INTERPRETATIVE
SITE INVESTIGATION REPORT

At

Barn Hurst,

Church Street,

Peterborough,

Cambridgeshire,

PE7 3UU

On behalf of

sedgwick

PROJECT REFERENCE: 10928607

OUR REFERENCE: MSI.01882

SITE INVESTIGATION: 24/02/2026

REPORT ISSUED: April 2026

SML SUBSIDENCE
A SML Group Company

Site Plan

Sheet:

Job No: MSI.01882

Date: 24/02/2026

Site: Barnhurst Church Street, PE7 3UU

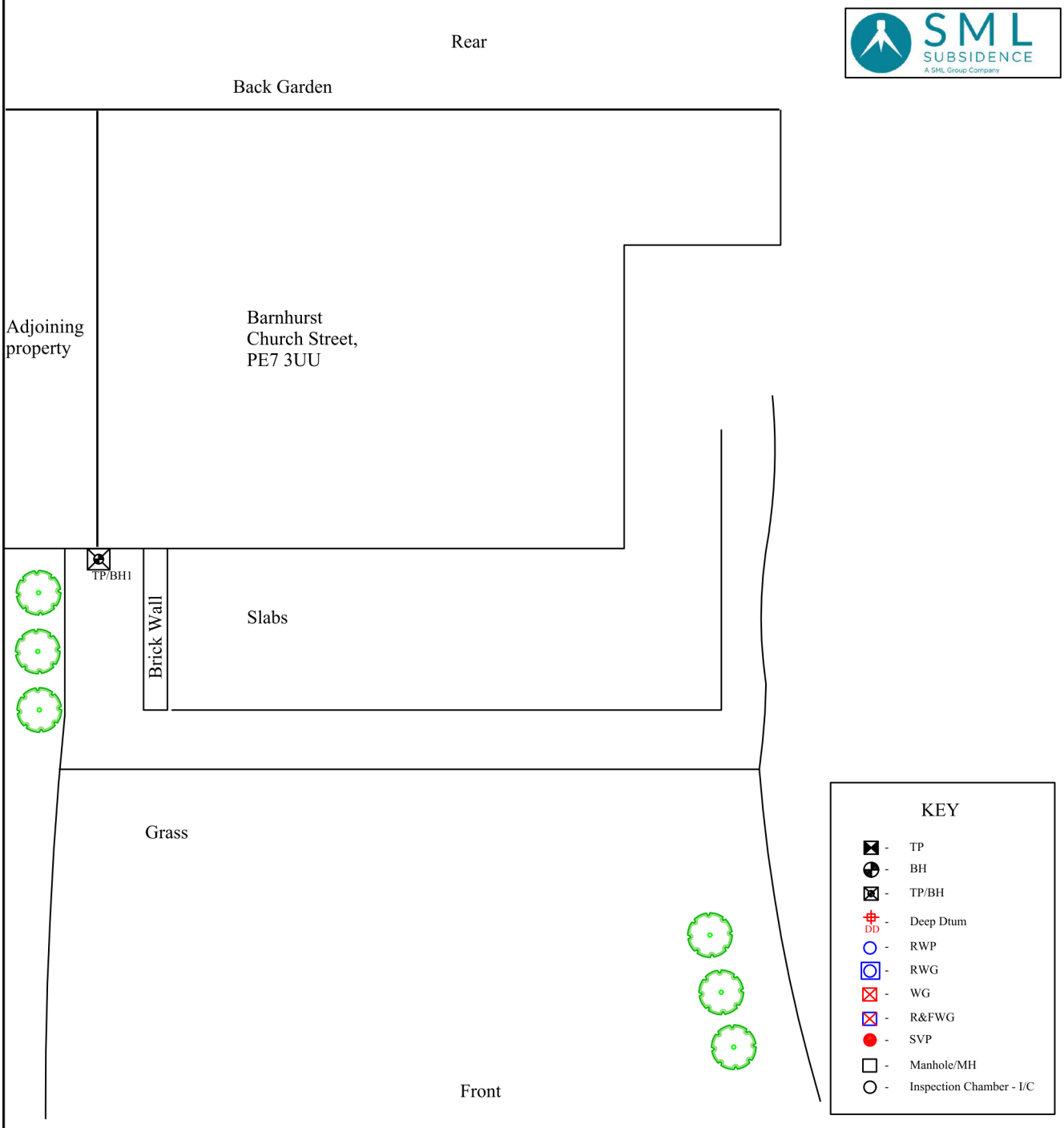
Client: Sedgwick

Hand Tools

Weather :

Drawn by :

Ground Level
MOD:



Remarks:

Logged:	Checked:	Approved:	Scale: N.T.S.

