

Our Ref: 260209

11 March 2026

Mr J Edwards,
Silverwood,
Wick Hill Lane,
Finchampstead,
Wokingham,
Berkshire,
RG40 3PZ

BRE 365 Soakaway Assessment – Silverwood, Wick Hill Lane, Finchampstead, Wokingham, Berkshire, RG40 3PZ

Scope and Objectives

Clear Environmental Limited (Clear) was commissioned by Mr J Edwards (the 'Client') to undertake a BRE 365 Soakaway Assessment at Silverwood, Wick Hill Lane, Finchampstead, Wokingham, Berkshire, RG40 3PZ (hereafter referred to as the 'site').

Purpose of Works

The purpose of this report is to provide information on the underlying ground conditions, infiltration rates and groundwater regime to assess the viability of infiltration and to inform future drainage design.

Scope of Works

- ≡ Progression of 1No. mechanically excavated trial pits to a maximum depth of 1.50m below ground level (bgl);
- ≡ Undertake 1No. Soakaway Tests in general accordance with BRE 365 guidance.
- ≡ Install 1No. Windowless Sample Borehole to allow monitoring of groundwater levels.
- ≡ Provision of a factual and interpretive report providing the calculated infiltration rates and records of ground conditions.

Limitations

This report presents Clear's observations, findings, and conclusions based on the information available and site conditions as understood at the time of reporting. These findings may be subject to change should material new information become available following the date of issue.

This report has been prepared specifically for the Client. It may not be relied upon by any other party without Clear's prior written agreement, which will typically require the execution of a reliance letter incorporating our standard terms and conditions. Where reliance has been granted to third parties, this will be noted in the report.

Site Constraints

Soakaway testing was undertaken in general accordance with BRE Digest 365. Trial pits were excavated and filled with water to assess the infiltration rates.

Results reflect conditions at the test locations only and may not represent the wider site. Variations in soil type, groundwater or compaction could affect soakaway performance and should be considered in design.

Due to the observed infiltration characteristics, TP01 could not be refilled the additional two times recommended within the guidance.

Site Location

A site location plan is presented below.



Figure 1: Site Location Plan

Ground Conditions

Ground Conditions Encountered

The ground conditions encountered during the excavation of the trial pit and borehole are summarised below. An Exploratory Hole Location Plan is presented in Enclosure I.

Trial pit and borehole logs are presented in Enclosure II.

Strata Description	Top Depth (m bgl)	Bottom Depth (m bgl)	Thickness (m)
Made Ground	Ground Level	0.30 – 1.00	0.30 – 1.00
Windlesham Formation	0.30 – 1.00	>3.00	>2.00 (Full depth not proven)

Made Ground

Made Ground was encountered in both exploratory hole locations comprising brown sandy gravel. Gravels were angular to sub-rounded redbrick and concrete between ground level and 1.00m below ground level (bgl).

Bedrock Deposits - Windlesham Formation

The Windlesham Formation was then recorded beneath the Made Ground comprising grey / orangish brown silty sand / orangish brown silty clayey sand to a maximum proven depth of 3.00m bgl.

Groundwater

The primary objective of the groundwater monitoring is to establish peak groundwater levels in order to demonstrate the minimum 1.00m freeboard required between peak groundwater levels and the base of any proposed infiltration feature.

During the investigation and subsequent groundwater monitoring visit, the following groundwater levels and seepages were recorded.

Hole ID	Seepage Level (m bgl)	Groundwater Level (m bgl) Monitoring Visit 3/03/2026
WS01	1.10 Seepage recorded during drilling.	0.93 Water was bailed from the borehole and recharge monitored, resting at 0.93m bgl.

Soakaway Testing Results

Soakaway testing was completed in general accordance with BRE 365.

The table below summarises the results, which are also contained as Enclosure III.

Location	Infiltration Rate (ms ⁻¹)		Infiltration Rate
TP01	Test 1	1.77 x 10 ⁻⁶	1.77 x 10 ⁻⁶
	Test 2	N/A	
	Test 3	N/A	

Closing Remarks

Soakaway testing has demonstrated a calculated infiltration rate of 1.77 × 10⁻⁶ m/s based on testing undertaken within the Windlesham Formation at TP01.

Groundwater levels were recorded at 0.93m bgl during monitoring, which indicates that achieving the minimum 1.00m freeboard between peak groundwater levels and the base of any proposed infiltration feature is not feasible.

