

Engineers Comments Regarding Surface Water Drainage

Application Reference:	Y/45/25/DOC	Reviewer Reference:	ADC/EXT4
Planning Officer:	Simon Davis	Date of Review:	14/11/2025
Site Name:	Land at Stakers Farm North End Road Yapton		
Application Description:	Approval of details reserved by condition imposed under reference Y/44/17/OUT relating to condition number 17 - SuDS .		
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	Condition 17- SuDS: No 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The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.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 result in an **objection** to any application to discharge a surface water drainage design condition.

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.

All relevant items on the checklist are expected to be met before an application to discharge an application to discharge a SuDS design condition is supported.

Our response and requirements are elaborated upon or condensed within an attached comment tracker where necessary. If a comment tracker is provided a designer is encouraged to refer to this and respond to comments to aid further review. Please request a .docx version of this document to by email to land.drainage@arun.gov.uk if needed.

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

Reviewed Plans

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

- EMAIL 24.10.25 subplans drainage
- Drain Survey 20250516
- DRAINAGE VERIFICATION REPORT - Ref: 19-156-09D Oct 2025

Condition wording

Condition 17 is worded as follows:

"Immediately following implementation of the approved SuDS scheme 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. There shall be no deviation to the approved scheme other than with the written consent of the Local Planning Authority. The scheme shall thereafter be maintained in perpetuity.

Reason: To ensure that the proposed development is satisfactorily drained in accordance with policy W DM3 of the Arun Local Plan."

Consultation comments to the planning officer

1. Please see the attached comment tracker for detailed comments relating to the submission.

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

Application Reference: Y/45/25/DOC (Y/19/25/DOC) Site Name: Land at Stakers Farm North End Road Yapton	Initial Issue Date: 14/11/2025 Issue Date: 14/11/2025 Reviewer Reference: ADC/EXT4
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Summary and Recommendation:

Condition 17: **No objection**

Please note: Any DOC application should only have a maximum of two consultation responses. If this is the second response for an open application and there are still comments outstanding, then please object to the application.

	ADC Drainage Comments	Odyssey Comments	ADC Drainage Comments		
Date:	21/04/2023(Previous application Y/145/22/DOC) 25/09/2025	9/10/2025	14/11/2025		

Condition Number: 17

Comment Number					
1.	Details of the of author including independence, qualifications and experience have not been provided. Such requirement is detailed in the Surface Water Drainage Verification Condition Guidance Note (Version 1.3). ADC Drainage Comments 25/09/2025 Provided now, item closed	Author details have been added to the Drainage Verification Report.	Noted. Item now closed		
2.	A clear statement on whether the author believes the constructed surface water drainage is adequate and				

	whether any identified issues will affect the operation, maintenance and performance of the drainage system, now or in the future has not been provided. Such requirement is detailed in the Surface Water Dra ADC Drainage Comments 25/09/2025 Provided now, item closed				
3.	It is noted that the report author did not have a site presence during construction to be able to verify that the SuDS elements of the drainage scheme were installed as per the approved design. Furthermore, the report author confirms that the developer and/or Contractor provided photographs and as built information sheets detailing SuDS construction. As detailed in the Surface Water Drainage Verification Condition Guidance Note (Version 1.3), verification/clear statement is to be provided by an independent and qualified Engineer. ADC Drainage Comments 25/09/2025 Provided now, item closed				

4.	All the SuDS elements/components photo records provided do not have dates and references that can relate on plan. Most of the photo records are black and white of low quality, and the content is not clearly visible. ADC Drainage Comments 25/09/2025 Whilst the photos provided are now clear, please provide information and cross reference these photos to which drainage run or SuDS component they relate to.	Details given to each stating location within site	Noted. Item now closed		
5.	There are no sufficient photo records showing the construction of SuDS elements/components for 70units. As an example, the information provided in Appendix A includes: -3no black and white low-quality photos of pipes in trenches; -1no black and white low-quality photo of inspection chambers; -1no black and white low quality photo of catchpits connecting into the attenuation tank;	As above.	Noted. Item now closed		

