

Engineers Comments Regarding Surface Water Drainage

Application Reference:	Y/80/25/S73	Reviewer Reference:	ADC/EXT4b
Planning Officer:	Simon Davis	Date of Review:	10/07/2026
Site Name:	Land West of Bilsham Road Yapton BN18 0LA		
Application Description:	Variation of conditions 2, 14, 15, 22 and 23 imposed under Y/52/23/PL relating to approved plans condition, proposed boundary treatments, proposed cycle storage, proposed ecological mitigation/enhancement measures and proposed energy/sustainability measures.		
Assessment Number:	1		

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

Objection

Reviewed Plans

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

- 5304-TTE-EX-XX-DR-L-9105 RevP13 – Detailed Soft Landscape Strategy Sheet 2 of 2
- 5304-TTE-EX-XX-DR-L-9109 RevP09 – Landscape and Services Plan Sheet 2 of 2
- FRA AND DRAINAGE STRATEGY
- ENGINEERING LAYOUT SHEET 1 OF 4 P25-3048-PEG-XX-XX-DR-C-101-P1
- ENGINEERING LAYOUT SHEET 2 OF 4 P25-3048-PEG-XX-XX-DR-C-102-P1
- ENGINEERING LAYOUT SHEET 3 OF 4 P25-3048-PEG-XX-XX-DR-C-103-P1
- ENGINEERING LAYOUT SHEET 4 OF 4 P25-3048-PEG-XX-XX-DR-C-104-P1
- PUMPING STATION SWEPT PATH ANALYSIS P25-3048-PEG-XX-XX-DR-C-113-P1
- IMPERMEABLE AREAS CATCHMENT PLAN P25-3048-PEG-XX-XX-DR-C-115-P1
- COVER LETTER (08/06/2026)

Comments

This application applies to vary condition 2 imposed under “Y/52/23/PL”

Condition 2 currently reads:

“The development hereby permitted shall be carried out in accordance with the following approved plans:

- Location Plan BRY-ECE-XX-XX-DR-A-SL-5010_P03
- Block Plan BRY-ECE-XX-XX-DR-A-SL-5011_P03
- Site Layout BRY-ECE-XX-XX-DR-A-SL-0512_P06
- Hardworks Landscape Masterplan BRY-NTA-XX-XX-DR-L-PL-0501-P06
- Softworks Landscape Masterplan BRY-NTA-XX-XX-DR-L-PL-0502-P06
- Landscape GA Softworks Sheet 1 of 2 BRY-NTA-XX-XX-DR-L-PL-0503-P06 • Landscape GA Softworks Sheet 2 of 2 BRY-NTA-XX-XX-DR-L-PL-0504-P06
- Topographical Survey BRY-ECE-XX-XX-DR-A-SL-5013_P02
- Parking Provision and Cycle Stores BRY-ECE-XX-XX-DR-A-SL-0514_P03
- Refuse Stores and Tracking BRY-ECE-XX-XX-DR-A-SL-5015_P03
- Tenure-Affordable Plan Allocation BRY-ECE-XX-XX-DR-A-SL-5016_P05
- Building Heights BRY-ECE-XX-XX-DR-A-SL-5018 P02
- Building Materials BRY-ECE-XX-XX-DR-A-SL-5019 P02
- Boundary Treatments Plan BRY-ECE-XX-XX-DR-A-SL-5020_P02
- Houses 165-170 (3 Bed Terrace) BRY-ECE-T01-ZZ-DR-A-XX-5100 P02
- Houses 21-22 (4 Bed Semi) BRY-ECE-HC908-ZZ-DR-A-XX-5101 P02
- Houses 7-10_30-33 Aff (2 Bed Terrace) BRY-ECE-T02-ZZ-DR-A-XX-5102 P02
- Houses 23-25 (2 Bed Terrace) BRY-ECE-T03-ZZ-DR-A-XX-5103 P02
- Houses 141-143 (2 Bed Terrace) BRY-ECE-T04-ZZ-DR-A-XX-5104 P02
- Houses 102-103_144-145_161-162 (4 Bed Semi) BRY-ECE-HC908-ZZ-DR-A XX-5105 P02
- Houses 112-13_137-138_153-154_163-164 (4 Bed Semi) BRY-ECE-HC908 ZZ-DR-A-XX-5106 P02
- Houses 1-2_15-16_104-105_155-156 (2 Bed M4(3)) BRY-ECE-HC602-ZZ-DR A-XX-5107 P02
- Houses 128-132_147-152 (3 Bed_Study Detached) BRY-ECE-HC401-ZZ-DR A-XX-5108 P02

