[redacted]

Site Investigation Report

[redacted]

Job Information	
Client	Crawford & Co
Client ref	[redacted]
Visit date	27/01/2023
Report date	13/02/2023

Job Summary

- 2 trial holes undertaken. Read more.
- Water encountered in TH1 Read more.
- Requested root samples not taken. Read more.

[redacted]

Job Information

Overview	
Brief	Auger were commissioned by Crawford & Co to undertake a site investigation within the area of concern (AOC) at the property.

Findings	
Trial Hole Findings	Within Trial hole 1 we revealed the footing but were unable to auger to the required depth (3m) in the proposed location due to hard soil (2.3m). We only took took soil samples down to 2m due to hard soil coupled with water suction, this meant we were unable to lift soil samples out anymore. These measurements are shown in Trial hole log 1 below. We were unable to collect root samples from TH1 because no roots were present during the trial hole, hence no samples were retrieved. In TH1, water was encountered at 0.9m Within TH1, we also took footing measurements from the **Rear balcony extension**. These measurements are shown in Trial Hole Log 1b below. Within Trial hole 2 we revealed the footing and augured to the required depth (3m) in the proposed location. We took the requested soil and root samples. These measurements are shown in Trial hole log 2 below. The base of the footing was determined by probing to a depth below 1m and therefore the exact profiles/depth cannot be guaranteed.

Photographs

Trial Hole 1

Fig 1.1: Trial Hole 1 Location

Fig 1.2: Trial Hole 1 Footing

Fig 1.3:Trial Hole 1b Footing

Trial Hole 2

Fig 2.1: Trial Hole 2 Location

Fig 2.2: Trial Hole 2 Footing

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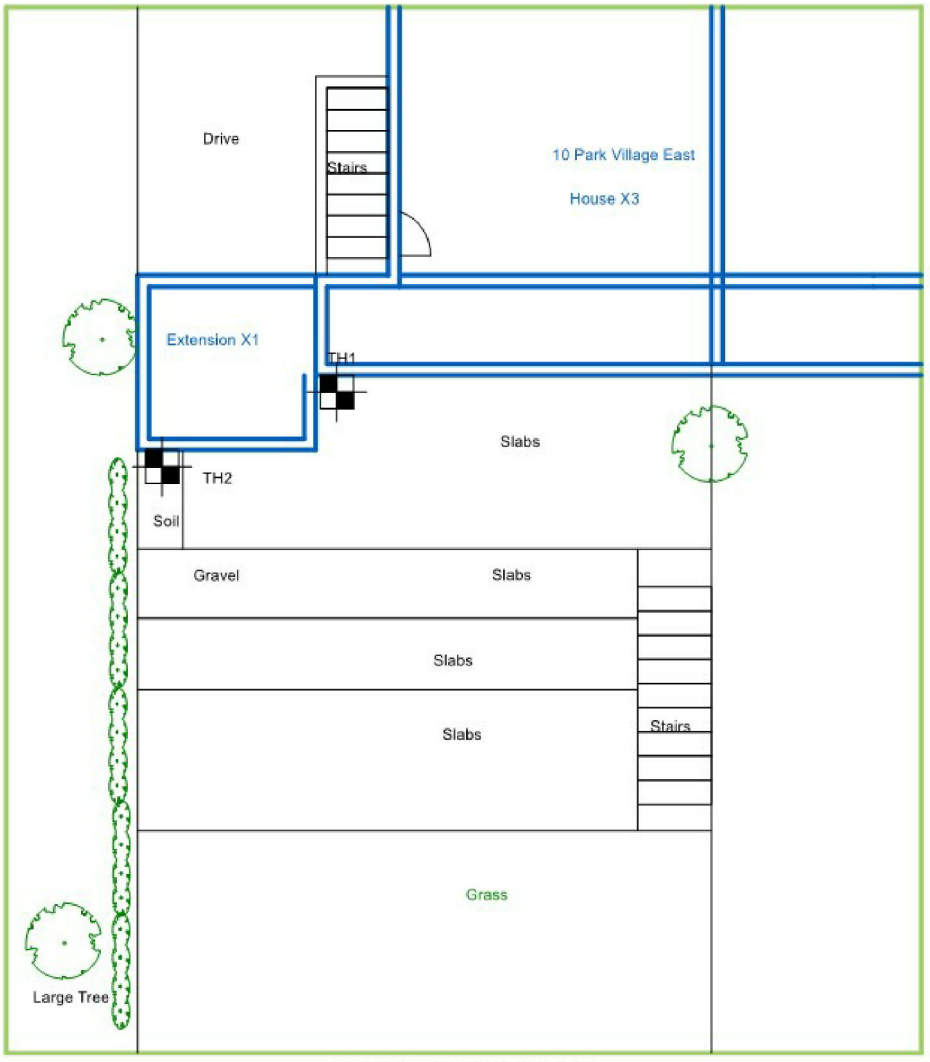
Existing Layout

