

**CCTV REPORT FOR: 9 RUDLANDS
IPSWICH
SUFFOLK
IP8 3RQ**

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ROOT IDENTIFICATION
LIMITATION OF REPORT



Client: 360GlobalNet
Regus House
Herald Way
Pegasus Business Park
Castle Donnington
DE74 2TZ

Insured: Mrs J Oakley
Reference: DLG-SN-20-002038 Ins Ref: 074634619

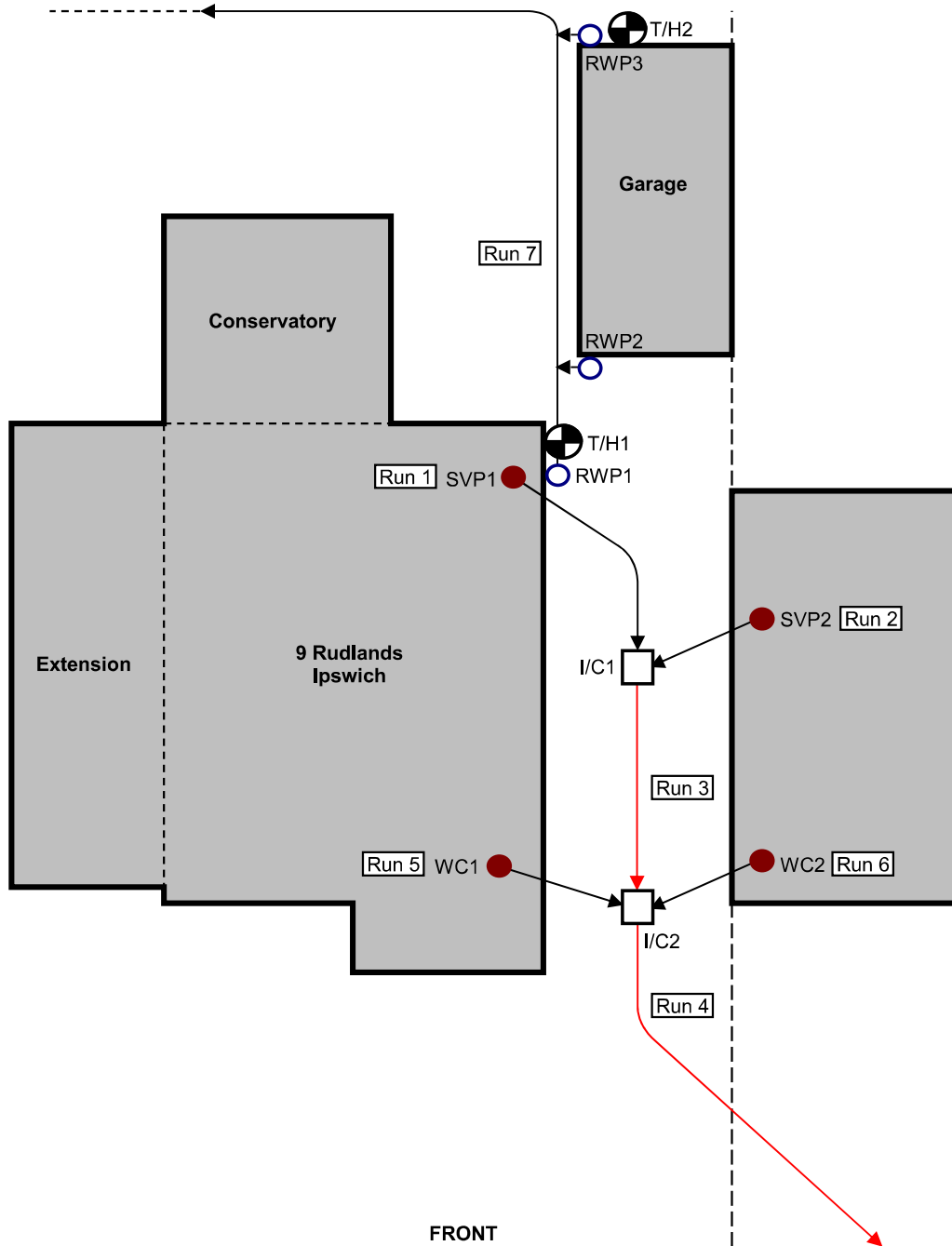
1st Site Visit: 13-Oct-20
1st Report Date: 25-Nov-20

2nd Site Visit: 03-Nov-20
2nd Report Date: 00-Jan-00

SITE AND DRAINAGE LAYOUT

Site Crew: MF / DJ

Date: 13-Oct-20



(This plan is not to be scaled and is provided to illustrate general layout only)

General Comments:

Note: Runs shown in red have been adopted by the local water authority.