- Houses 86-87_133_146 (3 Bed_Study Detached) BRY-ECE-HC401-ZZ-DR-A XX-5109 P02
- Houses 26-27_75-76_90-93_98-99_116-117_122-125_139-140 (3 Bed Semi) BRY-ECE-HC308-ZZ-DR-A-XX-5110 P02
- Houses 17-20_42-45_49-52_61-62_88-89_126-127_100-101_114-115_159 160 (3 Bed Semi) BRY-ECE-HC308-ZZ-DR-A-XX-5111 P02
- Houses 77-79 (3 Bed Terrace) BRY-ECE-T05-ZZ-DR-A-XX-5112 P02
- Houses 59-60 (3 Bed Semi) BRY-ECE-HC308-ZZ-DR-A-XX-5113 P02
- Houses 108-109 (3 Bed Semi) BRY-ECE-HC302-ZZ-DR-A-XX-5114 P01
- Houses 106-107 (3 Bed Semi) BRY-ECE-HC302-ZZ-DR-A-XX-5115 P02
- Houses 82-85 (3 Bed Semi) BRY-ECE-HC302-ZZ-DR-A-XX-5116 P02
- Houses 53-54_110-111 (3 Bed Semi) BRY-ECE-HC302-ZZ-DR-A-XX-5117 P02
- Houses 37-38 (3 Bed Semi) BRY-ECE-HC302-ZZ-DR-A-XX-5118 P02
- Houses 28-29_63-66_96-97_118-119 (2 Bed Semi) BRY-ECE-HC211-ZZ-DR A-XX-5119 P02
- Houses 55-58_67-68_94-95_120-121_157-158 (2 Bed Semi) BRY-ECE HC211-ZZ-DR-A-XX-5120 P02
- Houses 34-36 (2 Bed Terrace) BRY-ECE-T06-ZZ-DR-A-XX-5121 P02
- Houses 80-81 Aff (2 Bed Semi) BRY-ECE-HC208-ZZ-DR-A-XX-5122 P02
- Houses 39-41 Aff (2 Bed Terrace) BRY-ECE-T07-ZZ-DR-A-XX-5123 P02
- Houses 72-74 Aff (2 Bed Terrace) BRY-ECE-T08-ZZ-DR-A-XX-5124 P02
- Houses 134-136 Aff (2 Bed Terrace) BRY-ECE-T09-ZZ-DR-A-XX-5125 P02
- Houses 69-71 Aff (2 Bed Terrace) BRY-ECE-T10-ZZ-DR-A-XX-5126 P02
- Houses 3-6_11-14 Aff (2 Bed/3 Bed Terrace) BRY-ECE-T11-ZZ-DR-A-XX 5127 P02”

NEW WORDING

There has been **NO** proposed new wording.

Instead, there has been alterations to the layout of the development due to an updated surface water drainage system. This has rendered some of the above **approved** plans obsolete and outdated. New plans have been submitted which are aiming to replace many of the above **approved** plans.

