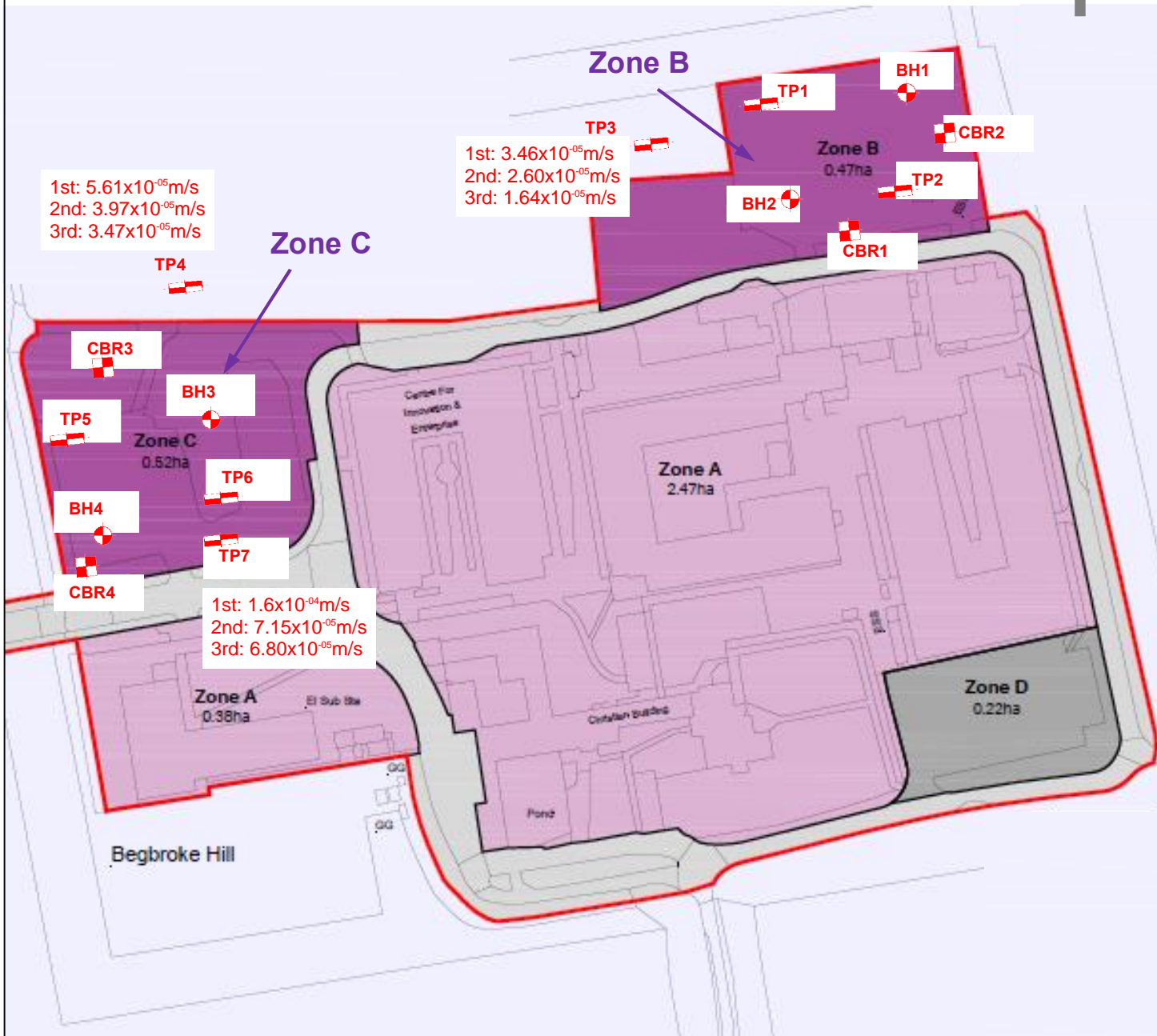


Exploratory Hole Location Plan

(Taken from a plan provided by the Engineer, Not to Scale)



Key

Rotary Cored Boreholes



Trial Pits



CBR Determinations



Site Area



Project: Begbroke Science Park, Kidlington

Client: Oxford University Development

**GROUND
ENGINEERING
LIMITED**

Peterborough Tel : 01733 566566

Project No.

C15387

SOAKAWAY TEST RESULTS

BRE DIGEST 365 - SOIL INFILTRATION RATE

Project: Begbroke Science Park, Kidlington

Project No: C15387

Date of Test : 16/06/2021

Sheet No: 1/3

Trial Pit: TP3 (FIRST FILLING)

