

Report No	Date
26008/R1	April 2026
Project CEFN LODGE CARE HOME, SKEWEN – SOAKAWAY INFILTRATION INVESTIGATION	
Client	BP Khanal

**Spectrum Geo Services
Foxglove Cottage,
Cwm Risca Lane,
Tondu,
BRIDGEND
CF32 0EH**

Report No:	Date:
26008/R1	April 2026

Project:
CEFN LODGE CARE HOME, SKEWEN – SOAKAWAY INFILTRATION INVESTIGATION

Issue Number	Status	Description of Amendments
1	Draft	

Report prepared by:
Signed  April 2026

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1.0 INTRODUCTION

1.1 Introduction

Spectrum Geo Services (SGS) were requested by BP Khanal to undertake a series of soakaway tests at a site adjacent to an existing care home in Skewen, Swansea.

The site is situated at 16 Cefn Parc, Skewen, Neath, SA10 6YR. The existing site comprised a sloping grassed area, adjacent to Cefn Lodge.

1.2 Scope of Works

The objectives of this assessment are to investigate the Infiltration Rates by BRE Digest soakaway testing at 5 locations, as directed by others.

1.3 Limitations

Subsoils are inherently variable and by their very nature are hidden from view such that no investigation can be exhaustive to the extent that all soil conditions are revealed. Conditions may therefore be present beneath the site that were not apparent from the data available for review.

Unless specifically noted to the contrary, it should be assumed that this report has not been submitted to any regulatory authorities for approval. Redevelopment sites in particular may have planning conditions attached in respect of contaminated land assessment. Where we are made aware of such conditions in advance of scoping the works, we can tailor the report to the regulatory authority requirements. Where we are not made aware of any such requirements there can be no certainty that our investigation will meet any or all of the regulatory authority requirements.

2.0 EXISTING SITE INFORMATION

2.1 Site Location

The site is situated on the eastern side of Cefnparc Road, Skewen, SA10 6YR.

The site comprised a rough vegetated area, immediately to the east of an existing Car Home.

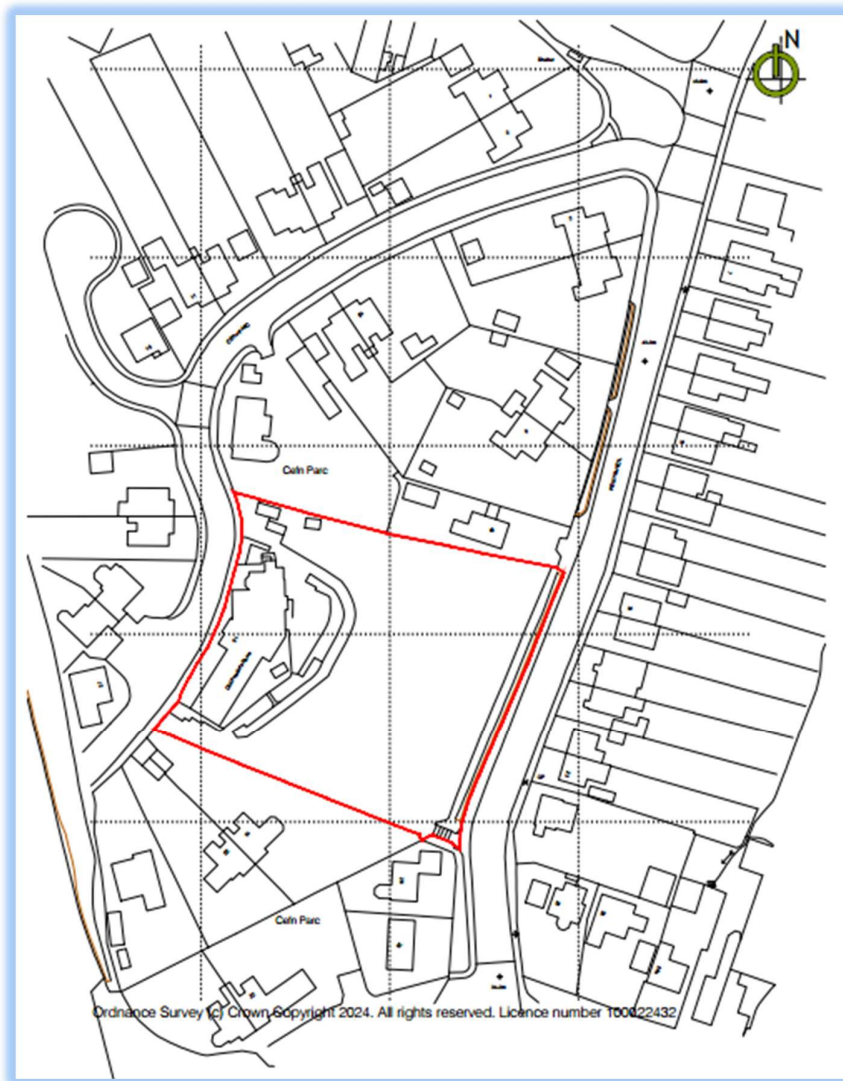


Figure 01.

3.0 SGS SITE OPERATIONS

3.1 Site Works

Site works comprised BRE Digest Soakaway tests and machine dug trial pits. These were made on 01 and 02 April 2026. The positions are shown on Drawing 26008/Locs.

Logs are shown in Appendix B.

4.0 SITE CONDITIONS ENCOUNTERED

4.1 Ground Conditions

During both ground investigations, a generalised succession as was noted, indicated in Table 4.1.

Stratum	Depth to base (m)	Remarks
MADE GROUND. Macadam	0.10	SA1 and 4
MADE GROUND. Sand and Gravel	0.20	SA4
CLAY	(1.50)	SA1 and 4
SAND/GRAVEL	(1.40) to (1.50)	SA2,3 and 5

Table 4.1. Generalised Strata

4.2 Groundwater Conditions

Water strikes were not noted.

It should be noted that groundwater levels vary due to changes in climatic and other conditions and may therefore vary from those recorded during these operations.

5.0 IN-SITU TESTING

BRE Digest Soakaway Testing was undertaken at 5 locations, determined by the project architect.

The results are appended.

