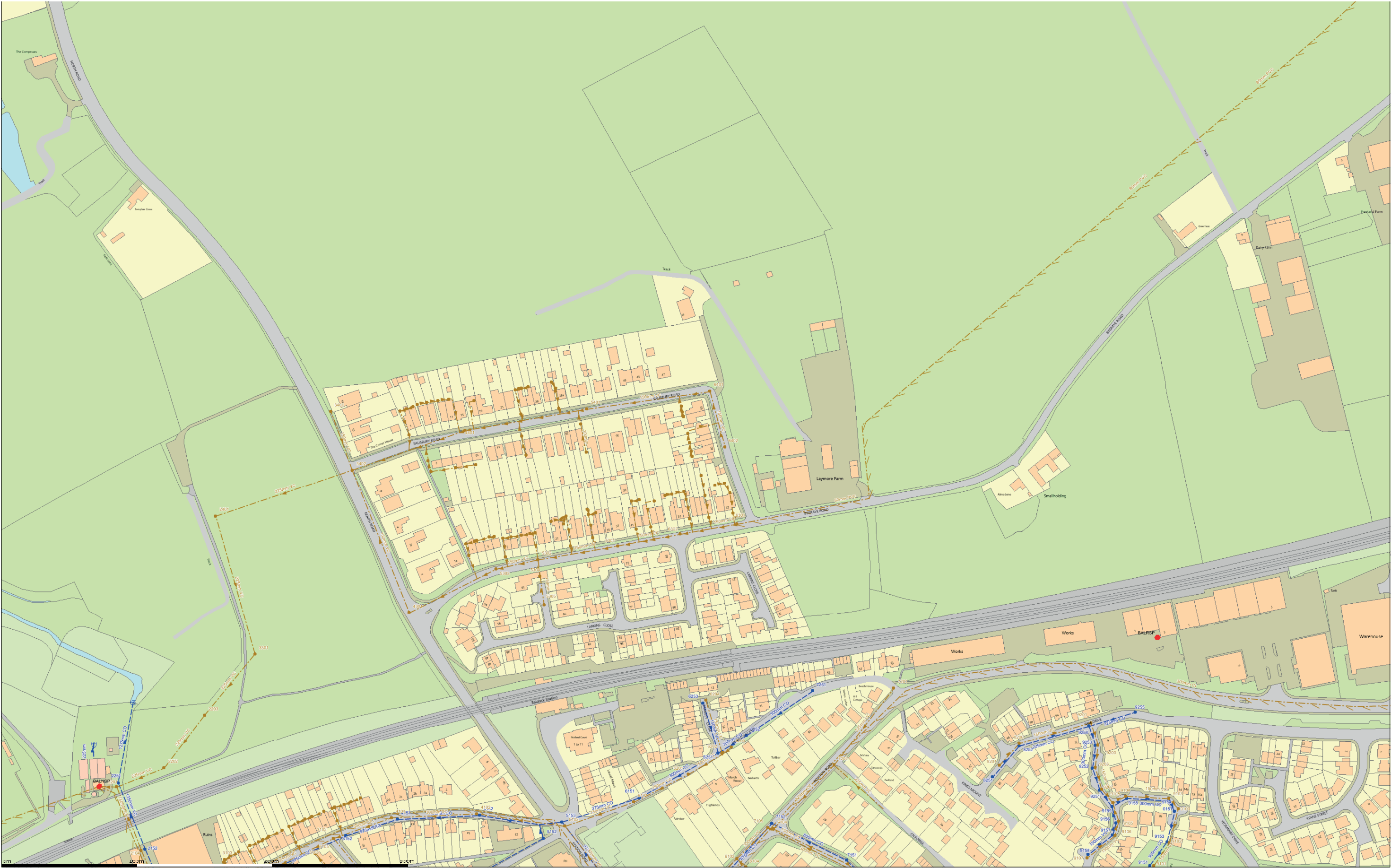




(c) Crown copyright and database rights 2017 Ordnance Survey 100022432 Date: 13/07/17 Scale: 1:1250 Map Centre: 524650,234473 Data updated: 01/05/17 Our Ref: 229373 - 1 Wastewater Plan A1

This plan is provided by Anglian Water pursuant to its obligations under the Water Industry Act 1991 sections 198 or 199. It must be used in conjunction with any search results attached. The information on this plan is based on data currently recorded but position must be regarded as approximate. Service pipes, private sewers and drains are generally not shown. Users of this map are strongly advised to commission their own survey of the area shown on the plan before carrying out any works. The actual position of all apparatus MUST be established by trial holes. No liability whatsoever, including liability for negligence, is accepted by Anglian Water for any error or inaccuracy or omission, including the failure to accurately record, or record at all, the location of any water main, discharge pipe, sewer or disposal main or any item of apparatus. This information is valid for the date printed. This plan is produced by Anglian Water Services Limited (c) Crown copyright and database rights 2017 Ordnance Survey 100022432. This map is to be used for the purposes of viewing the location of Anglian Water assets only. Any other view of this map data or further analysis is not permitted. This notice is not intended to exclude or restrict liability for death or personal injury.

Foul Sewer
Surface Sewer
Combined Sewer
Final Effluent
Rising Main

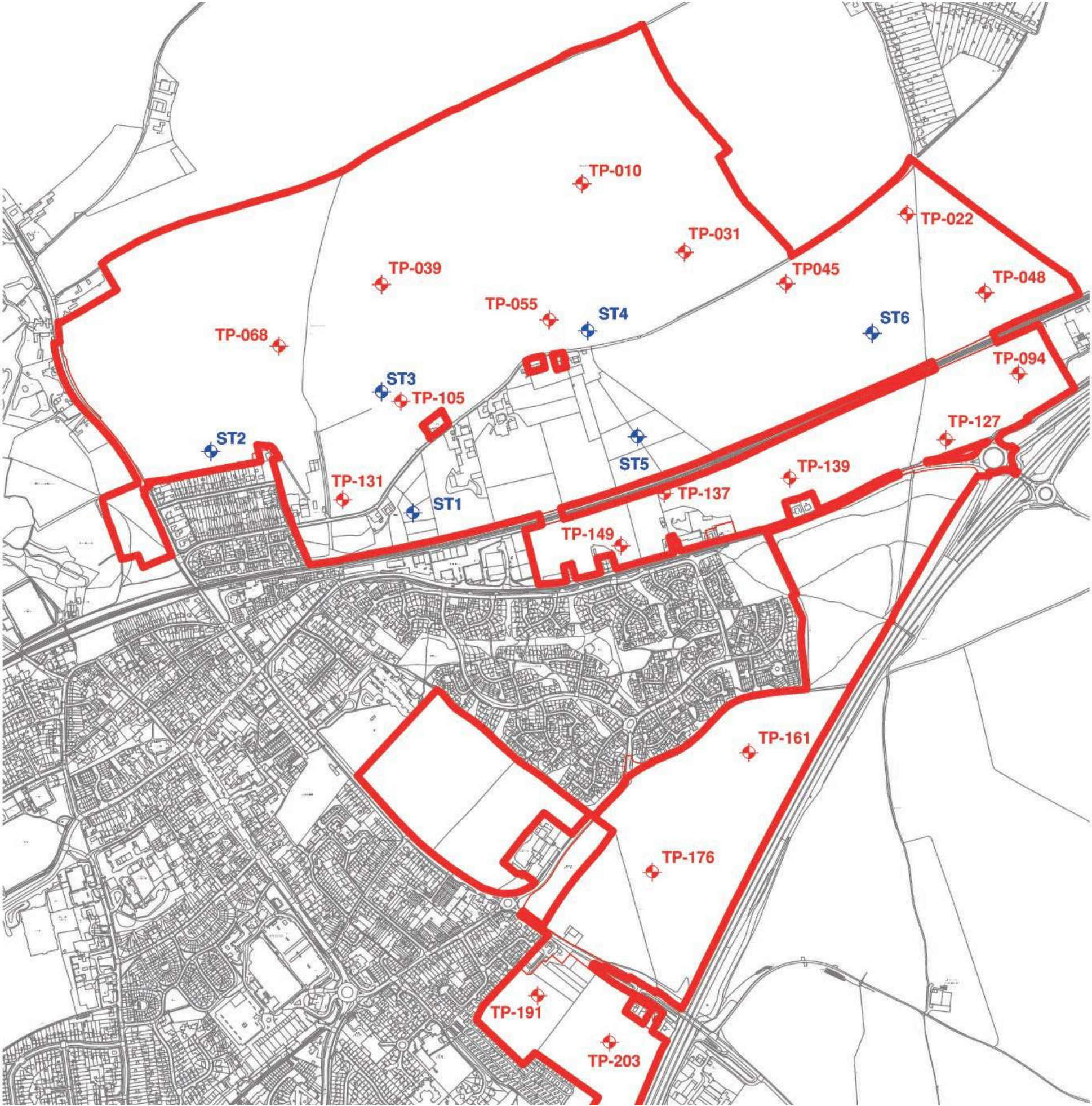
Outfall
(Colour denotes effluent type)
Inlet
(Colour denotes effluent type)
Manhole



Appendix G

Infiltration Testing Results

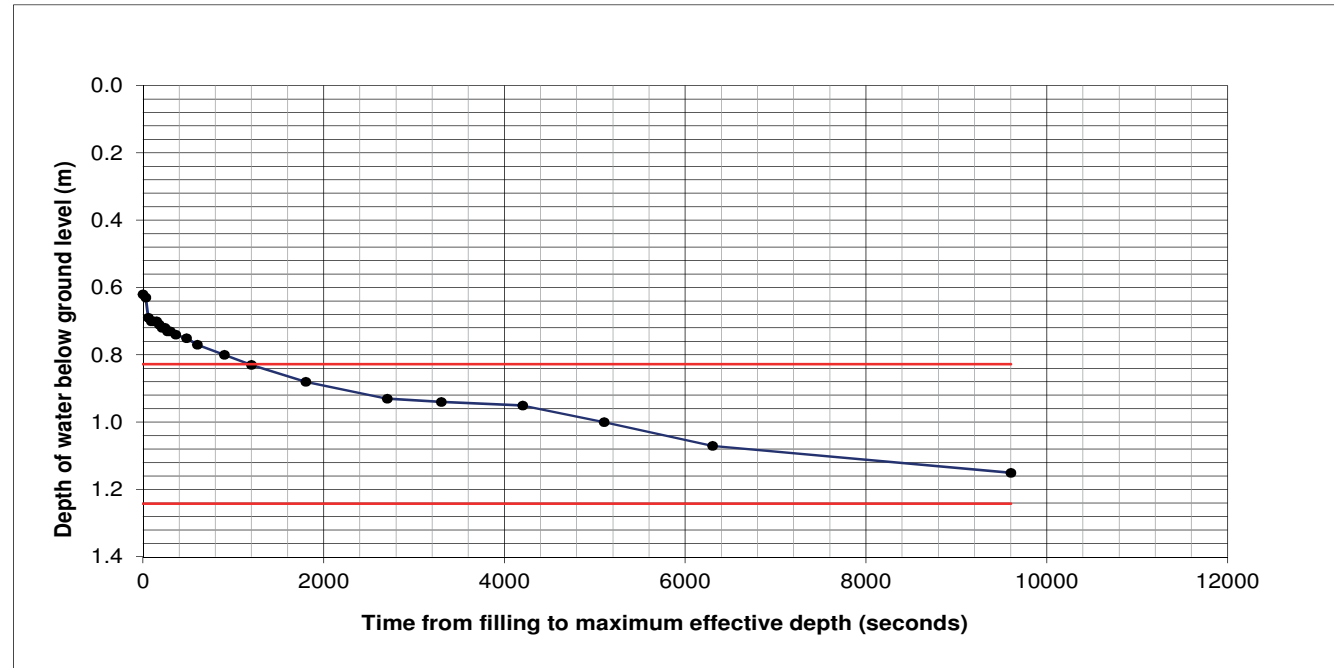




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Ground Engineering Services

PROJECT No.:	A090070-171
PROJECT NAME:	Baldock (BA1)
CLIENT:	Hertfordshire CC
FIGURE No.:	1

SOAKAWAY TEST - SOIL INFILTRATION RATE/PERMEABILITY CALCULATION



Time Elapsed (s)	Time Elapsed (mins)	Depth of water below ground level (m)	TRIALPIT No.: ST1
			TEST No.: 1
			DATE: 05/10/2017
			INPUT PARAMETERS:
30	0.00	0.620	Effective depth of Pit (m) 0.83
60	0.50	0.630	Depth of Pit (m) 1.45
90	1.00	0.690	Length of Pit (m) 2.05
120	1.50	0.700	Width of Pit (m) 0.50
150	2.00	0.700	Total volume of pit (m ³) 0.85
180	2.50	0.700	Total volume of Water (m ³) 0.85
210	3.00	0.710	Level of water in pit at 75% effective depth (p ₇₅) (m) 0.21
240	3.50	0.720	Level of water in pit at 25% effective depth (p ₂₅) (m) 0.62
270	4.00	0.720	Surface area of pit up to 50% effective depth (A _{p50}) (m ²) 3.142
300	4.50	0.730	Time at 75% effective depth (p ₇₅) (s) 1100
360	5.00	0.730	Time at 25% effective depth (p ₂₅) (s) 10400
480	6.00	0.740	Volume of outflow between 75% and 25% effective depth (V _{p75 - 25}) (m ³) 0.43
600	8.00	0.750	Time taken for the outflow between 75% and 25% effective depth (T _{p75-25}) (s) 9300
900	10.00	0.770	SOIL INFILTRATION RATE (f) $\frac{V_{p75-25}}{A_{p50} \times T_{p75-25}}$ (m/s) 1.46E-05
1200	15.00	0.800	WATER INPUT: Approx 650 litres in 10.5 mins
1800	20.00	0.830	GEOLOGY OF TEST SECTION:
2700	30.00	0.880	White Chalk. Recovered as moderately dense chalk clasts (fine to coarse gravel sized). Occasional fine to coarse nodular flint gravels at 1.4mbgl.
3300	45.00	0.930	Compiled by: DG
4200	55.00	0.940	Checked by: Ccol
5100	70.00	0.950	
6300	85.00	1.000	
9600	105.00	1.070	
	160.00	1.150	
Too many points to display			