Consultation comments to the planning officer

0. General

- 0.1. This consultation is primarily focussed on the SuDS that have been proposed for the site. However, the planning officer is alerted to the future flood risk on the site and the potential need for the sequential test to be applied. It is unclear if this is necessary as there is an extant permission.
- 0.2. The tidal flood levels have not been submitted and as such it is unclear if the proposed mitigation and finished floor levels will be sufficient to make the development safe over its lifetime without increasing flood risk elsewhere.
- 0.3. There is significant ground raising proposed on the site. The FRA is not clear about the extent or detail of the raising. Example wording of 'at least 1.2m' of raising. The impact of this raising on flood risk and hydrogeology has not been adequately assessed. The planning officer may consider the visual impact of the elevated levels on the site. For example, plot 26 which is raised from 6.13mAOD to 7.6mAOD. These increases are replicated elsewhere on the site.

1. Runoff destination

- 1.1. The FRA references the potential use water reuse features without making a commitment to this. It is acknowledged that water reuse is unlikely to provide a complete solution and that non-potable water reuse for regular supply is likely to be inappropriate for this type of development. However, water reuse is expected to be proposed and agreed as part of the detailed design process via an appropriately worded condition.
- 1.2. Infiltration has been ruled out due to high groundwater levels which mean that 1m of unsaturated ground cannot be achieved between any potential infiltrating features and the groundwater across the site. This is accepted.
- 1.3. No evidence of the flow parameters (discharge rates and volumes) being agreed by the risk management authority have been submitted, for ordinary watercourses this should be from the LLFA; WSCC. The lack of objection from the LLFA as a statutory consultee on this application could be viewed as acceptance.

2. Interception drainage

- 2.1. The interception assessment does not include the contributing area of the basins themselves. This means that the assessment which already shows inadequate interception drainage is overestimating the interception that is provided.
- 2.2. The assessment implies that ADC requirements are more stringent than national ones. This is not the case. The national requirements relate to unlined features with no allowance for lined features except permeable paving. ADC have offered relaxation against national suds standards based upon the detailed advice of The SuDS Manual relating to interception via evapotranspiration only.

- 2.3. No evidence is submitted to demonstrate that a higher factor than 4 times the wetted area of the raingardens and basins should be used to calculate the contributing area for interception.
 - 2.4. As interception may only be delivered by features with open vegetated surfaces or water reuse, which is not proposed. Additional features which deliver this interception are likely to affect the scale and layout of the proposed development and as such we **object** in relation to this standard.
3. Extreme rainfall and flooding
- 3.1. The greenfield runoff rate has been calculated using the IH124 method. The NSfS prescribe that the Environment Agency's Flood Estimation Guidelines should be used to estimate greenfield runoff rates developed in the Institute of Hydrology Report 124 (IH124 method) and that Flood Estimation Handbook (FEH) methods are preferred. This is due to a higher mean error when using the IH124 method as opposed to the FEH Statistical method. This means that the discharge rate may not be correct. Adjustments to the discharge rate may impact the scale and layout of the site as additional storage may be required.
 - 3.2. The contributing areas of the basins, swales and raingardens are not accounted for in the calculations for storage for the SuDS system for extreme events. Patios and ancillary buildings appear to not have been included, and gardens should have a factored contributing area if they are to be positively drained (with channel or threshold drains for example). The underassessment of contributing area means that additional storage will be required – this may affect the scale and layout of the site.
 - 3.3. In addition, the contributing area plan is not annotated to enable it to be cross referenced with the calculations. The plans and calculations need to be updated to reflect the areas that are positively drained. Neither the contributing area plan or the calculations detail where urban creep has been applied. The designer is guided to <https://www.arun.gov.uk/contributing-areas> for more information about contributing area expectations.
 - 3.4. The full submitted drainage network has not been modelled. The simulation is a simple storm network which only accounts for a single basin, flow control and outfall. The surcharge level that has been modelled is only 0.1m. Due to the simplicity of the network model it is unclear what effect modelling the outfall to the top of the bank of the watercourse would have on the network. The duration of the surcharge should also be considered further.
4. Water quality
- 4.1. The water quality assessment is inadequate. It does not justify the classification for every road on the site being 'low traffic' (less than 300 traffic movements a day). It is expected that the spine roads of the development will exceed these traffic movements and as such, be classified as a medium hazard level. Some of these roads only have the treatment of a single basin which would be inadequate when compared with the mitigation indices.