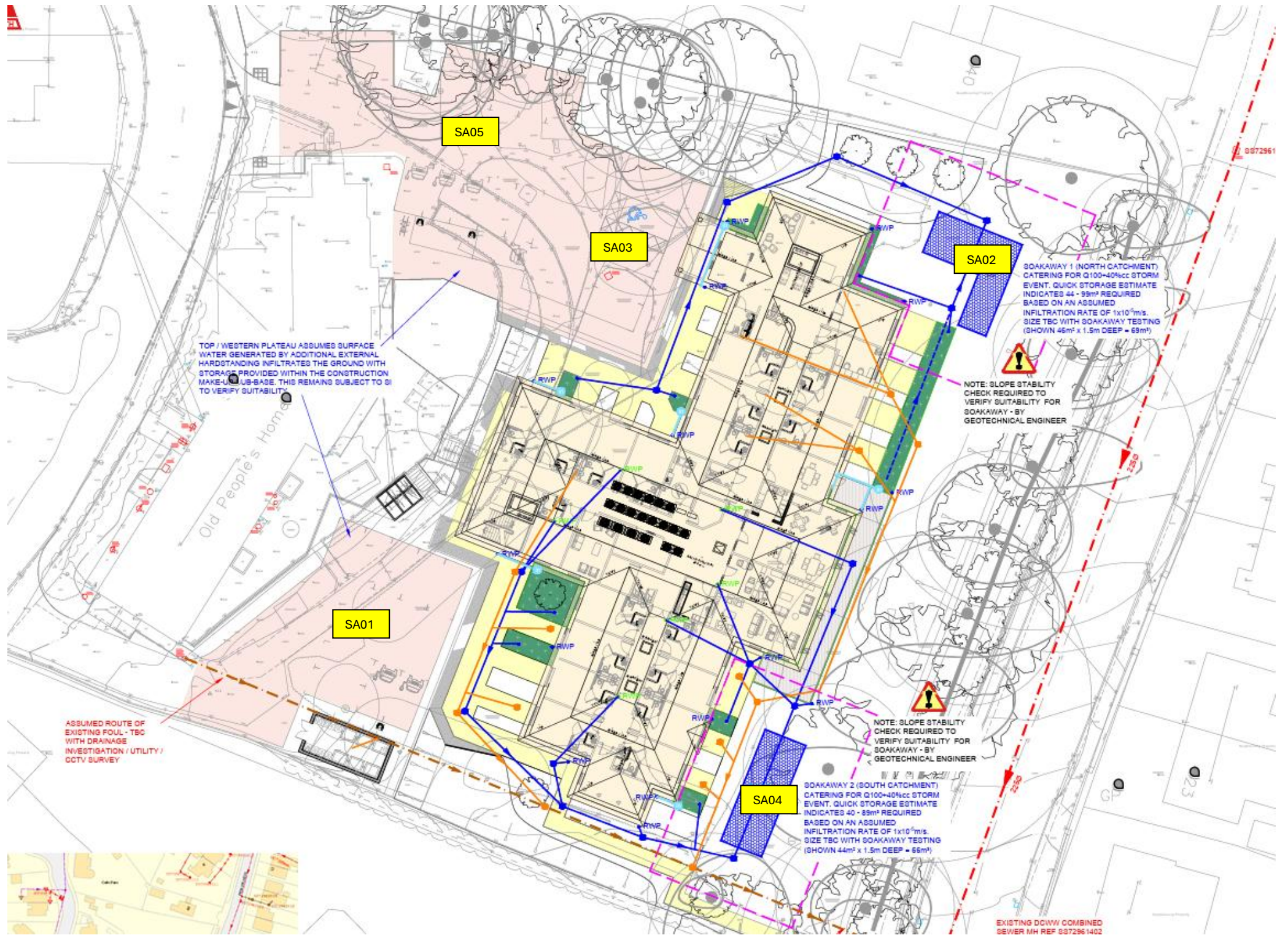
None of the tests achieved sufficient drawdown to allow calculation of infiltration rates (If values).

APPENDIX A

Drawings

Borehole Location Plan

Drawing 26008_Locs



APPENDIX B

Trial Pit Logs

Face Sketch (Indicate stratum boundaries, codes and Face(s) sketched, use additional sheets as required)

The diagram shows a large rectangular area divided into four vertical columns by three vertical lines. The leftmost and rightmost columns have short horizontal tick marks along their outer vertical edges, indicating measurement points or boundaries. The entire area is intended for a 'Face Sketch' as indicated by the text above it.

Groundwater Observations None	Strike of Face A		deg	
	Length of Face A	1	m	
	Width of Face B	0.4	m	
Method/plant	2.50 ton tracked excavator		Infiltration test at this location	
Stability	Stable			
Shoring	None			
Weather	Dry overcast			
Sample Type:			Logger's Signature PL	
U Undisturbed, P Piston, D Disturbed, B Bulk, W Water				
ES Environmental Soil Sample EW Environmental Water Sample				

Project	Cefn Lodge	Project No	26008
Described by	PL	Trial Pit No	SA02
Date	02.04.2026	Sheet No	1 of 3

Face Sketch (Indicate stratum boundaries, codes and Face(s) sketched, use additional sheets as required)

[illegible][illegible]

Groundwater Observations None	Strike of Face A		deg	
	Length of Face A	1.1	m	
	Width of Face B	0.3	m	
Method/plant	2.50 ton tracked excavator		Infiltration test at this location	
Stability	Stable			
Shoring	None			
Weather	Dry overcast			
Sample Type:	U Undisturbed, P Piston, D Disturbed, B Bulk, W Water ES Environmental Soil Sample EW Environmental Water Sample		Logger's Signature	
			PL	

Project	Cefn Lodge	Project No	26008
Described by	PL	Trial Pit No	SA03
Date	01.04.2026	Sheet No	1 of 3

Face Sketch (Indicate stratum boundaries, codes and Face(s) sketched, use additional sheets as required)

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[illegible]

Groundwater Observations None	Strike of Face A		deg	
	Length of Face A	1.1	m	
	Width of Face B	0.3	m	
Method/plant	2.50 ton tracked excavator		Infiltration test at this location	
Stability	Stable			
Shoring	None			
Weather	Dry overcast			
Sample Type:	U Undisturbed, P Piston, D Disturbed, B Bulk, W Water ES Environmental Soil Sample EW Environmental Water Sample		Logger's Signature	
			PL	

Project	Cefn Lodge	Project No	26008
Described by	PL	Trial Pit No	SA04
Date	01.04.2026	Sheet No	1 of 3

Face Sketch (Indicate stratum boundaries, codes and Face(s) sketched, use additional sheets as required)

[illegible][illegible]

Groundwater Observations None	Strike of Face A		deg	
	Length of Face A	1	m	
	Width of Face B	0.3	m	
Method/plant	2.50 ton tracked excavator		Infiltration test at this location	
Stability	Stable			
Shoring	None			
Weather	Dry overcast			
Sample Type:			Logger's Signature PL	
U Undisturbed, P Piston, D Disturbed, B Bulk, W Water				
ES Environmental Soil Sample EW Environmental Water Sample				

Face Sketch (Indicate stratum boundaries, codes and Face(s) sketched, use additional sheets as required)

The diagram shows a large rectangular area divided into four vertical columns by three vertical lines. The leftmost and rightmost columns have short horizontal tick marks along their outer vertical edges, indicating measurement points or boundaries. The entire area is intended for a 'Face Sketch' as indicated by the text above it.

