

Engineers Comments Regarding Surface Water Drainage

Application Reference:	F/22/26/DOC	Reviewer Reference:	ADC/EXT4b
Planning Officer:	Simon Brooksbank	Date of Review:	15/09/2026
Site Name:	Land at Ford Airfield Ford		
Application Description:	Approval of details reserved by condition under F/4/20/OUT relating to conditions 28- Proposed foul drainage system, 29- Proposed surface water drainage scheme, 30- Discharges to watercourses and 31- Maintenance & management of surface water 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 29: Objection Condition 30: Objection Condition 31: Objection
-----------------	---

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 The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.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

Reviewed Plans

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

- Air Valve and Washout Chamber. Drg no. 2205773-ACE-000-00-DR-C-1235
- 2205773-ACE-000-00-DR-C-1329 - Enkadrain Construction Details
- Construction Details Sheet 1. Drg no. 2205773-ACE-000-00-DR-C-1401, uploaded in 5 parts via public planning portal
- Surface Finishes and Kerbing Plan Sheet 1. Drg no. 2205773-ACE-000-00-DR-C-1821, uploaded in 13 parts via public planning portal
- Surface water drainage schedule Sheet 1. Drg no. 2205773-ACE-000-00-DR-C-1290, uploaded in 2 parts via public planning portal
- Surface Water Drainage Longsections Sheet 1. Drg no. 2205773-ACE-000-00-DR-C-1295, uploaded in 4 parts via public planning portal
- Drainage Layout Sheet 2. Drg no. 2205773-ACE-000-00-DR-C-1202 C3, uploaded in 12 parts via public planning portal
- SuDS Management & Maintenance Plan. Ref 2205771. May 2026
- Northern Network - 1, 30, 30+cc, 100+cc

-Southern Network 1 - 1, 30, 30+cc, 100+cc
 -Southern Network 2 - 1, 30, 30+cc, 100+cc
 -2205773-ACE-000-00-DR-C-1321 - Enkadrain Details - Sheet 1, uploaded in 5 parts via public planning portal
 -2205773-ACE-000-00-DR-C-1328 - Enkadrain Manhole Schedule
 -2205773-ACE-000-00-DR-C-2101 - Pond Setting Out Plans - Sheet 1.pdf, uploaded in 7 parts via public planning portal
 -2205773-ACE-000-00-DR-C-1951 - - Basin Setions - Sheet 1.pdf
 -2205773-ACE-000-00-DR-C-1952 - - Basin Setions - Sheet 2.pdf
 -2205773-ACE-000-00-DR-C-1223 - S104 Impermeable areas Plan - Sheet 1.pdf
 -2205773-ACE-000-00-DR-C-1224 - S104 Impermeable areas Plan - Sheet 2.pdf
 -2205773-ACE-000-00-DR-C-1251 - Headwall Construction Details - Sheet 1.pdf, uploaded in 19 parts via public planning portal
 -2205772-D1125 Yapton Road Roundabout Surface water Drainage General Arrangement
 -2205771_B - Ford Airfield Maintenance & Management Plan
 -2205772-D1000 Ford Lane Roundabout General Arrangement C1
 -2205772-D1025 Ford Lane Roundabout Surface Water Drainage General Arrangement C1
 -2205772-D1026 Ford Lane Roundabout Gully Catchment Plan C1
 -2205773-ACE-000-00-DR-C-1201-Rev C3-Drainage Layout-Sheet 1, uploaded in 7 parts via public planning portal
 -2205773-R07 Ford Airfield Arun - Drainage Addendum. Discharge of condition 28-31-Infrastructure and enabling works addendum. May 2026
 -2205773-ACE-000-00-DR-C-1221-Rev C2-S104 Layout-Sheet 1
 -2205773-ACE-000-00-DR-C-1222-Rev C2-S104 Layout-Sheet 1
 -Northern Network IR ONLY - 1, 30, 30+cc, 100+cc
 -Northern Network IR ONLY - 1, 30, 30+cc, 100+cc
 -Southern Network 1 IR ONLY - 1, 30, 30+cc, 100+cc
 -2205773-R08 Ford Airfield Arun - Comment Tracker. May 2026
 -

Condition wording

Condition 29 is worded as follows:

"Prior to the commencement of each phase of development (excluding demolition, site survey and site investigation works) as identified within the Phasing Strategy under Condition 5 full details of the proposed surface water drainage scheme for that phase, in accordance with the principles set out in the Drainage Technical Note (ref: C85228-JNP-92-XX-RP-C-1004) dated 9 July 2021 and the requirements of the Design Code secured under Condition 7, shall be submitted to and approved in writing by the Local Planning Authority. The design should follow 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 establish highest annual ground water levels and winter Percolation testing to BRE 365, or similar approved, will be required to support the design of any Infiltration drainage. No building shall be occupied until the complete surface water drainage system serving the property 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 W SP1, W DM1, W DM2 and W DM3 of the Arun Local Plan 2011-2031. 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.”

