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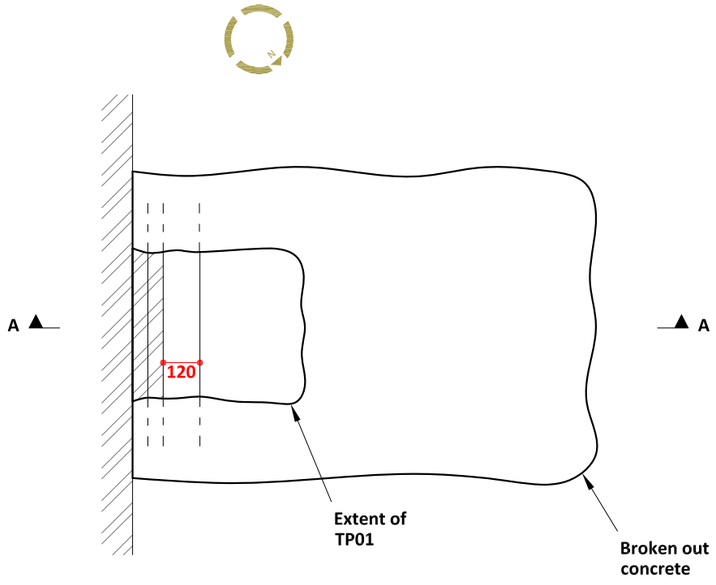
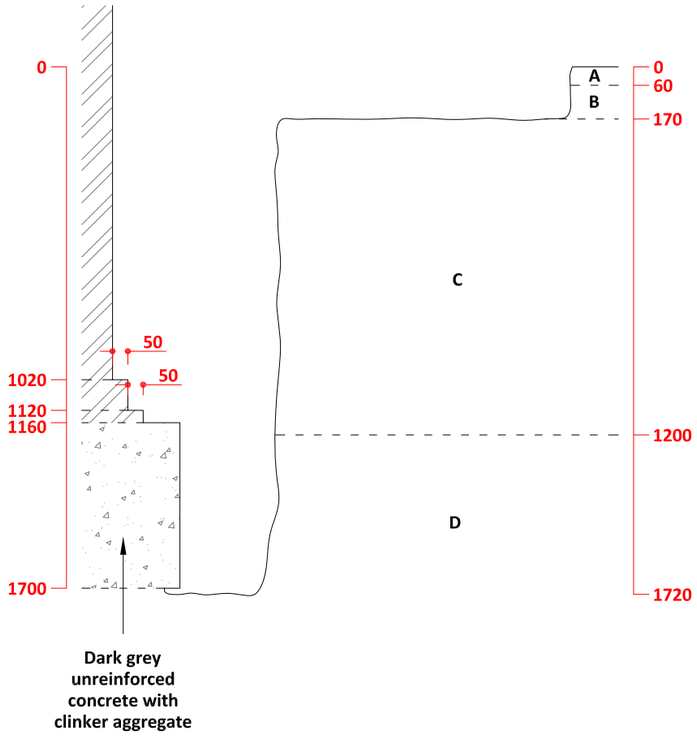
Plan



Section A-A



Photographic record

Key

A. Light grey unreinforced CONCRETE.
(MADE GROUND)

B. Dense dark brown sandy GRAVEL consisting of clinker.
(MADE GROUND)

C. Medium dense orange brown clayey gravelly fine SAND. Gravel consists of ceramic and brick.
(MADE GROUND)

D. Medium dense orange brown slightly gravelly fine SAND. Gravel consists of rounded flint.
(CLAYGATE MEMBER)

Observed features
Assumed features

Denotes brickwork
Denotes concrete

Notes

1. All dimensions shown in millimetres
2. Disturbed samples taken from 0.2-0.3m, 0.3-0.4m and 1.3-1.4m depths
3. Jar samples taken from 0.2-0.3m, 0.3-0.4m and 1.3-1.4m depths
4. Density of soil determined from ease of excavation

Method of excavation	Hand tools
Trial pit dimensions	As shown
Groundwater observations	No groundwater encountered
Title	Trial pit record
Date of excavation	27.10.2014
Scale	1:20 at A3
Trial pit number	TP01
Location plan on drawing number	02
Appendix	C

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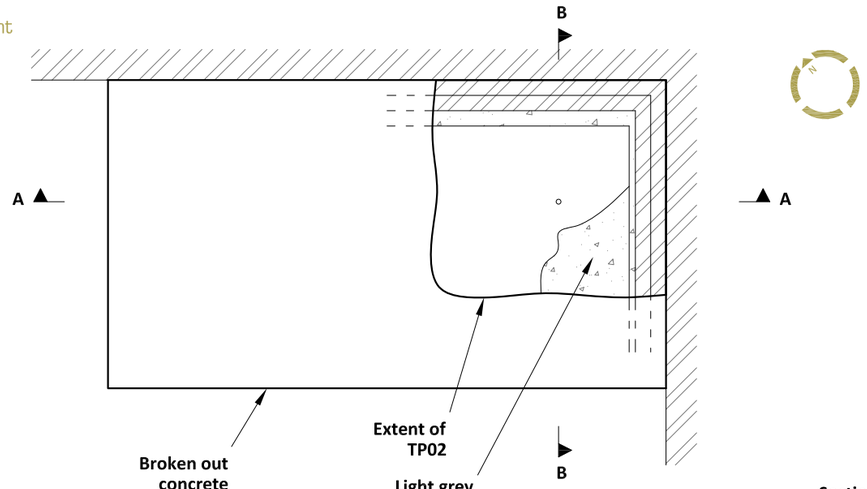
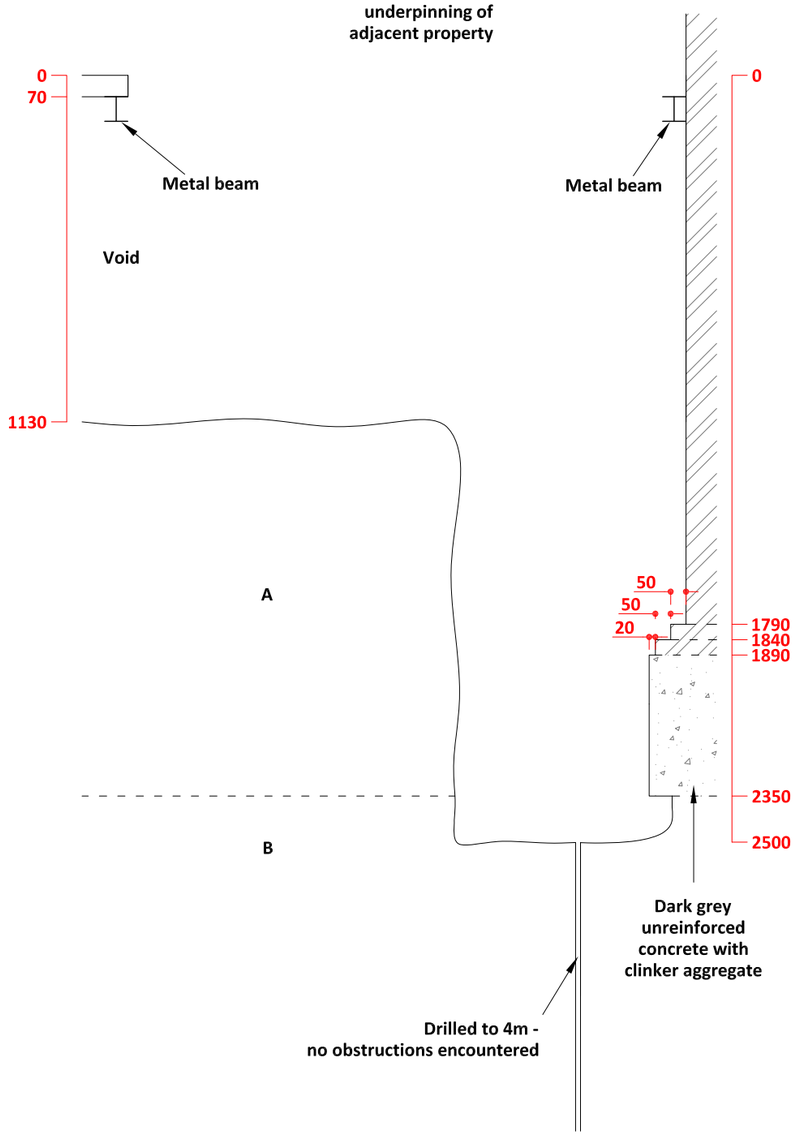
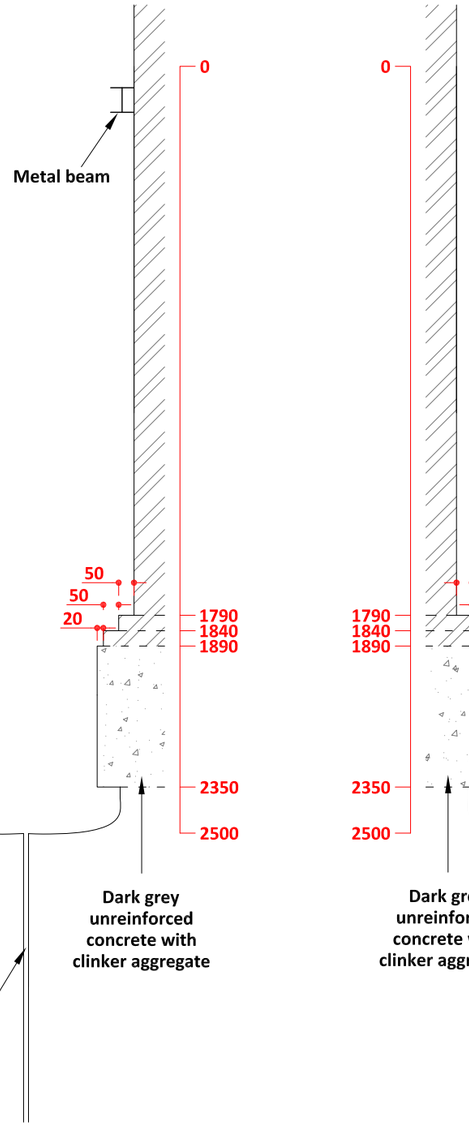
Plan



Section A-A



Section B-B



Photographic record

Key

A. Medium dense dark brown slightly clayey gravelly SAND. Gravel consists of ash, brick and slate.
(MADE GROUND)

B. Medium dense light brown very silty fine SAND.
(CLAYGATE MEMBER)

Observed features
Assumed features

Denotes brickwork
Denotes concrete

Notes

1. All dimensions shown in millimetres
2. Disturbed samples taken from 0.3-0.4m and 2.4-2.5m depths
3. Jar sample taken from 0.3-0.4m depth

Method of excavation	Hand tools
Trial pit dimensions	As shown
Groundwater observations	No groundwater encountered

Title	Trial pit record
Trial pit number	TP02
Date of excavation	27.10.2014
Location plan on drawing number	02
Scale	1:20 at A3
Appendix	C

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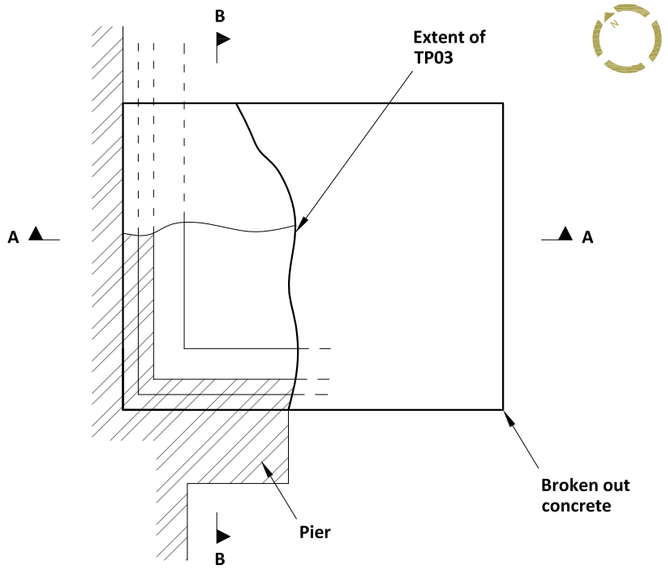
Plan



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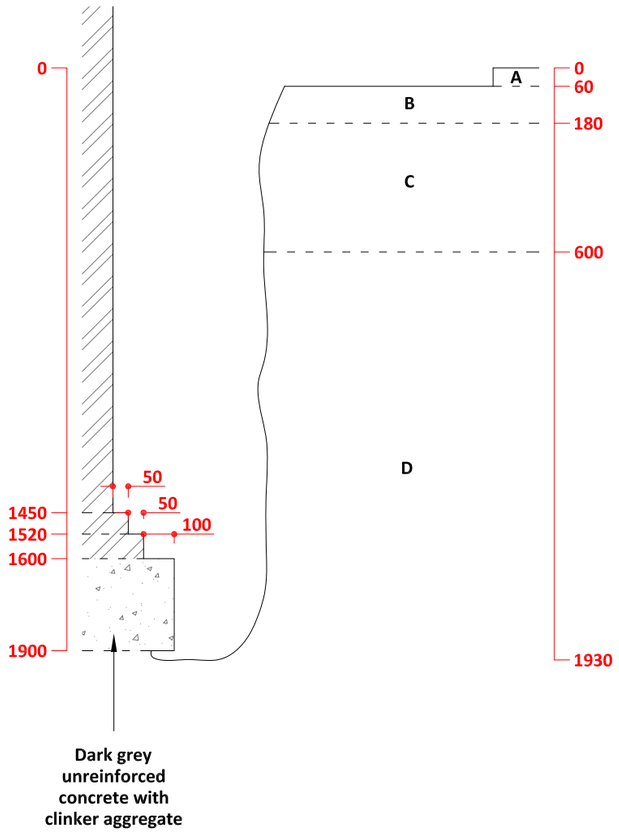

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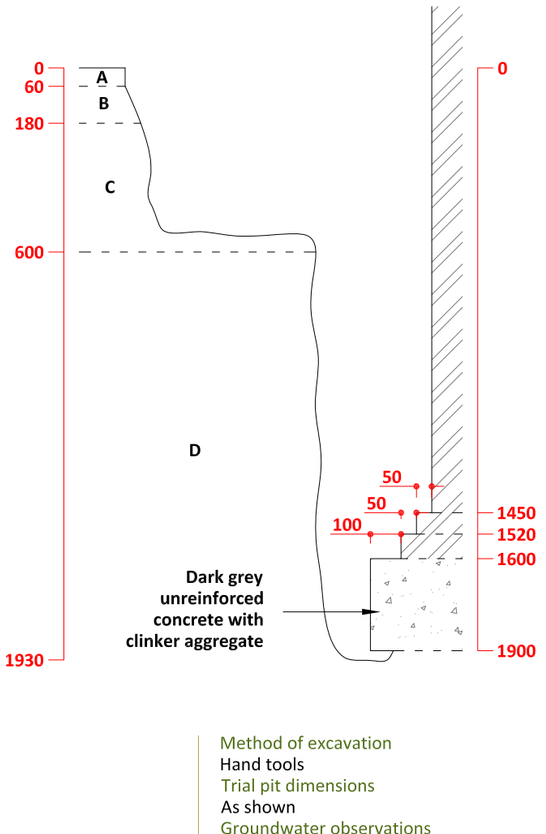

Photographic record

Key

A. Light grey unreinforced CONCRETE.
(MADE GROUND)

B. Medium dense dark brown clayey slightly gravelly SAND. Gravel consists of brick.
(MADE GROUND)

C. Dense dark brown sandy GRAVEL consisting of clinker.
(MADE GROUND)

D. Medium strength orange brown sandy slightly gravelly CLAY. Gravel consists of flint.
(CLAYGATE MEMBER)

Observed features
Assumed features

Denotes brickwork
Denotes concrete

Notes

1. All dimensions shown in millimetres
2. Jar samples taken from 0.2-0.3m, 0.3-0.4m and 0.6-0.7m depths

Method of excavation	Hand tools
Trial pit dimensions	As shown
Groundwater observations	No groundwater encountered

Title	Trial pit record
Trial pit number	TP03
Date of excavation	27.10.2014
Location plan on drawing number	02
Scale	1:20 at A3
Appendix	C

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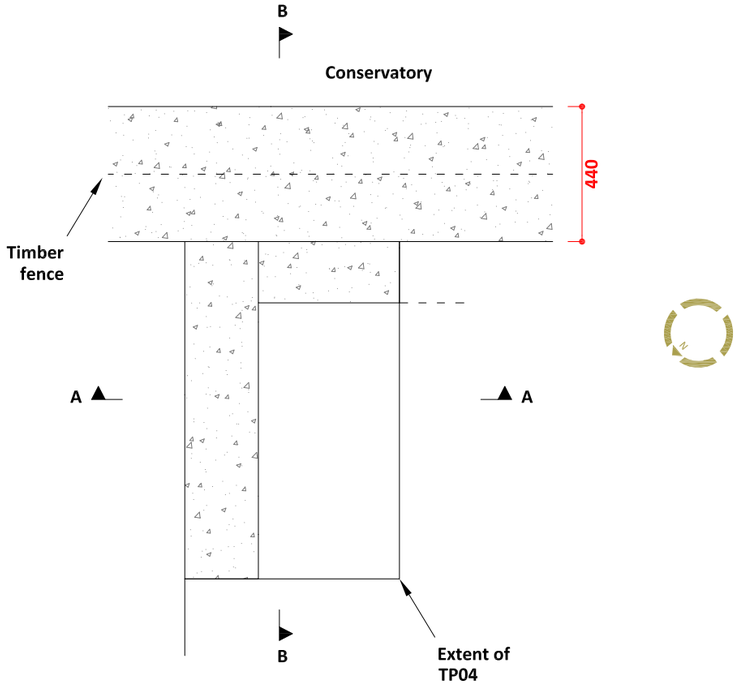
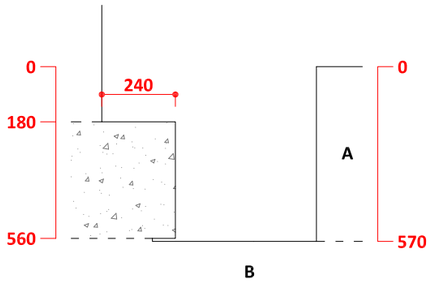
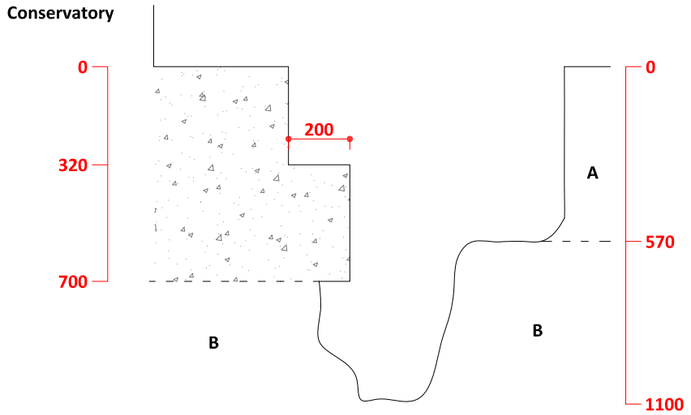
Plan



Section A-A



Section B-B



Photographic record

Key

A. Medium strength dark brown slightly sandy gravelly CLAY with frequent roots up to 12mm in diameter. Gravel consists of brick. (MADE GROUND)

B. Loose to medium dense orange brown clayey silty fine SAND with occasional rootlets up to 1mm in diameter. (CLAYGATE MEMBER)

Observed features
Assumed features

Denotes concrete

Notes

1. All dimensions shown in millimetres
2. Bulk and jar samples taken from 0.2-0.3m and 0.8-0.9m depths

Method of excavation		Title	Trial pit number
Hand tools		Trial pit record	TP04
Trial pit dimensions		Date of excavation	Location plan on drawing number
As shown		27.10.2014	02
Groundwater observations		Scale	Appendix
No groundwater encountered		1:20 at A3	C

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Key to legends

Composite materials, Soils and Lithology

Topsoil	Made Ground	Boulders
Chalk	Clay	Coal
Cobbles	Cobbles & Boulders	Concrete
Gravel	Limestone	Mudstone
Peat	Sand	Sand and Gravel
Sandstone	Silt	Silt / Clay
Siltstone		

Note: Composite soil types are signified by combined symbols.