Groundwater Observations None	Strike of Face A		deg	
	Length of Face A	1	m	
	Width of Face B	0.3	m	
Method/plant	2.50 ton tracked excavator		Infiltration test at this location	
Stability	Stable			
Shoring	None			
Weather	Dry overcast			
Sample Type:			Logger's Signature PL	
U Undisturbed, P Piston, D Disturbed, B Bulk, W Water				
ES Environmental Soil Sample EW Environmental Water Sample				

APPENDIX C

In-Situ Testing

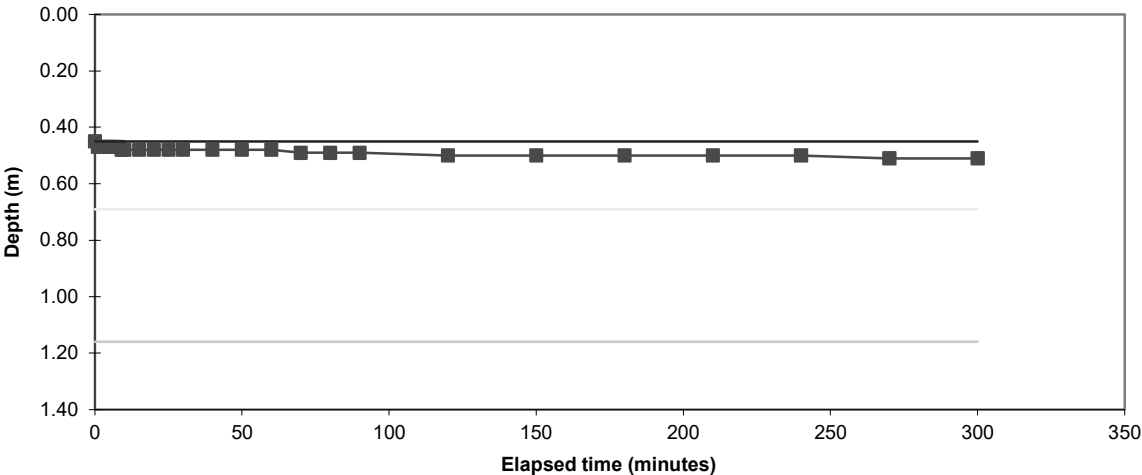
Soakaway Test Results

Trial Pit No: SA01
Length (m): 1.00
Width (m): 0.40
Depth (m): 1.40

Test No: 1
Granular infill: NA
Porosity of infill: 1 (assumed)

Date: 02.04.2026

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.45	30	0.48
1	0.47	40	0.48
2	0.47	50	0.48
3	0.47	60	0.48
4	0.47	70	0.49
5	0.47	80	0.49
6	0.47	90	0.49
7	0.47	120	0.50
8	0.47	150	0.50
9	0.48	180	0.50
10	0.48	210	0.50
15	0.48	240	0.50
20	0.48	270	0.51
25	0.48	300	0.51



Water depth at start of test (m): 0.45
75% effective depth (m): 0.69
50% effective depth (m): 0.93
25% effective depth (m): 1.16
Empty depth (m): 1.40

Elapsed time (mins): 405.9
Elapsed time (mins): 682.4

Volume outflow between 75% and 25% effective depth (m³):
Mean surface area of outflow (m²): 1.72
(side area at 50% effective depth + base area)
Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s):

Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate

Remarks

Soakaway Test Results

Trial Pit No: SA01

Test No: 2

Date: 02.04.2026

Length (m): 1.00

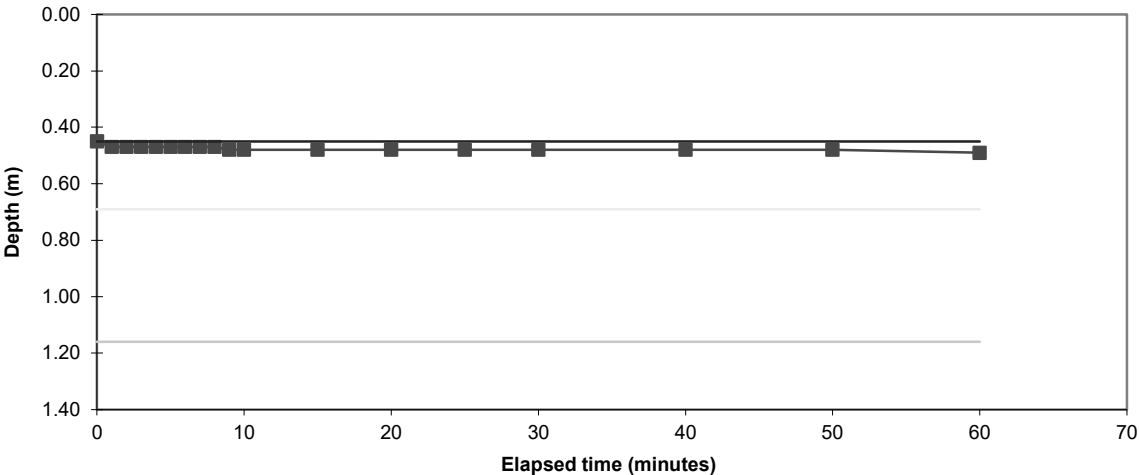
Width (m): 0.40

Depth (m): 1.40

Granular infill: NA

Porosity of infill: 1 (assumed)

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.45	30	0.48
1	0.47	40	0.48
2	0.47	50	0.48
3	0.47	60	0.49
4	0.47		
5	0.47		
6	0.47		
7	0.47		
8	0.47		
9	0.48		
10	0.48		
15	0.48		
20	0.48		
25	0.48		



Water depth at start of test (m): 0.45

75% effective depth (m): 0.69

50% effective depth (m): 0.93

25% effective depth (m): 1.16

Empty depth (m): 1.40

Elapsed time (mins): #N/A

Elapsed time (mins): #N/A

Volume outflow between 75% and 25% effective depth (m³):

Mean surface area of outflow (m²): 1.72

(side area at 50% effective depth + base area)

Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s):

Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate

Remarks

Notes:
Results processed following BRE 365 (1991)
Water depths measured below ground level