Depth: 2.00

Length: 2.20

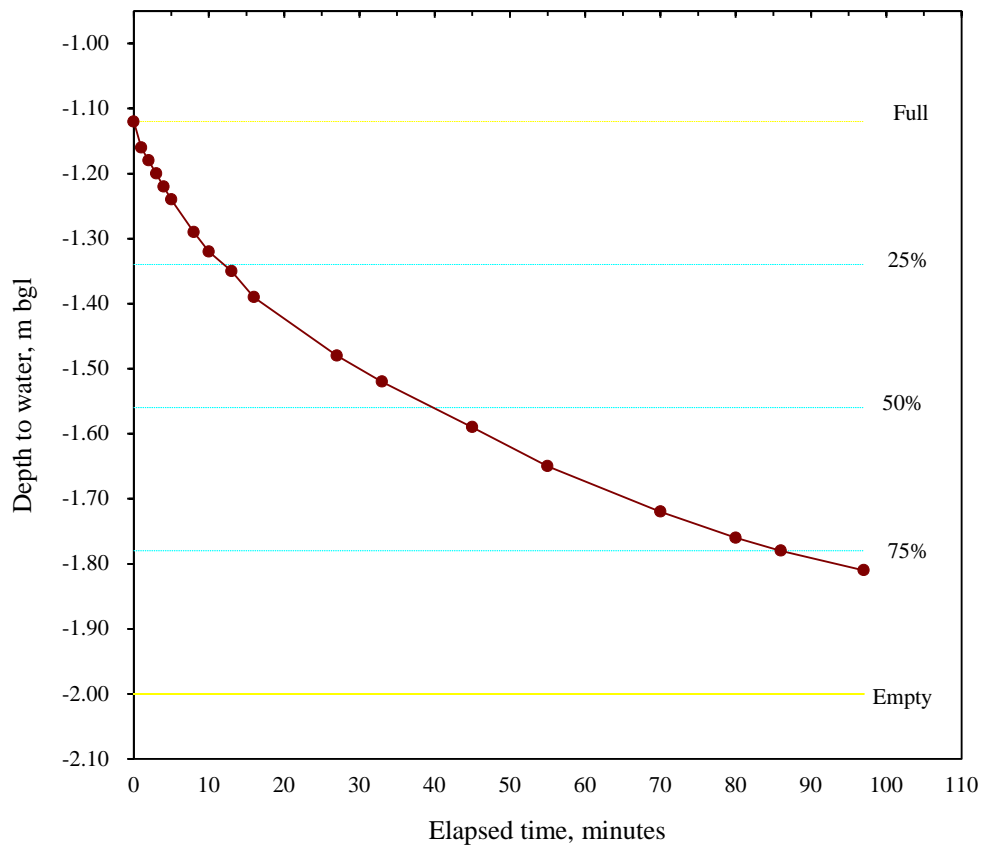
Width: 0.60

Description of Stratum under test: Brown and yellow brown, slightly silty, gravelly SAND

Depth to water prior to test: Dry
(below ground level)

DEPTH TO WATER vs ELAPSED TIME

Elapsed Time min	Depth to Water m
0.00	1.12
1.00	1.16
2.00	1.18
3.00	1.20
4.00	1.22
5.00	1.24
8.00	1.29
10.00	1.32
13.00	1.35
16.00	1.39
27.00	1.48
33.00	1.52
45.00	1.59
55.00	1.65
70.00	1.72
80.00	1.76
86.00	1.78
97.00	1.81



All dimensions given in metres

$$f = \frac{(V_{75} - V_{25})}{A_{50}(T_{75} - T_{25})}$$

$V_{75} - V_{25} = 0.58$
 $A_{50} = 3.78$
 $T_{75} - T_{25} = 74$
 $f = \underline{\underline{3.46E-05}} \text{ m/s}$

Soil Infiltration Rate

SOAKAWAY TEST RESULTS

BRE DIGEST 365 - SOIL INFILTRATION RATE

Project: Begbroke Science Park, Kidlington

Project No: C15387

Date of Test : 16/06/2021

Sheet No: 2/3

Trial Pit: TP3 (SECOND FILLING)