On this basis, infiltration drainage is considered unsuitable at the site and alternative drainage solutions should be explored as part of the drainage design.

Ben Lawry BSc(Hons) FGS

Director

For and on behalf of Clear Environmental Ltd

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Enclosure I – Exploratory Hole Location Plan



Legend

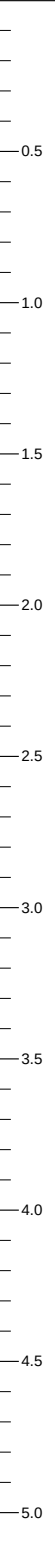
- Borehole
- Trial Pit
- Site Boundary

Figure Title	
Exploratory Hole Location Plan	
Site Location	
Silverwood, Wick Hill Lane, Finchampstead, Wokingham	
Job Number	Figure Number
260209	260209.01
Prepared By	Date
BJL	26/02/2026
Client	
Mr J Edwards	

Enclosure II – Exploratory Hole Logs

Hole Type TP	Easting	Northing	Ground Level (m)	Scale 1:25
Project Name Silverwood, Wokingham	Project No. 260209	Start Date 2026-02-25	End Date 2026-02-25	

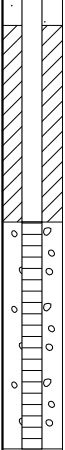
Client Mr J Edwards	Consultant Clear Environmental Limited	Contractor
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Inst/ Backfill	Water Levels	Samples and Tests			Level (m)	Depth (m) (thickness)	Strata		
		Depth (m)	Type/ Ref	Results			Legend	Description	
						(0.30)		MADE GROUND: Brown sandy gravel. Sand is fine to coarse. Gravel is angular to sub-rounded redbrick and concrete.	
						0.30		Grey silty SAND. Sand is fine to coarse.	
						(0.20)			
						0.50		Orangish brown silty SAND. Sand is fine to coarse.	
						(0.70)			
						1.20			
						(0.30)		Orangish brown silty clayey SAND. Sand is fine to coarse.	
						1.50			
								End of Trial Pit at 1.50m	

Remarks 1) All recorded strengths and densities based on visual observations of ease of excavation. 2) No direct visual or olfactory evidence of mobile contamination. 3) Groundwater was not encountered. 4) Trial pit terminated at 1.5m. 5) On completion, the trial pit was backfilled with arisings and made safe at the surface. 6) In-situ soakaway test undertaken in pit ...	Method, Plant, Stability, Dimensions 0.00 - 1.50m TP Stable  L = 1.00m W = 0.30m	Logger BL
	Checked By: BL Approved By: BL	

Hole Type WS	Easting	Northing	Ground Level (m)	Scale 1:50
Project Name Silverwood, Wokingham	Project No. 260209	Start Date 2026-02-25	End Date 2026-02-25	

Client Mr J Edwards	Consultant Clear Environmental Limited	Contractor
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Inst/ Backfill	Water Levels	Samples and Tests			Level (m)	Depth (m) (thickness)	Strata		
		Depth (m)	Type/ Ref	Results			Legend	Description	
						(1.00)		MADE GROUND: Brown sandy gravel. Sand is fine to coarse. Gravel is angular to sub-rounded redbrick and concrete.	0.5
						1.00 (0.20)		Orangish brown silty SAND. Sand is fine to coarse.	1.0
						1.20 (0.30)		Orangish brown silty clayey SAND. Sand is fine to coarse.	1.5
						1.50		Orangish brown silty SAND. Sand is fine to coarse.	2.0
						(1.50)			2.5
						3.00		End of Borehole at 3.00m	3.0
									3.5
									4.0
									4.5
									5.0
									5.5
									6.0
									6.5
									7.0
									7.5
									8.0
									8.5
									9.0
									9.5
									10.0

Remarks 1) All recorded strengths and densities based on visual observations of ease of excavation. 2) No direct visual or olfactory evidence of mobile contamination. 3) Groundwater seepage noted at 1.10m 4) Borehole terminated at 3m. 5) On completion, theborehole was installed with a 50mm standpipe.	Method, Plant, Stability, Dimensions	Logger
Checked By: BL Approved By: BL		



Window Sampler

WS01

SUPPLEMENTARY INFO

Hole Type WS	Easting	Northing	Ground Level (m)	Scale 1:50
Project Name Silverwood, Wokingham	Project No. 260209	Start Date 2026-02-25	End Date 2026-02-25	