Project Cefn Lodge
Project No. 26008
Carried out for

Figure
SA01_2

Soakaway Test Results

Trial Pit No:	SA01	Test No:	3	Date:	02.04.2026
Length (m):	1.00	Granular infill: NA			
Width (m):	0.40	Porosity of infill: 1 (assumed)			
Depth (m):	1.40				

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.46	30	0.48
1	0.46	40	0.48
2	0.46	50	0.49
3	0.47	60	0.49
4	0.47		
5	0.47		
6	0.47		
7	0.47		
8	0.47		
9	0.48		
10	0.48		
15	0.48		
20	0.48		
25	0.48		

Elapsed time (minutes)	Water Depth (metres)
0	0.46
1	0.46
2	0.46
3	0.47
4	0.47
5	0.47
6	0.47
7	0.47
8	0.47
9	0.48
10	0.48
15	0.48
20	0.48
25	0.48
30	0.48
40	0.48
50	0.49
60	0.49

Water depth at start of test (m):	0.46	Elapsed time (mins):	#N/A
75% effective depth (m):	0.70	Elapsed time (mins):	#N/A
50% effective depth (m):	0.93		
25% effective depth (m):	1.17		
Empty depth (m):	1.40		

Volume outflow between 75% and 25% effective depth (m³):

Mean surface area of outflow (m²): 1.72
 (side area at 50% effective depth + base area)

Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s): **Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate**

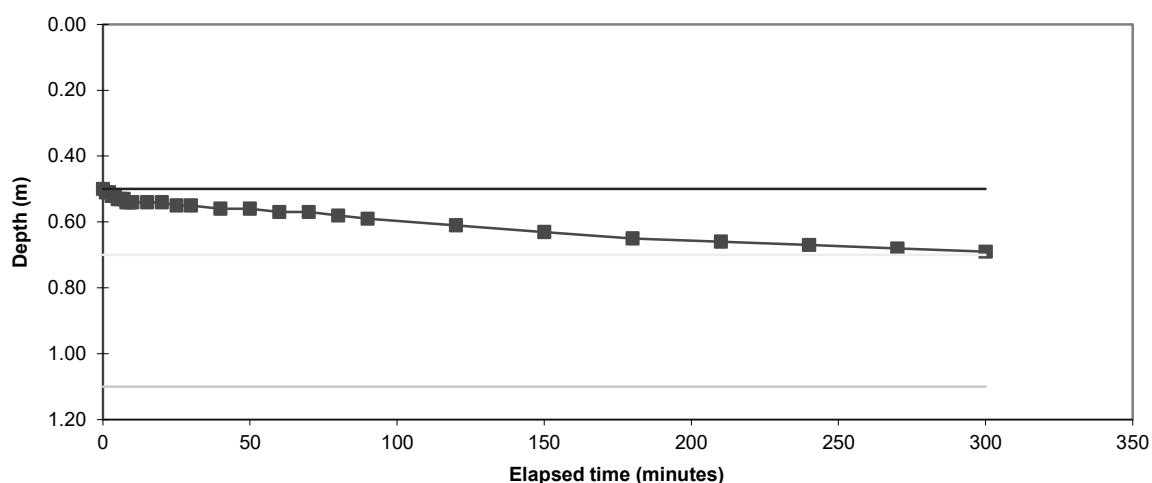
Remarks

Notes: Results processed following BRE 365 (1991) Water depths measured below ground level	Project Project No. Carried out for	Cefn Lodge 26008	Figure SA01_3
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Soakaway Test Results

Trial Pit No: SA02 Test No: 1 Date: 02.04.2026
 Length (m): 1.10
 Width (m): 0.30 Granular infill: NA
 Depth (m): 1.30 Porosity of infill: 1 (assumed)

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.50	30	0.55
1	0.51	40	0.56
2	0.51	50	0.56
3	0.52	60	0.57
4	0.52	70	0.57
5	0.53	80	0.58
6	0.53	90	0.59
7	0.53	120	0.61
8	0.54	150	0.63
9	0.54	180	0.65
10	0.54	210	0.66
15	0.54	240	0.67
20	0.54	270	0.68
25	0.55	300	0.69



Water depth at start of test (m): 0.50
 75% effective depth (m): 0.70 Elapsed time (mins): 304.3
 50% effective depth (m): 0.90
 25% effective depth (m): 1.10 Elapsed time (mins): 478.3
 Empty depth (m): 1.30

Volume outflow between 75% and 25% effective depth (m³):
 Mean surface area of outflow (m²): 1.45
 (side area at 50% effective depth + base area)
 Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s): **Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate**

Remarks

Notes:
 Results processed following BRE 365 (1991)
 Water depths measured below ground level

Project Cefn Lodge
 Project No. 26008
 Carried out for

Figure
SA02_1

Soakaway Test Results

Trial Pit No:	SA02	Test No:	2	Date:	02.04.2026
Length (m):	1.10				
Width (m):	0.30	Granular infill: NA			
Depth (m):	1.30	Porosity of infill: 1 (assumed)			

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.51	30	0.55
1	0.51	40	0.55
2	0.51	50	0.56
3	0.52	60	0.57
4	0.52		
5	0.52		
6	0.53		
7	0.53		
8	0.54		
9	0.54		
10	0.54		
15	0.54		
20	0.54		
25	0.54		

Elapsed time (minutes)	Water Depth (metres)
0	0.51
1	0.51
2	0.51
3	0.52
4	0.52
5	0.52
6	0.53
7	0.53
8	0.54
9	0.54
10	0.54
15	0.54
20	0.54
25	0.54
30	0.55
40	0.55
50	0.56
60	0.57

Water depth at start of test (m):	0.51	Elapsed time (mins):	#N/A
75% effective depth (m):	0.71	Elapsed time (mins):	#N/A
50% effective depth (m):	0.91		
25% effective depth (m):	1.10		
Empty depth (m):	1.30		

Volume outflow between 75% and 25% effective depth (m³):

Mean surface area of outflow (m²): 1.42

(side area at 50% effective depth + base area)

Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s):

Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate

Remarks

Notes: Results processed following BRE 365 (1991) Water depths measured below ground level	Project Project No. Carried out for	Cefn Lodge 26008	Figure SA02_2
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Soakaway Test Results