Depth: 2.00

Length: 2.20

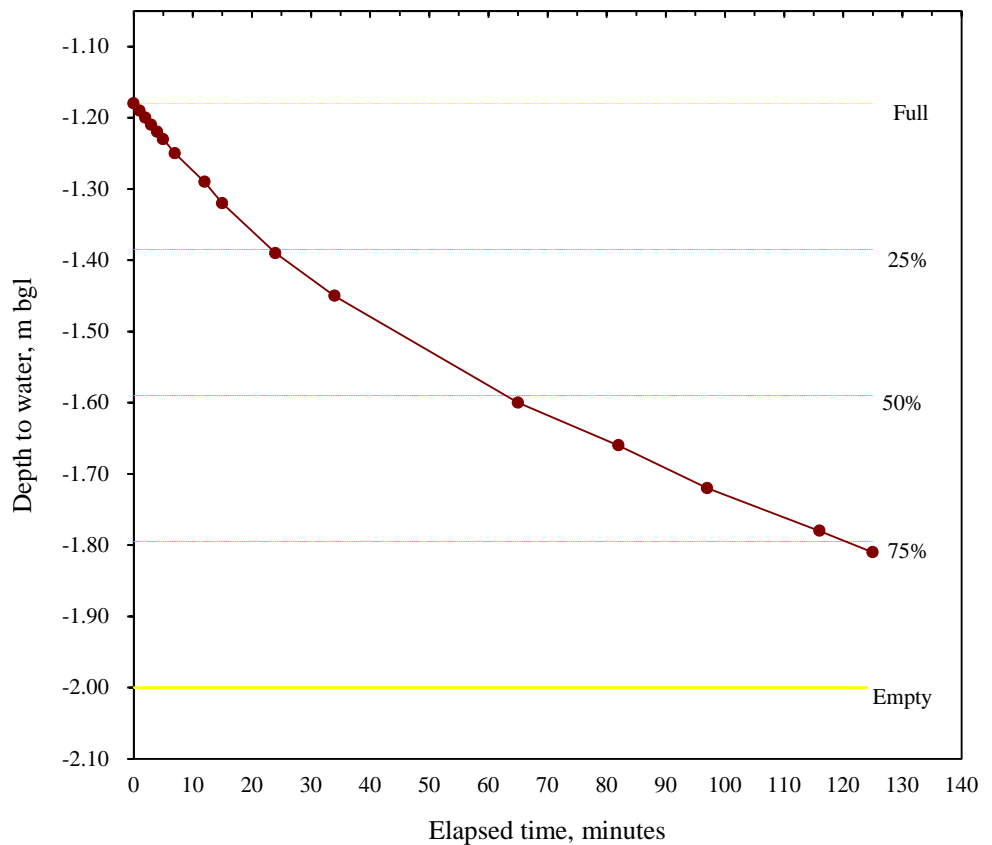
Width: 0.60

Description of Stratum under test: Brown and yellow brown, slightly silty, gravelly SAND

Depth to water prior to test: Dry
(below ground level)

DEPTH TO WATER vs ELAPSED TIME

Elapsed Time min	Depth to Water m
0.00	1.18
1.00	1.19
2.00	1.20
3.00	1.21
4.00	1.22
5.00	1.23
7.00	1.25
12.00	1.29
15.00	1.32
24.00	1.39
34.00	1.45
65.00	1.60
82.00	1.66
97.00	1.72
116.00	1.78
125.00	1.81



All dimensions given in metres

$$f = \frac{(V_{75} - V_{25})}{A_{50}(T_{75} - T_{25})}$$

$V_{75} - V_{25} = 0.54$
 $A_{50} = 3.62$
 $T_{75} - T_{25} = 96$
 $f = \underline{\underline{2.60E-05}} \text{ m/s}$

Soil Infiltration Rate

SOAKAWAY TEST RESULTS

BRE DIGEST 365 - SOIL INFILTRATION RATE

Project: Begbroke Science Park, Kidlington

Project No: C15387

Date of Test : 16/06/2021

Sheet No: 3/3

Trial Pit: TP3 (THIRD FILLING)

Depth: 2.00

Length: 2.20

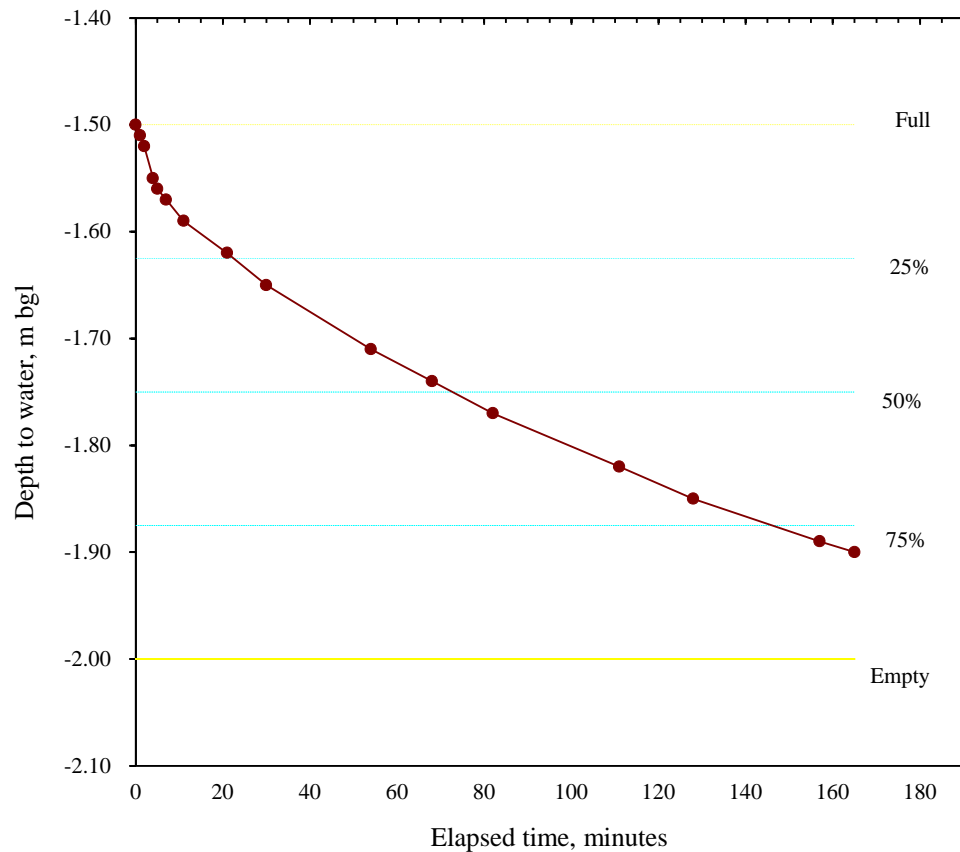
Width: 0.60

Description of Stratum under test: Brown and yellow brown, slightly silty, gravelly SAND