Condition 30 is worded as follows:

“Development shall not proceed on any phase of development as identified within the Phasing Strategy under Condition 5, until details have been submitted to and approved in writing by the Local Planning Authority for any proposals: to discharge flows to watercourses; or for the culverting, diversion, infilling or obstruction of any watercourse on or adjacent to the site. Any discharge to a watercourse must be at a rate no greater than the pre-development run-off values and in accordance with current policies. No construction is permitted, which will restrict current and future landowners from undertaking their riparian maintenance responsibilities in respect to any watercourse or culvert on or adjacent to the site.

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. And to ensure that the duties and responsibilities, as required under the Land Drainage Act 1991, and amended by the Flood and Water Management Act 2010, can be fulfilled without additional impediment following the development completion. It is considered necessary for this to be a pre-commencement condition to protect existing watercourses prior to the construction commencing.”

Condition 31 is worded as follows:

“Development shall not proceed on any phase of development as identified within the Phasing Strategy under Condition 5, 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.”

Consultation comments to the planning officer

1. Please see the attached comment tracker for detailed comments relating to the submission.
2. The application does not demonstrate adequately that flood risk will not be increased by the proposed drainage design and it's management. Furthermore, the assessment of water treatment is inadequate.

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: F/22/26/DOC Site Name: Land at Ford Airfield Ford	Initial Issue Date: 15/09/2026 Issue Date: Reviewer Reference: ADC/EXT4b
---	--

Summary and Recommendation:

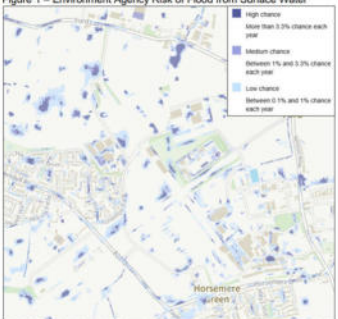
Condition 29: **Objection**
Condition 30: **Objection**
Condition 31: **Objection**

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	Designer Response	ADC Response		
Date:	13/04/2026		15/09/2026		
Condition Number: 29 – Full detailed SuDS design. Images have been shrunk for formatting purposes but access “2205773-R08 Ford Airfield Arun - Comment Tracker. May 2026” for full size images					
Comment Number					
1.	It is accepted that infiltration is not viable for runoff disposal of <u>extreme events</u> due to infiltration rates which would not meet half drain requirements in the north of the site, and high groundwater in the south.	Noted			
2.	It is accepted that water reuse is not practicable for the IRM and enabling works parcels which are the subject of this application. However, the designer is reminded that smart water butts will be expected for	Noted			

	the residential parcels and water reuse (rainwater harvesting) should be maximised for the commercial and industrial applications on the wider site (in accordance with the PPG).				
3.	Infiltration can still be relied upon for interception drainage (where groundwater levels allow) in parts of the north of the site.	Noted. Further information in response to comment 11.			
4.	The water treatment assessment is inadequate. It mis-classifies the basins as bio-retention areas and does not use the worst-case treatment train in the north where there are parts of the system which only pass through one basin. Please adjust and include additional water treatment as appropriate.	The classification of the basins as bio-retention features was considered appropriate based on their design to maximise their water treatment function. They incorporate a layer of substrate in the base to actively treat water as well as vegetation. However, taking a worst-case assessment, the downstream basin in both the north and the south incorporate permeable berms which effectively split these basins into two basins which provide individual treatment. Therefore, every part of the site would pass	The permeable berms do not effectively split the basins into 2. The water depths in the basins exceed the depth of the berm, which means that in extreme events they will not separate the 2 areas. Please adjust the water treatment assessment accordingly. The basins may not be classified as bio-retention areas as these would typically involve filtration through the substrate to an outlet at the base of the substrate. A raingarden is acknowledged to potentially act in a similar		