Trial Pit No: SA02

Test No: 3

Date: 02.04.2026

Length (m): 1.10

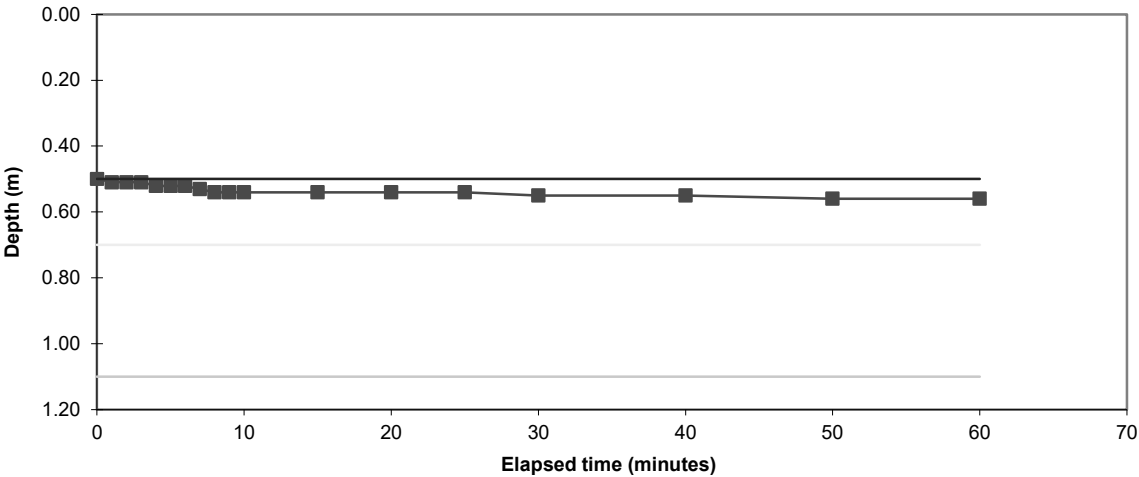
Width (m): 0.30

Depth (m): 1.30

Granular infill: NA

Porosity of infill: 1 (assumed)

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.50	30	0.55
1	0.51	40	0.55
2	0.51	50	0.56
3	0.51	60	0.56
4	0.52		
5	0.52		
6	0.52		
7	0.53		
8	0.54		
9	0.54		
10	0.54		
15	0.54		
20	0.54		
25	0.54		



Water depth at start of test (m): 0.50

75% effective depth (m): 0.70

50% effective depth (m): 0.90

25% effective depth (m): 1.10

Empty depth (m): 1.30

Elapsed time (mins): #N/A

Elapsed time (mins): #N/A

Volume outflow between 75% and 25% effective depth (m³):

Mean surface area of outflow (m²): 1.45

(side area at 50% effective depth + base area)

Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s):

Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate

Remarks

Notes:
Results processed following BRE 365 (1991)
Water depths measured below ground level

Project Cefn Lodge
Project No. 26008
Carried out for

Figure
SA02_3

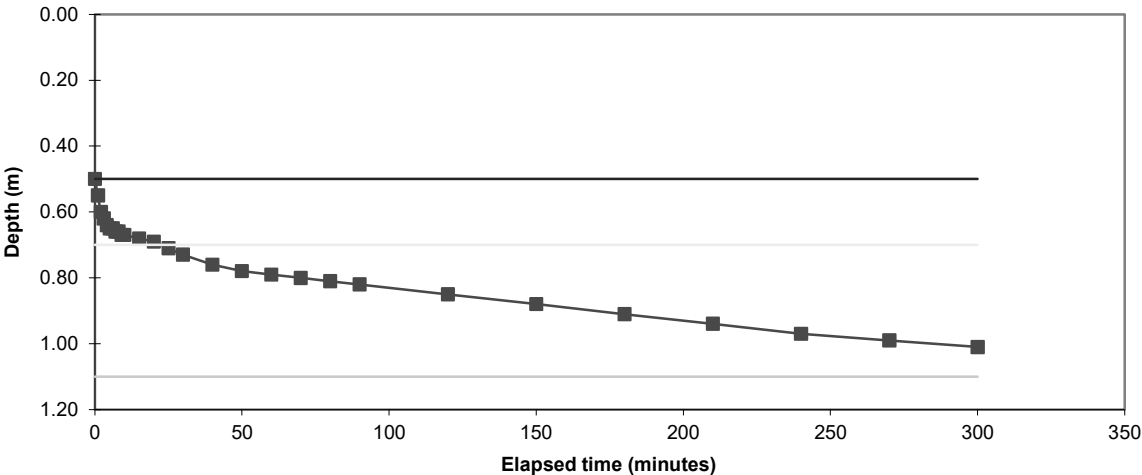
Soakaway Test Results

Trial Pit No: SA03
Length (m): 1.10
Width (m): 0.30
Depth (m): 1.30

Test No: 1
Granular infill: NA
Porosity of infill: 1 (assumed)

Date: 01.04.2026

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.50	30	0.73
1	0.55	40	0.76
2	0.60	50	0.78
3	0.62	60	0.79
4	0.64	70	0.80
5	0.65	80	0.81
6	0.65	90	0.82
7	0.66	120	0.85
8	0.66	150	0.88
9	0.67	180	0.91
10	0.67	210	0.94
15	0.68	240	0.97
20	0.69	270	0.99
25	0.71	300	1.01



Water depth at start of test (m): 0.50
75% effective depth (m): 0.70
50% effective depth (m): 0.90
25% effective depth (m): 1.10
Empty depth (m): 1.30

Elapsed time (mins): 22.5
Elapsed time (mins): 326.7

Volume outflow between 75% and 25% effective depth (m³):
Mean surface area of outflow (m²): 1.45
(side area at 50% effective depth + base area)
Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s):

Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate

Remarks

Soakaway Test Results

Trial Pit No: SA03

Test No: 2

Date: 01.04.2026

Length (m): 1.10

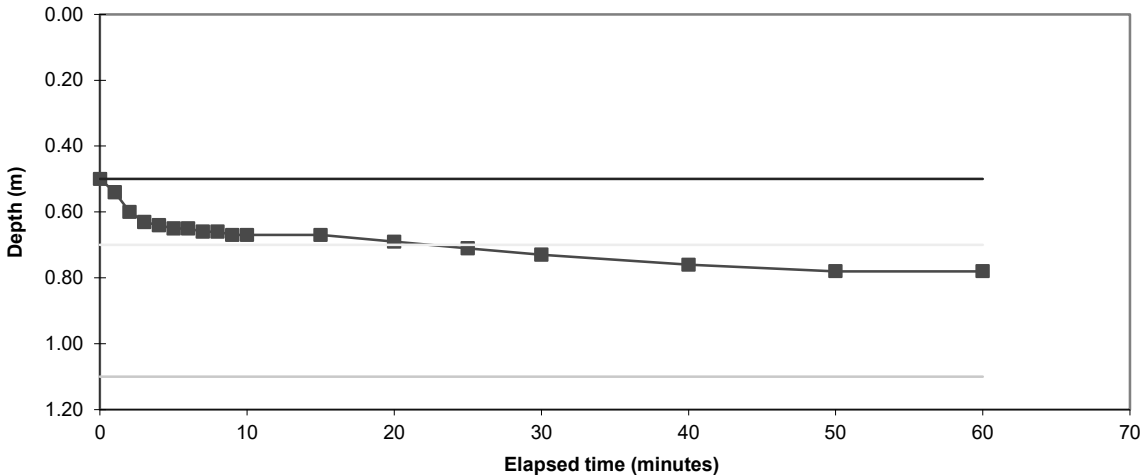
Width (m): 0.30

Depth (m): 1.30

Granular infill: NA

Porosity of infill: 1 (assumed)

