

SITE INVESTIGATION FACTUAL REPORT

Report No: SI-521890
Client: Crawford Claims Management
Site: 69 Elmroyd Avenue
Hertfordshire
Client Ref: SU2203004
Date of Visit: 31/10/2022



Home Emergency Response - Subsidence Investigation - Drainage Services – Crack & Level Monitoring – Property Video Surveys

Unit E2 First Floor Suite, Boundary Court
Willow Farm Business Park, Castle Donington
Leicestershire, DE74 2NN

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✉ enquiries@cet-uk.com
🌐 www.cet-uk.com

CET is the trading name of CET Structures Ltd
Registered in England No. 02527130

Investigation Layout Plan

Sheet: 1 of 1
Job No: 521890
Date: 31.10.22

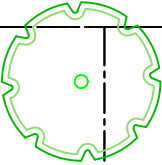
Site: 69, Elmroyd Avenue, Potters Bar

Work carried out for: Crawford Claims Management

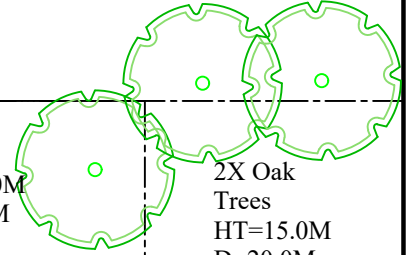
IC (SI) PS (Checked) JMC (Drawn)

Weather: Dry

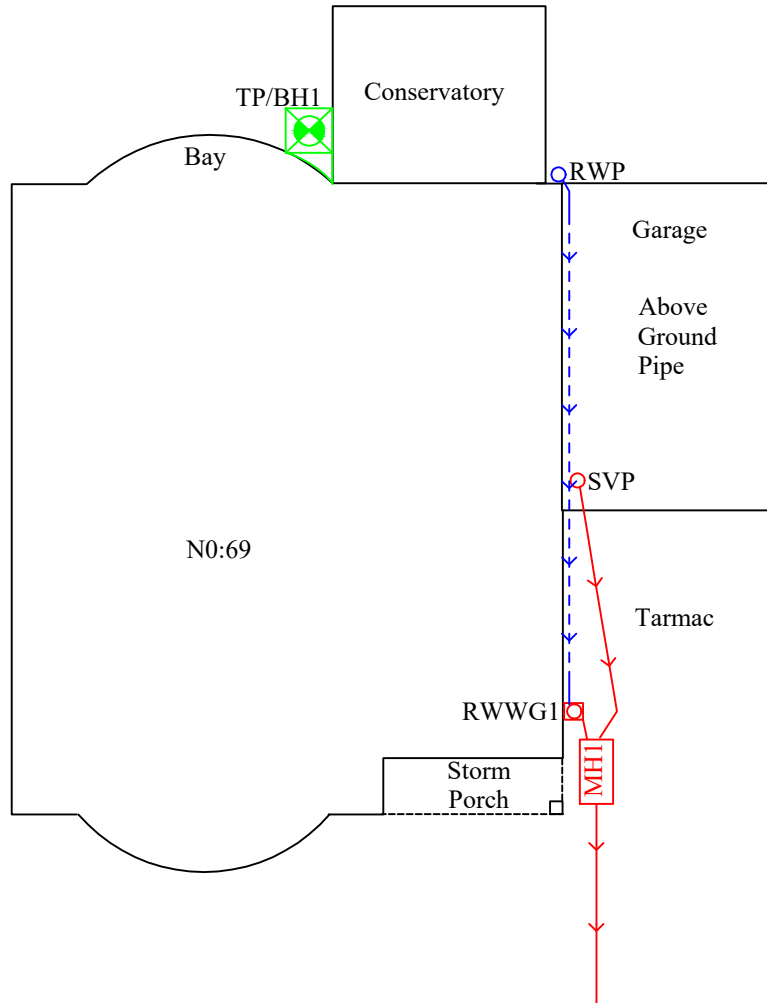
Oak Tree
HT=16.0M
D=16.0M



Conifer Tree
HT=13.0M
D=12.0M



2X Oak Trees
HT=15.0M
D=20.0M
Aprox



ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED.

