

Engineers Comments Regarding Surface Water Drainage

Application Reference:	P/49/25/DOC	Reviewer Reference:	ADC/EXT4
Planning Officer:	Jessica Riches	Date of Review:	22/10/2025
Site Name:	Land South of Summer Lane and West of Pagham Road Pagham		
Application Description:	Approval of details reserved by condition imposed under reference P/140/16/OUT relating to condition number 9 - Arboricultural Method Statement and Tree Protection Plan, condition number 10 - surface water drainage scheme , condition number 11 - maintenance and management of the surface water drainage system and condition number 13 - foul drainage system.		
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 10 surface water drainage scheme: **No objection**

Condition 11 maintenance and management of the surface water drainage system: **No objection**

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The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.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:

- D2240 SW Calculations (Sys1) Outfall S38-3(S278)
- D2240 SW Calculations (Sys 2) Outfall S38 HW-F(S38)
- D2240 SW Calculations (Sys 3) Outfall S23
- D2240 SW Calculations (Sys 4) - Outfall S33 Rev A
- D2240 SW Calculations (Sys 5) Outfall S73
- D2240 SW Calculations (Sys 6) Outfall S99
- D2240 SW Calculations (Sys 8) Outfall S39
- D2240 SW Calculations (Sys 9) Outfall S7
- D2240 SW Calculations (Sys 10) Outfall S63
- D2240 SW Calculations (Sys 11) Outfall S21
- D2240 SW Calculations (Sys 12) - Outfall S162 Rev B

- Summer Lane (NORTH) S104 Legal Agreement Plan sheet 2 of 2 000-BPC-WD-ZZ-D-C-6001 Rev D
- D2240-6100 S104 Legal Agreement Plan SOUTH-Sht1-B
- D2240-6101 S104 Legal Agreement Plan SOUTH-Sht2-B
- Summer Lane (NORTH) S104 Construction Details Sheet 1 000-BPC-WD-ZZ-D-C-6002 Rev A
- Summer Lane (NORTH) S104 Construction Details Sheet 2 000-BPC-WD-ZZ-D-C-6003 Rev A
- Summer Lane (SOUTH) S104 Construction Details Sheet1 000-BPC-WD-ZZ-D-C-6102
- Summer Lane (SOUTH) S104 Construction Details Sheet 2 000-BPC-WD-ZZ-D-C-6103 RevA
- D2240-1100 S38 Highway Drainage Sections C
- D2240-1101 S38 Highway Basin Cross Sections A
- S104 Longitudinal Sections SW System 3 Sheet 1 000-BPC-WD-ZZ-D-P-1300 Rev A
- S104 Longitudinal Sections SW System 4 Sheet 2 000-BPC-WD-ZZ-D-P-1301 Rev A
- S104 Longitudinal Sections SW System 5 Sheet 3 000-BPC-WD-ZZ-D-P-1302 Rev A
- S104 Longitudinal Sections SW System 6 Sheet 4 000-BPC-WD-ZZ-D-P-1303 Rev A
- S104 Longitudinal Sections SW System 7 Sheet 5 000-BPC-WD-ZZ-D-P-1304
- S104 Longitudinal Sections SW System 8 Sheet 6 000-BPC-WD-ZZ-D-P-1325 Summer Lane (SOUTH)
- S104 Longitudinal Sections SW System 8 Sheet1 000-BPC-WD-ZZ-1320 Rev A Summer Lane (SOUTH)
- S104 Longitudinal Sections SW System 9 Sheet 2 000-BPC-WD-ZZ-D_P_1321 Rev A Summer Lane (SOUTH)1
- S104 Longitudinal Sections SW System 10 Sheet 3 000-BPC-WD-ZZ-D-P-1322 Rev A Summer Lane (SOUTH)
- S104 Longitudinal Sections SW System 12 Sheet 4 000-BPC-WD-ZZ-D-P-1323 Rev A Summer Lane (SOUTH)
- S104 Longitudinal Sections SW System 11 Sheet 5 000-BPC-WD-ZZ-D-P-1324 Rev A Summer Lane (SOUTH)
- S104 Foul Rising Main Long Section Sht 1 000- BPC-WD-ZZ-D-P-1600
- S104 Foul Rising Main Long Section Sht 2 000- BPC-WD-ZZ-D-P-1601