Date: 27/01/2023



FRONT OF PROPERTY

This drawing should be used for diagrammatic purposes only. Auger are not responsible or liable for any 3rd party works undertaken using the details outlined in this drawing. Confirmation of the drainage configuration can only be confirmed by excavation or detailed technical survey.

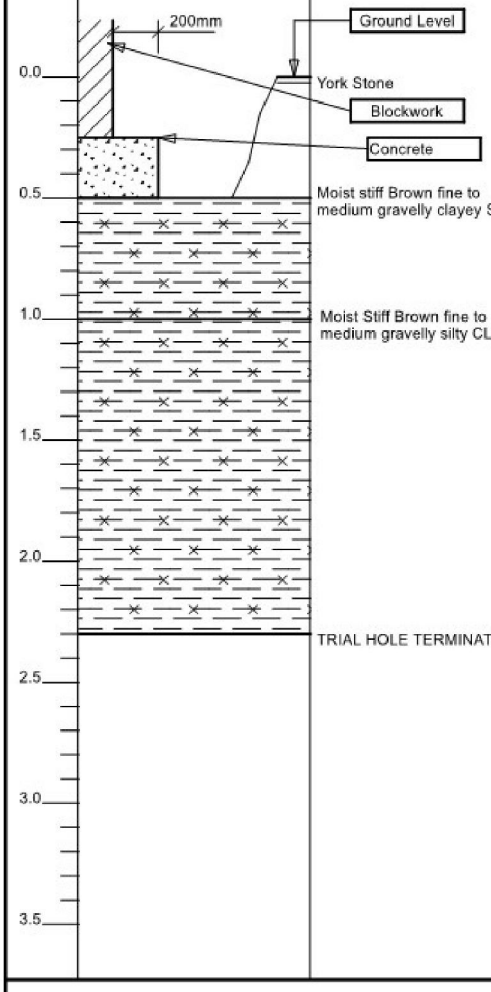
LEGEND

- = Manhole (MH)
- = Inspection Chamber (IC)
- = Inspection Point (IP)
- = Blockage / Collapse
- = Soil Vent Pipe (SVP) / WC
- = Combined Waste Gully (CWG) / Foul Waste Gully (FWG)
- = Rainwater Gully (RWG)
- = Rainwater Pipe (RWP)
- = Lines not camera surveyed
- = Lines camera surveyed
- = Assumed water mains feed
- = Walls
- = Fences
- = Building Outline
- = Trial hole
- = Borehole
- = Direction of flow
- = Gate / Door
- = Shrubs / Bush
- = Hedge
- = Tree
- = Steps

Trial Hole Log No.1

Location: Rear left in between extension A and Balcony Extension

[redacted]



Depth (m)	Symbolic Log	Strata Description	Insitu Tests SV(19)		Soil Sample	Root Sample
0.5		Moist stiff Brown fine to medium gravelly clayey SILT	66kpa		Soil @ 0.5m	
1.0		Moist Stiff Brown fine to medium gravelly silty CLAY	78kpa		Soil @ 1m	
1.5			116kpa		Soil @ 1.5m	
2.0			128kpa		Soil @ 2m	
2.5		TRIAL HOLE TERMINATED				
3.0						
3.5						