Depth to water prior to test: Dry
(below ground level)

DEPTH TO WATER vs ELAPSED TIME

Elapsed Time min	Depth to Water m
0.00	1.50
1.00	1.51
2.00	1.52
4.00	1.55
5.00	1.56
7.00	1.57
11.00	1.59
21.00	1.62
30.00	1.65
54.00	1.71
68.00	1.74
82.00	1.77
111.00	1.82
128.00	1.85
157.00	1.89
165.00	1.90



All dimensions given in metres

$$f = \frac{(V_{75} - V_{25})}{A_{50}(T_{75} - T_{25})}$$

$V_{75} - V_{25} = 0.33$
 $A_{50} = 2.72$
 $T_{75} - T_{25} = 125$
 $f = \underline{1.62E-05} \text{ m/s}$

Soil Infiltration Rate

SOAKAWAY TEST RESULTS

BRE DIGEST 365 - SOIL INFILTRATION RATE

Project: Begbroke Science Park, Kidlington

Project No: C15387

Date of Test : 16/06/2021

Sheet No: 1/3

Trial Pit: TP4 (FIRST FILLING)

Depth: 2.00

Length: 1.70

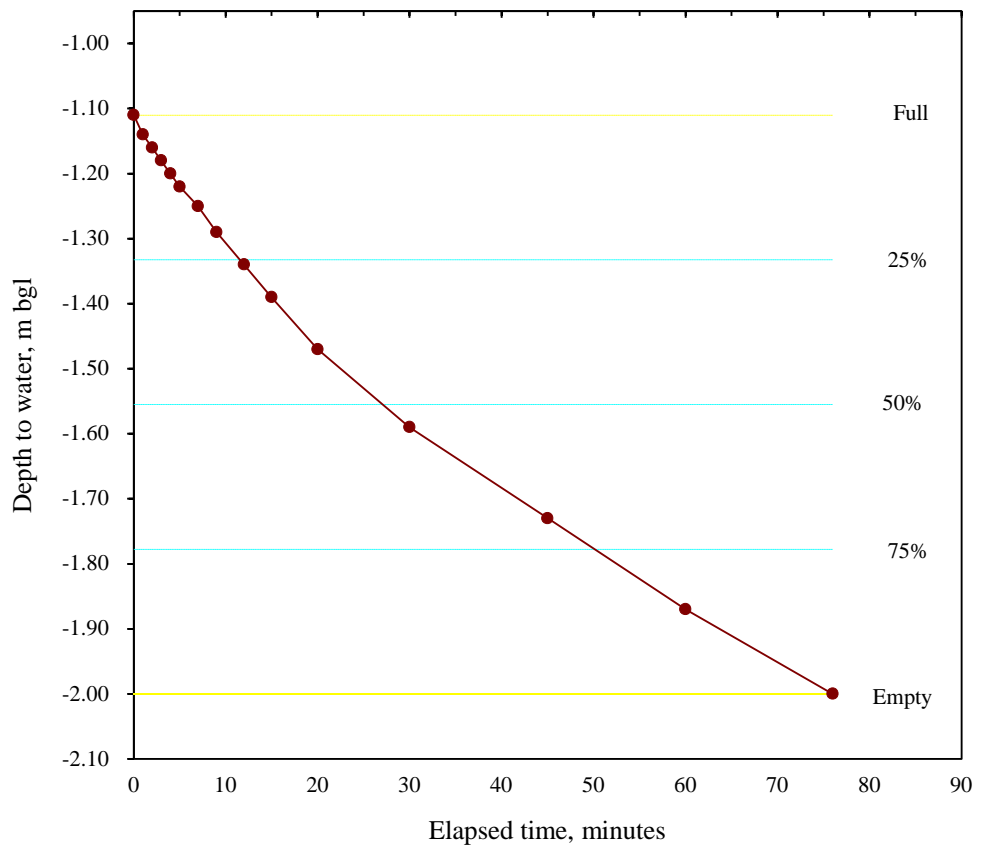
Width: 0.60

Description of Stratum under test: Light brown, slightly silty SAND AND GRAVEL.

