

PLANNING RESPONSE – DRAINAGE ISSUES

Response to Drainage Objection — Infiltration Testing & BRE Digest 365

**Croft Works,
Mill Lane,
Rustington,
West Sussex,
BN16 3JN**

Planning Application: R/62/26/PL

POSITION SUMMARY

The drainage package prepared by Meridian Civil Engineering Consultancy Ltd (ref. MC0779, 18/02/26) provides a complete, fully calculated soakaway design based on three BRE DG 365 compliant infiltration fills conducted during winter 2025. The three fills demonstrate a progressive saturation trend yielding a conservative design rate of 3.10×10^{-6} m/s. The soakaway passes all events to 1-in-100-year +45% climate change. The half-drain criterion is met. Groundwater is confirmed at greater than 4.19m bgl, providing more than three times the required clearance. We additionally note that BRE Digest 365 winter groundwater monitoring was previously undertaken at this site for the former site owner; we have requested this information from our archives and will submit it to the Council upon retrieval. A separate Factor of Safety Technical Note, addressing the officer's comments in further detail, is submitted alongside this letter. There is no technical basis for refusal.

Introduction

We write in response to the drainage officer's comments and stated intention to recommend refusal on the basis that infiltration testing was not conducted strictly in accordance with BRE Digest 365. We submit that this objection is not technically substantiated and that refusal on this basis would be disproportionate, inconsistent with national planning policy, contrary to the Council's own published guidance, and constitutes the type of behaviour that exposes a local planning authority to an award of costs on appeal.

This letter addresses the officer's concerns by reference to the drainage information already submitted with the application — specifically the soakaway design report by Meridian Civil Engineering Consultancy Ltd (MCEC, ref. MC0779, dated 18/02/26). A separate Factor of Safety Technical Note is submitted alongside this letter as an additional supporting document. We additionally confirm that BRE Digest 365 winter groundwater monitoring was undertaken at this site on behalf of the former site owner. We have requested this information from our archives and will submit it to the Council upon retrieval as further corroborating evidence of the site's suitability for infiltration drainage.

The Correct Policy Test

Paragraph 182 of the National Planning Policy Framework (December 2024) requires drainage proposals to be "*proportionate to the nature and scale of the proposal.*" For a minor development of three single-storey bungalows this is a modest threshold. The relevant question is whether the submitted information demonstrates, in principle, that infiltration drainage is feasible and adequately designed. It plainly does.

BRE Digest 365 is guidance, not statute. Schedule 3 of the Flood and Water Management Act 2010, which would make SuDS standards statutory, has not been commenced in England. No legislative provision mandates strict BRE DG 365 procedural compliance as a condition of planning permission. Arun District Council's own Infiltration Testing Guidance Note (October 2025), footnote [vi], states: "*Where it is not possible to complete consecutive tests on the same day, then testing on consecutive days will be accepted.*" The testing was conducted in the Council's preferred season.

Three BRE DG 365 Fills Were Completed — The Procedure Was Followed

The officer has characterised the testing as non-compliant. This is factually incorrect. Three fills of the same trial pit were conducted in late February and early March 2025, each reaching the required 25% drain level. The results are confirmed and calculated in full in the Meridian Civil Engineering Consultancy (MCEC) calculation spreadsheets (Appendix III, ref. MC0779). The lowest measured rate of 3.10×10^{-6} m/s is used for design in strict accordance with BRE DG 365.

Table 1 — Three-Fill Infiltration Test Data (MCEC Appendix III, pit: 2.10m × 0.75m × 2.10m)

Fill	Date	f (m/s)	t ₇₅ (min)	t ₂₅ (min)	Drain Outcome	Significance
Test 1	26 Feb 2025	6.77 × 10 ⁻⁶	46.4	551.7	Dry 07:30, 27 Feb	First fill — winter-damp soil, unsaturated baseline
Test 2	28 Feb 2025	3.33 × 10 ⁻⁶	52.1	1,080.0	Dry 08:00, 1 Mar	Rate halved — ground progressively saturating
Test 3	3 Mar 2025	3.10 × 10 ⁻⁶	105.0	1,209.2	Dry 08:00, 4 Mar	Rate stabilised — near-saturated; DESIGN VALUE

The sole point of departure from strict BRE DG 365 is that the three fills were conducted with a gap of days between them rather than within a single day. This is the totality of the officer’s objection. The officer is not contending that the fills were incomplete, that the 25% level was not reached, that the arithmetic is wrong, or that the soakaway is undersized. The objection is confined to the calendar interval between fills.

