



# Geotechnical Survey Report

FSI Ref: 27992  
Issue Date: May 2024

Risk Address: 7 Rogers Ruff  
Northwood  
HA6 2FD

Managing Director:  
Finance Director:

Martin Rush MSc FGS  
Louise Banks BSc (Hons)

Laboratory Manager:

Jade McLellan

Senior Geologist:  
Assistant Geologist:  
Geotechnical Assistant:

Thomas Lee BSc (Hons)  
Sarah Brand  
Bradley Webb



**FASTRACK**

Telephone: 0844 3358908

Fax: 0844 3358907

Email: [enquiries@fastrackgroup.co.uk](mailto:enquiries@fastrackgroup.co.uk)

Web: [www.fastrackgroup.co.uk](http://www.fastrackgroup.co.uk)

197-199 High Street, Maldon, Essex CM9 5BU

**Appendix No:** 1

**FSI Ref:** 27992

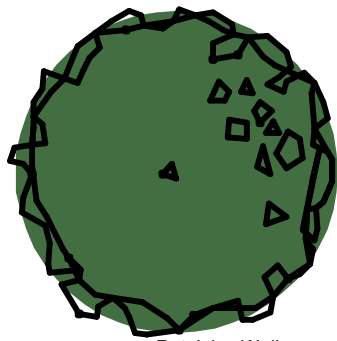
## SITE PLAN

**Property Address:** 7 Rogers Ruff, Northwood, HA6 2FD

**Client Claim Ref:** N/A

**Survey date:** 22/04/2024

**Operative:** SE3



Retaining Wall

TP/BH1



#7

Front

**Scale:**

NTS

**Drawn by:**

BW

**Key:**



Trial Pit



Borehole



Manholes



Rain Water Pipe

Soil & Vent Pipe

Surface Water Gully

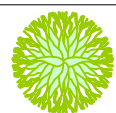
Foul Water Gully



Shrub



Tree (Conifer)



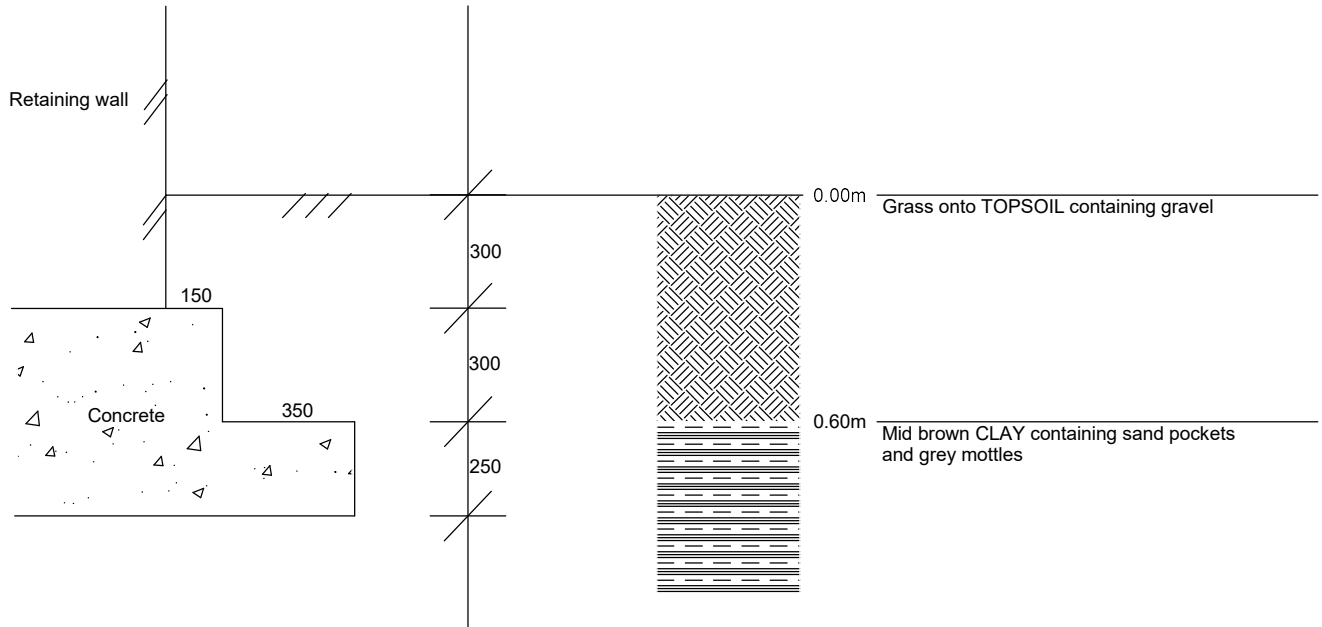
Tree (Deciduous)