Key to 'test result' and 'sampling' columns

Test result	
Depth	Records depth that the test was carried out *(ie at 2.1m or between 2.1 and 2.55m)* [1]
Result	PP – Pocket penetrometer result (kN/m^2) HVP – Hand held shear vane result (kN/m^2) *PP result converted to an equivalent undrained shear strength by applying a factor of 50. Where at least 3 results obtained at same depth then an average value may be reported.*
	SPT – Standard penetration test result (uncorrected) *SPT (c) - Standard penetration test result (solid cone)*

Sampling		
From (m) To (m)	Records depth of sampling	
Type	D	Disturbed sample
	B	Bulk disturbed sample
	J	Disturbed sample placed in sealed amber jar
	W	Water sample
	U (32)	Undisturbed sample 100mm diameter sampler with number of blows of driving equipment required to obtain sample

Note [1]: Carried out on undisturbed samples.

Water observations

Described at foot of log and shown in the 'water strike' column.

▼ = water level observed after specified delay in drilling

▽ = water strike

Standpipe details

Gravel filter

Arisings

Bentonite

Slotted pipe

Unslotted pipe

Density

Density recorded in brackets inferred from density testing and soil descriptions from across the site (e.g. [Medium dense]).

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WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	Grass onto low strength dark brown sandy slightly gravelly CLAY. Gravel consists of brick. MADE GROUND				PP 0.20	38	0.20	0.30	J/B
	Low strength orange brown sandy slightly gravelly CLAY. Gravel consists of ash, brick and rounded flint. MADE GROUND		0.50				0.50	0.60	J/B
					PP 1.00	30			
							1.20	1.30	J/B
					PP 1.40	38			
							1.50	1.60	D
					PP 1.60	25			
	Medium strength orange brown slightly silty sandy CLAY. CLAYGATE MEMBER		1.80 1.90		PP 1.80	25			
	Loose orange brown silty fine SAND. CLAYGATE MEMBER		2.05		PP 2.05	58			
	Medium strength grey slightly silty CLAY with occasional rootlets up to 1mm diameter observed. CLAYGATE MEMBER		2.10				2.10	2.20	D
	Loose orange brown and grey silty fine SAND. CLAYGATE MEMBER								
	High strength orange brown mottled grey slightly silty CLAY. CLAYGATE MEMBER		3.40		PP 3.40	88	3.40	3.60	D
					PP 3.60	92			
					PP 3.70	100			
	Medium dense orange brown and grey clayey slightly silty fine SAND. CLAYGATE MEMBER		3.80						
	Loose orange brown and grey silty fine SAND. CLAYGATE MEMBER		4.00				4.00	4.10	D
	Medium strength orange brown and grey silty slightly sandy CLAY. CLAYGATE MEMBER		4.20 4.30		PP 4.20	75	4.20	4.30	D
	Loose orange brown and grey clayey silty fine SAND. CLAYGATE MEMBER								
	Medium strength orange brown and grey slightly silty sandy CLAY.		4.80		PP 4.80	83	4.80	5.00	D
					PP 4.90	83			
	CONTINUED ON NEXT SHEET								

Notes: Hand excavated to 1.5m depth. For Dynamic Cone Penetration testing, refer to DCP01. 80% recovery between 1m and 2m depth. 95% recovery between 2m and 3m depth. 95% recovery between 3m and 4m depth. 95% recovery between 4m and 5m depth.

Ground level (mAOD)

Co-ordinates
528241, 186950

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
Minor groundwater seepages from 4.7m depth.

Date of excavation (range if applicable)
27/10/2014

Appendix
D

Location plan on drawing number
02

DTS01

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WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS		SAMPLING		
					TYPE/ DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	CLAYGATE MEMBER								
	BOREHOLE TERMINATED AT 5.00m		5.00						

Notes: Hand excavated to 1.5m depth. For Dynamic Cone Penetration testing, refer to DCP01. 80% recovery between 1m and 2m depth. 95% recovery between 2m and 3m depth. 95% recovery between 3m and 4m depth. 95% recovery between 4m and 5m depth.

Ground level (mAOD)

Co-ordinates
528241, 186950

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
Minor groundwater seepages from 4.7m depth.

Date of excavation (range if applicable)
27/10/2014

Appendix
D

Location plan on drawing number
02

DTS01

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WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS TYPE/ DEPTH (m)	TEST RESULTS RESULT	SAMPLING FROM (m)	SAMPLING TO (m)	SAMPLING TYPE
	STONE PAVING SLAB.		0.05						
	MADE GROUND								
	Medium strength dark grey gravelly CLAY. Gravel consists of ash, clinker, concrete and brick.						0.20	0.30	D
	MADE GROUND		0.50				0.50	0.60	D
	Loose to medium dense orange brown and grey silty fine SAND.								
	CLAYGATE MEMBER				PP 0.87	54			
							1.20	1.50	D
	Loose orange brown slightly clayey silty SAND.		1.68						
	CLAYGATE MEMBER		1.87						
	Low strength orange brown occasional dark brown silty sandy slightly gravelly CLAY with cobbles of flint. Gravel consists of rounded flint.								
	CLAYGATE MEMBER				PP 2.10	33			
					PP 2.30	25	2.30	2.40	D
					PP 2.40	25			
					PP 2.50	83			
	Loose orange brown and grey silty slightly gravelly fine SAND. Gravel consists of rounded flint.		2.54						
	CLAYGATE MEMBER		2.67		PP 2.70	46	2.70	2.80	D
	Medium strength orange brown silty slightly sandy CLAY.		2.80		PP 2.77	54			
	CLAYGATE MEMBER						2.90	3.00	D
	Loose to medium dense light orange brown silty fine SAND.								
	CLAYGATE MEMBER								
	Loose to medium dense light brown clayey slightly silty fine SAND.		3.26						
	CLAYGATE MEMBER								
	Medium strength orange brown and grey CLAY with <5mm lenses of fine sand.		3.70		PP 3.75	54	3.70	3.90	D
	CLAYGATE MEMBER				PP 3.80	46			
	Medium dense light brown silty fine SAND.		3.92						
	CLAYGATE MEMBER								
	Medium strength light orange brown silty slightly sandy CLAY.		4.20		PP 4.20	54			
	CLAYGATE MEMBER		4.30		PP 4.30	63			
	Medium strength orange brown silty slightly sandy CLAY with <5mm lenses of orange brown and grey fine sand.				PP 4.40	63			
	CLAYGATE MEMBER				PP 4.50	63	4.50	4.60	D
					PP 4.60	46			
					PP 4.70	96			
					PP 4.80	71			
	Medium dense orange brown silty fine SAND.		4.85						
			4.90						
	CONTINUED ON NEXT SHEET								

Notes: For Dynamic Cone Penetration testing, refer to DCP02. 90% recovery between 1m and 2m depth. 90% recovery between 2m and 3m depth.

Ground level (mAOD)

Co-ordinates
528240, 186955

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
No groundwater encountered.

Date of excavation (range if applicable)
27/10/2014

Appendix
D

Location plan on drawing number
02

DTS02

Job number: STL2926D-

Revision: 0

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WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS		SAMPLING		
					TYPE/ DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	CLAYGATE MEMBER Medium strength orange brown silty sandy CLAY with <5mm lenses of light brown sand. CLAYGATE MEMBER		5.00						
	BOREHOLE TERMINATED AT 5.00m								

Notes: For Dynamic Cone Penetration testing, refer to DCP02. 90% recovery between 1m and 2m depth. 90% recovery between 2m and 3m depth.

Ground level (mAOD)

Co-ordinates
528240, 186955

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
No groundwater encountered.

Date of excavation (range if applicable)
27/10/2014

Appendix
D

Location plan on drawing number
02

DTS02

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WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS		SAMPLING		
					TYPE/ DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Grass onto orange brown CLAY. TOPSOIL								
	[Loose to medium dense] orange brown silty fine SAND. CLAYGATE MEMBER		0.22				0.50	0.90	D
							1.10	1.90	D
	BOREHOLE TERMINATED AT 2.00m		2.00						

Notes:

Ground level (mAOD)

Co-ordinates
528216, 186939

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
No groundwater encountered.

Date of excavation (range if applicable)
27/10/2014

Appendix
D

Location plan on drawing number
02

DTS03

Job number: STL2926D-

Revision: 0

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WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS		SAMPLING		
					TYPE/ DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Grass onto orange brown silty sandy slightly gravelly CLAY. Gravel consists of flint. TOPSOIL								
	[Loose to medium dense] orange brown clayey slightly gravelly fine SAND. Gravel consists of rounded flint. CLAYGATE MEMBER		0.20				0.20	0.30	D
	[Loose to medium dense] orange brown silty slightly gravelly fine SAND. Gravel consists of rounded flint. CLAYGATE MEMBER		1.30				1.30	2.00	D
	BOREHOLE TERMINATED AT 2.00m		2.00						

Notes: 50% recovery between 0m and 1m depth. 80% recovery between 1m and 2m depth.

Ground level (mAOD)

Co-ordinates
528205, 186937

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
No groundwater encountered.

Date of excavation (range if applicable)
27/10/2014

Appendix
D

Location plan on drawing number
02

DTS04

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WELL	DESCRIPTION	LEGEND	DEPTH (m)	WATER STRIKE	TEST RESULTS		SAMPLING		
					TYPE/ DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
	Vegetation onto dark brown clayey slightly gravelly fine SAND. Gravel consists of brick. MADE GROUND		0.28						
	[Loose to medium dense] orange brown and grey silty fine SAND. CLAYGATE MEMBER						0.60	0.70	D
	[Loose to medium dense] orange brown very clayey silty fine SAND. CLAYGATE MEMBER		1.36				1.50	1.70	D
	[Loose to medium dense] orange brown and grey fine SAND. CLAYGATE MEMBER		1.70						
	[Loose to medium dense] light brown fine SAND. CLAYGATE MEMBER		2.10				2.10	3.00	D
	BOREHOLE TERMINATED AT 3.00m		3.00						

Notes:

Ground level (mAOD)

Co-ordinates
528215, 186935

Title
Driven tube sampler borehole record

Surface breaking
No

Groundwater observations
No groundwater encountered.

Date of excavation (range if applicable)
27/10/2014

Appendix
D

Location plan on drawing number
02

DTS05

Environmental Scientifics Group
2 Newton Close
Drayton Fields Industrial Estate
Daventry
Northants NN11 8RR
Telephone: +44 (0) 1327 703828
Facsimile: +44 (0) 1327 300154

0001

TEST REPORT

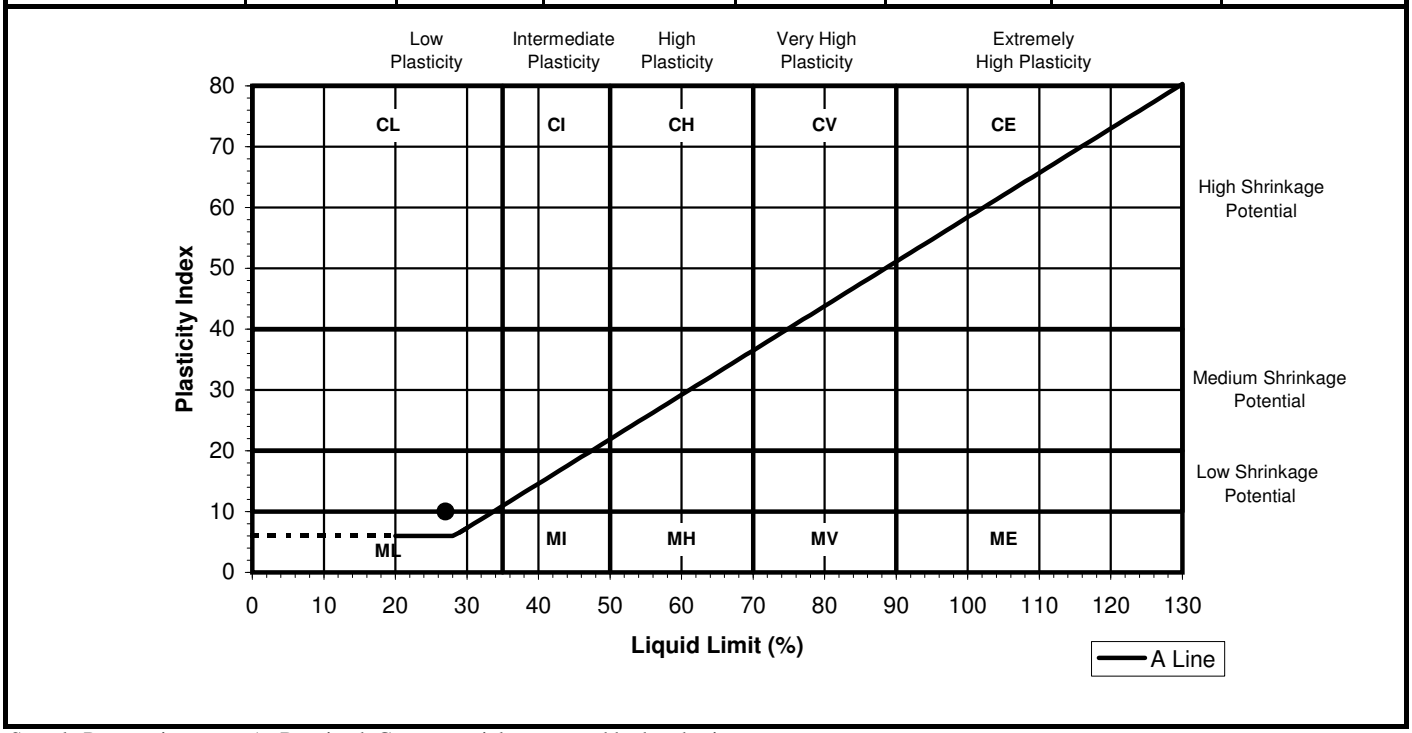
Determination of Moisture Content and Atterberg Limits

Client:	Soiltechnics Limited	Report No:	50186826/14/01
Client Address:	Cedar Barn,	Batch Number:	DAM0050449
	White Lodge		
	Walgrave	Client Reference:	STL2926D
Postcode:	NN6 9PY	Sampled by:	Client
Contact:	Andy Keeler	Date Sampled:	Not Advised
		Date Received:	30.10.14
Site:	STL2926D - 95 Hillway Highgate London	Tested From:	04.11.14-05.11.14
		Sample Type:	Bulk

Test Results:

Description: Brown Sandy Gravelly CLAY

Laboratory Reference	Location	Depth (m)	As Received Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
45229156	DTS01	0.50-0.60	N/A	27	17	10	84



Sample Preparation: As Received, Coarse particles removed by hand prior to test
Estimated % passing 425µm BS Test Sieve

Certified that the laboratory testing was carried out in accordance with BS 1377-2: 1990: Method 3.2, 4.4 and 5

Page: 1 of 1
Date: 10.11.14

Signed

[ ] M. Carr - Section Manager
[✓] D. Berrill - Laboratory Manager

For and on behalf of Environmental Scientifics Group

Environmental Scientifics Group
2 Newton Close
Drayton Fields Industrial Estate
Daventry
Northants NN11 8RR
Telephone: +44 (0) 1327 703828
Facsimile: +44 (0) 1327 300154

0001

TEST REPORT

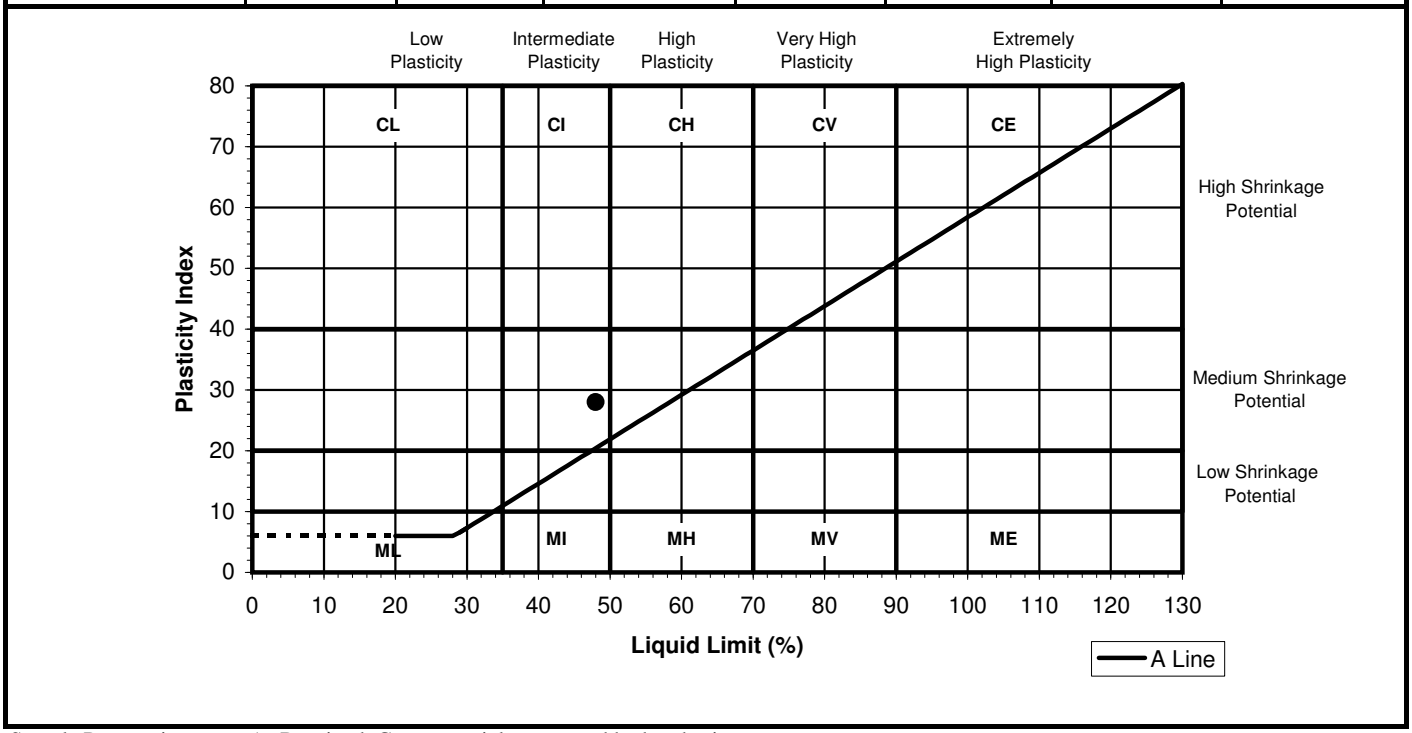
Determination of Moisture Content and Atterberg Limits