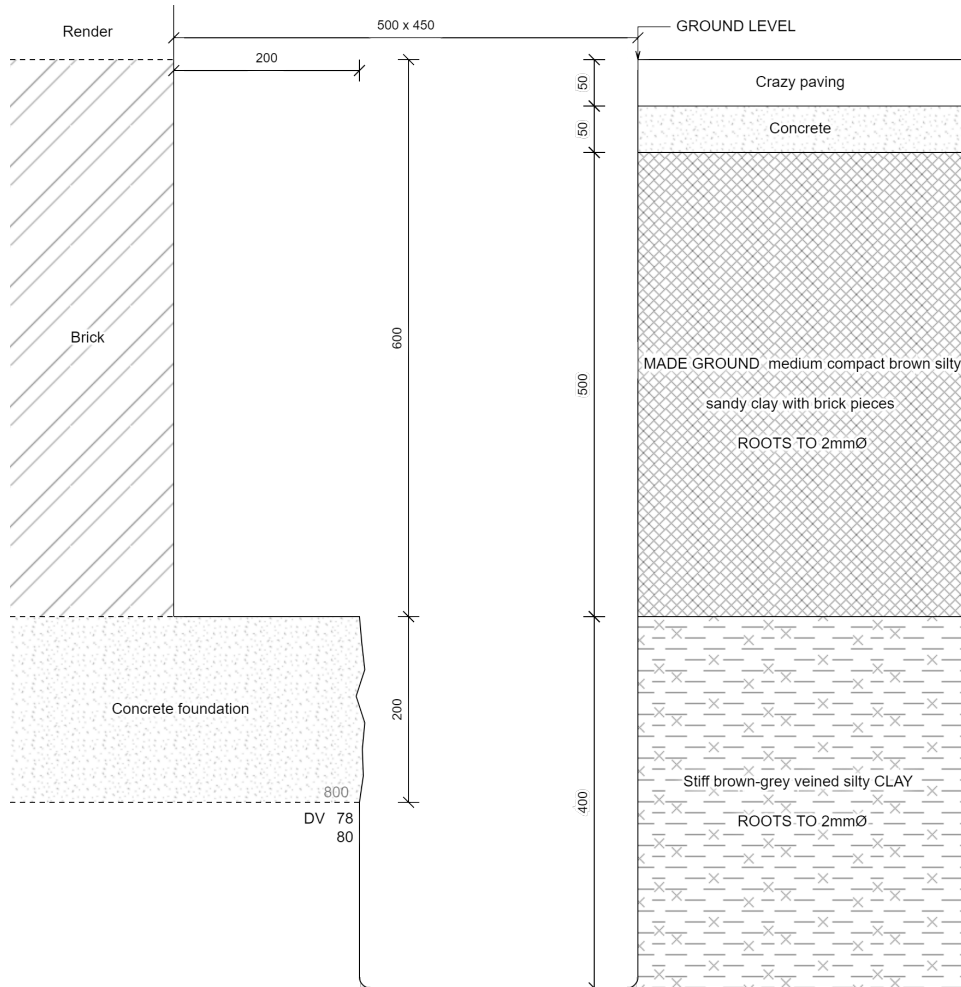
Remarks:

Key:

Combined Gully	RWWG	Surface Water Drain	
Manhole	MH	Foul Water Drain	
Rain Water Pipe	RWP	Tree / Bush	
Rain Water Gully	RWG	(approx. ht in m)	
Soil Vent Pipe	SVP	Trial Pit	
Waste Gully	WG	Borehole	
Waste Pipe	WP		

Scale: N.T.S.