		through a minimum of two basins during lower order events, which are most important for treatment. The updated pollution indices assessments are therefore shown below. Table 1 Pollution indices (North) <table><tr><th colspan="4">Pollution index 'Medium. For surface water discharge from medium/high traffic roads</th></tr><tr><th colspan="4">Required mitigation indices</th></tr><tr><th>Source</th><th>TSS</th><th>Metals</th><th>Hydrocarbons</th></tr><tr><td>Medium</td><td>0.7</td><td>0.6</td><td>0.7</td></tr><tr><td colspan="4">Type of SuDS component provided</td></tr><tr><td>Detention Basin</td><td>0.5</td><td>0.5</td><td>0.7</td></tr><tr><td>Detention Basin (x 0.5)</td><td>0.25</td><td>0.25</td><td>0.35</td></tr><tr><td>Total</td><td>0.75</td><td>0.75</td><td>1.15</td></tr><tr><td>Check</td><td>+0.05</td><td>+0.15</td><td>+0.45</td></tr></table> Table 2 Pollution indices (South) <table><tr><th colspan="4">Pollution index 'Medium. For surface water discharge from medium/high traffic roads</th></tr><tr><th colspan="4">Required mitigation indices</th></tr><tr><th>Source</th><th>TSS</th><th>Metals</th><th>Hydrocarbons</th></tr><tr><td>Medium</td><td>0.7</td><td>0.6</td><td>0.7</td></tr><tr><td colspan="4">Type of SuDS component provided</td></tr><tr><td>Detention Basin</td><td>0.5</td><td>0.5</td><td>0.7</td></tr><tr><td>Detention Basin (x 0.5)</td><td>0.25</td><td>0.25</td><td>0.35</td></tr><tr><td>Total</td><td>0.75</td><td>0.75</td><td>1.15</td></tr><tr><td>Check</td><td>+0.05</td><td>+0.15</td><td>+0.45</td></tr></table>	Pollution index 'Medium. For surface water discharge from medium/high traffic roads				Required mitigation indices				Source	TSS	Metals	Hydrocarbons	Medium	0.7	0.6	0.7	Type of SuDS component provided				Detention Basin	0.5	0.5	0.7	Detention Basin (x 0.5)	0.25	0.25	0.35	Total	0.75	0.75	1.15	Check	+0.05	+0.15	+0.45	Pollution index 'Medium. For surface water discharge from medium/high traffic roads				Required mitigation indices				Source	TSS	Metals	Hydrocarbons	Medium	0.7	0.6	0.7	Type of SuDS component provided				Detention Basin	0.5	0.5	0.7	Detention Basin (x 0.5)	0.25	0.25	0.35	Total	0.75	0.75	1.15	Check	+0.05	+0.15	+0.45	manner to that described, however, these are “typically for small systems that serve part of a single property or driveway” (The SuDS Manual p335), not for the areas proposed in the base of the basins.		
Pollution index 'Medium. For surface water discharge from medium/high traffic roads																																																																													
Required mitigation indices																																																																													
Source	TSS	Metals	Hydrocarbons																																																																										
Medium	0.7	0.6	0.7																																																																										
Type of SuDS component provided																																																																													
Detention Basin	0.5	0.5	0.7																																																																										
Detention Basin (x 0.5)	0.25	0.25	0.35																																																																										
Total	0.75	0.75	1.15																																																																										
Check	+0.05	+0.15	+0.45																																																																										
Pollution index 'Medium. For surface water discharge from medium/high traffic roads																																																																													
Required mitigation indices																																																																													
Source	TSS	Metals	Hydrocarbons																																																																										
Medium	0.7	0.6	0.7																																																																										
Type of SuDS component provided																																																																													
Detention Basin	0.5	0.5	0.7																																																																										
Detention Basin (x 0.5)	0.25	0.25	0.35																																																																										
Total	0.75	0.75	1.15																																																																										
Check	+0.05	+0.15	+0.45																																																																										
5.	There is ground raising in excess of 500mm over a significant area of the site. Please submit evidence that this will have no negative hydrological impact.	The site levels have been designed to respect the natural catchments of the site, within the context of the proposed drainage strategy. There are not any surface water flow paths across the site that will be impacted by ground raising. Refer to Figure 1 below. The levels strategy is shown on the drainage layout drawings in Appendix A.	The areas of localised flood risk may be receiving surface water from outside the redline boundary, has this been checked? Would the raising affect that?																																																																										

