

Engineers Comments Regarding Surface Water Drainage

Application Reference:	BN/76/26/DOC	Reviewer Reference:	ADC/EXT2/113
Planning Officer:	Amber Willard	Date of Review:	07/09/2026
Site Name:	Land South Of Wandleys Lane Eastergate PO20 3SE		
Application Description:	Approval of details reserved by condition under BN/46/25/PL relating to conditions 4- Surface Water Drainage and 9- Maintenance & Management of Sustainable Drainage Scheme.		
Assessment Number:	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 4: No objection Condition 9: 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 (Chapter 18). 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 The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.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:

- SuDS Maintenance and Management Plan (Aug 2026)
- Drainage Layout P5
- Storm Catchment Plan P3
- Manhole Schedules P2
- Drainage Simulation Results PP2 V4
- Drainage Simulation Results PP3 V4
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Plans/Documents to be listed as approved

The following plans/documents should be listed as approved in respect to condition 4:

- Drainage Layout 501 P5
- Exceedance Flood Routes Drg no. 503 P01
- Storm Catchment Plan 502 P3
- Manhole Schedules 504 P2
- Drainage Simulation Results PP2 V4
- Drainage Simulation Results PP3 V4
- Construction Details Sheet 1. Drg no. 911 P03
- Construction Details Sheet 2. Drg no. 912 P03
- Construction details Sheet 3. Drg no. 914 P01
- Levels Layout Drg no. 201 P02
- Surface Finishes 211 P06

The following plans/documents should be listed as approved in respect to condition 9:

- SuDS Maintenance and Management Plan (Aug 2026)
- Maintenance Plan 001

Condition wording

Condition 4 is worded as follows:

"Prior to the commencement of development, construction drawings of the surface water drainage network, associated sustainable drainage components and flow control mechanisms and a construction method statement shall be submitted and agreed in writing by the Local Planning Authority. The scheme shall then be constructed as per the agreed drawings, method statement, FRA/Drainage Statement (version 1.0, BP Civils, April 2025 and Drawing Proposed Drainage Plan Dwg. 000-BPC-WD-ZZ-D-C PL007 Rev 0 and remaining in perpetuity for the lifetime of the development unless agreed in writing by the Local Planning Authority. No alteration to the agreed drainage scheme shall occur without prior written approval from the Local Planning Authority.

Reason: To ensure that the development achieves a high standard of sustainability and to comply with the NPPF and Arun Local Plan policies W DM2 and W DM3"

Condition 9 is worded as follows:

"The development hereby approved shall not be first occupied until details of the maintenance and management of the sustainable drainage scheme have been submitted to and approved in writing by the Local Planning Authority. The drainage scheme shall be implemented prior to the first occupation of the development hereby approved and thereafter managed and maintained in accordance with the approved details in perpetuity. The Local Planning Authority shall be granted access to inspect the sustainable drainage scheme for the lifetime of the development. The details of the scheme to be submitted for approval shall include:

- (a) A timetable for its implementation,

(b) Details of SuDS features and connecting drainage structures and maintenance requirement for each aspect

(c) A management and maintenance plan for the lifetime of the development which shall include the arrangements for adoption by any public body or statutory undertaker, or any other arrangements to secure the operation of the sustainable drainage scheme throughout its lifetime.

Reason: To ensure that the development achieves a high standard of sustainability and ensure the flood risk is adequately addressed for each new dwelling and not increased in accordance with the NPPF and Arun Local Plan policies W DM2 and W DM3.”

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: BN/76/26/DOC Site Name: Land South Of Wandleys Lane Eastergate PO20 3SE	Initial Issue Date: 07-09-2026 Issue Date: 07-09-2026 Reviewer Reference: ADC/EXT2/113
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Summary and Recommendation:

Condition 4: **No objection**

Condition 9: **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.