- D2240-2001-S104 Basin Sections-Sht1 D
- S104 Detention Basin Sections Sheet 2 of 7 000- BPC-WD-ZZ-D-C-2002 Rev C
- S104 Detention Basin Sections Sheet 3 of 7 000- BPC-WD-ZZ-D-C-2003 Rev C
- S104 Detention Basin Sections Sheet 4 of 7 000- BPC-WD-ZZ-D-C-2004 Rev D
- S104 Detention Basin Sections Sheet 5 of 7 000- BPC-WD-ZZ-D-C-2005 Rev D
- S104 Detention Basin Sections Sheet 6 of 7 000- BPC-WD-ZZ-D-C-2006 Rev D

- S104 Detention Basin Sections Sheet 7 of 7 000- BPC-WD-ZZ-D-C-2007 Rev C
- S104 Detention Basin Sections Sheet 1 of 13 000- BPC-WD-ZZ-D-C-2100 Rev A (POND SOUTH)
- S104 Detention Basin Sections Sheet 2 of 13 000- BPC-WD-ZZ-D-C-2101 Rev A (POND SOUTH)
- S104 Detention Basin Sections Sheet 3 of 13 000- BPC-WD-ZZ-D-C-2102 Rev A (POND SOUTH)
- S104 Detention Basin Sections Sheet 5 of 13 000- BPC-WD-ZZ-D-C-2104 Rev A (POND SOUTH)
- D2240-2103-S104 Pond Sections (SOUTH)-Sht4-B
- D2240-2105-S104 Pond Sections (SOUTH)-Sht6-C
- S104 Detention Basin Sections Sheet 8 of 13 000- BPC-WD-ZZ-D-C-2107 (POND SOUTH)
- S104 Detention Basin Sections Sheet 9 of 13 000- BPC-WD-ZZ-D-C-2108 (POND SOUTH)
- S104 Detention Basin Sections Sheet 10 of 13 000- BPC-WD-ZZ-D-C-2109 (POND SOUTH)
- D2240-2110-S104 Pond Sections (SOUTH)-Sht11 A
- S104 Detention Basin Sections Sheet 12 of 13 000- BPC-WD-ZZ-D-C-2111 Rev A (POND SOUTH)
- D2240-2112-S104 Pond Sections (SOUTH)-Sht13 A
- S104 Detention Basin Levels Design Central Parcel 000- BPC-WD-ZZ-D-C-282 Rev A
- S104 Pumping Station GA Sheet 1 of 2 000-BPC-WD-ZZ-D-C-6030
- S104 Pumping Station GA Sheet 2 of 2 000-BPC-WD-ZZ-D-P-6031

- Summer Lane NORTH Impermeable Areas Sheet 1 of 2 BPC-WD-ZZ-D-C-1500 Rev C
- Summer Lane NORTH Impermeable Area Schedule BPC-WD-ZZ-D-C-1510 Rev A
- Summer Lane SOUTH Impermeable Areas Sheet 1 of 2 BPC-WD-ZZ-D-C-1502 Rev B
- Summer Lane SOUTH Impermeable Areas Sheet 2 of 2 BPC-WD-ZZ-D-C-1503 Rev B
- Summer Lane SOUTH Impermeable Area Schedule Sheet 1 of 2 BPC-WD-ZZ-D-C-1520
- Summer Lane SOUTH Impermeable Area Schedule Sheet 2 of 2 BPC-WD-ZZ-D-C-1521

- Levels Design Sheet 1 of 10 000- BPC-WD-ZZ-D-C-180 Rev A
- Levels Design Sheet 2 of 10 000- BPC-WD-ZZ-D-C-181 Rev A
- Levels Design Sheet 3 of 10 000- BPC-WD-ZZ-D-C-182 Rev A
- Levels Design Sheet 4 of 10 000- BPC-WD-ZZ-D-C-183 Rev A
- Levels Design Sheet 5 of 10 000- BPC-WD-ZZ-D-C-184 Rev A
- Levels Design Sheet 6 of 10 000- BPC-WD-ZZ-D-C-185 Rev A
- Levels Design Sheet 7 of 10 000- BPC-WD-ZZ-D-C-186 Rev A
- Levels Design Sheet 8 of 10 000- BPC-WD-ZZ-D-C-187 Rev A
- Levels Design Sheet 9 of 10 000- BPC-WD-ZZ-D-C-188 Rev A
- Levels Design Sheet 10 of 10 000- BPC-WD-ZZ-D-C-189 Rev A

