

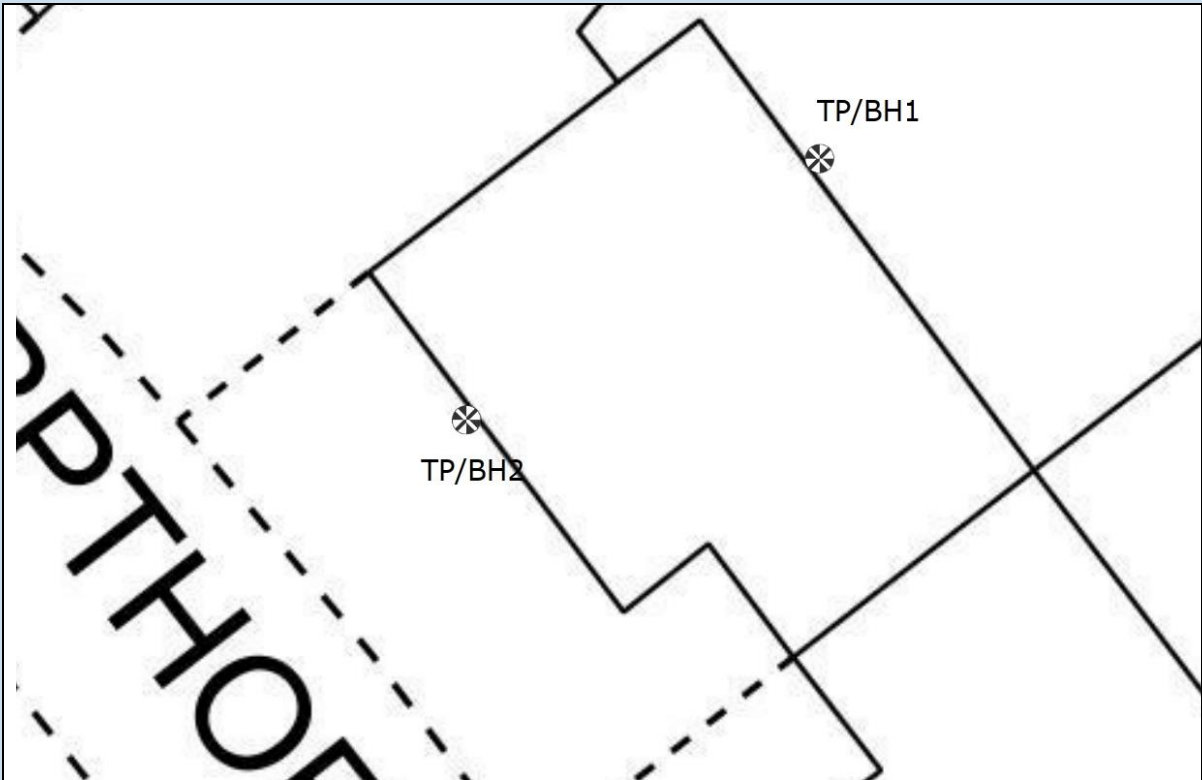
GEOTECHNICAL

for Subsidence Management Services

5 Sharpthorpe Close, Lower Earley, Reading, RG6 4DB

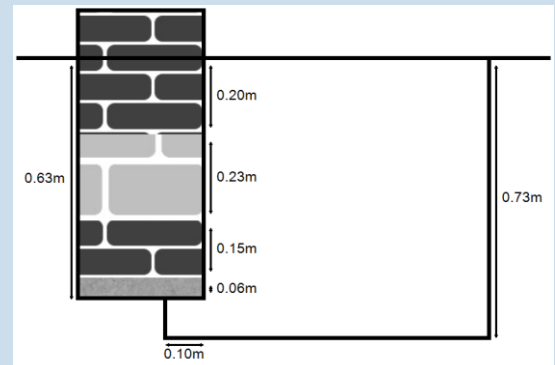
Client: Subsidence Management Services
Client Contact: Chris Sherwin
Client Ref: [REDACTED]
Policy Holder: [REDACTED]
Report Date: 10 August 2023
Our Ref: [REDACTED]

Site Plan



	Borehole		Foul Water Drain		Foul Manhole		Foul Rodding Point		Foul Vent Pipe
	Trial Pit / Borehole		Surface Water Drain		Rain Water Manhole		Surface Rodding Point		Rain Water Gully
	Trial Pit		Combined Drain		Combined Manhole				

House foundation comprised of brick and block wall to 575mm bgl, bearing on concrete to 630mm bgl, with a total projection of 0mm from the elevation. Underside of foundation (USF) was exposed to 100mm back from the face of the foundation and probed 500mm back from the face of the foundation.



