



SITE INVESTIGATION FACTUAL REPORT

Geocore Site Investigations Ltd
Tralee Close, Kirkleatham Business Park, Redcar, Cleveland, TS10 5SG

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Geocore Control Sheet

Claim Number:

Client: Quest gates

Client Ref: QG1S1213503

Policy Holder:

Our Reference Number: HH/22/69374

Issue Date: 27/02/2023

Office: Geocore Site Investigations Ltd, Tralee Close, Redcar, TS10 5SG

Version: Feb-02

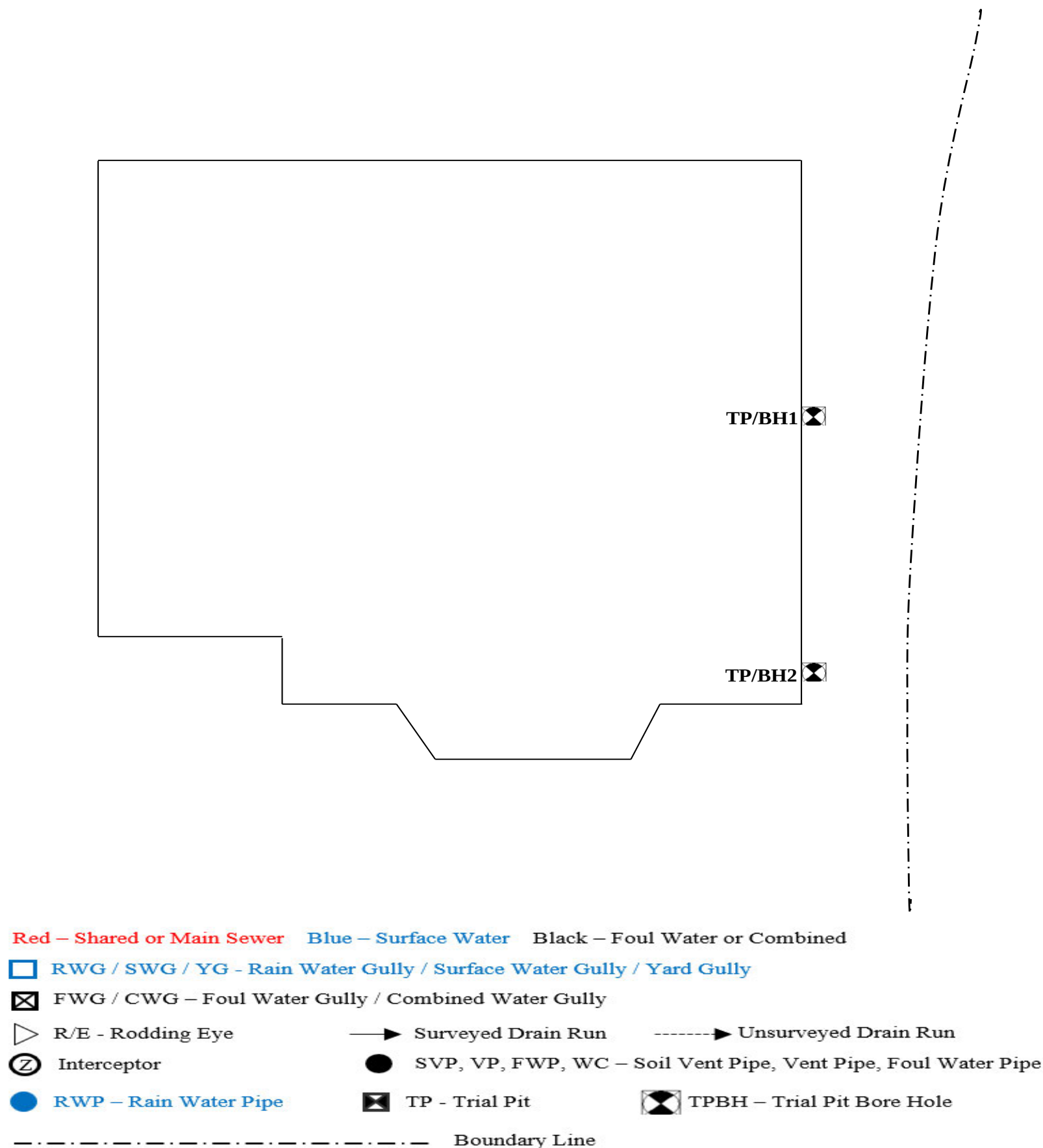
Author
Authors Name K.Barker
Title Administrator
Insert Signature K.Barker