Trial Pit No: 1

Risk address

Sheet:

Job No: 01882

Date: 24/02/2026

Site: Barnhurst Church Street, PE7 3UU

Hand Tools

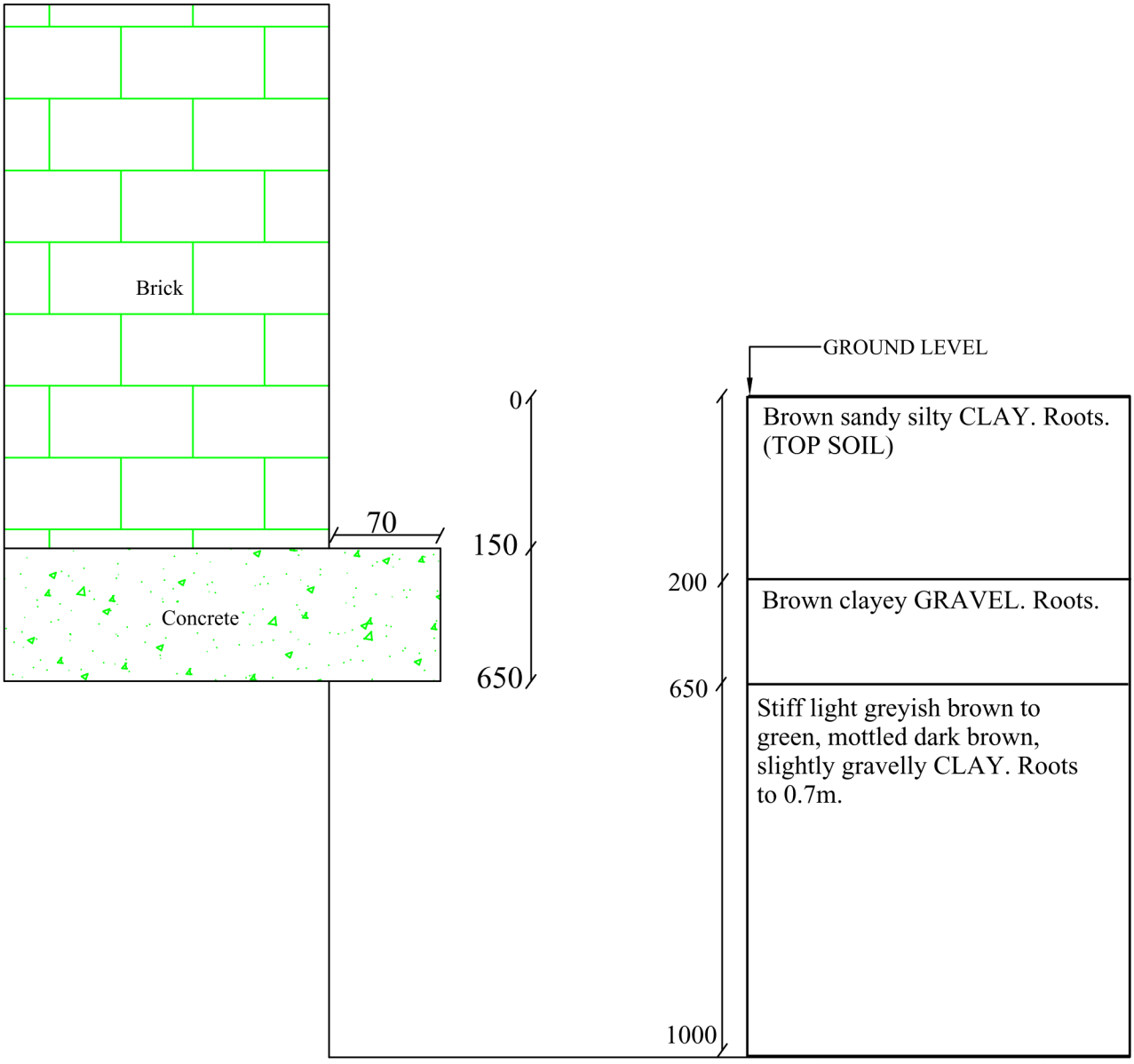
Weather :

Drawn by :

Ground Level
MOD:

Client : Sedgwick

All measurements in mm



Remarks:

Key:

D	Small disturbed sample	J	Jar sample
B	Bulk disturbed sample	V	Pilcon Vane (kPa)
W	Water sample	M	Mackintosh probe
TDTD	Too dense to drive		

Logged:	Checked:	Approved:	Scale: N.T.S.

