

## Engineers Comments Regarding Surface Water Drainage

|                                 |                                                                                                                      |                            |             |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------|----------------------------|-------------|
| <b>Application Reference:</b>   | FP/73/26/DOC                                                                                                         | <b>Reviewer Reference:</b> | ADC/EXT5/AF |
| <b>Planning Officer:</b>        | Amber Willard                                                                                                        | <b>Date of Review:</b>     | 28/08/2026  |
| <b>Site Name:</b>               | 1 Burley Road Felpham PO22 7NF                                                                                       |                            |             |
| <b>Application Description:</b> | Approval of details reserved by condition imposed under FP/176/24/PL relating to condition 3-surface water drainage. |                            |             |
| <b>Assessment Number:</b>       | 2                                                                                                                    |                            |             |

| Policy and Guidance Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |
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| <p>Arun District Council Surface Water Drainage Guidance (including design checklists) - <a href="https://www.arun.gov.uk/surfacewater">https://www.arun.gov.uk/surfacewater</a></p> <p>Land Drainage Consent – <a href="https://www.westsussex.gov.uk/fire-emergencies-and-crime/dealing-with-extreme-weather/flooding/flood-risk-management/ordinary-watercourse-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/</a></p> <p>Arun District Council Land Drainage Byelaws - <a href="https://www.arun.gov.uk/byelaws/">https://www.arun.gov.uk/byelaws/</a></p> <p>Arun District Council surface water pre-commencement conditions - <a href="https://www.arun.gov.uk/planning-pre-commencement-conditions">https://www.arun.gov.uk/planning-pre-commencement-conditions</a></p> <p>The National Standards for SuDS - <a href="https://www.gov.uk/government/publications/national-standards-for-sustainable-drainage-systems/national-standards-for-sustainable-drainage-systems-suds">https://www.gov.uk/government/publications/national-standards-for-sustainable-drainage-systems/national-standards-for-sustainable-drainage-systems-suds</a></p> <p>The SuDs Manual [C753] by CIRIA</p> |  |

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|-----------------|-------------------------------|
| <b>Response</b> | Condition 3: <b>Objection</b> |
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| References                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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| <p>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.</p> <p>The NsTS have been superseded by the National Standards for Sustainable Drainage Systems [NSfS] from 19 June 2025.</p> <p>This consultation has been primarily informed by the NSfS and The SuDS Manual.</p> |

## 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](mailto:land.drainage@arun.gov.uk) if needed.

| Standard                                                                          | Assessment   | Response            |
|-----------------------------------------------------------------------------------|--------------|---------------------|
| 1. Runoff destination                                                             | Compliant    | <b>No objection</b> |
| 2. Interception drainage                                                          | Compliant    | <b>No objection</b> |
| 3. Extreme Rainfall and Flooding                                                  | Insufficient | <b>Objection</b>    |
| 4. Water Quality                                                                  | Compliant    | <b>No objection</b> |
| 5. Amenity                                                                        | N/A          |                     |
| 6. Biodiversity                                                                   | N/A          |                     |
| 7. Construction, operation, maintenance, decommissioning and structural integrity | Compliant    | <b>No objection</b> |

## Reviewed Plans

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

- Construction Details P2
- P-002 Drainage Layout Revision P8
- Response to Engineers comments
- Updated Modelling Calculations
- P-002 Drained Areas Plan Revision P8
- Engineers response
- Email 12.8.26 confirming drainage comments addressed

## Plans/Documents to be listed as approved

The following plans/documents should be listed as approved in respect to condition 3:

- N/A

### Condition wording

Condition is worded as follows:

*"No development apart from demolition of the existing buildings shall commence, until full details of the proposed surface water drainage scheme is submitted to and approved in writing by the local planning authority. The full details submitted for approval shall include:*

- 1. Winter groundwater monitoring,*
- 2. Winter infiltration testing strictly in accordance with BRE DG 365 or similar approved,*
- 3. Details of the proposed method and location of surface water disposal, in accordance with the SuDS hierarchy,*
- 4. Impermeable area plan,*
- 5. Calculations modelling the surface water drainage network for the following storm events:*
  - a. 100% Annual Exceedance Probability*
  - b. 10% AEP + climate change allowance*
  - c. 3.3% AEP + climate change allowance*
  - d. 1% AEP + climate change allowance All storm events must include an allowance for urban creep and surcharged outfalls where appropriate,*
- 6. Detailed drainage plans conforming to Local Planning Authority guidance,*
- 7. Specifications for all surface water drainage components and associated infrastructure or flow control mechanisms,*
- 8. Any relevant permissions relating to the discharge location, works to watercourses or adoption of the SuDS scheme.*