WS	Samples		Tests		Legend	Stratum Description and Observations
	Type	Depth (m)	Type	Depth (m)		
					0	PAVING SLAB.
					0.5	SHARP SAND/ GRIT SAND. Firm dark brown sandy gravelly CLAY. Gravel is fine to medium gravel.
D R	0.63 - 1.13 0.63 - 1.63	PEN	0.63	HP=1.8 (1.5,1.5,2.0,2.0,2.0)		Firm orangish brown silty sandy gravelly CLAY. Gravel is fine to medium gravel.
D	1.13 - 1.63	PEN	1.13	HP=1.9 (1.5,2.0,2.0,2.0,2.0)		
D	1.63 - 2.13	PEN	1.63	HP=2.1 (2.0,2.0,2.0,2.5,2.0)		
D	2.13 - 2.63	PEN	2.13	HP=2.2 (2.0,2.5,2.5,2.0,2.0)		
D	2.63 - 3.13	PEN	2.63	HP=2.3 (2.0,2.5,2.5,2.5,2.0)		
D	3.13 - 3.63	PEN	3.13	HP=2.4 (2.5,2.0,2.5,2.5,2.5)		Firm orangish brown silty sandy CLAY.
D	3.63 - 4.00	PEN	3.63	HP=2.6 (3.0,2.5,2.5,2.5,2.5)		
						4.0
-- End of borehole at 4.00m -- Trial pit excavated to 0.73m bgl. Borehole completed by mech window sampler.						4.0

Foundation Detail

Diagram illustrating the cross-section of a wall with a stepped profile. The wall consists of two main sections: a top section and a bottom section. The total height of the wall is 1.05m. The top section has a height of 0.45m and a width of 0.20m, filled with brickwork. The bottom section has a height of 0.50m and a width of 0.20m, filled with concrete. The remaining width of the wall is 0.08m, which is a vertical section on the left, 0.95m high, also filled with concrete.

-- End of borehole at 4.00m --
Trial pit excavated to 1.05m bgl. Borehole completed by mech window sampler.

Site Observations

GENERAL:

Site Investigation works (TP/BH 1) undertaken on 25 July 2023 during dry weather (i.e. no rain).

Site Investigation works (TP/BH 2) undertaken on 25 July 2023 during dry weather (i.e. no rain).

HEALTH AND SAFETY:

Negative signal obtained in Power, Radio and Genny mode on the Cable Avoidance Tool (CAT) (TP/BH1).

Negative signal obtained in Power, Radio and Genny mode on the Cable Avoidance Tool (CAT) (TP/BH2).

FOUNDATIONS:

House foundation was exposed and the underside of foundation (USF) recorded to be 0.63m bgl (TP/BH 1).

House foundation was exposed and the underside of foundation (USF) recorded to be 0.95m bgl (TP/BH 2).

ROOTS:

Roots encountered to 1.63m bgl (TP/BH 1).

Roots encountered to 1.95m bgl (TP/BH 2).

INSITU TESTING:

Hand Penetrometer (PEN) undertaken at 0.63m bgl (TP/BH 1) within the window sampler and thereafter in the window sampler at maximum 0.5m intervals.

Hand Penetrometer (PEN) undertaken at 0.95m bgl (TP/BH 2) within the window sampler and thereafter in the window sampler at maximum 0.5m intervals.

WATER STRIKES:

No water strike/s (NWS) encountered (TP/BH 1).

No water strike/s (NWS) encountered (TP/BH 2).