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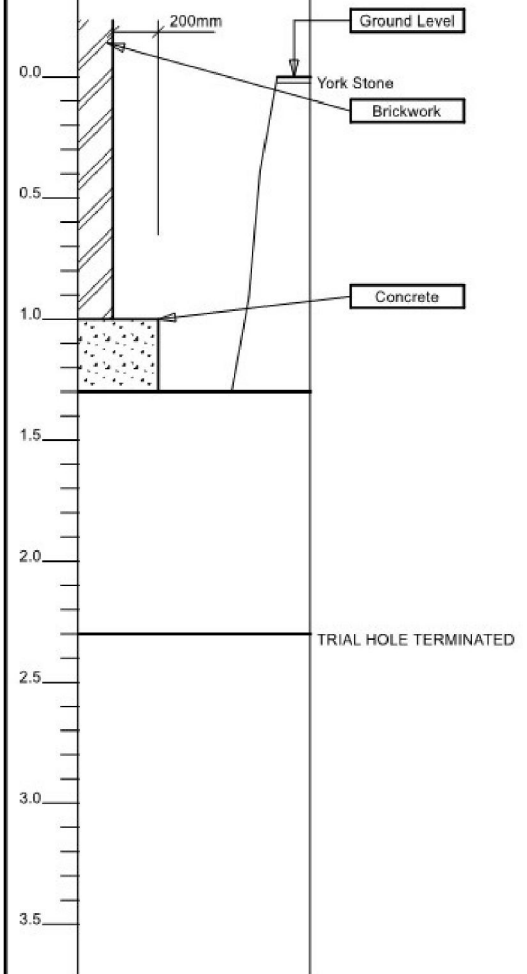
Trial Hole Log No.1b

Location: Rear Balcony Extension

[redacted]

Depth (m)	Symbolic Log	Strata Description	Insitu Tests SV(19)		Soil Sample	Root Sample



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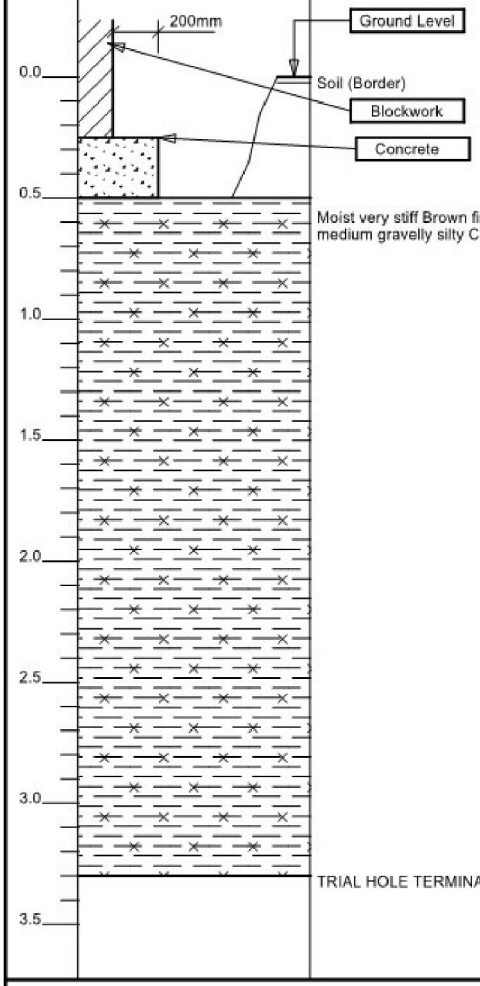
Trial Hole Log No.2

Location: Rear right corner

[redacted]



Richardson's Botanical Identifications

Root identification
Vegetation surveys
Tree/Building investigations
Plant taxonomy

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

[redacted]

[redacted]

01/03/2023

Dear Sirs

Root ID

The samples you sent in relation to the above on 27/01/2023 have been examined. Their structures were referable as follows:

TH2, 0.5m		
2 no.	Examined root: similar in many ways to the family Rosaceae, subfamily ROSOIDEAE (shrubs including Roses, Brambles, Raspberries, Kerria and Potentilla). This was a very IMMATURE sample.	Alive, recently*.
1 no.	Examined root: could well be a type of SHRUB (different from above). Please send us twigs from nearby bushes if this is critical - we may be able to give you a match. Very thin (less than 0.15mm in diameter); also POOR in condition.	Dead* (note this 'dead' result can be unreliable with such thin samples).
1 no.	Microscopic examination showed insufficient cells for recognition.	