Client Mr J Edwards	Consultant Clear Environmental Limited	Contractor
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Water Strike - General

Struck (m)	Seal Depth (m)	Casing Depth (m)	Date and Time	Remarks
1.10				

Remarks 1) All recorded strengths and densities based on visual observations of ease of excavation. 2) No direct visual or olfactory evidence of mobile contamination. 3) Groundwater seepage noted at 1.10m 4) Borehole terminated at 3m. 5) On completion, the borehole was installed with a 50mm standpipe.	Method, Plant, Stability, Dimensions Logger
Checked By: BL Approved By: BL	

Enclosure III – BRE 365 Soakaway Test Results



Project Number	260209	Location	TP01
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Calculated Infiltration Rate (ms⁻¹) = 1.77E-06

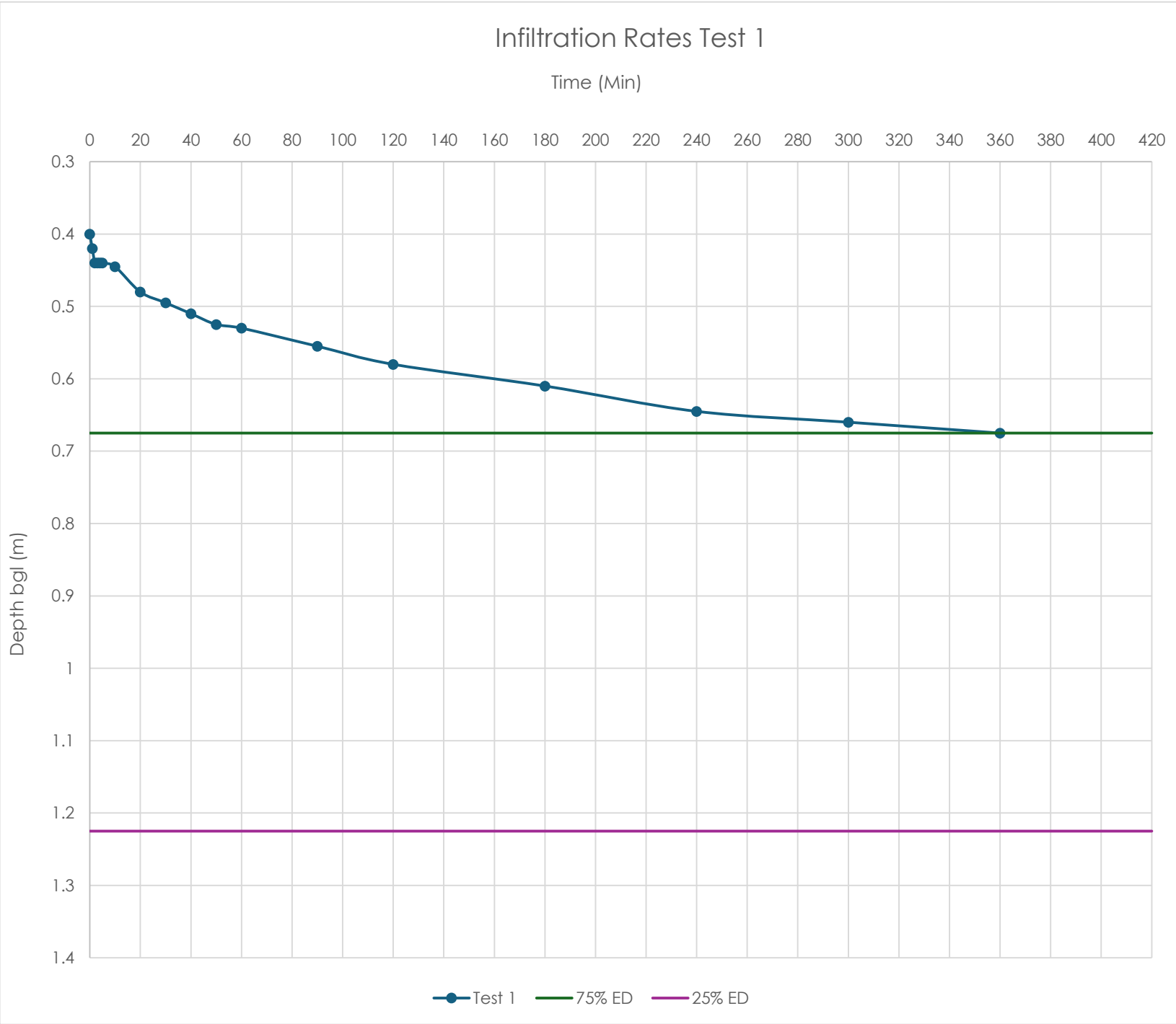
Time (min)	Water Level bgl (m)		
	Test No.		
	Test 1	Test 2	Test 3
0	0.40		
1	0.42		
2	0.44		
3	0.44		
4	0.44		
5	0.44		
10	0.45		
20	0.48		
30	0.50		
40	0.51		
50	0.53		
60	0.53		
90	0.56		
120	0.58		
180	0.61		
240	0.65		
300	0.66		
360	0.68		

