct depths.
- 1.5. Overall, insufficient evidence has been provided to demonstrate that infiltration is a viable solution. It is the responsibility of the applicant or their drainage designer to provide this evidence. Without it, we are unable to assess whether the proposed development would increase flood risk. The applicant has also not demonstrated how they may drain the site if infiltration was later found not to be viable. For this reason, **we object to the proposal**. The submission of such evidence may also affect the scale and layout of the development.
- 1.6. The application site is in the Lidsey Wastewater Treatment Catchment Area. This catchment is the subject of a surface water management plan due in part to the recognised history of foul sewer flooding. The site is within a local flood risk zone identified within the surface water management plan [LFRZ_025]. The plan states that flood risk from pluvial water and public sewers is high. The capacity of the surface water sewer system is the main issue as a result of tide locking. Foul sewers overflow due to infiltration/inundation and historic surface water connection. A significant flood hazard in the 1%AEP has been identified in Davenport Road.

2. Interception drainage

- 2.1. The applicant has proposed permeable paving, subject to infiltration being proven viable this accords with Standard 2 of the NSfS. In recognition that the National Planning Policy Framework states that SuDS should be proportionate to the nature and scale of the proposal we are willing to accept that the following interception features can demonstrate compliance without further detailed assessment.
 - infiltration features designed to meet extreme rainfall standards.
 - water butts or other means of reuse that are not designed for regular daily demand attached to all new downpipes.
 - raingardens and bioretention features attached to all new downpipes.

- permeable surfacing.

2.2. These features will not affect the scale or layout of development and as such can be secured by condition.

3. Extreme rainfall and flooding

3.1. The site sits within Flood Zone 3, with the northern most part of site in Flood Zone 1. The Flood Risk Assessment has identified via product 4 data, that the site is at risk from tidal flood sources. SuDS systems are appropriate in areas of tidal flood risk without additional mitigation. No other sources of flooding have been identified.

3.2. The soakaway is required to provide storage for up to the 3.3%AEP plus CC event and is required to half empty its runoff volume within a maximum of 24 hours as per the NSfS. Not all structures are currently shown to half empty on this storm event. The 1%AEP plus CC event is also required to be stored on site without detriment to the property.

3.3. Revised calculations will be required once further infiltration testing has been undertaken (ie. using worst rate for the design) and will need to achieve the above half emptying/storage requirements.

3.4. The issue of infiltration to the sides and the base of the soakaway appears to have been resolved, with the value being applied to the sides only. A safety factor of 2 of one has been applied to the soakaway, this is acceptable.

3.5. Both of the areas of permeable paving have correctly estimated their volumes of storage and have applied infiltration to their bases only.

3.6. Until such time that an accurate infiltration rate is applied to the system, and evidence that the 1%AEP event plus CC is retained on site, **we still object to the proposal.**

4. Water quality

4.1. A water quality assessment has been submitted. The assessment provided is sufficient for the size of development and the submission of further details is unlikely to affect the scale and layout. No objection on this ground, subject to securing full details at condition.

5. Amenity

5.1. Permeable paving has been specified to manage surface water (in part). The proposed SuDS demonstrate multifunctional benefits and therefore complies with Standard 5 of the NSfS. The submission of further details is unlikely to affect the scale or layout of the development, and we do not therefore object on this basis. Accordingly, subject to a condition securing those details, the proposed SuDS will deliver amenity benefits.

6. Biodiversity

6.1. Insufficient biodiversity benefits arising from the proposed SuDS have been identified, and therefore Standard 6 of the Systems NSfS has not been met. However, the submission of such evidence is unlikely to affect the scale or layout of the development. Accordingly, we do not object to the proposal on these grounds, subject to a condition securing details of biodiversity benefits.

7. Construction, operation, maintenance, decommissioning and structural integrity

7.1. Insufficient information regarding the construction, operation and maintenance of the SuDS system, and therefore Standard 8 of the Systems NSfS. However, in the absence of significant existing trees which could impact the scale and layout and location of SuDS features, most elements of this standard can normally be secured via condition. The submission of a Management and Maintenance Plan is unlikely to affect the scale or layout of the development. Accordingly, we do not object to the proposal on these grounds, subject to a condition securing the detailed surface water drainage design.

8. Suggested conditions / Overcoming the objection

8.1. As this is not a holding objection or a request for further information, requested conditions are not listed. If you are minded to approve this application, please reconsult engineers for a list of suggested conditions to ensure that the development is adequately drained and does not increase flood risk elsewhere.