TEST REPORT: Trial Pit
REPORT NUMBER: C1068562 / 217891.1.1.1
TRIAL PIT REF: TP1A Bay **DATE:** 31/10/2022
CLIENT: Crawford & Co **SITE:** 69 ELMROYD AVENUE
JOB NO: 521890 **WEATHER:** Dry
EXCAVATION METHOD: Hand tools



For Strata below 1000mm see Trial Pit log

Key:

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

Remarks:

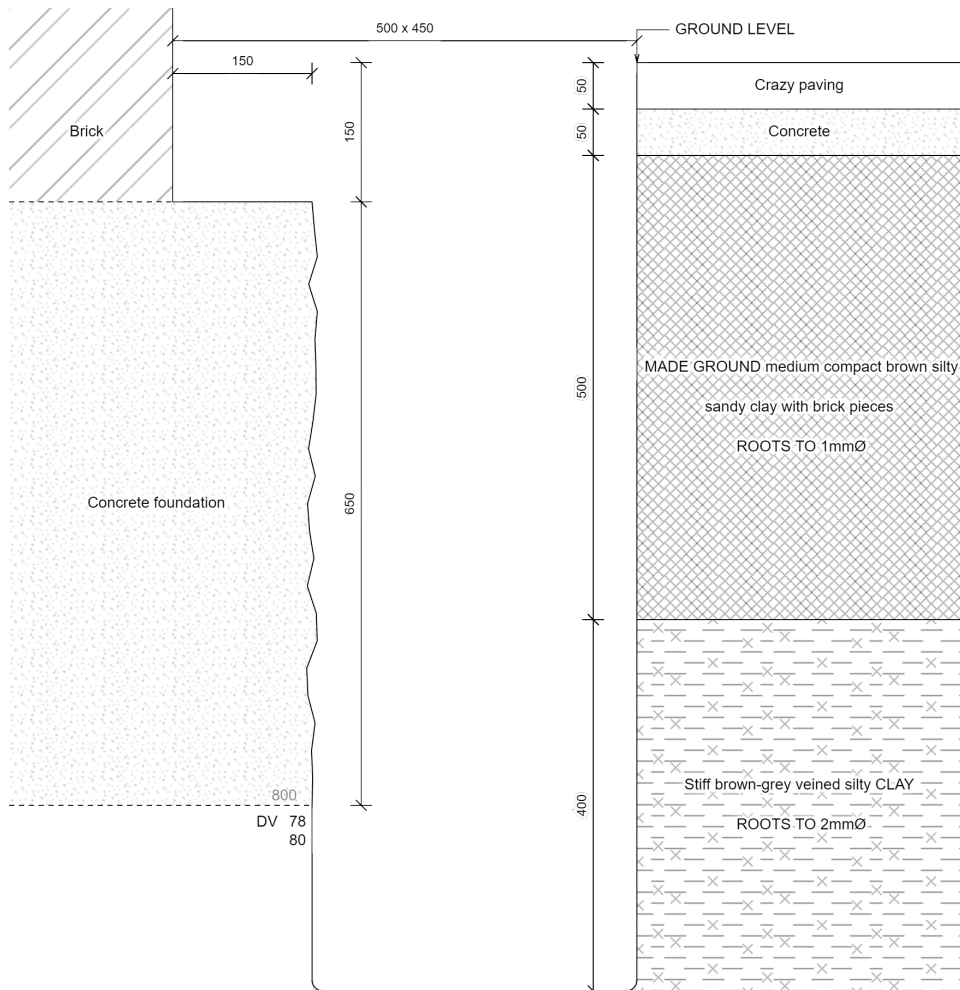
Test results reported relate only to the items tested.
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 The laboratory does not apply a conformity statement to test reports as standard, unless specifically requested by the customer.

For and on behalf of CTS
 Adam Mason - Quality Control



Approved Signatory
 Report date 02-Nov-22

TEST REPORT: Trial Pit
REPORT NUMBER: C1068562 / 217891.1.1.2
TRIAL PIT REF: TP1 B Conservatory **DATE:** 31/10/2022
CLIENT: Crawford & Co **SITE:** 69 ELMROYD AVENUE
JOB NO: 521890 **WEATHER:** Dry
EXCAVATION METHOD: Hand tools



For Strata below 1000mm see Bore Hole log

Key:

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

Remarks:

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For and on behalf of CTS
 Adam Mason - Quality Control