	-9no photos (5no low quality) showing the attenuation tanks; -1no black and white low quality photo showing check dams; -14no black and white low quality photos showing road construction (finished surface/top of sub-base/binder/base course (most appear to cover 2-3no areas); -6no photos showing the construction of one section of road; -No photos of the construction of the swale; ADC Drainage Comments 25/09/2025 As above there isn't any information relating to which photo applies where on the site. Please clear information on which component, including manhole reference etc... each photo relates to on a title to each photo. Also please provide a full suite of photos of the completed main SuDS components and clearly cross reference these to the plans in the report				
6.	Confirmation of how key materials were verified, e.g. inspection of goods receipts				

	for key components such as tanks, geomembranes, sub-base materials, flow control devices; inspections and tests of welded membrane joints; etc has not been provided. The author refers to SuDS's 'As Built Information Sheet' being included in Appendix B of the Drainage Verification Report. Such information does not appear to have been uploaded on the Planning Portal. The requirement for this information is detailed in the Surface Water Drainage Verification Condition Guidance Note (Version 1.3) ADC Drainage Comments 25/09/2025 Provided now, item closed				
7.	No CCTV survey video footage (including reports) of pipelines have been provided. Such requirement is detailed in the Surface Water Drainage Verification Condition Guidance Note (Version 1.3). ADC Drainage Comments 25/09/2025 Please provide CCTV of main drainage runs	CCTV survey information now provided.	Noted. Item now closed		

8.	Confirmation that no trees have been located in areas which would be detrimental to the drainage infrastructure, has not been provided by the Author. Such requirement is detailed in the Surface Water Drainage Verification Condition Guidance Note (Version 1.3) ADC Drainage Comments 25/09/2025	All existing trees that are to be retained are shown on the drainage layouts. Drawing number: YAP-130-081 to YAP- 130-086 Drainage Layout Sheet 1-6. This shows that there are no clashes between trees and the installed drainage infrastructure.	Noted. Item now closed		
9.	Confirmation that there has been no unauthorised land raising or watercourse infilling/culverting/alterations, has not been provided by the Author. Such requirement is detailed in the Surface Water Drainage Verification Condition Guidance Note (Version 1.3). ADC Drainage Comments 25/09/2025 Item is outstanding		Noted in report that elements of the drainage system have generally been installed per the approved design. Item now closed		
10.	Please confirm if there are any variations to the design shown in the approved drawings. Where variations from the approved drawings have occurred the report should show that the as constructed drainage will meet policy				

	requirements and that these variations have been approved by the designer. ADC Drainage Comments 25/09/2025 Provided now, item closed				
11.	Please confirm if any remedial works are required and/or that may have been undertaken. ADC Drainage Comments 25/09/2025 Item is outstanding	We can confirm that no remedial works are required.	Noted. Item now closed		
12.	The verification condition requires the supply of as-built survey drawing/s (DWG and PDF). The following information is missing on drawing YAP -130-29 and SW Network Document: - Not all pipe diameters and gradients are shown; - Pipe materials and cover levels are missing; - Roads, footpaths, driveways and parking areas with finished levels are missing; - The footpath extent and surfacing type, noting whether permeable or impermeable;				

	- Infiltration blanket base level, cover level and plan dimensions; - Attenuation crates base level, height of crate, cover level and plan dimensions; - Swale base levels, crest level, side slope; - Permeable Paving finished surface levels; - Flow control device (where applicable) invert levels, cover level, overflow (where applicable) level; and Finished floor levels (this is required to confirm/ensure that there is no increase in flood risk). ADC Drainage Comments 25/09/2025 Provided now, item closed				
13.	In addition, to the missing as-built information, please provide a copy of the approved drawings (PDF and DWG-CAD) in support of the review process. ADC Drainage Comments 25/09/2025 Item is outstanding	The approved drawings have been included within the latest issue	Noted. Item now closed		
14.	Microdrainage SW Piped Network Calculations	All relevant nodes have been added into the Microdrainage	Noted. Item now closed		