- Key :**
- = Storm Gully
 - = Storm Pipe
 - = Foul Gully
 - = W/C or Soil Pipe
 - = Inspection Chamber
 - = Rodding Eye
 - = Surveyed pipe indicating flow
 - - - - - = Unsurveyed pipe
 - = Exploratory Hole (hand dug pit and/or hand auger)
 - = Boundary line
 - = Hedges & Shrubs
 - = Trees & bushes
 - = Area of damage



Drainage
Repair Company
CCTV SURVEY DETAILS

Site Crew: MF / DJ Date: 13-Oct-20

RUN: 1 Pipe Dia. (mm): 100 System: Foul Water Made of: Glazed Clay
From: I/C1 Inv (m): 0.70 Upstream To: SVP1 Inv (m): n/a

Metres	Faults / Defects	Remarks
0.00		At I/C1
1.10		Pipe bends left
1.30		Pipe bends left
1.50	Circumferential Crack 12 to 6 o'clock	
2.20		At rest bend to SVP1
		End of survey

RUN: 2 Pipe Dia. (mm): 100 System: Foul Water Made of: Glazed Clay
From: I/C1 Inv (m): 0.70 Upstream To: SVP2 Inv (m): n/a

Metres	Faults / Defects	Remarks
0.00		At I/C1
1.00	No Visible Defects	At rest bend to SVP2 (next door)
		End of survey

RUN: 3 Pipe Dia. (mm): 100 System: Foul Water Made of: Glazed Clay
From: I/C1 Inv (m): 0.70 Downstream To: I/C2 Inv (m): 0.90

Metres	Faults / Defects	Remarks
0.00		At I/C1
3.00	No Visible Defects	Into I/C2
		End of survey

RUN: 4 Pipe Dia. (mm): 100 System: Foul Water Made of: Glazed Clay
From: I/C2 Inv (m): 0.90 Downstream To: Main Sewer Inv (m): n/a

Metres	Faults / Defects	Remarks
0.00		At I/C2
1.70		Pipe bends left
5.00	No Visible Defects	Past area of concern
		End of survey

RUN: 5 Pipe Dia. (mm): 100 System: Foul Water Made of: Glazed Clay
From: I/C2 Inv (m): 0.90 Upstream To: WC1 Inv (m): n/a

Metres	Faults / Defects	Remarks
0.00		At I/C2
1.50	No Visible Defects	At rest bend to SC1
		End of survey

Defects shown in **RED** relate to runs adopted by the Local Water Authority



Drainage
Repair Company
CCTV SURVEY DETAILS

Site Crew: MF / DJ Date: 13-Oct-20

RUN: 6 **Pipe Dia. (mm):** 100 **System:** Foul Water **Made of:** Glazed Clay
From: I/C2 **Inv (m):** 0.90 Upstream **To:** WC2 **Inv (m):** n/a

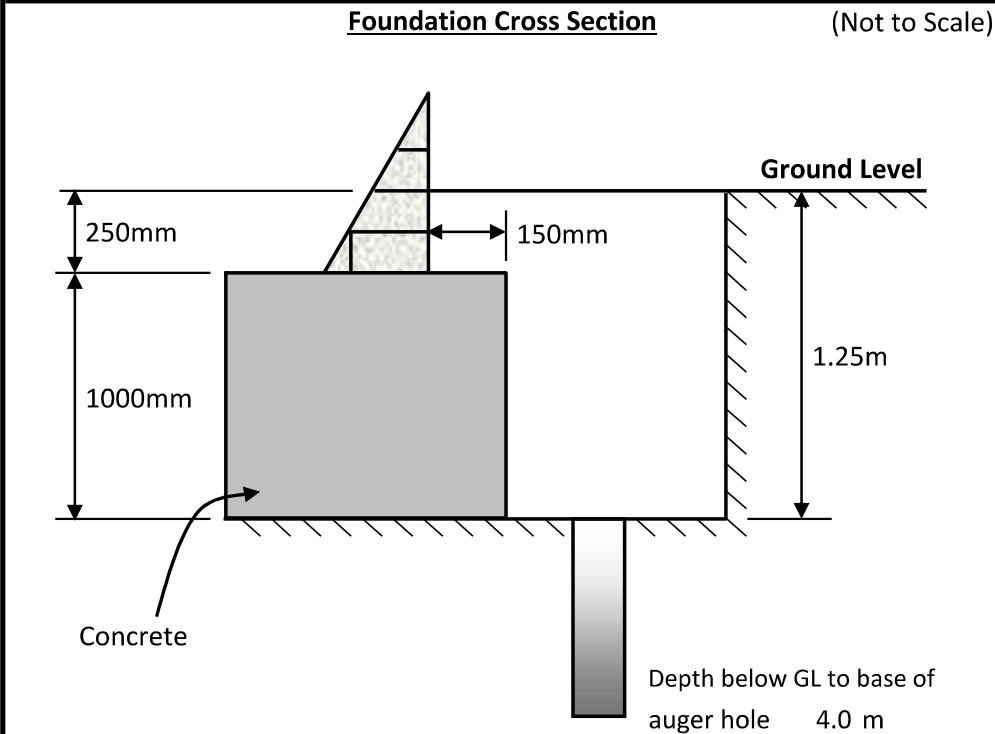
Metres	Faults / Defects	Remarks
0.00		At I/C2
1.00	No Visible Defects	At rest bend to WC2 (next door)
		End of survey