Trial Pit No: 1

Adjoining Property

Sheet:

Job No: 01882

Date: 24/02/2026

Site: Barnhurst Church Street, PE7 3UU

Hand Tools

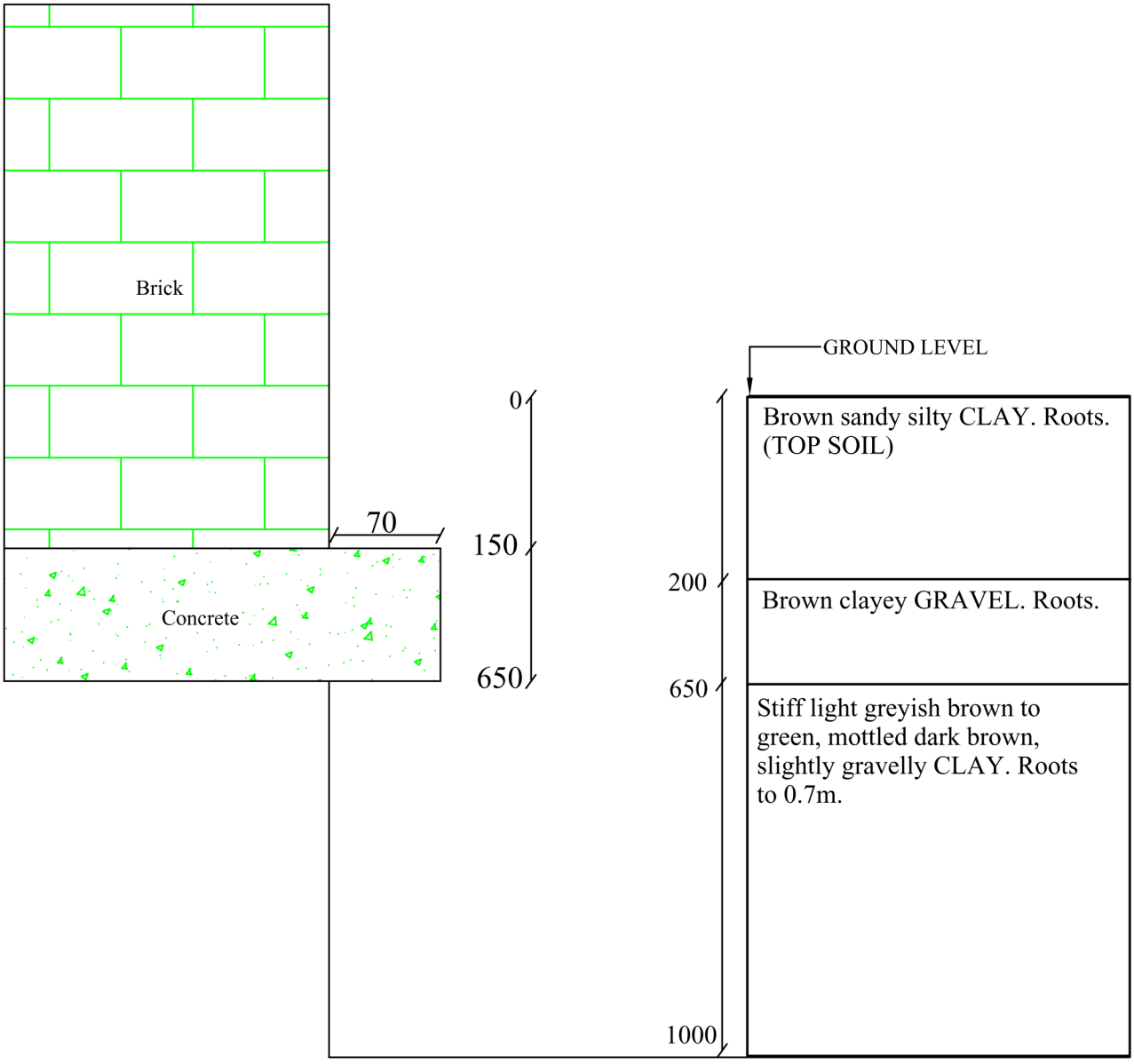
Weather :

Drawn by :

Ground Level
MOD:

Client : Sedgwick

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Logged:	Checked:	Approved:	Scale: N.T.S.

