SOAKAWAY INFILTRATION TEST RESULTS

BRE 365 method

Project Name:	Sandfields Young Business Centre
Project Ref:	9222
Date of Testing:	03/03/2025
Test Location:	TP101
Fill Number:	1 of 3
Soil Infiltration Rate	**4.44E-04 m/sec**

Test results:

Time (mins)	Water Level (m bgl)
0	2.10
2	2.20

Pit Dimensions (m)

Length	2.00
Width	0.50
Depth	2.20

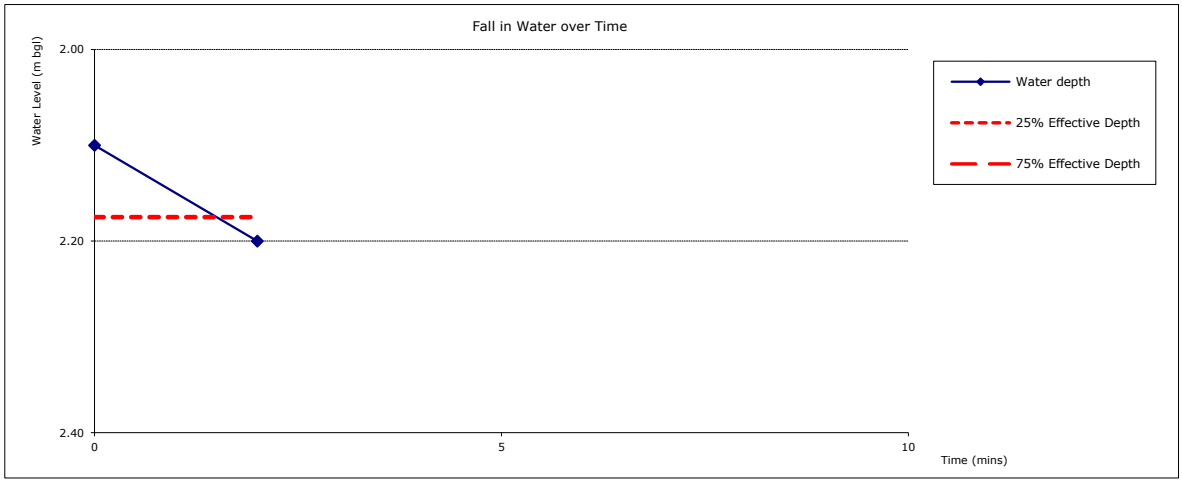
Assumed Invert Level (m bgl)	12.00

Ground Conditions:

GL - 0.2m	Grass over soft dark brown mottled brown slightly clayey silty fine SAND. (MADE GROUND / PLACED TOPSOIL).
0.2m - 1.7m	(Probably loose) dark grey mottled brown silty sandy fine to coarse angular to sub angular GRAVEL of slag-like material and brick and concrete fragments with medium cobble content. (MADE GROUND).
1.7m - 2.2m	(Probably loose to medium dense) light brown mottled brown fine SAND with occasional shell fragments. (BLOWN SAND).

Remarks:

1. Testing undertaken in general accordance with BRE Digest 365:2016
2. Trial pit was not filled with aggregate for test.
3. Partial spalling during excavation.
4. Due to the high infiltration rate in the Blown Sand, it was not possible to achieve 1m head of water. Bowser was emptied before this could be achieved.