SOIL ANALYSIS

for Subsidence Management Services

5 Sharpthorpe Close, Reading, RG6 4DB

Client: Subsidence Management Services

Claim Number: [REDACTED]

Policy Holder: [REDACTED]

Report Date: 22/08/2023

Our Ref: [REDACTED]

Compiled By:

Name	Position	Signature
Saira Dougan	Laboratory Supervisor	[REDACTED]

Checked By:

Name	Position	Signature
Bob Walker	Laboratory Manager	[REDACTED]

Date samples received: 01-Aug-23

Water Content Test Date: 02-Aug-23

Atterberg Limits Test Date: 21-Aug-23



9265

Notes relating to soils testing

Unless otherwise stated, all soil testing was undertaken by Environmental Services at unit 10H Maybrook Business Park, B76 1AL for SubsNetUK of Unit 4 Linnet Court, Cawledge Business Park, Alnwick, NE66 2GD

Soil samples have been prepared in accordance with BS1377:Part 1: 2016 Section 7

Descriptions of soil samples within the laboratory have been undertaken generally in accordance with BS5930:2015. Descriptions of soil samples fall outside of the scope of UKAS accreditation and may have been shortened to remove tertiary components for ease of reference.

The graphical representation of 40% of the LL and the numerical representation of the modified plasticity index (mod. PI) fall outside of the scope of UKAS accreditation.

Following the issue of this soil analysis report, samples will be retained for at least 28 days should additional testing, or referencing, be required. It should be noted that any tests undertaken on soils retained subsequent to the issue of this report may not give an accurate indication of the in-situ conditions of the sample.

This Soil Analysis Report may not be reproduced, in part or in full, without written approval of the laboratory.

The results contained herein relate only to items tested and no others. Additionally as the laboratory is not responsible for the sampling process it takes no responsibility for the condition of the samples and all samples are tested "as received".

Where samples of the same test type are not tested on the same day, or the testing spans multiple days, the test date states the day of the final test or the test date of the final sample.

All information above the laboratory reference on the cover page of this report are as provided by the customer and the laboratory is not responsible for any errors or omissions therein.

Water Content Tests are undertaken in accordance with ISO 17892:Part 1:2014

The Liquid Limit test is undertaken in accordance with BS1377:Part 2:1990 Section 4.4 using an 80g cone with a 30° tip. Sieve percentages reported in blue denote that the sample has been sieved otherwise it has been prepared from its natural state. Sieve percentage reported in BOLD denote that the sample has been oven-dried prior to testing.

Unless otherwise specified herein, the one-point cone penetrometer method has been used. Atterberg results depicted in green have not been tested and are duplicates of the preceding sample, included for reference only.

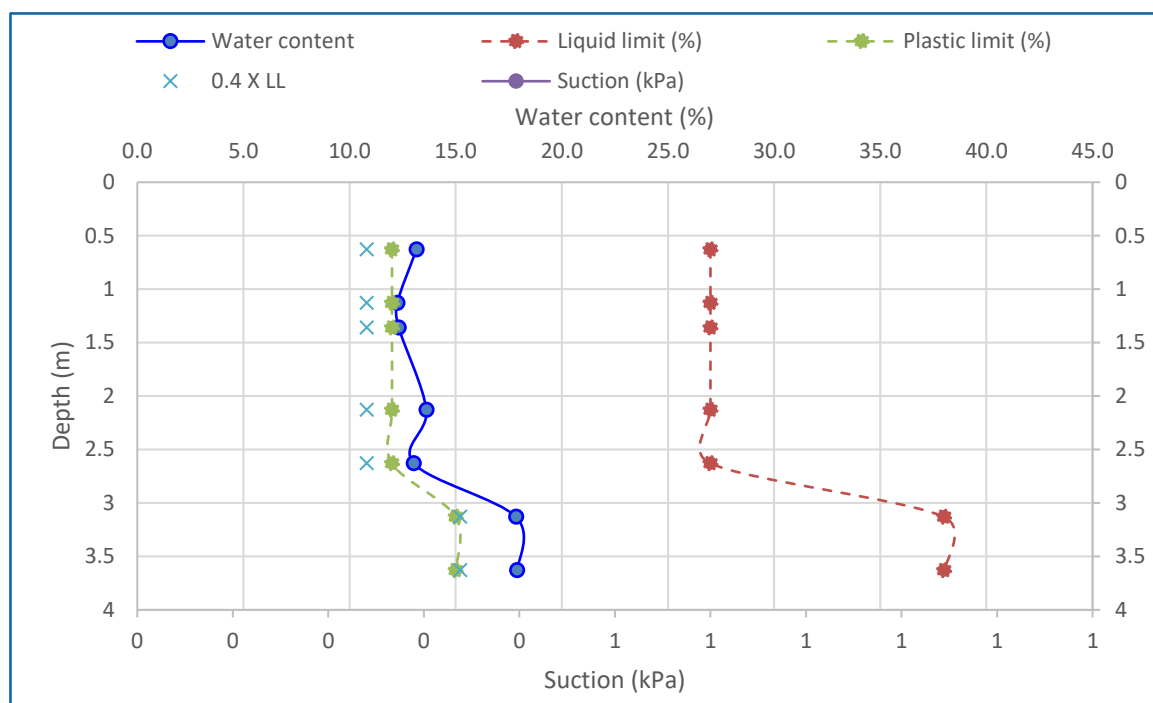
The Plastic Limit test and the determination of the Plasticity Index is undertaken in accordance with BS1377:Part 2:2022. Where a plastic limit has been denoted with an asterisk (*) then it has been derived from the liquid limit and has not been tested.

