

Engineers Comments Regarding Surface Water Drainage

Application Reference:	AL/20/26/PL	Reviewer Reference:	ADC/EXT5/AF
Planning Officer:	Simon Davis	Date of Review:	15/07/2026
Site Name:	Land at West Barn Old Dairy Lane Norton PO20 3AF		
Application Description:	Demolition of existing tennis court and erection of a commercial building (within Use Class E(g), parking, landscaping and other associated works (resubmission following AL/107/25/PL). This application is a Departure from the Development Plan, may affect the character and appearance of the Norton Lane, Norton Conservation Area and is in CIL Zone 3 (Zero Rated) as other development.		
Assessment Number:	4		

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	No objection subject to conditions
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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 The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.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	No objection subject to condition
2. Interception drainage	Compliant	No Objection
3. Extreme Rainfall and Flooding	Compliant	No objection subject to condition
4. Water Quality	Compliant	No Objection
5. Amenity	Insufficient	No Objection
6. Biodiversity	Insufficient	No Objection
7. Construction, operation, maintenance, decommissioning and structural integrity	Compliant	No objection subject to condition

Reviewed Plans

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

- Proposed Drainage Layout Sheet 1 of 2 P27002-LRW-XX-XX-DR-C-7501-P03
- Proposed Drainage Layout Sheet 2 of 2 P27002-LRW-XX-XX-DR-C-7502-P05
- FRA/Drainage Statement/Foul Drainage Impact Assessment Rev P05
- Appendix D Hydraulic Calculations 30/04/26
- Appendix F - Soakage Testing - June 2026 - sheet 1/3
- Existing Hard Standing Area Plan
- Proposed Hard Standing Area Plan
- Impermeable Areas Plan P27002-LRW-XX-XX-DR-C-7506-P01
- Arun DC email 12.12.2026 - Small Site Exception
- Arun DC email 16.12.2026
- Hydraulic Calculations P04 dated 10.06.2026

Plans/Documents to be listed as approved

The following plans/documents should be listed as approved:

- FRA/Drainage Statement/Foul Drainage Impact Assessment Rev P05
- Proposed Drainage Layout Sheet 1 of 2 P27002-LRW-XX-XX-DR-C-7501-P03
- Proposed Drainage Layout Sheet 2 of 2 P27002-LRW-XX-XX-DR-C-7502-P05
- Hydraulic Calculations P04 dated 10.06.2026

Consultation comments to the planning officer

0. General

- 0.1. We note the previous refused application AL/107/25/PL and our comments dated 8 December 2025.
- 0.2. We note the WSCC LLFA comments dated 20 April 2026 stating no objection subject to conditions.
- 0.3. We note the comparison provided of the existing and proposed paved / drained areas and on the basis that the nett paved / drained area is either a very small increase or possibly a reduction (when accounting for the previous hardstanding to the south of the proposed building converted to soft landscaping as shown on the landscaping layout) we can accept the ground investigation and groundwater monitoring provided with a precautionary buffer.
- 0.4. Please note that from a drainage assessment perspective there is no distinction between permeable surfaces and surfaces drained to soakaways in terms of drained area. Permeable surfaces effectively act as individual infiltration blankets. They are not omitted from designs and calculations and they require their own storage to replicate the absorption function provided by topsoil in soft landscaped areas or 'greenfield' use. Therefore the removal of the permeable courts is removal of a drained area and is offset from the proposed drained areas when comparing before and after drained area. Similarly the existing stone paved area produces runoff even if not positively drained.

1. Runoff destination

- 1.1. We concur that rainwater harvesting is not required at this development on the basis of limited demand for non-potable water.
- 1.2. The drainage strategy is to discharge to ground via a modular crate storage soakaway.
- 1.3. A ground investigation has been provided which includes winter groundwater monitoring up to the end of January 2026 and it is stated in the ground investigation report that groundwater levels are increasing up to a likely seasonal maximum in March. The current scope of the groundwater monitoring was previously agreed with ADC as part of pre-application enquiry.
- 1.4. The proposed soakaway has been adjusted to be larger in plan and less deep to mitigate the risk of high ground water. The highest groundwater level for the current data is 2.2m below ground level. The proposed soakaway is approximately 0.8-0.9m below existing ground levels. The base therefore has a margin of buffer before the 1m vertical offset which is acceptable on a precautionary basis to mitigate the possibility that the annual peak had not been fully reached at the end of the groundwater monitoring.
- 1.5. The previous infiltration testing was carried out at 2.2m bgl with a starting head of 0.9m at the trial pit logs show different stratum (Harwich Formation) at that depth to the Head material at 1 metre depth. It therefore cannot be applied to the design infiltration rate as representative of the receiving subsoil at 0.8m bgl and above.
- 1.6. A further round of infiltration testing has been conducted at the correct depth (approx. 1m below existing ground level) but does not comply with the BRE365 test method which is to undertake

testing in Winter or Spring when groundwater levels are high. However, the results show good rates of infiltration in the shallower subsoil. Therefore, the following precautionary approach can be adopted at planning stage; an additional margin of safety should be applied at planning stage to mitigate this aspect and further testing at the depth and location of the soakaway should be provided as part of a submission to discharge conditions.

- 1.7. Subject to a suitable factor of safety being applied we are satisfied that the design is sufficiently robust and feasible for planning stage. However, due to the single summer test, which is slightly deeper than the proposed soakaway, further testing will be required at discharge of conditions stage to support the final technical design of the soakaway.