Client:	Soiltechnics Limited	Report No:	50186826/14/02
Client Address:	Cedar Barn,	Batch Number:	DAM0050449
	White Lodge		
	Walgrave	Client Reference:	STL2926D
Postcode:	NN6 9PY	Sampled by:	Client
Contact:	Andy Keeler	Date Sampled:	Not Advised
		Date Received:	30.10.14
Site:	STL2926D - 95 Hillway Highgate London	Tested From:	04.11.14-05.11.14
		Sample Type:	Bulk

Test Results:

Description: Sandy CLAY

Laboratory Reference	Location	Depth (m)	As Received Moisture Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Passing 425µm
45229157	DTS01	3.40-3.60	N/A	48	20	28	100



Sample Preparation: As Received, Coarse particles removed by hand prior to test
Estimated % passing 425µm BS Test Sieve

Certified that the laboratory testing was carried out in accordance with BS 1377-2: 1990: Method 3.2, 4.4 and 5

Page: 1 of 1
Date: 10.11.14

Signed

[ ] M. Carr - Section Manager
[✓] D. Berrill - Laboratory Manager

For and on behalf of Environmental Scientifics Group

Environmental Scientifics Group
2 Newton Close
Drayton Fields Industrial Estate
Daventry
Northants NN11 8RR
Telephone: +44 (0) 1327 703828
Facsimile: +44 (0) 1327 300154

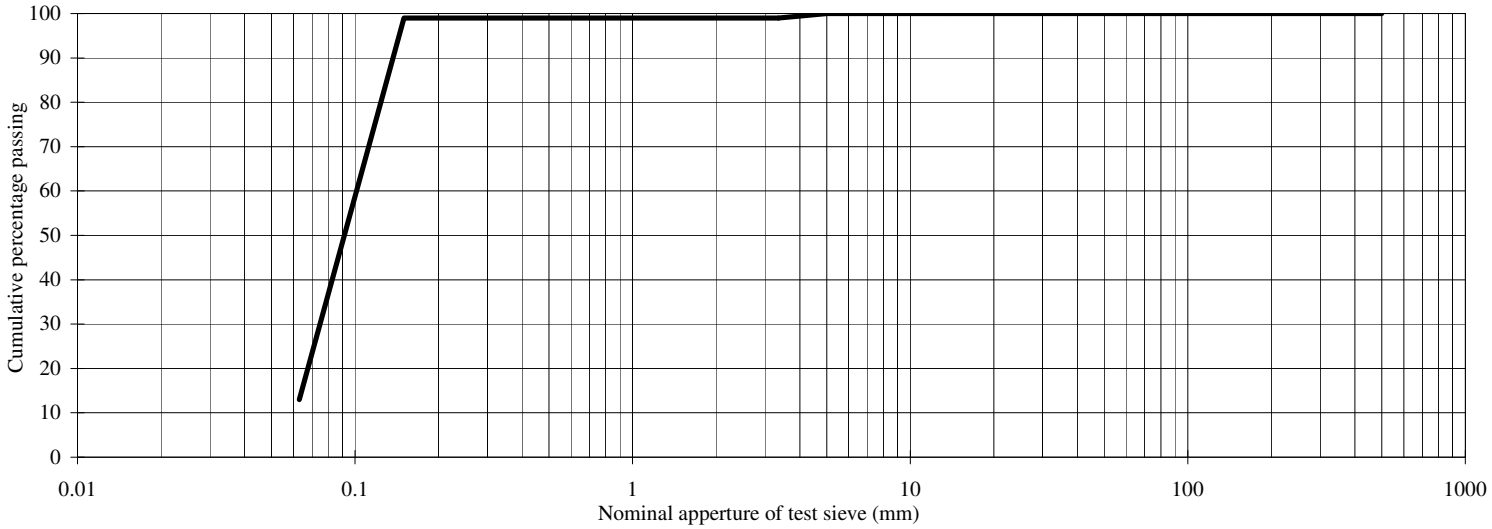
0001

TEST REPORT

Determination of Particle Size Distribution

Client:	Soiltechnics Limited	Report No:	50186826/14/03
Client Address:	Cedar Barn, White Lodge Walgrave	Batch Number:	DAM0050449
		Lab Ref:	45229158
Postcode:	NN6 9PY	Client Ref:	STL2926D
Contact:	Andy Keeler	Location:	DTS03
		Depth (m):	0.50-1.90
Site:	STL2926D - 95 Hillway Highgate London		
		Date Sampled:	Not Advised
Sampled by:	Client	Date Received:	30.10.14
Sampled from:	Site	Date Tested:	05.11.14
Supplier:	Client	Sample Type:	Bulk
Source:	Site	Sample Mass (kg):	2
Description:	Brown SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	99	
2	99	
1.18	99	
0.600	99	
0.425	99	
0.300	99	
0.212	99	
0.150	99	
0.063	13.0	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 10.11.14

Signed: _____

[ ] M. Carr - Section Manager
[✓] D. Berrill - Laboratory Manager

For and on behalf of Environmental Scientifics Group

Environmental Scientifics Group
2 Newton Close
Drayton Fields Industrial Estate
Daventry
Northants NN11 8RR
Telephone: +44 (0) 1327 703828
Facsimile: +44 (0) 1327 300154

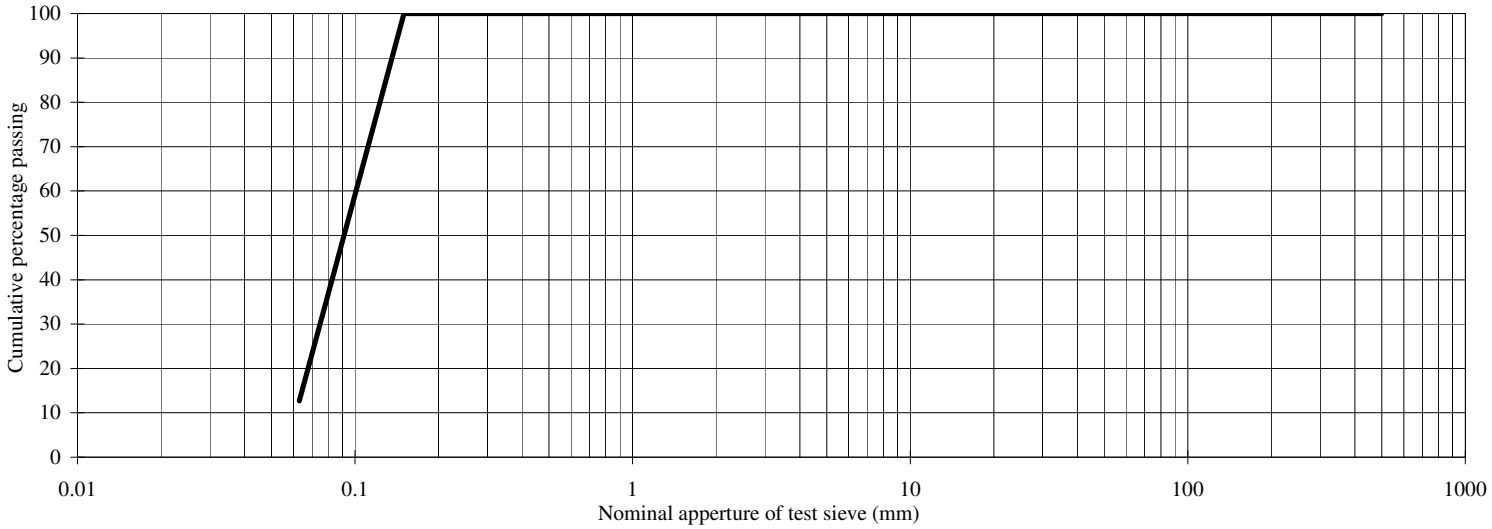
0001

TEST REPORT

Determination of Particle Size Distribution

Client:	Soiltechnics Limited	Report No:	50186826/14/04
Client Address:	Cedar Barn, White Lodge Walgrave	Batch Number:	DAM0050449
		Lab Ref:	45229159
Postcode:	NN6 9PY	Client Ref:	STL2926D
Contact:	Andy Keeler	Location:	DTS04
		Depth (m):	1.30-2.00
Site:	STL2926D - 95 Hillway Highgate London		
		Date Sampled:	Not Advised
Sampled by:	Client	Date Received:	30.10.14
Sampled from:	Site	Date Tested:	05.11.14
Supplier:	Client	Sample Type:	Bulk
Source:	Site	Sample Mass (kg):	1.0
Description:	Brown SAND		
Specification:	Not Required		
Comments:			

SIEVE ANALYSIS		
BS Sieve (mm)	Passing (%)	Material Specification
500	100	
300	100	
125	100	
100	100	
90	100	
75	100	
63	100	
50	100	
37.5	100	
28	100	
20	100	
14	100	
10	100	
6.3	100	
5	100	
3.35	100	
2	100	
1.18	100	
0.600	100	
0.425	100	
0.300	100	
0.212	100	
0.150	100	
0.063	12.7	



Certified that the Particle Size Distribution was determined in accordance with BS 1377 - 2 : 1990, Method 9.2. Washing & Dry Sieving
Method of Preparation: BS 1377 - 1 & 2 : 1990

Page: 1 of 1
Date: 10.11.14

Signed: D. Berrill

[ ] M. Carr - Section Manager
[✓] D. Berrill - Laboratory Manager

For and on behalf of Environmental Scientifics Group

Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.co.uk

Final Report

Report Number:	14-13219 Issue-1
Initial Date of Issue:	04-Nov-14
Client:	Soiltechnics Limited
Client Address:	Cedar Barn White Lodge Walgrave Northampton Northamptonshire NN6 9PY
Contact(s):	Rachel Brown Sara Bertholdson
Project:	STL2926D - 95 Hillway, Highgate, London

Quotation No.:		**Date Received:**	31-Oct-14
Order No.:	17818	**Date Instructed:**	31-Oct-14
No. of Samples:	9	**Results Due:**	04-Nov-14
Turnaround: (Weekdays)	3		
Date Approved:	04-Nov-14		

Approved By:

Details: Keith Jones, Technical Manager

Chemtest
The right chemistry to deliver results

Results Summary - Soil

Project: STL2926D - 95 Hillway, Highgate, London

Client: Soiltechnics Limited					Chemtest Job No.:	14-13219	14-13219	14-13219	14-13219	14-13219	14-13219	14-13219	14-13219	14-13219
Quotation No.:					Chemtest Sample ID.:	64343	64344	64345	64346	64347	64348	64349	64350	64351
Order No.: 17818					Client Sample Ref.:									
					Client Sample ID.:	TP1	TP4	TP2	DTS01	DTS04	TP4	TP2	TP3	DTS01
					Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
					Top Depth (m):	0.3	0.2	0.3	0.2	0.2	0.8	2.4	0.6	4.2
					Bottom Depth(m):	0.4	0.3	0.4	0.3	0.3	0.9	2.5	0.7	4.3
					Date Sampled:	27-Oct-14	27-Oct-14	27-Oct-14	27-Oct-14	27-Oct-14	27-Oct-14	27-Oct-14	27-Oct-14	27-Oct-14
Determinand	**Accred.**	**SOP**	**Units**	**LOD**										
Moisture	N	2030	%	0.02		13	20	15	17	14	15	8.6	15	23
Soil Colour	N					brown	brown	brown	brown	yellow	brown	brown	brown	brown
Other Material	U					none	stones	stones	stones	stones	none	none	none	none
Soil Texture	N					loam	loam	loam	loam	loam	loam	sand	loam	loam
pH	M	2010				7.8	7.8	7.8	6.7	4.2	5.1	5.0	7.1	7.2
Boron (Hot Water Soluble)	M	2120	mg/kg	0.4		1.5	2.8	4.5	1.2	0.95				
Sulphate (2:1 Water Soluble) as SO4	M	2120	g/l	0.01							0.057	0.17	0.37	0.039
Total Sulphur	M	2175	%	0.01							0.010	0.010	0.050	< 0.010
Cyanide (Total)	M	2300	mg/kg	0.5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50				
Cyanide (Free)	M	2300	mg/kg	0.5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50				
Cyanide (Complex)	M	2300	mg/kg	0.5		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50				
Sulphate (Acid Soluble)	M	2430	%	0.01							0.044	0.040	0.14	0.014
Arsenic	M	2450	mg/kg	1		13	25	19	25	13				
Beryllium	U	2450	mg/kg	1		< 1.0	1.1	< 1.0	< 1.0	< 1.0				
Cadmium	M	2450	mg/kg	0.1		< 0.10	5.0	0.35	0.40	< 0.10				
Chromium	M	2450	mg/kg	1		31	50	35	46	56				
Copper	M	2450	mg/kg	1		18	120	31	52	11				
Mercury	M	2450	mg/kg	0.1		< 0.10	2.0	0.38	1.2	< 0.10				
Nickel	M	2450	mg/kg	1		12	23	16	17	9.3				
Lead	M	2450	mg/kg	1		210	460	540	240	18				
Selenium	M	2450	mg/kg	0.2		< 0.20	< 0.20	< 0.20	< 0.20	< 0.20				
Vanadium	U	2450	mg/kg	5		52	69	58	61	80				
Zinc	M	2450	mg/kg	1		55	760	98	130	34				
Chromium (Hexavalent)	N	2490	mg/kg	0.5		< 0.50	0.65	< 0.50	< 0.50	< 0.50				
Organic Matter	M	2625	%	0.4		1.9	5.9	2.9	3.6	0.62				
Naphthalene	M	2800	mg/kg	0.1		< 0.10	< 0.10	< 0.10	0.22	< 0.10				
Acenaphthylene	N	2800	mg/kg	0.1		< 0.10	< 0.10	< 0.10	0.31	< 0.10				
Acenaphthene	M	2800	mg/kg	0.1		< 0.10	< 0.10	< 0.10	0.87	< 0.10				
Fluorene	M	2800	mg/kg	0.1		< 0.10	< 0.10	< 0.10	1.7	< 0.10				
Phenanthrene	M	2800	mg/kg	0.1		0.26	0.27	< 0.10	20	0.41				
Anthracene	M	2800	mg/kg	0.1		< 0.10	< 0.10	< 0.10	4.2	< 0.10				
Fluoranthene	M	2800	mg/kg	0.1		0.25	0.63	0.17	19	0.27				
Pyrene	M	2800	mg/kg	0.1		0.17	0.56	0.12	14	< 0.10				

Chemtest
The right chemistry to deliver results

Results Summary - Soil

Project: STL2926D - 95 Hillway, Highgate, London

Client: Soiltechnics Limited													
Quotation No.:				**Chemtest Job No.:**	14-13219	14-13219	14-13219	14-13219	14-13219	14-13219	14-13219	14-13219	14-13219
Order No.: 17818				**Chemtest Sample ID.:**	64343	64344	64345	64346	64347	64348	64349	64350	64351
				Client Sample Ref.:									
				Client Sample ID.:	TP1	TP4	TP2	DTS01	DTS04	TP4	TP2	TP3	DTS01
				Sample Type:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
				Top Depth (m):	0.3	0.2	0.3	0.2	0.2	0.8	2.4	0.6	4.2
				Bottom Depth(m):	0.4	0.3	0.4	0.3	0.3	0.9	2.5	0.7	4.3
				Date Sampled:	27-Oct-14	27-Oct-14	27-Oct-14	27-Oct-14	27-Oct-14	27-Oct-14	27-Oct-14	27-Oct-14	27-Oct-14
Determinand	**Accred.**	**SOP**	**Units**	**LOD**									
Benzo[a]anthracene	M	2800	mg/kg	0.1	< 0.10	0.14	< 0.10	8.1	< 0.10				
Chrysene	M	2800	mg/kg	0.1	< 0.10	0.20	< 0.10	7.2	< 0.10				
Benzo[b]fluoranthene	M	2800	mg/kg	0.1	< 0.10	0.42	< 0.10	6.9	< 0.10				
Benzo[k]fluoranthene	M	2800	mg/kg	0.1	< 0.10	< 0.10	< 0.10	2.8	< 0.10				
Benzo[a]pyrene	M	2800	mg/kg	0.1	< 0.10	0.18	< 0.10	6.6	< 0.10				
Indeno(1,2,3-c,d)Pyrene	M	2800	mg/kg	0.1	< 0.10	0.14	< 0.10	3.6	< 0.10				
Dibenz(a,h)Anthracene	N	2800	mg/kg	0.1	< 0.10	< 0.10	< 0.10	0.56	< 0.10				
Benzo[g,h,i]perylene	M	2800	mg/kg	0.1	< 0.10	0.24	< 0.10	2.8	< 0.10				
Total Of 16 PAH's	N	2800	mg/kg	2	< 2.0	2.8	< 2.0	99	< 2.0				
Total Phenols	M	2920	mg/kg	0.3	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30				

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVCOs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at our Coventry laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container

Sample Retention and Disposal

All soil samples will be retained for a period of 1 month following the date of the test report
All water samples will be retained for 7 days following the date of the test report
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.co.uk

Chemtest Ltd.
Depot Road
Newmarket
CB8 0AL
Tel: 01638 606070
Email: info@chemtest.co.uk

Amended Report

Report Number:	14-13271 Issue-2		
Initial Date of Issue:	07-Nov-14	**Date of Re-Issue:**	10-Nov-14
Client:	Soiltechnics Limited		
Client Address:	Cedar Barn White Lodge Walgrave Northampton Northamptonshire NN6 9PY		
Contact(s):	Rachel Brown Sara Bertholdson		
Project:	STL2926D - 95 Hillway, Highgale, London		
Quotation No.:		**Date Received:**	31-Oct-14
Order No.:	17819	**Date Instructed:**	31-Oct-14
No. of Samples:	1	**Results Due:**	07-Nov-14
Turnaround: (Weekdays)	6		
Date Approved:	07-Nov-14		
Approved By:			
Details:	Darrell Hall, Laboratory Director		

Results Summary - Soil

Project: STL2926D - 95 Hillway, Highgale, London

Client: Soiltechnics Limited			**Chemtest Job No.:**		14-13271
Quotation No.:			**Chemtest Sample ID.:**		64592
Order No.: 17819			Client Sample Ref.:		
			Client Sample ID.:		Waste Composite
			Sample Type:		SOIL
			Top Depth (m):		
			Bottom Depth(m):		
			Date Sampled:		27-Oct-14
Determinand	**Accred.**	**SOP**	**Units**	**LOD**	
Moisture	N	2030	%	0.02	15