Approved Signatory
 Report date 02-Nov-22

Borehole		1		Sheet:	1 of 1		Site:	69 ELMROYD AVENUE, POTTERS BAR				
Boring Method:		Hand Auger		Job No:	521890		Client:	Crawford Claims Management				
Diameter (mm):		75		Date:	31/10/2022							
Weather:		dry		Ground Level:								
Depth	Soil Description						Samples and Tests					
(m)							Thickness	Legend	Depth	Type	Result	
0.00	See Trial Pit						1.00					
1.00	Stiff brown-grey veined silty CLAY						2.00	x — x	1.00	DV	82	
								x — x		DV	82	
								x — x				
								x — x				
								x — x				
								x — x	1.50	DV	98	
								x — x			102	
								x — x				
								x — x				
								x — x				
								x — x	2.00	DV	104	
								x — x			106	
								x — x				
								x — x				
								x — x				
								x — x	2.50	DV	110	
								x — x			118	
								x — x				
								x — x				
								x — x				
3.00	End of BH								3.00	DV	132	
											134	
Remarks: BH ends at 3.0m, BH dry and open on completion. No roots observed below 2.2m							Key:				To	Max
							D - Disturbed Sample				Depth	Dia
							B - Bulk Sample				(m)	(mm)
							W - Water Sample Roots				2.20	1
							J - Jar Sample Roots					
							V - Pilcon Shear Vane (kPa) Roots					
							M - Mackintosh Probe Depth to Water (m)					
							TDTD - Too Dense To Drive					
Logged:	IC	AM	Checked:	Approved:	Version	V1.0 28/01/16	N.T.S.					



SITE INVESTIGATION LABORATORY TEST REPORT

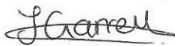
SI REPORT NUMBER: 521890

CLIENT : CET Property Assurance (Crawford Claims Management)

SITE:
69 Elmroyd Avenue
Potters Bar
EN6 2EF

DATE OF SITE VISIT:
31/10/2022

DATE RECEIVED BY LABORATORY:
02/11/2022

<p>L. Kirby</p> <p>Compiled by : L. Kirby - Senior Laboratory Technician (B)</p> <p></p> <p>Approved by : J. Garrett - Laboratory Manager (B)</p>
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DATE REPORTED: 17-Nov-2022

Laboratory Summary Results

Our Ref : 521890
 Location : 69 Elmroyd Avenue, Potters Bar, EN6 2EF
 Client: CET Property Assurance (Crawford Claims Management)
 Address: Unit 4, Boundary Court, Willow Farm Business Park, Castle Donington, DE74 2NN

Date Sampled: 31/10/2022
 Date Received : 02/11/2022
 Date Tested : 02/11/2022
 Date of Report : 17/11/2022

Sample Ref		Type	Moisture Content (%) [1]	Soil Fraction > 0.425mm (%) [2]	Liquid Limit (%) [3]	Plastic Limit (%) [4]	Plasticity Index (%) [5]	Liquidity * Index [5]	Modified * Plasticity Index (%) [6]	Soil * Class [7]	Filter Paper Contact Time (d)	Soil Sample Suction (kPa) [8]	Oedometer Strain [9]	Estimated * Heave Potential (Dd) (mm)[10]	In situ * Shear Vane Strength (kPa) [11]	Organic * Content (%) [12]	pH * Value [13]	Sulphate Content * (g/l)		* Class [16]
TP/BH No	Depth (m)																	SO3 [14]	SO4 [15]	
1	(A) U/S 0.80	D	37	<5	80	27	53	0.18	53	CV					79					
	(B) U/S 0.80	D	40	<5	82	28	54	0.21	54	CV					79					
	1.0	D	33	<5	70	27	43	0.14	43	CV					82					
	1.5	D	31	<5											100					
	2.0	D	30	<5	70	25	45	0.11	45	CV					105					
	2.5	D	30	<5											114					
	3.0	D	31	<5	67	23	44	0.18	44	CH					133					

Test Methods / Notes

- [1] BS 1377 : Part 2 : 1990, Test No 3.2
- [2] Estimated if <5%, otherwise measured
- [3] BS 1377 : Part 2 : 1990, Test No 4.4
- [4] BS 1377 : Part 2 : 1990, Test No 5.3
- [5] BS 1377 : Part 2 : 1990, Test No 5.4
- [6] BRE Digest 240 : 1993
- [7] BS 5930 : 2018 : Figure 8 - Plasticity Chart for the classification of fine soils