THE OFFICER’S PRECISE OBJECTION — AND WHY IT CANNOT BE SUSTAINED

The three fills were conducted on 26 February, 28 February, and 3 March 2025. The gap between Fill 1 and Fill 2 was two days. The gap between Fill 2 and Fill 3 was three days. Arun District Council’s own Infiltration Testing Guidance Note (October 2025), footnote [vi], states that “testing on consecutive days will be accepted” where same-day testing is not possible. The officer’s guidance therefore already accepts a one-day gap between fills. The officer must now explain — with technical evidence — why a two-day or three-day gap produces an unreliable result when a one-day gap does not. No such technical distinction exists. The measured data makes this plain: the infiltration rate fell from 6.77 × 10⁻⁶ m/s (26 Feb) to 3.33 × 10⁻⁶ m/s (28 Feb) to 3.10 × 10⁻⁶ m/s (3 Mar) — a stabilising, saturated trend that confirms the longer intervals between fills did not produce an optimistic result. They produced a more conservative one.

The Specific Gaps Between Fills — And Why They Strengthen, Not Undermine, the Data
BRE DG 365 requires three fills to progressively saturate the soil, driving the measured rate toward the true saturated hydraulic conductivity. This is precisely what occurred across the three test dates:

26 February (Fill 1): f = 6.77 × 10⁻⁶ m/s. Ground is winter-damp but the pit has not been previously wetted. This is the highest and least conservative result.

28 February (Fill 2, two days later): f = 3.33 × 10⁻⁶ m/s. The rate has fallen by 51%. In the two days between fills, the pit walls remained wet, winter rainfall continued, and the surrounding soil absorbed further moisture. The ground is markedly more saturated than at Fill 1.

3 March (Fill 3, three days later): f = 3.10 × 10⁻⁶ m/s. The rate has stabilised, falling only a further 6% from Fill 2. This plateau is the hallmark of a soil approaching its saturated hydraulic conductivity — the condition BRE DG 365 seeks to measure. The three-day gap between fills, during which winter rainfall continued, enhanced rather than diminished this saturation effect.

The officer’s guidance accepts a one-day gap. The officer must now explain — with technical evidence — why a two-day or three-day gap produces an unreliable infiltration rate when a one-day gap does not. No such technical explanation exists. The longer the interval, the more moisture the

surrounding soil absorbs between fills, and the more conservative the result. The data itself proves this: a 51% rate reduction between Fill 1 and Fill 2 demonstrates that the two-day interval drove the soil to a more saturated state, not a less saturated one.

The officer’s stated concern — that non-consecutive testing overstates infiltration rate — is demonstrably incorrect on this site. The data shows the opposite: a declining, stabilising trend, with the lowest and most conservative rate recorded at the final fill. The design uses that lowest rate. The objection has no technical foundation.

The Soakaway Design is Fully Calculated and Passes All Events

On the basis of the infiltration data, MCEC have designed a 2.5m × 8.0m × 0.8m deep geocellular soakaway per plot (porosity 0.95), serving a 144m² roof area. The design has been modelled in Flow+ v15.0 using FEH-22 rainfall methodology, with an appropriate safety factor applied. Full calculations are contained in Appendix I of the submitted MCEC report (ref. MC0779).

Table 2 — Hydraulic Performance (MCEC Flow+ v15.0, ref. MC0779 Appendix I)

Design Event	Peak Depth	Soakaway Depth	Flood	Result
1-in-1 year	0.038m	0.8m	0	OK
1-in-30 year	0.350m	0.8m	0	OK
1-in-100 year	0.453m	0.8m	0	OK
1-in-100 year +45% CC	0.685m	0.8m	0	PASS — 115mm freeboard
Half-drain (30yr storm)	1,125 mins	1,440 mins	n/a	PASS — within 24 hours

The soakaway passes the critical **1-in-100-year +45% climate change** event with freeboard remaining. No flooding occurs at any return period. **The National SuDS Standards half-drain criterion is met** — full calculations are set out in Appendix IV of the MCEC report. MCEC also tested shallower alternatives (1.2m and 1.6m depth soakaways) and demonstrated these fail the half-drain criterion (Appendix V), confirming the 0.8m shallow-plan-area design is the technically correct solution for this site and infiltration rate.