Results Summary - 2 Stage WAC

Project: STL2926D - 95 Hillway, Highgale, London

Chemtest Job No: 14-13271 Chemtest Sample ID: 64592 Sample Ref: Sample ID: Waste Composite Top Depth(m): Bottom Depth(m): Sampling Date: 27-Oct-2014							Landfill Waste Acceptance Criteria Limits		
							Inert Waste Landfill	Stable Non-reactive Hazardous waste in non-hazardous	Hazardous Waste Landfill
Determinand	**SOP**	**Accred.**	**Units**						
Total Organic Carbon	2625	U	%			1.5	3	5	6
Loss on Ignition	2610	U	%			3.6	--	--	10
Total BTEX	2760	U	mg/kg			< 0.01	6	--	--
Total PCBs (7 congeners)	2815	U	mg/kg			< 0.10	1	--	--
TPH Total WAC (Mineral Oil)	2670	U	mg/kg			21	500	--	--
Total (of 17) PAHs	2700	N	mg/kg			3.4	100	--	--
pH	2010	U				7.5	--	>6	--
Acid Neutralisation Capacity	2015	N	mol/kg			0.13	--	To evaluate	To evaluate
Eluate Analysis			**2:1 mg/l**	**8:1 mg/l**	**2:1 mg/kg**	**Cumulative 10:1 mg/kg**	**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
Arsenic	1450	U	0.002	0.003	< 0.050	< 0.050	0.5	2	25
Barium	1450	U	0.048	0.018	< 0.50	< 0.50	20	100	300
Cadmium	1450	U	< 0.0001	< 0.0001	< 0.010	< 0.010	0.04	1	5
Chromium	1450	U	0.006	< 0.001	< 0.050	< 0.050	0.5	10	70
Copper	1450	U	0.005	0.004	< 0.050	< 0.050	2	50	100
Mercury	1450	U	< 0.0005	< 0.0005	< 0.010	< 0.010	0.01	0.2	2
Molybdenum	1450	U	0.012	0.006	< 0.050	0.062	0.5	10	30
Nickel	1450	U	< 0.001	< 0.001	< 0.050	< 0.050	0.4	10	40
Lead	1450	U	< 0.001	0.003	< 0.010	0.031	0.5	10	50
Antimony	1450	U	0.002	0.001	< 0.010	0.013	0.06	0.7	5
Selenium	1450	U	< 0.001	< 0.001	< 0.010	< 0.010	0.1	0.5	7
Zinc	1450	U	0.016	0.004	< 0.50	< 0.50	4	50	200
Chloride	1220	U	5.9	1.1	12	15	800	15000	25000
Fluoride	1220	U	0.85	0.93	1.7	9.2	10	150	500
Sulphate	1220	U	420	65	830	920	1000	20000	50000
Total Dissolved Solids	1020	N	640	100	1300	1400	4000	60000	100000
Phenol Index	1920	U	< 0.030	< 0.030	< 0.30	< 0.50	1	-	-
Dissolved Organic Carbon	1610	N	25	12	< 50	130	500	800	1000

Soild Information	
Dry mass of test portion/kg	0.175
Moisture (%)	15

Leachate Test Information	
Leachant volume 1st extract/l	0.32
Leachant volume 2nd extract/l	1.4
Eluant recovered from 1st extract/l	0.134

Chemtest
The right chemistry to deliver results

Report Information

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I/S	Insufficient Sample
U/S	Unsuitable sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation
The results relate only to the items tested
Uncertainty of measurement for the determinands tested are available upon request
None of the results in this report have been recovery corrected
All results are expressed on a dry weight basis
The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVCOs, PCBs, Phenols
For all other tests the samples were dried at < 37°C prior to analysis
All Asbestos testing is performed at our Coventry laboratory
Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

A - Date of sampling not supplied
B - Sample age exceeds stability time (sampling to extraction)
C - Sample not received in appropriate containers
D - Broken Container

Sample Retention and Disposal

All soil samples will be retained for a period of 60 days from the date of receipt
All water samples will be retained for 14 days from the date of receipt
Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.co.uk

soiltechnics
environmental and geotechnical consultants

Analysis of test data in relation to concentrations of inorganic chemical contaminants

Adopted Model: Industrial/Commercial
Receptor: Construction operative

Test procedure			Summary of test data					Initial comparison	Outlier test					Normality test			UCL	
Contaminant	Guideline source	Guideline value mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Arsenic	SGV	640	5	13.0	25.0	19.0	0	Mean value below guideline										
Beryllium	GAC	420	5	1.0	1.1	1.0	0	Mean value below guideline										
Boron	GAC	192000	5	1.0	4.5	2.2	0	Mean value below guideline										
Cadmium	SGV	230	5	0.1	5.0	1.2	0	Mean value below guideline										
Chromium	GAC	30400	5	31.0	56.0	43.6	0	Mean value below guideline										
Copper	GAC	71700	5	11.0	120.0	46.4	0	Mean value below guideline										
Cyanide (total)	ATK	34	5	0.5	0.5	0.5	0	Mean value below guideline										
Lead	ATK	6490	5	18.0	540.0	293.6	0	Mean value below guideline										
Mercury#	SGV	26	5	0.1	2.0	0.8	0	Mean value below guideline										
Nickel	SGV	1800	5	9.3	23.0	15.5	0	Mean value below guideline										
Selenium	SGV	13000	5	0.2	0.2	0.2	0	Mean value below guideline										
Vanadium	GAC	3160	5	52.0	80.0	64.0	0	Mean value below guideline										
Zinc	GAC	665000	5	34.0	760.0	215.4	0	Mean value below guideline										

Notes

1. Statistical analysis not undertaken due to small sample size

SGV	Soil Guideline Value as published by the Environment Agency 2009
GAC	Generic Assessment Criterion as published by LQM and CIEH
SSV	Soil Screening Value as derived by Soiltechnics
ATK	Soil Screening Value derived by Atkins
NGV	No Guideline Value
BPG5	Guideline from BPG Note 5 as published by Forest Research
#	Assumed to be elemental mercury as initial screening value

Title	Table number
Analysis of test data in relation to concentrations of inorganic chemical contaminants.	1

soiltechnics
environmental and geotechnical consultants

Analysis of test data in relation to concentrations of inorganic chemical contaminants

Adopted Model: Residential
Receptor: Proposed site user

Test procedure			Summary of test data					Initial comparison	Outlier test					Normality test			UCL	
Contaminant	Guideline source	Guideline value mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Arsenic	SGV	32	5	13.0	25.0	19.0	0	Mean value below guideline	y									
Beryllium	GAC	51	5	1.0	1.1	1.0	0	Mean value below guideline	n									
Boron	GAC	291	5	1.0	4.5	2.2	0	Mean value below guideline	y									
Cadmium	SGV	10	5	0.1	5.0	1.2	0	Mean value below guideline	n									
Chromium	GAC	3000	5	31.0	56.0	43.6	0	Mean value below guideline	y									
Copper	GAC	2330	5	11.0	120.0	46.4	0	Mean value below guideline	n									
Cyanide (total)	ATK	34	5	0.5	0.5	0.5	0	Mean value below guideline	y									
Lead	ATK	276	5	18.0	540.0	293.6	2	Mean value above guideline										
Mercury#	SGV	1	5	0.1	2.0	0.8	2	Mean value below guideline	y									
Nickel	SGV	130	5	9.3	23.0	15.5	0	Mean value below guideline	y									
Selenium	SGV	350	5	0.2	0.2	0.2	0	Mean value below guideline	y									
Vanadium	GAC	75	5	52.0	80.0	64.0	1	Mean value below guideline	y									
Zinc	GAC	3750	5	34.0	760.0	215.4	0	Mean value below guideline	n									

SGV	Soil Guideline Value as published by the Environment Agency 2009
GAC	Generic Assessment Criterion as published by LQM and CIEH
SSV	Soil Screening Value as derived by Soiltechnics
ATK	Soil Screening Value derived by Atkins
NGV	No Guideline Value
BPG5	Guideline from BPG Note 5 as published by Forest Research
#	Assumed to be elemental mercury as initial screening value

Title	Table number
Analysis of test data in relation to concentrations of inorganic chemical contaminants.	2

soiltechnics
environmental and geotechnical consultants

Analysis of test data in relation to concentrations of inorganic chemical contaminants

Adopted Model: Industrial/Commercial and BPG5
Receptor: Vegetation

Test procedure			Summary of test data					Initial comparison	Outlier test					Normality test			UCL	
Contaminant	Guideline source	Guideline value mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Arsenic	SGV	640	5	13.0	25.0	19.0	0	Mean value below guideline										
Beryllium	GAC	420	5	1.0	1.1	1.0	0	Mean value below guideline										
Boron	GAC	192000	5	1.0	4.5	2.2	0	Mean value below guideline										
Cadmium	SGV	230	5	0.1	5.0	1.2	0	Mean value below guideline										
Chromium	GAC	30400	5	31.0	56.0	43.6	0	Mean value below guideline										
Copper	BPG5	130	5	11.0	120.0	46.4	0	Mean value below guideline										
Cyanide (total)	ATK	34	5	0.5	0.5	0.5	0	Mean value below guideline										
Lead	ATK	6490	5	18.0	540.0	293.6	0	Mean value below guideline										
Mercury#	SGV	26	5	0.1	2.0	0.8	0	Mean value below guideline										
Nickel	SGV	1800	5	9.3	23.0	15.5	0	Mean value below guideline										
Selenium	SGV	13000	5	0.2	0.2	0.2	0	Mean value below guideline										
Vanadium	GAC	3160	5	52.0	80.0	64.0	0	Mean value below guideline										
Zinc	BPG5	300	5	34.0	760.0	215.4	1	Mean value below guideline										

SGV	Soil Guideline Value as published by the Environment Agency 2009
GAC	Generic Assessment Criterion as published by LQM and CIEH
SSV	Soil Screening Value as derived by Soiltechnics
ATK	Soil Screening Value derived by Atkins
NGV	No Guideline Value
BPG5	Guideline from BPG Note 5 as published by Forest Research
#	Assumed to be elemental mercury as initial screening value

Title	Table number
Analysis of test data in relation to concentrations of inorganic chemical contaminants.	3

soiltechnics
environmental and geotechnical consultants

Analysis of test data in relation to concentrations of organic chemical contaminants

Adopted model: Industrial/Commercial
Receptor: Construction operative and vegetation

Test procedure			Summary of test data					Initial Screening	Oulier test				Normality test			UCL	
Contaminant	Guideline source	Guideline value mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Acenaphthene	GAC	85000	5	0.1	0.9	0.3	0	Mean value below guideline										
Acenaphthylene	GAC	84000	5	0.1	0.3	0.1	0	Mean value below guideline										
Anthracene	GAC	530000	5	0.1	4.2	0.9	0	Mean value below guideline										
Benzo(a)anthracene	GAC	90	5	0.1	8.1	1.7	0	Mean value below guideline										
Benzo(a)pyrene	GAC	14	5	0.1	6.6	1.4	0	Mean value below guideline										
Benzo(b)fluoranthene	GAC	100	5	0.1	6.9	1.5	0	Mean value below guideline										
Benzo(g,h,i)perylene	GAC	650	5	0.1	2.8	0.7	0	Mean value below guideline										
Benzo(k)fluoranthene	GAC	140	5	0.1	2.8	0.6	0	Mean value below guideline										
Chrysene	GAC	140	5	0.1	7.2	1.5	0	Mean value below guideline										
Dibenzo(a,h)anthracene	GAC	13	5	0.1	3.6	0.8	0	Mean value below guideline										
Fluoranthene	GAC	23000	5	0.2	19.0	4.1	0	Mean value below guideline										
Fluorene	GAC	64000	5	0.1	1.7	0.4	0	Mean value below guideline										
Indeno(1,2,3-cd)pyrene	GAC	60	5	0.1	0.6	0.2	0	Mean value below guideline										
Naphthalene	GAC	200	5	0.1	0.2	0.1	0	Mean value below guideline										
Phenanthrene	GAC	22000	5	0.1	20.0	4.2	0	Mean value below guideline										
Phenols	SGV	3200	5	0.3	0.3	0.3	0	Mean value below guideline										
Pyrene	GAC	54000	5	0.1	14.0	3.0	0	Mean value below guideline										

Notes

SGV	Soil Guideline Value as published by the Environment Agency
GAC	Generic Assessment Criterion as published by LQM and CIEH
SSV	Soil Screening Value as derived by Soiltechnics
NGV	No Guideline Value

Title	Table number
Analysis of test data in relation to concentrations of organic chemical contaminants.	4

soiltechnics
environmental and geotechnical consultants

Analysis of test data in relation to concentrations of organic chemical contaminants

Adopted model: Residential
Receptor: Proposed site user

Test procedure			Summary of test data					Initial Screening	Oulier test				Normality test			UCL	
Contaminant	Guideline source	Guideline value mg/kg	No. of tests	Min. mg/kg	Max. mg/kg	Mean mg/kg	No. of tests above guideline value	Initial screening	Pass outlier test?	Number of outliers	Location of outlier	Depth	Concentration mg/kg	Shapiro-Wilk Normality test	Probability plot test	Data normally distributed?	95% UCL of mean mg/kg	Contaminant
Acenaphthene	GAC	210	5	0.1	0.9	0.3	0	Mean value below guideline										
Acenaphthylene	GAC	170	5	0.1	0.3	0.1	0	Mean value below guideline										
Anthracene	GAC	2300	5	0.1	4.2	0.9	0	Mean value below guideline										
Benzo(a)anthracene	GAC	3.1	5	0.1	8.1	1.7	1	Mean value below guideline										
Benzo(a)pyrene	GAC	0.83	5	0.1	6.6	1.4	1	Mean value above guideline										
Benzo(b)fluoranthene	GAC	5.6	5	0.1	6.9	1.5	1	Mean value below guideline										
Benzo(g,h,i)perylene	GAC	44	5	0.1	2.8	0.7	0	Mean value below guideline										
Benzo(k)fluoranthene	GAC	8.5	5	0.1	2.8	0.6	0	Mean value below guideline										
Chrysene	GAC	6	5	0.1	7.2	1.5	1	Mean value below guideline										
Dibenzo(a,h)anthracene	GAC	0.76	5	0.1	3.6	0.8	1	Mean value above guideline										
Fluoranthene	GAC	260	5	0.2	19.0	4.1	0	Mean value below guideline										
Fluorene	GAC	160	5	0.1	1.7	0.4	0	Mean value below guideline										
Indeno(1,2,3-cd)pyrene	GAC	3.2	5	0.1	0.6	0.2	0	Mean value below guideline										
Naphthalene	GAC	1.5	5	0.1	0.2	0.1	0	Mean value below guideline										
Phenanthrene	GAC	92	5	0.1	20.0	4.2	0	Mean value below guideline										
Phenols	SGV	420	5	0.3	0.3	0.3	0	Mean value below guideline										
Pyrene	GAC	560	5	0.1	14.0	3.0	0	Mean value below guideline										

Notes

SGV	Soil Guideline Value as published by the Environment Agency
GAC	Generic Assessment Criterion as published by LQM and CIEH
SSV	Soil Screening Value as derived by Soiltechnics
NGV	No Guideline Value

Title	Table number
Analysis of test data in relation to concentrations of organic chemical contaminants.	5

soiltechnics
environmental and geotechnical consultants

Initial Conceptual Model

Current site use residential
Proposed site use residential

Source	Pathway										Receptor		Risk assessment to CIRIA C552	
	Humans						Vegetation	Water					Consequence of risk occurring via most likely pathway	Risk
	Ingestion of air-borne dusts	Ingestion of soil	Ingestion of vegetables and soil attached to vegetables	Inhalation of air-borne dusts	Inhalation of vapours	Dermal contact with soil and dust	Root uptake, deposition to shoots and foliage contact	Percolation of water through contaminated soils	Near-surface water run-off through contaminated	Saturation of contaminated soils by flood waters				
Soils														
Made Ground soils	Likely	Low likelihood	Unlikely	Likely	Likely	Likely	-	-	-	-	Construction operatives	Adult	Medium	Moderate
(metals and PAHs)	Likely	Likely	Likely	Likely	Likely	Likely	-	-	-	-	Proposed site users	Child	Medium	Moderate
	-	-	-	-	-	-	Likely	-	-	-	Vegetation (proposed)	-	Medium	Moderate
	-	-	-	-	-	-	-	Likely	Unlikely	Unlikely	Water (current and proposed)	-	Minor	Low

Title	Table number
Initial Conceptual Site Model	1

soiltechnics
environmental and geotechnical consultants

Updated Conceptual Model

Current site use residential
Proposed site use residential

Source	Pathway										Receptor		Risk assessment to CIRIA C552	
	Humans						Vegetation	Water					Consequence of risk occurring via most likely pathway	Risk
	Ingestion of air-borne dusts	Ingestion of soil	Ingestion of vegetables and soil attached to vegetables	Inhalation of air-borne dusts	Inhalation of vapours	Dermal contact with soil and dust	Root uptake, deposition to shoots and foliage contact	Percolation of water through contaminated soils	Near-surface water run-off through contaminated	Saturation of contaminated soils by flood waters				
Soils														
Made Ground soils beneath and immediatley surrounding the existing property	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	Construction operatives	Adult	Minor	Low
	Low likelihood	Low likelihood	Unlikely	Low likelihood	Low likelihood	Low likelihood	-	-	-	-	Proposed site users	Child	Mild	Low
	-	-	-	-	-	-	Likely	-	-	-	Vegetation (current)	-	Minor	Low
	-	-	-	-	-	-	-	Likely	Likely	Unlikely	Water (current and proposed)	-	Minor	Low
Made Ground soils within the front garden area (DTS01 - metals and PAHs)	Likely	Likely	Unlikely	Likely	Likely	Likely	-	-	-	-	Construction operatives	Adult	Minor	Low
	Likely	Likely	Likely	Likely	Likely	Likely	-	-	-	-	Proposed site users	Child	Mild	Low/moderate
	-	-	-	-	-	-	Likely	-	-	-	Vegetation (current)	-	Minor	Low
	-	-	-	-	-	-	-	Likely	Likely	Unlikely	Water (current and proposed)	-	Mild	Low/moderate

Title	Table number
Updated Conceptual Site Model	2

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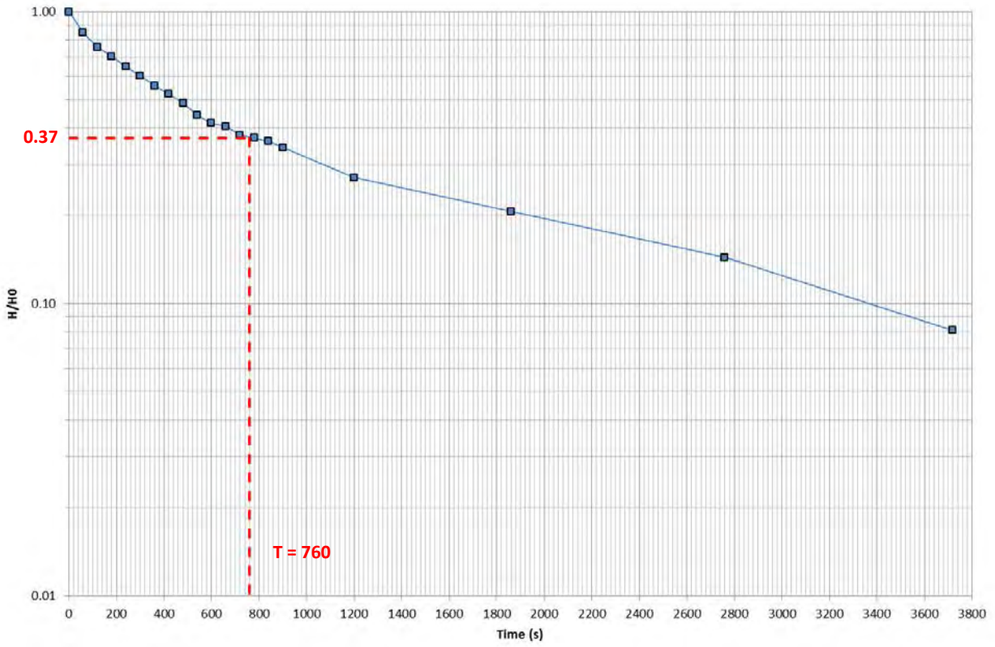
The basic time lag (T) is obtained from the plot of the head ratio H/Ho (log scale) against elapsed time t (seconds). The basic time lag corresponds to a value of H/Ho = 0.37 where Ho denotes the head at the start of the test and H is time measured head at the elapsed time t. The plot and identification of T is shown below.