Key to exploratory hole symbols and abbreviations

SAMPLE TYPES

ACM - Asbestos sample
AMAL - Amalgamated sample
B - Bulk disturbed sample
BLK - Block sample
C - Core sample
CBR - CBR test sample
D - Disturbed sample
ES - Environmental sample
EW - Environmental water sample
G - Gas sample
J - Jar sample
L - Liner sample
TW - Pushed thin wall sample
U - Undisturbed sample
UT - Undisturbed thin wall sample
W - Water sample

IN-SITU TESTS

HV - Hand shear vane
HV(r) - Hand shear vane residual
PID - Photo ionisation detector
PP - Hand penetrometer
SPT - Standard penetration test
SPT(C) - SPT using cone

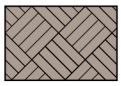
GROUNDWATER

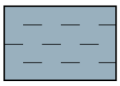
Groundwater strike
Groundwater rest level

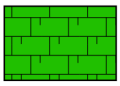
ROTARY CORE DETAILS

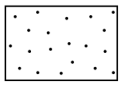
TCR - Total core recovery (%)
SCR - Solid core recovery (%)
RQD - Rock quality designation (%)
FI - Fracture index
NI - Non-intact core
AZCL - Assumed zone of core loss

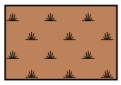
LEGEND

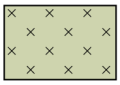

Topsoil

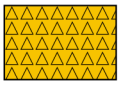

Clay

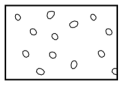

Chalk

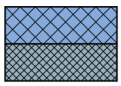

Sand backfill

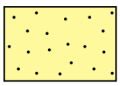

Peat

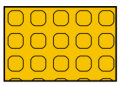

Silt

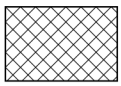

Breccia

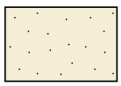

Gravel backfill

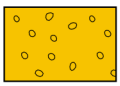

Made ground [cohesive]


Sand

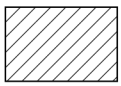

Conglomerate

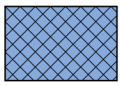

Arisings

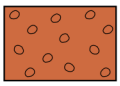

Concrete

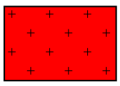

Gravel

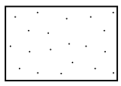

Metamorphic

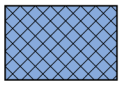

Bentonite

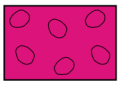

Wood


Cobbles


Igneous

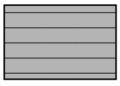

Concrete

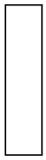

Brick


Boulders

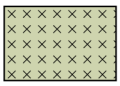

Grout


Bituminous material

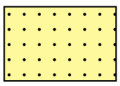

Mudstone


Plain pipe

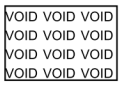

Gypsum


Siltstone

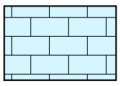

Coal


Sandstone


Slotted pipe



Void


Limestone

Created using Pebble Geo

Borehole Log

TP/BH 01

Sheet 1 of 1

Hole Type	Easting	Northing	Ground Level (m)	Scale
BH				1:15

Project Name	Project No.	Start Date	End Date
Barnhurst Church Street, PE7 3UU	MSI.01882	2026-02-24	2026-02-24