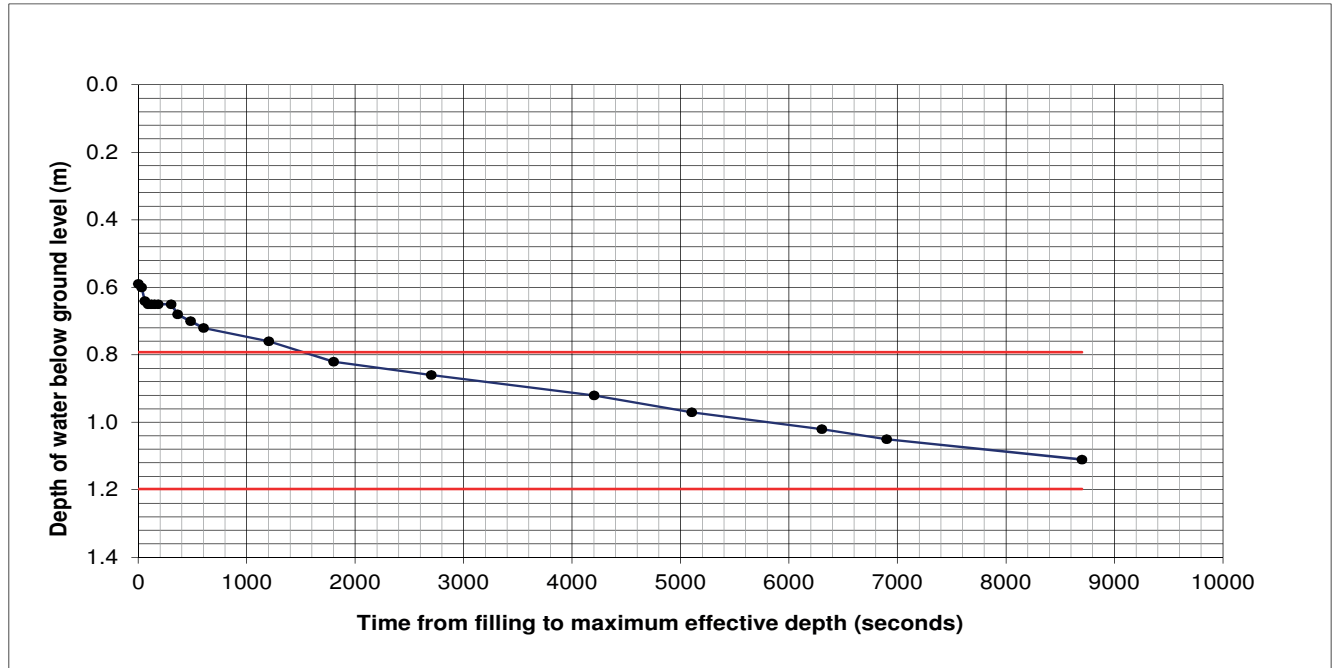
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PROJECT No.:	A090070-171
PROJECT NAME:	Baldock (BA1)
CLIENT:	Hertfordshire CC
FIGURE No.:	2

SOAKAWAY TEST - SOIL INFILTRATION RATE/PERMEABILITY CALCULATION

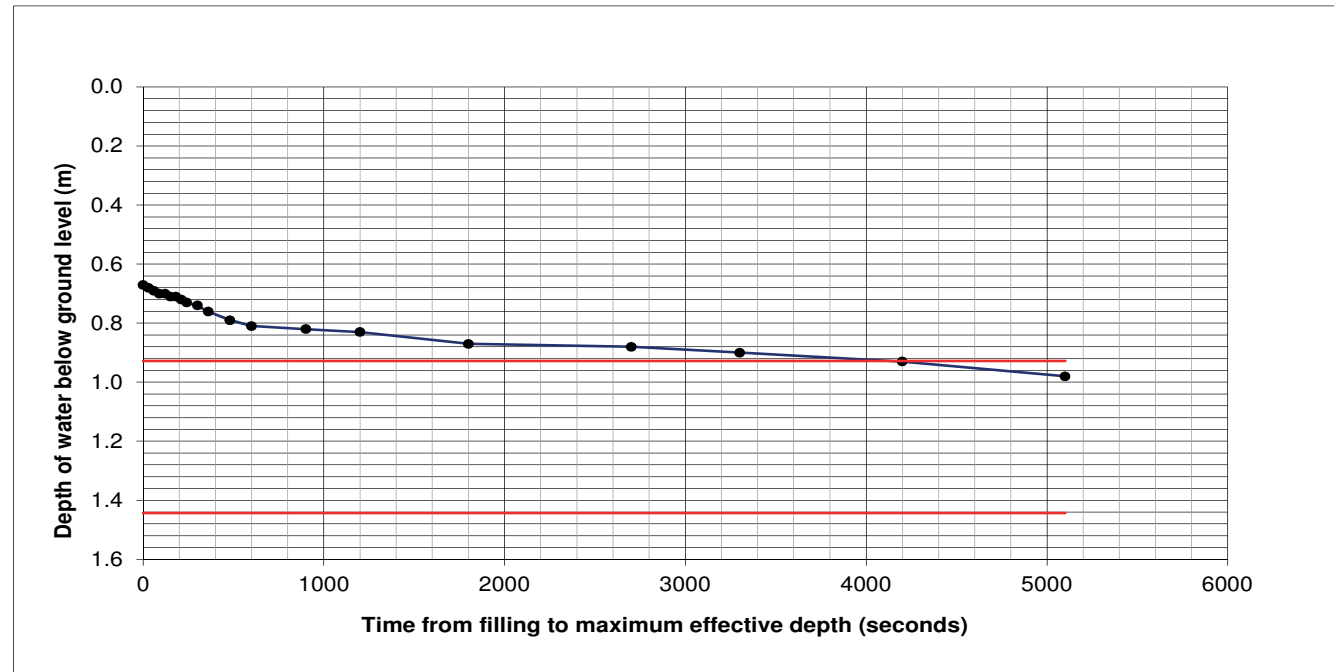


Time Elapsed (s)	Time Elapsed (mins)	Depth of water below ground level (m)	TRIALPIT No.: ST2
			TEST No.: 1
			DATE: 05/10/2017
			INPUT PARAMETERS:
0	0.00	0.590	Effective depth of Pit (m) 0.81
30	0.50	0.600	Depth of Pit (m) 1.40
60	1.00	0.640	Length of Pit (m) 0.85
90	1.50	0.650	Width of Pit (m) 0.60
120	2.00	0.650	Total volume of pit (m ³) 0.41
150	2.50	0.650	Total volume of Water (m ³) 0.41
180	3.00	0.650	Level of water in pit at 75% effective depth (p ₇₅) (m) 0.20
300	5.00	0.650	Level of water in pit at 25% effective depth (p ₂₅) (m) 0.61
360	6.00	0.680	Surface area of pit up to 50% effective depth (A _{p50}) (m ²) 1.685
480	8.00	0.700	Time at 75% effective depth (p ₇₅) (s) 1600
600	10.00	0.720	Time at 25% effective depth (p ₂₅) (s) 10650
1200	20.00	0.760	Volume of outflow between 75% and 25% effective depth (V _{p75 - 25}) (m ³) 0.21
1800	30.00	0.820	Time taken for the outflow between 75% and 25% effective depth (T _{p75-25}) (s) 9050
2700	45.00	0.860	SOIL INFILTRATION RATE (f) $\frac{V_{p75-25}}{A_{p50} \times T_{p75-25}}$ (m/s) 1.35E-05
4200	70.00	0.920	WATER INPUT: in
5100	85.00	0.970	GEOLOGY OF TEST SECTION: Light brown fine to coarse sand.
6300	105.00	1.020	
6900	115.00	1.050	
8700	145.00	1.110	
Too many points to display			Compiled by: DG Checked by: Ccol
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PROJECT No.:	A090070-171
PROJECT NAME:	Baldock (BA1)
CLIENT:	Hertfordshire CC
FIGURE No.:	3

SOAKAWAY TEST - SOIL INFILTRATION RATE/PERMEABILITY CALCULATION



Time Elapsed (s)	Time Elapsed (mins)	Depth of water below ground level (m)	TRIALPIT No.: ST3
			TEST No.: 1
			DATE: 05/10/2017
0	0.00	0.670	INPUT PARAMETERS:
30	0.50	0.680	Effective depth of Pit (m) 1.03
60	1.00	0.690	Depth of Pit (m) 1.70
90	1.50	0.700	Length of Pit (m) 0.85
120	2.00	0.700	Width of Pit (m) 0.60
150	2.50	0.710	Total volume of pit (m ³) 0.53
180	3.00	0.710	Total volume of Water (m ³) 0.53
210	3.50	0.720	Level of water in pit at 75% effective depth (p ₇₅) (m) 0.26
240	4.00	0.730	Level of water in pit at 25% effective depth (p ₂₅) (m) 0.77
300	5.00	0.740	Surface area of pit up to 50% effective depth (A _{p50}) (m ²) 2.004
360	6.00	0.760	Time at 75% effective depth (p ₇₅) (s) 4000
480	8.00	0.790	Time at 25% effective depth (p ₂₅) (s) 14350
600	10.00	0.810	Volume of outflow between 75% and 25% effective depth (V _{p75 - 25}) (m ³) 0.26
900	15.00	0.820	Time taken for the outflow between 75% and 25% effective depth (T _{p75-25}) (s) 10350
1200	20.00	0.830	SOIL INFILTRATION RATE (f) $\frac{V_{p75-25}}{A_{p50} \times T_{p75-25}}$ (m/s) 1.27E-05
1800	30.00	0.870	WATER INPUT: in
2700	45.00	0.880	GEOLOGY OF TEST SECTION:
3300	55.00	0.900	Pale grey and white Chalk recovered as moderately dense clasts (fine to coarse gravel). With occasional fine to coarse nodular flint gravels.
4200	70.00	0.930	Compiled by: DG
5100	85.00	0.980	Checked by: Ccol
Too many points to display			

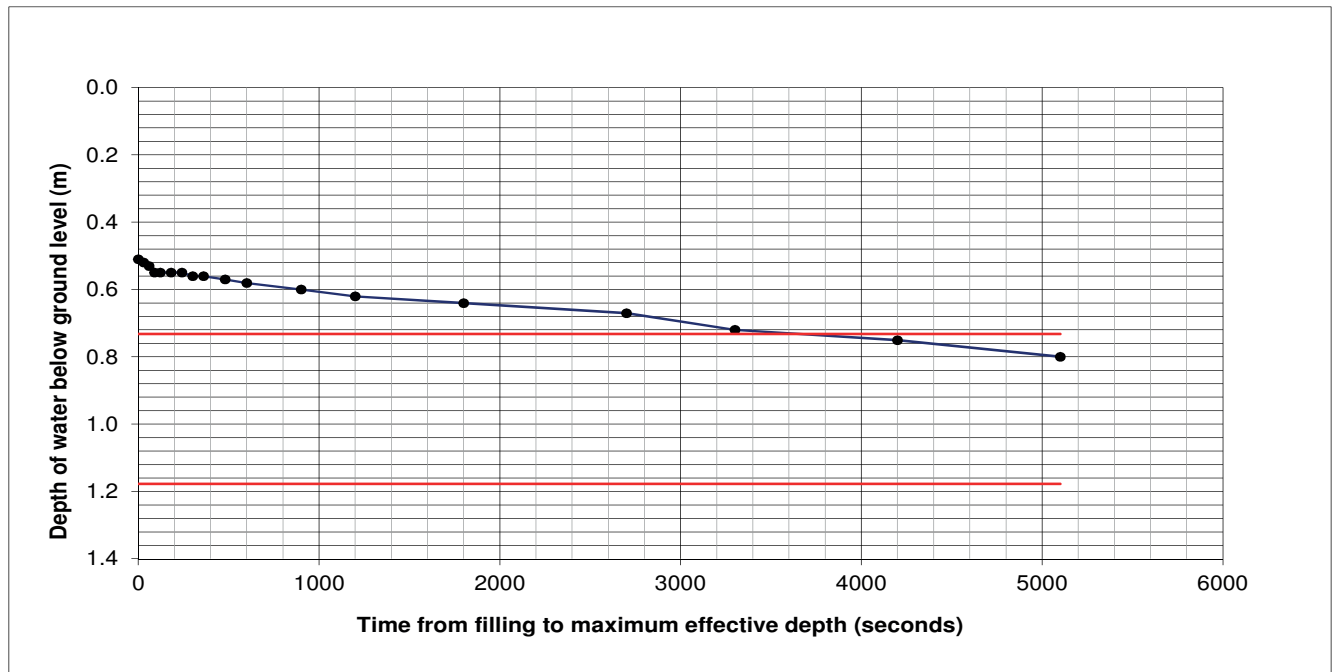
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PROJECT No.:	A090070-171
PROJECT NAME:	Baldock (BA1)
CLIENT:	Hertfordshire CC
FIGURE No.:	4

SOAKAWAY TEST - SOIL INFILTRATION RATE/PERMEABILITY CALCULATION



Time Elapsed (s)	Time Elapsed (mins)	Depth of water below ground level (m)	TRIALPIT No.: ST4
			TEST No.: 1
			DATE: 06/10/2017
			INPUT PARAMETERS:
			Effective depth of Pit (m) 0.89
			Depth of Pit (m) 1.40
			Length of Pit (m) 1.60
			Width of Pit (m) 0.50
			Total volume of pit (m ³) 0.71
			Total volume of Water (m ³) 0.71
			Level of water in pit at 75% effective depth (p ₇₅) (m) 0.22
			Level of water in pit at 25% effective depth (p ₂₅) (m) 0.67
			Surface area of pit up to 50% effective depth (A _{p50}) (m ²) 2.669
			Time at 75% effective depth (p ₇₅) (s) 3600
			Time at 25% effective depth (p ₂₅) (s) 12700
			Volume of outflow between 75% and 25% effective depth (V _{p75 - 25}) (m ³) 0.36
			Time taken for the outflow between 75% and 25% effective depth (T _{p75-25}) (s) 9100
			SOIL INFILTRATION RATE (f) $\frac{V_{p75-25}}{A_{p50} \times T_{p75-25}}$ (m/s) 1.47E-05
			WATER INPUT: in
			GEOLOGY OF TEST SECTION: White Chalk recovered as moderately dense clasts (fine to coarse gravel).
			Compiled by: DG Checked by: Ccol
Too many points to display			

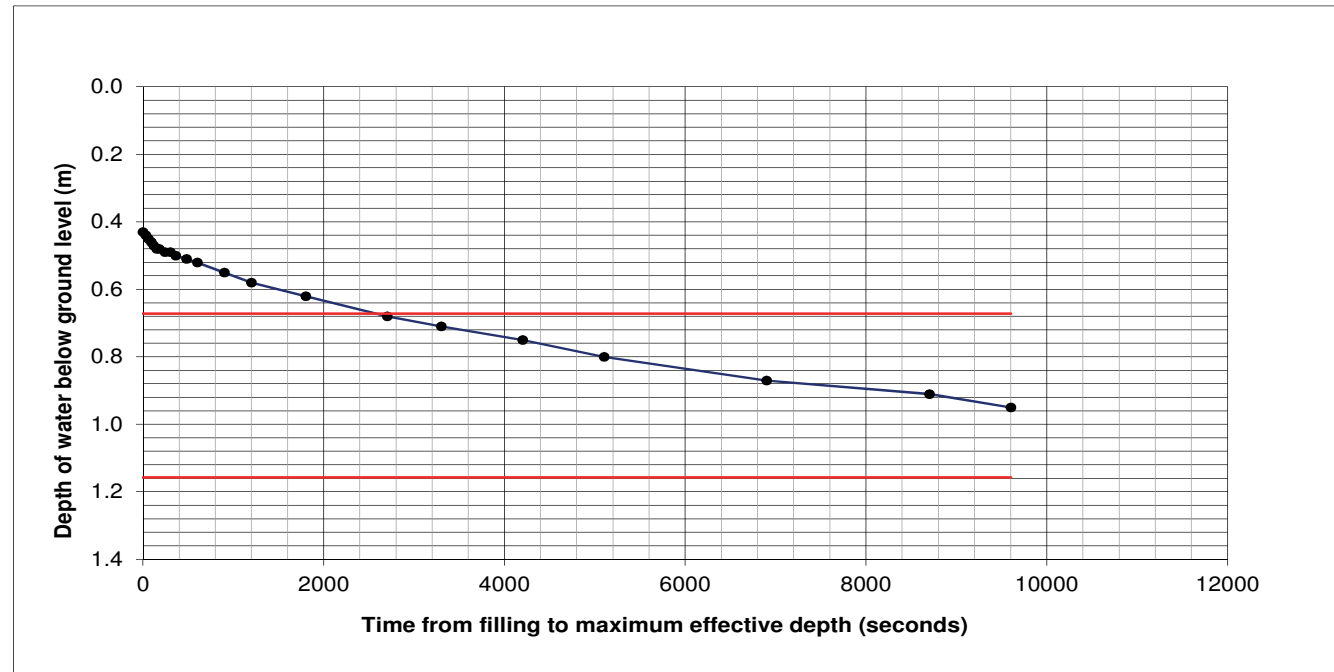
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PROJECT No.:	A090070-171
PROJECT NAME:	Baldock (BA1)
CLIENT:	Hertfordshire CC
FIGURE No.:	5