Adopting the basic time lag method

k = permeability = $\frac{\pi r^2}{FT}$

Where F = intake factor (adopting fig 6D of BS5930)

$$F = \frac{2\pi L}{In\left[\frac{L}{D} + \sqrt{1+\left(\frac{L}{D}\right)^2}\right]} = \mathbf{1.957}$$

Then

$$\mathbf{k} = \frac{0.003117}{1.957 \times 760} = \mathbf{2.10 \times 10^{-6}\ ms^{-1}}$$

Borehole dimensions:

Borehole depth:	5m
Length of slotted casing under test:	**L** = 1.11m
Diameter of borehole:	**D** = 0.063m
Cross sectional area:	**A** = 0.003117m^2
Groundwater level:	**G** = 4.41m

DESCRIPTION	DEPTH (m)
Grass onto low strength dark brown sandy slightly gravelly CLAY. Gravel consists of brick. (MADE GROUND)	0.0
Low strength orange brown sandy slightly gravelly CLAY. Gravel consists of ash, brick and rounded flint. (MADE GROUND)	0.5
Medium strength orange brown slightly silty sandy CLAY. (CLAYGATE MEMBER)	1.8
Loose orange brown silty fine SAND. (CLAYGATE MEMBER)	1.9
Medium strength grey slightly silty CLAY with occasional rootlets up to 1mm diameter observed. (CLAYGATE MEMBER)	2.05
Loose orange brown and grey silty fine SAND. (CLAYGATE MEMBER)	2.1
High strength orange brown mottled grey slightly silty CLAY. (CLAYGATE MEMBER)	3.4
Medium dense orange brown and grey clayey slightly silty fine SAND. (CLAYGATE MEMBER)	3.8
Loose orange brown and grey silty fine SAND. (CLAYGATE MEMBER)	4.0
Medium strength orange brown and grey silty slightly sandy CLAY. (CLAYGATE MEMBER)	4.2
Loose orange brown and grey clayey silty fine SAND. (CLAYGATE MEMBER)	4.3
Medium strength orange brown and grey slightly silty sandy CLAY. (CLAYGATE MEMBER)	4.8
BOREHOLE TERMINATED AT 5.0m DEPTH	5.0

TEST OBSERVATIONS		
TIME (seconds)	WATER LEVEL (from GL)	Head of water above groundwater Level (H)
0	3.30	1.11
60	3.47	0.94
120	3.57	0.84
180	3.63	0.78
240	3.69	0.72
300	3.74	0.67
360	3.79	0.62
420	3.83	0.58
480	3.87	0.54
540	3.92	0.49
600	3.95	0.46
660	3.96	0.45
720	3.99	0.42
780	4.00	0.41
840	4.01	0.4
900	4.03	0.38
1200	4.11	0.3
1860	4.18	0.23
2760	4.25	0.16
3720	4.32	0.09

Co-ordinates
-

Cycle number
1

Date of excavation
27.10.2014

Method of excavation
Driven tube sampler

Groundwater observations
No groundwater encountered

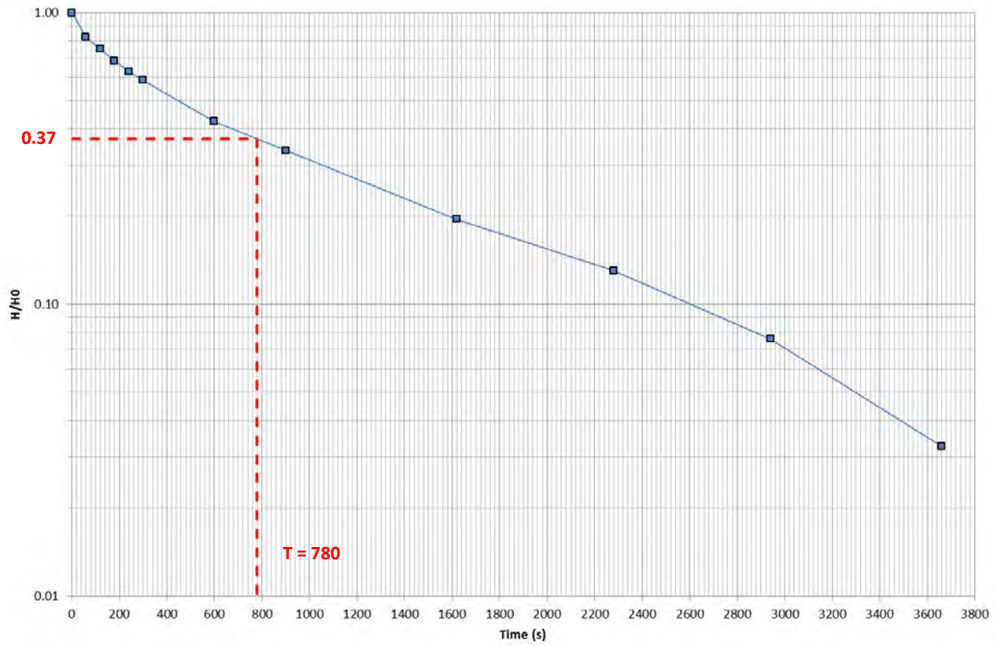
Title
Variable Head Test carried out in accordance with *BS5930: 1999 (Section 25.4) and CIRIA special publication 25 'Site Investigation Manual'*

Location
DTS01

Location plan on drawing number
02

soiltechnics
environmental and geotechnical consultants

The basic time lag (T) is obtained from the plot of the head ratio H/Ho (log scale) against elapsed time t (seconds). The basic time lag corresponds to a value of H/Ho = 0.37 where Ho denotes the head at the start of the test and H is time measured head at the elapsed time t. The plot and identification of T is shown below.



Adopting the basic time lag method

k = permeability = $\frac{\pi r^2}{FT}$

Where F = intake factor (adopting fig 6D of BS5930)

$$F = \frac{2\pi L}{In\left[\frac{L}{D} + \sqrt{1+\left(\frac{L}{D}\right)^2}\right]} = \mathbf{1.712}$$

Then

$$\mathbf{k} = \frac{0.003117}{1.712 \times 780} = \mathbf{2.33 \times 10^{-6}\ ms^{-1}}$$

Borehole dimensions:

Borehole depth:	5m
Length of slotted casing under test:	**L** = 0.92m
Diameter of borehole:	**D** = 0.063m
Cross sectional area:	**A** = 0.003117m^2
Groundwater level:	**G** = 4.32m

DESCRIPTION	DEPTH (m)
Grass onto low strength dark brown sandy slightly gravelly CLAY. Gravel consists of brick. (MADE GROUND)	0.0
Low strength orange brown sandy slightly gravelly CLAY. Gravel consists of ash, brick and rounded flint. (MADE GROUND)	0.5
Medium strength orange brown slightly silty sandy CLAY. (CLAYGATE MEMBER)	1.8
Loose orange brown silty fine SAND. (CLAYGATE MEMBER)	1.9
Medium strength grey slightly silty CLAY with occasional rootlets up to 1mm diameter observed. (CLAYGATE MEMBER)	2.05
Loose orange brown and grey silty fine SAND. (CLAYGATE MEMBER)	2.1
High strength orange brown mottled grey slightly silty CLAY. (CLAYGATE MEMBER)	3.4
Medium dense orange brown and grey clayey slightly silty fine SAND. (CLAYGATE MEMBER)	3.8
Loose orange brown and grey silty fine SAND. (CLAYGATE MEMBER)	4.0
Medium strength orange brown and grey silty slightly sandy CLAY. (CLAYGATE MEMBER)	4.2
Loose orange brown and grey clayey silty fine SAND. (CLAYGATE MEMBER)	4.3
Medium strength orange brown and grey slightly silty sandy CLAY. (CLAYGATE MEMBER)	4.8
BOREHOLE TERMINATED AT 5.0m DEPTH	5.0

TEST OBSERVATIONS		
TIME (seconds)	WATER LEVEL (from GL)	Head of water above groundwater Level (H)
0	3.4	0.92
60	3.56	0.76
120	3.63	0.69
180	3.69	0.63
240	3.74	0.58
300	3.78	0.54
600	3.93	0.39
900	4.01	0.31
1620	4.14	0.18
2280	4.2	0.12
2940	4.25	0.07
3660	4.29	0.03
4320	4.32	0

Co-ordinates
-

Cycle number
2

Date of excavation
27.10.2014

Method of excavation
Driven tube sampler

Groundwater observations
No groundwater encountered

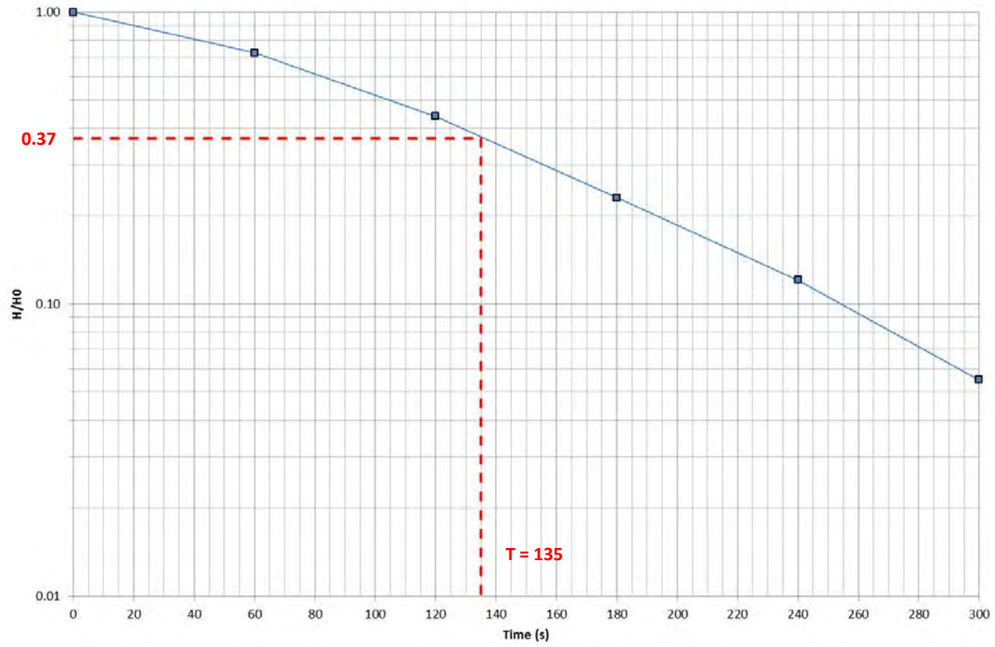
Title
Variable Head Test carried out in accordance with *BS5930: 1999 (Section 25.4) and CIRIA special publication 25 'Site Investigation Manual'*

Location
DTS01

Location plan on drawing number
02

soiltechnics
environmental and geotechnical consultants

The basic time lag (T) is obtained from the plot of the head ratio H/Ho (log scale) against elapsed time t (seconds). The basic time lag corresponds to a value of H/Ho = 0.37 where Ho denotes the head at the start of the test and H is time measured head at the elapsed time t. The plot and identification of T is shown below.



Adopting the basic time lag method

k = permeability = $\frac{\pi r^2}{FT}$

Where F = intake factor (adopting fig 6D of BS5930)

$$F = \frac{2\pi L}{In\left[\frac{L}{D} + \sqrt{1+\left(\frac{L}{D}\right)^2}\right]} = \mathbf{1.647}$$

Then

$$\mathbf{k} = \frac{0.003117}{1.647 \times 135} = \mathbf{1.40 \times 10^{-5}\ ms^{-1}}$$

Borehole dimensions:

Borehole depth:	2m
Length of slotted casing under test:	**L** = 0.87m
Diameter of borehole:	**D** = 0.063m
Cross sectional area:	**A** = 0.003117m^2
Groundwater level:	**G** = 1.87m

DESCRIPTION	LEGEND	DEPTH (m)
Grass onto orange brown CLAY. (TOPSOIL)		0.0
[Loose to medium dense] orange brown silty fine SAND. (CLAYGATE MEMBER)		0.22
BOREHOLE TERMINATED AT 2.0m DEPTH		2

TEST OBSERVATIONS		
TIME (seconds)	WATER LEVEL (from GL)	Head of water above groundwater Level (H)
0	0.96	0.91
60	1.21	0.66
120	1.47	0.4
180	1.66	0.21
240	1.76	0.11
300	1.82	0.05
360	1.87	0

Co-ordinates
-

Cycle number
1

Date of excavation
27.10.2014

Method of excavation
Driven tube sampler

Groundwater observations
No groundwater encountered

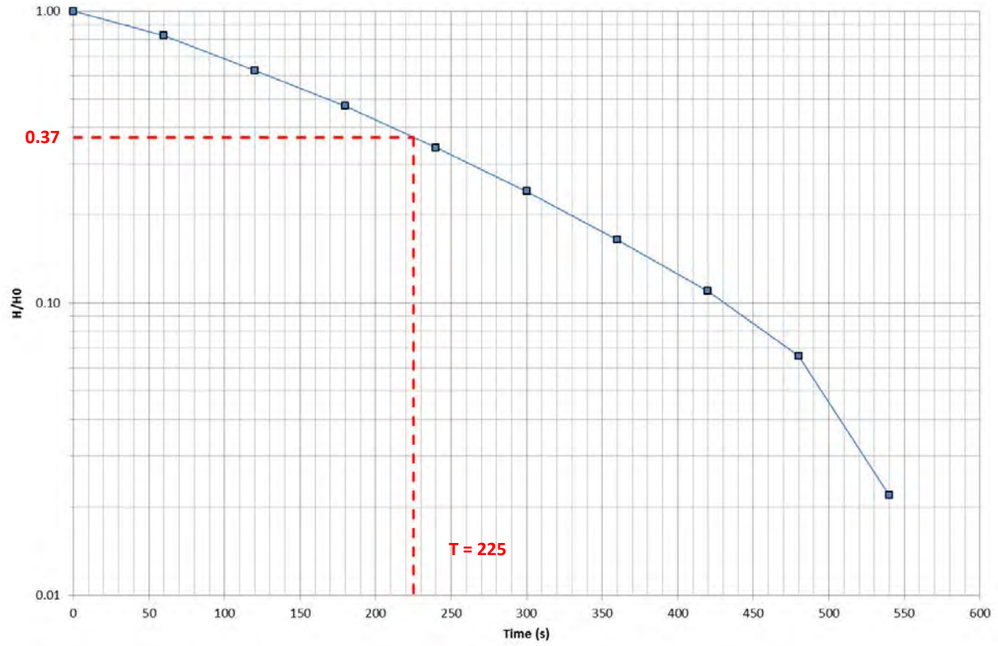
Title
Variable Head Test carried out in accordance with *BS5930: 1999 (Section 25.4) and CIRIA special publication 25 'Site Investigation Manual'*

Location
DTS03

Location plan on drawing number
02

soiltechnics
environmental and geotechnical consultants

The basic time lag (T) is obtained from the plot of the head ratio H/Ho (log scale) against elapsed time t (seconds). The basic time lag corresponds to a value of H/Ho = 0.37 where Ho denotes the head at the start of the test and H is time measured head at the elapsed time t. The plot and identification of T is shown below.



Adopting the basic time lag method

k = permeability = $\frac{\pi r^2}{FT}$

Where F = intake factor (adopting fig 6D of BS5930)

$$F = \frac{2\pi L}{In\left[\frac{L}{D} + \sqrt{1+\left(\frac{L}{D}\right)^2}\right]} = \mathbf{1.647}$$

Then

$$\mathbf{k} = \frac{0.003117}{1.647 \times 225} = \mathbf{8.41 \times 10^{-6}\ ms^{-1}}$$

Borehole dimensions:

Borehole depth:	2m
Length of slotted casing under test:	**L** = 0.87m
Diameter of borehole:	**D** = 0.063m
Cross sectional area:	**A** = 0.003117m^2
Groundwater level:	**G** = 1.87m

DESCRIPTION	LEGEND	DEPTH (m)
Grass onto orange brown CLAY. (TOPSOIL)		0.0
(Loose to medium dense) orange brown silty fine SAND. (CLAYGATE MEMBER)		0.22
BOREHOLE TERMINATED AT 2.0m DEPTH		2

TEST OBSERVATIONS		
TIME (seconds)	WATER LEVEL (from GL)	Head of water above groundwater Level (H)
0	0.96	0.91
60	1.12	0.75
120	1.3	0.57
180	1.44	0.43
240	1.56	0.31
300	1.65	0.22
360	1.72	0.15
420	1.77	0.1
480	1.81	0.06
540	1.85	0.02
600	1.87	0

Co-ordinates
-

Cycle number
2

Date of excavation
27.10.2014

Method of excavation
Driven tube sampler

Groundwater observations
No groundwater encountered

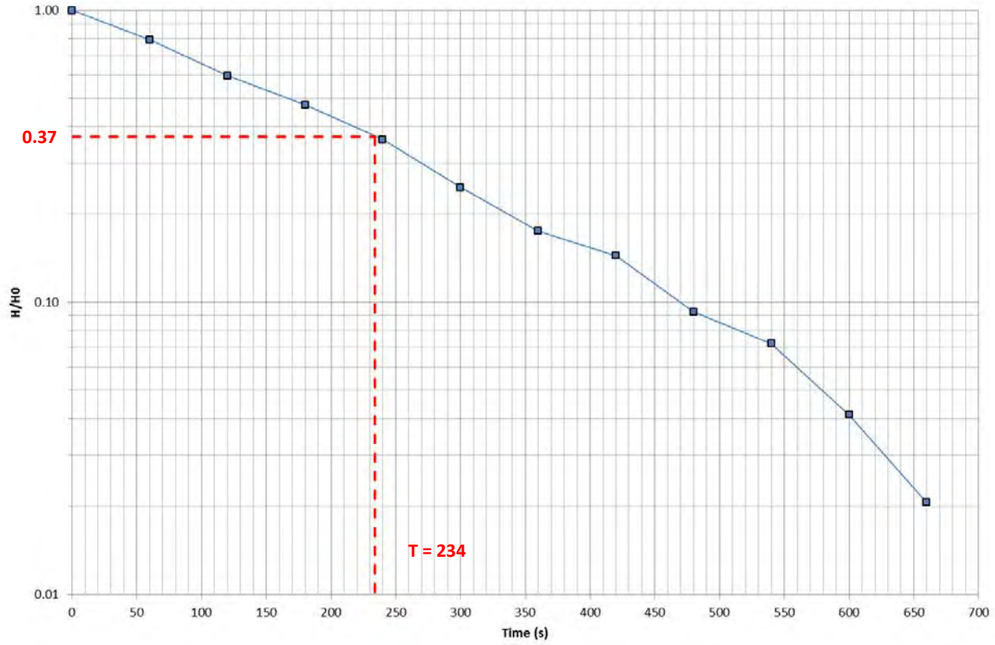
Title
Variable Head Test carried out in accordance with *BS5930: 1999 (Section 25.4) and CIRIA special publication 25 'Site Investigation Manual'*

Location
DTS03

Location plan on drawing number
02

soiltechnics
environmental and geotechnical consultants

The basic time lag (T) is obtained from the plot of the head ratio H/Ho (log scale) against elapsed time t (seconds). The basic time lag corresponds to a value of H/Ho = 0.37 where Ho denotes the head at the start of the test and H is time measured head at the elapsed time t. The plot and identification of T is shown below.