RUN: 7 **Pipe Dia. (mm):** 100 **System:** Storm Water **Made of:** Glazed Clay
From: RWP1 Access Cut **Inv (m):** n/a Downstream **To:** Unknown **Inv (m):** n/a

Metres	Faults / Defects	Remarks
0.00		At Access Cut
1.40		Inlet at 3 o'clock to RWP2
5.40		Inlet at 3 o'clock to RWP3
10.00	No Visible Defects	Past area of concern
		End of survey

RWP2 and RWP3 drop directly onto Run 7.

Location: **Rear Right Corner of House** T/H No. **1**
 Ground Surface: **Damp** Weather: **Dry** Date: **13-Oct-20**



Roots Depth & Diameter:
 Down to 1.5m

 Water Depth Hit & Rise:
 None observed on site

 Reason for Termination :
 Hole at instructed depth

Depth (m)	Soil Descriptions <i>(NB: Field crew description only)</i>	Test Type	Depth (m)	
			From	To
G.L.				
1.25	Friable light brown very gravelly very sandy CLAY			
1.50	Firm brown slightly gravelly CLAY			
3.50	Firm brown CLAY			
4.00	End of Borehole			

Photograph



General Comments :
 Run 7 visible in trial hole.

Key: Mac=Macintosh Probe, V(n)=Natural Shear Vane, P.P. = Pocket Penetrometer



FOUNDATION RECORD

Location: **Rear Left Corner of Garage**

T/H No. **2**

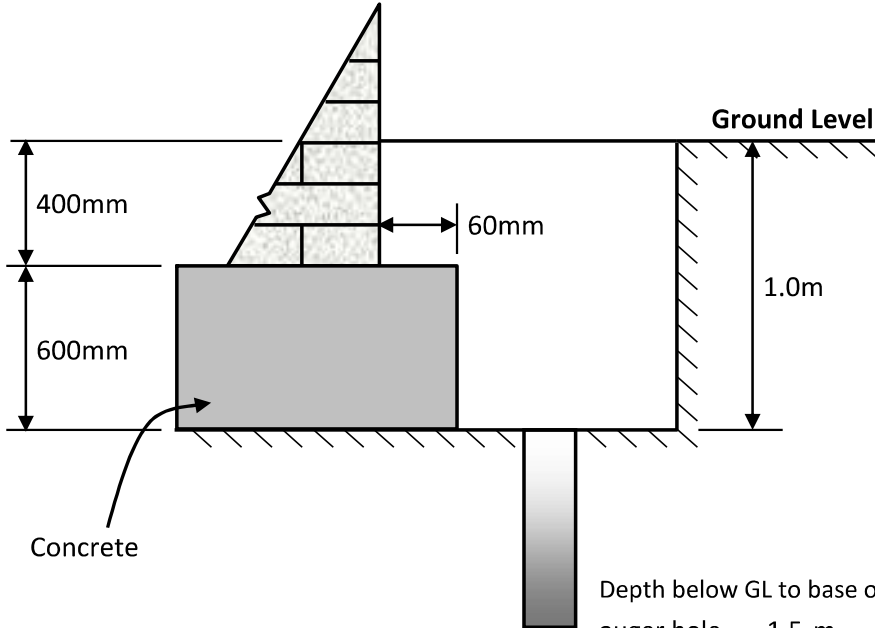
Ground Surface: **Damp**

Weather: **Dry**

Date: **13-Oct-20**

Foundation Cross Section

(Not to Scale)



Roots Depth & Diameter:

Down to 1.5m

Water Depth Hit & Rise:

None observed on site

Reason for Termination :

Encountered obstruction
Friable ground

Depth (m)	Soil Descriptions <i>(NB: Field crew description only)</i>	Test Type	Depth (m)	
			From	To
G.L.				
1.00	Friable light brown gravelly sandy CLAY			
1.50	End of Borehole			

Photograph



General Comments :

Run 7 visible in trial hole.