SOAKAWAY TEST - SOIL INFILTRATION RATE/PERMEABILITY CALCULATION



Time Elapsed (s)	Time Elapsed (mins)	Depth of water below ground level (m)	TRIALPIT No.: ST5
0	0.00	0.430	TEST No.: 1
30	0.50	0.440	DATE: 06/10/2017
60	1.00	0.450	INPUT PARAMETERS:
90	1.50	0.460	Effective depth of Pit (m) 0.97
120	2.00	0.470	Depth of Pit (m) 1.40
150	2.50	0.480	Length of Pit (m) 2.05
180	3.00	0.480	Width of Pit (m) 0.55
240	4.00	0.490	Total volume of pit (m ³) 1.09
300	5.00	0.490	Total volume of Water (m ³) 1.09
360	6.00	0.500	Level of water in pit at 75% effective depth (p ₇₅) (m) 0.24
480	8.00	0.510	Level of water in pit at 25% effective depth (p ₂₅) (m) 0.73
600	10.00	0.520	Surface area of pit up to 50% effective depth (A _{p50}) (m ²) 3.650
900	15.00	0.550	Time at 75% effective depth (p ₇₅) (s) 2600
1200	20.00	0.580	Time at 25% effective depth (p ₂₅) (s) 13400
1800	30.00	0.620	Volume of outflow between 75% and 25% effective depth (V _{p75 - 25}) (m ³) 0.55
2700	45.00	0.680	Time taken for the outflow between 75% and 25% effective depth (T _{p75-25}) (s) 10800
3300	55.00	0.710	SOIL INFILTRATION RATE (f) $\frac{V_{p75-25}}{A_{p50} \times T_{p75-25}}$ (m/s) 1.39E-05
4200	70.00	0.750	WATER INPUT: in
5100	85.00	0.800	GEOLOGY OF TEST SECTION:
6900	115.00	0.870	White Chalk recovered as moderately dense clasts (fine to coarse gravel). With occasional fine to coarse nodular flint gravels.
8700	145.00	0.910	Compiled by: DG
9600	160.00	0.950	Checked by: CCol
Too many points to display			

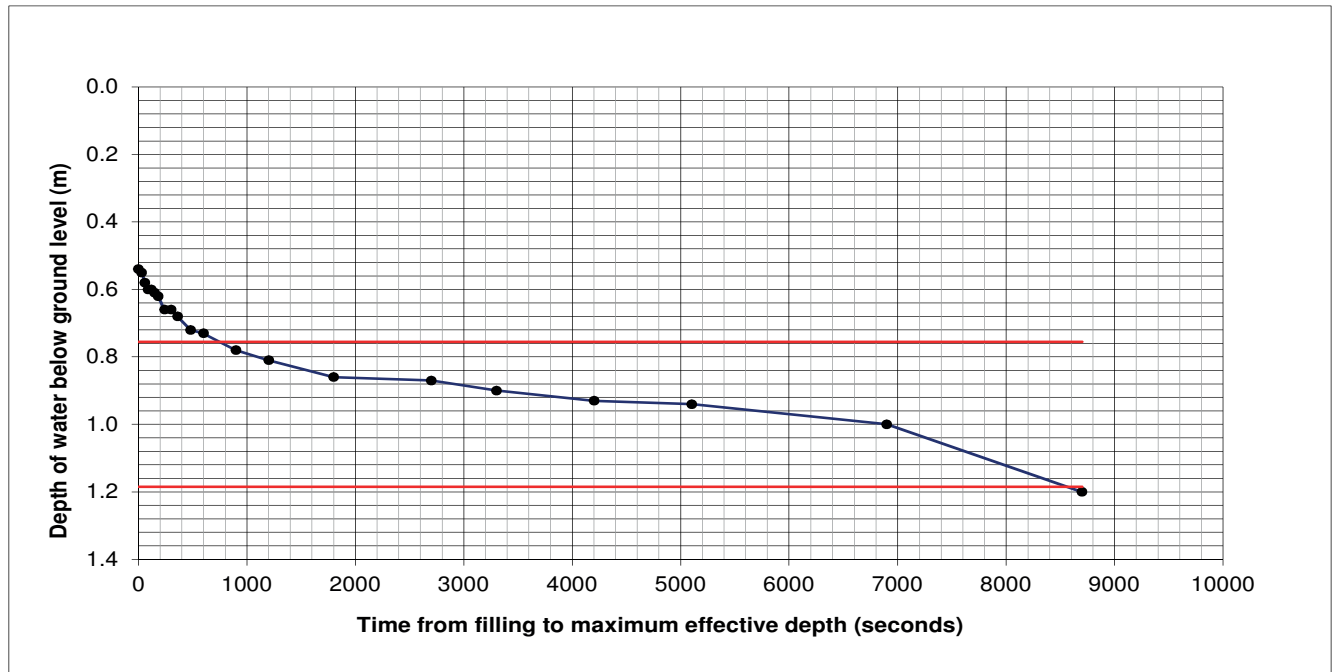
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PROJECT No.:	A090070-171
PROJECT NAME:	Baldock (BA1)
CLIENT:	Hertfordshire CC
FIGURE No.:	6

SOAKAWAY TEST - SOIL INFILTRATION RATE/PERMEABILITY CALCULATION



Time Elapsed (s)	Time Elapsed (mins)	Depth of water below ground level (m)	TRIALPIT No.: ST6
			TEST No.: 1
			DATE: 06/10/2017
0	0.00	0.540	INPUT PARAMETERS:
30	0.50	0.550	Effective depth of Pit (m) 0.86
60	1.00	0.580	Depth of Pit (m) 1.40
90	1.50	0.600	Length of Pit (m) 2.10
120	2.00	0.600	Width of Pit (m) 0.65
150	2.50	0.610	Total volume of pit (m ³) 1.17
180	3.00	0.620	Total volume of Water (m ³) 1.17
240	4.00	0.660	Level of water in pit at 75% effective depth (p ₇₅) (m) 0.22
300	5.00	0.660	Level of water in pit at 25% effective depth (p ₂₅) (m) 0.65
360	6.00	0.680	Surface area of pit up to 50% effective depth (A _{p50}) (m ²) 3.730
480	8.00	0.720	Time at 75% effective depth (p ₇₅) (s) 800
600	10.00	0.730	Time at 25% effective depth (p ₂₅) (s) 8600
900	15.00	0.780	Volume of outflow between 75% and 25% effective depth (V _{p75 - 25}) (m ³) 0.59
1200	20.00	0.810	Time taken for the outflow between 75% and 25% effective depth (T _{p75-25}) (s) 7800
1800	30.00	0.860	SOIL INFILTRATION RATE (f) $\frac{V_{p75-25}}{A_{p50} \times T_{p75-25}}$ (m/s) 2.02E-05
2700	45.00	0.870	WATER INPUT: Approx 1500 litres in 25mins
3300	55.00	0.900	GEOLOGY OF TEST SECTION:
4200	70.00	0.930	White Chalk recovered as moderately dense clasts (fine to coarse gravel). With occasional fine to coarse nodular flint gravels.
5100	85.00	0.940	Compiled by: DG
6900	115.00	1.000	Checked by: Ccol
8700	145.00	1.200	
Too many points to display			

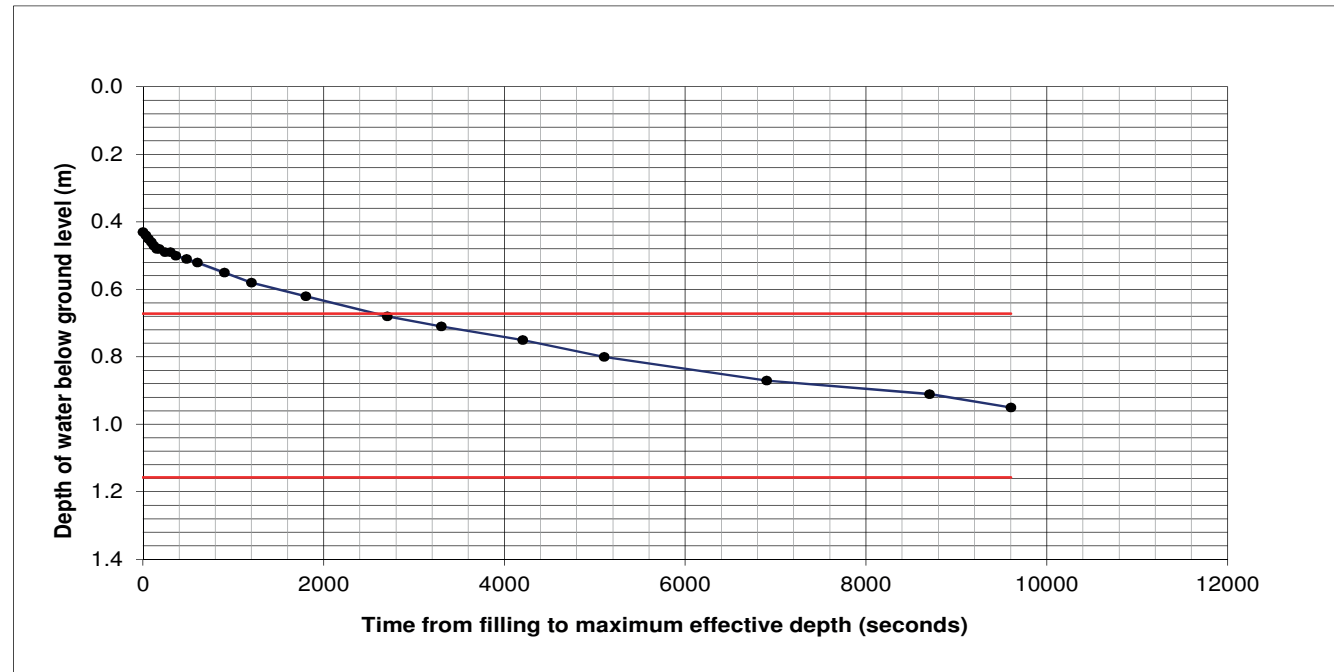
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PROJECT No.:	A090070-171
PROJECT NAME:	Baldock (BA1)
CLIENT:	Hertfordshire CC
FIGURE No.:	5

SOAKAWAY TEST - SOIL INFILTRATION RATE/PERMEABILITY CALCULATION



Time Elapsed (s)	Time Elapsed (mins)	Depth of water below ground level (m)	TRIALPIT No.: ST5
			TEST No.: 1
			DATE: 06/10/2017
0	0.00	0.430	INPUT PARAMETERS:
30	0.50	0.440	Effective depth of Pit (m) 0.97
60	1.00	0.450	Depth of Pit (m) 1.40
90	1.50	0.460	Length of Pit (m) 2.05
120	2.00	0.470	Width of Pit (m) 0.55
150	2.50	0.480	Total volume of pit (m ³) 1.09
180	3.00	0.480	Total volume of Water (m ³) 1.09
240	4.00	0.490	Level of water in pit at 75% effective depth (p ₇₅) (m) 0.24
300	5.00	0.490	Level of water in pit at 25% effective depth (p ₂₅) (m) 0.73
360	6.00	0.500	Surface area of pit up to 50% effective depth (A _{p50}) (m ²) 3.650
480	8.00	0.510	Time at 75% effective depth (p ₇₅) (s) 2600
600	10.00	0.520	Time at 25% effective depth (p ₂₅) (s) 13400
900	15.00	0.550	Volume of outflow between 75% and 25% effective depth (V _{p75 - 25}) (m ³) 0.55
1200	20.00	0.580	Time taken for the outflow between 75% and 25% effective depth (T _{p75-25}) (s) 10800
1800	30.00	0.620	SOIL INFILTRATION RATE (f) $\frac{V_{p75-25}}{A_{p50} \times T_{p75-25}}$ (m/s) 1.39E-05
2700	45.00	0.680	WATER INPUT: in
3300	55.00	0.710	GEOLOGY OF TEST SECTION:
4200	70.00	0.750	White Chalk recovered as moderately dense clasts (fine to coarse gravel). With occasional fine to coarse nodular flint gravels.
5100	85.00	0.800	
6900	115.00	0.870	
8700	145.00	0.910	
9600	160.00	0.950	
Too many points to display			Compiled by: DG Checked by: CCol

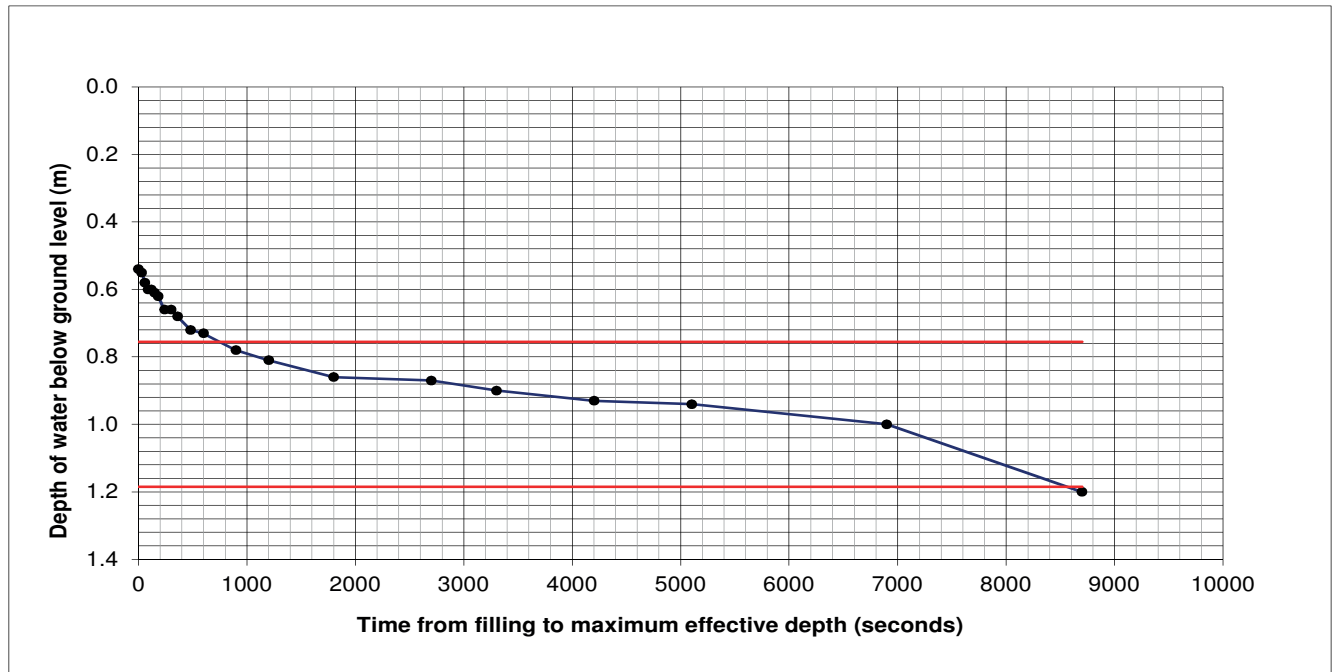
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PROJECT No.:	A090070-171
PROJECT NAME:	Baldock (BA1)
CLIENT:	Hertfordshire CC
FIGURE No.:	6