	observations (Doc ref: 'As Built 70 Units SW Network'): - Some of the nodes in the 1st sheet of 'As Built 70Units SW Network' are missing in the Microdrainage calculations (i.e....ICs S38, S39, S40 etc). Please make sure that all relevant nodes are included in the Microdrainage Calculations; - Some of the pipe gradients shown in the 1st sheet of 'As Built 70units Network' do not match with those shown on the Microdrainage calculations (i.e....Pipe S1.006, S1.007, S1.008, S1.009 etc). Please make sure that all pipe gradients shown on the as-built plan and Microdrainage calculations match; - Please confirm if Urban Creep has been allowed for in the as-built Microdrainage calculations. If yes please demonstrate how this has been taken into account; - Please confirm that Requirement 13 of ADC's Surface Water Drainage Proposals Checklist	model. Rodding eyes and individual connections have not been added to the model as their impact is negligible. Pipe gradients have been amended with the model to match the as built information. There are small rounding differences as the Microdrainage model calculates the pipe to the centre of the manhole instead of the connection point. The pipe gradients may cause confusion as the as built drawing shows the originally designed levels as well. Please refer to the dark blue text for the as built information that will match the Microdrainage model. A 10 percent allowance has been included for urban creep, please see the screenshot below from the Microdrainage model.			
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(Version 5.2) is met and provide evidence in support of this. The Microdrainage calculations provided indicate that the water level for 1 in 10years + CC storms is above the lowest incoming pipe of the infiltration blanket;

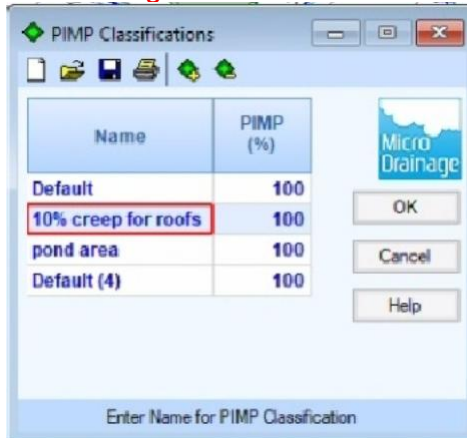
- Please confirm which Safety Factor has been applied from Clause f of ADC's Surface Water Drainage Proposals Checklist (Version 5.2) and demonstrate how this has been applied on the drainage calculations. Is there a risk of flooding developments to the north of the site?;
- Please provide half drain times for the 1 in 10y + CC and 1 in 100y + CC storms;
- Please provide a copy of the soakage tests (BRE Digest 365) confirming existing ground infiltration rates – accepted by LPA at Planning Stage;
- Please provide groundwater monitoring data showing depth of groundwater – accepted by LPA at



A factor of safety of 6.5 has been applied to the Microdrainage model in line with the “Factor of Safety Table” found within the Arun surface water drainage proposal checklist.

Soakage tests have been included in this pack.

Groundwater monitoring data has now been included in this pack.

	planning stage; - Please provide a copy of the drainage calculations accepted by LPA at planning stage; Please provide a DWG (CAD) of the 1st page of Doc ref: 'As Built 70 Units SW Network' to enable checking of the contribution areas used in the calculations. ADC Drainage Comments 25/09/2025 Item is outstanding				
15.	Microdrainage Permeable Paving Calculations observations (Doc ref: 'As Built 70 Unit Permeable Paving'): - Please confirm that the contribution areas include all roads, footways and drives/driveways. Please overlay the site layout on the contribution areas plan (page 1 of the above document); Please confirm if Urban Creep has been allowed for in the as-built Microdrainage calculations. If yes please demonstrate how this has been taken into account; - Please confirm which	Yes, all carriageways, footways and drives are included in the permeable paving modelling. A 10 percent allowance has been included for urban creep, please see the screenshot below from the Microdrainage model. 	Noted. Item now closed		