If you would like to provide feedback on this report or any laboratory services or performance, please complete the form below. All appropriate feedback will be used in the continual improvement of laboratory services.

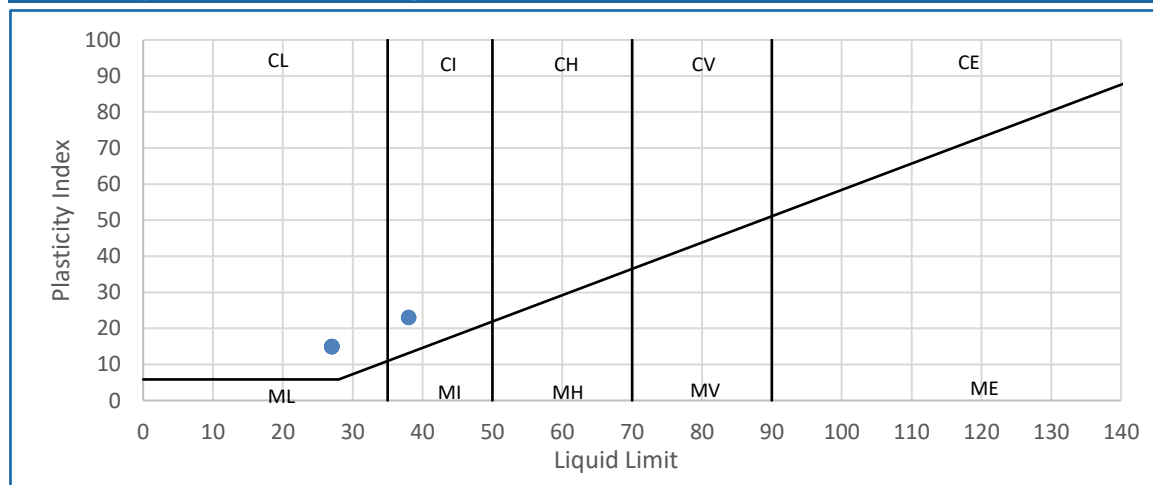
[Laboratory feedback form](#)

Samples from BH1

Lab Ref	Depth (m)	WC (%)	LL (%)	PL (%)	PI (%)	.425 mm(%)	mod. PI (%)	Av. Suc. (kPa)	Description
1	0.63	13.1	27	12	15	88	13		Soft to firm brown/orange-brown sandy silty CLAY with rare gravel. Gravel is fine and medium.
2	1.13	12.2	27	12	15	88	13		Soft to firm brown/orange-brown sandy silty CLAY with rare gravel. Gravel is fine and medium.
3	1.36	12.3	27	12	15	88	13		Soft to firm brown/orange-brown sandy silty CLAY with rare gravel. Gravel is fine and medium.
4	2.13	13.6	27	12	15	88	13		Soft to firm brown/orange-brown sandy silty CLAY with rare gravel. Gravel is fine and medium.
5	2.63	13.0	27	12	15	88	13		Soft to firm brown/orange-brown sandy silty CLAY with rare gravel. Gravel is fine and medium.
6	3.13	17.8	38	15	23	96	22		Firm brown/orange-brown slightly sandy silty CLAY with rare gravel. Gravel is fine and medium.
7	3.63	17.9	38	15	23	96	22		Firm brown/orange-brown slightly sandy silty CLAY with rare gravel. Gravel is fine and medium.