Depth to water prior to test: Dry
(below ground level)

DEPTH TO WATER vs ELAPSED TIME

Elapsed Time min	Depth to Water m
0.00	1.11
1.00	1.14
2.00	1.16
3.00	1.18
4.00	1.20
5.00	1.22
7.00	1.25
9.00	1.29
12.00	1.34
15.00	1.39
20.00	1.47
30.00	1.59
45.00	1.73
60.00	1.87
76.00	2.00



All dimensions given in metres

$$f = \frac{(V_{75} - V_{25})}{A_{50}(T_{75} - T_{25})}$$

$V_{75} - V_{25} = 0.45$
 $A_{50} = 3.07$
 $T_{75} - T_{25} = 44$
 $f = \underline{\underline{5.61E-05}} \text{ m/s}$

Soil Infiltration Rate

SOAKAWAY TEST RESULTS

BRE DIGEST 365 - SOIL INFILTRATION RATE

Project: Begbroke Science Park, Kidlington

Project No: C15387

Date of Test : 16/06/2021

Sheet No: 2/3

Trial Pit: TP4 (SECOND FILLING)

Depth: 2.00

Length: 1.70

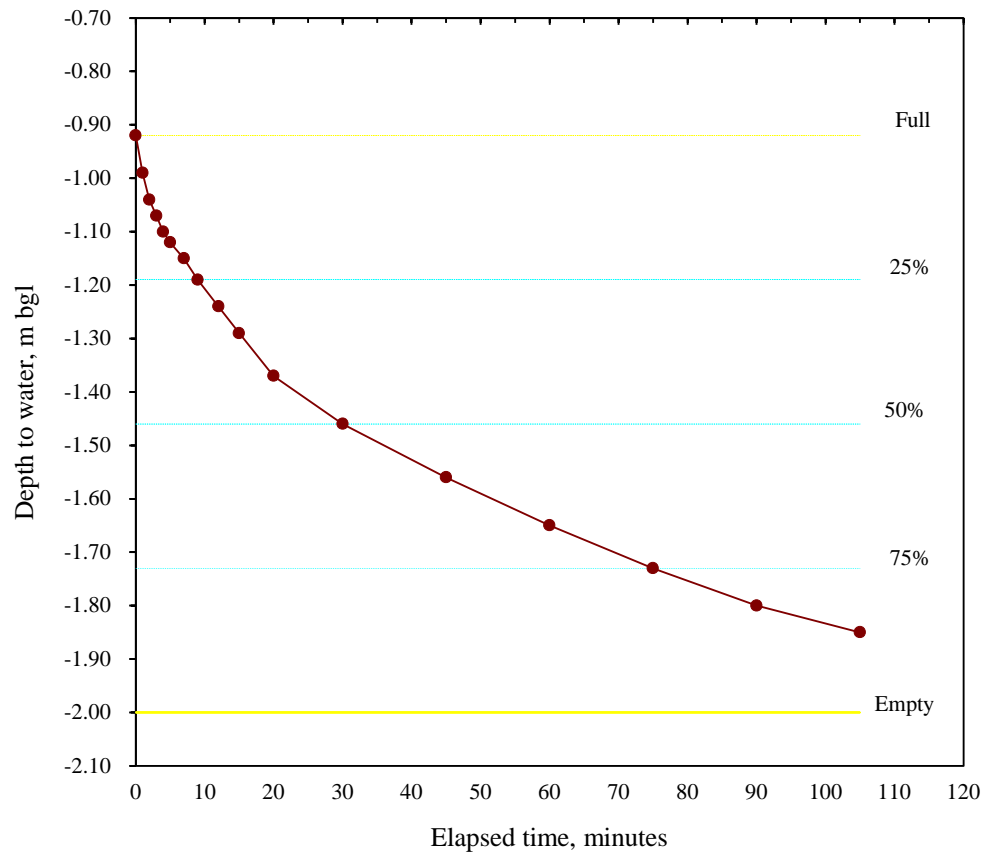
Width: 0.60

Description of Stratum under test: Light brown, slightly silty SAND AND GRAVEL.

Depth to water prior to test: Dry
(below ground level)

DEPTH TO WATER vs ELAPSED TIME

Elapsed Time min	Depth to Water m
0.00	0.92
1.00	0.99
2.00	1.04
3.00	1.07
4.00	1.10
5.00	1.12
7.00	1.15
9.00	1.19
12.00	1.24
15.00	1.29
20.00	1.37
30.00	1.46
45.00	1.56
60.00	1.65
75.00	1.73
90.00	1.80
105.00	1.85



All dimensions given in metres

$$f = \frac{(V_{75} - V_{25})}{A_{50}(T_{75} - T_{25})}$$

$V_{75} - V_{25} = 0.55$
 $A_{50} = 3.50$
 $T_{75} - T_{25} = 66$
 $f = \underline{\underline{3.97E-05}} \text{ m/s}$

Soil Infiltration Rate

SOAKAWAY TEST RESULTS

BRE DIGEST 365 - SOIL INFILTRATION RATE

Project: Begbroke Science Park, Kidlington

Project No: C15387

Date of Test : 16/06/2021

Sheet No: 3/3

Trial Pit: TP4 (THIRD FILLING)