	Designer Response	ADC Drainage Comments	Designer Response	ADC Drainage Comments	
Date:	02/06/2026	30/07/2026	13/08/2026	07/09/2026	

Condition Number: 4

Look at "Response to engineers comments regarding surface water drainage (Word version)" for prior comments

Comment Number				
1.	OK			
2.	OK			
3.	Please refer To Exceedance Plan drg. No. 476988-503_P01- Exceedance Flood Routes. Please refer to descriptor file: FEH_Point_Descriptors_494812_ 106233_v5_1_0FEH File sent via email on 10.06.26	Noted. Comment closed.		
4.	OK			
5.	The provision of water butts to each plot and utilising permeable paving within the development provides amenity benefits.	Noted. Comment closed.		

	Rain gardens have also been added, collecting rainwater from some RWP's, which provides attenuation. The planting within the rain gardens provide amenity benefits to the development				
6.	Slightly limited in what we can provide at this stage due to the development layout and plots having been fixed at planning stage, therefore, SuDS features that fit within the approved landscaped areas can only be included as not to affect the planning permission of the site. Therefore, rain gardens have been added to take some of the RWP's, which provides attenuation and allows for evapotranspiration. The provision of water butts provides biodiversity benefits as it allows planting to be watered with rainwater. The addition of Rain gardens to the drainage scheme provides biodiversity benefits as they provide a habitat for wildlife.	Noted. Comment closed.			
7.	This has been updated and attached.	Noted.			

		Comment closed.			
8.	Please refer To Exeedance Plan drg. No. 476988-503_P01- Exceedance Flood Routes.	Noted. Comment closed.			
9.	OK				

10.	Please refer to updated calculations which now show the permeable paving summary tables along with the flow/time graphs, which include the half drain down times for each storage feature.	Noted. Comment closed.			
11.	Please refer to drg. No. 476988-201_P02- Levels Layout	Noted. Comment closed.			
12.	The road long section does not show any type of construction but only the vertical geometry designs to be applied to whatever the construction type might be. The porous paving will only be up to the ramp, where it will change to a standard non-porous bitmac construction, including the bell-mouth up to the junction with the existing road construction. The S278 is nearing completion in terms of technical design and review, and the current details have been assessed and have been accepted. The full technical approval is imminent.	Noted. Comment closed. Please ensure the S278 design technical approval is provided in due course.			
13.	The formation levels will vary dependant upon varies criteria, for example, where there is a pipe or diffuser outlet, the formation level will need to be adjusted to allow for adequate pipe and structure bedding. It will	Noted. Please review all diffuser locations as Building Control requires these to be located at least 5m from a dwelling Soakaway rule).	Diffuser locations revised to maintain 5m away from buildings	Noted. Comment closed.	

	also vary on site to suit prevailing conditions, CBR test values and where ground conditions vary, i.e. removal of any soft spots etc... It is not possible to fix the formation levels to the accuracy you are asking for. The formation levels shown are indicative only. All the diffuser discharge levels are set at the nominal base of the voided sub-base, irrespective of what the actual construction formation levels will be.	Comment outstanding.			
14.	Construction detail updated. Please refer to drg no. 476988-911_P03 - Construction Details-- Sheet 1.	Noted. Comment closed.			
15.	Detail updated with correct reference. Please refer to drg no. 476988-911_P03 - Construction Details-- Sheet 1.	Noted. Comment closed.			
16.	Construction detail updated. Please refer to drg no. 476988-912_P03 – Construction Details-- Sheet 2.			Noted.	
17.	Our initial response was incorrect. There are several road gullies within the drainage designs.	Noted. Comment closed.			