Key: Mac=Macintosh Probe, V(n)=Natural Shear Vane, P.P. = Pocket Penetrometer

INVESTIGATION SUMMARY

1.0 EXECUTIVE SUMMARY

Brief:	The Drainage Repair Company Ltd were commissioned to undertake a CCTV survey / inspection of the drainage at the property.
Specific Area of Interest:	Accessible drainage to rear and right of the property.
System Access:	Inspection chambers to right of property, access cur to RWP1.
Visual Survey:	RWP2 and RWP3 drop directly on to Run 7.
Water Pressure Test:	No

2.0 SUMMARY OF FINDINGS

Defects requiring repair:	Yes
Is any damaged section shared:	No
No. of properties sharing:	N/A
Age of property / system:	Unknown
Cause of damage:	N/A



INVESTIGATION SUMMARY

3.0 GENERAL SUMMARY

The results of the CCTV / inspection survey to the underground drainage system at the above address are as follows:

Run 1 - Foul - Private:

Circumferential crack.

Run 2 - Foul - Private (next door):

No visible pipework defects.

Run 3 - Foul - Shared, Local Water Authority:

No visible pipework defects.

Run 4 - Foul - Shared, Local Water Authority:

No visible pipework defects.

Run 5 - Foul - Private:

No visible pipework defects.

Run 6 - Foul - Private (next door):

No visible pipework defects.

Run 7 - Storm - Private:

No visible pipework defects.

Small section of Run 7 pipework was replaced due to damage caused when performing access cut and T/H1.

RECOMMENDATIONS & QUOTATION

4.0 RECOMMENDATIONS

We would recommend returning the system to a watertight condition by repairing the defects as follows:

Run 1:

Carry out high pressure water jetting to prepare pipework for lining. Install a flexible structural liner from I/C1 upstream to SVP1 rest bend.

5.0 QUOTATION

Run 1:

- Carry out high pressure water jetting
- Install a flexible structural liner from I/C1 upstream to SVP1 rest bend

Total ex.VAT	£750.00
VAT	£150.00
Total inc.VAT	£900.00

Grand Total - All Works ex.VAT	£750.00
VAT	£150.00
Grand Total - All Works inc.VAT	£900.00



T/H1 - Run 7 visible



T/H1 - Repair to Run 7 following survey



T/H2



T/H2



I/C1



I/C2

LABORATORY TESTING RESULTS

SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
TP/BH1			1.20	1.50	Light brown very gravelly very sandy CLAY.
TP/BH1			1.50	2.00	Brown slightly gravelly CLAY.
TP/BH1			2.00	2.50	Brown slightly gravelly CLAY.
TP/BH1			2.50	3.00	Brown slightly gravelly CLAY.
TP/BH1			3.00	3.50	Brown slightly gravelly CLAY.
TP/BH1			3.50	4.00	Brown CLAY.

PSL Professional Soils Laboratory	Contract No:	PSL20/6231
	Client Ref:	DLG-SN-20-002038
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	 4043	



SUMMARY OF SOIL CLASSIFICATION TESTS

(BS1377 : PART 2 : 1990)

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Moisture Content % Clause 3.2	Linear Shrinkage % Clause 6.5	Particle Density Mg/m ³ Clause 8.2	Liquid Limit % Clause 4.3/4	Plastic Limit % Clause 5.3	Plasticity Index % Clause 5.4	Passing .425mm %	Remarks
TP/BH1			1.20	1.50	19			29	17	12	72	Low plasticity CL.
TP/BH1			1.50	2.00	37							
TP/BH1			2.00	2.50	36		84		35	49	98	Very high plasticity CV.
TP/BH1			2.50	3.00	39							
TP/BH1			3.00	3.50	49		73		32	41	100	Very high plasticity CV.
TP/BH1			3.50	4.00	51							