	Safety Factor has been applied from Clause f of ADC's Surface Water Drainage Proposals Checklist (Version 5.2) and demonstrate how this has been applied on the drainage calculations (most of the permeable paving areas modelled are greater than 100msq, consideration of flooding risk due to surface water in the car park or roads must be given); - Please provide Microdrainage calculations for the 1 in 10y +CC storms; - Please provide half drain times for the 1 in 10y + CC and 1 in 100y + CC storms; - Please provide a copy of the soakage tests (BRE Digest 365) confirming existing ground infiltration rates – accepted by LPA at Planning Stage; - Please provide groundwater monitoring data showing depth of groundwater – accepted by LPA at planning stage; - Please provide a copy of	A factor of safety of 6.5 has been applied to the Microdrainage model in line with the "Factor of Safety Table" found within the Arun surface water drainage proposal checklist.			
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	the drainage calculations accepted by LPA at planning stage; Please provide a DWG (CAD) of the 1st page of Doc ref: 'As Built 70 Units Permeable Paving' to enable checking of the permeable paving areas used in the calculations. ADC Drainage Comments 25/09/2025 Item is outstanding				
16.	The image of the crates appears to be prior to the crates being secured together / shows a system where securing the crates may not be required. Please provide confirmation from SDS / crate supplier that the arrangement installed is as per manufacturers guidance and best practice. ADC Drainage Comments 25/09/2025 Item is outstanding	We can confirm the crates have been installed in line with SDS' guidance and best practice.	Noted. Item now closed		

17.	Please provide a Micro drainage modelling rational and commentary for the permeable paving systems and general modelling principals. ADC Drainage Comments 25/09/2025 Item is outstanding		Noted. Item now closed based on updated calculations provided.		
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If a designer would like a .docx version of this document to aid administration of responses, please request this by email to land.drainage@arun.gov.uk.

From: Nicola Oktay on behalf of Planning.Responses
Sent: 17 November 2025 12:41
To: Planning Scanning
Subject: FW: Planning Re-Consultation on: Y/45/25/DOC
Attachments: Y-45-25-DOC – Stakers Farm.docx

Drainage Engineers response

Nikki Oktay
Planning Receptionist, Planning Department

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To register to receive notifications of planning applications in your area please go to <https://www1.arun.gov.uk/planning-application-finder>



Our priorities...

Improving the wellbeing of Arun

Delivering the right homes in the right places

Supporting our environment to support us

Fulfilling Arun's economic potential

From: Sarah Burrow <Sarah.Burrow@arun.gov.uk>
Sent: 17 November 2025 08:51
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Simon Davis <Simon.Davis@arun.gov.uk>; Paul Cann <Paul.Cann@arun.gov.uk>
Subject: RE: Planning Re-Consultation on: Y/45/25/DOC

Hi Simon,

Find the consultation response – no objection – attached. Apologies for the delay in response.

I am submitting this consultation on behalf of Paul, our Principal Drainage Engineer. It has been completed by one of our external consultants.

Kind regards

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

T: 01903 737815
E: sarah.burrow@arun.gov.uk

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Our priorities...

Improving the wellbeing of Arun

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From: Planning.Responses <Planning.Responses@arun.gov.uk>
Sent: 27 October 2025 11:33
To: Land Drainage <Land.Drainage@arun.gov.uk>
Subject: Planning Re-Consultation on: Y/45/25/DOC

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No:	Y/45/25/DOC
Registered:	14th July 2025
Site Address:	Land at Stakers Farm North End Road Yapton
Grid Reference:	497619 103624
Category:	Discharge of Condi
Description of Works:	Approval of details reserved by condition imposed under reference Y/44/17/OUT relating to condition number 17 - SuDS.

I am able to inform you that I have received an amendment to the above application dated 23rd October 2025 relating to: Additional drainage information
If you should wish to make further representations as a result of this amendment, please make any further comment by **10th November 2025**.

[Click here to view the application, documents and make further 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.

Yours sincerely

Mr S Davis

Planning Case Officer-Arun District Council

Telephone: 01903 737874

Email: Simon.Davis@arun.gov.uk

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