Soil Infiltration Rate (m/sec)

$$f \frac{V_{p75-25}}{\alpha_{p50} \times t_{p75-25}}$$

V_{p75-25}	Effective depth storage volume of water in the trial pit between 75% and 25% effective depth	0.05
α_{p50}	The internal surface area of the trial pit up to 50% effective depth and including the base area	1.25
t_{p75-25}	The time for the water level to fall from 75% to 25% effective depth	1

Soil Infiltration Rate (m/sec)

$$f \frac{0.050}{112.5}$$

f **4.44E-04**

SOAKAWAY INFILTRATION TEST RESULTS

BRE 365 method

Project Name:	Sandfields Young Business Centre
Project Ref:	9222
Date of Testing:	03/03/2025
Test Location:	TP101
Fill Number:	2 of 3
Soil Infiltration Rate	**3.56E-04 m/sec**

Test results:

Time (mins)	Water Level (m bgl)
0	2.10
2.5	2.20

Pit Dimensions (m)

Length	2.00
Width	0.50
Depth	2.20

Assumed Invert Level (m bgl)	12.00

Ground Conditions:

GL - 0.2m	Grass over soft dark brown mottled brown slightly clayey silty fine SAND. (MADE GROUND / PLACED TOPSOIL).
0.2m - 1.7m	(Probably loose) dark grey mottled brown silty sandy fine to coarse angular to sub angular GRAVEL of slag-like material and brick and concrete fragments with medium cobble content. (MADE GROUND).
1.7m - 2.2m	(Probably loose to medium dense) light brown mottled brown fine SAND with occasional shell fragments. (BLOWN SAND).

Remarks:

1. Testing undertaken in general accordance with BRE Digest 365:2016
2. Trial pit was not filled with aggregate for test.
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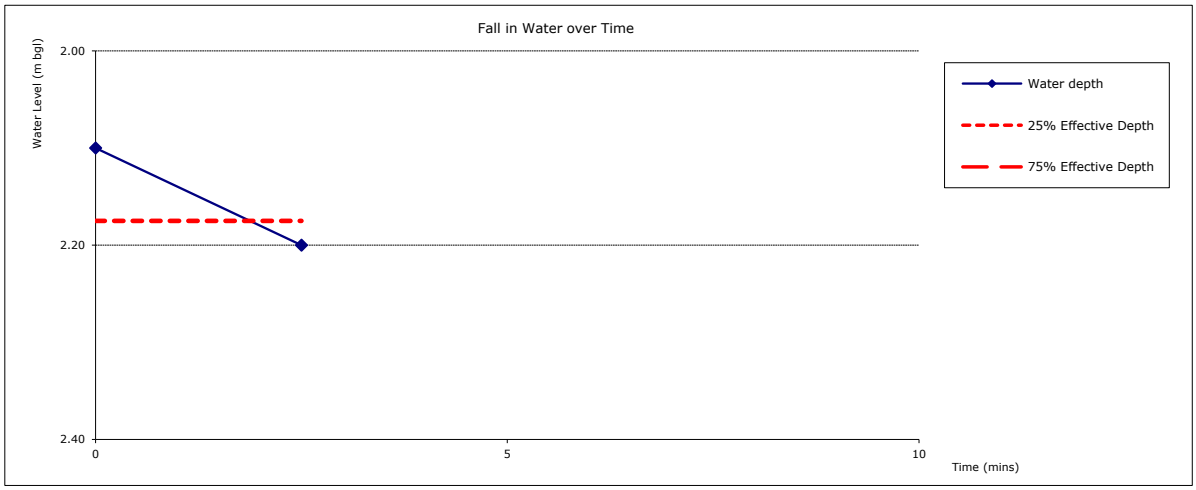
4. Due to the high infiltration rate in the Blown Sand, it was not possible to achieve 1m head of water. Bowser was emptied before this could be achieved.