4.2. The water treatment assessment needs to be updated to reflect the various treatment trains on the site to ensure that adequate water treatment is provided by the design. Inadequate water treatment may result in downstream pollution and resultant effects on downstream biodiversity.

5. Amenity

5.1. Open features and multifunctional permeable paving are proposed. No amenity assessment is included in the submission but features that provide amenity are proposed.

5.2. The side slopes of the basins are 1:4 which is acceptable.

6. Biodiversity

6.1. A BRO assessment has not been submitted to support the application. This should be assessed by the ecology officer. Open features are proposed which will offer biodiversity benefit. Detailed design and landscaping of the basins, swales and raingardens can be agreed via a suitably worded condition to ensure that biodiversity benefits are maximised.

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

7.1. Groundwater is stated to be high on the site. Mitigation against the risk of floatation is likely to be required but has not been considered at this stage. If basins need to be made more shallow to mitigate risk of floatation then this may affect the scale and layout of the development.

7.2. Flat maintenance easements are shown around the tops of the basins however it is unclear how wide these are and if they offer practical maintenance access to the basins for the lifetime of the development including excavator access for desilting. Due to the potential restricted access, particularly at the northern basin, it is requested that a maintenance access plan is submitted demonstrating that all drainage features can be accessed for maintenance purposes for the lifetime of the development. This is important as if open features cannot be adequately maintained then flood risk may be increased later in the lifetime of the development.

7.3. If the plan shape, or the maintenance strips of the basins need to be adjusted to improve maintenance access then this could affect the scale and layout of the site.

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

Improving the wellbeing of Arun

Delivering the right homes in the right places

Supporting our environment to support us

Fulfilling Arun's economic potential

Our core foundations

ARUN
DISTRICT COUNCIL

From: Paul Cann <Paul.Cann@arun.gov.uk>
Sent: 13 July 2026 13:22
To: Planning.Responses <Planning.Responses@arun.gov.uk>
Cc: Land Drainage <Land.Drainage@arun.gov.uk>; Simon Davis <Simon.Davis@arun.gov.uk>
Subject: RE: Planning Consultation on: Y/80/25/S73

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



From: Planning.Responses <Planning.Responses@arun.gov.uk>
Sent: 08 June 2026 15:49
To: Land Drainage <Land.Drainage@arun.gov.uk>
Subject: Planning Consultation on: Y/80/25/S73

To: Engineers (Drainage)

NOTIFICATION FROM ARUN DISTRICT COUNCIL

TOWN AND COUNTRY PLANNING ACT 1990

Application No:	Y/80/25/S73
Registered:	22nd December 2025
Site Address:	Land West of Bilsham Road Yapton BN18 0LA
Grid Reference:	497545 102448
Category:	Section 73
Description of Works:	Variation of conditions 2, 14, 15, 22 and 23 imposed under Y/52/23/PL relating to approved plans condition, proposed boundary treatments, proposed cycle storage, proposed ecological mitigation/enhancement measures and proposed energy/sustainability measures.

I am able to inform you that I have received an amendment to the above application dated 27th May 2026 relating to:- amendments to Layout, House Types, Landscape as a result of Drainage revisions

If you should wish to make further representations as a result of this amendment, please make any further comment by **9th July 2026**.

[Click here to view the application, documents and make further comments](#)

Please be aware that Planning Services operate an 'open file' policy and will publish your comments including your name and address on the website. We will aim to redact signatures, telephone numbers and email addresses but please help us by not incorporating them in the body of your text. Please make sure that you only include information that you are happy will be

published in this way. If you supply information belonging to a third party, you must make sure you have their permission to do so.

Yours sincerely

Mr S Davis

Planning Case Officer- Arun District Council

Telephone: 01903 737874

Email: Simon.Davis@arun.gov.uk

PLRECON (ODB) 2018