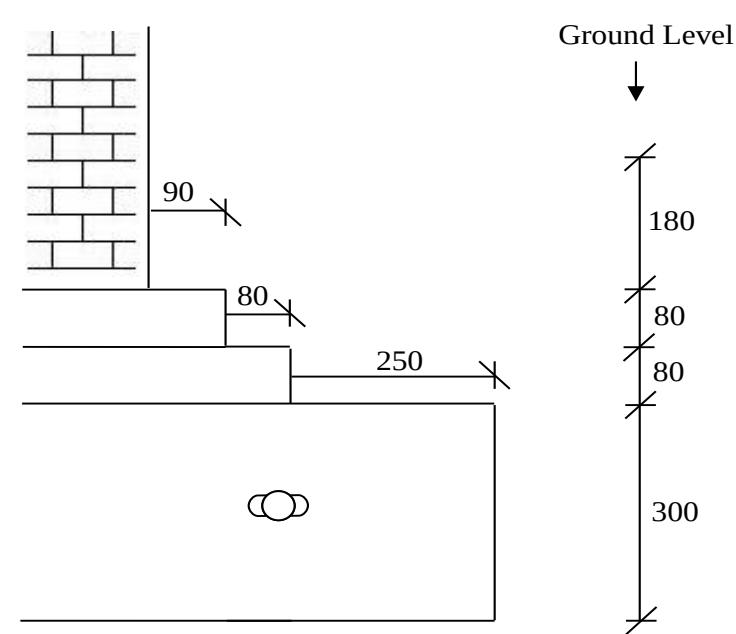
Technical Reviewer
Technical Reviewers Name D. Frank
Title Darren Frank
Insert Signature Drainage manager
D. Frank

Table 1 - Site Location

Site Crew	P. Beadnall / Thomas
Site Address & Postcode	2 Ringwood Avenue, London, N2 9NS
Date	31/01/2023

Figure 1: Site & Drainage Layout





For strata information, please refer to borehole log TPBH1.