- Summer Lane NORTH Maintenance Plan Sheet 1 000- BPC-WD-ZZ-D-C-3000
- Summer Lane SOUTH Maintenance Plan Sheet 1 000- BPC-WD-ZZ-D-C-3100
- Summer Lane SOUTH Maintenance Plan Sheet 2 000- BPC-WD-ZZ-D-C-3101

- Summer Lane NORTH OWC Existing Site Plan Access Road (S278/38 Works) 000- BPC-WD-ZZ-D-P-4000 Rev D
- Summer Lane NORTH OWC Proposed Site Plan S278/38 Works)000- BPC-WD-ZZ-D-P-4001 Rev D
- Summer Lane NORTH OWC Access Road Cross Sections 000- BPC-WD-ZZ-D-H-4002 Rev A
- Summer Lane NORTH OWC Long Sections and Schedule Access Road (S278/38 Works) 000- BPC-WD-ZZ-D-P-4003 Rev A
- Summer Lane NORTH OWC Existing Site Plan North Parcel 000- BPC-WD-ZZ-D-P-4010 Rev A
- Summer Lane NORTH OWC Proposed Site Plan North Parcel 000- BPC-WD-ZZ-D-P-4011 Rev A
- Summer Lane NORTH OWC Long and Cross Sections North Parcel Watercourse Improvement 000- BPC-WD-ZZ-D-P-4012 Rev B
- Summer Lane (NORTH) OWC Arun Land Drainage Consent Existing Site Plan 000-BPC-WD-ZZ-P-4100 Rev B
- Summer Lane (NORTH) OWC Arun Land Drainage Consent Proposed Site Plan 000-BPC-WD-ZZ-P-4101 Rev B

- Summer Lane (NORTH) OWC Arun Land Drainage Consent Cross Sections 000-BPC-WD-ZZ-H-4102 Rev C
 - Summer Lane (NORTH) OWC Arun Land Drainage Consent Long Sections Sht 1 of 3 000-BPC-WD-ZZ-P-4103 Rev A
 - Summer Lane (NORTH) OWC Arun Land Drainage Consent Long Section Sht 2 of 3 000-BPC-WD-ZZ-P-4104 Rev A
 - Summer Lane (NORTH) OWC Arun Land Drainage Consent Long Section Sht 3 of 3 000-BPC-WD-ZZ-P-4105
 - Summer Lane (NORTH) OWC Arun Land Drainage Consent Existing Site Plan Sht 2 000-BPC-WD-ZZ-P-4107
 - Summer Lane (NORTH) OWC Arun Land Drainage Consent Proposed Site Plan Sht 2 000-BPC-WD-ZZ-P-4108
 - Summer Lane (NORTH) Arun Land Drainage Consent Long Sections 000-BPC-WD-ZZ-D-P-4304
 - Summer Lane (SOUTH) OWC Existing Site Plan 000-BPC-WD-ZZ-P-4200
 - Summer Lane (SOUTH) OWC Proposed Site Plan 000-BPC-WD-ZZ-P-4201
 - Summer Lane (SOUTH) OWC Cross -Sections 000-BPC-WD-ZZ-D-H-4202
 - Summer Lane (SOUTH) OWC Long Sections and Schedule 000-BPC-WD-ZZ-D-H-4204
 - Summer Lane (SOUTH) OWC Watercourse Long and Cross Sections 000-BPC-WD-ZZ-D-P-4205
 - Summer Lane (SOUTH) Arun Land Drainage Byelaws Consent Existing Site Plan 000-BPC-WD-ZZ-D-P-4300
 - Summer Lane (SOUTH) Arun Land Drainage Byelaws Consent Proposed Site Plan 000-BPC-WD-ZZ-D-P-4301
 - Summer Lane (SOUTH) Arun Land Drainage Consent Cross Sections 000-BPC-WD-ZZ-D-H-4302
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- Drainage Design Sheet 1 of 10 000- BPC-WD-ZZ-D-P-41 Rev I
 - Drainage Design Sheet 2 of 10 000- BPC-WD-ZZ-D-P-42 Rev H
 - Drainage Design Sheet 3 of 10 000- BPC-WD-ZZ-D-P-43 Rev I
 - Drainage Design Sheet 4 of 10 000- BPC-WD-ZZ-D-P-44 Rev H
 - Drainage Design Sheet 5 of 10 000- BPC-WD-ZZ-D-P-45 Rev D
 - Drainage Design Sheet 6 of 10 000- BPC-WD-ZZ-D-P-46 Rev D
 - Drainage Design Sheet 7 of 10 000- BPC-WD-ZZ-D-P-47 Rev D
 - Drainage Design Sheet 8 of 10 000- BPC-WD-ZZ-D-P-48 Rev D
 - Drainage Design Sheet 9 of 10 000- BPC-WD-ZZ-D-P-49 Rev D
 - Drainage Design Sheet 10 of 10 000- BPC-WD-ZZ-D-P-50 Rev C
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- Private Drainage Details Sheet 1 000-BPC-WD-ZZ-D-C-6020
 - Private Drainage Details Sheet 2 000-BPC-WD-ZZ-D-C-6021
 - Private Drainage Details Sheet 3 000-BPC-WD-ZZ-D-C-6022
 - Summer Lane (SOUTH) Private Drainage Details Sheet 1 000-BPC-WD-ZZ-D-C-6120
 - Summer Lane (SOUTH) Private Drainage Details Sheet 2 000-BPC-WD-ZZ-D-C-6121
 - Summer Lane (SOUTH) Private Drainage Details Sheet 3 000-BPC-WD-ZZ-D-C-6122
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- Levels Design Sheet 1 of 10 000- BPC-WD-ZZ-D-P-81 Rev A
 - Levels Design Sheet 2 of 10 000- BPC-WD-ZZ-D-P-82 Rev A
 - Levels Design Sheet 3 of 10 000- BPC-WD-ZZ-D-P-83 Rev A
 - Levels Design Sheet 4 of 10 000- BPC-WD-ZZ-D-P-84 Rev A
 - Levels Design Sheet 5 of 10 000- BPC-WD-ZZ-D-P-85
 - Levels Design Sheet 6 of 10 000- BPC-WD-ZZ-D-P-86 Rev A
 - Levels Design Sheet 7 of 10 000- BPC-WD-ZZ-D-P-87 Rev A
 - Levels Design Sheet 8 of 10 000- BPC-WD-ZZ-D-P-88 Rev A
 - Levels Design Sheet 9 of 10 000- BPC-WD-ZZ-D-P-89 Rev A
 - Levels Design Sheet 10 of 10 000- BPC-WD-ZZ-D-P-90 Rev A