[8] Building Research Establishment Information Paper 4/93

- [9] In Accordance with BS 1377-5 : 1990 : Clause 3
- [10] Estimated Heave Potential (Dd)
- [11] Values of shear strength were determined in situ by CTS using a Pilon hand vane or Geonor vane (GV).
- [12] BS 1377 : Part 3 : 1990, Test No 4
- [13] BS 1377 : Part 3 : 1990, Test No 9
- [14] BS 1377 : Part 3 : 1990, Test No 5.6
- [15] SO₄ = 1.2 x SO₃

[16] BRE Special Digest One (Concrete in Aggressive Ground) August 2005

Note that if the SO₄ content falls into the DS-4 or DS-5 class, it would be prudent to consider the sample as falling into the DS-4M or DS-5M class respectively unless water soluble magnesium testing is undertaken to prove otherwise.
 PSD Chart - BS 1377: Part 2 : 1990, Test No 9.2

* These tests are not UKAS accredited
 Full reports can be provided upon request.

Key

- D Disturbed sample (small)
- B Disturbed sample (bulk)
- U Undisturbed sample
- W Groundwater sample
- ENP Essentially Non-Plastic by inspection
- U/S Underside of Foundation

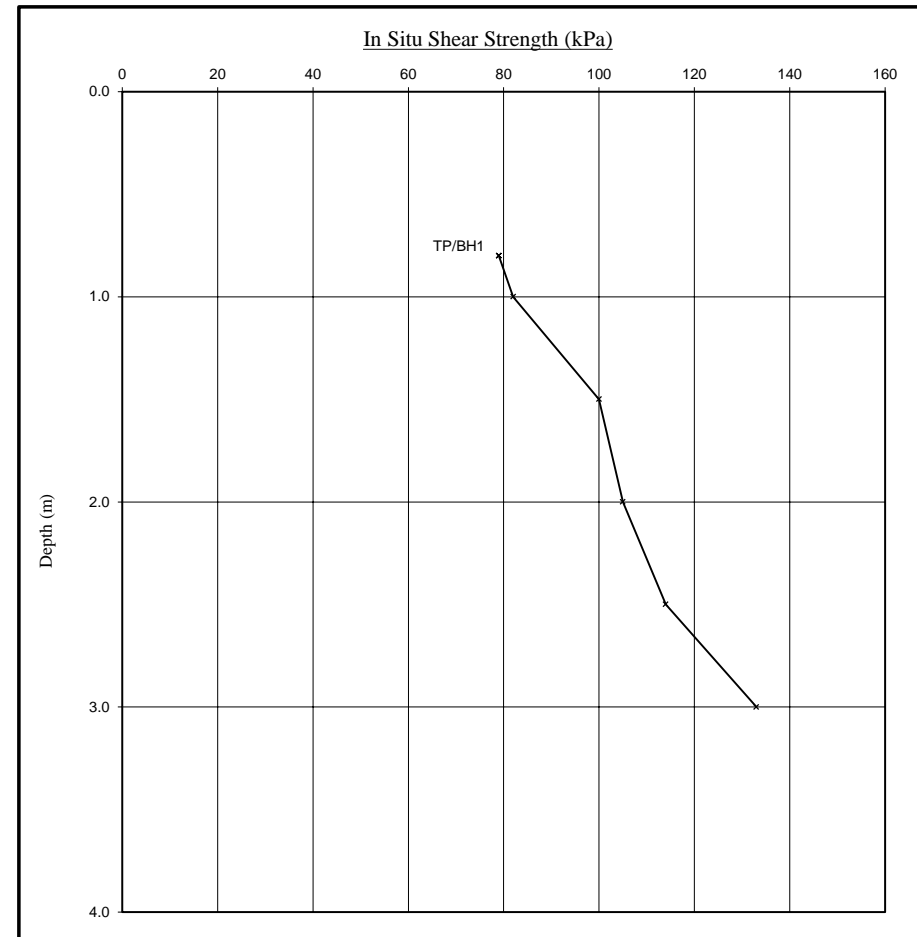
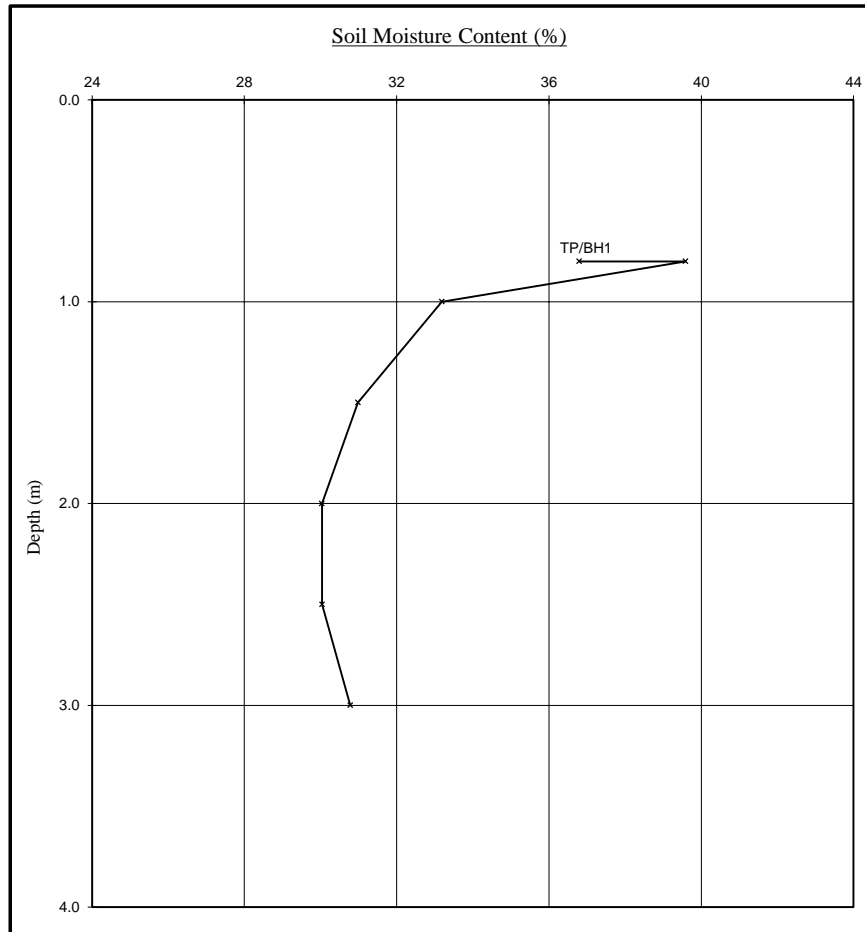
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Moisture Content Profiles