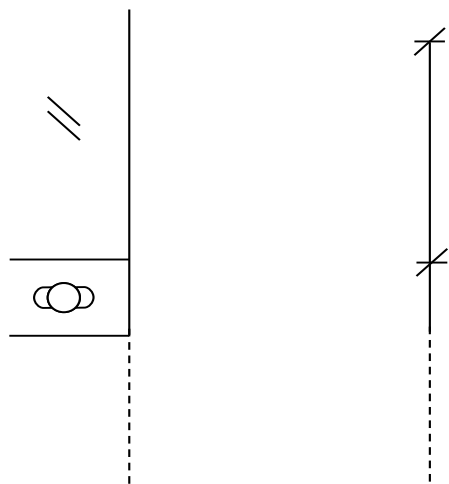
BOREHOLE LOG RECORD

Borehole Number 1

 BOREHOLE LOG  Geocore										
Location 2 Ringwood Avenue, London, N2 9NS								BOREHOLE No TP/BH1		
Job No HH/22/69374		Date 05-01-23		Ground Level (m)		Co-Ordinates ()				
Client Questgates								Sheet 1 of 1		
SAMPLES & TESTS				STRATA						
Depth	Type No	Test Result	Water	Reduced Level	Legend	Depth (Thickness)	DESCRIPTION			
0.64	D1 ROOTS HV	95kPa@0.64m				0.02	MADE GROUND Paving slabs.			
0.64-2.40				0.20		MADE GROUND Concrete.				
0.64				(0.44)		MADE GROUND Firm orangish brown mottled grey slightly sandy gravelly clay with roots. Gravel is of sub-rounded fine to coarse chalk and flint.				
				0.64		BASE OF FOUNDATIONS @ 0.64m.				
1.00	D2 HV	150kPa@1.0m					Stiff becoming locally very stiff with depth, orangish brown fissured grey slightly sandy gravelly CLAY with roots. Gravel is of sub-rounded fine to coarse chalk and flint.			
1.00										
1.50	D3 HV	145kPa@1.5m								
1.50										
2.00	D4 HV	140kPa@2.0m								
2.00										
2.50	D5 HV	150+kPa@2.5m								
2.50										
3.00	D6 HV	150kPa@3.0m								
3.00										
Boring Progress and Water Observations				Chiselling			Water Added		GENERAL REMARKS Borehole terminated at 3.0m. Excavation remained open and dry on completion.	
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours		From
All dimensions in metres Scale 1:25			Client Engineer Kelvin Zitha			Method/ Plant Used Handheld Window Sampler			Logged By A. Brown	

GEOCORE BH 69374.GPJ AUGUST 7:58 GPJ 27/02/23

TP/BH2 FOUNDATION DETAIL

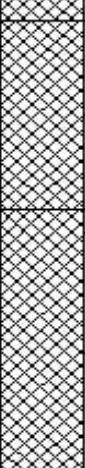


For strata information, please refer to borehole log TPBH2

Unable to determine depth of foundations due to buried services. No other appropriate location for TP/BH2

BOREHOLE LOG RECORD

Borehole Number 1

 BOREHOLE LOG  Geocore											
Location 2 Ringwood Avenue, London, N2 9NS										BOREHOLE No TP/BH2	
Job No HH/22/69374		Date 05-01-22		Ground Level (m)		Co-Ordinates ()					
Client Questgates										Sheet 1 of 1	
SAMPLES & TESTS			Water	STRATA					Instrument Backfill		
Depth	Type No	Test Result		Reduced Level	Legend	Depth (Thickness)	DESCRIPTION				
						0.02	MADE GROUND Paving slabs.				
						(0.16)	MADE GROUND Concrete.				
						0.18					
					(0.22)	MADE GROUND Firm brown gravelly slightly sandy clay with occasional cobbles. Gravel is of sandstone, chalk, flint, concrete and brick. Cobbles are of angular concrete, tile and brick.					
					0.40						
						Unable to establish the depth of foundations due to buried services.					
Boring Progress and Water Observations						Chiselling		Water Added		GENERAL REMARKS	
Date	Time	Depth	Depth	Casing Dia. mm	Water Dpt	From	To	Hours	From		To
											Trial pit abandoned at 0.4m due to buried services (gas and drainage systems).
All dimensions in metres Scale 1:6.25			Client Engineer Kelvin Zitha			Method/ Plant Used		Hand Tools		Logged By A.Brown	