	An ACO drainage channel has been added along the highway/private boundary interface. Please refer to drg. No. 476988-501_P04- Drainage Layout.				
18.	Construction detail updated. Please refer to drg no. 476988-911_P03 - Construction Details— Sheet 1.	Noted. Comment closed.			
19.	Note added to construction details. Please refer to drg no. 476988-911_P03 - Construction Details-- Sheet 1.	Noted. Comment closed.			
20.	Note reviewed and amended as necessary. Please refer to drg no. 476988-912_P03 - Construction Details— Sheet 1.	Noted. Comment closed.			
21.	ACO run from PS36-ACO increased to 1:80. Please refer to drg. No. 476988-501_P04- Drainage Layout and drainage calculation sheets.	Noted. Comment closed.			
22.	New IC with 300mm sump added. Please refer to drg. No. 476988-501_P04- Drainage Layout.	Noted. Comment closed.			
23.	PS3 is noted on the plan and within the manhole schedules with a 300mm sump and is	Noted. Comment closed.			

	directly upstream of the outlet diffuser. Please refer to drg. No. 476988-501_P04- Drainage Layout.				
24.	A construction detail has been added to a new construction sheet 3. Please refer to drg. No. 476988-914_P01 - Construction Details— Sheet 3.	Noted. Comment closed.			
25.	The previous planning indicative landscaping information has been removed and replaced with the current more detailed landscaping designs.	Noted, however the current landscaping design was not supplied. It is assume this will also be coordinated with the raingardens. Comment outstanding.	Landscaping design now provided	Noted. Comment closed.	
26.	An ACO drainage channel has been added along the highway/private boundary interface. Please refer to drg. No. 476988-501_P04- Drainage Layout.	Noted. Comment closed. Please ensure the S278 design technical approval is provided in due course.	Approved S278 design drawings now provided		
27.	Manhole schedules have been split out into their respective networks/catchments and updated in accordance with changes to the designs and comments. Please refer to drg. No. 476988-504_P01- Manhole Schedules.	Noted. Comment closed.			

28.	The invert levels for the diffusers have been set to the design base of the voided sub-base, irrespective of the actual nominal formation levels which will vary slightly due to construction levels/criteria, i.e. CBR's or pipe bedding requirements etc.	Noted. Please review all diffuser locations as Building Control requires these to be located at least 5m from a dwelling Soakaway rule). Comment outstanding.	Diffuser locations revised to maintain 5m away from buildings	Noted. Comment closed.	
29.	Inspection chamber types have been added to the construction details. Please refer to drg no. 476988-912_P03 – Construction Details-- Sheet 2.	Noted. Comment closed.			
30.	Detail updated to show bitmac. The siltation / blockage of the bitmac would be the same scenario as if it were block paving; The construction running surface will be an impermeable Dense Bitumen Macadam (DBM) base course. Site traffic can then use this road for access during the construction phase. Once access by construction traffic is no longer needed, the DBM layer can remain in place. The layer is cleaned and then core drilled through with 75mm diameter holes on a 750mm grid, to allow water to drain through to the sub-base aggregate. Then the permeable surfacing is applied. This method statement has been updated on the detail. Please	Noted. Comment closed.			

	refer to drg no. 476988-912_P03 – Construction Details-- Sheet 1.				
31.	A shallow rodding eye construction detail has been added. Please refer to drg no. 476988-912_P03 – Construction Details-- Sheet 1.	Noted. Comment closed.			
32.	The flap valve has been removed from the drainage designs. Please refer to drainage calculation sheets.	Noted. Comment closed.			
33.	The proposed services corridor has been added. Please refer to drg. No. 476988-501_P04- Drainage Layout.	Noted. It remains unclear what the width is required for the service corridor and if this is sufficient for all ducts. The perimeter service corridor implies that no services will need to cross beneath/within the permeable pavement therefore the storage quota is acceptable, however there are numerous conflicts with SW & FW drains and the recently added raingardens. If traditional service strips are required as a result, this will reduce storage and may dictate compensatory storage depth.	1.2M width service corridor has been provided. The drainage has been adjusted as not to clash with this. There has also been the addition of 2no. impermeable service crossings through the permeable paved areas. The relevant permeable paved areas calculations have been updated to take account of the loss in storage.	Noted. Comment closed.	