Our Ref : 521890
Location : 69 Elmroyd Avenue, Potters Bar, EN6 2EF
Work carried out for: CET Property Assurance (Crawford Claims Management)

Date Sampled : 31/10/2022
Date Received : 02/11/2022
Date Tested : 02/11/2022
Date of Report : 17/11/2022



Notes

1. If plotted, 0.4 LL and PL+2 (after Driscoll, 1983) should only be applied to London Clay (and similarly overconsolidated clay) at shallow depths.
2. Unless specifically noted the profiles have not been related to a site datum.

Note

1. Unless otherwise stated, values of Shear Strength were determined in situ by CTS using a Pilcon Hand Vane the calibration of which is limited to a maximum reading of 130 kPa.
2. Unless specifically noted the profiles have not been related to a site datum.

Construction Testing Solutions
4 Oak Spinney Park
Ratby Lane
Leicester Forest East
Leicestershire
LE3 3AW

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

ROOT IDENTIFICATION

69 Elmroyd Avenue

Client Reference: 521890
Report Date: 8 November 2022
Our Ref: R48101

Sub Sample	Species Identified		Root Diameter	Starch
TP1:				
USF	<i>Quercus</i> spp.	1	2 mm	Abundant
BH1:				
to 2.2m	<i>Quercus</i> spp.	2	1 mm	Low
to 2.2m	broadleaved species, too juvenile for positive identification	3	<1 mm	Low

Comments:

- 1 - Plus 2 others also identified as *Quercus* spp.
- 2 - Rather juvenile.
- 3 - Plus 2 others the same. All very small.