8.2. The imposition of conditions at this stage rather than overcoming the objection could result in a circumstance where the condition cannot be discharged. In the event of attaching a condition that cannot be discharged, permission may be invalid or that condition could be deemed to be unreasonable.

8.3. If you are minded to allow the applicant additional time to submit further documents to support this application, then further evidence may overcome our objection. Please do not allow the applicant to submit further documents without prior discussion as to whether it will be possible for these to be assessed or influence your determination.

Drainage Impact on Other Planning Matters

This application has been assessed with regards to surface water drainage design only, together with land drainage aspects if deemed necessary.

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, River Arun internal drainage board, groundwater source protection zones)

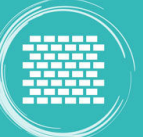
- ☐ Southern Water (foul drainage and surface water disposal to public sewer network/groundwater source protection zones)
- ☐ Portsmouth Water (groundwater source protection zones)
- ☐ Lead local flood authority (all other sources of flooding and ordinary watercourses)
- ☐ Other: Specify
- ☒ None

PL- Consultation- Engineers response

Arun District Council, Civic Centre, Maltravers Rd
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From: Kathryn Welch <Kathryn.Welch@arun.gov.uk>
Sent: 19 January 2026 16:40
To: Planning.Responses <Planning.Responses@arun.gov.uk>; Harry Chalk <Harry.Chalk@arun.gov.uk>
Cc: Paul Cann <Paul.Cann@arun.gov.uk>
Subject: RE: Planning Consultation on: FP/139/25/PL

Please find attached the engineers response; an objection.

Many thanks,

Kathryn Welch
Senior Planning Officer, Planning Department

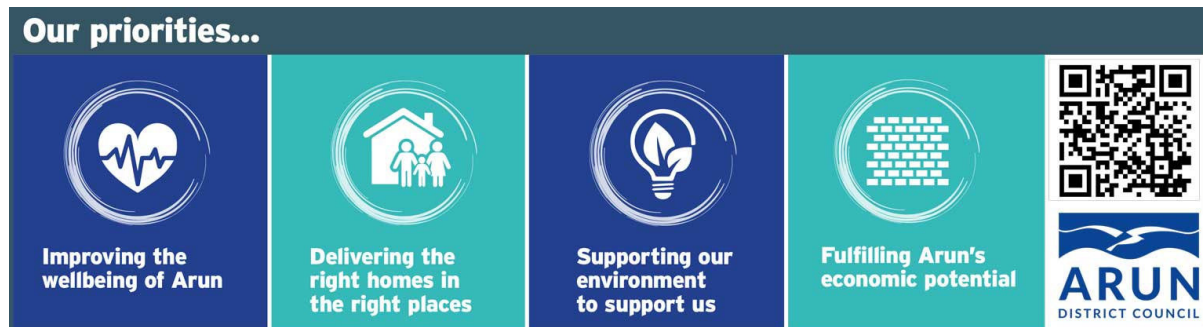
Please note: My working hours are currently split between Development Management and ADC Engineers, which may result in extended response times. **Development Management:** Tuesdays and Thursdays **ADC Engineers:** Mondays, Wednesdays, and Fridays

T: 01903 737789

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

Sent: 22 December 2025 11:49

To: Land Drainage <Land.Drainage@arun.gov.uk>

Subject: Planning Consultation on: FP/139/25/PL

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No:	FP/139/25/PL
Registered:	1st October 2025
Site Address:	Land east of 22 Davenport Road Felpham PO22 7JR
Grid Reference:	495495 99527
Category:	Plan Applicat'n
Description of Works:	Demolition of outbuilding and erection of 1 No self-build detached dwelling (resubmission following FP/52/24/PL). This application is in CIL Zone 4 and is CIL Liable as a new dwelling.

I am able to inform you that I have received an amendment to the above application dated 18th December 2025 relating to:- Substitute Surface water drainage strategy

If you should wish to make further representations as a result of this amendment, please make any further comment by **13th January 2026**.

[Click here to view the application, documents and make further comments](#)

Please be aware that Planning Services operate an 'open file' policy and will publish your comments including your name and address on the website. We will aim to redact signatures, telephone numbers and email addresses but please help us by not incorporating them in the body of your text. Please make sure that you only include information that you are happy will be published in this way. If you supply information belonging to a third party, you must make sure you have their permission to do so.

Yours sincerely

Harry Chalk

Planning Case Officer- Arun District Council

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PLRECON (ODB) 2018