		Figure 1 – Environment Agency Risk of Flood from Surface Water 			
6.	Please submit evidence that the LLFA (as the risk management authority for the ordinary watercourses) agree to the proposed flow parameters (discharge rates and volumes).	The LLFA raised no objection to the reserved matters application where the discharge rates were stated. Refer to letter in Appendix C.	Accepted, thank you.		
7.	Permission for the connection to Northwood Farm is specific to the Yapton Road roundabout installations. There is also additional area beyond what was shown in the Drainage Technical Note (ref: C85228-JNP-92-XX-RP-C-1004) dated 9 July 2021 draining to this watercourse. Please demonstrate that this additional area will not increase flood risk and the updated flow volume has been agreed.	All connections to offsite watercourses are agreed through the Land Transfer Agreement. This is enclosed in Appendix D. The Land Transfer agreement does not specify discharge rates as these are agreed through planning. The discharge rates match those approved at outline for the southern part of the site and the volume is managed through a reduction in	Southern network IR ONLY calcs are showing flooding on node S278 S1 on the 100 year + CC event. It is unclear why this node floods on the IR ONLY and not the full site model, however the potential flooding of the highway may be unacceptable. With regards to the permission, it is agreed that the approved technical note shows the connection of the wider site to this watercourse even if this is not explicitly acknowledged		

		the rate to Qbar. There is no flooding shown in the drainage calculations.	in the legal agreement. That element of the point is closed.		
8.	Please submit calculations and contributing area plans specific to the enabling works and IRM. It is advised that a separate set of calculations are also included with the addition of the assumed contributing areas from later parcels. It is understood that the basins will serve the wider site and the calculations need to account for this, however, it is necessary to determine that the discharge rate is appropriate for each phase of development to ensure that flood risk is not being increased. The contributing area plans should align with the calculations, both for the detailed contributing areas for the submitted IRM and enabling works phases and the assumed contributing areas.	Updated calculations have been provided in Appendix B. Additional calculations have been run for the enabling works and IRM only. This shows no flooding in the network for the IRM only scenario.	The contributing area plans are insufficient. Please submit plans showing the contributing areas hatched to correspond with the calculations. The plan may include a table of values and a total. The Southern 2 IR ONLY does not include the contributing areas of the ponds. These can be approximated from the depth/area tables for the pond structures for the comment below. The calculations demonstrate that the discharge rates for IRM exceed QBAR for the equivalent contributing areas: QBAR is 2.42l/s/ha North Contributing area: 3.038ha Therefore max 7.35 l/s for IRM. Discharging at 12.5 l/s.		

	Please ensure that the contributing areas of the basins are accounted for.		Southern 1 IR Only 1.352ha QBAR is 3.27 l/s for IRM. Discharging at 6.8l/s. Southern 2 IR Only Contributing area: 2.509ha QBAR is 6.07 l/s for IRM. Discharging at 8.4 l/s. How will the design be adjusted to ensure that flood risk is not increased prior to later phases being constructed? The network model contributing area for S278 works is incorrect (for example in the north currently shown as 320m² contributing at S278 S8, yet the gully catchment plans shows 2870m²). Please also justify the PIMP of 25%. Analysis of the FEH 22 data implies that this value should be closer to 34%.		
9.	Swales with underdrains have very shallow gradients. Please submit evidence that the adopting	The swales are shallow by design to encourage water retention and	The underdrains in the swales proposed within the approved technical note at outline were proposed to have 600mm diameter		

	body have reviewed these and approve them.	treatment both within the underlying filter media and the above ground swale. The swales and all other SuDS will be managed by a Management Company. IWNL will take on all pipework within the IRM boundary.	perforated pipes. Please explain the reason for the reduced pipe diameter and consider whether this impacts the design. It is also queried why manholes are located in the base of the swales? It is suggested this is reconsidered from a practical and health and safety perspective.		
10.	The distance between inspection chambers on swales with underdrains is >100m in places. Please demonstrate how these lengths will be inspected and maintained.	An additional inspection chamber has been added to the length of swale in question. Refer to updated drawings in Appendix A.	Thank you point closed.		
11.	The interception assessment is insufficient. Please demonstrate that the contributing area which is applied for achieves sufficient interception drainage. Please see our advice at Interception drainage Arun District Council for more information regarding the level of detail that is required.	The proposed approach to interception was based on an approach accepted elsewhere given that this requirement has been introduced late in the planning process. Nevertheless, Table 3 below sets out the interception areas for the IRM application demonstrating that this can be	Why has the impermeable area been multiplied by 0.8 for interception area? If it is not, then the north catchment would not offer enough interception for IRM. Please adjust so that interception assessment accords with The SuDS Manual (predating national standards for suds) and submit interception area plan as per our guidance.		