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.50	30	0.73
1	0.54	40	0.76
2	0.60	50	0.78
3	0.63	60	0.78
4	0.64		
5	0.65		
6	0.65		
7	0.66		
8	0.66		
9	0.67		
10	0.67		
15	0.67		
20	0.69		
25	0.71		



Water depth at start of test (m): 0.50

75% effective depth (m): 0.70

50% effective depth (m): 0.90

25% effective depth (m): 1.10

Empty depth (m): 1.30

Elapsed time (mins): 22.5

Elapsed time (mins): #N/A

Volume outflow between 75% and 25% effective depth (m³):

Mean surface area of outflow (m²): 1.45

(side area at 50% effective depth + base area)

Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s):

Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate

Remarks

Soakaway Test Results

Trial Pit No:	SA03	Test No:	3	Date:	01.04.2026
Length (m):	1.10				
Width (m):	0.30	Granular infill: NA			
Depth (m):	1.30	Porosity of infill: 1 (assumed)			

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.51	30	0.73
1	0.53	40	0.76
2	0.60	50	0.77
3	0.63	60	0.78
4	0.64		
5	0.65		
6	0.65		
7	0.66		
8	0.67		
9	0.67		
10	0.67		
15	0.67		
20	0.69		
25	0.71		

Depth (m)

Elapsed time (minutes)

Water depth at start of test (m):	0.51	Elapsed time (mins):	25.0
75% effective depth (m):	0.71		
50% effective depth (m):	0.91	Elapsed time (mins):	#N/A
25% effective depth (m):	1.10		
Empty depth (m):	1.30		

Volume outflow between 75% and 25% effective depth (m³):

Mean surface area of outflow (m²): 1.42

(side area at 50% effective depth + base area)

Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s):

Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate

Remarks

Notes: Results processed following BRE 365 (1991) Water depths measured below ground level	Project Project No. Carried out for	Cefn Lodge 26008	Figure SA03_3
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Soakaway Test Results

Trial Pit No: SA04Test No: 1Date: 01.04.2026

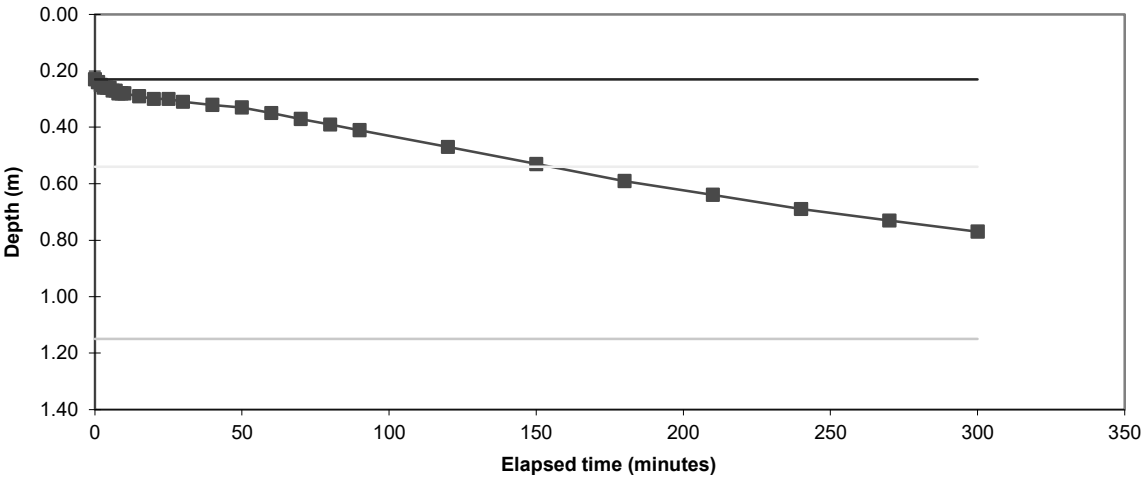
Length (m): 1.00

Width (m): 0.30

Depth (m): 1.45

Granular infill: NAPorosity of infill: 1 (assumed)

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.23	30	0.31
1	0.24	40	0.32
2	0.25	50	0.33
3	0.26	60	0.35
4	0.26	70	0.37
5	0.26	80	0.39
6	0.27	90	0.41
7	0.27	120	0.47
8	0.28	150	0.53
9	0.28	180	0.59
10	0.28	210	0.64
15	0.29	240	0.69
20	0.30	270	0.73
25	0.30	300	0.77



Water depth at start of test (m): 0.23

75% effective depth (m): 0.54Elapsed time (mins): 155.0

50% effective depth (m): 0.84

25% effective depth (m): 1.15Elapsed time (mins): 448.1

Empty depth (m): 1.45

Volume outflow between 75% and 25% effective depth (m³):

Mean surface area of outflow (m²): 1.89

(side area at 50% effective depth + base area)

Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s):

Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate

Remarks

Notes:
Results processed following BRE 365 (1991)
Water depths measured below ground level