2. Interception drainage

- 2.1. The design achieves interception drainage through infiltration to ground.

3. Extreme rainfall and flooding

- 3.1. An impermeable areas plan is now provided. There are some areas of hard paving omitted between the parking bays and adjacent to the building which do not appear to be soft landscaping on the submitted landscape architecture layout. However, these areas are a relatively small proportion and are balanced by the additional allowance of 350 square metres added to the model as set out in the drawing note.
- 3.2. Revised drainage calculations dated 10.06.2026 have now been provided with the with the updated soakaway design and factor of safety. There is a small discrepancy in that the base level of the soakaway on the drainage layout plan is 14.772 whereas the base of soakaway (IL) in the calculations is 14.820 (48mm higher) but in terms of analysis the higher level in the calculations is robust.
- 3.3. A factor of safety of 10 is applied as suggested by our previous comments. The coefficient and factor of safety is applied to the sides and base, which is in accordance with guidance within Ciria R156 - Infiltration drainage - manual of good practice.
- 3.4. We are therefore able to remove our objection and apply planning conditions.

4. Water quality

- 4.1. The mitigation provided by the permeable paving and vortex separator is sufficient to mitigate the risk of pollution from the development.

5. Amenity

- 5.1. No mitigation or specific design is proposed for amenity / multifunctionality and no assessment is provided on the amenity aspect for the sustainable drainage system.
- 5.2. The increase in hardstanding area is small and a small sites exception is applicable. Therefore multifunctional design to improve Amenity is not required.

6. Biodiversity

- 6.1. No mitigation or specific design is proposed for biodiversity and no assessment is provided on the biodiversity aspect for the sustainable drainage system.
- 6.2. The increase in hardstanding area is small and a small sites exception is applicable. Therefore multifunctional design to improve Biodiversity is not required.

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

7.1. An outline Management and Maintenance Plan is provided with the planning application which is acceptable for the current design for planning stage. A condition can be applied to require a detailed Management and Maintenance Plan.

8. Suggested conditions / Overcoming the objection

8.1. The following conditions are proposed to control the technical design and implementation of the sustainable drainage system and the successful long term management and maintenance of the system.

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 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,
3. Infiltration testing strictly in accordance with BRE DG 365 or Ciria R156 Guidance,
4. Impermeable area plan,
5. Calculations modelling the surface water drainage network for the following storm events: a.) 100% Annual Exceedance Probability, b.) 10% AEP + climate change allowance, c.) 3.3% AEP + climate change allowance, and d.) 1% AEP + climate change allowance. All storm events must include an allowance for urban creep and surcharged outfalls where appropriate.

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: 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 NPPF. 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.

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.

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 and in accordance with policies W SP1, W DM1, W DM2 and W DM3 of the Arun Local Plan.

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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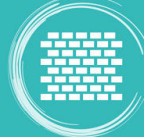
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Supporting our environment to support us



Fulfilling Arun's economic potential



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From: Paul Cann <Paul.Cann@arun.gov.uk>
Sent: 20 July 2026 14:36
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Land Drainage <Land.Drainage@arun.gov.uk>; Simon Davis <Simon.Davis@arun.gov.uk>
Subject: RE: Planning Consultation on: AL/20/26/PL

Please find enclosed our consultants revised response based upon the further information provided by the applicant. No objection subject to condition.

Regards

Paul Cann
Principal Drainage Engineer, Coastal Engineers and Flood Prevention

T: 01903 737819
E: paul.cann@arun.gov.uk

Arun District Council, Civic Centre, Maltravers Rd
Littlehampton, West Sussex, BN17 5LF
www.arun.gov.uk



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Delivering the right homes in the right places



Supporting our environment to support us



Fulfilling Arun's economic potential



From: Paul Cann
Sent: 22 June 2026 10:18
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Land Drainage <Land.Drainage@arun.gov.uk>; Simon Davis <Simon.Davis@arun.gov.uk>
Subject: RE: Planning Consultation on: AL/20/26/PL

Please find enclosed our consultants response, an objection.

Regards

Paul Cann
Principal Drainage Engineer, Coastal Engineers and Flood Prevention

T: 01903 737819
E: paul.cann@arun.gov.uk

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Littlehampton, West Sussex, BN17 5LF
www.arun.gov.uk



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: Planning.Responses <Planning.Responses@arun.gov.uk>
Sent: 15 June 2026 11:03
To: Land Drainage <Land.Drainage@arun.gov.uk>
Subject: Planning Consultation on: AL/20/26/PL

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No:	AL/20/26/PL
Registered:	30th March 2026
Site Address:	Land at West Barn Old Dairy Lane Norton PO20 3AF
Grid Reference:	492782 106456
Category:	Plan Applicat'n
Description of Works:	Demolition of existing tennis court and erection of a commercial building (within Use Class E(g), parking, landscaping and other associated works (resubmission following AL/107/25/PL). This application is a Departure from the Development Plan, may affect the character and appearance of the Norton Lane, Norton Conservation Area and is in CIL Zone 3 (Zero Rated) as other development.

I am able to inform you that I have received an amendment to the above application dated 11th June 2026 relating to:- Amended Drainage Layout, FRA and Soakaway Calculations

If you should wish to make further representations as a result of this amendment, please make any further comment by **7th July 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

Mr S Davis

Planning Case Officer- Arun District Council

Telephone: 01903 737874

Email: Simon.Davis@arun.gov.uk