Quercus spp. are oaks (both deciduous and evergreen).

Signed: R J Shaw

Unless we are otherwise instructed in writing, the above sample material will normally be disposed of 6 years after the date of this report.



Coding Sheet	Sheet:		Site:	69 ELMROYD AVENUE, POTTERS BAR
	Job No.:	521890		
	Date:	31/10/2022	Client:	Crawford Claims Management

Run: 1									
From:	MH1		Invert Level:		Direction:	U/S			
To:	wg1		Invert Level:	400	Function:	F/W			
Pipe Material:	VC		Pipe Dia:	100					
Water/Pressure Test:			Drain Break-In:	No	Gully Condition:	As Built			
Distance (m)	Code	Clock Ref at to	Dia mm	Intrusion % mm	Shared Run:				
					If Shared How:				
0.00	ST				Remarks	Surface Material	Length (m)		
0.10	LU				Line deviates up	tarmac			
0.40	FH				reached wg1				
Comments:									

Run: 2									
From:	MH1		Invert Level:		Direction:	U/S			
To:	svp		Invert Level:	400	Function:	F/W			
Pipe Material:	VC		Pipe Dia:	100					
Water/Pressure Test:			Drain Break-In:	No	Gully Condition:				
Distance (m)	Code	Clock Ref at to	Dia mm	Intrusion % mm	Shared Run:	No			
					If Shared How:				
0.00	ST				Remarks	Surface Material	Length (m)		
0.20	LL				Line deviates left	tarmac	1		
1.50	LU				Line deviates up	inide garage	0.5		
1.80	FH				reached svp	concrete not seen			
Comments:									

Run: 3									
From:	MH1		Invert Level:		Direction:	D/S			
To:	3.0m		Invert Level:	400	Function:	F/W			
Pipe Material:	VC		Pipe Dia:	100					
Water/Pressure Test:			Drain Break-In:	No	Gully Condition:				
Distance (m)	Code	Clock Ref at to	Dia mm	Intrusion % mm	Shared Run:	No			
					If Shared How:				
0.00	ST				Remarks	Surface Material	Length (m)		
3.00	FH				reached 3.0m				
Comments:									

To:
Ftaco:
Site:

Crawford Claims Management

69 Elmroyd Avenue

Client Ref:
Job No: 521890
Claim No:
Date: 16-Nov-22

ESTIMATE

Item	Amount
------	--------

No recommendations to the drainage surveyed.

Notes

Repairs to shared runs and off boundary pipe-work may be the responsibility of the water authority.

Total £0.00

Condition Grade

- A - Structurally sound with no leakage evident.
- B - Cracks and fractures observed.
- C - Structurally unsound

plus VAT @20% £0.00

Total + VAT £0.00

Quotation is binding only if accepted within 28 days from date of issue and is subject to our Standard Terms and Conditions
The price qualification notes, stated on the drainage solutions schedule of rates, apply to this quotation.
CET Structures Ltd undertakes to return to site free of charge to carry out remedial work to the drainage repairs set out above for a period of 2 months from the date of this invoice. The company standard charge rates will apply to the visit should the work requested be unrelated to the said repairs.

CET STRUCTURES LTD TERMS AND CONDITIONS

Site:- 69 Elmroyd Avenue

Client Ref:-

Client :- Crawford Claims Management

Job No.:- 521890

Attention of:-

Claim No:-

Date:- 16-Nov-22

General Terms and Conditions

- 1 On site parking is a prerequisite of any drain repair contract. This quotation is to the addressee only and should not be forwarded unless prior agreement is obtained from CET Structures Ltd. Every effort will be made to match existing surfaces however, there will be evidence of excavation works in certain circumstances.
- 2 The rates do not include for excavation of surfaces other than soft ground or concrete < 100mm thick; reinstatement other than concrete <100mm thick; internal excavations; reinstatement >750mm in width; excavation of depths greater than 1.2m; reinforced concrete.
- 3 CET's standard soakaway that is priced on the agreed alliance schedule of drainage rates is constructed to dimensions specified in the NHBC Guidelines for small soakaways. The soakaway is generally located 5m from any foundations (should site constraints permit) and is constructed to provide adequate short term surface water storage and percolation into surrounding ground. This small 1m³ soakaway is usually of sufficient capacity to accommodate average rainfall from an average surface area of roof space, however in extreme weather conditions and /or larger than average roof surface area feeding the soakaway, surcharging may occur. Alternative designs and prices are available at a cost along with percolation testing. Certain ground conditions may not be suitable for soakaway design due to low permeability and this information is not always readily available.