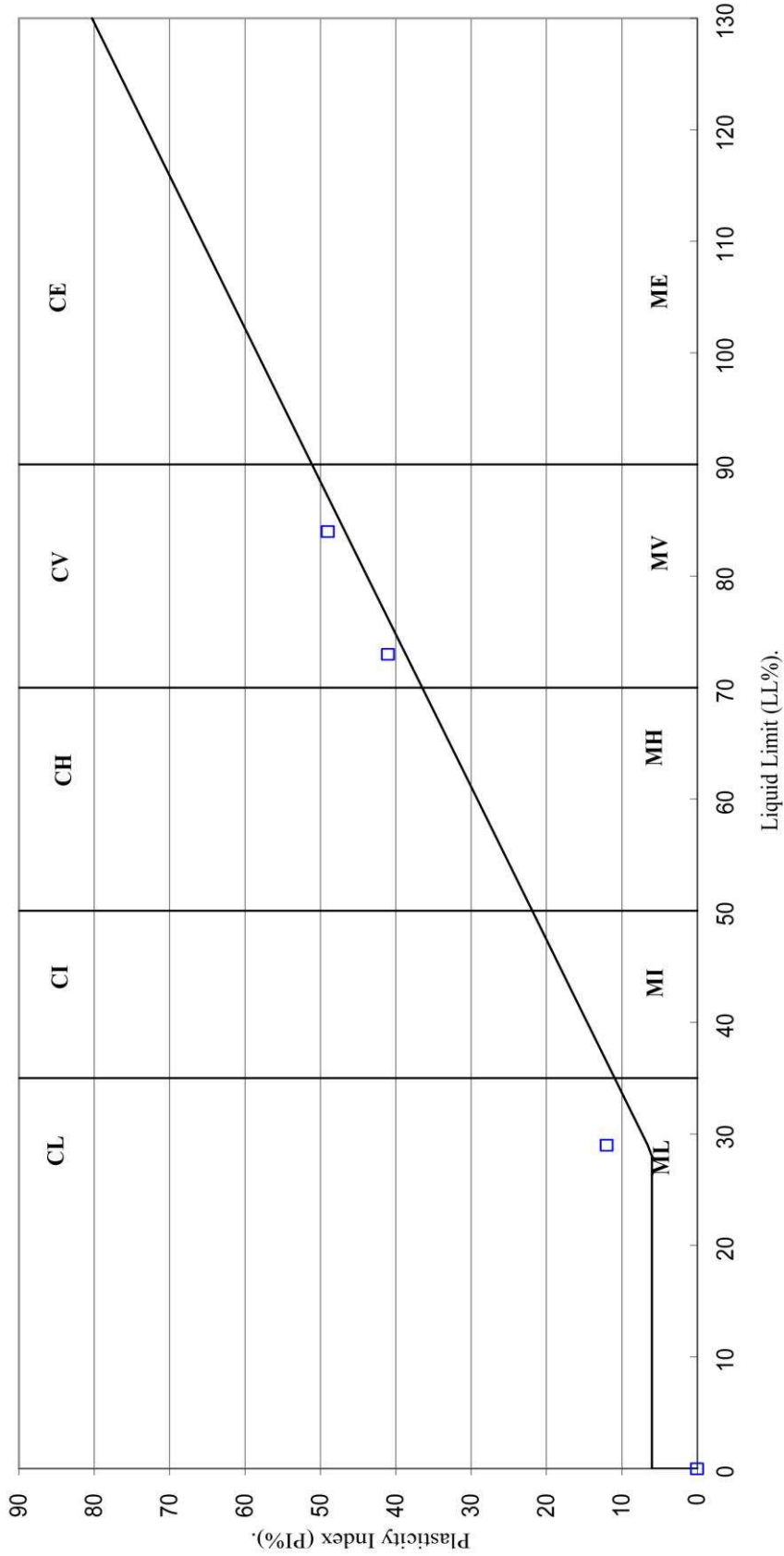
* : Liquid Limit and Plastic Limit Wet Sieved.

SYMBOLS : NP : Non Plastic

 4043		Contract No: PSL20/6231 Client Ref: DLG-SN-20-002038
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LABORATORY TESTING RESULTS

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.



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LABORATORY TESTING RESULTS

Summary of results

One Dimensional Swell / Strain test - In House Method

Hole Number	Sample Number	Sample Type	Depth m	Strain	Dd (mm)	Moisture Content (%)	Remarks
TP/BH1			1.20	0.0011	0.6	19	
TP/BH1			2.00	0.0162	6.5	36	
TP/BH1			3.00	0.0019	0.9	49	
Total column Dd TP/BH1 =				8.1 mm			