## TRIAL PIT 1

**Property Address:** 7 Rogers Ruff, Northwood, HA6 2FD

**Client Claim Ref:** N/A

**Survey date:**22/04/2024

**Operative:** SE3


D1 @ F.L. (0.85m)

V = 56-50kPa

Founding strata: Mid brown CLAY containing sand pockets and grey mottles

**Trial Pit Location:**



**Drawn by:**

BW

**Scale:**

1:20

D= small disturbed sample, B= large bulk sample, U= undisturbed sample,  
MP= mackintosh probe blow counts, V= shear vane reading (kPa)

		Fastrack Site Investigations Ltd Unit 9, Tyndales Farm Southend Road Maldon CM9 6TQ		Borehole Log		Borehole No. <b>BH1</b> Sheet 1 of 1	
Project Name: N/A			Project No. 27992		Site Date: 22/05/2024		Hole Type BH
Location:		7 Rogers Ruff, Northwood, HA6 2FD					Scale 1:17
Client:		Barbra Whitehead					Logged By SE3
Water Strikes	Sample and In Situ Testing			Depth (m)	Legend	Stratum Description	
	Depth (m)	Type	Results				
						Grass onto brown TOPSOIL containing gravel	
				0.60		Foundation top-0.30m (Concrete construct projects 150 & 350mm with a thickness of 300 & 250mm respectively)	
	0.85	D	V (kPa) = 50 V (kPa) = 56			Brown CLAY containing sand pockets & grey mottle	1
						Noted to contain 1-3mm roots at 0.85m	
	1.50	D	V (kPa) = 104 V (kPa) = 98			Noted to contain 1-3mm roots at 1.50m	
						Clay noted to become light brown in colour at 1.80m	
	2.00	D	V (kPa) = 140				2
	2.50	D	V (kPa) = 140				
	3.00	D	V (kPa) = 140	3.00		End of Borehole at 3.000m	3
Key: D - Disturbed Sample    V - Insitu Vane Test    MP - Mackintosh Probe Test							
Remarks: Borehole closed at 3.00m. Borehole noted to be dry on completion.							

**LABORATORY RESULTS****Property Address:** 7 Rogers Ruff, Northwood, HA6 2FD**SAMPLE DETAILS**

Investigation date: **22/04/2024**  
Sample details: **Bags as received**  
Samples received: **22/04/2024**  
Schedule recieved: **22/04/2024**  
Samples tested: **24/04/2024 - 29/04/2024**  
Results reported: **29/04/2024**

**ANALYSIS REQUESTED**

Moisture Content	<input checked="" type="checkbox"/>	PSD	<input type="checkbox"/>
Liquid Limit	<input checked="" type="checkbox"/>	Soil Suction	<input type="checkbox"/>
Plastic Limit	<input checked="" type="checkbox"/>	Shear Strength	<input type="checkbox"/>
Plasticity Index	<input checked="" type="checkbox"/>	Contamination	<input type="checkbox"/>
Root ID	<input checked="" type="checkbox"/>	Root/Tree DNA	<input type="checkbox"/>
Other (please state)			<input type="checkbox"/>

**TEST DETAILS****General**

Sample descriptions were written in accordance with BS 5930:1999.

Samples were prepared in accordance with BS 1377: Part 1: 1990, section 7

Samples from this contract will be retained for 1 calender month following the issue of this report unless otherwise notified

Written approval is required from Fastrack Site Investigations Limited to reproduce report in full. The results shown within this report only relate to the samples tested

**Moisture Content**

Samples were tested in accordance with BS 1377: Part 2: 1990, section 3.2 (Oven drying method)

In accordance with Note 1 to paragraph 3.2.4 of BS 1377 Part 2 1990; these moisture contents have been corrected to give the equivalent moisture content of the fraction passing the 425µm sieve, to enable comparison with the liquid & plastic limits. (If condition of test is 'natural' the retained percentage is an estimated value, if condition is 'washed' the percentage is a measured value).