Permeable paving: Hardstanding areas are designed as permeable pavement (Appendix VI, ref. MC0779). The system passes all events including 1-in-100-year +45%CC.

The officer’s objection to the interval between test fills does not engage with any of these calculated outputs. The hydraulic performance of the design is not in dispute. The design is complete, submitted, and passing. The sole objection is to the calendar dates on which the three test fills were conducted.

Groundwater Separation is Confirmed With Substantial Margin

Six winter monitoring visits (October 2024 – March 2025) confirmed no groundwater in TP4 (excavated to 4.3m bgl). The Highest Likely Groundwater Level is conservatively assessed at greater than **4.19m bgl**. The soakaway base sits at approximately 0.8m bgl, giving a clearance of more than **3.4m — over three times the 1.0m BRE DG 365 minimum**. Full monitoring records are set out in Appendix VII of the submitted MCEC report.

We additionally advise the officer that BRE Digest 365 **winter groundwater monitoring was previously undertaken at this site on behalf of the former site owner**. We have formally requested the documentation from our archives and will forward to the council shortly. This earlier monitoring is

expected to provide independent corroboration of the site’s groundwater conditions and its suitability for infiltration drainage, further strengthening the case for approval.

The Development Represents a Clear Betterment

The existing site is almost entirely impermeable buildings and hardstanding. Surface water is currently unmanaged. The proposed development removes all impermeable surfacing and introduces soakaways, permeable paving, and landscaped gardens — a substantial improvement in surface water management, directly consistent with the drainage hierarchy in NPPF paragraph 182 and the SuDS objectives of Arun District Council and West Sussex County Council as LLFA.

The Council’s Procedural Position and Appeal Consequences

FORMAL NOTICE: APPEAL AND COSTS

The applicant wishes to put the Council formally on notice that should the application be refused, an appeal will be lodged immediately under section 78 of the Town and Country Planning Act 1990. A costs application will accompany that appeal, citing the Council’s conduct as unreasonable behaviour under the Planning Practice Guidance (PPG) on Costs Awards in Planning Appeals.

Pre-application advice: The officer has placed weight on the absence of pre-application advice. This is not a statutory requirement, and the PPG does not permit refusal to be recommended on this ground alone. NPPF paragraph 40 encourages pre-application engagement but makes clear it is a matter for the applicant, not a condition precedent to determination.

Refusal of extension of time: The officer has declined to invite submission of further details within the current application and has refused any extension of time, directing the applicant to withdraw and resubmit after February 2027. This would impose significant additional cost and delay on the applicant for a development that is technically sound. PPG paragraph 049 identifies “*preventing or delaying development which should clearly be permitted*” as an example of unreasonable behaviour capable of giving rise to a costs award.

Failure to engage on a resolution: Despite the applicant presenting a complete hydraulic design and calculation package, together with six-visit winter groundwater monitoring, the officer has not substantively engaged with the technical merits of the submitted information but has instead directed withdrawal. The PPG identifies resistance to co-operation and failure to engage with the substance of the evidence as examples of unreasonable behaviour. Refusal to accept supplementary documents — particularly where the officer acknowledges the groundwater data is acceptable in substance — is inconsistent with the positive, proactive approach to decision-making the NPPF expects at paragraph 38.

Substantive unreasonableness: PPG paragraph 049 states that local planning authorities are at risk of a costs award where they “*unreasonably refuse planning applications.*” The grounds proposed for refusal — procedural deviation from a guidance document by which three fills were nonetheless completed and calculated — are not supported by technical evidence. The PPG further identifies “*failure to produce evidence to substantiate each reason for refusal*” as a form of unreasonable behaviour. We respectfully submit that the officer cannot produce technical evidence that the design rate is unsafe, because the progressive saturation data demonstrates the opposite.

We put the Council on notice that a costs claim will be submitted to the Planning Inspectorate alongside any appeal, citing: (i) failure to engage proactively in accordance with NPPF paragraph 38; (ii) refusal to grant any extension of time or allow supplementary technical submissions within the current application; (iii) the direction to withdraw and resubmit at significant cost and delay to the applicant; and (iv) the substantive absence of technical evidence to support the proposed reason for refusal. The applicant will seek a full award of appeal costs and, where appropriate, any additional remedies available to it.

Yours faithfully,

LM Associates Ltd