- Summer Lane (NORTH)Geotechnical Testing Location Plan 000-BPC-WD-ZZ-P-SK06 RevE
- Summer Lane (SOUTH)Geotechnical Testing Location Plan Sht 1 000-BPC-WD-ZZ-P-SK07.1 RevC
- Summer Lane (SOUTH)Geotechnical Testing Location Plan Sht 2 000-BPC-WD-ZZ-P-SK07.2 Rev C
- SFA 10B Headwall 3 Sided KEE KLAMP

- D2240-140 Drainage-Sht1-C
- D2240-141 Drainage-Sht2-C
- D2240-142 Drainage-Sht3-E
- D2240-143 Drainage-Sht4-C
- D2240-144 Drainage-Sht5-C
- D2240-146 Drainage-Sht7-C
- D2240-148 Drainage-Sht9-C

- D2240-2106-S104 Pond Sections (SOUTH)-Sht7-C
- D2240-242 Drainage-Central-C
- Surface Water Management and Maintenance Schedule D2240/DS/1.0 8 May 2025
- Flow Controls Table North
- Flow Control Tables South
- D2240 Headwall Table NORTH
- D2240 Headwall Table SOUTH
- Surface Water Management and Maintenance Schedule D2240/DS/1.0 8 May 2025
- Surface Water Management and Maintenance Schedule D2240/MMS/1.0 4 February 2025 (Part1)
- Updated Geotechnical Ground Investigation Report GWPR5982/GIR/September 2024 V1.02
- HQT-167848 Sales Quote NORTH Spec by Hydro
- HQT-170823 Sales Quote SOUTH Spec by Hydro
- JL Edit Water Monitoring Pagham 28.03.22
- LDC-2025-022 Land Drainage Consent Approval Letter 24.04.25
- LDC-2025-022 Land Drainage Consent
- Covering email dated 27.11.20 with P14405 Ground Water Monitoring Results
- Email with Flow Control Specification NORTH
- Email with Flow Control Specification SOUTH
- Ordinary Watercourse Consent Application WSCC-710897014
- Ground Water Monitoring Results Report No P14405
- SFA10 Headwall Data sheet and Installation Guide
- Technical Approval Certificate Pagham Road (North Parcel)
- Water Monitoring Pagham 28.03.22
- Water monitoring Pagham 31.01.22
- Arboricultural Method Statement Phase 1 (21.7.25)
- 2018 R18-13402 GW Monitoring Results
- 2020 P14405 GW Monitoring Results
- D2240 Drawing Register NORTH (2025-08-22)
- D2240 Drawing Register SOUTH (2025-08-22)