Project Cefn Lodge
Project No. 26008
Carried out for

Figure
SA4_01

Soakaway Test Results

Trial Pit No: SA04

Length (m): 1.00

Width (m): 0.30

Depth (m): 1.45

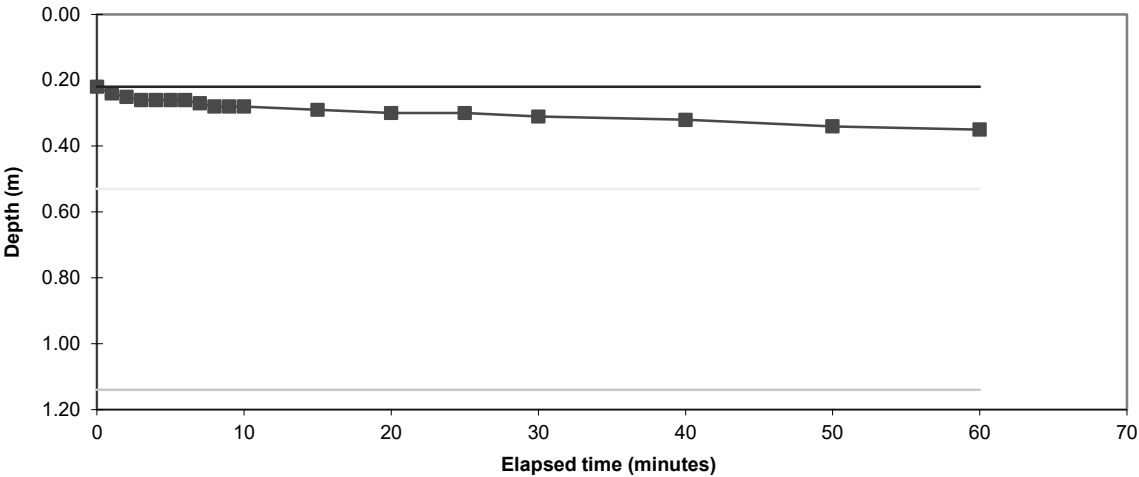
Test No: 2

Date: 01.04.2026

Granular infill: NA

Porosity of infill: 1 (assumed)

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.22	30	0.31
1	0.24	40	0.32
2	0.25	50	0.34
3	0.26	60	0.35
4	0.26		
5	0.26		
6	0.26		
7	0.27		
8	0.28		
9	0.28		
10	0.28		
15	0.29		
20	0.30		
25	0.30		



Water depth at start of test (m): 0.22

75% effective depth (m): 0.53

50% effective depth (m): 0.84

25% effective depth (m): 1.14

Empty depth (m): 1.45

Elapsed time (mins): #N/A

Elapsed time (mins): #N/A

Volume outflow between 75% and 25% effective depth (m³):

Mean surface area of outflow (m²): 1.89

(side area at 50% effective depth + base area)

Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s):

Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate

Remarks

Notes:
Results processed following BRE 365 (1991)
Water depths measured below ground level

Project Cefn Lodge
Project No. 26008
Carried out for

Figure
SA04_2

Soakaway Test Results

Trial Pit No: SA04Test No: 3Date: 01.04.2026

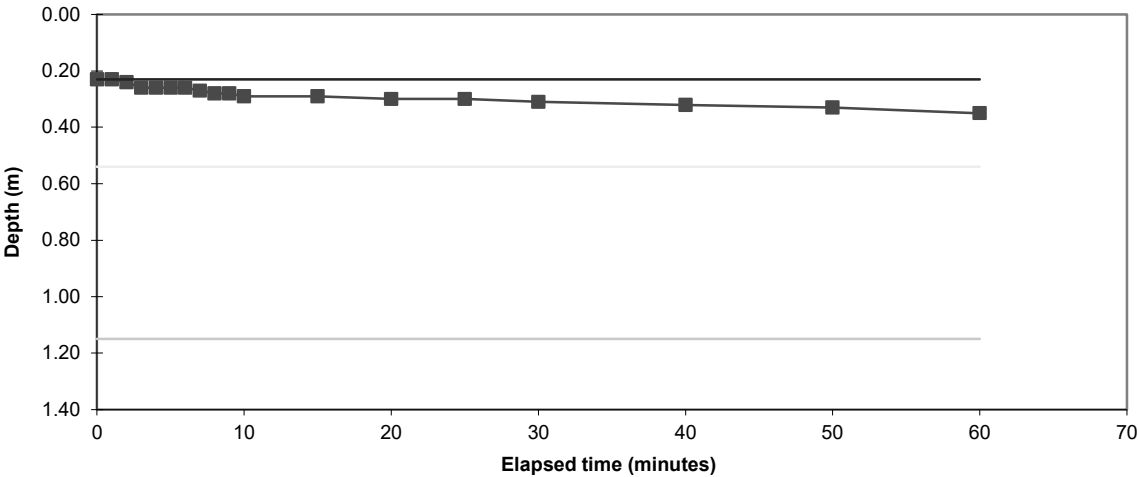
Length (m): 1.00

Width (m): 0.30

Depth (m): 1.45

Granular infill: NAPorosity of infill: 1 (assumed)

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.23	30	0.31
1	0.23	40	0.32
2	0.24	50	0.33
3	0.26	60	0.35
4	0.26		
5	0.26		
6	0.26		
7	0.27		
8	0.28		
9	0.28		
10	0.29		
15	0.29		
20	0.30		
25	0.30		



Water depth at start of test (m): 0.23

75% effective depth (m): 0.54Elapsed time (mins): #N/A

50% effective depth (m): 0.84Elapsed time (mins): #N/A

25% effective depth (m): 1.15

Empty depth (m): 1.45

Volume outflow between 75% and 25% effective depth (m³):

Mean surface area of outflow (m²): 1.89

(side area at 50% effective depth + base area)

Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s):

Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate

Remarks

Notes:
Results processed following BRE 365 (1991)
Water depths measured below ground level

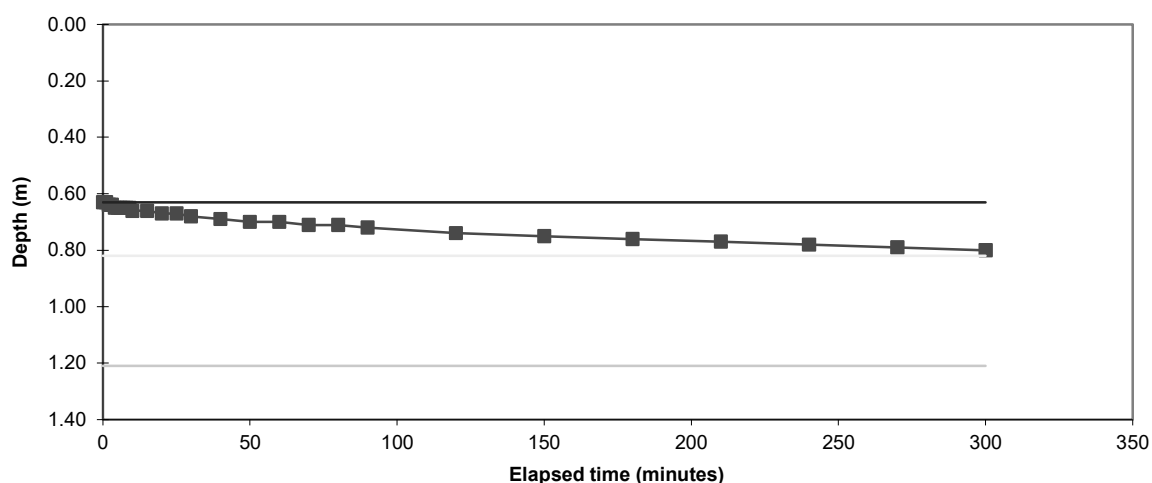
Project Cefn Lodge
Project No. 26008
Carried out for