Depth: 2.00

Length: 1.70

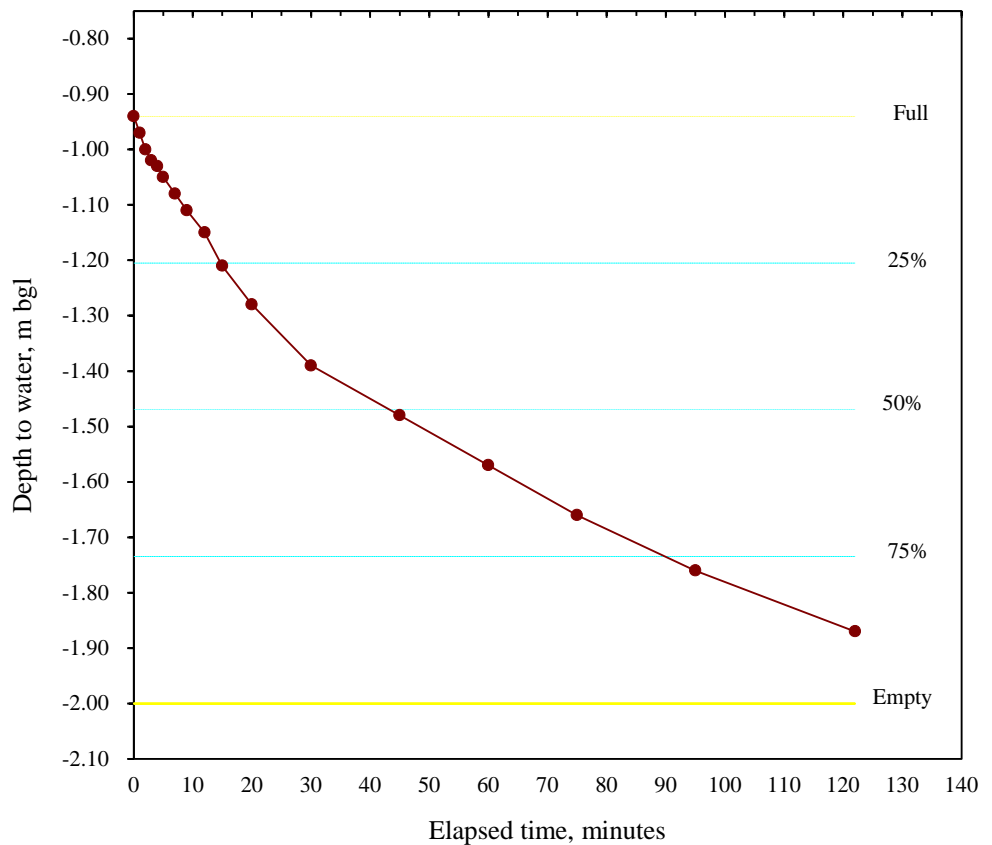
Width: 0.60

Description of Stratum under test: Light brown, slightly silty SAND AND GRAVEL.

Depth to water prior to test: Dry
(below ground level)

DEPTH TO WATER vs ELAPSED TIME

Elapsed Time min	Depth to Water m
0.00	0.94
1.00	0.97
2.00	1.00
3.00	1.02
4.00	1.03
5.00	1.05
7.00	1.08
9.00	1.11
12.00	1.15
15.00	1.21
20.00	1.28
30.00	1.39
45.00	1.48
60.00	1.57
75.00	1.66
95.00	1.76
122.00	1.87



All dimensions given in metres

$$f = \frac{(V_{75} - V_{25})}{A_{50}(T_{75} - T_{25})}$$

$V_{75} - V_{25} = 0.54$
 $A_{50} = 3.46$
 $T_{75} - T_{25} = 75$

Soil Infiltration Rate $f = \underline{\underline{3.47E-05}}$ m/s

SOAKAWAY TEST RESULTS

BRE DIGEST 365 - SOIL INFILTRATION RATE

Project: Begbroke Science Park, Kidlington

Project No: C15387

Date of Test : 16/06/2021

Sheet No: 1/3

Trial Pit: TP7 (FIRST FILLING)