Adopting the basic time lag method

k = permeability = $\frac{\pi r^2}{FT}$

Where F = intake factor (adopting fig 6D of BS5930)

$$F = \frac{2\pi L}{In\left[\frac{L}{D} + \sqrt{1+\left(\frac{L}{D}\right)^2}\right]} = \mathbf{1.647}$$

Then

$$\mathbf{k} = \frac{0.003117}{1.647 \times 234} = \mathbf{8.09 \times 10^{-6}\ ms^{-1}}$$

Borehole dimensions:

Borehole depth:	2m
Length of slotted casing under test:	**L** = 0.87m
Diameter of borehole:	**D** = 0.063m
Cross sectional area:	**A** = 0.003117m^2
Groundwater level:	**G** = 1.87m

DESCRIPTION	LEGEND	DEPTH (m)
Grass onto orange brown CLAY. (TOPSOIL)		0.0
(Loose to medium dense) orange brown silty fine SAND. (CLAYGATE MEMBER)		0.22
BOREHOLE TERMINATED AT 2.0m DEPTH		2

TEST OBSERVATIONS		
TIME (seconds)	WATER LEVEL (from GL)	Head of water above groundwater Level (H)
0	0.9	0.97
60	1.1	0.77
120	1.29	0.58
180	1.41	0.46
240	1.52	0.35
300	1.63	0.24
360	1.7	0.17
420	1.73	0.14
480	1.78	0.09
540	1.8	0.07
600	1.83	0.04
660	1.85	0.02
720	1.87	0

Co-ordinates
-

Cycle number
3

Date of excavation
27.10.2014

Method of excavation
Driven tube sampler

Groundwater observations
No groundwater encountered

Title
Variable Head Test carried out in accordance with *BS5930: 1999 (Section 25.4) and CIRIA special publication 25 'Site Investigation Manual'*

Location
DTS03

Location plan on drawing number
02

soiltechnics
environmental and geotechnical consultants

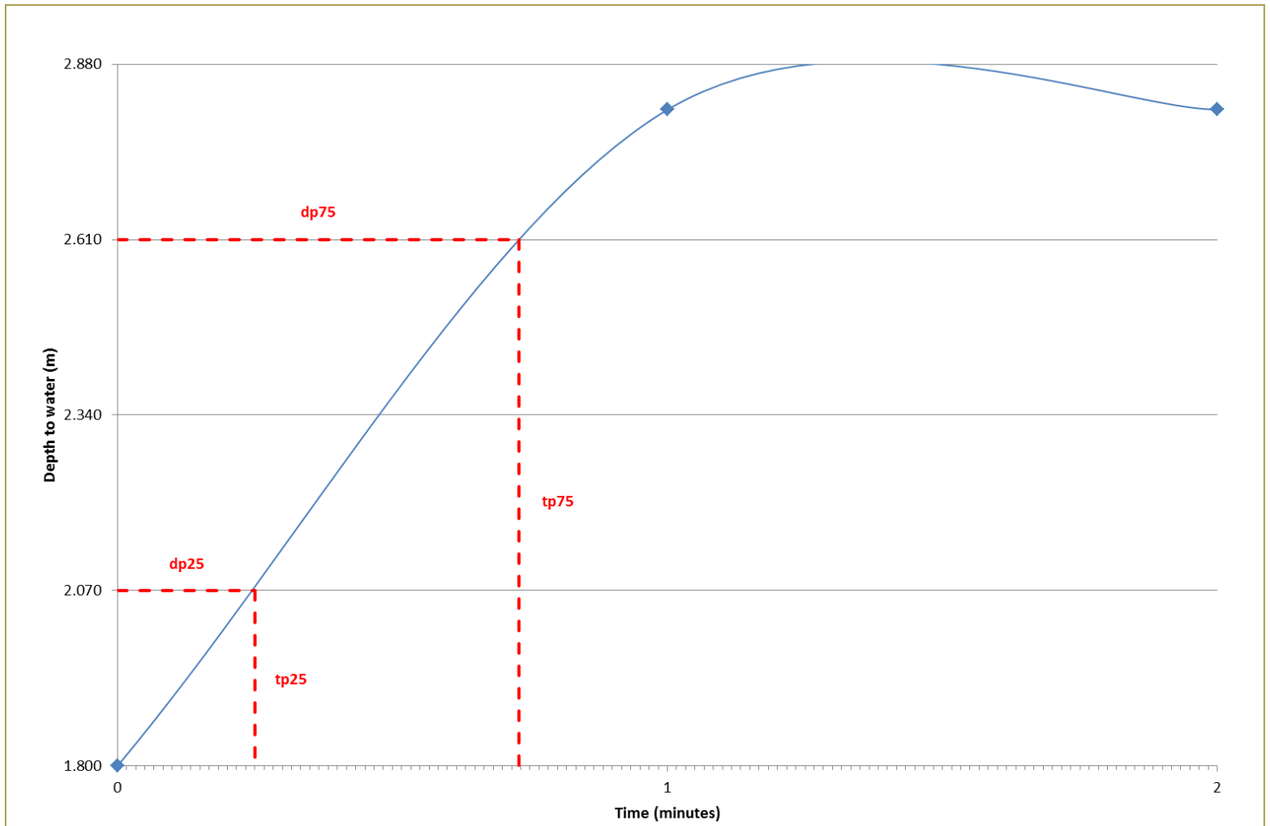
Soil description and strata:

DESCRIPTION	LEGEND	DEPTH (m)
Vegetation onto dark brown clayey slightly gravelly fine SAND. Gravel consists of brick. (MADE GROUND)		0.0
[Loose to medium dense] orange brown and grey silty fine SAND. (CLAYGATE MEMBER)		0.28
[Loose to medium dense] orange brown very clayey silty fine SAND. (CLAYGATE MEMBER)		1.36
[Loose to medium dense] orange brown and grey fine SAND. (CLAYGATE MEMBER)		1.7
[Loose to medium] dense light brown fine SAND. (CLAYGATE MEMBER)		2.1
BOREHOLE TERMINATED AT 3.0m DEPTH		3.0

Test observations:

TIME (mins)	DEPTH TO WATER (m)
0	1.800
1	2.810
2	2.810

Plot showing time against depth to water:



Calculations:

Soil infiltration rate, $f = \frac{V_{p75-25}}{a_{p50} \times t_{p75-25}}$ where: V_{p75-25} = effective storage volume of water in the borehole between 75% (d_{p75}) and 25% (d_{p25}) effective depth = $(d_{p75} - d_{p25}) \times \prod r^2$
= $(2.610 - 2.070) \times \prod \times 0.0315^2 = 0.00168 m^3$

a_{p50} = the internal surface area of the borehole up to 50% effective depth and including the base area = $(2\prod r \times (d_{p75} - d_{p25})) + \prod r^2$
= $(2 \times \prod \times 0.0315) \times (2.610 - 2.070) + (\prod \times 0.0315^2) = 0.10999 m^2$

$t_{p75} - t_{p25}$ = the time for the water level to fall from 75% to 25% effective depth = 0.73 - 0.25 = 0.48 (minutes)
= 0.48 x 60 = 28.8 (seconds)

therefore:

$$f = \frac{0.00168}{0.10999 \times 28.8} = \mathbf{5.30 \times 10^{-4}\ m/s}$$

Groundwater observations	Test zone	Title
No groundwater encountered	1.8m - 2.88m	Soil infiltration test (following principles of the Building Research Establishment Digest 365 2007)
Borehole diameter	**Ground level**	**Location plan on drawing number**
0.063m	N/A	02
Method of excavation	**Co-ordinates**	**Borehole number / Cycle number / Date of excavation**
Driven tube sampler	-	DTS05 / 1 / 27.10.2014

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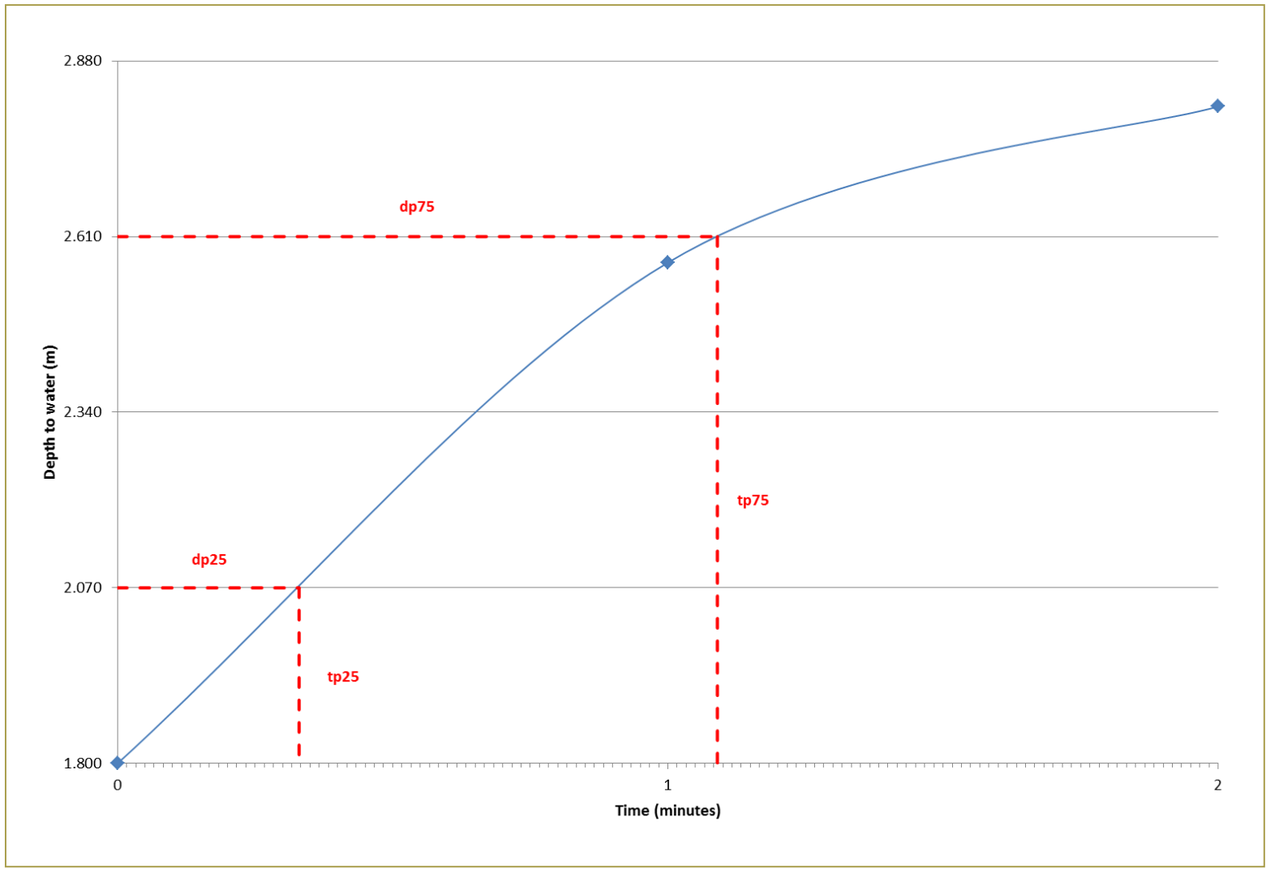
Soil description and strata:

DESCRIPTION	LEGEND	DEPTH (m)
Vegetation onto dark brown clayey slightly gravelly fine SAND. Gravel consists of brick. (MADE GROUND)		0.0
[Loose to medium dense] orange brown and grey silty fine SAND. (CLAYGATE MEMBER)		0.28
[Loose to medium dense] orange brown very clayey silty fine SAND. (CLAYGATE MEMBER)		1.36
[Loose to medium dense] orange brown and grey fine SAND. (CLAYGATE MEMBER)		1.7
[Loose to medium] dense light brown fine SAND. (CLAYGATE MEMBER)		2.1
BOREHOLE TERMINATED AT 3.0m DEPTH		3.0

Test observations:

TIME (mins)	DEPTH TO WATER (m)
0	1.800
1	2.570
2	2.810

Plot showing time against depth to water:



Calculations:

Soil infiltration rate, $f = \frac{V_{p75-25}}{a_{p50} \times t_{p75-25}}$ where: V_{p75-25} = effective storage volume of water in the borehole between 75% (d_{p75}) and 25% (d_{p25}) effective depth = $(d_{p75} - d_{p25}) \times \prod r^2$
= $(2.610 - 2.070) \times \prod \times 0.032^2 = 0.00168 m^3$

a_{p50} = the internal surface area of the borehole up to 50% effective depth and including the base area = $(2\prod r \times (d_{p75} - d_{p25})) + \prod r^2$
= $(2 \times \prod \times 0.0315) \times (2.610 - 2.070) + (\prod \times 0.032^2) = 0.10999 m^2$

$t_{p75-t_{p25}}$ = the time for the water level to fall from 75% to 25% effective depth = 1.09 - 0.33 = 0.76 (minutes)
= 0.76 x 60 = 45.6 (seconds)

therefore:

$$f = \frac{0.00168}{0.10999 \times 45.6} = \mathbf{3.35 \times 10^{-4}\ m/s}$$

Groundwater observations	Test zone	Title
No groundwater encountered	1.8m - 2.88m	Soil infiltration test (following principles of the Building Research Establishment Digest 365 2007)
Borehole diameter	**Ground level**	**Location plan on drawing number**
0.063m	N/A	02
Method of excavation	**Co-ordinates**	**Borehole number / Cycle number / Date of excavation**
Driven tube sampler	-	DTS05 / 2 / 27.10.2014

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environmental and geotechnical consultants

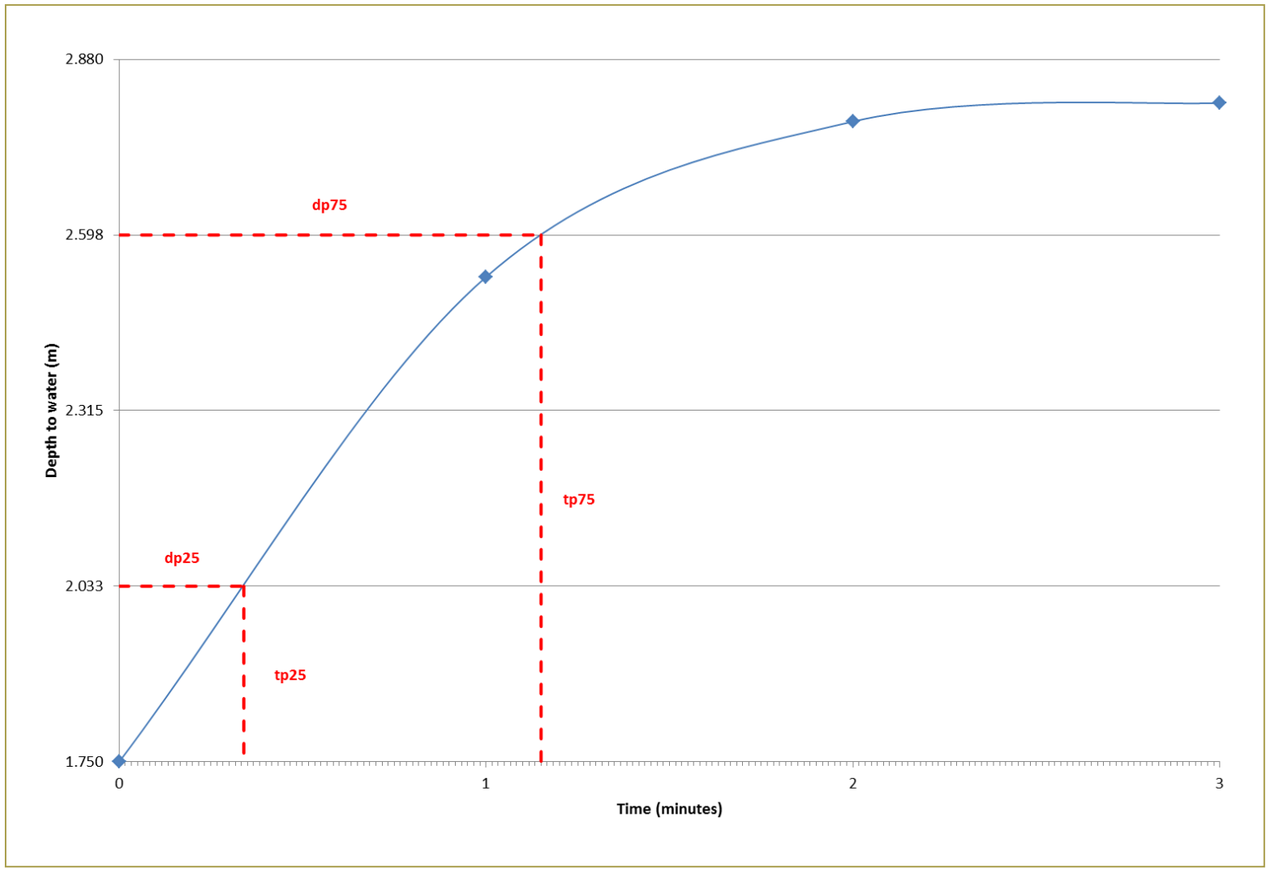
Soil description and strata:

DESCRIPTION	LEGEND	DEPTH (m)
Vegetation onto dark brown clayey slightly gravelly fine SAND. Gravel consists of brick. (MADE GROUND)		0.0
[Loose to medium dense] orange brown and grey silty fine SAND. (CLAYGATE MEMBER)		0.28
[Loose to medium dense] orange brown very clayey silty fine SAND. (CLAYGATE MEMBER)		1.36
[Loose to medium dense] orange brown and grey fine SAND. (CLAYGATE MEMBER)		1.7
[Loose to medium] dense light brown fine SAND. (CLAYGATE MEMBER)		2.1
BOREHOLE TERMINATED AT 3.0m DEPTH		3.0

Test observations:

TIME (mins)	DEPTH TO WATER (m)
0	1.750
1	2.530
2	2.780
3	2.810

Plot showing time against depth to water:



Calculations:

Soil infiltration rate, $f = \frac{V_{p75-25}}{a_{p50} \times t_{p75-25}}$ where: V_{p75-25} = effective storage volume of water in the borehole between 75% (d_{p75}) and 25% (d_{p25}) effective depth = $(d_{p75} - d_{p25}) \times \prod r^2$
= $(2.598 - 2.033) \times \prod \times 0.032^2 = 0.00176 m^3$

a_{p50} = the internal surface area of the borehole up to 50% effective depth and including the base area = $(2\prod r \times (d_{p75} - d_{p25})) + \prod r^2$
= $(2 \times \prod \times 0.0315) \times (2.598 - 2.033) + (\prod \times 0.032^2) = 0.11494 m^2$

$t_{p75} - t_{p25}$ = the time for the water level to fall from 75% to 25% effective depth = 1.15 - 0.34 = 0.81 (minutes)
= 0.81 x 60 = 48.6 (seconds)

therefore:

$$f = \frac{0.00176}{0.11494 \times 48.6} = \mathbf{3.15 \times 10^{-4}\ m/s}$$

Groundwater observations	Test zone	Title
No groundwater encountered	1.75m - 2.88m	Soil infiltration test (following principles of the Building Research Establishment Digest 365 2007)
Borehole diameter	**Ground level**	**Location plan on drawing number**
0.063m	N/A	02
Method of excavation	**Co-ordinates**	**Borehole number / Cycle number / Date of excavation**
Driven tube sampler	-	DTS05 / 3 / 27.10.2014