Soil Infiltration Rate (m/sec)

$$f = \frac{V_{p75-25}}{\alpha_{p50} \times t_{p75-25}}$$

V_{p75-25}	Effective depth storage volume of water in the trial pit between 75% and 25% effective depth	0.05
α_{p50}	The internal surface area of the trial pit up to 50% effective depth and including the base area	1.25
t_{p75-25}	The time for the water level to fall from 75% to 25% effective depth	2

Soil Infiltration Rate (m/sec)

$$f = \frac{0.050}{140.625}$$

f **3.56E-04**

SOAKAWAY INFILTRATION TEST RESULTS

BRE 365 method

Project Name:	Sandfields Young Business Centre
Project Ref:	9222
Date of Testing:	03/03/2025
Test Location:	TP101
Fill Number:	3 of 3
Soil Infiltration Rate	**2.96E-04 m/sec**

Test results:

Time (mins)	Water Level (m bgl)
0	2.10
3.0	2.20

Pit Dimensions (m)

Length	2.00
Width	0.50
Depth	2.20

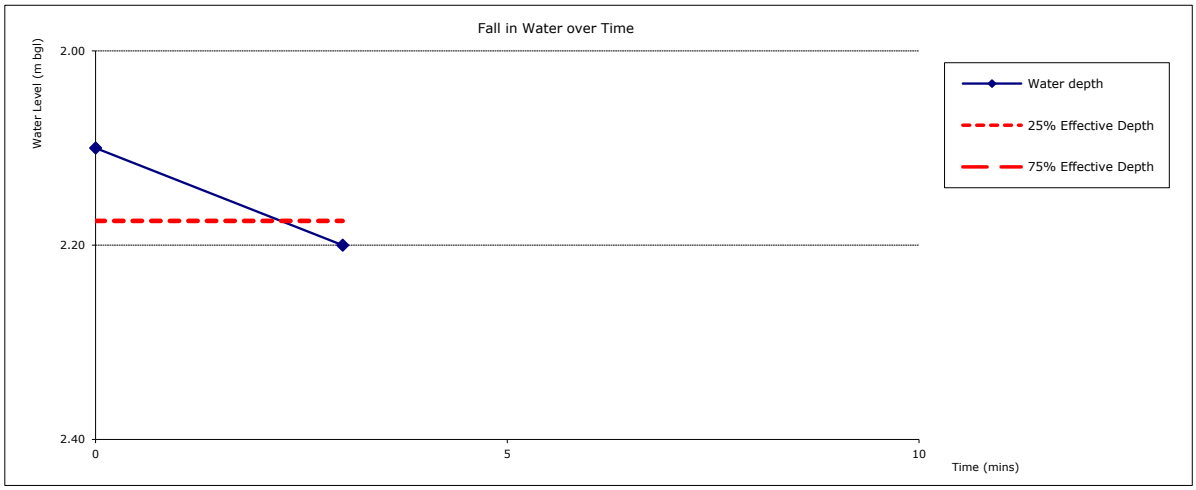
Assumed Invert Level (m bgl)	12.00

Ground Conditions:

GL - 0.2m	Grass over soft dark brown mottled brown slightly clayey silty fine SAND. (MADE GROUND / PLACED TOPSOIL).
0.2m - 1.7m	(Probably loose) dark grey mottled brown silty sandy fine to coarse angular to sub angular GRAVEL of slag-like material and brick and concrete fragments with medium cobble content. (MADE GROUND).
1.7m - 2.2m	(Probably loose to medium dense) light brown mottled brown fine SAND with occasional shell fragments. (BLOWN SAND).

Remarks:

1. Testing undertaken in general accordance with BRE Digest 365:2016
2. Trial pit was not filled with aggregate for test.
3. Partial spalling during excavation.
4. Due to the high infiltration rate in the Blown Sand, it was not possible to achieve 1m head of water. Bowser was emptied before this could be achieved.