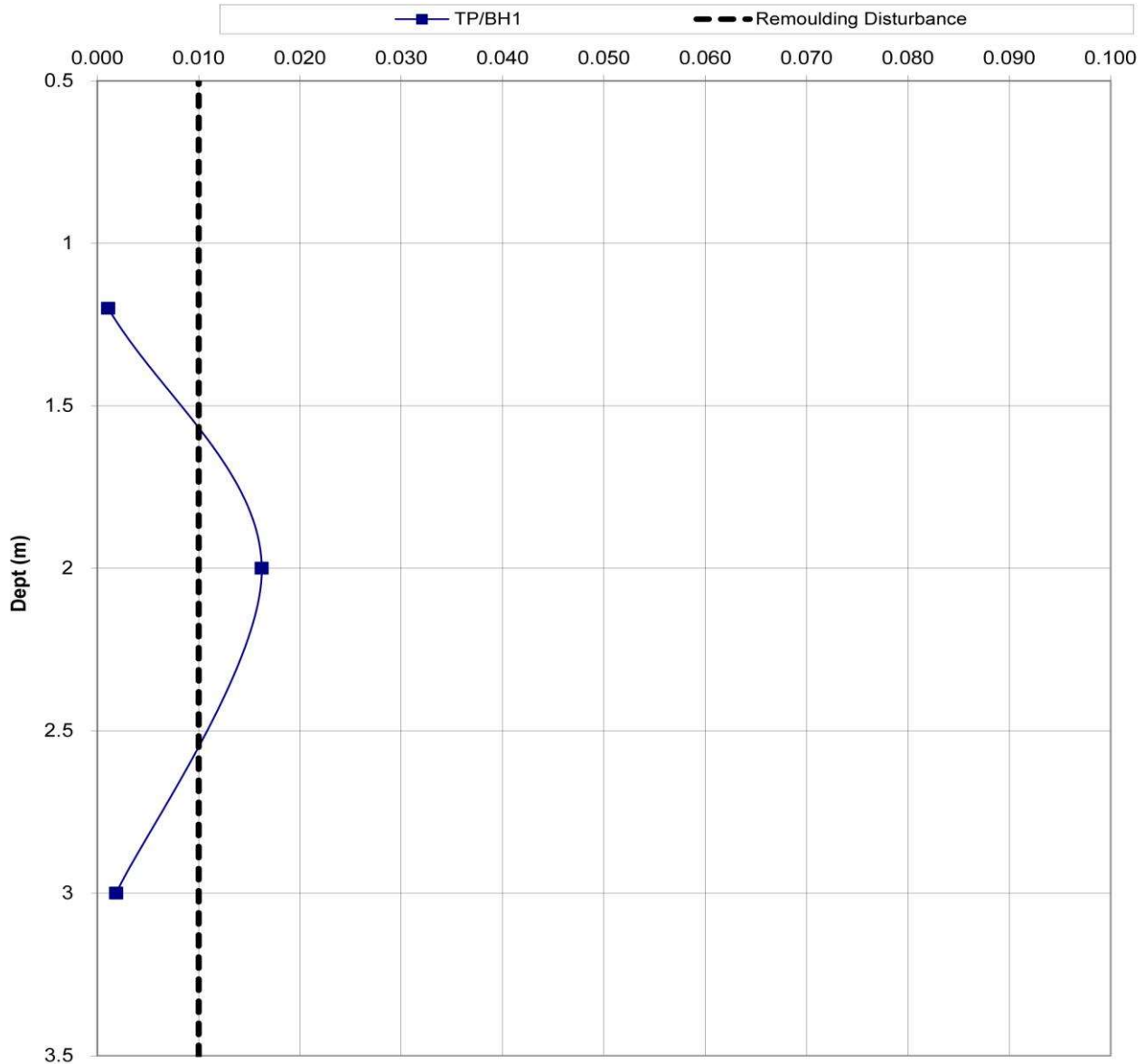


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Oedometer Strain

One Dimensional Swell / Strain test - In House Method



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SUMMARY OF LABORATORY SOIL DESCRIPTIONS

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Description of Sample
TP/BH2			1.00	1.50	Light brown gravelly sandy CLAY.

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LABORATORY TESTING RESULTS

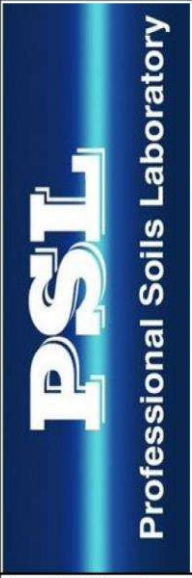
SUMMARY OF SOIL CLASSIFICATION TESTS

(BS1377 : PART 2 : 1990)

Hole Number	Sample Number	Sample Type	Top Depth m	Base Depth m	Moisture Content % Clause 3.2	Linear Shrinkage % Clause 6.5	Particle Density Mg/m ³ Clause 8.2	Liquid Limit % Clause 4.3/4	Plastic Limit % Clause 5.3	Plasticity Index % Clause 5.4	Passing .425mm %	Remarks
TP/BH2			1.00	1.50	17			37	17	20	82	Intermediate plasticity Cl.

SYMBOLS : NP : Non Plastic

* : Liquid Limit and Plastic Limit Wet Sieved.