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Table comparing cumulative compound concentrations with hazardous waste threshold values

Category of danger		Irritant	Harmful	Toxic		Carcinogenic		Corrosive		Toxic for reproduction		Mutagenic		Ecotoxic		
														∑N : R50-53/0.25	∑N : 50-53	∑N : 50-53
														+∑N : R51-53/2.5	+∑N : R50	+∑N : 51-53
						Carc Cat 1				Repr Cat 1 or				+∑N : R52-53/25		+∑N : 52-53
Risk Phrase		Xi	Xn	T+	T	or 2	Carc Cat 3	C R34	C R35	2	Repr Cat 3	Muta Cat 2	Muta Cat 3			+∑N : R53
Contaminant	Highest concentration	H4 (%)	H5 (%)	H6 (%)	H6 (%)	H7 (%)	H7 (%)	H8 (%)	H8 (%)	H10 (%)	H10 (%)	H11 (%)	H11 (%)	H14	H14	H14
Metals																
Arsenic	25.00			0.0033	0.0038	0.0038								0.4012	0.0038	0.0038
Beryllium	1.10	0.0003		0.0003	0.0003	0.0003										0.0003
Copper	120.00	0.0300	0.0300												0.0300	0.0300
Cadmium	5.00		0.0006		0.0006	0.0006										
Chromium	0.65					0.0001									0.0001	0.0001
Lead	540.00		0.0582							0.0582	0.0582				0.0582	0.0582
Mercury	2.00			0.0002											0.0002	0.0002
Nickel	23.00		0.0029				0.0029				0.0029				0.0029	0.0029
Selenium	0.00				0.0000										0.0000	0.0000
Zinc	760.00							0.1585							0.0000	0.5510
Vanadium	80.00	0.0198			0.0118						0.0118		0.0118			0.0118
PAH																
Naphthalene	0.22		0.0000												0.0000	0.0000
Benzo(a)anthracene	8.10				0.0008	0.0008									0.0008	0.0008
Chrysene	7.20				0.0007	0.0007							0.0007		0.0007	0.0007
Benzo(b)fluoranthene	6.90				0.0007	0.0007									0.0007	0.0007
Benzo(k)fluoranthene	2.80				0.0003	0.0003									0.0003	0.0003
Benzo(a)pyrene	6.60					0.0007				0.0007		0.0007			0.0007	0.0007
Dibenzo(a,h)anthracene	3.60				0.0004	0.0004									0.0004	0.0004
TPH																
Benzene	0.00				0.0000	0.0000										
1,2,4-trimethylbenzene	0.00	0.0000	0.0000													0.0000
PRO (C6 - C10)	0.00		0.0000			0.0000										0.0000
DRO (C10 - C35)	0.00		0.0000				0.0000									0.0000
Total (or greatest)		0.0501	0.0917	0.0038	0.0193	(0.0038)	(0.0029)	0.1585	0.0000	(0.0582)	(0.0000)	(0.0007)	(0.0000)	0.4012	0.0988	0.6619
Threshold		20%	25%	0.10%	3%	0.10%	1%	5%	1%	0.50%	5%	0.10%	1%	1	25%	25%
Exceeded Y/N		N	N	N	N	N	N	N	N	N	N	N	N	N	N	N

Title	Table number
Hazard assessment spreadsheet	1 of 1

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Landfill Waste				Laboratory test data
Parameter	Inert waste landfill	Stable non-reactive hazardous waste in non-hazardous landfill	Hazardous waste landfill	Composite Sample 1
Parameters determined on the waste				
Total organic carbon (w/w %)	3%	5%	6%*	1.5
Loss on ignition			10%*	3.6
BTEX (mg kg^{-1})	6			< 0.01
PCBs (7 congeners) (mg kg^{-1})	1			< 0.10
Mineral oil C_{10} - C_{40} (mg kg^{-1})	500			21
PAH (17 congeners)	100			3.4
pH		>6		7.5
Acid neutralisation capacity pH 6 (mol kg^{-1})		To be evaluated	To be evaluated	0.13
Acid neutralisation capacity pH 4 (mol kg^{-1})		To be evaluated	To be evaluated	
Limit values (mg kg^{-1}) for compliance test using BN 12457-3 at L/S 10 l kg^{-1}				
As (arsenic)	0.5	2	25	< 0.050
Ba (barium)	20	100	300	< 0.50
Cd (cadmium)	0.04	1	5	< 0.010
Cr (chromium (total))	0.5	10	70	< 0.050
Cu (Copper)	2	50	100	< 0.050
Hg (mercury)	0.01	0.2	2	< 0.010
Mo (molybdenum)	0.5	10	30	0.062
Ni (nickel)	0.4	10	40	< 0.050
Pb (lead)	0.5	10	50	0.031
Sb (antimony)	0.06	0.7	5	0.013
Se (selenium)	0.1	0.5	7	< 0.010
Zn (zinc)	4	50	200	< 0.50
Cl (chloride)	800	15,000	25,000	15
F (fluoride)	10	150	500	9.2
SO_4 (sulphate)	1000#	20,000	50,000	920
Total Dissolved Solids (TDS)+	4,000	60,000	100,000	1400
Phenol index	1			< 0.50
Dissolved organic carbon at own pH or pH 7.5-8.0@	500	800	1000	130

Notes

* Either TOC or LOI must be used for hazardous waste
\# If an inert waste does not meet the SO4 L/S10 limit, alternative limit values of 1500 mg l-1 SO4 at Co (initial eluate from the percolation test (prCEN/TS 14405:2003)) AND 6000 mg kg-1 SO4 at L/S10 (either from the percolation test or batch test BS EN 12457-3), can be used to demonstrate compliance with the acceptable criteria for inert wastes.
\+ The value for TDS can be used instead of the values for Cl and SO4
@ DOC at pH 7.5-8.0 abd L/S10 can be determined or eluate derived from a modified version of the pH dependence Test, prEN 14429, if the limit value at own pH (BS EN 12457 eluate) is not met

PRIMARY CLASSIFICATION	NON-HAZARDOUS
SECONDARY CLASSIFICATION	INERT

Title

Comparison of test data with landfill waste acceptance criteria (table 5.1). (Seconday Assessment)

Appendix

K

Basic categorisation schedule for Made Ground soils

Produced following the requirements of The Landfill (England and Wales) (Amendment) Regulations 2004 Part 2 (5)

(a) *Source and origin of waste*

Proposed development at 95 Hillway, Highgate, London N6 6AB

(b) *Process producing the waste*

Foundation, basement and service trench excavations.

(c) *Statement on waste treatment*

Refer to pre-treatment confirmation form

(d) *Composition of the waste*

Medium strength orange brown, grey and orange brown mottled grey, sandy silty sandy CLAY and orange brown and grey silty fine SAND. Gravels consisted of flint.

(e) *Appearance of the waste*

As above

(f) *European waste catalogue code*

17-05-04 (*for non-hazardous waste*)

(g) *Hazardous waste properties*

none

(h) *Is the waste prohibited under regulation 9?*

No

(i) *Landfill class*

Inert based on soils being of natural origin and unlikely to be affected by artificial contamination

(j) *Additional precautions required at landfill*

none

(k) *Can waste be recycled or recovered?*

YES

(l) *Name and address of waste producer*

TBC

(m) *Name and address of consultant*

Soiltechnics Limited, Cedar Barn, White Lodge, Walgrave, Northampton. NN6 9PY.
Tel: (01604) 781877 **E-mail: mail@soiltechnics.net**
Fax: (01604) 781007 **Website: www.soiltechnics.net**

Schedule Date:
26.11.14

Soiltechnics reference
STL2629D

signed

Andrew Fitzpatrick B.Sc, (Hons), M.Sc.
Geo-environmental Engineer for Soiltechnics Limited

soiltechnics

Basic categorisation schedule for Made Ground soils

Produced following the requirements of The Landfill (England and Wales) (Amendment) Regulations 2004 Part 2 (5)

(a) *Source and origin of waste*

Proposed redevelopment at 95 Hillway, Highgate, London N6 6AB

(b) *Process producing the waste*

Foundation, basement and service trench excavations, general site clearance and remediation

(c) *Statement on waste treatment*

Refer to pre-treatment confirmation form

(d) *Composition of the waste*

Low to medium strength dark brown and orange brown sandy slightly gravelly clay, loose to medium dense dark brown slightly clayey gravelly sand, brown to dark brown sandy gravel. Gravels consisted of ash, clinker, concrete, brick and flint.

(e) *Appearance of the waste*

As above

(f) *European waste catalogue code*

17-05-04 (*for non-hazardous waste*)

(g) *Hazardous waste properties*

none

(h) *Is the waste prohibited under regulation 9?*

No

(i) *Landfill class*

Inert

(j) *Additional precautions required at landfill*

none

(k) *Can waste be recycled or recovered?*

(l) *Name and address of waste producer*
TBC

(m) *Name and address of consultant*

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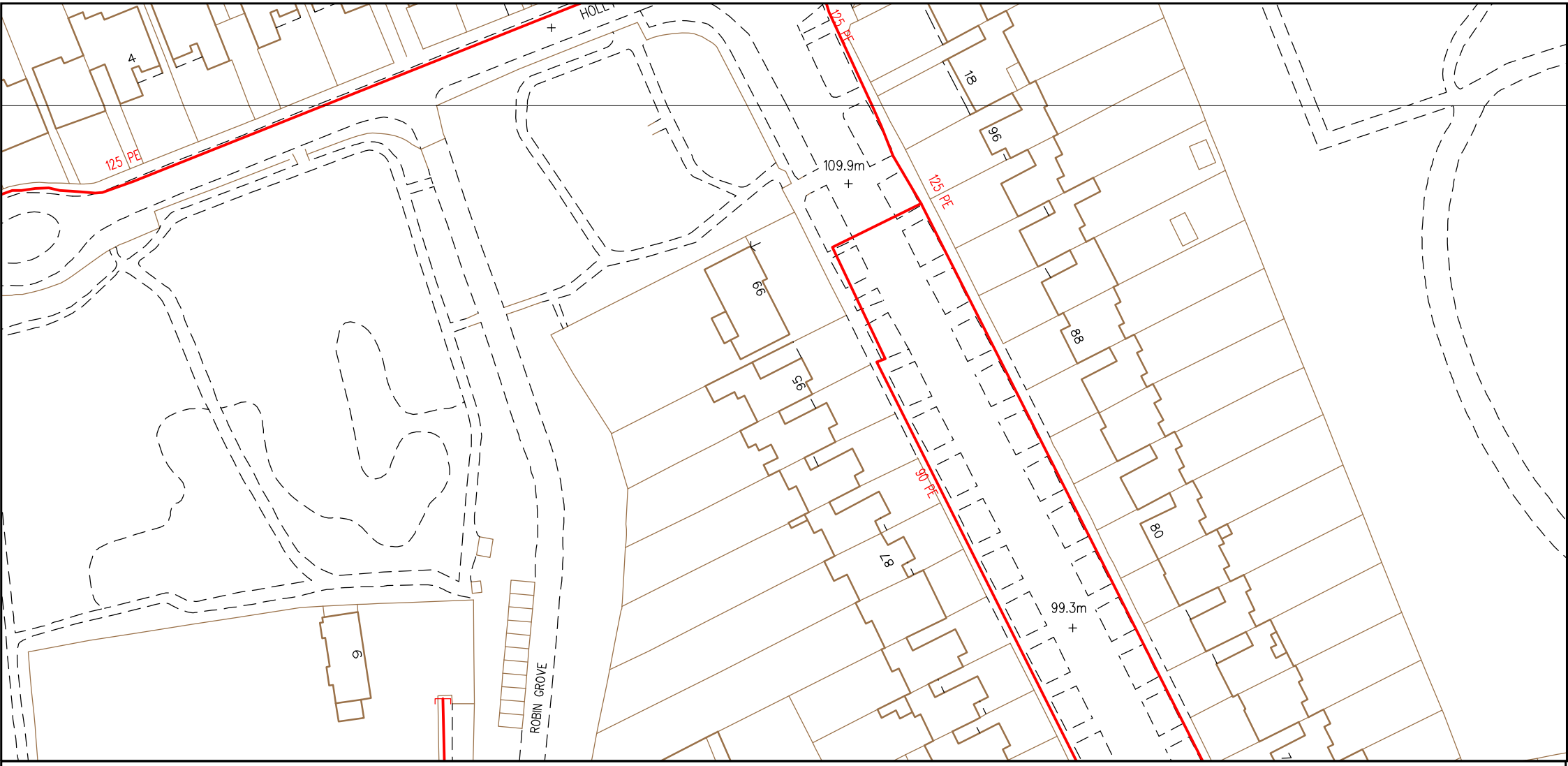


SCALE: Not to scale

USER ID: SaraB

DATE: 13/10/2014

EXTRACT DATE: 11/06/2014

MAP REF: TQ2886

CENTRE: 528229, 186947

LP MAINS

MP MAINS

IP MAINS

LHP MAINS

NHP MAINS

Some examples of Plant Items:

Valve | Depth of Cover | Syphon | Diameter Change | Material Change

This plan shows those pipes owned by National Grid Gas plc in their role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid Gas plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue. Further information on all DR4s can be determined by calling the DR4 hotline on 01455 892426 (9am-5pm) A DR4 is where a potential error has been identified within the asset record and a process is currently underway to investigate and resolve the error as appropriate.

MAPS Viewer Version 5.6.7.0

Local Machine

Asset Location Search

Soiltechnics Limited
GLASGOW
G3 8EP

Search address supplied	95 Hillway, Highgate London N6 6AB
Your reference	STL2926D
Our reference	ALS/ALS Standard/2014_2885198
Search date	13 October 2014

You are now able to order your Asset Location Search requests online by visiting
www.thameswater-propertysearches.co.uk

Asset Location Search

Search address supplied: 95, Hillway, Highgate, London, N6 6AB

Dear Sir / Madam

An Asset Location Search is recommended when undertaking a site development. It is essential to obtain information on the size and location of clean water and sewerage assets to safeguard against expensive damage and allow cost-effective service design.

The following records were searched in compiling this report: - the map of public sewers & the map of waterworks. Thames Water Utilities Ltd (TWUL) holds all of these.

This searchprovides maps showing the position, size of Thames Water assets close to the proposed development and also manhole cover and invert levels, where available.

Please note that none of the charges made for this report relate to the provision of Ordnance Survey mapping information. The replies contained in this letter are given following inspection of the public service records available to this company. No responsibility can be accepted for any error or omission in the replies.

You should be aware that the information contained on these plans is current only on the day that the plans are issued. The plans should only be used for the duration of the work that is being carried out at the present time. Under no circumstances should this data be copied or transmitted to parties other than those for whom the current work is being carried out.

Thames Water do update these service plans on a regular basis and failure to observe the above conditions could lead to damage arising to new or diverted services at a later date.

Contact Us

If you have any further queries regarding this enquiry please feel free to contact a member of the team on 0845 070 9148, or use the address below:

Thames Water Utilities Ltd
Property Searches
PO Box 3189
Slough
SL1 4WW

Email: searches@thameswater.co.uk
Web: www.thameswater-propertysearches.co.uk

Asset Location Search

Waste Water Services

Please provide a copy extract from the public sewer map.

Enclosed is a map showing the approximate lines of our sewers. Our plans do not show sewer connections from individual properties or any sewers not owned by Thames Water unless specifically annotated otherwise. Records such as "private" pipework are in some cases available from the Building Control Department of the relevant Local Authority.

Where the Local Authority does not hold such plans it might be advisable to consult the property deeds for the site or contact neighbouring landowners.

This report relates only to sewerage apparatus of Thames Water Utilities Ltd, it does not disclose details of cables and or communications equipment that may be running through or around such apparatus.

The sewer level information contained in this response represents all of the level data available in our existing records. Should you require any further Information, please refer to the relevant section within the 'Further Contacts' page found later in this document.

For your guidance:

- The Company is not generally responsible for rivers, watercourses, ponds, culverts or highway drains. If any of these are shown on the copy extract they are shown for information only.
- Any private sewers or lateral drains which are indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an ‘as constructed’ record. It is recommended these details be checked with the developer.

Clean Water Services

Please provide a copy extract from the public water main map.

Enclosed is a map showing the approximate positions of our water mains and associated apparatus. Please note that records are not kept of the positions of individual domestic supplies.

For your information, there will be a pressure of at least 10m head at the outside stop valve. If you would like to know the static pressure, please contact our Customer Centre on 0800 316 9800. The Customer Centre can also arrange for a full flow and

pressure test to be carried out for a fee.

For your guidance:

- Assets other than vested water mains may be shown on the plan, for information only.
- If an extract of the public water main record is enclosed, this will show known public water mains in the vicinity of the property. It should be possible to estimate the likely length and route of any private water supply pipe connecting the property to the public water network.

Payment for this Search

A charge will be added to your suppliers account.

Asset Location Search

Further contacts:

Waste Water queries

Should you require verification of the invert levels of public sewers, by site measurement, you will need to approach the relevant Thames Water Area Network Office for permission to lift the appropriate covers. This permission will usually involve you completing a TWOSA form. For further information please contact our Customer Centre on Tel: 0845 920 0800. Alternatively, a survey can be arranged, for a fee, through our Customer Centre on the above number.