Soil Infiltration Rate (m/sec)

$$f = \frac{V_{p75-25}}{\alpha_{p50} \times t_{p75-25}}$$

V_{p75-25}	Effective depth storage volume of water in the trial pit between 75% and 25% effective depth	0.05
α_{p50}	The internal surface area of the trial pit up to 50% effective depth and including the base area	1.25
t_{p75-25}	The time for the water level to fall from 75% to 25% effective depth	2

Soil Infiltration Rate (m/sec)

$$f = \frac{0.050}{168.75}$$

f **2.96E-04**

SOAKAWAY INFILTRATION TEST RESULTS

BRE 365 method

esp
ENGINEERS
GEOLOGISTS
SCIENTISTS

Project Name:	Sandfields Young Business Centre
Project Ref:	9222
Date of Testing:	11/03/2025
Test Location:	TP102
Fill Number:	1 of 3
Soil Infiltration Rate	**5.00E-04 m/sec**

Test results:

Time (mins)	Water Level (m bgl)
0	1.70
2.5	1.95
5	2.10

Pit Dimensions (m)

Length	2.00
Width	0.50
Depth	2.10

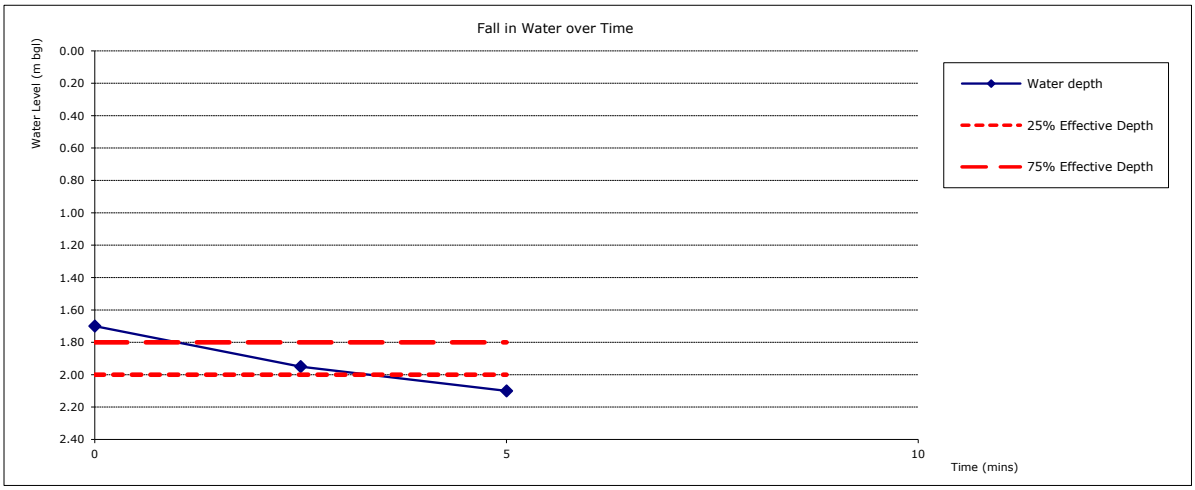
Assumed Invert Level (m bgl)	12.00

Ground Conditions:

GL - 0.1m	Black TARMAC. (MADE GROUND).
0.1m - 1.5m	(Probably medium dense) dark grey mottled brown silty sandy fine to coarse angular to sub angular GRAVEL of slag-like material and brick and concrete fragments with medium cobble content. (MADE GROUND).
1.5m - 2.10m	(Probably medium dense) light brown mottled brown fine SAND with occasional shell fragments. (BLOWN SAND).

Remarks:

1. Testing undertaken in general accordance with BRE Digest 365:2016
2. Trial pit was not filled with aggregate for test.
3. Partial spalling during excavation.
4. Due to the high infiltration rate in the Blown Sand, it was not possible to achieve 1m head of water. Bowser was emptied before this could be achieved.