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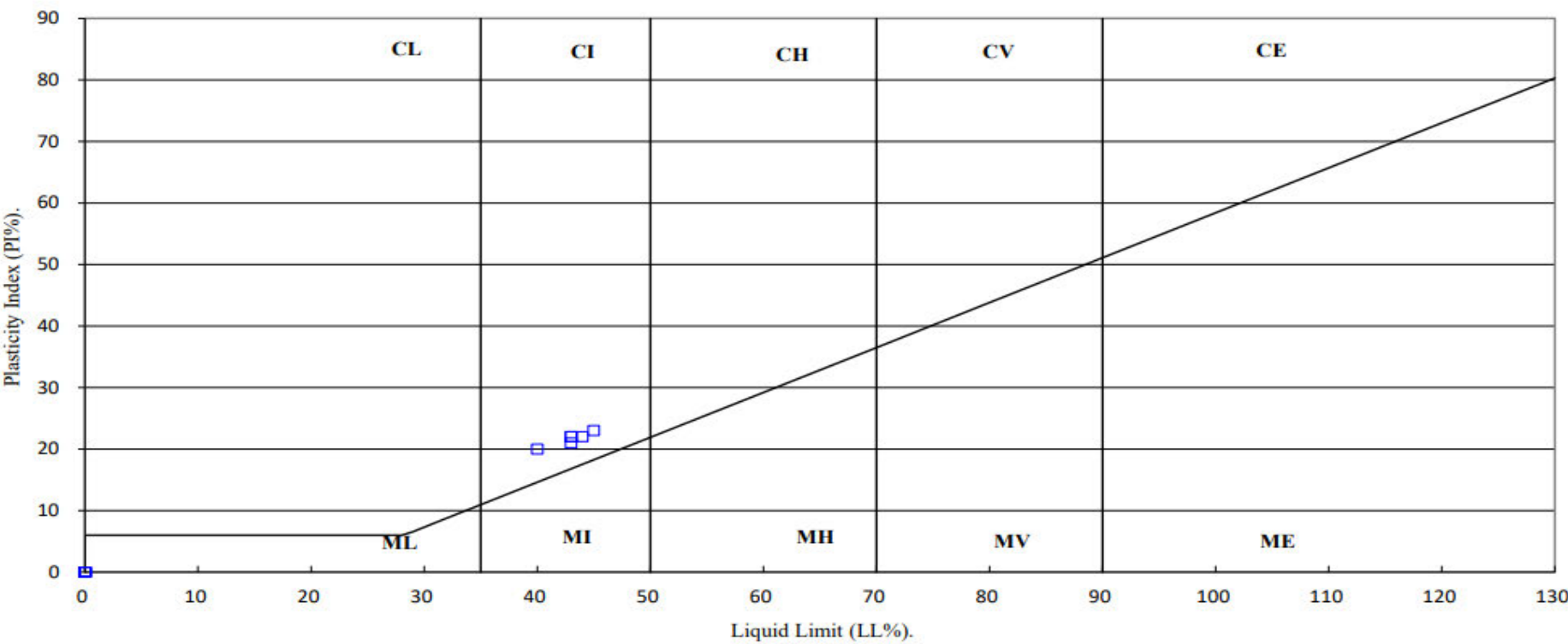
(BS1377 : PART 2 : 1990)

[illegible]

SYMBOLS : NP : Non Plastic

* : Liquid Limit and Plastic Limit Wet Sieved.

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.