If you have any questions regarding sewer connections, budget estimates, diversions, building over issues or any other questions regarding operational issues please direct them to our service desk. Which can be contacted by writing to:

Developer Services (Waste Water)
Thames Water
Clearwater Court
Vastern Road
Reading
RG1 8DB

Tel: 0845 850 2777
Email: developer.services@thameswater.co.uk

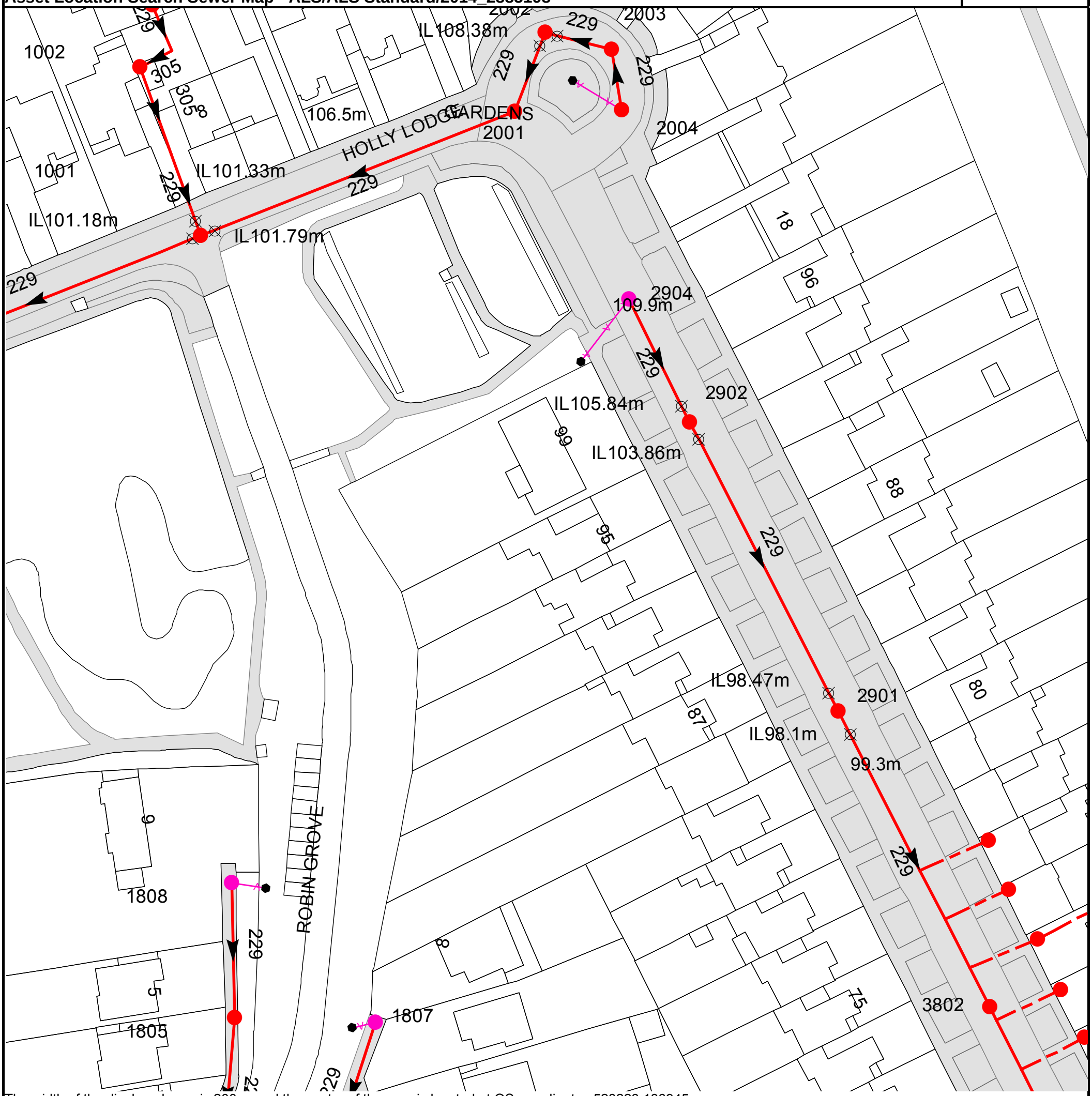
Clean Water queries

Should you require any advice concerning clean water operational issues or clean water connections, please contact:

Developer Services (Clean Water)
Thames Water
Clearwater Court
Vastern Road
Reading
RG1 8DB

Tel: 0845 850 2777
Email: developer.services@thameswater.co.uk

Asset Location Search Sewer Map - ALS/ALS Standard/2014_2885198



The width of the displayed area is 200 m and the centre of the map is located at OS coordinates 528223,186945

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

Based on the Ordnance Survey Map with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.

NB. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates that no survey information is available

Manhole Reference	Manhole Cover Level	Manhole Invert Level
3808	n/a	n/a
3802	95.46	93.48
3809	n/a	n/a
3810	n/a	n/a
3812	n/a	n/a
3813	n/a	n/a
2901	101.03	n/a
2902	107.78	n/a
2904	110.46	106.86
1001	103.54	n/a
2001	109.4	105.1
2004	111.66	109.89
1002	105.13	102.72
2003	112.17	109.58
2002	n/a	n/a
1808	98.27	95.73
1805	95.38	92.21
1807	96.73	93.97

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

ALS Sewer Map Key

Public Sewer Types (Operated & Maintained by Thames Water)

Foul: A sewer designed to convey waste water from domestic and industrial sources to a treatment works.

Surface Water: A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.

Combined: A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.

Trunk Surface Water

Trunk Foul

Storm Relief

Trunk Combined

Vent Pipe

Bio-solids (Sludge)

Proposed Thames Surface Water Sewer

Proposed Thames Water Foul Sewer

Gallery

Foul Rising Main

Surface Water Rising Main

Combined Rising Main

Sludge Rising Main

Proposed Thames Water Rising Main

Vacuum

Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

Air Valve

Dam Chase

Fitting

Meter

Vent Column

Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

Control Valve

Drop Pipe

Ancillary

Weir

End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol, Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

Outfall

Undefined End

Inlet

Other Symbols

Symbols used on maps which do not fall under other general categories

Public/Private Pumping Station

Change of characteristic indicator (C.O.C.I.)

Invert Level

Summit

Areas

Lines denoting areas of underground surveys, etc.

Agreement

Operational Site

Chamber

Tunnel

Conduit Bridge

Other Sewer Types (Not Operated or Maintained by Thames Water)

Foul Sewer

Surface Water Sewer

Combined Sewer

Gulley

Culverted Watercourse

Proposed

Abandoned Sewer

Notes:

1) All levels associated with the plans are to Ordnance Datum Newlyn.

2) All measurements on the plans are metric.

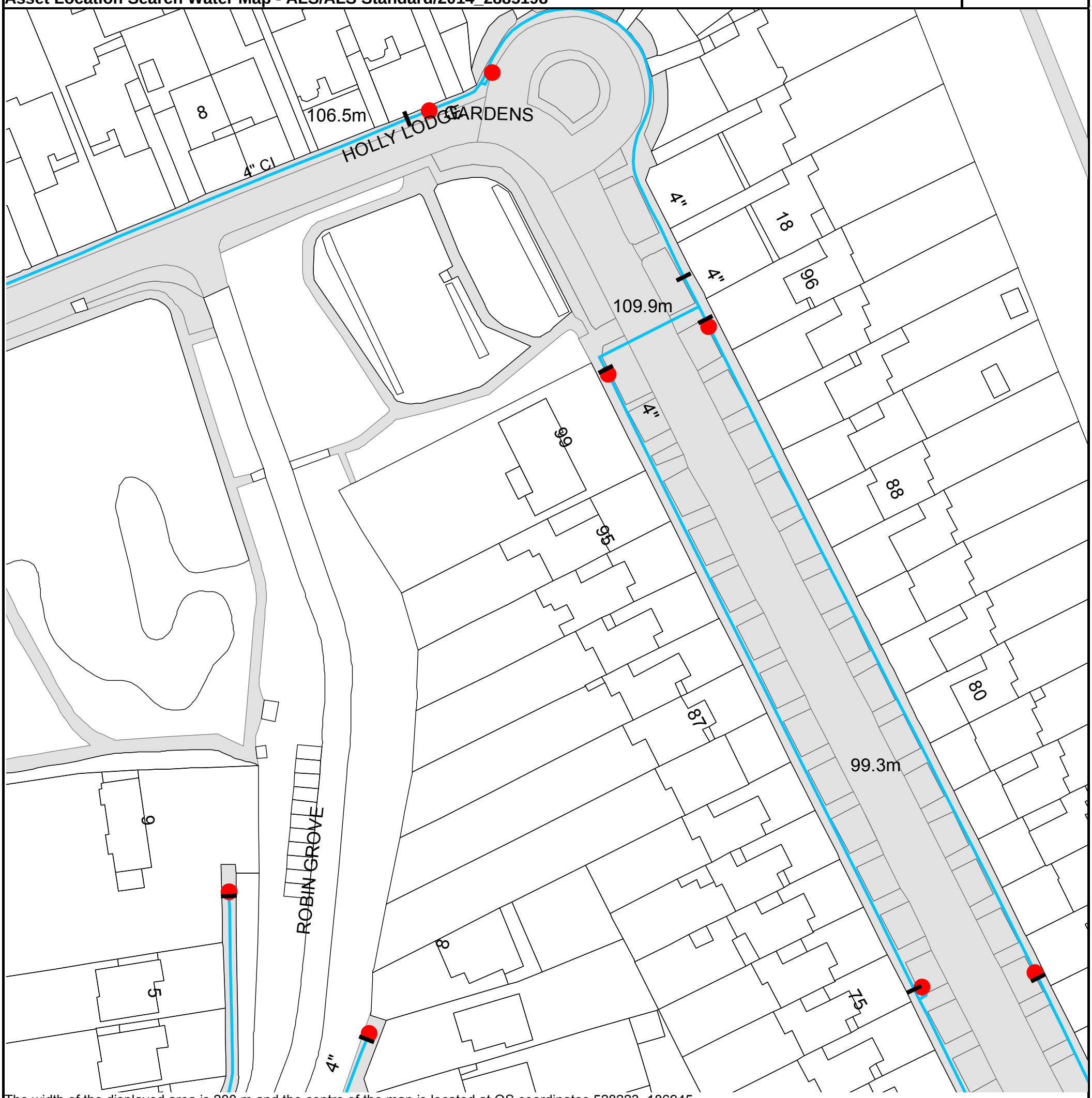
3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.

4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.

5) 'na' or '0' on a manhole level indicates that data is unavailable.

6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in milimetres. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any text or symbology present on the plan, please contact a member of Property Insight on 0845 070 9148.

Asset Location Search Water Map - ALS/ALS Standard/2014_2885198



The width of the displayed area is 200 m and the centre of the map is located at OS coordinates 528223, 186945.

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

ALS Water Map Key

Water Pipes (Operated & Maintained by Thames Water)

4"

Distribution Main: The most common pipe shown on water maps. With few exceptions, domestic connections are only made to distribution mains.

16"

Trunk Main: A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers.

3" SUPPLY

Supply Main: A supply main indicates that the water main is used as a supply for a single property or group of properties.

3" FIRE

Fire Main: Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.

3" METERED

Metered Pipe: A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown.

Transmission Tunnel: A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided.

Proposed Main: A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main.

Valves

- General Purpose Valve
- Air Valve
- Pressure Control Valve
- Customer Valve

Hydrants

- Single Hydrant

Meters

- Meter

End Items

Symbol indicating what happens at the end of a water main.

- Blank Flange
- Capped End
- Emptying Pit
- Undefined End
- Manifold
- Customer Supply
- Fire Supply

Operational Sites

- Booster Station
- Other
- Other (Proposed)
- Pumping Station
- Service Reservoir
- Shaft Inspection
- Treatment Works
- Unknown
- Water Tower

Other Symbols

- Data Logger

PIPE DIAMETER	DEPTH BELOW GROUND
Up to 300mm (12")	900mm (3')
300mm - 600mm (12" - 24")	1100mm (3' 8")
600mm and bigger (24" plus)	1200mm (4')

Other Water Pipes (Not Operated or Maintained by Thames Water)

Other Water Company Main: Occasionally other water company water pipes may overlap the border of our clean water coverage area. These mains are denoted in purple and in most cases have the owner of the pipe displayed along them.

Private Main: Indiates that the water main in question is not owned by Thames Water. These mains normally have text associated with them indicating the diameter and owner of the pipe.

Terms and Conditions

All sales are made in accordance with Thames Water Utilities Limited (TWUL) standard terms and conditions unless previously agreed in writing.

1. All goods remain in the property of Thames Water Utilities Ltd until full payment is received.
2. Provision of service will be in accordance with all legal requirements and published TWUL policies.
3. All invoices are strictly due for payment 14 days from due date of the invoice. Any other terms must be accepted/agreed in writing prior to provision of goods or service, or will be held to be invalid.
4. Thames Water does not accept post-dated cheques-any cheques received will be processed for payment on date of receipt.
5. In case of dispute TWUL`s terms and conditions shall apply.
6. Penalty interest may be invoked by TWUL in the event of unjustifiable payment delay. Interest charges will be in line with UK Statute Law 'The Late Payment of Commercial Debts (Interest) Act 1998'.
7. Interest will be charged in line with current Court Interest Charges, if legal action is taken.
8. A charge may be made at the discretion of the company for increased administration costs.

A copy of Thames Water's standard terms and conditions are available from the Commercial Billing Team (cashoperations@thameswater.co.uk).

We publish several Codes of Practice including a guaranteed standards scheme. You can obtain copies of these leaflets by calling us on 0800 316 9800

If you are unhappy with our service you can speak to your original goods or customer service provider. If you are not satisfied with the response, your complaint will be reviewed by the Customer Services Director. You can write to him at: Thames Water Utilities Ltd. PO Box 492, Swindon, SN38 8TU.

If the Goods or Services covered by this invoice falls under the regulation of the 1991 Water Industry Act, and you remain dissatisfied you can refer your complaint to Consumer Council for Water on 0121 345 1000 or write to them at Consumer Council for Water, 1st Floor, Victoria Square House, Victoria Square, Birmingham, B2 4AJ.

Ways to pay your bill

Credit Card	**BACS Payment**	**Telephone Banking**	**Cheque**
Call **0845 070 9148** quoting your invoice number starting CBA or ADS.	Account number **90478703** Sort code **60-00-01** A remittance advice must be sent to: **Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW.** or email **ps.billing@thameswater.co.uk**	By calling your bank and quoting: Account number **90478703** Sort code **60-00-01** and your invoice number	Made payable to '**Thames Water Utilities Ltd**' Write your Thames Water account number on the back. Send to: **Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW** or by DX to **151280 Slough 13**

Thames Water Utilities Ltd Registered in England & Wales No. 2366661 Registered Office Clearwater Court, Vastern Rd, Reading, Berks, RG1 8DB.

Search Code

IMPORTANT CONSUMER PROTECTION INFORMATION

This search has been produced by Thames Water Property Searches, Clearwater Court, Vastern Road, Reading RG1 8DB, which is registered with the Property Codes Compliance Board (PCCB) as a subscriber to the Search Code. The PCCB independently monitors how registered search firms maintain compliance with the Code.

The Search Code:

- provides protection for homebuyers, sellers, estate agents, conveyancers and mortgage lenders who rely on the information included in property search reports undertaken by subscribers on residential and commercial property within the United Kingdom
- sets out minimum standards which firms compiling and selling search reports have to meet
- promotes the best practise and quality standards within the industry for the benefit of consumers and property professionals
- enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.

By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

The Code's core principles

Firms which subscribe to the Search Code will:

- display the Search Code logo prominently on their search reports
- act with integrity and carry out work with due skill, care and diligence
- at all times maintain adequate and appropriate insurance to protect consumers
- conduct business in an honest, fair and professional manner
- handle complaints speedily and fairly
- ensure that products and services comply with industry registration rules and standards and relevant laws
- monitor their compliance with the Code

Complaints

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award compensation of up to £5,000 to you if he finds that you have suffered actual loss as a result of your search provider failing to keep to the Code.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.

TPOs Contact Details

The Property Ombudsman scheme
Milford House
43-55 Milford Street
Salisbury
Wiltshire SP1 2BP
Tel: 01722 333306
Fax: 01722 332296
Email: admin@tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk

PLEASE ASK YOUR SEARCH PROVIDER IF YOU WOULD LIKE A COPY OF THE SEARCH CODE

UK Power Networks

Ms. Sara Bertholdson
Soiltechnics
Cedar Barn
White Lodge
Walgrave
Northamptonshire
NN6 9PY

Our Ref: 2014/2170740
Your Ref:
22/10/2014

Dear Sir/Madam

95 HILLWAY HIGHGATE LONDON

Thank you for your letter of 13/10/2014 in which you asked if there are any electric lines and/or electrical plant belonging to UK Power Networks (LPN) plc ("UK Power Networks") within the land identified by your enquiry.

I enclose a copy of UK Power Networks record of its electric lines and/or electrical plant at the site identified by your enquiry. If the records provided do not relate to the land to which you had intended to refer please resubmit your enquiry.

This information is made available to you on the terms set out below.

1. **UK Power Networks does not warrant that the information provided to you is correct. You rely upon it at your own risk.**

2. UK Power Networks does not exclude or limit its liability if it causes the death of any person or causes personal injury to a person where such death or personal injury is caused by its negligence.

3. Subject to paragraph 2 UK Power Networks has no liability to you in contract, in tort (including negligence), for breach of statutory duty or otherwise how for any loss, damage, costs, claims, demands, or expenses that you or any third party may suffer or incur as a result of using the information provided whether for physical damage to property or for any economic loss (including without limitation loss of profit, loss of opportunity, loss of savings, loss of goodwill, loss of business, loss of use) or any special or consequential loss or damage whatsoever.

4. The information about UK Power Networks electrical plant and/or electric lines provided to you belongs to and remains the property of UK Power Networks. You must not alter it in any respect.

5. The information provided to you about the electrical plant and/or electric lines depicted on the plans may NOT be a complete record of such apparatus belonging to UK Power Networks. The information

provided relates to electric lines and/or electrical plant belonging to UK Power Networks that it believes to be present but the plans are NOT definitive: other electric lines and/or electrical plant may be present and that may or may not belong to UK Power Networks.

6. Other apparatus not belonging to UK Power Networks is not shown on the plan. It is your responsibility to make your own enquiries elsewhere to discover whether apparatus belonging to others is present. It would be prudent to assume that other apparatus is present.

7. You are responsible for ensuring that the information made available to you is passed to those acting on your behalf and that all such persons are made aware of the contents of this letter.

8. Because the information provided to you may NOT be accurate, you are recommended to ascertain the presence of UK Power Networks electric lines and/or electrical plant by the digging of trial holes. Trial holes should be dug by hand only.

Excavations must be carried out in line with the Health and Safety Executive guidance document HSG 47. We will not undertake this work. A copy of HSG 47 can be obtained from the Health an Safety Executives website.

All electric lines discovered must be considered LIVE and DANGEROUS at all times and must not be cut, resited, suspended, bent or interfered with unless specially authorised by UK Power Networks.

The electric line and electrical plant belonging to UK Power Networks remains so even when made dead and abandoned and any such electric line and/or electrical plant exposed shall be reported to UK Power Networks.

Where your works are likely to affect our electric lines and/or electrical plant an estimate of the price of any protective /diversionary works can be prepared by UK Power Networks Branch at Metropolitan House, Darkes Lane, Potters Bar, Herts. , EN6 1AG, telephone no. 0845 2340040

9 Any work near to any overhead electric lines must be carried out by you in accordance with the Health and Safety Executive guidance document GS6 and the Electricity at Work Regulations.

The GS6 Recommendations may be purchased from HSE Books or downloaded from the Energy Networks Association's website.

If given a reasonable period of prior notice UK Power Networks will attend on site without charge to advise how and where "goal posts" should be erected. If you wish to avail yourself of this service, in the first instance please telephone: 0845 6014516 between 08:30 and 17:00 Monday to Friday, Public and bank holidays excepted.

10. You are responsible for the security of the information provided to you. It must not be given, sold or made available upon payment of a fee to a third party.

11. If in carrying out work on land in, on, under or over which is installed an electric line and/or electrical plant that belongs to UK Power Networks you and/or anyone working on your behalf damages (however slightly) that apparatus you must inform immediately UK Power Networks by telephone at the number below providing:

- your name, address and telephone number; and

- the date, time and place at which such damage was caused; and
- a description of the electric line and/or electrical plant to which damage was caused; and
- the name of the person whom it appears to you is responsible for that damage; and
- the nature of the damage

In the East of England or London 0800 780078 (24 Hours).

12. The expression "UK Power Networks" includes UK Power Networks (EPN) plc, UK Power Networks (LPN) plc, UK Power Networks (SEPN) plc, UK Power Networks and any of their successors and predecessors in title.

IF YOU DO NOT ACCEPT AND/OR DO NOT UNDERSTAND THE TERMS OF USE SET OUT IN PARAGRAPHS 1 TO 12 INCLUSIVE ABOVE YOU MUST NOT USE THE PLANS AND RETURN THEM TO ME.

I would remind you that work adjacent to electric lines and/or electrical plant represents a serious risk to health and safety and as such should feature amongst the items you have assessed in your workplace risk assessment and method statement.

I shall be pleased to supply you with further assistance if you require it.

Yours sincerely

L Blizard

Lynda Blizard - Telephone: 0800 0565 866
Plan Provision