Soil Infiltration Rate (m/sec)

$$f \frac{V_{p75-25}}{\alpha_{p50} \times t_{p75-25}}$$

V_{p75-25}	Effective depth storage volume of water in the trial pit between 75% and 25% effective depth	0.20
α_{p50}	The internal surface area of the trial pit up to 50% effective depth and including the base area	2
t_{p75-25}	The time for the water level to fall from 75% to 25% effective depth	3

Soil Infiltration Rate (m/sec)

$$f \frac{0.200}{400}$$

f **5.00E-04**

SOAKAWAY INFILTRATION TEST RESULTS

BRE 365 method

esp
ENGINEERS
GEOLOGISTS
SCIENTISTS

Project Name:	Sandfields Young Business Centre
Project Ref:	9222
Date of Testing:	11/03/2025
Test Location:	TP102
Fill Number:	2 of 3
Soil Infiltration Rate	**4.35E-04 m/sec**

Test results:

Time (mins)	Water Level (m bgl)
0	1.70
3.0	1.95
5.5	2.10

Pit Dimensions (m)

Length	2.00
Width	0.50
Depth	2.10

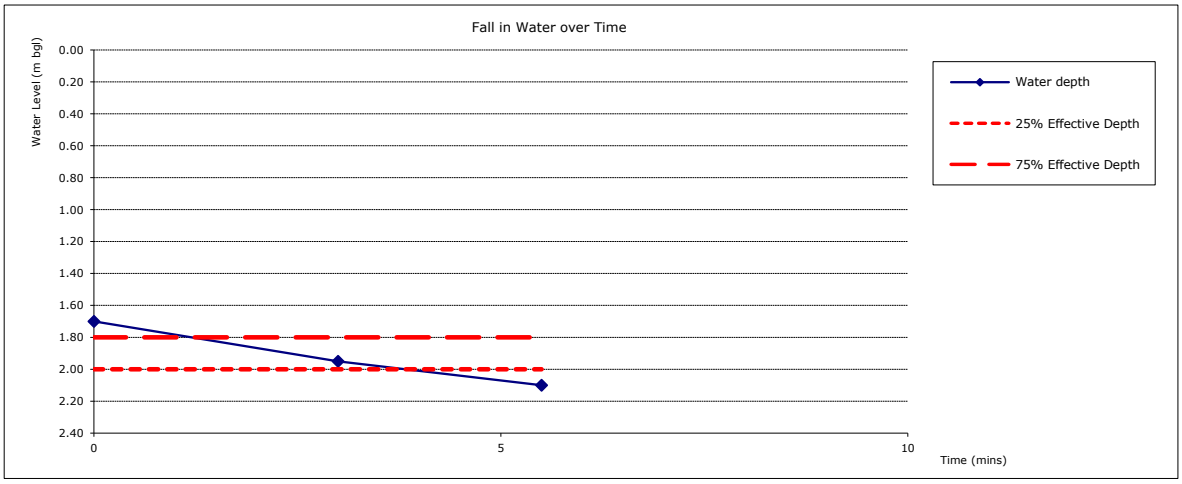
Assumed Invert Level (m bgl)	12.00

Ground Conditions:

GL - 0.1m	Black TARMAC. (MADE GROUND).
0.1m - 1.5m	(Probably medium dense) dark grey mottled brown silty sandy fine to coarse angular to sub angular GRAVEL of slag-like material and brick and concrete fragments with medium cobble content. (MADE GROUND).
1.5m - 2.10m	(Probably medium dense) light brown mottled brown fine SAND with occasional shell fragments. (BLOWN SAND).

Remarks:

1. Testing undertaken in general accordance with BRE Digest 365:2016
2. Trial pit was not filled with aggregate for test.
3. Partial spalling during excavation.
4. Due to the high infiltration rate in the Blown Sand, it was not possible to achieve 1m head of water. Bowser was emptied before this could be achieved.