	As stated in comment 3 infiltration may still be allowed for interception in parts of the site where groundwater levels are lower.	achieved in accordance with the ADC guidance Table 3 Interception Storage <table border="1"> <thead> <tr> <th>Catchment</th><th>IRM Imp Area (ha)</th><th>Imp Area for Inter (80%) (ha)</th><th>Base Area of Basins (ha)</th><th>4 x Base Area of Basins (ha)</th><th>Inter area met?</th></tr> </thead> <tbody> <tr> <td>North</td><td>3.10</td><td>2.48</td><td>0.74</td><td>2.96</td><td>Yes</td></tr> <tr> <td>South</td><td>2.16</td><td>1.73</td><td>0.92</td><td>3.68</td><td>Yes</td></tr> </tbody> </table>	Catchment	IRM Imp Area (ha)	Imp Area for Inter (80%) (ha)	Base Area of Basins (ha)	4 x Base Area of Basins (ha)	Inter area met?	North	3.10	2.48	0.74	2.96	Yes	South	2.16	1.73	0.92	3.68	Yes	The initial assessment indicates that the majority of interception for the upstream parcels will need to be secured within the parcels themselves which will impact their layout.		
Catchment	IRM Imp Area (ha)	Imp Area for Inter (80%) (ha)	Base Area of Basins (ha)	4 x Base Area of Basins (ha)	Inter area met?																		
North	3.10	2.48	0.74	2.96	Yes																		
South	2.16	1.73	0.92	3.68	Yes																		
12.	There is an area of surface water flood risk at the Ford Lane roundabout, the designer's statement to accompany this application states that this is accounted for in the calculations. However it is unclear what volume of additional surface water is added to the system here or how it is accounted for. Has the catchment been modelled. There should be a clear explanation within the statement that aligns with the submitted (updated) calculations. It is noted that there are additional areas of surface water flood risk elsewhere on the site. Some of these are likely to accept surface water from outside the redline boundary. When these areas are included in future applications it will be	For clarity, the surface water flood risk shown at the Ford Lane roundabout originates from the development site and will be managed through the implementation of the development and its drainage system. It is not proposed that runoff from areas outside of the development are captured within the proposed drainage system. Refer to Figure 1 above. Noted for future applications	Ford Lane falls from both directions (east and west) towards the proposed roundabout as demonstrated by the submitted Topographical Survey and PAS 128 Utility Survey (Sheet 1, project 32809). It is acknowledged that there are gullies on the southern side of the road to the west of the proposed roundabout, however, none are shown on the north (which is a lower elevation than the centre) and the east (north or south). It is therefore expected that some surface water from Ford Lane will be captured by the drainage system and as such this should be accounted for. Please demonstrate how this is done.																				

	expected that the designer demonstrates how the surface water entering the site from elsewhere is managed. If it is drained within the onsite SUDS then hydraulic modelling is likely to be required.				
13.	Please detail the interaction between proposed trees and lined swales. Where root barriers or tree pits are proposed please indicate their locations on the drainage layouts.	Details of the proposed trees were submitted to address Condition 5. (Ref. F/28/26/DOC). These show locations of tree pits and details of the proposed root protection guards. These are provided in Appendix E for reference.	The submitted Tree Pit Details (CSA/7394/149) does not include an example of a tree <u>within</u> a lined swale with an underdrain. Please update the details and plans accordingly. Condition 5 may need to be discharged again.		
14.	Where there is a risk of groundwater ingress to basin liners they shall be integrity tested after installation. Integrity testing to be specified on the construction detail drawings and included for within the CMP when submitted for the IRM phase.	A note has been added to the drawings to specify that integrity testing is required. Refer to updated drawings in Appendix A. The IRM CMP has already been submitted and is not necessary to be referenced within that document given the above referenced notes embedded within future approved drawings.	Thank you. Point closed with regards to this application. It is disagreed that this does not need to be included within the CMP. However, that should be raised through the consultation process for that discharge of conditions application.		
15.	Please provide further explanation of how uplift force is accounted for in the	Due to unavailability, the Pozdrain system has been switched for the EnkaDrain	Enkodrain do not specifically reference groundwater and uplift		