- D2240 System 2 S38 (Basin Liner) Flotation
- D2240 System 3 (S11) (Basin Liner) Flotation
- D2240 System 3 S26 (Tank Anchor) Flotation
- D2240 System 4 (S41) (Tank Anchor) Flotation
- D2240 System 4 (S43) (Basin Liner) Flotation
- D2240 System 4 (S44) (Tank Anchor) Flotation
- D2240 System 4 (S45) (Tank Anchor) Flotation
- D2240 System 5 (S65) (Basin Liner) Flotation
- D2240 System 5 (S71) (Basin Liner) Flotation

- D2240 System 6 (S108) (Basin Liner) Flotation Rev A
- D2240 System 6 (S97) (Basin Liner) Flotation Rev A
- D2240 System 7 (S19) (Basin Liner) Flotation
- D2240 System 8 (S140) (Basin Liner) Flotation
- D2240 System 8 (S37) (Basin Liner) Flotation
- D2240 System 9 (S6) (Basin Liner) Flotation
- D2240 System 10 (S163) (Basin Liner) Flotation
- D2240 System 10 (S62) (Basin Liner) Flotation
- D2240 System 10 S160 (Tank Anchor) Flotation
- D2240 System 12 (S153) (Basin Liner) Flotation
- D2240 System 12 S150 (Tank Anchor) Flotation
- D2240 System 12 S152 (Tank Anchor) Flotation
- D2240 System 12 S86 (Tank Anchor) Flotation

- D2240-1401 Private MH Schedule NORTH-Sht1
- D2240-1411 Private MH Schedule SOUTH-Sht1
- D2240-1412 Private MH Schedule SOUTH-Sht2

- D2240-44 Drainage-Sht4 J
- D2240-45 Drainage-Sht5 F
- D2240-46 Drainage-Sht6 F
- D2240-47 Drainage-Sht7 F
- D2240-48 Drainage-Sht8 F
- D2240-49 Drainage-Sht9 F
- D2240-50 Drainage-Sht 10 E

- D2240-6200 S104 Site Location Plan (SOUTH)
- D2240-DS-1.2 - Design Statement
- D2240-SK50-LiDAR Overlay
- GWPR5982 Updated Geotechnical Report
- LDB-ARUN-2025-003 Approval (SOUTH)
- LDC-2025-039 Approval letter
- LDC-2025-039 Consent
- Technical Note 001
- Technical Note 002
- Water_monitoring_Pagham 28.03.22
- Technical Approvals Certificate - Pagham Road (North Parcel)
- Technical Approvals Certificate - Pagham Road (South Parcel)

Condition wording

Condition 10 is worded as follows:

Development shall not commence until full details of the proposed surface water drainage scheme have been submitted to and approved in writing by the local planning authority, and shall include;

- The design should following the hierarchy of preference for different types of surface water drainage disposal systems as set out in Approved Document H of the Building Regulations, and the recommendations of the SuDs Manual Produced by CIRIA. Winter groundwater monitoring to established

highest annual ground water levels and percolation testing to BRE 365, or similar approved, will be required to support the design of any infiltration drainage.

- The development shall not proceed until formal consent has been approved in writing from the Lead Local Flood Authority (WSSC) or its agent (ADC) for the discharge of any flows to watercourses, or the culverting, diversion, infilling or obstruction of any watercourses on the site. Any discharge of watercourse must be at a rate no greater than the pre-development run off values.

- Arrangements for future access and maintenance of any watercourse or culvert (piped watercourse) crossing or abutting the site. P/140/16/OUT REPORT(ODB) No building shall be occupied until the complete surface water drainage system serving it has been implemented in accordance with the agreed details and the details so agreed shall be maintained in good working order in perpetuity.

Reason: To ensure that the proposed development is satisfactorily drained in accordance with Policies D 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 surface water disposal scheme is agreed before construction commences and to protect existing watercourses prior to the commencement of development

Condition 11 is worded as follows:

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 D 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.

Consultation comments to the planning officer

1. Based on the updated information and clarification that has been submitted we have no objection to the updated proposals.