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

Yours faithfully

[redacted]

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.

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

Report commissioned by auger

GSTL GEOTECHNICAL SITE & TESTING LABORATORIES	**Geotechnical Testing Analysis Report**	auger environmental + claims mgmt + subsidence + drainage +
[redacted]	***The testing results contained within this report have been performed by GSTL a UKAS accredited laborotory on behalf of Auger.**	[redacted]

Summary Of Claim Details

Policy Holder	
GSTL Job Reference	[redacted]
SI Date	27/01/2023
Issue Date	27/01/2023
Report Date	15/02/2023
Auger Reference	[redacted]
Insurance Company	RSA
LA Claim Reference	[redacted]
LA Co. Reference	Crawford & Co

Checked and approved	15/02/2023	Wayne Honey	[redacted]

UKAS TESTING 2788

GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX
(BS 1377:1990 - Part 2 : 4.4 & 5.3)
DESCRIPTIONS

auger
environmental + claims mgmt + subsidence + drainage +

GSTL Contract Number	[redacted]	
Report Date	15/02/2023	
Auger Reference	[redacted]	

TH Trial Hole	Sample Type	Depth (m)	Sample Description
TH1	D	0.50	Brown fine to medium gravelly clayey SIL
TH1	D	1.00	Brown fine to medium gravelly silty CLAY
TH1	D	1.50	Brown fine to medium gravelly silty CLAY
TH1	D	2.00	Brown fine to medium gravelly silty CLAY
TH2	D	0.50	Brown fine to medium gravelly silty CLAY
TH2	D	1.00	Brown fine to medium gravelly silty CLAY
TH2	D	1.50	Brown fine to medium gravelly silty CLAY
TH2	D	2.00	Brown fine to medium gravelly silty CLAY
TH2	D	2.50	Brown fine to medium gravelly silty CLAY
TH2	D	3.00	Brown fine to medium gravelly silty CLAY

Test Operator
Jason Smith

GSTL
GEOTECHNICAL SITE & TESTING LABORATORIES

LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX
(BS 1377:1990 - Part 2 : 4.4 & 5.3)

auger
environmental + claims mgmt + subsidence + drainage +

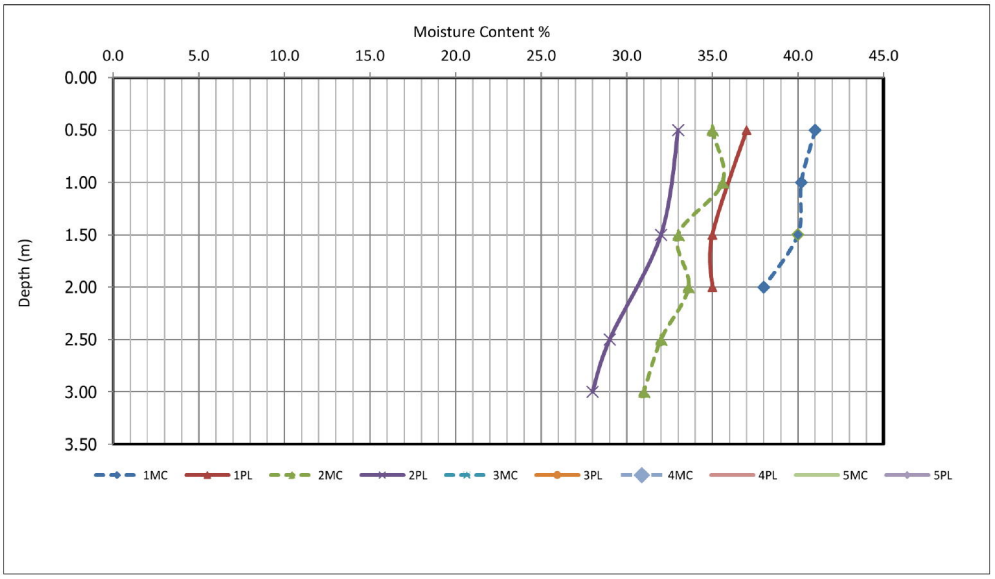
GSTL Contract Number	[redacted]	
Report Date	15/02/2023	
Auger Reference	[redacted]	
Remarks	NP - (Non-Plastic), # - (Liquid Limit and Plastic Limit Wet Sieved)	