SOAKAWAY TEST - SOIL INFILTRATION RATE/PERMEABILITY CALCULATION



Time Elapsed (s)	Time Elapsed (mins)	Depth of water below ground level (m)	TRIALPIT No.: ST6
0	0.00	0.540	TEST No.: 1
30	0.50	0.550	DATE: 06/10/2017
60	1.00	0.580	INPUT PARAMETERS:
90	1.50	0.600	Effective depth of Pit (m) 0.86
120	2.00	0.600	Depth of Pit (m) 1.40
150	2.50	0.610	Length of Pit (m) 2.10
180	3.00	0.620	Width of Pit (m) 0.65
240	4.00	0.660	Total volume of pit (m ³) 1.17
300	5.00	0.660	Total volume of Water (m ³) 1.17
360	6.00	0.680	Level of water in pit at 75% effective depth (p ₇₅) (m) 0.22
480	8.00	0.720	Level of water in pit at 25% effective depth (p ₂₅) (m) 0.65
600	10.00	0.730	Surface area of pit up to 50% effective depth (A _{p50}) (m ²) 3.730
900	15.00	0.780	Time at 75% effective depth (p ₇₅) (s) 800
1200	20.00	0.810	Time at 25% effective depth (p ₂₅) (s) 8600
1800	30.00	0.860	Volume of outflow between 75% and 25% effective depth (V _{p75 - 25}) (m ³) 0.59
2700	45.00	0.870	Time taken for the outflow between 75% and 25% effective depth (T _{p75-25}) (s) 7800
3300	55.00	0.900	SOIL INFILTRATION RATE (f) $\frac{V_{p75-25}}{A_{p50} \times T_{p75-25}}$ (m/s) 2.02E-05
4200	70.00	0.930	WATER INPUT: Approx 1500 litres in 25mins
5100	85.00	0.940	GEOLOGY OF TEST SECTION:
6900	115.00	1.000	White Chalk recovered as moderately dense clasts (fine to coarse gravel). With occasional fine to coarse nodular flint gravels.
8700	145.00	1.200	Compiled by: DG
			Checked by: Ccol

Too many points to display

After BRE Digest 365, Soakaway Design, September 1991

Page 1 of 1

Recommended soil infiltration rate

1.78E-05

m/s

NOTE:

Water level did not fall to below the 25% full level within 24 hrs for fills 1 and 3 - Soil infiltration rate based on effective drainage only

Depth (final reading)	units	Fill 1	Fill 2	Fill 3
Pit depth	m	1.02		
Pit length	m		1.30	
Pit width	m		1.75	
Depth to first reading	m		0.55	
Maximum effective depth	m		0.47	
Depth at 75% full	m		0.66	
Depth at 25% full	m		0.90	
Time at 75% full	mins		12.81	
Time at 25% full	mins		87.71	
Vp75 - 25 (volume outflowing between 75% and 25% effective depth)	m3		0.206	
Mean surface area for outflow (50% effective depth)	m2		2.57	
Time for outflow	mins		74.90	
Soil infiltration rate, f =			0.0000178090	
or			1.78E-05	

LOG

BACKFILL

DEPTH (m)

DEPTH (m)

0.0

0.0

0.3

1.3

1.3

0.0

0.0

0.3

1.3

1.3

Scrub over TOPSOIL

0.0

0.0

0.3

1.3

1.3

Weak to moderately strong white CHALK

0.3

1.3

1.3

SOAKAWAY TEST RESULTS

In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)

PROJECT NAME

Baldock

CLIENT

Urban and Civic

DATE

Nov-23

PROJECT NUMBER

2899.00

SOAKAWAY NUM/FILL NUMBER

TP-010

1

Depth (final reading)	units	Fill 1	Fill 2	Fill 3
Pit depth	m	0.95		
Pit length	m		1.60	
Pit width	m		1.60	
Depth to first reading	m		0.54	
Maximum effective depth	m		0.41	
Depth at 75% full	m		0.64	
Depth at 25% full	m		0.85	
Time at 75% full	mins		8.73	
Time at 25% full	mins		57.52	
Vp75 - 25 (volume outflowing between 75% and 25% effective depth)	m3		0.164	
Mean surface area for outflow (50% effective depth)	m2		3.03	
Time for outflow	mins		48.79	
Soil infiltration rate, f =			0.0000185198	
or			1.85E-05	

LOG

BACKFILL

DEPTH (m)

DEPTH (m)

0.0

0.0

0.5

1.6

1.6

0.0

0.0

0.5

1.6

1.6

Scrub over TOPSOIL

0.0

0.0

0.5

1.6

1.6

Weak to moderately strong white CHALK

0.5

1.6

1.6

SOAKAWAY TEST RESULTS

In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)

PROJECT NAME

Baldock

CLIENT

Urban and Civic

DATE

Nov-23

PROJECT NUMBER

2899.00

SOAKAWAY NUM/FILL NUMBER

TP-022

1

Depth (final reading)	units	Fill 1	Fill 2	Fill 3
Pit depth	m	0.95		
Pit length	m		1.60	
Pit width	m		1.60	
Depth to first reading	m		0.54	
Maximum effective depth	m		0.41	
Depth at 75% full	m		0.64	
Depth at 25% full	m		0.85	
Time at 75% full	mins		8.73	
Time at 25% full	mins		57.52	
Vp75 - 25 (volume outflowing between 75% and 25% effective depth)	m3		0.164	
Mean surface area for outflow (50% effective depth)	m2		3.03	
Time for outflow	mins		48.79	
Soil infiltration rate, f =			0.0000185198	
or			1.85E-05	

LOG

BACKFILL

DEPTH (m)

DEPTH (m)

0.0

0.0

0.5

1.6

1.6

0.0

0.0

0.5

1.6

1.6

Scrub over TOPSOIL

0.0

0.0

0.5

1.6

1.6

Weak to moderately strong white CHALK

0.5

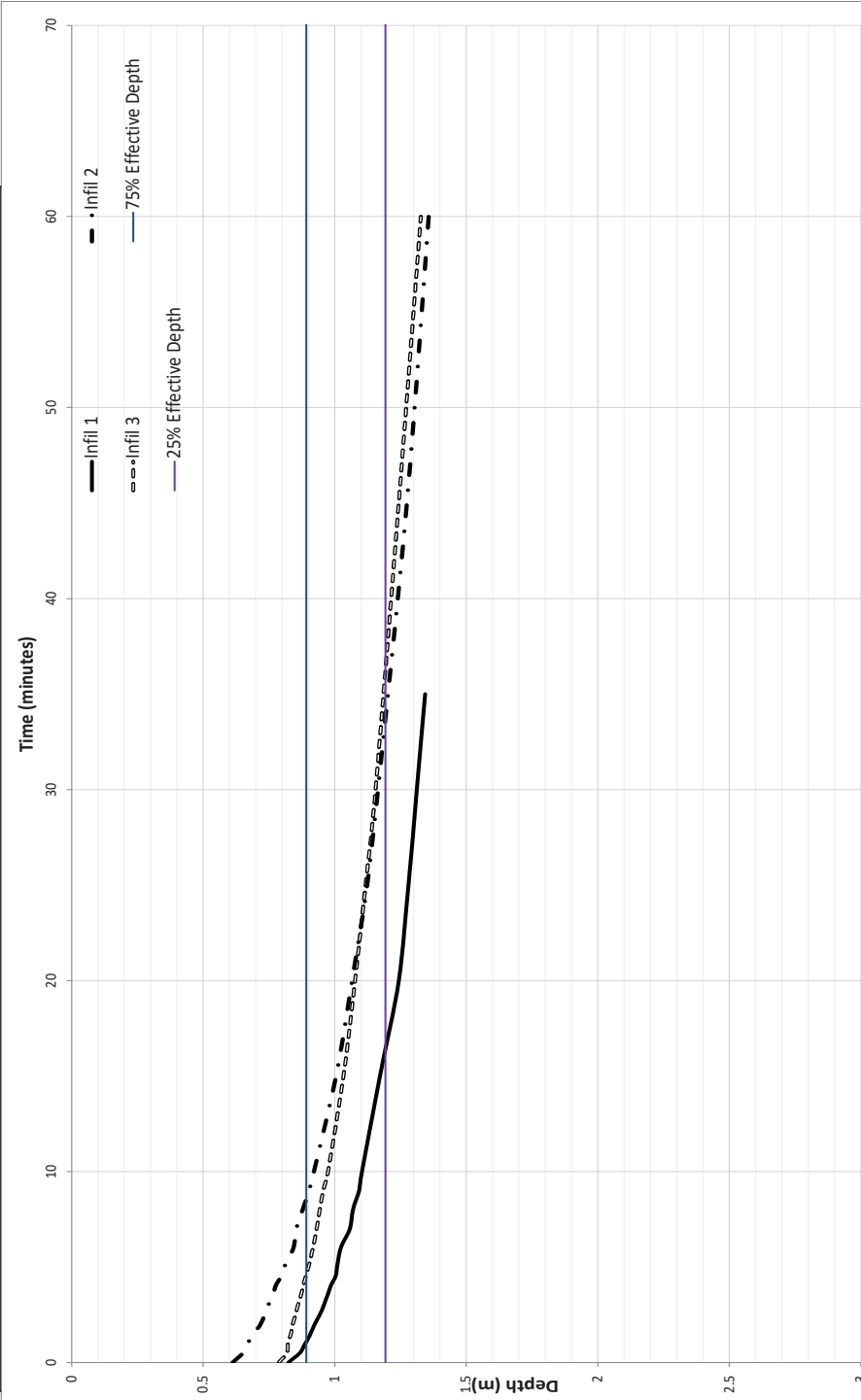
1.6

1.6

Recommended soil infiltration rate	
5.85E-05	m/s

NOTE:

Water level did not fall to below the 25% full level within 24 hrs for fill 3 - Soil infiltration rate based on effective drainage only



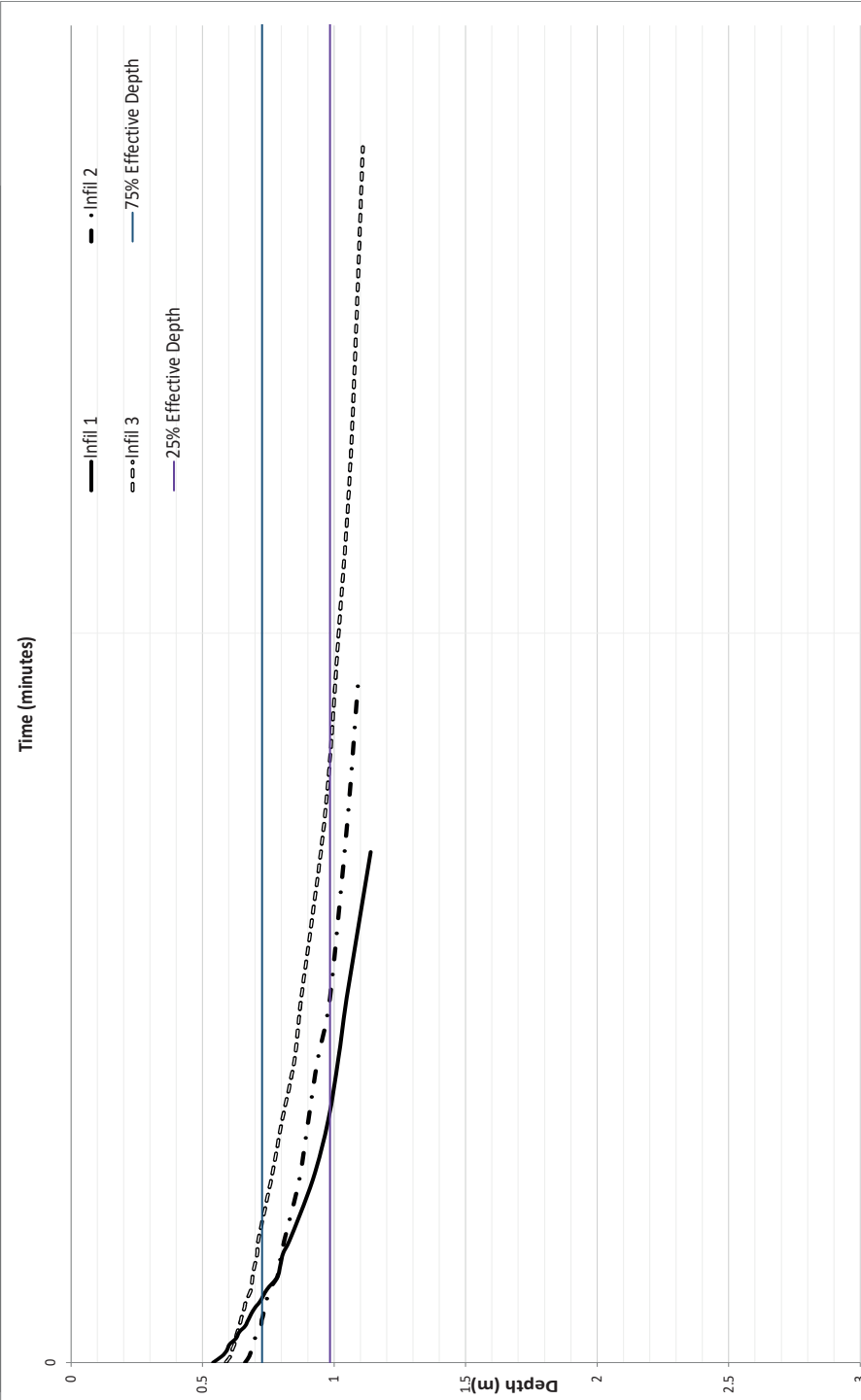
LOG	DEPTH (m)	BACKFILL	DEPTH (m)
Crop stuble over soft brown TOPSOIL	0.0	Arisings	0.0
Soft light brown CLAY	0.3		
Weak white CHALK	0.5		
	1.4		1.4

SOAKAWAY TEST RESULTS		DATE	PROJECT NUMBER
In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)		Nov-23	2899.00
		TP-031	SOAKAWAY NUM/FILL NUMBER
			1-3

Recommended soil infiltration rate	
4.27E-05	m/s

NOTE:

Water level did not fall to below the 25% full level within 24 hrs for fill 3 - Soil infiltration rate based on effective drainage only