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: P/49/25/DOC Site Name: Land South of Summer Lane and West of Pagham Road Pagham	Initial Issue Date: 22/10/2025 Issue Date: 22/10/2025 Reviewer Reference: ADC/EXT4
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Summary and Recommendation:

Condition 10: **No objection**

Condition 11: **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	ADC Drainage Comments	Designer Comments	ADC Drainage Comments	Designer Comments
Date:	26/03/2025 (P/14/25/DOC)	06/08/2025	22/08/2025	22/10/2025	
Condition Number: 10 [Surface water drainage design]					
Comment Number					
1.	Provide groundwater monitoring taken at the winter months (October-March) unless it has been assumed that the groundwater is reaching the ground level which should be reflected at the flotation calculations.	Based on a review of the information provided, it appears that whilst groundwater monitoring appears to have been provided from January to March in the updated monitoring there doesn't appear to be records for October to December? A review of the flotation calculations don't appear to assume groundwater as reaching ground level. Please either provided updated flotation calculations or full winter groundwater monitoring to	The design statement attachments for the 2018 – 2019 winters groundwater monitoring were missing from the appendix. These cover from November to May so are just a few weeks short of October. Noting that further monitoring has been conducted for 2018-2019, 2020, 2021 and 2022. Review of these results shows some variation with February 2020 the worst	Noted item is now closed	

		cover from a period of October to March	case which has been used for the design. Worst case groundwater levels at each location has been used for flotation calculations for each SW basin and/or geocellular storage features.		
2.	Provide construction detail drawings and the relevant hydraulic calculations.	Thank you these are now received. The only items that may need further review is the SuDS basins details subject to the updated flotation calculations or full period of winter groundwater monitoring	Noted. We enclose the updated 1D modelling to address the comment raised in item 4. To clarify SOUTH Network 12 is updated for RPZ and NORTH Network 4 is updated for TANK adjustment for LEAP.	Noted item is now closed	
3.	Show pipe material bending type and gradient at the surface water layout drawings for both the private and the adopted surface water drainage	Thank you these are now reflected on the provided drainage construction details, we have no further comments on these			
4.	Provide surface water hydraulic modelling calculations for both the	Thank you these are now provided in the calculations. Please review the peak discharge rate from Network	Network 12 has been corrected to 3.0l/s and the design statement clause 2.3.2 has been	Noted item is now closed	

	private and the adopted surface water drainage.	12 calculations as noted the simulated peak flows as 3.491l/s but the table in paragraph 2.3.3 of the Design Statement indicates a rate of 2l/s should be used. It may be the overall rate of discharge from the southern part is still 11l/s but please confirm	updated as the value of 2.8l/s/ha has been used, however the National Standards for SUDS and Runoff rates and volumes to surface waters or sewers, clause 3.18 states '<i>The peak allowable discharge rate from the development to surface waters or sewers for the 50% AEP event shall be limited to the equivalent 50% AEP greenfield runoff rate, or 3 l/s/ha, whichever is the greater.</i>' Therefore a rate of 3.0l/s/ha is compliant with the SOUTH parcel totalling 12.0l/s/ha. As you will appreciate whilst flow rates have been set as above, the 1D modelling concludes slight variations of flow rates as thus (100yr +45% SIM): Sys 8 = 1.96 Sys 9 = 2.77 Sys 10 = 1.91 Sys 11 = 1.94		
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			Sys 12 = 2.99 Total 11.57l/s In summary, and ignoring the opportunity to increase flow rates for 24hr 'tanked half drain down durations', the modelling sits within expected parameters.		
5.	The flotation calculations for the detention basins should contain different factor of safety. A Factor of Safety of 1.1 should be applied to disturbing forces and a Factor of Safety of 0.9 should be applied to resisting forces.	These don't appear to have been applied to the updated calculations with an overall FoS of 1.2 being applied as noted in 2.8.2 of the Design Statement, which would be acceptable but please review flotation calculations if required per item 1 above	To clarify all calculations use a safety factor of 1.2 thus exceed your criteria. The NORTH calculations remain unchanged. The SOUTH calculations for network 12 have been updated to capture the basin variation and tanks.	Noted item is now closed	
6.	Provide manhole schedule for both the private and the adopted surface water drainage.	Adoptable drainage schedules provided but there doesn't appear to be schedules provided for the private surface water, please can you provide this information as well	Please see enclosed new drawings 1401 for the private NORTH schedule, and drawings 1411/1412 for the private SOUTH schedule.	Noted item is now closed	
7.	Provide construction issue level for all the drainage details.	Now proved thank you. Item is now closed			

