CET PROPERTY ASSURANCE
Giving our all

SITE INVESTIGATION
FACTUAL REPORT

Report No:	474758
Client:	Crawford Claims Management
Site:	79 Pixmore Way
Client Ref:	SU1703302-Mr Abbas Alibhai
Date of Visit:	06/12/17

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

☎ 0843 2272362
✉ enquiries@cet-uk.com
www.cet-uk.com

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

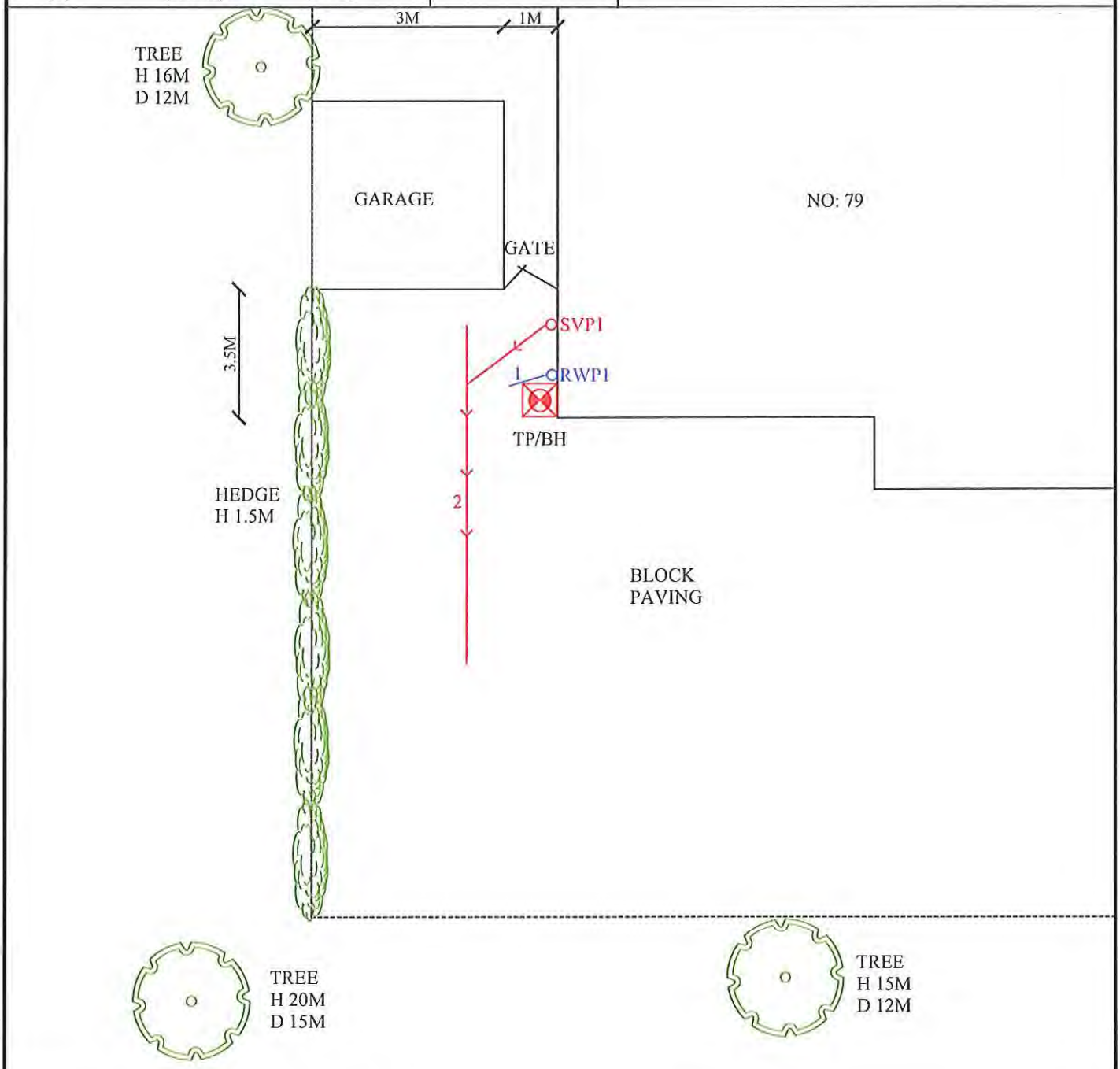
Drainage Layout Plan

Sheet: 1 of 1
Job No: 474758
Date: 06/12/2017

Site: 79 Pixmore Way
Work carried out for: Crawford Claims MGMT SUS

AN (SI)	SA (Checked)	ANS (Drawn)

Weather: DRY



DRAIN REPAIR RECOMMENDATIONS

RWP 1 downstream - Run 1. Excavate and replace rest bend plus 2 metres of pipe work and then complete cctv(high pressure water jet if required), repair as necessary. If findings or repair exceptional then discuss with engineer before repair.

SVP downstream - Run 2. Excavate and replace rest bend plus pipe work downstream to main run.