*The scheme shall then be constructed as per the approved plans. The surface water drainage scheme shall remain for the lifetime of the development unless agreed in writing by the local planning authority.*

*Reason: In order to comply with Arun Local Plan policies W DM2 and W DM3 and the NPPF. It is considered necessary for this to be a pre-commencement condition as the site lies in a defined Lidsey Local Flood Risk Zone and it is important to ensure that the drainage scheme is agreed before construction commences."*

### Consultation comments to the planning officer

1. Please see the attached comment tracker for detailed comments relating to the submission.

### Drainage Impact on Other Planning Matters

This application has been assessed with regards to surface water drainage design only, together with land drainage aspects if deemed necessary.

Other planning matters occasionally effect the surface water drainage design. If plans relating to other matters have been assessed for their impact on the proposed drainage, then it must not be assumed that they have been assessed for any other purpose. The planning officer is advised to check for conflicts with any existing approved plans and to consult any relevant consultees as appropriate.

It has been identified that the following consultees may have comments about the plans that have been submitted and reviewed for this application:

- ☐ Landscaping officer (proposed trees and landscaping)
- ☐ Tree officer (existing trees)
- ☐ Environment Agency (main rivers and fluvial/tidal flood risk, River Arun internal drainage board, groundwater source protection zones)
- ☐ Southern Water (foul drainage and surface water disposal to public sewer network/groundwater source protection zones)
- ☐ Portsmouth Water (groundwater source protection zones)
- ☐ Lead local flood authority (all other sources of flooding and ordinary watercourses)
- ☐ Other: Specify .....
- ☒ None

|                                                                                  |                                                                                             |
|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Application Reference: FP/73/26/DOC<br>Site Name: 1 Burley Road Felpham PO22 7NF | Initial Issue Date: 03/07/2026<br>Issue Date: 28/08/2026<br>Reviewer Reference: ADC/EXT5/AF |
|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|

### Summary and Recommendation:

#### Condition 3: **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 Drainage Comments                                                                                                                                                                                                                 |  |  |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Date:               | 03/07/2026                                                                                                                                                                                       | 12/08/2026                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 28/08/2026                                                                                                                                                                                                                            |  |  |
| Condition Number: 3 |                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                       |  |  |
| Comment Number      |                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                       |  |  |
| 1.                  | The calculations currently total 270sqm drained area but the drainage plan states 310sqm. A drained areas plan should be provided to set out the drained area and clarify Urban Creep allowance. | The discrepancies on the original Drainage Layout Plan have been addressed and a new Drainage Layout Plan has been issued, raised to revision P8. A new Drained Areas Plan has been created detailing the contributing impermeable areas and has clarified the Urban Creep Allowance associated with each area. This new drawing is at revision P8. The consequence of including the correct Urban Creep Allowance is that the Geocellular Soakaway Structure has been increased in its footprint area. | The drained areas plan is acceptable, however, revised FLOW drainage calculations have not been provided. Rounding up to the nearest allowable decimal place is appropriate. The revised calculations should be submitted for review. |  |  |

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|    |                                                        | <p>It should be noted that the measured main building impermeable area is 198 metres<sup>2</sup>. Urban Creep Allowance of +10% gives an addition of 19.8 metres<sup>2</sup>, producing a total of 217.8 metres<sup>2</sup>.</p> <p>Causeway Flow handles its areas in hectares, with a minimum available area of 0.001 hectare (10 metres<sup>2</sup>), so is unable to resolve areas smaller than this. This is why Causeway Flow has used 0.020 hectares as its 'rounded' contributing area (200 metres<sup>2</sup>), as it is unable to resolve to 198 metres<sup>2</sup>.</p> <p>The modelling used here is generally for smaller developments and is capable to resolve contributing areas to 2 decimal points of a metre<sup>2</sup> as a 'floating point number'. Additional information has also been added to each of the drawings, as regards the soil investigations, to aid with the consultation.</p> |                 |  |  |
| 2. | Finished levels design information should be provided. | <p>Since there is levels information provided for the Finished Floor Levels (FFL), the Garage Floor Level</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Comment closed. |  |  |