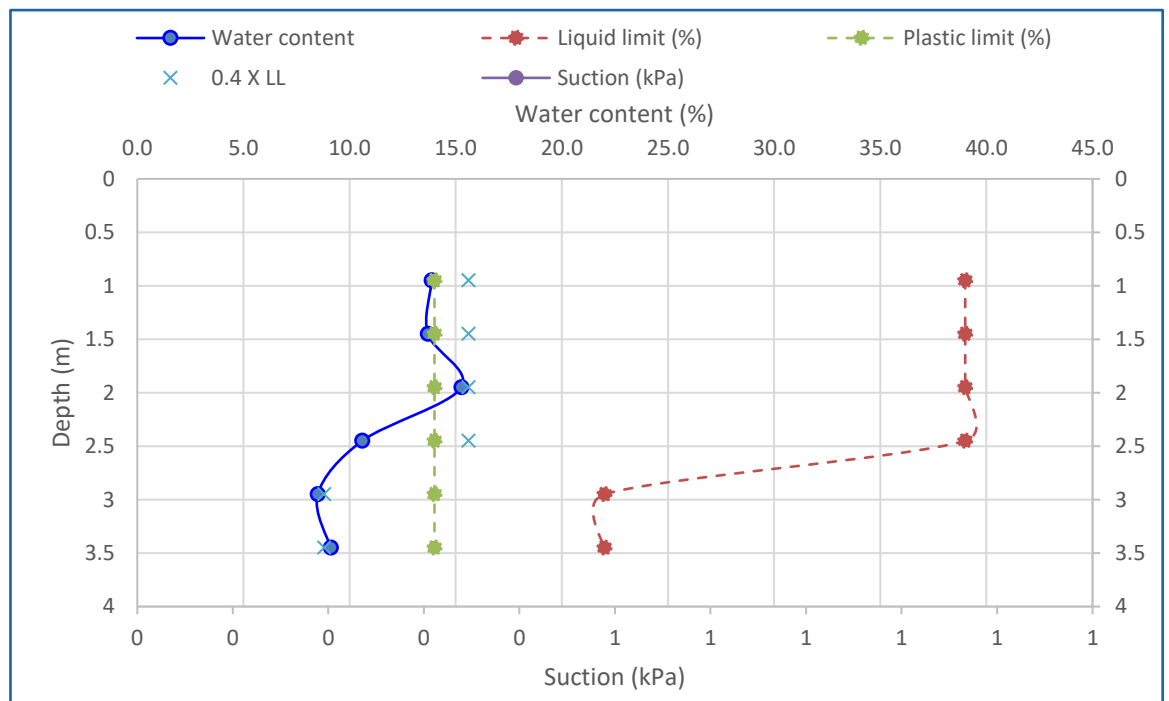


Plasticity Chart for Casagrande Classification

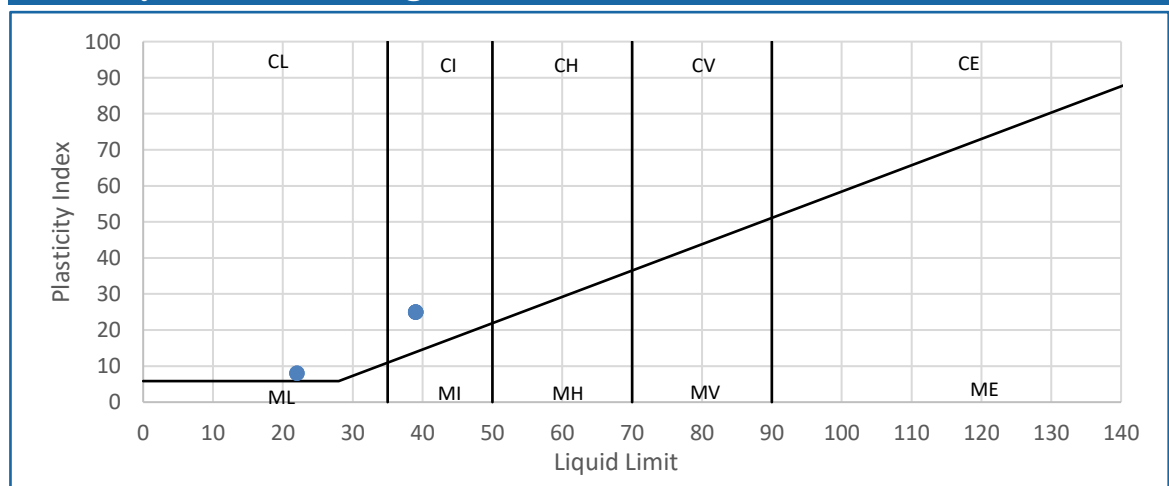


Samples from BH2

Lab Ref	Depth (m)	WC (%)	LL (%)	PL (%)	PI (%)	.425 mm(%)	mod. PI (%)	Av. Suc. (kPa)	Description
8	0.95	13.9	39	14	25	80	20		Soft to firm brown/orange-brown sandy silty CLAY with rare gravel. Gravel is fine, medium and coarse.
9	1.45	13.7	39	14	25	80	20		Soft to firm brown/orange-brown sandy silty CLAY with rare gravel. Gravel is fine and medium.
10	1.95	15.3	39	14	25	80	20		Soft to firm brown/orange-brown sandy silty CLAY with rare gravel. Gravel is fine and medium.
11	2.45	10.6	39	14	25	80	20		Soft to firm brown/orange-brown sandy silty CLAY with rare gravel. Gravel is fine and medium.
12	2.95	8.5	22	14	8	74	6		Moist brown/orange-brown clayey silty SAND with rare gravel. Gravel is fine and medium.
13	3.45	9.1	22	14	8	74	6		Moist brown/orange-brown clayey silty SAND with rare gravel. Gravel is fine and medium.



Plasticity Chart for Casagrande Classification



Deviating Samples

The table below details any samples deviating from laboratory procedure or deviating in condition to an extent whereby the validity of results may be affected. A test denoted "I" is likely to have had testing abandoned but where a test result has been provided a non-standard procedure may have been used, details of which will be provided upon request.

LAB REF	CONDITION	WC	ATT	SUC	OED