SUMMARY OF SOIL CLASSIFICATION TESTS

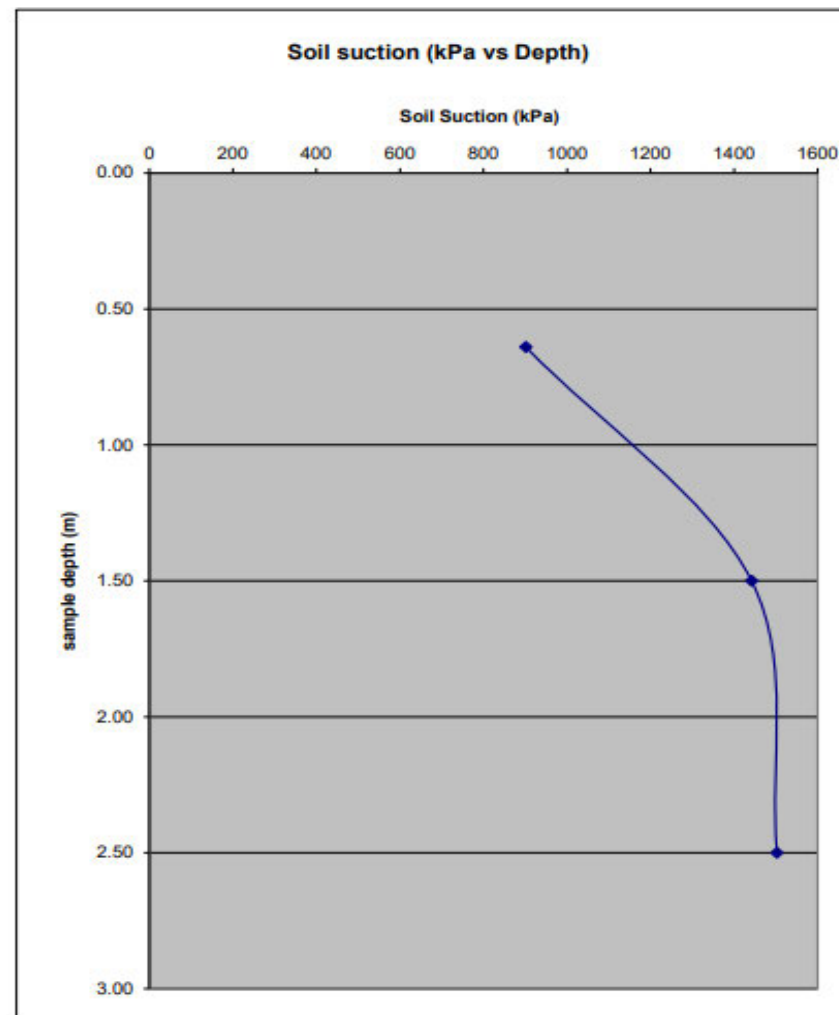
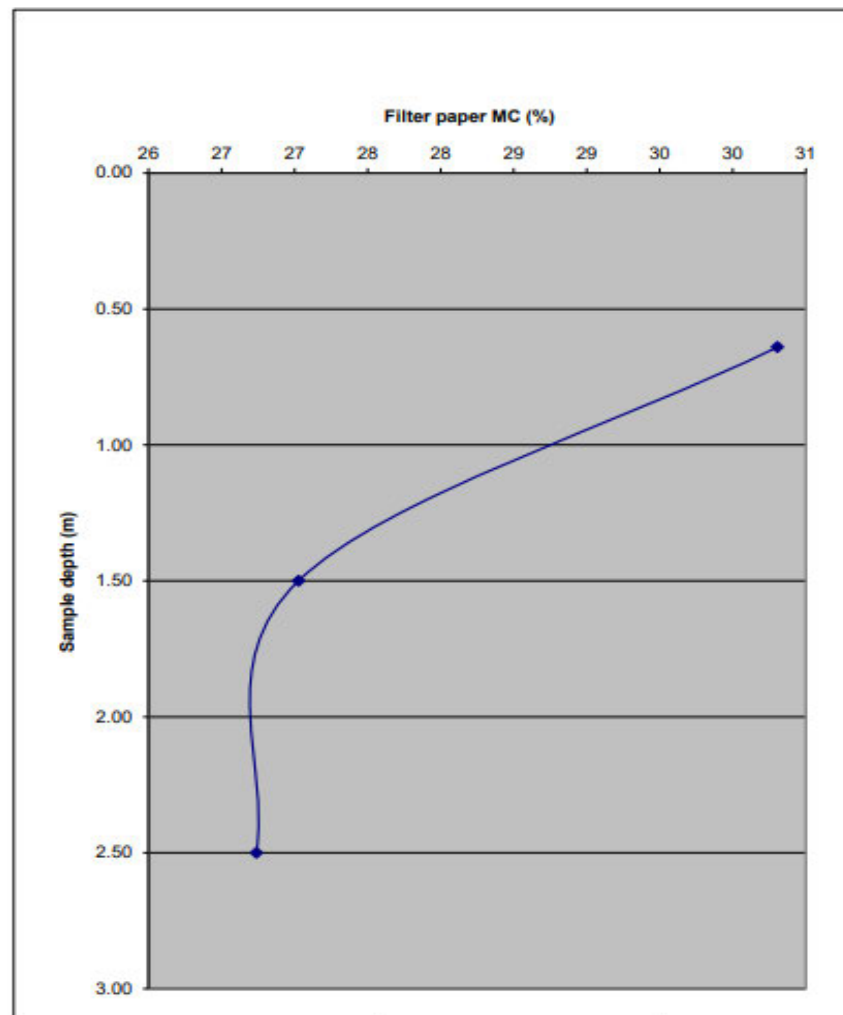
Soil Suction Test

BRE Information Paper IP 4/93 Febuary 1993 (CI/SfB p1)

[illegible]

Soil Suction Test - Graphical data

BRE Information Paper IP 4/93 February 1993 (CI/SfB p1)