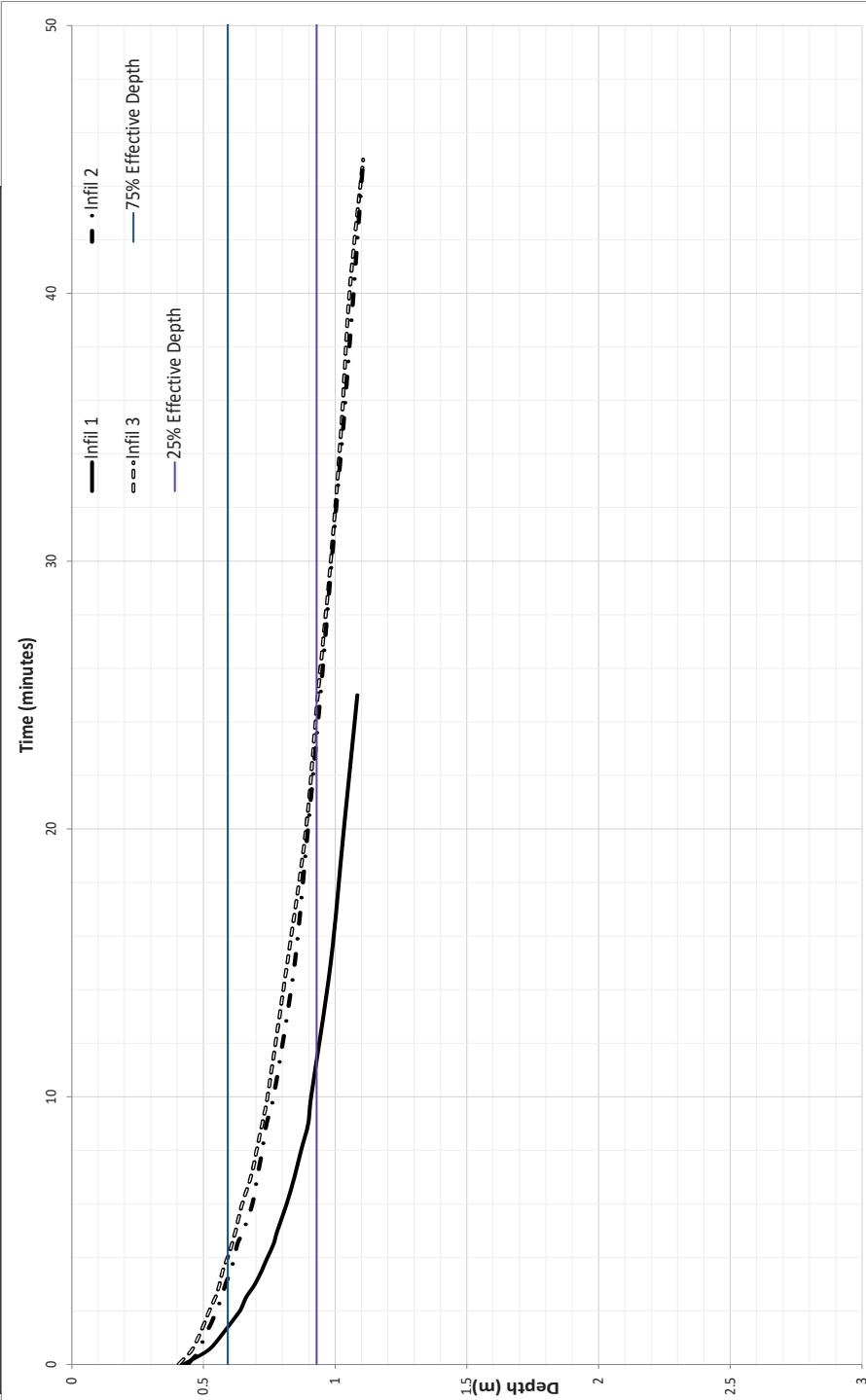


LOG	DEPTH (m)	BACKFILL	DEPTH (m)
Crop stuble over TOPSOIL	0.0	Arisings	0.0
Weak to moderately strong CHALK	0.4		
	1.2		1.2

SOAKAWAY TEST RESULTS		DATE	PROJECT NUMBER
In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)		Nov-23	2899.00
		TP-039	SOAKAWAY NUM/FILL NUMBER
			1-3

Recommended soil infiltration rate	
9.98E-05	m/s

Depth (final reading)	units	Fill 1	Fill 2	Fill 3
Pit depth	m	1.08	1.11	1.11
Pit length	m	1.30		
Pit width	m	1.80		
Depth to first reading	m	0.50		
Maximum effective depth	m	0.42	0.44	0.41
Depth at 75% full	m	0.66	0.67	0.70
Depth at 25% full	m	0.59	0.61	0.58
Time at 75% full	mins	0.92	0.94	0.93
Time at 25% full	mins	2.09	5.09	5.27
Vp75 - 25 (volume outflowing between 75% and 25% effective depth)	mins	24.68	42.16	42.14
Mean surface area for outflow (50% effective depth)	m3	0.395	0.387	0.403
Time for outflow	m2	2.92	2.88	2.96
Soil infiltration rate, f =	mins	22.59	37.07	36.87
or		0.0000998019	0.0000604506	0.0000615384
		9.98E-05	6.05E-05	6.15E-05



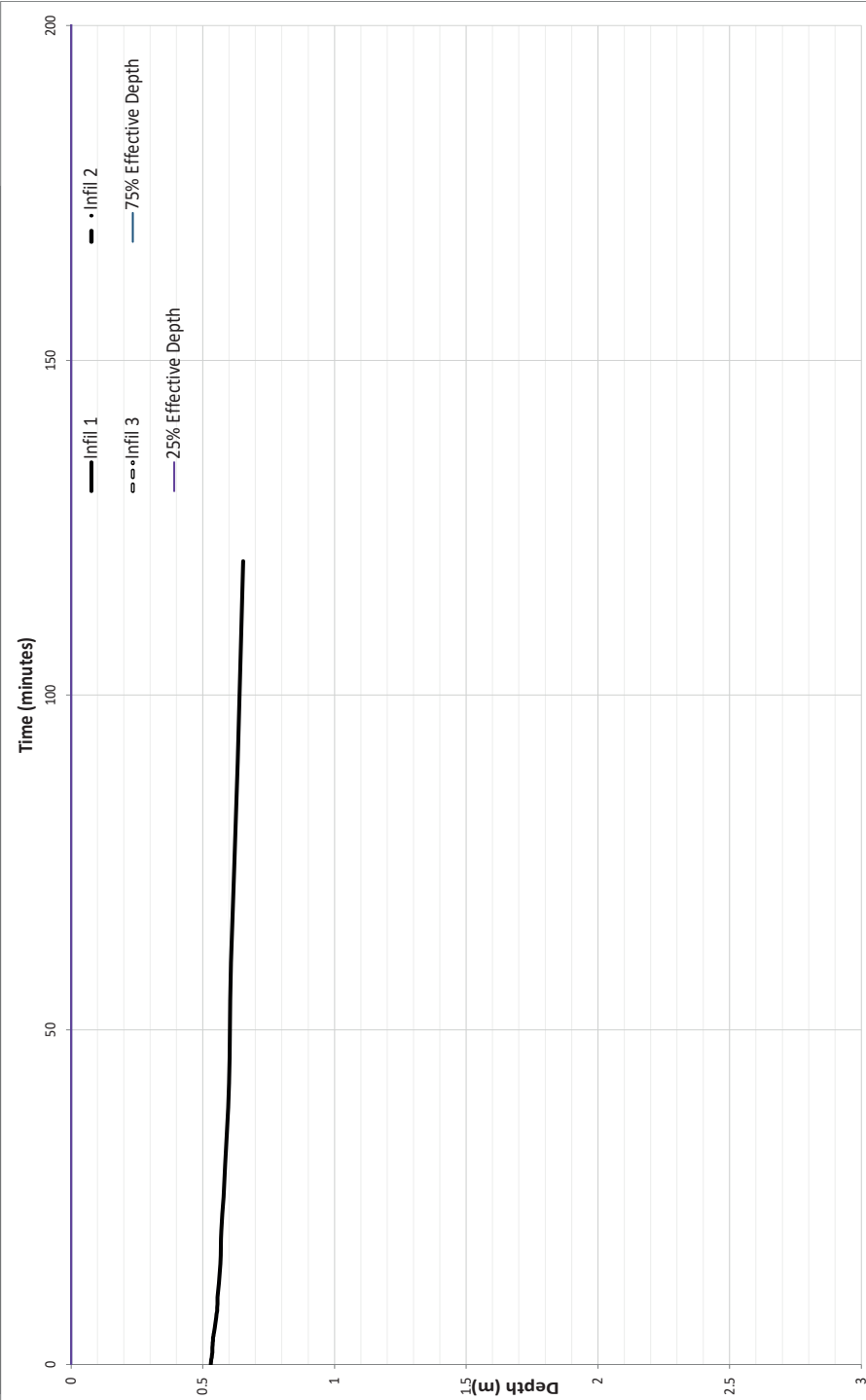
LOG	DEPTH (m)	BACKFILL	DEPTH (m)
Scrub over TOPSOIL	0.0	Anisings	0.0
	1.3		1.3
Weak to moderately strong white CHALK	0.4		

PROJECT NAME	SOAKAWAY TEST RESULTS			
	In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)			
CLIENT	Baldock	DATE	Nov-23	PROJECT NUMBER
	Urban and Civic	SOAKAWAY NUM	TP-045	2899.00
		FILL NUMBER	1-3	

Recommended soil infiltration rate	
5.22E-06	m/s

NOTE:
Water level did not fall to below the 25% full level within 24 hrs for fills 1 and 3 - Soil infiltration rate based on effective drainage only

Depth (final reading)	units	Fill 1	Fill 2	Fill 3
Pit depth	m	0.65		
Pit length	m	1.30		
Pit width	m	1.75		
Depth to first reading	m	0.50		
Maximum effective depth	m	0.53		
Depth at 75% full	m	0.12		
Depth at 25% full	m	0.56		
Time at 75% full	mins	0.62		
Time at 25% full	mins	12.38		
Vp75 - 25 (volume outflowing between 75% and 25% effective depth)	mins	78.30		
Mean surface area for outflow (50% effective depth)	m3	0.054		
Time for outflow	m2	2.61		
Soil infiltration rate, f =	mins	65.92		
or		0.000052174		
		5.22E-06		



LOG	DEPTH (m)	BACKFILL	DEPTH (m)
Scrub over TOPSOIL	0.0	Anisings	0.0
	1.3		1.3
Weak to moderately strong white CHALK	0.4		

PROJECT NAME	SOAKAWAY TEST RESULTS			
	In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)			
CLIENT	Baldock	DATE	Nov-23	PROJECT NUMBER
	Urban and Civic	SOAKAWAY NUM	TP-048	2899.00
		FILL NUMBER	1	

Recommended soil infiltration rate

8.41E-06

m/s

NOTE:

Water level did not fall to below the 25% full level within 24 hrs for fills 1 and 3 - Soil infiltration rate based on effective drainage only

units	Fill 1	Fill 2	Fill 3
Depth (final reading)	m	0.91	
Pit depth	m	1.40	
Pit length	m	1.80	
Pit width	m	0.50	
Depth to first reading	m	0.54	
Maximum effective depth	m	0.36	
Depth at 75% full	m	0.63	
Depth at 25% full	m	0.82	
Time at 75% full	mins	16.15	
Time at 25% full	mins	129.27	
Vp75 - 25 (volume outflowing between 75% and 25% effective depth)	m3	0.164	
Mean surface area for outflow (50% effective depth)	m2	2.87	
Time for outflow	mins	113.12	
Soil infiltration rate, f =		0.0000084057	
or		8.41E-06	

LOG

DEPTH (m)

0.0

0.4

1.4

1.4

BACKFILL

DEPTH (m)

0.0

0.4

1.4

1.4

Crop stubble over TOPSOIL

0.0

0.4

1.4

Weak brown CHALK

0.4

1.4

SOAKAWAY TEST RESULTS

In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)

PROJECT NAME

Baldock

CLIENT

Urban and Civic

DATE

Nov-23

PROJECT NUMBER

2899.00

SOAKAWAY NUM/FILL NUMBER

TP-055

1

units	Fill 1	Fill 2	Fill 3
Depth (final reading)	m	1.16	
Pit depth	m	1.15	0.92
Pit length	m	1.30	
Pit width	m	1.70	
Depth to first reading	m	0.70	
Maximum effective depth	m	0.63	0.64
Depth at 75% full	m	0.56	0.52
Depth at 25% full	m	0.74	0.76
Time at 75% full	m	1.02	1.02
Time at 25% full	mins	18.27	40.28
Time at 25% full	mins	122.41	206.00
Vp75 - 25 (volume outflowing between 75% and 25% effective depth)	m3	0.417	0.399
Mean surface area for outflow (50% effective depth)	m2	2.87	2.80
Time for outflow	mins	104.14	165.72
Soil infiltration rate, f =		0.0000232255	0.0000143291
or		2.32E-05	1.43E-05
			0.0000206372
			2.06E-05

LOG

DEPTH (m)

0.0

0.3

1.3

1.3

BACKFILL

DEPTH (m)

0.0

0.3

1.3

1.3

Topsoil

0.0

0.3

1.3

CHALK

0.3

1.3

SOAKAWAY TEST RESULTS

In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)

PROJECT NAME

Baldock North

CLIENT

Urban and Civic

DATE

May-24

PROJECT NUMBER

2899.00

SOAKAWAY NUM/FILL NUMBER

TP-068

1-3

units	Fill 1	Fill 2	Fill 3
Depth (final reading)	m	1.16	
Pit depth	m	1.15	0.92
Pit length	m	1.30	
Pit width	m	1.70	
Depth to first reading	m	0.70	
Maximum effective depth	m	0.63	0.64
Depth at 75% full	m	0.56	0.52
Depth at 25% full	m	0.74	0.76
Time at 75% full	m	1.02	1.02
Time at 25% full	mins	18.27	40.28
Time at 25% full	mins	122.41	206.00
Vp75 - 25 (volume outflowing between 75% and 25% effective depth)	m3	0.417	0.399
Mean surface area for outflow (50% effective depth)	m2	2.87	2.80
Time for outflow	mins	104.14	165.72
Soil infiltration rate, f =		0.0000232255	0.0000143291
or		2.32E-05	1.43E-05
			0.0000206372
			2.06E-05

LOG

DEPTH (m)

0.0

0.3

1.3

1.3

BACKFILL

DEPTH (m)

0.0

0.3

1.3

1.3

Topsoil

0.0

0.3

1.3

CHALK

0.3

1.3

SHADBOLT ENVIRONMENTAL

PROJECT NAME

Baldock North

CLIENT

Urban and Civic

SOAKAWAY TEST RESULTS

In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)

DATE

May-24

PROJECT NUMBER

2899.00

SOAKAWAY NUM/FILL NUMBER

TP-068

1-3

Time (minutes)

0

50

100

150

200

250

300

Depth (m)

0

0.5

1

1.5

2

2.5

3

— Infil 1

--- Infil 3

• Infil 2

— 75% Effective Depth

— 25% Effective Depth

Time (minutes)

0

50

100

150

200

250

300

Depth (m)