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					

Key

- D Delay in sample receipt
- C Contaminated sample
- B Sample not bagged correctly
- S Sample too sandy (unsuitable for testing)
- G Sample too gravelly (unsuitable for testing)
- V Sample too soft (unsuitable for preparation)
- L Sample too silty
- I Insufficient sample
- O Too much organic content (unsuitable for testing)
- N Non-standard procedure used
- H Sample depth too shallow
- X Testing result too similar to above sample

References

The following provides a brief interpretation of the test results by comparison of the results to published classifications. The Atterberg Limit test may be used to classify the plasticity of soils; the plasticity classes defined in BS5930:2015 "Code of Practice for Site Investigations" are as follows.

CL (ML)	CLAY and CLAY/SILT of Low plasticity
CI (MI)	CLAY and CLAY/SILT of Intermediate plasticity
CH (MH)	CLAY and CLAY/SILT of High plasticity
CV (MV)	CLAY and CLAY/SILT of Very High plasticity
CE (ME)	CLAY and CLAY/SILT of Extremely High plasticity
O	The letter O is added to prefixes to symbolise a significant proportion of organic matter.
NP	Non-plastic

The Plasticity Index (PI) Result obtained from the Atterberg Limit tests may also be used to classify the potential for volume change of fine soils, in accordance with the National House Building Council's standards - Chapter 4.2 (2003) "Building Near Trees", as summarised below.