Samples are dried at 105-110°C unless otherwise stated.

**Atterberg Limits**

Samples were tested in accordance with BS 1377: Part 2: 1990, section 4.3 (4 drop LL), 4.4 (1 drop LL), 5.3 (PL) and 5.4 (PI)

Test results on samples with a sand content, may show less accurate results. If condition of test is 'washed' results relate to the fraction passing the 425µm sieve only.

\* *Driscoll's rules deem the soil to be desicated where the moisture content is less than the value calculated using driscoll's rule 1 and/or 2*

**Particle Size Distribution**

Samples were tested in accordance with BS 1377: Part 2: 1990 section 9.2 (Wet sieving method)

**Undrained Shear Stength**

Samples were prepared in accordance with BS 1377: Part 7: 1990 section 8.3 and testing in accordance with BS 1377: Part 7: 1990: section 8.4 (undrained shear strength in triaxial compression without measurement of pore pressure (UU))

**Soil Suction**

Samples were prepared and tested based on the BRE digest No:IP4/93 (Corrected). 'A method of determining the state of desiccation in clay soils.' (Filter paper method).

Test results on samples with a sand or silt content, may show less accurate results. Deviation to standard procedure - Polythene bags are not used from weighing filter papers.

<b>Property Address:</b>	7 Rogers Ruff, Northwood, HA6 2FD
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**Figure 10: Soil profile and plasticity chart.**

**Left Graph: Soil Profile Data**

Depth (m)	Corrected Moisture Content (%)	Plastic Limit (%)	Liquid Limit (%)	Soil Suction (kPa)
0.8	45	35	65	0.4
1.5	40	30	55	0.45
2.0	50	40	65	0.45
2.5	45	35	55	0.45
3.0	50	40	65	0.45

**Right Graph: Plasticity Chart**

The Plasticity Chart plots Plasticity Index (PI) (%) on the y-axis (0 to 80) against Liquid Limit (LL) (%) on the x-axis (0 to 120). The chart includes the A-line, U-line, and Plastic Limit (PL) lines. Soil classification regions are defined as follows:

- Upper Plasticity Range:** CL (Low Plasticity), CI (Int. med), CH (High), CV (V. High), CE (Extr. High).
- Lower Plasticity Range:** ML (Low Plasticity), MI (Int. med), MH (High), MV (V. High), ME (Extr. High).

Soil classification points from the profile are plotted on the chart:

- At 0.8m depth: CI (Int. med)
- At 1.5m depth: CH (High)
- At 2.0m depth: CH (High)
- At 2.5m depth: CI (Int. med)
- At 3.0m depth: CH (High)

Reported by: Jade McLellan

Fastrack Site Investigations Ltd  
Unit 9 Tyndales Farm  
Southend Road  
Woodham Mortimer  
Essex  
CM9 6TQ

Intec  
Parc Menai, Bangor,  
Gwynedd, North Wales  
LL57 4FG  
Tel: 01248 672652  
Fax: 01248 672601

# ROOT IDENTIFICATION

**7 Rogers Ruff,**

Client Reference: 27992  
Report Date: 25 April 2024  
Our Ref: R57636

Sub Sample	Species Identified		Root Diameter	Starch
<b>BH1:</b>				
0.85m	Cupressaceae spp.	1	<1 mm	Abundant
0.85m	probably Lonicera spp.	2	<1 mm	Abundant
0.85m	too small and juvenile for identification		<1 mm	Absent
1.5m	probably Lonicera spp.	2	<1 mm	Abundant

## Comments:

- 1 - Plus 1 other also identified as Cupressaceae spp.
- 2 - Rather juvenile.

Cupressaceae spp. include Lawson cypress, western red cedar, Monterey cypress, Leyland cypress and junipers.  
*Lonicera* spp. are honeysuckles, both climbing and shrub forms; related species include *Symphoricarpos* spp. (snowberry).

**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.