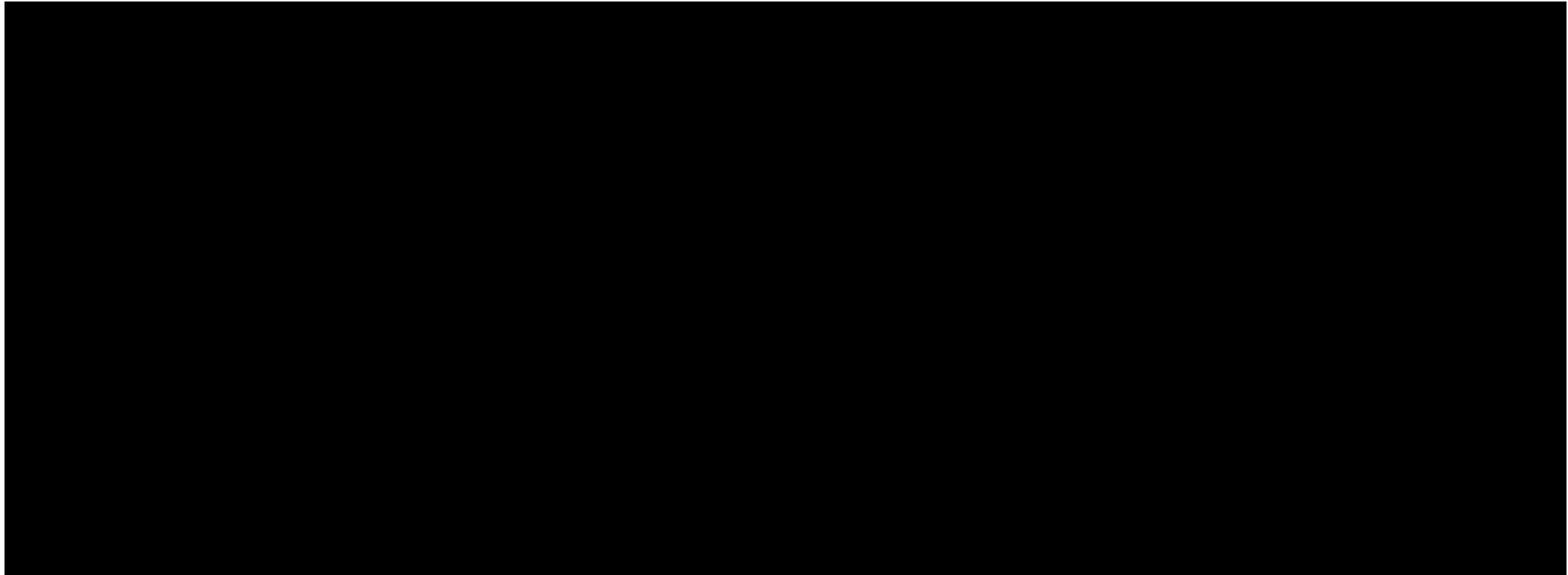
|    |                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                 |  |  |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--|--|
|    |                                                                                                                                                                                                                   | (GFL), the Geocellular Soakaway Structure, the individual drainage components and the original Topographical Survey, I can only assume that the consultation, when referring to the <i>'finished levels design information'</i> , relates to the permeable pavement. The relevant design levels have now been incorporated on both the Drainage Layout Plan and the Impermeable areas Plan.                                                                                                       |                 |  |  |
| 3. | There are two permeable pavement details, the plans should differential where they are to be constructed. Note also the access road details should specify the holes in the road base including spacing and size. | The Constructional Details Drawing (sheet No. 2) showed a detail for the Permeable Pavement for a POROUS PAVED ACCESS ROAD/SHARED DRIVE DETAIL with a "tarmac running layer". This detail is completely erroneous and irrelevant and is not incorporated within the original design and its inclusion can only be assumed to be an error. This superfluous detail has been deleted from the Constructional Details Drawing (sheet No. 2) which has been raised to revision P2. The full Permeable | Comment closed. |  |  |

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|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--|--|
|    |                                                                                                                                                                        | Pavement ENTRANCE & DRIVEWAY with a footprint area of 70 metres <sup>2</sup> is the only relevant detail on this drawing.                                                                                                                                                                                                                                                                                                                      |                                                                                         |  |  |
| 4. | Details for the venting for the soakaway should be provided.                                                                                                           | The location and general details for the (direct atmospheric) venting of the soakaway has been included on the Drainage Layout Plan and the full details of the vent assembly, including the manufacturer and model type, has been incorporated on the Constructional Details Drawing (sheet No. 2)                                                                                                                                            | Comment closed.                                                                         |  |  |
| 5. | The factor of safety for the base draining infiltration features should be reviewed in line with the NSfS Table S3.1 for the drained area and consequence of flooding. | The Factor of Safety for the Geocellular Soakaway Structure has been reviewed, and has been increased from 2 to 3, as indicated by consultation. It is considered that, since for the 1% AEP Critical Storm of 12 hours, all the designed runoff is contained within the Geocellular Soakaway Structure and there is no flooding above Ground Level, that the consequence of flooding to be -- <i>No damage or inconvenience from flooding</i> | A FoS of 3 is acceptable. The revised FLOW calculations should be submitted for review. |  |  |