	buoyancy calculations. The hydraulic conductivity of the clay should be based on site specific testing, not BS 8004. Please also submit written confirmation from pozidrain stating that they have reviewed the calculations and design and agree that the these are appropriate for their system and that it will perform the function it is designed for (to relieve uplift forces on the basins).	system which functions in the same way. The submitted calculations for the basins are to determine the flow rate through the EnkaDrain system which manages the buoyancy forces on the basins. The implementation of the EnkaDrain system effectively removes the buoyancy force and introduces a minor additional flow rate (as calculated). Enkadrain do not sign off engineering designs as they are a product manufacturer. However, EnkaDrain list this as a valid product use on their website (https://www.geosyn.co.uk/product/enkadrain).	force (buoyancy) relief as a use. However, it is acknowledged that the webpage states that the system “Reliably prevents hydraulic pressure build-up in soil layers and under structures”. The page appears to refer primarily to percolating water and landfill capping uses. As such, the company have been approached to confirm that the product is suitable for, and tested for this purpose. If the applicant can submit this evidence then that is also satisfactory. The point regarding the hydraulic conductivity of the clay remains unanswered.		
16.	Please submit the FEH22 point descriptors for the site confidentially to land.drainage@arun.gov.uk. These will be checked to ensure that the correct inputs for the greenfield runoff calculations have been used.	These have been sent as part of the submission.	Thank you, point closed.		

17.	Please amend the CV value to 1 for the design settings as well as the simulation settings.	Calculations updated. Refer to Appendix B.	Thank you, point closed.		
18.	Please justify the additional storage within the networks that have been modelled (35m ³ /ha).	Estimates were made based on a representative area of the development. The residential parcels will include smart waterbutts (50% attenuation), oversized pipes and manholes, etc. Calculations will be submitted as each phases comes forward demonstrating compliance with the wider strategy.	The pipes and manholes will be network modelled. The wider site model shows a reduced additional storage of 20m³/ha compared with the 35. However, the comment regarding waterbutts does not adequately justify the additional volume accounted for. For example, in RM1 there is a contributing area of approximately 5.6ha, which would equate to 196m³ of additional storage at 35m³/ha or 112m³ at 20m³/ha. Assuming 340 homes, even if every property were to have a reasonably large 250l waterbutt at 50% spare capacity this would be 59.5m³. Please further justify or reduce the additional storage figure.		

19.	Please include a climate change allowance on the 1 in 30 year calcs on resubmission.	Updated calculations have been provided in Appendix B.	Thank you, point closed.		
20.	The calculations incorrectly state that the invert levels and depths of several of the flow through pond structures for northern and south basins.	Updated calculations have been provided in Appendix B.	Thank you, point closed.		
21.	Please submit the link design settings.	Updated calculations have been provided in Appendix B.	Thank you, point closed.		
22.	The site sections do not correspond with the drainage layout ('interception areas' are shown as 100mm deep on drainage layout and 300mm deep on site sections.	Updated drawings are provided in Appendix A.	Thank you, point closed.		
23.	Please check design heads on hydrobrakes – on 289 the depth on the 1 in 100 year + CCA event exceeds the design depth.	Updated calculations have been provided in Appendix B.	These still do not correspond. Invert level of 293, plus the design depth is exceeded for all hydrobrakes except 464 in the 1% AEPP + CCA. The discharge rates from 293 and 520 exceed the design rate.		

24.	Please submit surcharged outfall settings with the revised calculations.	Updated calculations have been provided in Appendix B.	Please justify the surcharge depth of 0.827m in the north. The topographic and PAS surveys do not appear to include this existing watercourse or manhole. Please submit evidence of the levels and condition.		
25.	There appear to be manholes missing from the surface water drainage schedules. Please submit schedules for all manholes.	Updated drawings are provided in Appendix A.	Thank you. Discrepancies in cover/invert levels remain between the schedule and the plans, these correspond with the same discrepancies between the model and the plans (model and schedule correspond with each other).		
26.	The hydrobrake dimension table is useful, please also include the invert and cover levels plus incoming and outgoing pipe diameters on this.	Updated drawings are provided in Appendix A. The hydrobrake dimension table has been amended	Thank you point closed.		
27.	Please submit a construction detail for all headwalls. Where headwalls are of a similar design an accompanying table may be used to inform the specific details for each one.	Updated drawings are provided in Appendix A. This includes drawings of all proposed headwalls.	Some headwalls are missing. S278 ones. Please add the pipe diameter and gradient for all of the details (as per headwall 504 as an example).		