Modified PI < 10	Non Classified.
Modified PI = 10 to <20	Low volume change potential.
Modified PI = 20 to <40	Medium volume change potential.
Modified PI = 40 or greater	High volume change potential.

The 2003 edition of Chapter 4.2 also permits use of the Plasticity Index without modification. The classifications for this are grouped by soil type (soils with similar visual soils description and using unmodified Plasticity Indices).

ROOT IDENTIFICATION

for Subsidence Management Services

5 Sharpthorpe Close, Lower Earley, Reading, RG6 4DB

Client: Subsidence Management Services
 Client Contact: Chris Sherwin
 Claim Number: [REDACTED]
 Client Reference: [REDACTED]
 Policy Holder: [REDACTED]
 Report Date: 31 July 2023
 Our Ref: [REDACTED]



Intec
 Parc Menai, Bangor,
 Gwynedd, North Wales
 LL57 4FG
 Tel: 01248 672652

Sub Sample	Species Identified		Root Diameter	Starch
TP/BH1:				
0.63-1.6m	Acer spp.	1	2 mm	Moderate
TP/BH2:				
0.95-1.95m	Pomoideae gp.	2	3 mm	Moderate
0.95-1.95m	not a tree or shrub root		1 mm	Absent

Comments:

- 1 - Plus 2 others also identified as *Acer* spp.
- 2 - Plus 1 other also identified as Pomoideae gp.

Acer spp. are maples, including sycamore, Norway maple, and Japanese maples.

Pomoideae gp include apple, cotoneaster, hawthorn, pear, pyracantha, quince, rowan, snowy mespil and whitebeam.

Signed: M D Mitchell

Unless we are otherwise instructed in writing, the above sample material will normally be disposed of 6 years after the date of this report.

Drainage Investigation Report

For Subsidence Management Services

Client Aviva

Risk Address: 5 Sharpthorpe Close, Reading, Lower Earley, RG6 4DB

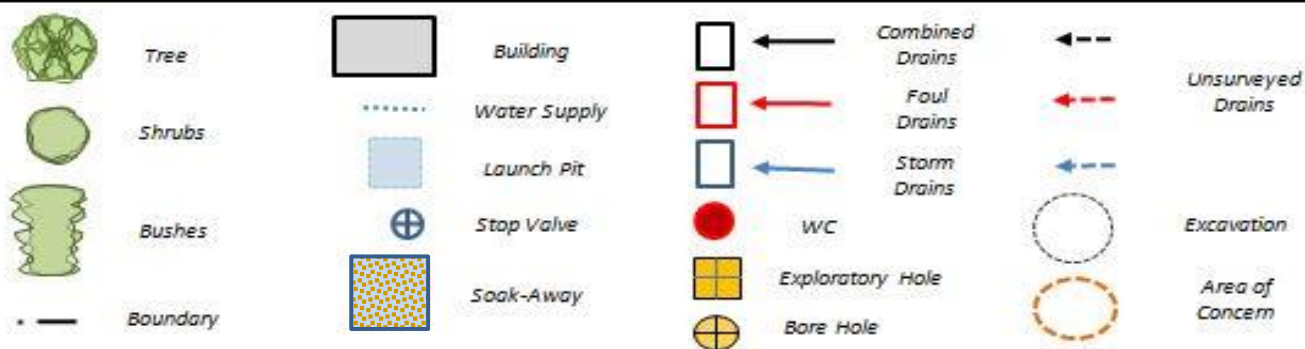
Visit Date: 11/09/2023

Client Reference:

Our Reference:

Report Date: 14/09/2023

Report Content: Front Page
Site Plan
CCTV Coding
Drain Overview



5 Sharpthorpe Close, Reading, Lower Earley, RG6 4DB

RUN	Start From :	FMH1	Finish at :	SVP1	Pipe Ø:	100mm
A	Invert Level (m):	0.65	Invert Level (m):	n/a	Material:	Plastic
FOUL	Condition grade:	A	Direction:	Upstream	Responsibility:	Home Owner
Distance	Code	Hydraulic Test - Not Tested				
0.00	SN	Start Node from FMH1				
0.67	LU	Line of drain deviates up 90°				
1.44	FN	Finish Node at SVP1				
RUN	Start From :	FMH1	Finish at :	Downstream Node	Pipe Ø:	100mm
B	Invert Level (m):	0.65	Invert Level (m):	n/a	Material:	Plastic
FOUL	Condition grade:	A	Direction:	Downstream	Responsibility:	Home Owner
Distance	Code	Hydraulic Test - PASS				
0.00	SN	Start Node from FMH1				
2.78	JN	Junction at 1 o'clock to Run C - FWG1				
6.72	FN	Finish Node - Beyond Area of Concern				
RUN	Start From :	FWG1	Finish at :	Run B	Pipe Ø:	100mm
C	Invert Level (m):	0.2	Invert Level (m):	n/a	Material:	Plastic
FOUL	Condition grade:	A	Direction:	Downstream	Responsibility:	Home Owner
Distance	Code	Hydraulic Test - PASS				
0.00	SN	Start Node from FWG1				
0.50	FN	Finish Node at Run B				
RUN	Start From :	SMH1	Finish at :	Rodding Eye	Pipe Ø:	100mm
D	Invert Level (m):	1.1	Invert Level (m):	n/a	Material:	Plastic
STORM	Condition grade:	A	Direction:	Upstream	Responsibility:	Home Owner
Distance	Code	Hydraulic Test - PASS				
0.00	SN	Start Node from SMH1				
0.86	JN	Junction at 12 o'clock				
2.11	JN	Junction at 12 o'clock				
7.77	JN	Junction at 12 o'clock				
7.78	FN	Finish Node at Rodding Eye				
RUN	Start From :	SMH2	Finish at :	RWP2 Junction	Pipe Ø:	100mm
E	Invert Level (m):	0.96	Invert Level (m):	n/a	Material:	Plastic
STORM	Condition grade:	A	Direction:	Upstream	Responsibility:	Home Owner
Distance	Code	Hydraulic Test - PASS				
0.00	SN	Start Node from SMH2				
0.96	JN	Junction at 3 o'clock				
8.16	LR	Line of drain deviates right				
9.13	FN	Finish Node at RWP2 Junction				

Address:

5 Sharpthorpe Close, Reading, Lower Earley, RG6 4DB

Following the receipt of your instruction, we attended site to carry out a CCTV survey.

The CCTV survey was undertaken in general accordance with the Manual of Sewer Classification and the WRc Drain Repair Book.

The following presents a summary of the findings with recommendations to repair and/or return the drains to a serviceable state, where necessary.

Drain Run A: FMH1 Upstream to SVP1

Pipe Diameter: 100mm

Responsibility: Home Owner

Hydraulic Pressure Test: Not Tested

CCTV Survey Result: No structural damage

Recommended Repair: No repairs have been recommended as the drain line was found to be free from defects.

Drain Run B: FMH1 Downstream

Pipe Diameter: 100mm

Responsibility: Home Owner

Hydraulic Pressure Test: Not Tested

CCTV Survey Result: No structural damage

Recommended Repair: No repairs have been recommended as the drain line was found to be free from defects.

Drain Run C: FWG1 Downstream to Run B

Pipe Diameter: 100mm

Responsibility: Home Owner

Hydraulic Pressure Test: Not Tested

CCTV Survey Result: No structural damage

Recommended Repair: No repairs have been recommended as the drain line was found to be free from defects.

Drain Run D: SMH1 Upstream to Rodding Eye

Pipe Diameter: 100mm

Responsibility: Home Owner

Hydraulic Pressure Test: Not Tested

CCTV Survey Result: No structural damage

Recommended Repair: No repairs have been recommended as the drain line was found to be free from defects.

Drain Run E: SMH2 Upstream to RWP2 Junction

Pipe Diameter: 100mm

Responsibility: Local Water Authority

Hydraulic Pressure Test: PASS

CCTV Survey Result: No structural damage

Recommended Repair: No repairs have been recommended as the drain line was found to be free from defects.

Water Main Test	From	To	Result	Notes
	ESV	ISV	PASS	No drop in 10 minutes

Address:

5 Sharpthorpe Close, Reading, Lower Earley, RG6 4DB