8.	Provide a proposed levels plan.	Provided and no further comments. Item is closed			
9.	Provide Ordinary Watercourse Consent by Arun District Council.	Please provided a copy of this once received.	I believe were sent across, however for completeness I enclose OWC & LDB approvals for both the NORTH and SOUTH parcels.	Noted item is now closed	
10.	For System 4 and 6 with discharge rate 1l/s each. Show which adequate blockage prevention measures are incorporated.	Thank you received on drawing 000-BPC-WD-ZZ-D-C-6003-A. No further comments			
11.	Provide the impermeable area plans that have been used for the hydraulic calculations.	Thank you now provided in sheets. No further comments			
12.	Confirm that the basins contain freeboard of 300mm above the 1 in 100 year +cc event water level.	Please review calculations and SuDS design sections, it appears in some cases that a freeboard of 300mm is not achieved., for example pond at S43	ADC's published guidance now adheres to CIRIA guidance (and new National Standards) is clearly stated as <i>'Adequate freeboard is provided between the top water level of any open storage features and the top of the bank.'</i> Typically each SW basin has of the order of 150mm freeboard during the 1:100yr+45+UC	Noted item is now closed	

			event which is compliant.		
13.	Silt traps must be provided upstream of all connections into attenuating structures.	Please review this item, as it doesn't appear than catchpits are provided on the manholes directly upstream from the attenuation features.	Noted. Whilst the majority of the SW spines networks are being offered for adoption via IWNL, the adopting authority has permitted catchpits to be installed upstream of each SW basin. Catchpits are highlight on all updated GA's and MH schedules 1400 NORTH & 1410 SOUTH.	Noted item is now closed	
14.	Provide Infiltration testing undertaken during the wet winter months, (October to March) and in line with BRE365.	Thank you noted, confirmation from design statement. Item is now closed			
15.	Provide the typical winter water levels in that watercourses	Please provide this information, as it's not clear where this is currently provided	Winter water levels have not been recorded specifically for watercourses, however this is expected to directly correlate with the observed high groundwater recorded. The development has been elevated above natural ground to mitigate the risks of	The surcharged levels used in the updated calculations are noted and item is now closed	

			groundwater and ensure SW flow is achieved to each watercourse outfall. It can be seen from OS mapping/LiDAR that a number of the existing watercourses surrounding the site represent head of runs and collect run-off predominantly from the development catchment itself, which will be positively drained post completion attenuating run-off before it gets to each watercourse. Please refer to new drawing SK50. Further water level monitoring for each watercourse information is not deemed necessary.		
Condition Number: 11 [SuDS management and maintenance]					
Comment Number					
1.	Include the approved design drawings in the document.	Please provide this information within the Maintenance Plan	It is understood from ADC that nothing was formerly approved at planning stage. However, whilst not wholly relevant for future		

			maintenance, to ensure you have everything requested, the planning drainage plans have been included.		
2.	Provide information regarding the green waste and organic sediments arising from the maintenance activities disposal locations. Additionally, any other waste from maintenance activities should be also listed and provide disposal location.	Please provide this information in the maintenance schedule	This is already suitably covered within D2240-MMS-1.0 - Surface Water Management & Maintenance Report. Activities adhere to CIRIA guidance. Any material for disposal will be dealt with in accordance with waste disposal legislation by the contractor/management company.	Noted item is now closed	
3.	Health and safety risks of maintenance activities are assessed. Identify health and safety risks of maintenance activities and provide action plans and method statements to mitigate the risks.	Please provide this information	This is covered in 1.1.5, however as summarized in section 3 responsibilities, it shall be noted the majority of the drainage networks are being adopted by IWNL and their methodology will apply.	Noted item is now closed	
4.	A periodic evaluation of the maintenance regime should be scheduled. There should also be a formal procedure in	Please provide this information	This evaluation aspect is covered in 1.1.3 & 1.1.4 of the report.	Noted item is now closed	

	place to allow for changes to the regime following evaluation. Finally, advice should be provided as to what to do if alterations are to be made to the development or, works are to be carried out which may affect the surface water drainage system.		Future alterations aspect is covered in 3.1.3 of the report.		
5.		Please provide more information on the maintenance schedule with respects to inspection, maintenance etc.. for the private permeable paving, pipework, gullies, manholes etc....	This is covered in 3.4 for pipework, IC's and 3.7 for permeable pavements.	Noted item is now 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.