0

0.5

1

1.5

2

2.5

3

— Infil 1

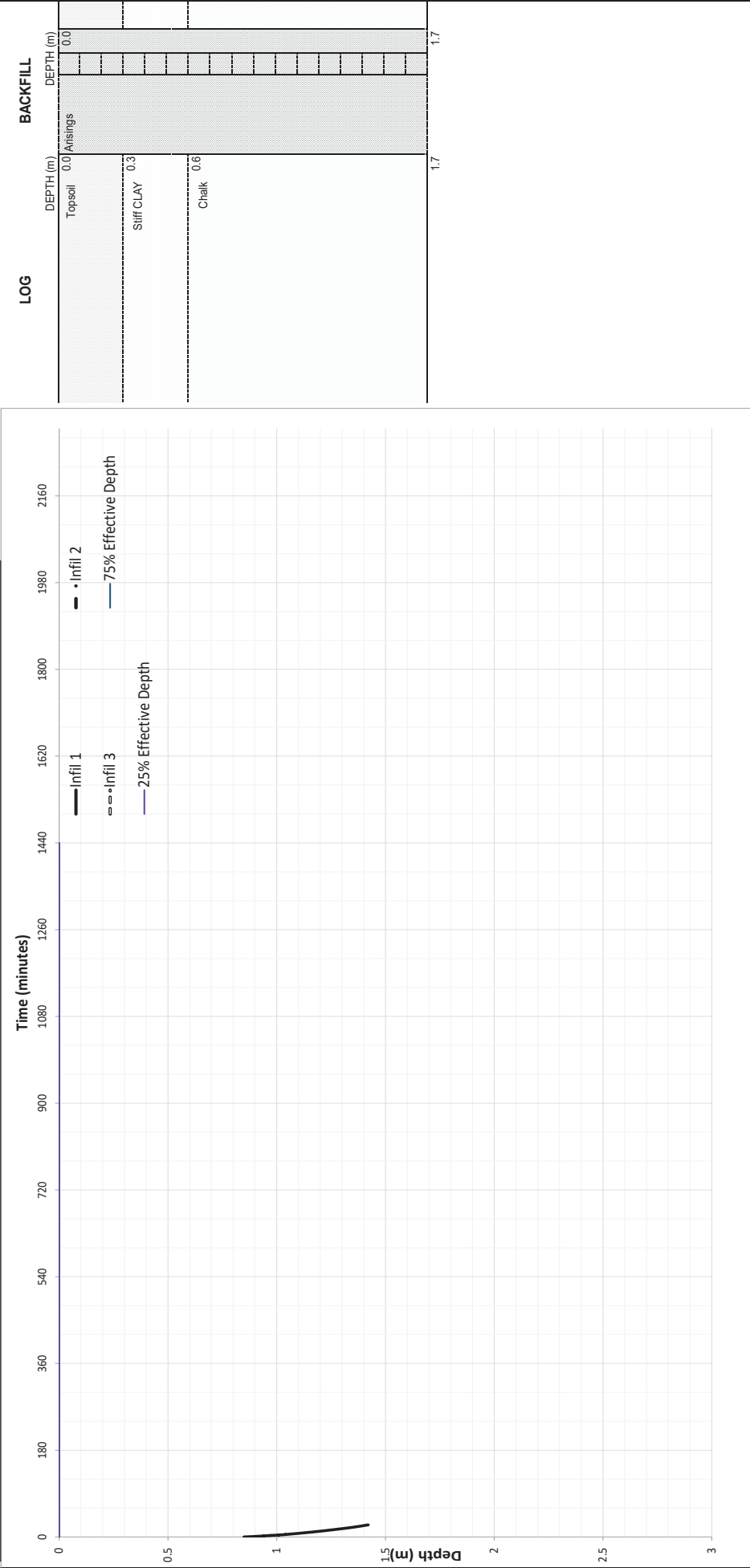
--- Infil 3

• Infil 2

— 75% Effective Depth

— 25% Effective Depth

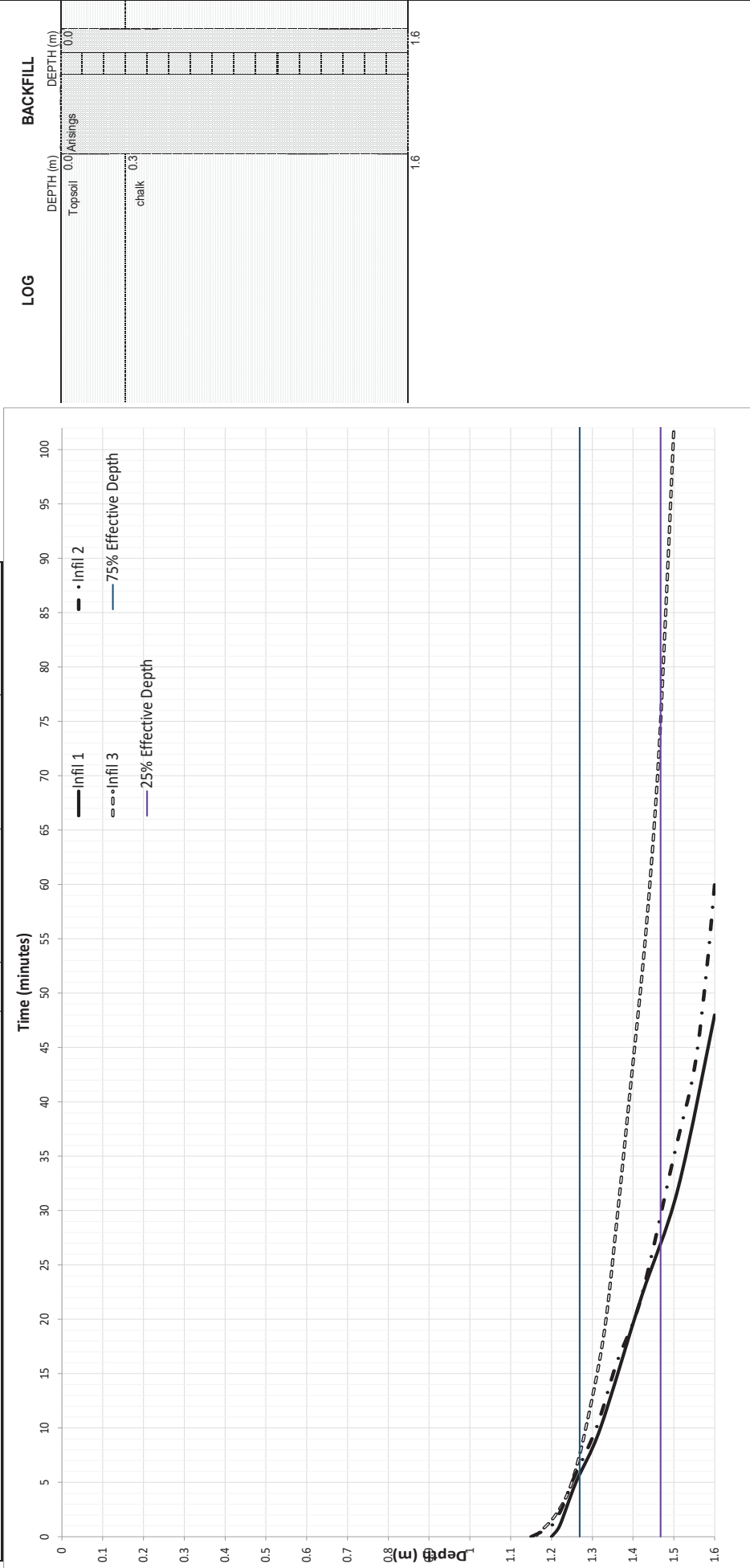
Recommended soil infiltration rate	
1.42E-04	m/s
NOTE: Water level did not fall to below the 25% full level within 24 hrs for fills 1, 2 and 3 - Soil infiltration rate based on effective drainage only	



PROJECT NAME Baldock	SOAKAWAY TEST RESULTS		
	In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)		
	DATE	PROJECT NUMBER	
CLIENT U&C	Nov-23	2899.00	
	TP-094	SOAKAWAY NUM	1

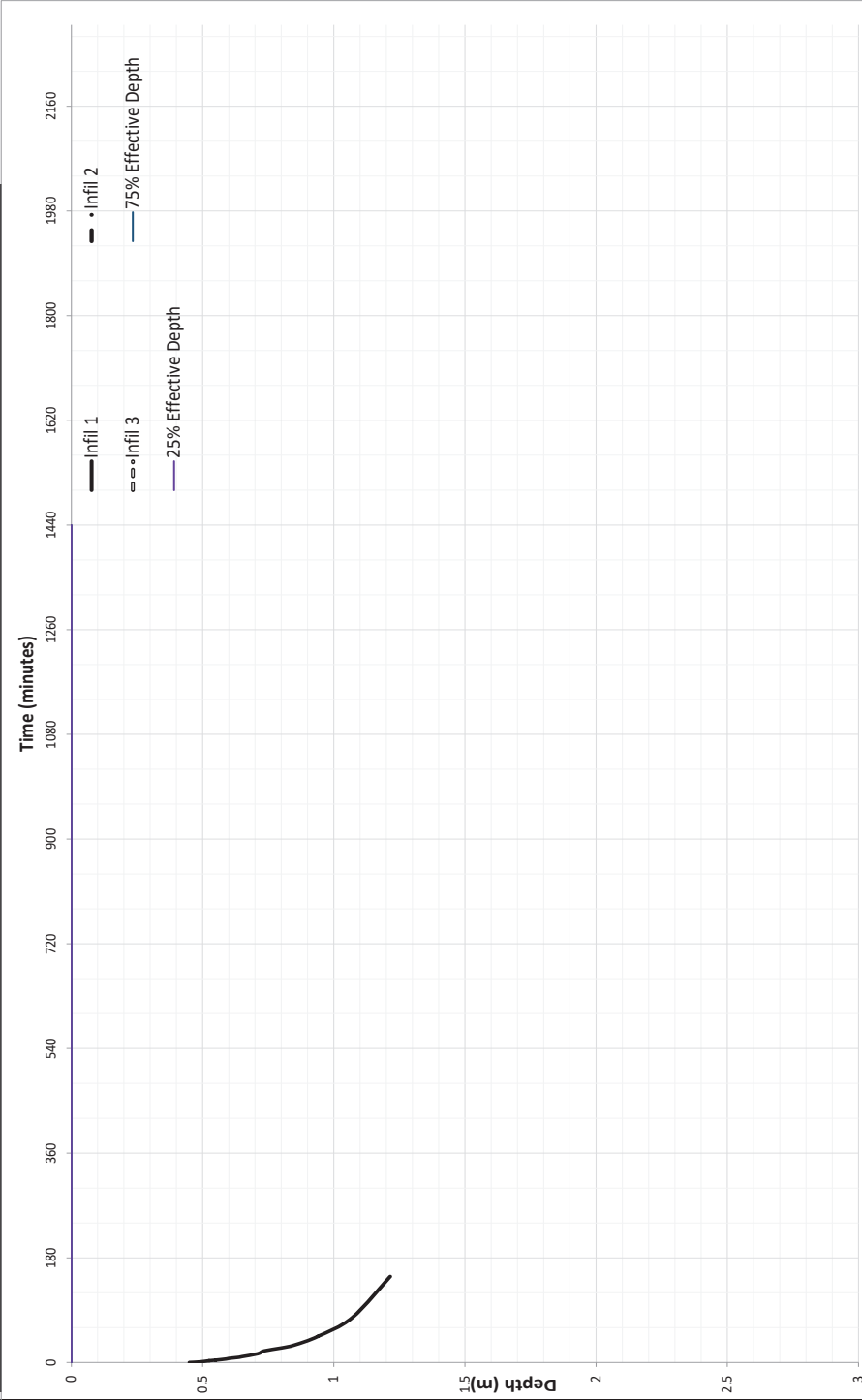
Recommended soil infiltration rate				
2.27E-05			m/s	

PROJECT NAME Baldock				
CLIENT U&C				
Depth (final reading)	Fill 1	Fill 2	Fill 3	
Pit depth	1.60	1.60	1.50	
Pit length	1.60	1.60	1.50	
Pit width	1.70	1.70	1.50	
Depth to first reading	1.20	1.15	1.16	
Maximum effective depth	0.40	0.45	0.34	
Depth at 75% full	1.30	1.26	1.25	
Depth at 25% full	1.50	1.49	1.42	
Time at 75% full	8.33	6.04	8.00	
Time at 25% full	30.89	32.97	93.50	
Vp75 - 25 (volume outflowing between 75% and 25% effective depth)	0.238	0.268	0.262	
Mean surface area for outflow (50% effective depth)	2.15	2.27	2.25	
Time for outflow	22.56	26.93	85.50	
Soil infiltration rate, f =	0.0000817963	0.0000730068	0.0000227218	
or	8.18E-05	7.30E-05	2.27E-05	



PROJECT NAME Baldock North	SOAKAWAY TEST RESULTS		
	In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)		
	DATE	PROJECT NUMBER	
CLIENT Urban and Civic	May-24	2899.00	
	TP-105	SOAKAWAY NUM	1-3

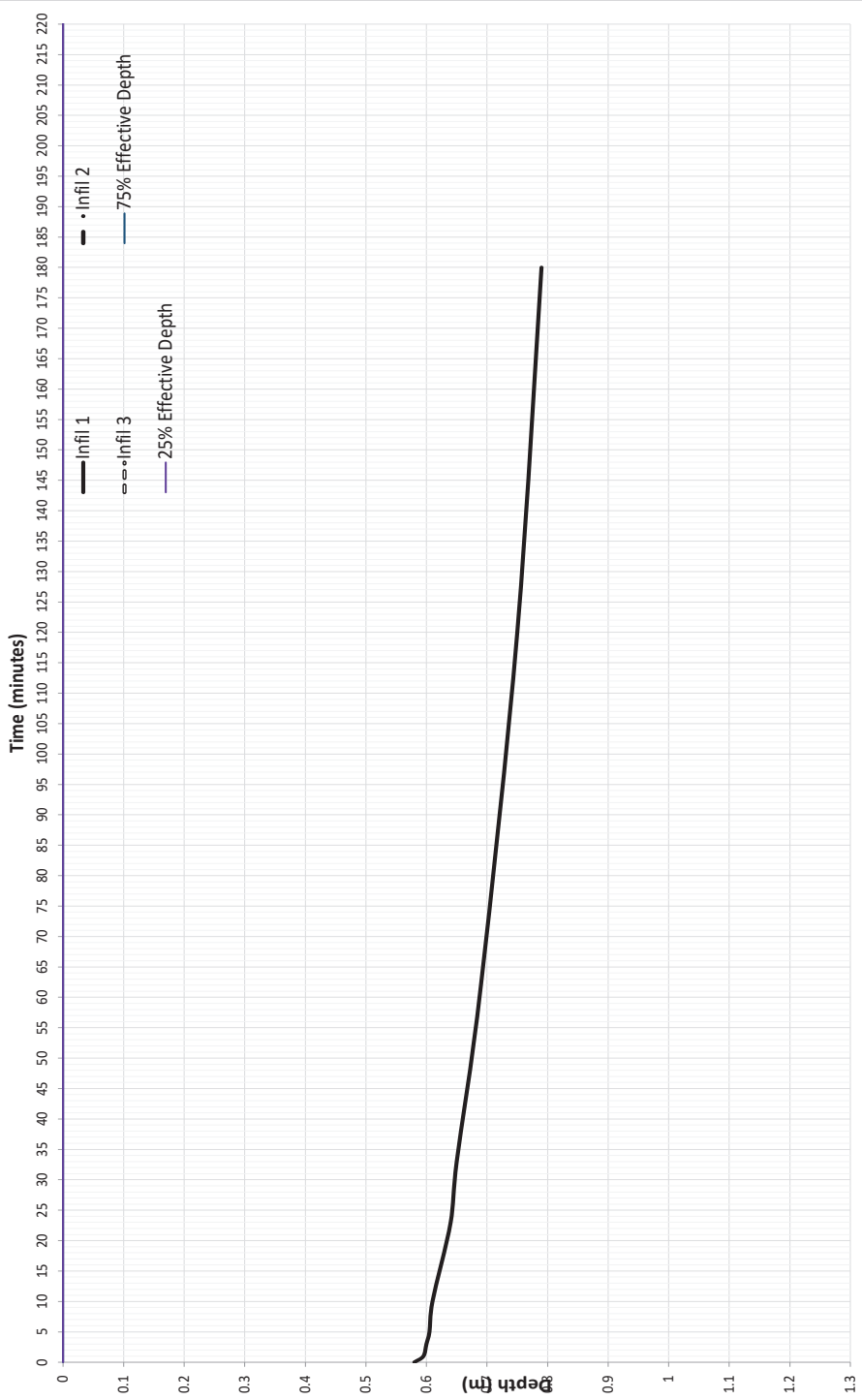
Recommended soil infiltration rate	
2.84E-05	m/s
NOTE: Water level did not fall to below the 25% full level within 24 hrs for fills 1, 2 and 3 - Soil infiltration rate based on effective drainage only	