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|  |  | <p>– however prudence dictates to follow the guidance of consultation and to produce a Robust Design, such that the Factor of Safety has been increased here in the calculations.</p> <p>A new set of modelling calculations has been provided using the latest FEH22 Rainfall Data.</p> <p>The 'Point Descriptors' for the site have been included as part of the calculations document. This is the same data used by Causeway Flow modelling in the original submitted calculations and to ensure consistency a comparison of the rainfall intensity + climate change allowance for any rainfall durations can be performed. For example MGS modelling and Causeway modelling both give for a 60 minute storm a rainfall of 63.534 mm/hour. Additionally these calculations include the correct main roof impermeable area including the Urban Creep Allowance as a contributing area of 217.8 metres<sup>2</sup>.</p> |  |  |  |
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|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
|  |  | <p>The end result is an increase in the footprint area to 6m00 x 12m00 (72 metres<sup>2</sup>) whilst maintaining the original Geocellular depth of 300mm.</p> <p>It should be noted that the Permeable Pavement modelling remains unchanged since its area &lt; 100 metres<sup>2</sup> and any Urban Creep Allowance is not relevant here. As such the original Causeway Flow calculations remain unchanged as valid here for the Permeable Paving.</p> |  |  |  |
|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|

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](mailto:land.drainage@arun.gov.uk).



Arun District Council, Civic Centre, Maltravers Rd  
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[www.arun.gov.uk](http://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>



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



Our core foundations



**From:** Paul Cann <Paul.Cann@arun.gov.uk>  
**Sent:** 28 August 2026 17:01  
**To:** Planning.Responses <Planning.Responses@arun.gov.uk>  
**Cc:** Land Drainage <Land.Drainage@arun.gov.uk>; Amber Willard <Amber.Willard@arun.gov.uk>  
**Subject:** RE: Planning Re-Consultation on: FP/73/26/DOC

Please find enclosed our consultants response.

Regards

**Paul Cann**  
**Principal Drainage Engineer**, Coastal Engineers and Flood Prevention

**T:** 01903 737819  
**E:** [paul.cann@arun.gov.uk](mailto:paul.cann@arun.gov.uk)

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Our priorities...



Improving the wellbeing of Arun



Delivering the right homes in the right places



Supporting our environment to support us



Fulfilling Arun's economic potential



**From:** Planning.Responses <[Planning.Responses@arun.gov.uk](mailto:Planning.Responses@arun.gov.uk)>  
**Sent:** 17 August 2026 15:24

1

To: Land Drainage <[Land.Drainage@arun.gov.uk](mailto:Land.Drainage@arun.gov.uk)>  
Subject: Planning Re-Consultation on: FP/73/26/DOC

To:      **Engineers (Drainage)**

**NOTIFICATION FROM ARUN DISTRICT COUNCIL**

**TOWN AND COUNTRY PLANNING ACT 1990**

|                              |                                                                                                                      |
|------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Application No:</b>       | <b>FP/73/26/DOC</b>                                                                                                  |
| <b>Registered:</b>           | 17th June 2026                                                                                                       |
| <b>Site Address:</b>         | 1 Burley Road Felpham PO22 7NF                                                                                       |
| <b>Grid Reference:</b>       | 496613 99712                                                                                                         |
| <b>Category:</b>             | Discharge of Condi                                                                                                   |
| <b>Description of Works:</b> | Approval of details reserved by condition imposed under FP/176/24/PL relating to condition 3-surface water drainage. |

I am able to inform you that I have received an amendment to the above application dated 12th August 2026 relating to: Revised plans, calculations and response to comments

If you should wish to make further representations as a result of this amendment, please make any further comment by **1st September 2026**.

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

**Please be aware that any comments you may make will be available on our website so please do not insert personal details or signatures on your reply.**

Yours sincerely

Amber Willard

Planning Case Officer-Arun District Council

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Email: [amber.willard@arun.gov.uk](mailto:amber.willard@arun.gov.uk)

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