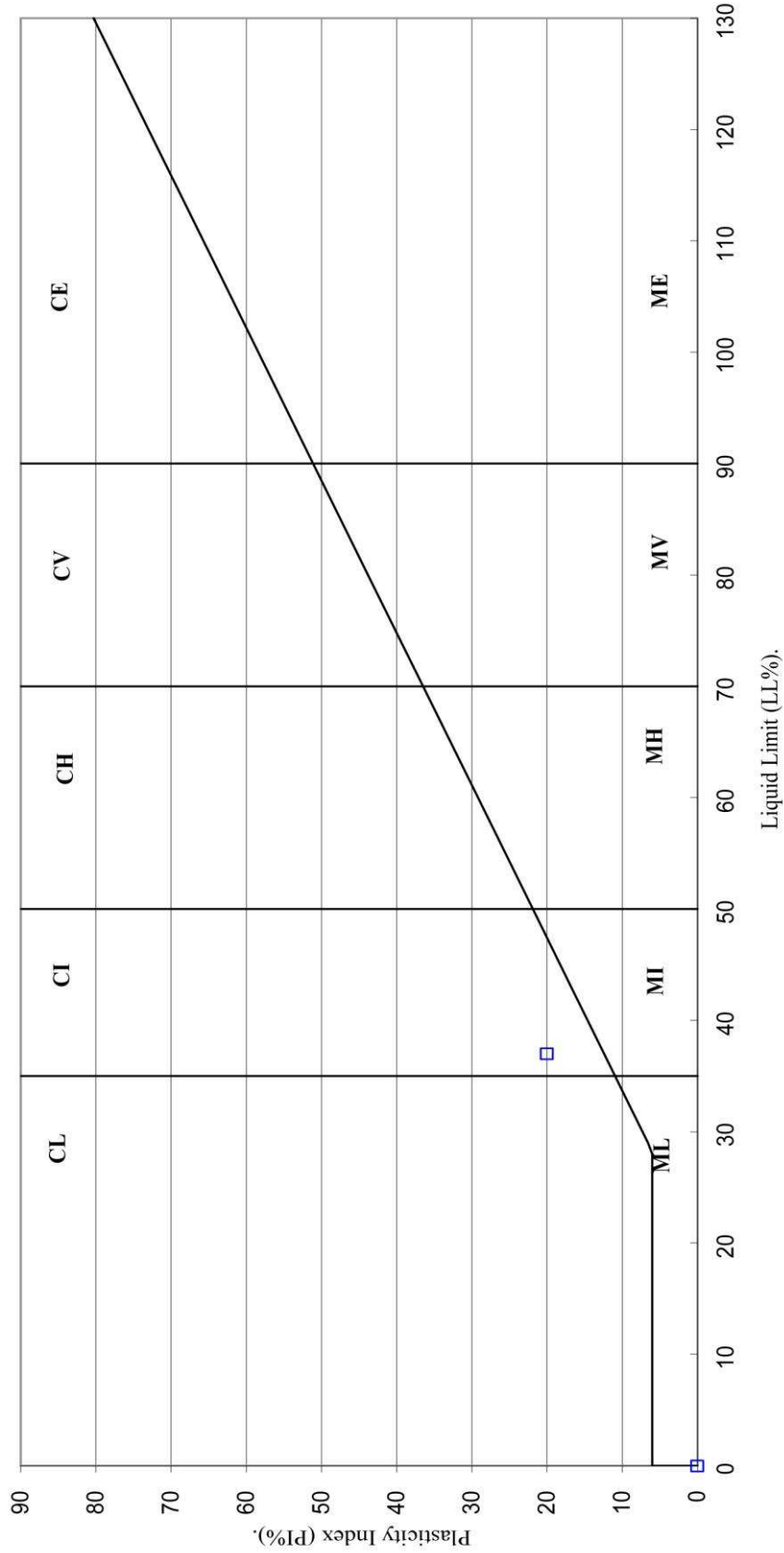


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LABORATORY TESTING RESULTS

PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.



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Drainage
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LABORATORY TESTING RESULTS

Summary of results

One Dimensional Swell / Strain test - In House Method

Hole Number	Sample Number	Sample Type	Depth m	Strain	Dd (mm)	Moisture Content (%)	Remarks
TP/BH2			1.00	0.0000	0.0	17	
Total column Dd TP/BH2 =				0.0 mm			