Depth: 2.00

Length: 1.70

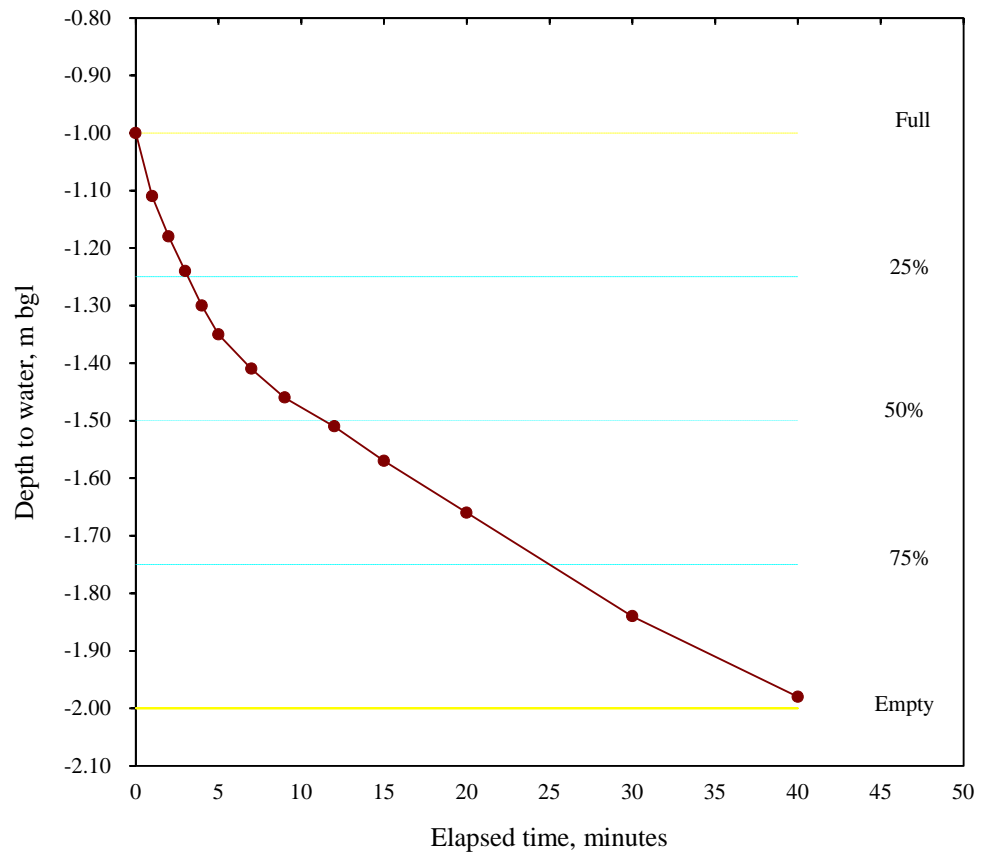
Width: 0.60

Description of Stratum under test: Brown and Yellow Brown, slightly silty SAND AND GRAVEL

Depth to water prior to test: Dry
(below ground level)

DEPTH TO WATER vs ELAPSED TIME

Elapsed Time min	Depth to Water m
0.00	1.00
1.00	1.11
2.00	1.18
3.00	1.24
4.00	1.30
5.00	1.35
7.00	1.41
9.00	1.46
12.00	1.51
15.00	1.57
20.00	1.66
30.00	1.84
40.00	1.98



All dimensions given in metres

$$f = \frac{(V_{75} - V_{25})}{A_{50}(T_{75} - T_{25})}$$

$V_{75} - V_{25} = 0.51$
 $A_{50} = 3.32$
 $T_{75} - T_{25} = 22$
 $f = \underline{1.16E-04} \text{ m/s}$

Soil Infiltration Rate

SOAKAWAY TEST RESULTS

BRE DIGEST 365 - SOIL INFILTRATION RATE

Project: Begbroke Science Park, Kidlington

Project No: C15387

Date of Test : 16/06/2021

Sheet No: 2/3

Trial Pit: TP7 (SECOND FILLING)

Depth: 2.00

Length: 1.70

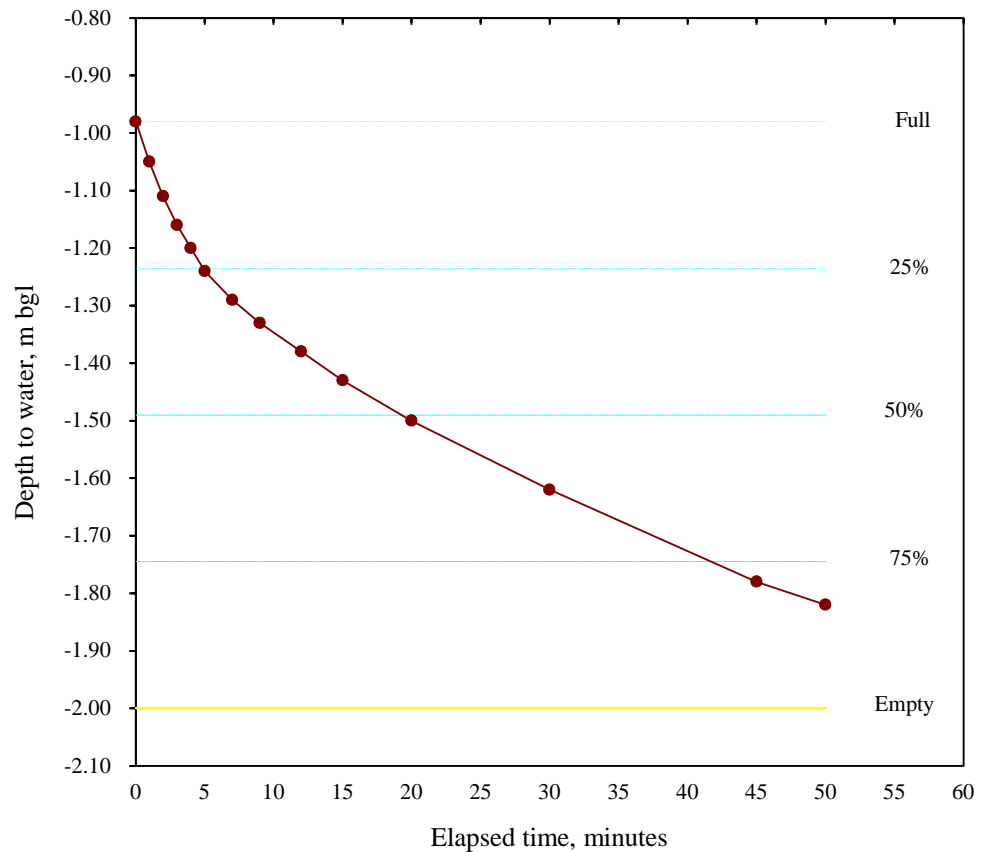
Width: 0.60

Description of Stratum under test: Brown and Yellow Brown, slightly silty SAND AND GRAVEL