			Please indicate the design parameters for when railings have been considered necessary (or not). Is the grill on 462 necessary? The pipe diameter is 300mm so small enough to prevent access and it's an outfall rather than inlet so grill could increase risk of blockage. On 519 as it is an inlet, is a grill needed to capture solids (leaf matter for example) from the basin? 518- the stay wet level is 3.75 not 3.63. 444 only the elevation shows the grill (preferred) please include on section and plan views. 448 missing pipe invert level.		
28.	The RoSPA Desktop safety review quotes depths that do not reflect those shown in the submitted calculations	The updated RoSPA Assessments will be submitted with IRM Reserved Matter Condition	Condition 6 imposed under F/14/24/RES relates to play areas. Please submit the updated RoSPA		

	and plans. Please get the report adjusted to suit the updated modelling. (For example, north basin 1 is quoted as being 2.1m in overall depth and a maximum water level of 1.8m deep. The modelling shows a maximum water level of 2.14m excluding the permanent water level of 0.3m which is not accounted for in the storage calculations. This results in a maximum water depth of 2.44m and the maximum depth of the basin being 2.8m as shown by the site sections. The report also refers to the need for PRE when water levels are regularly 900mm or deeper, the most likely storm that has been modelled is the 50% AEP (1 in 2 year) event and this shows water depths of >900mm excluding the permanent water depths in both northern basins).	6. All recommended mitigation as required based on final approved designs will be incorporated. It is agreed that PRE will need to be implemented as per RoSPA recommendations.	assessment related to the drainage areas which this condition seeks to discharge. We have concerns about the depth of the basins which have been raised previously. It is expected that designers risk assessments will have already been completed for the basins, please submit these to demonstrate that health and safety has been adequately considered during the design process – the RoSPA desktop safety review should supplement the DRAs.		
29.	Please submit detailed plans for the basins, including setting out plans (it is critical that they are	Updated drawings are provided in Appendix A	Thank you. RoSPA report is awaited as per comment 28 in relation to details		

	constructed with the correct volume of storage). Please also include all measures recommended in the (updated) RoSPA report on the construction details and/or detailed plans (as appropriate). The RoSPA report refers to the use of gabions – these are not shown on any of the submitted construction details.		associated with their recommendations.		
30.	Please submit all relevant approved drainage plans relating to the S278/38 enabling works (not just the SW GAs).	The S278 works have been approved and the plans are enclosed in Appendix F. There is no S38 submission as only the gullies and laterals are to be adopted by the Highways Authority.	Please submit supporting network models for both roundabouts and gully catchment plan for Yapton Road. Please submit construction details for S278 works.		
Condition Number: 30 - Watercourses					
Comment Number					
1.	All outfalls from the site require new connections to what appear to be culverted watercourses. Please provide confirmation of what consents are necessary (from the relevant consenting authorities) and where applicable, plans that align with those consents	All outfalls from the proposed development connect to existing connections serving the existing development. No watercourse consents are required. Permission has been secured through the Land Transfer Agreement.	Please submit evidence of these existing connections, they do not appear to be shown on the PAS 128 and topographical survey. Please submit evidence that WSCC and ADC agree that OWC or land		

	(OWC and land drainage byelaw consent).		drainage byelaw consent are not required.		
Condition Number: 31 – Maintenance and management					
Comment Number					
1.	Please include a written summary of the surface water drainage of the site and how it functions. This should be written in plain english intended to be read by future occupiers and the persons responsible for maintenance.	An updated Maintenance and Management Plan is provided in Appendix G. Refer to updated Section 2.	Thank you. Please correct reference to Pozidrain collector pipes.		
2.	It is understood that this will be a living document that will be updated for the subsequent phases of the development. The designer should consider how this is presented. For example, with an overarching summary and then broken down for the separate phases or by responsibility (a section for the highways authority, for the landowner or adopting body, for private owners).	Refer to updated section 3	Thank you, what about the highways authority for the s278 works? Please submit Drawing No. 2205773-ACE-XXXX-DR-C-1221&1222 (Appendix B)		
3.	The documents refer to designer's risk assessments, these should	These are being completed as part of the construction drawings and	The designs have been completed and therefore the designers risk		

	be appended to the maintenance and management plan – they will not be assessed as part of the planning process.	will be provided as part of the handover.	assessment should have been completed and made available.		
4.	Please detail potential performance risks for components are described. This should include a description of the likely impacts of malfunction to aid fault finding. For example – blocked hydrobrake, or hydrobrake bypass left open. Consider all components.	Refer to updated section 3	Please correct and provide further detail for hydrobrakes. One of the most important risks is the bypass door being left open for example. The blockage risk seems to be copied from the Pozidrain section which is not applicable (hydrostatic pressure build up). Consider risk of headwall grilles being left open following maintenance. Has the risk of eutrophication been considered in the design and maintenance of the stay wet areas? Stipulate removal of unapproved saplings within lined features please.		
5.	Detail the implications of lack of maintenance or incorrect maintenance in the overarching summary.	Refer to updated section 2	Consider expanding on the statement (operate as originally designed) to at		