Figure
SA04_3

Soakaway Test Results

Trial Pit No: SA05 Test No: 1 Date: 02.04.2026
 Length (m): 1.00
 Width (m): 0.30 Granular infill: NA
 Depth (m): 1.40 Porosity of infill: 1 (assumed)

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.63	30	0.68
1	0.63	40	0.69
2	0.64	50	0.70
3	0.64	60	0.70
4	0.65	70	0.71
5	0.65	80	0.71
6	0.65	90	0.72
7	0.65	120	0.74
8	0.65	150	0.75
9	0.65	180	0.76
10	0.66	210	0.77
15	0.66	240	0.78
20	0.67	270	0.79
25	0.67	300	0.80



Water depth at start of test (m): 0.63
 75% effective depth (m): 0.82 Elapsed time (mins): 307.5
 50% effective depth (m): 1.02
 25% effective depth (m): 1.21 Elapsed time (mins): 453.8
 Empty depth (m): 1.40

Volume outflow between 75% and 25% effective depth (m³):
 Mean surface area of outflow (m²): 1.29
 (side area at 50% effective depth + base area)
 Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s): Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate

Remarks

Notes:
 Results processed following BRE 365 (1991)
 Water depths measured below ground level

Project Cefn Lodge
 Project No. 26008
 Carried out for

Figure
SA05_1

Soakaway Test Results

Trial Pit No: SA05

Test No: 2

Date: 02.04.2026

Length (m): 1.00

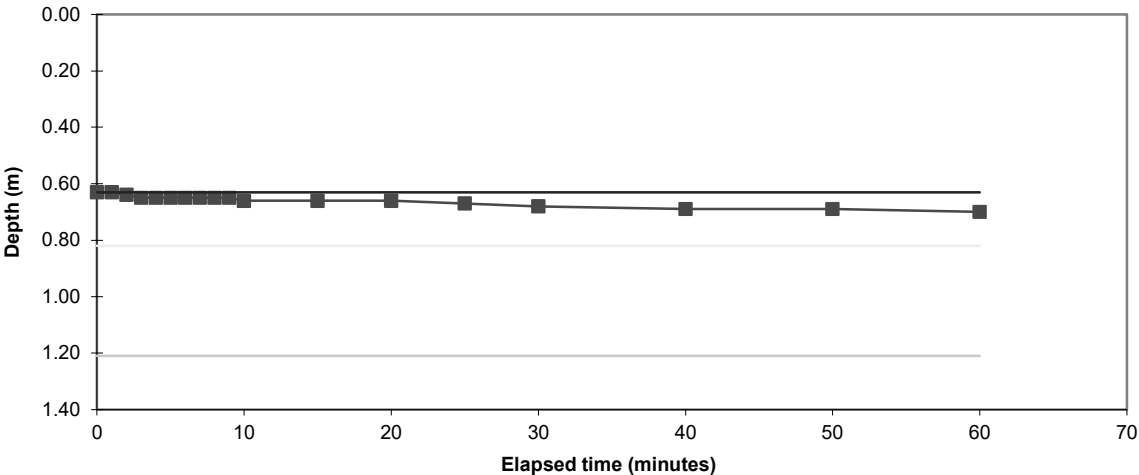
Width (m): 0.30

Depth (m): 1.40

Granular infill: NA

Porosity of infill: 1 (assumed)

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.63	30	0.68
1	0.63	40	0.69
2	0.64	50	0.69
3	0.65	60	0.70
4	0.65		
5	0.65		
6	0.65		
7	0.65		
8	0.65		
9	0.65		
10	0.66		
15	0.66		
20	0.66		
25	0.67		



Water depth at start of test (m): 0.63

75% effective depth (m): 0.82

50% effective depth (m): 1.02

25% effective depth (m): 1.21

Empty depth (m): 1.40

Elapsed time (mins): #N/A

Elapsed time (mins): #N/A

Volume outflow between 75% and 25% effective depth (m³):

Mean surface area of outflow (m²): 1.29

(side area at 50% effective depth + base area)

Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s):

Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate

Remarks

Notes:
Results processed following BRE 365 (1991)
Water depths measured below ground level

Project Cefn Lodge
Project No. 26008
Carried out for

Figure
SA05_2

Soakaway Test Results

Trial Pit No:	SA05	Test No:	3	Date:	02.04.2026
Length (m):	1.00	Granular infill: NA			
Width (m):	0.30	Porosity of infill: 1 (assumed)			
Depth (m):	1.40				

Elapsed time (minutes)	Water Depth (metres)	Elapsed time (minutes)	Water Depth (metres)
0	0.64	30	0.67
1	0.64	40	0.68
2	0.64	50	0.69
3	0.65	60	0.70
4	0.65		
5	0.65		
6	0.65		
7	0.65		
8	0.65		
9	0.66		
10	0.66		
15	0.66		
20	0.66		
25	0.66		

Elapsed time (minutes)	Water Depth (metres)
0	0.64
1	0.64
2	0.64
3	0.65
4	0.65
5	0.65
6	0.65
7	0.65
8	0.65
9	0.66
10	0.66
15	0.66
20	0.66
25	0.66
30	0.67
40	0.68
50	0.69
60	0.70

Water depth at start of test (m):	0.64	Elapsed time (mins):	#N/A
75% effective depth (m):	0.83	Elapsed time (mins):	#N/A
50% effective depth (m):	1.02		
25% effective depth (m):	1.21		
Empty depth (m):	1.40		

Volume outflow between 75% and 25% effective depth (m³):

Mean surface area of outflow (m²): 1.29
(side area at 50% effective depth + base area)

Time for outflow between 75% and 25% effective depth (mins):

Soil infiltration rate (m/s):

Test incomplete as 25% effective depth not achieved. Unable to reliably determine soil infiltration rate

Remarks

Notes: Results processed following BRE 365 (1991) Water depths measured below ground level	Project Project No. Carried out for	Cefn Lodge 26008	Figure SA05_3
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APPENDIX D

Photographic Plates



2/4/26

PROJECT
PROJECT NO
TP
DEPTH (M)
FACE

CEFN LODGE

26008

SA01

GL 1.50





PROJECT
PROJECT NO
TP
DEPTH (M)
FACE

CEFN LODGE
26008
SA03
GL 1.40



1/4/26

PROJECT
PROJECT NO
TP
DEPTH (M)
FACE

CEFN LODGE
26008
SA04
GL 1.50