Notes
Soakaway testing was undertaken in general accordance with BRE Digest 365. A trial pit was excavated and filled with water to assess the infiltration rates.

Results reflect conditions at the test location only and may not represent the wider site. Variations in soil type, groundwater or compaction could affect soakaway performance and should be considered in design.

Results were extrapolated due to time constraints on site.

Test 1 Rate	Test 2 Rate	Test 3 Rate
1.77E-06	0.00E+00	0.00E+00



Pit Width (m)	0.3	Pit Length (m)	1	Pit Depth (m)	1.5
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Guidance / Limitations

Soakaway testing is undertaken in accordance with BRE Digest 365 (2016). Testing typically comprises the excavation of a trial pit to the proposed formation level, followed by controlled filling and monitoring of water levels over time to calculate the infiltration rate.

Where boreholes are utilised, permeability testing (falling head or rising head) is carried out in accordance with **BS 5930** to provide supporting geotechnical data.

If infiltration drainage is progressed, the following key design and risk considerations should be addressed:

- **Ground contamination:** Soakaways should not discharge through potentially contaminated Made Ground. This must be assessed at the site investigation stage to avoid mobilising contaminants and creating a controlled waters risk.
- **Environment Agency requirements:** In some settings, soakaways may need to operate as sealed systems accepting roof water only.
- **Highway drainage:** Interceptors are typically required for highway runoff. The adopting authority should be consulted at an early stage to confirm acceptance of infiltration proposals.
- **Groundwater protection:** The base of the soakaway must not be located below the highest recorded groundwater level. As good practice, a minimum of 1m of unsaturated soil should be maintained beneath the soakaway base to provide attenuation and protect underlying aquifers.
- **Building proximity:** Soakaways should not be located within 5m of buildings.
- **Topography and levels:** Site levels and slopes must be considered to prevent ponding or uncontrolled down-slope discharge.
- **Regulatory compliance:** Construction must comply with current Building Regulations Part H and associated guidance.

Limitations

This report has been prepared solely for the named Client and for the specific site and purpose described. It should not be relied upon for any other use without written agreement from Clear Environmental Limited.

The assessment is based on information available at the time of writing, including site investigation data, desk study information and third-party records. We cannot guarantee the accuracy or completeness of third-party data.

Ground conditions are inherently variable. Observations and test results relate only to the specific locations and depths investigated. Conditions between or beyond these points may differ.

Infiltration rates derived from BRE 365 testing represent conditions at the time of testing only and may vary due to seasonal groundwater fluctuations, soil moisture conditions, weather patterns or future site disturbance.

Groundwater levels recorded during the investigation reflect conditions at the time of measurement only. No long-term monitoring has been undertaken unless explicitly stated.

The report does not constitute a detailed contamination risk assessment unless expressly stated. If unexpected contamination, Made Ground, groundwater or unusual ground conditions are encountered during construction, works should cease and specialist advice sought.

Recommendations are based on the proposed development layout and levels provided at the time of instruction. Changes to site levels, formation depths, drainage layout or building design may require reassessment.

Final approval of drainage proposals remains subject to acceptance by the relevant statutory bodies (e.g. Local Planning Authority, Lead Local Flood Authority, Environment Agency or Highway Authority where applicable).

This report provides geotechnical and/or environmental parameters for design purposes only. Detailed structural design, sizing calculations and construction methodology remain the responsibility of the appointed designer and contractor.

No warranty is provided that the investigation has identified all potential subsurface obstructions, buried services, voids or anomalous features. Service searches and appropriate safe digging practices remain the responsibility of the contractor.

Clear Environmental Limited accepts no liability for use of this report by third parties unless expressly agreed in writing.

This report does not constitute verification of the suitability, design, construction or performance of any existing soakaway system.