Notes

For excavation and reinstatement of any steps, will be done on day work rate.

With a minimum of 4 hours. Materials at cost plus 25%.

Any obstacles, shrubs & plants that are located in the working area will need to be removed by others to allow for these works

Water Authority Sewer Condition Codes

B Broken pipe at... (or from... to...) o'clock	JN Junction at...o'clock, diameter...mm
BR Branch Major	JX Junction defective at.. o'clock, diameter.. mm
CC Crack circumferential from... to... o'clock	LC Lining of sewer changes/starts/finishes at this point
CL Crack longitudinal @... o'clock	LD Line of sewer deviates down
CM Cracks multiple from... to... o'clock	LL Line of sewer deviates left
CN Connection at... o'clock, diameter... mm	LN Line defect at (or from.. to..) o'clock
CNI Connection at... o'clock, diameter... mm, intrusion... mm	LR Line of sewer deviates right
CU Camera under water	LU Line of sewer deviates up
CX Connection defective at... o'clock	MB Missing bricks at.. (or from.. to..) o'clock
CXI Connection defective at... o'clock, diameter... mm, intrusion... mm	MC Material of sewer changes at this point
D Deformed sewer... %	MH Manhole/node
DB Displaced bricks at (or from.. to..) o'clock	MM Mortar missing medium at.. (or from.. to..) o'clock
DC Dimension of sewer changes at this point	MS Mortar missing surface at.. (or from.. to..) o'clock
DE Debris (non silt/grease)... % cross-sectional loss	MT Mortar missing total at.. (or from.. to..) o'clock
DEG Debris grease... % cross-sectional area loss	OB Obstruction... % height/diameter loss
DES Debris silt... % cross-sectional area loss	OJL Open joint large
DI Dropped invert, gap... mm	OJM Open joint medium
EHJ Encrustation heavy from.. to.. o'clock % cross-sectional area loss (at joint)	PC Length of pipe forming sewer changes at this point, new length...mm
ELJ Encrustation light from.. to.. o'clock%	RFJ Roots fine (at joint)
EMJ Encrustation medium from.. to.. o'clock %, cross-sectional area loss (at joint)	RMJ Roots mass... % cross-sectional area loss (at joint)
ESH Scale heavy... % cross-sectional area loss from... to... o'clock	RTJ Roots tap (at joint)
ESL Scale light from... to... o'clock	SA Survey abandoned
ESM Scale medium... % cross-sectional area loss from... to... o'clock	SC Shape of sewer changes at this point
FC Fracture circumferential from... to... o'clock	SSL Surface damage, spalling large at (or from.. to..) o'clock
FL Fracture longitudinal at... o'clock	SSM Surface damage, spalling medium at (or from.. to..) o'clock
FM Fractures multiple from... to... o'clock	SSS Surface damage, spalling slight at (or from.. to..) o'clock
GO General observation at this point	SWL Surface damage, wear large at... (or from.. to..) o'clock
GP General photograph number... taken at this point	SWN Surface damage, wear medium at... (or from.. to..) o'clock
H Hole in sewer at... o'clock	SWS Surface damage, wear slight at.. (or from.. to..) o'clock
IDJ Infiltration dripper at (or from... to...) o'clock (at joint)	V Vermin (rats and mice)
IGJ Infiltration gusher at (or from... to...) o'clock (at joint)	WL Water level... % height/diameter
IRJ Infiltration runner at (or from... to...) o'clock (at joint)	X Sewer collapsed... % cross-sectional area loss
ISJ Infiltration seeper at (or from... to...) o'clock (at joint)	FH End of survey
JDM Joint displaced medium	
JDL Joint displaced large	