ROOT ANALYSIS

Richardson's Botanical Identifications

Root identification
Vegetation surveys
Tree/Building investigations
Plant taxonomy

Geocore Site Investigations Limited

**Tralee Close
Kirkleatham Business Park
REDCAR**

Cleveland TS10 5SG

02/02/2023

Dr Ian B. K. Richardson
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James Richardson
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48-51 Whiteknights Road
Reading
RG6 7BB**

Tel: (0118) 888 8662 (Direct line)
E-mail: richardsoni@botanical.net
Web: www.botanical.net

Your ref: 88874
Our ref: 85/3913

Dear Sirs

2 Ringwood Avenue, London N2 9NS

The samples you sent in relation to the above on 05/01/2023 have been examined. Their structures were referable as follows:

TP/BH1, 0.64-2.40m

1 root: QUERCUS (Oak). 2 further samples, not examined in detail appeared similar under low magnification. Alive, recently*.

7 samples: unfortunately insufficient cells for identification.

I trust this is of help. Please call us if you have any queries; our Invoice is enclosed.

Yours faithfully

Dr Ian B K Richardson

* Based mainly on the Iodine test for starch. Starch is present in some cells of a living woody root, but is more or less rapidly broken down by soil micro-organisms on death of the root, sometimes before decay is evident. This result need not reflect the state of the parent tree.

* * Try out our web site on www.botanical.net * *

Identified with no information on vegetation, on or off site.

Run: 1	Dir: D/S	Pipe Dia(mm):	100	System:	F/W	Made Of:	PVC
From:	Access cap on SVP	Inv(m):	Above ground	To:	Run 4	Inv(m):	N/A
Metres	Faults/Defects					Internal Condition Grade (ICG)	Remarks
0	ST:						
0	WL: 0%						
0	GO: Access point at ground level						
0.1	GO: Line levels out						
0.3	LR: 45°						
0.86	MC: PVC to VC						
1.4	FH: Intersection of run 4					Grade 1	
Run: 2	Dir: D/S	Pipe Dia(mm):	100	System:	S/W	Made Of:	V/C
From:	RWG1	Inv(m):	0.3	To:	Run 5	Inv(m):	N/A
Metres	Faults/Defects					Internal Condition Grade (ICG)	Remarks
0	ST:						
0	WL: 0%						
0.1	LD: 45°						
0.3	LR: 45°						
0.4	RF						
0.5	FH: Junction of run 5						
Key: I/C = Inspection Chamber, Inv=Invert, RWG=Rainwater Gully, FWG=Foul Water Gully, CWG=Combined Water Gully							

CCTV SURVEY DETAILS

Run: 3	Dir: D/S	Pipe Dia(mm):	100	System:	S/W	Made Of:	V/C
From:	RWG 2	Inv(m):	0.3	To:	Run 5	Inv(m):	N/A
Metres	Faults/Defects					Internal Condition Grade (ICG)	Remarks
0	ST:						
0	WL: 0%						
0	LD: 45°						
0.68	JDL:					Grade 3	
0.68	CC: 9 o'clock to 10 o'clock					Grade 2	
0.68	LD: Vertical						
0.84	CC: 2 o'clock to 6 o'clock					Grade 2	
1.1	FH: Junction of run 5						
Run: 4	Dir: U/S	Pipe Dia(mm):	100	System:	F/W	Made Of:	V/C
From:	I/C2	Inv(m):	1.1	To:	I/C1	Inv(m):	0.6
Metres	Faults/Defects					Internal Condition Grade (ICG)	Remarks
0	ST:						
0	WL: 10%						Running water
11	JN: 9 o'clock from SVP						
14.1	FH: I/C1						

Key: I/C = Inspection Chamber, Inv=Invert, RWG=Rainwater Gully, FWG=Foul Water Gully, CWG=Combined Water Gully

SURVEY NOTES

The operatives on site found that the property is served by a separate foul and surface water system. There are two manholes on site which serve the foul system but there is no visible manholes for the surface water system.