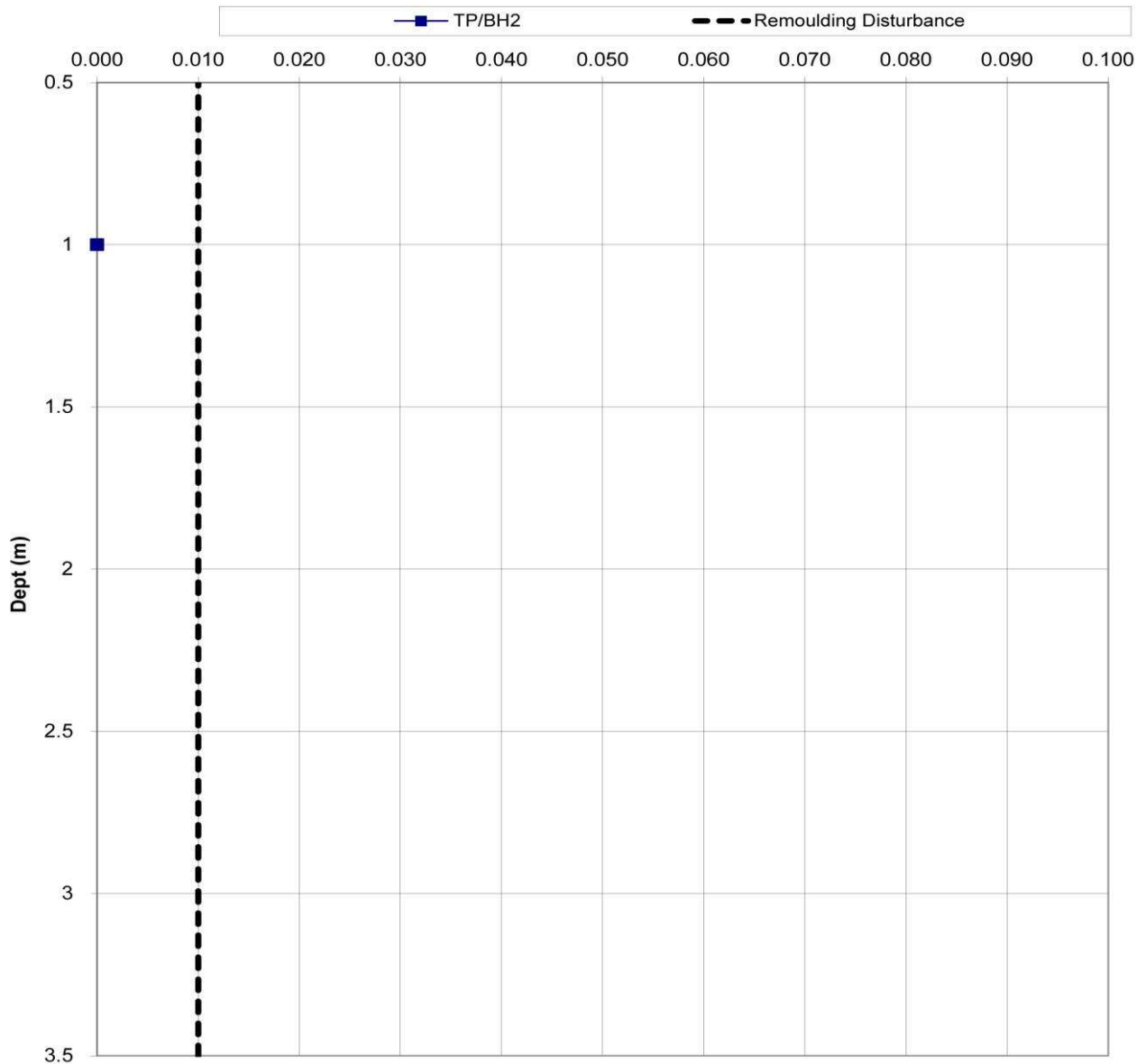
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Oedometer Strain

One Dimensional Swell / Strain test - In House Method



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Contract No:

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Client Ref:

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Root identification
Vegetation surveys
Tree/Building investigations
Plant taxonomy

Richardson's Botanical Identifications

The Drainage Repair Company
Suite 15, Leatherline House
71 Narrow Lane
AYLESTONE
Leicester LE2 8NA

23/11/2020

Dr Ian B K Richardson
BSc, MSc, PhD, MRSB, FLS
James Richardson
BSc (Hons. Biology)

Enterprise House
49-51 Whiteknights Road
Reading
RG6 7BB

Tel: (0118) 986 9552 (*Direct line*)
E-mail: richardsons@botanical.net
Web: www.botanical.net

Your ref: **Root ID**

Our ref: 81/0704

Dear Lisa

9 Rudlands Ipswich IP8 3RQ

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

TP/BH1, 1.25-1.50m	
4 no.	Examined root: most referable to QUERCUS (Oak). This was a very IMMATURE sample.
TP/BH2, 1.00-1.50m	
2 no.	Examined root: QUERCUS (Oak).
2 no.	Examined root: PRUNUS species (Cherries, Plums and Damsons, Almonds, Peaches and Apricots, Blackthorn/Sloe, as well as the shrubby Cherry-laurel and Portugal-laurel).
1 no.	A piece of BARK only, insufficient material for identification.

Click here for more information: [PRUNUS](#) [QUERCUS](#)

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

Yours sincerely

Dr Ian B K Richardson

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



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Repair Company

LIMITATION OF REPORT

We were commissioned to carry out an inspection of the accessible areas of the drainage to the property, identifying any major defects and recommending any repair works that may be necessary. It should be appreciated that the exact layout of the system cannot be confirmed without the exposure of inaccessible branches and connections etc.

The lack of any significant defects within the main drainage line should not be regarded as a guarantee of water tightness. Defects may be encountered upon exposure of inaccessible branches and gullies etc.

The contents of this report are strictly confined to comments concerning those terms outlined above. It is not a structural survey and must not be construed as such.

The views expressed in this report are based entirely upon a visual examination of the drainage, supported by information obtained from a CCTV inspection / water pressure test.