			least be specific about risk of flooding and pollution.		
6.	The approved drainage layouts and construction detail drawings shall be appended to the document.	These have been provided in Appendix A.	Appears to be missing or not submitted.		
7.	Please submit a maintenance responsibility plan(s) so that it is clear who is responsible for what drainage infrastructure on the site.	This have been provided in Appendix B.	Appears to be missing or not submitted.		
8.	The responsibility plan may be combined with or separated from a maintenance access plan showing how SuDS features are accessed for maintenance purposes, including occasional access by excavators for silt removal.	This have been provided in Appendix B.	Appears to be missing or not submitted.		
9.	Linked to comment 2 and 7, where drainage is to be adopted the adopting body and their standards should be referenced.	Refer to updated Section 3 and 4.	Thank you, point closed.		
10.	Please offer an explanation within the document of how maintenance including for	Refer to updated Section 3	Thank you, point closed.		

	the replacement of any features at the end of their design life will be funded and by whom.				
11.	Please stipulate that there will be a pre-handover inspection (as necessary or applicable, per phase, per completion, or prior to handover to management company or adopting body?)	Refer to updated Section 3	Thank you, point closed.		
12.	It is suggested that an inspection checklist is created and appended to ensure consistent inspection.	Refer to updated Section 5	Thank you, point closed.		
13.	Linked to comments 2, 7 and 9 – please list who should be contacted if the surface water drainage system is not functioning correctly.	Refer to updated Section 3	Thank you, point closed.		
14.	How will green waste and organic sediments arising from maintenance be disposed of? Include in document.	Refer to updated Section 4	Thank you, point closed – to be updated with specific sediment testing requirements prior to handover and in consultation with EA.		

15.	The detention basin table cross-references wetlands without providing that reference elsewhere in the document. Please ensure that the document is site-specific, include the relevant details from the wetland table in this.	This has been amended.	Thank you point closed.		
16.	Demonstrate that the maintenance regime considers amenity and biodiversity and the evolving landscape through the lifetime of the development.	Refer to updated Section 4 and 5.	Thank you, point closed.		
17.	Are there any prohibited maintenance activities or practices? If so highlight them in the document.	No, there are not but this could be incorporated as part of future reviews	The plan includes suggested prohibition of the use of herbicides, pesticides and fertilisers which is acceptable. Without seeing Appendix B it is unclear if maintenance from any particular areas have been or should be prohibited.		
18.	Please include an action plan for dealing with accidental spillages of pollutants – also consider where or when this may be more likely.	Refer to updated Section 6.	Thank you, point closed.		

19.	Stipulate a periodic review of the maintenance of the site with the opportunity (prescribed formal procedure) to update the maintenance plan.	Refer to updated Section 3 and 5	Please point to specific paragraph numbers. Apologies, this was not noted on review but may have been missed.		
20.	Provide advice 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	Refer to updated Section 3	No scope for changes or works that affect the design at all. Not even in agreement with designer and LPA? This seems unrealistic.		
21.			The document suggests relining of perforated pipes. This is unlikely to be practical and ensure that the permeability is retained. Please elaborate or adjust.		
22.			How will sediment removal be carried out for different components – does this link with Appendix B?		
23.			Please correct reference to rip-rap to gabions and consider whether any further maintenance or inspection requirements are necessary for these.		

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: 16 September 2026 13:38
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Land Drainage <Land.Drainage@arun.gov.uk>; Simon Brooksbank <Simon.Brooksbank@arun.gov.uk>
Subject: RE: Planning Re-Consultation on: F/22/26/DOC

Please find enclosed our consultants response, not recommending the discharge of conditions.
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



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: 01 July 2026 15:48
To: Land Drainage <Land.Drainage@arun.gov.uk>
Subject: Planning Re-Consultation on: F/22/26/DOC

To: **Engineers (Drainage)**

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No: F/22/26/DOC
Registered: 23rd March 2026
Site Address: Land at Ford Airfield Ford

Grid Reference:	499204 102967
Category:	Discharge of Condi
Description of Works:	Approval of details reserved by condition under F/4/20/OUT relating to conditions 28- Proposed foul drainage system, 29- Proposed surface water drainage scheme, 30- Discharges to watercourses and 31-Maintenance & management of surface water drainage system.

I am able to inform you that I have received an amendment to the above application dated 26th May 2026 relating to: New and updated documents.

If you should wish to make further representations as a result of this amendment, please make any further comment by **15th July 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

Simon Brooksbank

Planning Case Officer-Arun District Council

Telephone: 01903 737881

Email: simon.brooksbank@arun.gov.uk

PLRECON_DOC (ODB) 2020