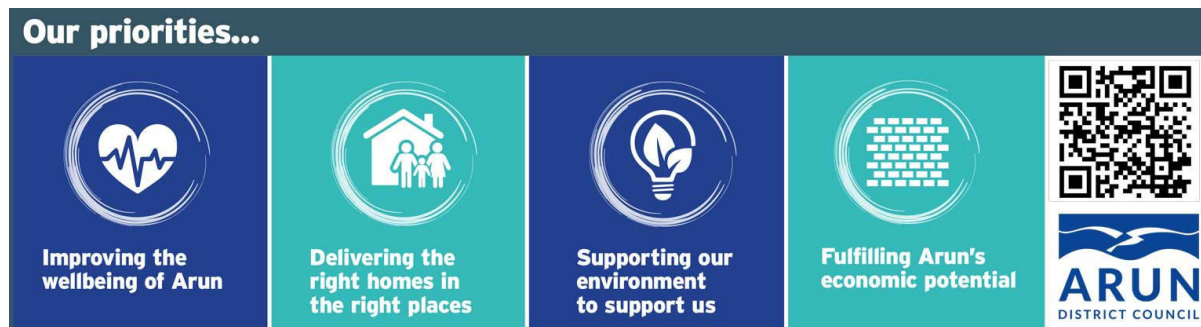
[REDACTED]

Drainage Engineers response

[REDACTED]

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

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



From: Sarah Burrow <Sarah.Burrow@arun.gov.uk>
Sent: 24 October 2025 09:45
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Paul Cann <Paul.Cann@arun.gov.uk>; Jessica Riches <Jessica.Riches@arun.gov.uk>
Subject: RE: Planning Re-Consultation on: P/49/25/DOC

Hi Jessica,

Find the consultation response – no objection – attached.

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

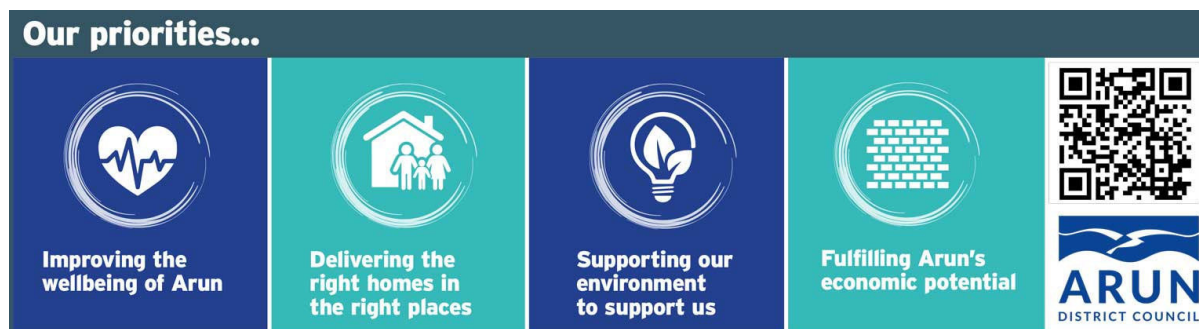
Flood Risk and Drainage Engineer, Coastal Engineers and Flood Prevention

T: 01903 737815

E: sarah.burrow@arun.gov.uk

Arun District Council, Civic Centre, Maltravers Rd
Littlehampton, West Sussex, BN17 5LF

www.arun.gov.uk



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

Sent: 21 October 2025 08:49

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

Subject: Planning Re-Consultation on: P/49/25/DOC

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No:	P/49/25/DOC
Registered:	22nd April 2025
Site Address:	Land South of Summer Lane and West of Pagham Road Pagham
Grid Reference:	488747 98017
Category:	Discharge of Condi
Description of Works:	Approval of details reserved by condition imposed under reference P/140/16/OUT relating to condition number 9 - Arboricultural Method Statement and Tree Protection Plan, condition number 10 - surface water drainage scheme, condition number 11 - maintenance and management of the

surface water drainage system and condition number 13 - foul drainage system.

I am able to inform you that I have received an amendment to the above application dated 17th October 2025 relating to: Substitute drainage plans

If you should wish to make further representations as a result of this amendment, please make any further comment by **4th 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

Jessica Riches

Planning Case Officer-Arun District Council

Telephone: 01903 737852

Email: jessica.riches@arun.gov.uk

PLRECON_DOC (ODB) 2020