Client
Sedgwick

Consultant

Contractor

Inst/ Backfill	Water Levels	Samples and Tests: Depth (m)	Samples and Tests: Type/ Ref	Samples and Tests: Results	Level (m)	Depth (thickness) (m)	Strata: Legend	Strata: Description
						(0.20) 0.20		Brown sandy silty CLAY. Roots. (TOP SOIL)
						(0.45) 0.65		Brown clayey GRAVEL. Roots.
		0.65 0.65	HV(r) D	110 (kPa)		(0.35) 1.00		Stiff light greyish brown to green, mottled dark brown, slightly gravelly CLAY. Roots to 0.7m.
		1.00 1.00	HV(r) D	120 (kPa)		(0.50) 1.50		Stiff light greyish brown, mottled white, slightly gravelly CLAY. Gravel is fine to medium stone
		1.50 1.50	HV(r) D	120 (kPa)		(0.50) 2.00		Stiff very light brown, mottled grey and orangeish brown, sandy CLAY.
		2.00 2.00	HV(r) D	140 (kPa)		(0.40) 2.40		Stiff very light brown, mottled grey and orangeish brown, sandy, gravelly CLAY. Gravel is fine to medium stone.
								End of Borehole at 2.40m

Remarks
GROUNDWATER: None encountered.
INSTALLATION: None.
BACKFILL: Backfilled arisings.
STABILITY: Borehole remained stable.
NOTES: Refusal at 2.4m on obstruction by a solid object.

Method, Plant, Stability, Dimensions

Logger

SML Laboratories Ltd
Unit E1, Rosebury Business Park
Brampton Road
Eastbourne
BN22 9BN

IDENTIFICATION REPORT

Client: Land Science Ltd, Unit 10, 19 Albert Drive, Burgess Hill RH15 9TN

Our reference: MSI.01882

Project Address: Barnhurst

Date received: 27/02/2026

Date issued: 17/03/2026

Dear Sirs,

Sample(s) recently provided for analysis have been identified as follows:

Borehole	Depth (m)	Species identified	Note	Diameter	Condition
TP/BH01	0.7	*Acer pseudoplatanus*	1		Alive

Notes:

1. *Acer pseudoplatanus* is commonly known as Sycamore.

For and on behalf of SML Laboratories

[redacted]

SML Laboratories Ltd
Unit E1, Rosebury Business Park
Brampton Road
Eastbourne
BN22 9BN

Guide to notation

Notation	Meaning	Confidence
Prunus avium	Exact species identified	Highest
Prunus	Exact genus identified	High
Prunus sp.	Unknown which Prunus species	Medium
Prunus spp.	Could be any species in the genus	Medium–low
Rosaceae gp.	Only family/subfamily known	Lower
cf. *Prunus*	"Appears to be Prunus, but not certain"	Low
Unidentified root	No diagnostic features	None

Analysis Methods

Analysis was undertaken using DNA fingerprinting techniques and supported by standardised anatomical comparison under stereo and -compound -microscopy.

DNA Fingerprinting

This method involves extraction and amplification of diagnostic genetic markers and comparison with reference databases. The analysis allows high-confidence identification, including separation of closely related species that cannot be reliably distinguished by anatomical characteristics alone.

Anatomical Comparison Under Microscopy

Samples are also assessed using standardised anatomical comparison techniques under magnification supported by reference collections. Anatomical methods complement DNA results and allow identification where molecular material is insufficient or degraded.

Iodine Starch test

The iodine test indicates the level of starch in the sample provided. Starch is present in recently living root tissue but quickly decays after death. The test may help indicate whether the material was recently living at the time of testing. The test is interpreted as follows:

- Abundant: recently living
- Moderate: residual starch
- Absent: older or dead tissue

SML GEOTECHNICAL

SUMMARY OF MOISTURE CONTENT AND ATTERBERG LIMIT DETERMINATIONS

Site Name:	Barn Hurst PE7 3UU	**Samples Received:**	03/03/2026
Reference:	MSI.1882	**Reported:**	01/04/2026

Position	Top Depth m	Sample Description	Roots or Rootlets (type)	Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Passing 425µm %	Modified PI %
BH1	USF	Light greyish brown, green, mottled dark brown, slightly gravelly CLAY.		40					
BH1	1.00	Light greyish brown, mottled white, slightly gravelly CLAY. Gravel is fine to medium stone.		45	75	27	48	97	46
BH1	1.50	Very light brown, mottled grey and orangeish brown, sandy CLAY.		18					
BH1	2.00	Very light brown, mottled grey and orangeish brown, sandy, gravelly CLAY. Gravel is fine to medium stone.		24	57	19	38	65	25