Soil Infiltration Rate (m/sec)

$$f \frac{V_{p75-25}}{\alpha_{p50} \times t_{p75-25}}$$

V_{p75-25}	Effective depth storage volume of water in the trial pit between 75% and 25% effective depth	0.20
α_{p50}	The internal surface area of the trial pit up to 50% effective depth and including the base area	2
t_{p75-25}	The time for the water level to fall from 75% to 25% effective depth	4

Soil Infiltration Rate (m/sec)

$$f \frac{0.200}{460}$$

f **4.35E-04**

SOAKAWAY INFILTRATION TEST RESULTS

BRE 365 method

esp ENGINEERS GEOLOGISTS SCIENTISTS

Project Name:	Sandfields Young Business Centre
Project Ref:	9222
Date of Testing:	11/03/2025
Test Location:	TP102
Fill Number:	3 of 3
Soil Infiltration Rate	**3.62E-04 m/sec**

Test results:

Time (mins)	Water Level (m bgl)
0	1.70
3.2	1.90
6	2.10

Pit Dimensions (m)

Length	2.00
Width	0.50
Depth	2.10

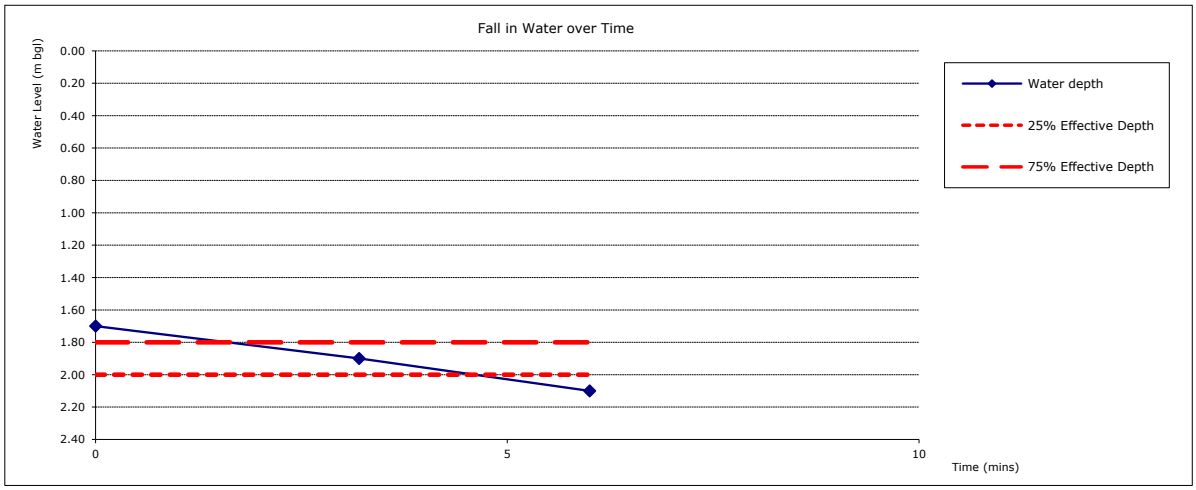
Assumed Invert Level (m bgl)	12.00

Ground Conditions:

GL - 0.1m	Black TARMAC. (MADE GROUND).
0.1m - 1.5m	(Probably medium dense) dark grey mottled brown silty sandy fine to coarse angular to sub angular GRAVEL of slag-like material and brick and concrete fragments with medium cobble content. (MADE GROUND).
1.5m - 2.10m	(Probably medium dense) light brown mottled brown fine SAND with occasional shell fragments. (BLOWN SAND).

Remarks:

1. Testing undertaken in general accordance with BRE Digest 365:2016
2. Trial pit was not filled with aggregate for test.
3. Partial spalling during excavation.
4. Due to the high infiltration rate in the Blown Sand, it was not possible to achieve 1m head of water. Bowser was emptied before this could be achieved.



Soil Infiltration Rate (m/sec)

$$f \frac{V_{p75-25}}{\alpha_{p50} \times t_{p75-25}}$$

V_{p75-25}	Effective depth storage volume of water in the trial pit between 75% and 25% effective depth	0.20
α_{p50}	The internal surface area of the trial pit up to 50% effective depth and including the base area	2
t_{p75-25}	The time for the water level to fall from 75% to 25% effective depth	5

Soil Infiltration Rate (m/sec)

$$f \frac{0.200}{552}$$

f **3.62E-04**