LOG		BACKFILL	
DEPTH (m)	DEPTH (m)	DEPTH (m)	DEPTH (m)
Topsoil 0.0	Arising	0.0	
Stiff CLAY 0.3			
Chalk 0.6			
1.5			1.5

PROJECT NAME Baldock U&C	SOAKAWAY TEST RESULTS			
	In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)			
	DATE	PROJECT NUMBER	DATE	PROJECT NUMBER
	Nov-23	2899.00	Nov-23	2899.00
	SOAKAWAY NUM	FILL NUMBER	SOAKAWAY NUM	FILL NUMBER
	TP-127	1	TP-127	1

Recommended soil infiltration rate	
8.17E-06	m/s
NOTE: Water level did not fall to below the 25% full level within 24 hrs for fill 1 - Soil infiltration rate based on effective drainage only	

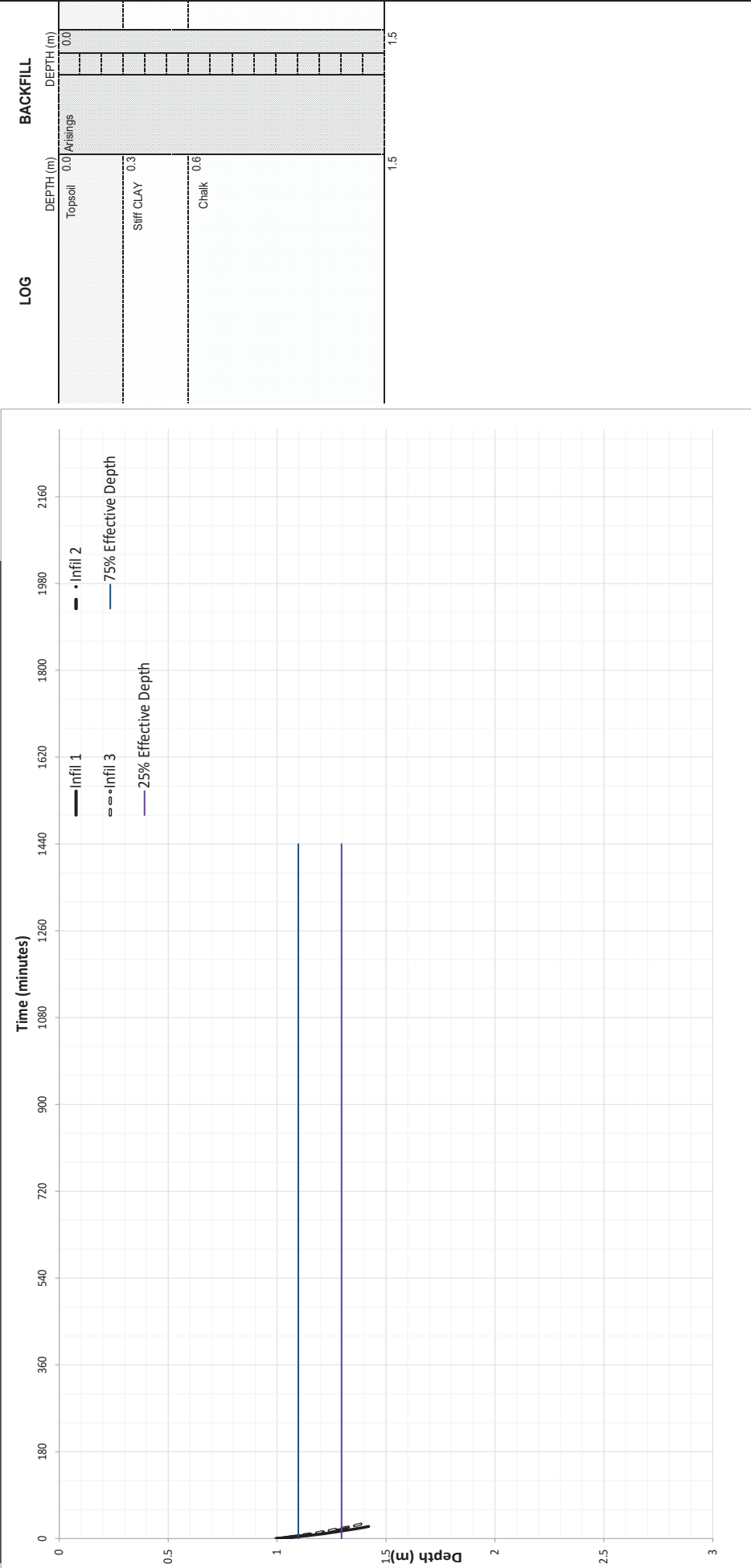


LOG		BACKFILL	
DEPTH (m)	DEPTH (m)	DEPTH (m)	DEPTH (m)
Topsoil 0.0	Arising	0.0	
SAND 0.2			
CHALK 0.5			
1.3			1.3

PROJECT NAME Baldock North Urban and Civic	SOAKAWAY TEST RESULTS			
	In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)			
	DATE	PROJECT NUMBER	DATE	PROJECT NUMBER
	May-24	2899.00	May-24	2899.00
	SOAKAWAY NUM	FILL NUMBER	SOAKAWAY NUM	FILL NUMBER
	TP-131	1	TP-131	1

Recommended soil infiltration rate			
1.12E-04		m/s	
NOTE: Water level did not fall to below the 25% full level within 24 hrs for fills 2 and 3 - Soil infiltration rate based on effective drainage only			

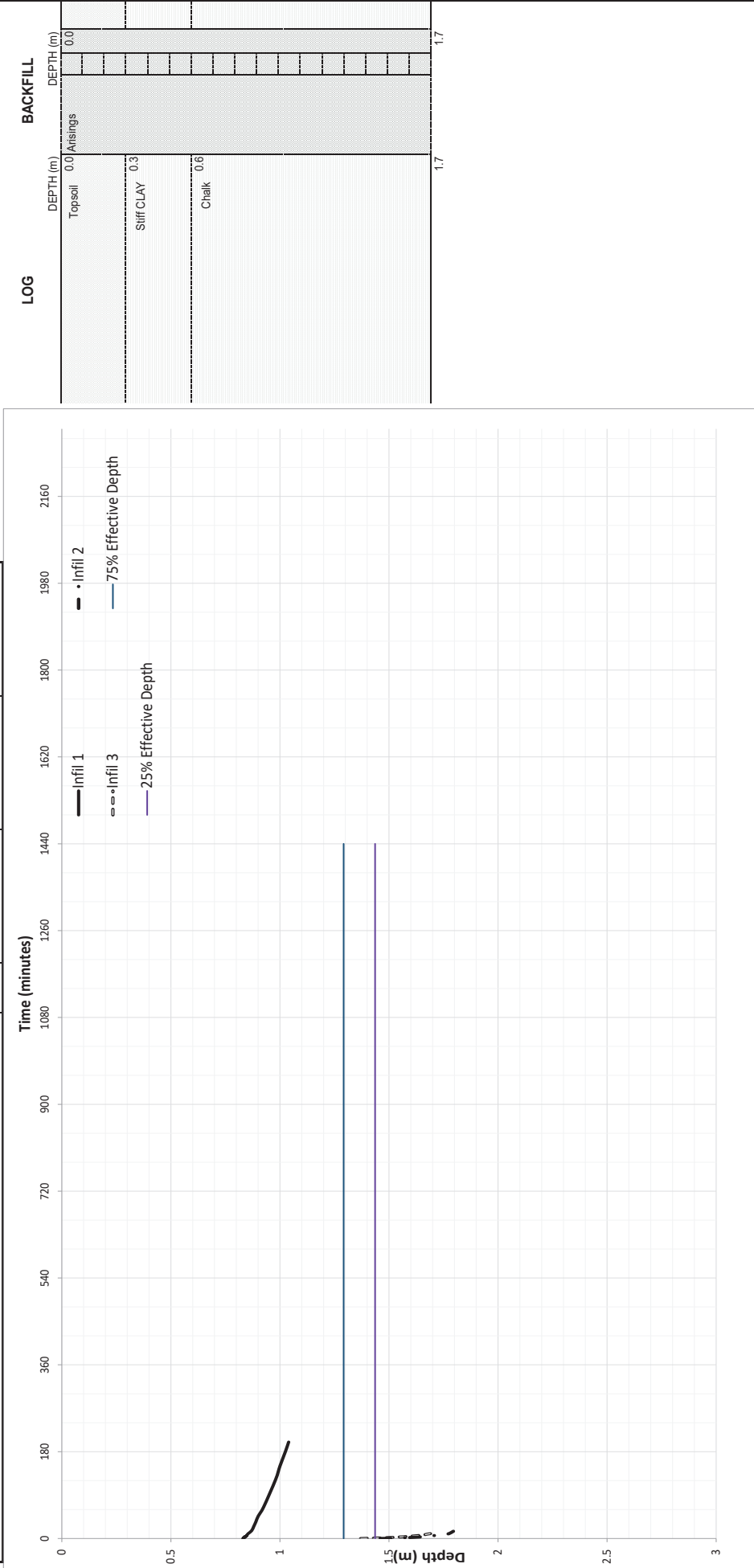
	units	Fill 1	Fill 2	Fill 3
Depth (final reading)	m	1.42	1.38	1.39
Pit depth	m	1.50		
Pit length	m	1.60		
Pit width	m	0.50		
Depth to first reading	m	1.00	1.00	1.00
Maximum effective depth	m	0.42	0.38	0.39
Depth at 75% full	m	1.11	1.10	1.09
Depth at 25% full	m	1.32	1.29	1.29
Time at 75% full	mins	5.20	4.50	5.50
Time at 25% full	mins	21.25	17.73	20.63
Vp75 - 25 (volume outflowing between 75% and 25% effective depth)	m3	0.200	0.152	0.156
Mean surface area for outflow (50% effective depth)	m2	1.85	1.85	1.86
Time for outflow	mins	16.05	13.23	15.13
Soil infiltration rate, f =		0.0001122618	0.0001035262	0.0000923950
or		1.12E-04	1.04E-04	9.24E-05



PROJECT NAME	SOAKAWAY TEST RESULTS		
	DATE	PROJECT NUMBER	
	Nov-23	2899.00	
CLIENT	In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)		
	SOAKAWAY NUM	FILL NUMBER	
	TP-139	1-3	

Recommended soil infiltration rate				
5.34E-06		m/s		
NOTE: Water level did not fall to below the 25% full level within 24 hrs for fills 1, 2 and 3 - Soil infiltration rate based on effective drainage only				

	units	Fill 1	Fill 2	Fill 3
Depth (final reading)	m	1.04	1.80	1.69
Pit depth	m		1.65	
Pit length	m		1.70	
Pit width	m		0.50	
Depth to first reading	m	0.83	1.46	1.37
Maximum effective depth	m	0.21	0.34	0.32
Depth at 75% full	m	0.88	1.54	1.45
Depth at 25% full	m	0.99	1.71	1.61
Time at 75% full	mins	27.50	1.08	1.13
Time at 25% full	mins	132.50	6.31	5.20
Vp75 - 25 (volume outflowing between 75% and 25% effective depth)	m3	0.089	0.142	0.136
Mean surface area for outflow (50% effective depth)	m2	2.65	1.27	1.47
Time for outflow	mins	105.00	5.24	4.07
Soil infiltration rate, f = or		0.0000053379	0.0003573051	0.0003794251
		5.34E-06	3.57E-04	3.79E-04



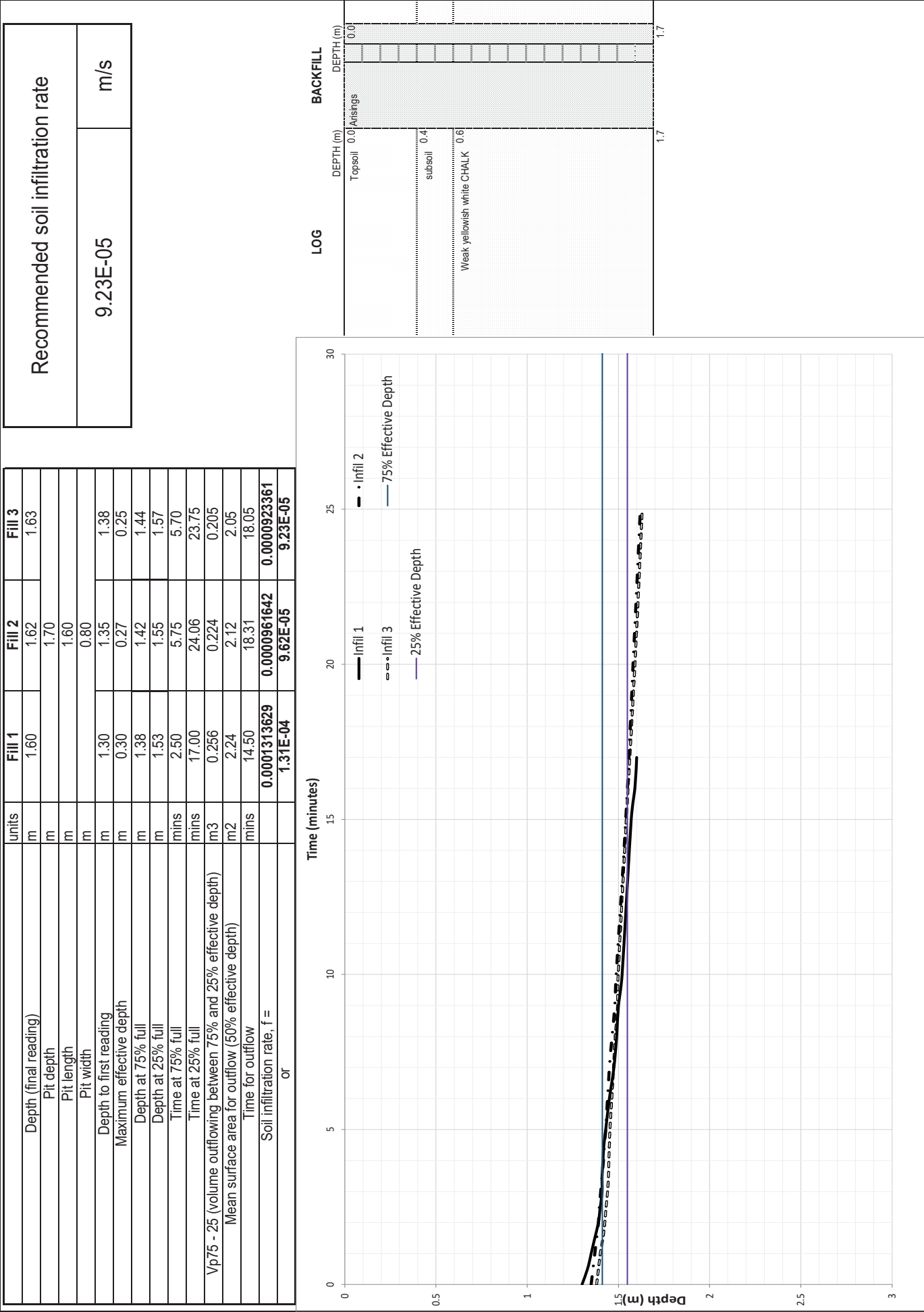
PROJECT NAME	SOAKAWAY TEST RESULTS		
	DATE	PROJECT NUMBER	
	Nov-23	2899.00	
CLIENT	In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)		
	SOAKAWAY NUM	FILL NUMBER	
	TP-149	1-3	

The graph illustrates the relationship between Time (minutes) and Depth (m) for three different infiltration scenarios (Infil 1, Infil 2, and Infil 3). The Y-axis represents Time in minutes, ranging from 0 to 400. The X-axis represents Depth in meters, ranging from 0 to 3. The legend indicates that the curves represent 25% Effective Depth (solid black line) and 75% Effective Depth (dotted black line).