TH Trial Hole	Sample Type	Depth (m)	Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity index %	Passing .425mm %	NHBC Chapter 4.2	Remarks
TH1	D	0.50	41	73	37	36	93	MEDIUM VCP	MV Very High Plasticity
TH1	D	1.00	40						
TH1	D	1.50	40	77	35	42	94	HIGH VCP	CV Very High Plasticity
TH1	D	2.00	38	78	35	43	94	HIGH VCP	CV Very High Plasticity
TH2	D	0.50	35	81	33	48	93	HIGH VCP	CV Very High Plasticity
TH2	D	1.00	36						
TH2	D	1.50	33	78	32	46	93	HIGH VCP	CV Very High Plasticity
TH2	D	2.00	34						
TH2	D	2.50	32	80	29	51	93	HIGH VCP	CV Very High Plasticity
TH2	D	3.00	31	82	28	54	94	HIGH VCP	CV Very High Plasticity

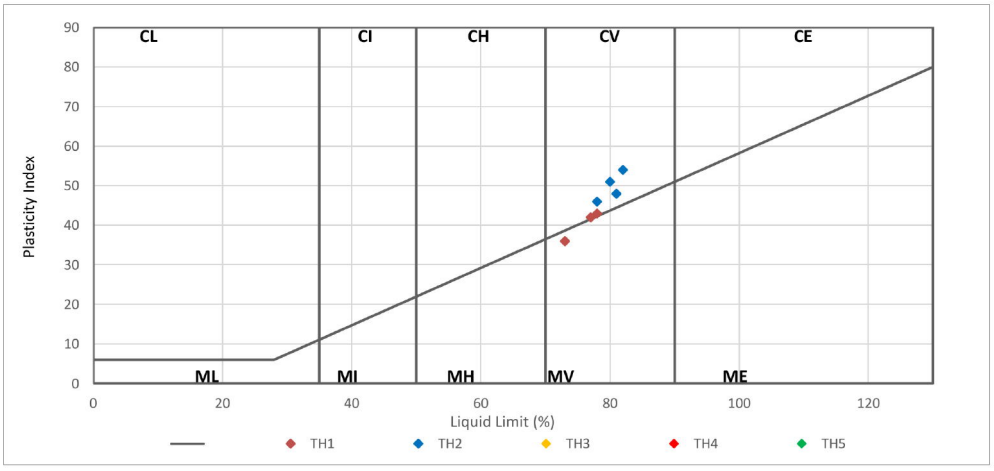
Modified Plasticity Index (PI) <10	: Non Classified
Modified PI = 10 to <20	: Low volume change potential (LOW VCP)
Modified PI = 20 to <40	: Medium volume change potential (Med VCP)
Modified PI = 40 or greater	: High volume change potential (HIGH VCP)

The Atterberg Limits May also be used to classify the volume change potential of fine soils using the National House building system, as given in the NHBC's Standards Chapter 4.2 (2003) "Building Near Trees"

Test Operator
Jason Smith



PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION
BS 5930:1999+A2:2010



Modified Plasticity Index (PI) <10	: Non Classified
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Modified PI = 40 or greater	: High volume change potential (HIGH VCP)

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