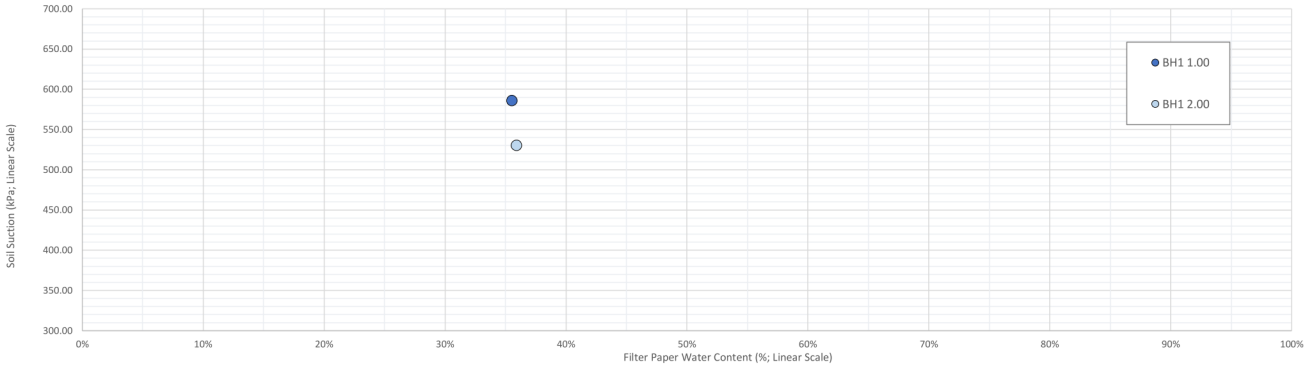
SML SUBSIDENCE
A SML Group Company

SOIL SUCTION

SUMMARY OF RESULTS

Project No	MSI.1882
Project Name	Barn Hurst PE7 3UU
Client	Sedgwick

Hole ID	Depth (m)	Duration of Test (Hr)	Moisture Content of Soil (%)	Filter Paper Position	Filter Paper Dry Mass (g)	Filter Paper Water Content (%)	Soil Suction (kPa)	Average Soil Suction (kPa)	Remarks
BH1	**1.00**	139	46.8	1	0.0326	44	129.299	**585.82**	
				2	0.0357	29	1066.624		
				3	0.0360	34	561.551		
BH1	**2.00**	139	22.0	1	0.0406	33	657.255	**530.22**	
				2	0.0274	44	123.940		
				3	0.0293	31	809.452		



All testing undertaken in accordance with BRE IP 4/93 "A method of determining the state of dessiccation in clay soils"

Site Photographs

Project Ref: MSI.01882

Site Name: Barnhurst Church Street, PE7 3UU

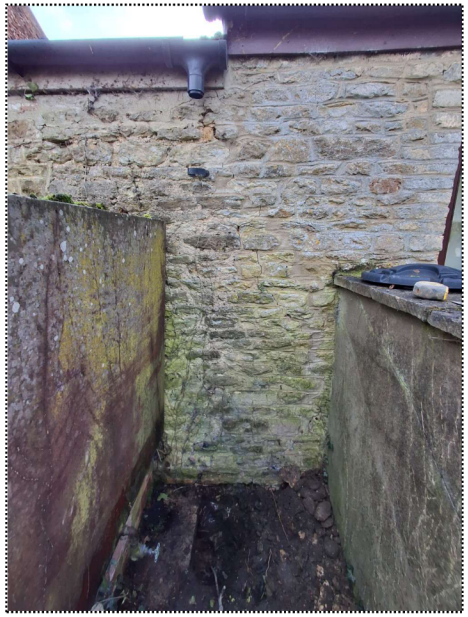
1.



2.



3.



4.



1) Front Elevation
2) TP/BH 01 & TP 02 Location
3) TP/BH 01 & TP 02 Location
4) TP/BH 01 & TP 02

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A SML Group Company

Site Photographs

Project Ref: MSI.01882

Site Name: Barnhurst Church Street, PE7 3UU

5.



6.



7.



5) TP/BH 01 & TP 02

6) TP/BH 01 & TP 02

7) TP/BH 01 & TP 02

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