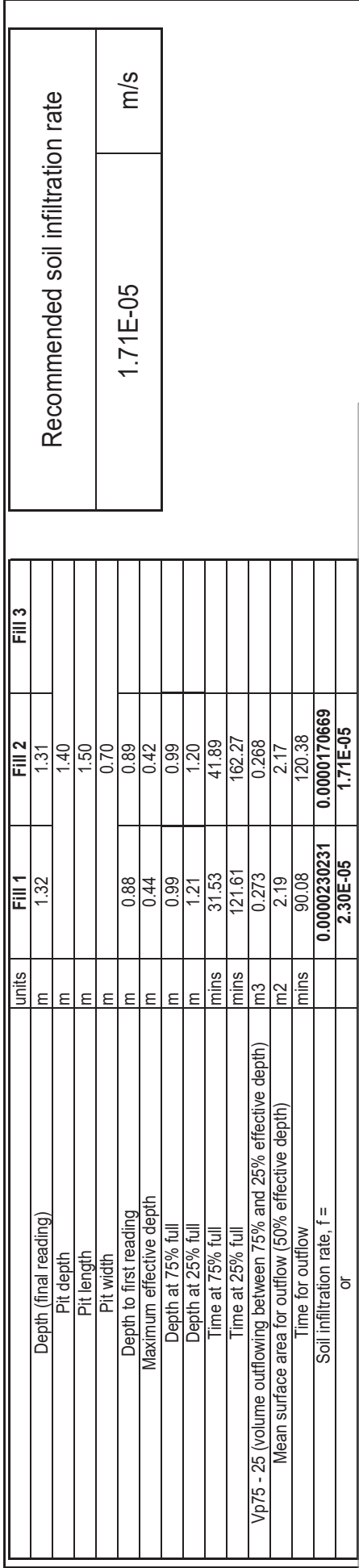
Time (minutes)	Infil 1 Depth (m)	Infil 2 Depth (m)	Infil 3 Depth (m)
0	0.0	0.0	0.0
50	0.2	0.1	0.1
100	0.5	0.2	0.2
150	0.8	0.3	0.3
200	1.1	0.4	0.4
250	1.4	0.5	0.5
300	1.7	0.6	0.6
350	2.0	0.7	0.7
400	2.3	0.8	0.8

	units	Fill 1	Fill 2	Fill 3
Depth (final reading)	m	1.04		
Pit depth	m		1.10	
Pit length	m		0.80	
Pit width	m		1.60	
Depth to first reading	m	0.71		
Maximum effective depth	m	0.33		
Depth at 75% full	m	0.79		
Depth at 25% full	m	0.96		
Time at 75% full	mins	56.91		
Time at 25% full	mins	258.60		
Vp/75 - 25 (volume outflowing between 75% and 25% effective depth)	m3	0.250		
Mean surface area for outflow (50% effective depth)	m2	2.22		
Time for outflow	mins	201.69		
Soil infiltration rate, f =		0.000093077		
or		9.31E-06		



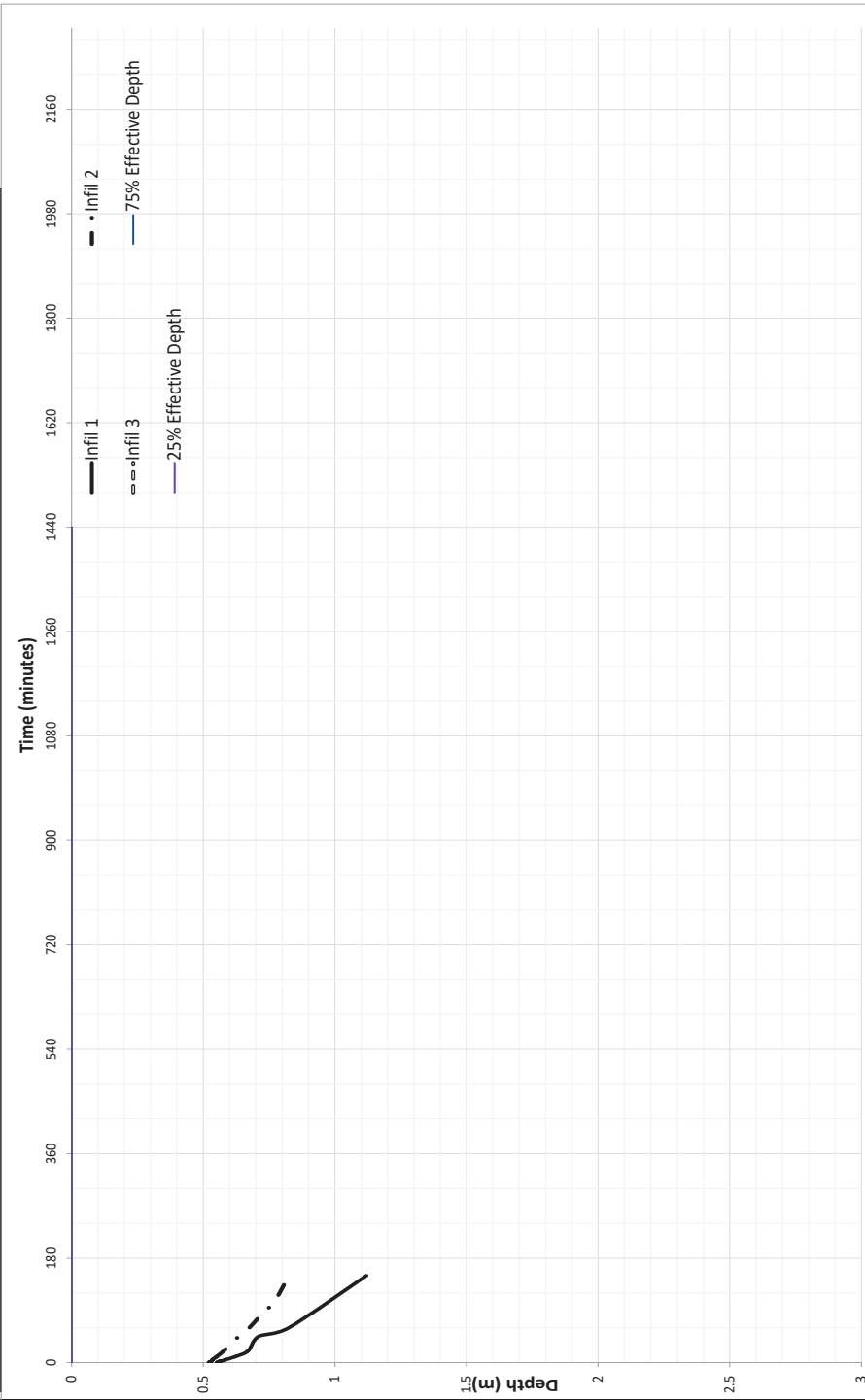


	PROJECT NAME	SOAKAWAY TEST RESULTS		DATE	PROJECT NUMBER
	Baldock North	In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)		Jul-20	2899.00
	Urban and Civic			TP-191	SOAKAWAY INFILL NUMBER 1-3

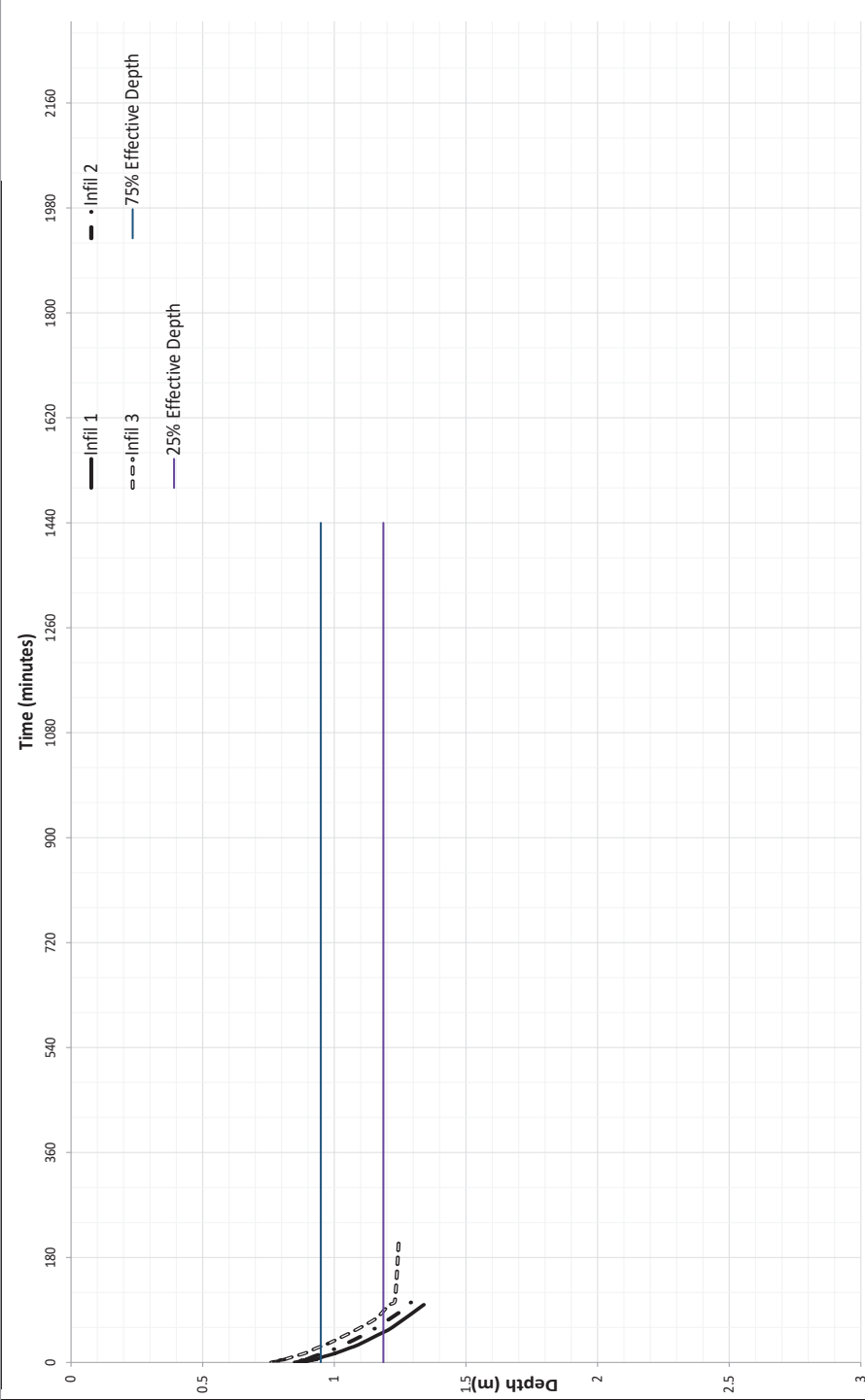


	PROJECT NAME	SOAKAWAY TEST RESULTS		DATE	PROJECT NUMBER
	Baldock North	In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)		Mar-24	2899.00
	Urban and Civic			TP-203	SOAKAWAY INFILL NUMBER 1-2

	units	Fill 1	Fill 2	Fill 3
Depth (final reading)	m	1.12	0.83	
Pit depth	m		1.20	
	m		1.10	
Pit length	m			
	m		0.50	
Pit width	m			
Depth to first reading	m	0.55	0.52	
Maximum effective depth	m	0.57	0.31	
	m			
Depth at 75% full	m	0.69	0.60	
Depth at 25% full	m	0.98	0.75	
Time at 75% full	mins	45.33	29.13	
Time at 25% full	mins	124.83	94.67	
Vp75 - 25 (volume outflowing between 75% and 25% effective depth)	m3	0.179	0.084	
Mean surface area for outflow (50% effective depth)	m2	1.59	1.64	
Time for outflow	mins	79.50	65.54	
Soil infiltration rate, f =		0.0000235671	0.0000130212	
or		2.36E-05	1.30E-05	

[illegible]

	units	Fill 1	Fill 2	Fill 3
Depth (final reading)	m	1.34	1.33	1.25
Pit depth	m		1.40	
Pit length	m		1.50	
Pit width	m		0.70	
Depth to first reading	m	0.88	0.85	0.76
Maximum effective depth	m	0.46	0.48	0.49
Depth at 75% full	m	1.00	0.97	0.88
Depth at 25% full	m	1.23	1.21	1.12
Time at 75% full	mins	16.67	17.60	14.83
Time at 25% full	mins	76.25	74.55	66.33
Vp75 - 25 (volume outflowing between 75% and 25% effective depth)	m ³	0.273	0.252	0.255
Mean surface area for outflow (50% effective depth)	m ²	2.19	2.26	2.46
Time for outflow	mins	59.58	56.95	51.50
Soil infiltration rate, f =		0.0000348057	0.0000326349	0.0000335244
or		3.48E-05	3.26E-05	3.35E-05



	PROJECT NAME	SOAKAWAY TEST RESULTS <i>In accordance with BRE Digest 365 (1991 with amendments in 2003 and 2007)</i>		DATE	PROJECT NUMBER
	Baldock			Dec-23	2899.00
	CLIENT			SOAKAWAY NUM/FILL NUMBER	
	U&C			sa-02	1-3