Run 1: Access point in the SVP downstream to the junction with Run 4.

No defects where identified.

Run 2: RWG 1 downstream to the junction with Run 5.

Defects where identified.

Run 3: RWG 2 downstream to the junction with Run 5.

Defects where identified.

Run 4: I/C 2 upstream I/C 1.

No defects where identified.

Run 5: surface water.

The operatives where unable to carry out a survey of Run 5 as no manhole upstream or downstream of the RWG 1 and RWG 2.

RECOMMENDATIONS

NOTE: The following recommendations have been made, based on the information provided by the CCTV survey.

Geocore are unable to confirm if the defects identified from the investigation are the cause of the potential subsidence. Any decision made is the responsibility of the client.

Item 1: Run 2: RWG 1 downstream includes the junction with Run 5.

Excavate up to 1 metre of pipe downstream of the gully (including the junction of Run 5)

Carry out high pressure water clean and CCTV survey downstream of Run 5. Report findings to client.

Please note that there is a gas pipe in the area of repair.

Item 2: Run 3: RWG 2

Excavate 1 metre of pipe downstream of the gully to the junction of Run 5.

[illegible]

DRAINAGE KEY CODES

Condition Grades for Clay ware, Concrete and Plastic Sewer Pipes	
5	• Already collapsed • Deformation >10% and broken • Extensive areas of fabric missing • Fracture with deformation >10%
4	• Broken • Deformation >10% and broken • Fracture with deformation 6-10% • Multiple fracture • Serious loss of level • Serious joint defects with voids or soil visible (open joint with >50mm soil of void visible or joint displacement >25% diameter) • Surface damage- spalling large (entire surface of brick missing) • Surface damage- wear large (entire surface of brick missing)
3	• Fracture with no deformation or deformation <5% • Longitudinal cracking with or multiple cracking • Minor loss of level • Severe joint defects, i.e. open joint (large) or displaced joint (large) • Surface damage- spalling medium (large areas of chipped brick) • Surface damage- wear medium (entire surface of brick missing)
2	• Circumferential crack • Moderate joint defects, i.e. open joint (medium) or displaced joint (medium) • Surface damage- spalling slight (small fragments breaking away from the surface) • Surface damage- wear slight (increased roughness)
1	• No or slight structural defects
Note: Deformed sewers that have subsequently been relined with structural lining can normally be considered to have no deformation.	

DRAINAGE CODES

Code	Description
B	Broken pipe at/from __ to __ o'clock
CC	Crack circumferential from __ to __ o'clock
CL	Crack longitudinal at __ o'clock
CM	Cracks multiple from __ to __ o'clock
CN	Connection at __ o'clock, diameter is __mm
CNI	Connection as __ o'clock, diameter is __mm, intrusion at __mm
CU	Camera underwater
CX	Connection defective at __ o'clock
D	Deformed sewer __%
DC	Dimension of sewer changes at this point
DE	Debris (non-silt/grease) __% cross-sectional loss
DEG	Debris grease __% cross sectional area loss
DES	Debris silt __% cross-sectional area loss
FC	Fracture circumferential from __ to __ o'clock
FL	Fracture longitudinal at __ o'clock
FM	Fractures longitudinal at __ o'clock
GO	General observations at this point
H	Hole in sewer at __ o'clock
JDM	Joint displaced medium
JDL	Joint displaced large
JN	Junction at __ o'clock, diameter __mm
JX	Junction defective as __ o'clock, diameter __mm
LC	Lining of sewer changes/starts/finishes at this point
LD	Line of sewer deviates down
LL	Line of sewer deviates left
LR	Line of sewer deviates right
LU	Line of sewers deviates up
MC	Material of sewer changes at this point
MH	Manhole/node
OB	Obstruction __% height/diameter loss
OJL	Open joint large
OJM	Open joint medium
RFJ	Roots fine (at joint)
RMJ	Roots mass __% cross-sectional area loss (at joint)
RTJ	Roots tap (at joint)
SA	Survey abandoned
WL	Water level % height/diameter

X	Sewer collapsed __% cross sectional area loss
FH	End of survey