Depth to water prior to test: Dry
(below ground level)

DEPTH TO WATER vs ELAPSED TIME

Elapsed Time min	Depth to Water m
0.00	0.98
1.00	1.05
2.00	1.11
3.00	1.16
4.00	1.20
5.00	1.24
7.00	1.29
9.00	1.33
12.00	1.38
15.00	1.43
20.00	1.50
30.00	1.62
45.00	1.78
50.00	1.82



All dimensions given in metres

$$f = \frac{(V_{75} - V_{25})}{A_{50}(T_{75} - T_{25})}$$

$V_{75} - V_{25} = 0.52$
 $A_{50} = 3.37$
 $T_{75} - T_{25} = 36$
 $f = \underline{7.15E-05} \text{ m/s}$

Soil Infiltration Rate

SOAKAWAY TEST RESULTS

BRE DIGEST 365 - SOIL INFILTRATION RATE

Project: Begbroke Science Park, Kidlington

Project No: C15387

Date of Test : 16/06/2021

Sheet No: 3/3

Trial Pit: TP7 (THIRD FILLING)

Depth: 2.00

Length: 1.70

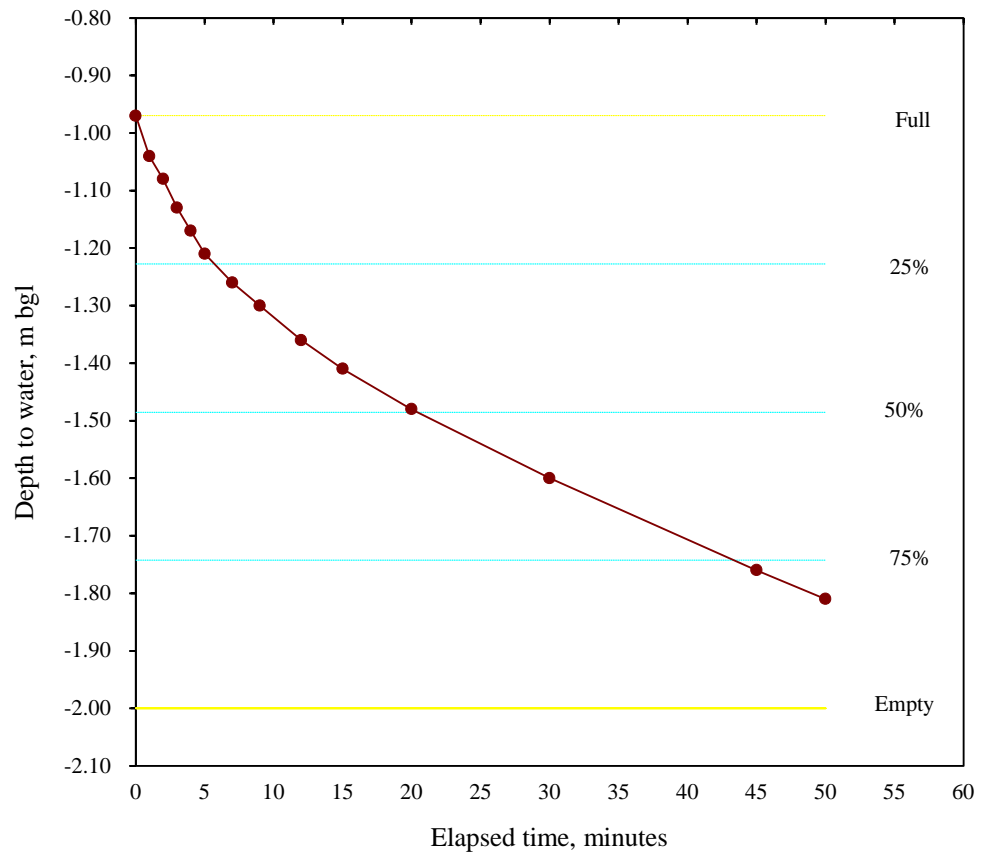
Width: 0.60

Description of Stratum under test: Brown and Yellow Brown, slightly silty SAND AND GRAVEL

Depth to water prior to test: Dry
(below ground level)

DEPTH TO WATER vs ELAPSED TIME

Elapsed Time min	Depth to Water m
0.00	0.97
1.00	1.04
2.00	1.08
3.00	1.13
4.00	1.17
5.00	1.21
7.00	1.26
9.00	1.30
12.00	1.36
15.00	1.41
20.00	1.48
30.00	1.60
45.00	1.76
50.00	1.81



All dimensions given in metres

$$f = \frac{(V_{75} - V_{25})}{A_{50}(T_{75} - T_{25})}$$

$V_{75} - V_{25} = 0.53$
 $A_{50} = 3.39$
 $T_{75} - T_{25} = 38$
 $f = \underline{\underline{6.80E-05}} \text{ m/s}$

Soil Infiltration Rate