		Comment outstanding.			
34.	No fines voided granular material is generally referred to as 'Type 3'. A more detailed description has been added to the Long Sections for clarity. Please refer to drg. no. 476988-225_P02- Roads Longitudinal Sections.	Noted. Comment closed.			
35.	These occur usually when there are very short lengths of pipe or when there is a high volume of water and a very low or near zero restriction. These are showing at the location of the dummy outfall which have a 1mm orifice restriction to simulate a zero out flow from the permeable paving features. The rest of the upstream system is showing no errors. From Site3D: Continuity Errors Continuity errors in a drainage system simulation are used to assess the accuracy of the model's results and are an indication of flow stability through the network. Continuity Errors are reported as two separate percentage values, each representing the difference between input and output for	Noted and updated calculations are acknowledged. Comment closed.			

	different system components and should ideally be as close to zero as possible. • Flow Continuity Error: Reflects the accuracy of simulation through the system's manholes, conduits, tanks and ponds. • Runoff Continuity Error: Reflects the accuracy of the simulation across any modelled drainable areas. A positive continuity error indicates a higher inflow than outflow i.e. unexpected water loss, whereas a negative value indicates a higher outflow than inflow i.e. unexpected water gain. The equation used for continuity errors is: Continuity Error = 100 * (1 - Total Outflow / Total Inflow) Continuity Error Severity Levels The continuity errors are classified and coloured based on their severity as follows: • 0-5%: Acceptable level of accuracy (black). • 5-10%: Less accurate but still within acceptable tolerance (orange). • >10%: Unreliable for realistic simulations (red).				
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	Common Causes of High Continuity Errors • Short pipe sections. • Extreme flow control values in manholes. By reviewing these continuity errors, the overall reliability of the simulation can be determined and potential issues in the system design can be identified. You can further inspect the errors by turning on per item continuity errors in the Simulation Results Properties window, this adds an additional row to the Simulated Rainfall Events table showing item continuity errors for the simulated storm.				
36.	The calculations now show the permeable paving summary information as well as the inflow/outflow/time graphs with half drain down times indicated. Please refer to drainage calculation sheets.	Noted and updated calculations are acknowledged. Comment closed.			
Condition Number: 9					
Comment Number					
1.		Whilst the maintenance report is accepted, as cited above, coordination with service corridors is essential to align with future maintenance so this must be confirmed.	Updated	Noted. Comment closed.	

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.

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

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



From: Paul Cann <Paul.Cann@arun.gov.uk>
Sent: 17 September 2026 12:38
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Land Drainage <Land.Drainage@arun.gov.uk>; Amber Willard <Amber.Willard@arun.gov.uk>
Subject: RE: Planning Re-Consultation on: BN/76/26/DOC

Please find enclosed our consultants response, recommending discharge of conditions.

Regards

Paul Cann
Principal Drainage Engineer, Coastal Engineers and Flood Prevention

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Our priorities...



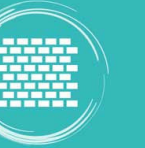
Improving the wellbeing of Arun



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: 13 August 2026 14:49
To: Land Drainage <Land.Drainage@arun.gov.uk>
Subject: Planning Re-Consultation on: BN/76/26/DOC

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No: BN/76/26/DOC
Registered: 23rd June 2026
Site Address: Land South Of Wandleys Lane Eastergate PO20 3SE

Grid Reference: 495021 106282
Category: Discharge of Condi
Description of Works: Approval of details reserved by condition under BN/46/25/PL relating to conditions 4- Surface Water Drainage and 9- Maintenance & Management of Sustainable Drainage Scheme.

I am able to inform you that I have received an amendment to the above application dated 6th August 2026 relating to: Substitute and supplementary drainage and landscape plans and documents

If you should wish to make further representations as a result of this amendment, please make any further comment by **27th August 2026**.

[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

Amber Willard

Planning Case Officer-Arun District Council

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Email: amber.willard@arun.gov.uk

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