Scale: N.T.S. | Parking: ONSITE | Power: INTERNAL | Water: INHOUSE | Approx age:

Surface Water Drain
Foul Water Drain

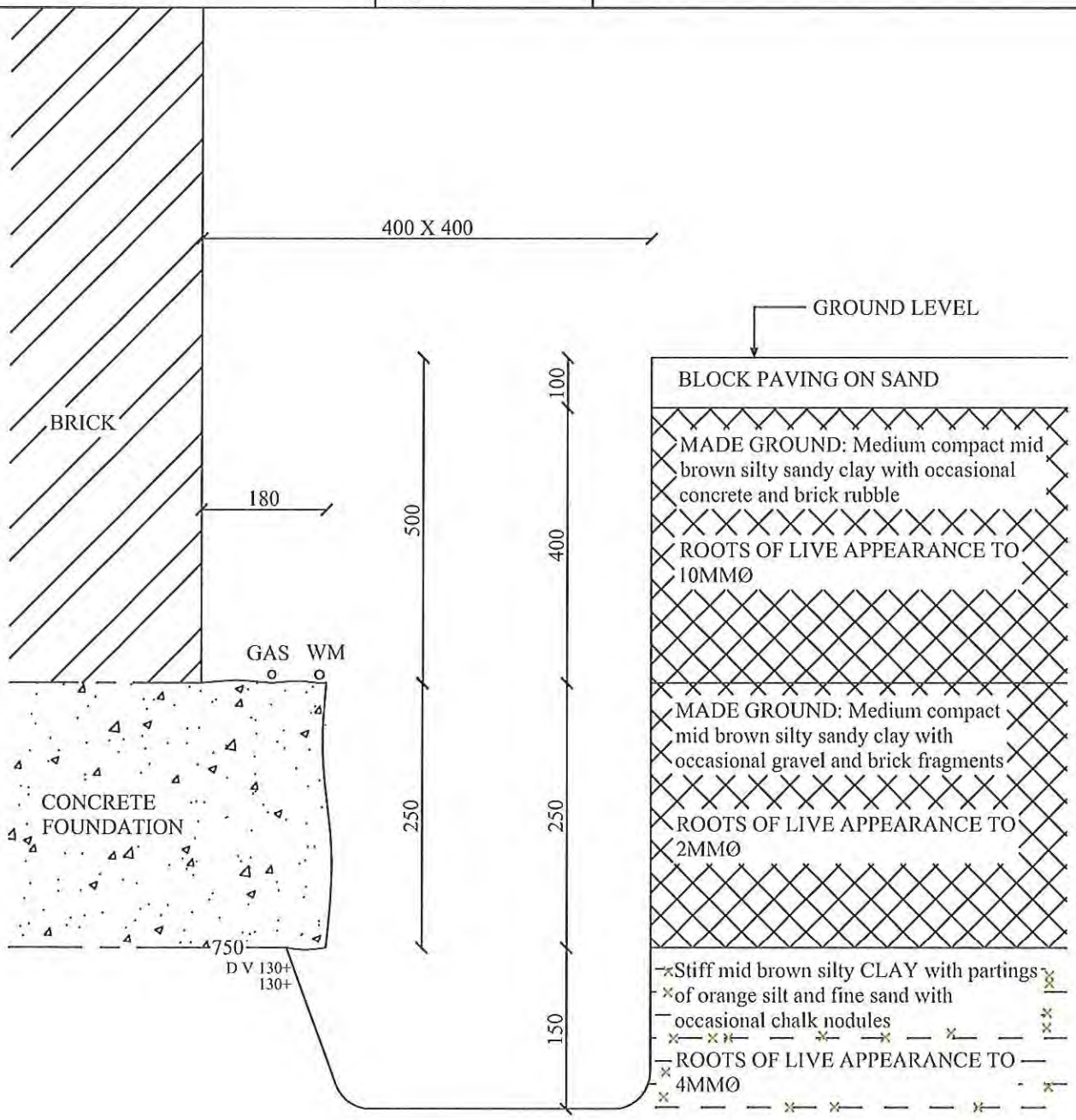
Trial Pit No: 1

Sheet: 1 of 1
Job No: 474758
Date: 06/12/2017

Site: 79 Pixmore Way
Work carried out for: Crawford Claims MGMT SUS

Hand Tools
Weather: DRY

Ground Level
Drawn By: ANS
MOD:



FOR STRATA BELOW 900mm SEE BH LOG 1

Remarks: Augered down face of foundation due to location of gas and water mains

All measurements in millimetres.

Key:
D Small disturbed sample
B Bulk disturbed sample
W Water sample
TDTD Too dense to drive
J Jar sample
V Pilcon Vane (kPa)
M Mackintosh probe

Logged: AN | Checked: SA | Approved: | Scale: N.T.S.

Borehole 1

Sheet:	1 of 1	Site:	79 Pixmore Way
Job No:	474758		
Date:	06/12/2017		
Boring Method:	Hand Auger	Ground Level:	
Client:	Crawford Claims Management		
Diameter (mm):	75	Weather:	dry

Depth (m)	Soil Description	Thickness	Legend	Samples and Tests Depth	Type	Result
0.00	See Trial Pit	0.90				
0.90	Very Stiff brown silty sandy CLAY with occasional chalk nodules	0.50		1.00	DV	130+
						130+
1.40	End of BH					

Remarks:
BH ends at 1.4m.Too stiff/hard to hand auger.BH dry and open on completion.

Key:

		To Depth (m)	Max Dia (mm)
D - Disturbed Sample			
B - Bulk Sample			
W - Water Sample	Roots	1.40	1
J - Jar Sample	Roots		
V - Pilcon Shear Vane (kPa	Roots		
M - Mackintosh Probe	Depth to Water (m)		

TDTD - Too Dense To Drive

Logged:	AN	SA	Checked:	Approved:	Version	V1.0 28/01/16	N.T.S.

Laboratory Summary Results

Our Ref : 474758

Location : 79, Pixmore Way, Letchworth Garden City

Work carried out for: Crawford Claims Management

Date Sampled: 06/12/17

Date Received : 08/12/17

Date Tested : 12/12/17

Date of Report : 17/12/17

Sample Ref TP/BH No	Sample Ref Depth (m)	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 (h)	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) SO_3 *[14]*	Sulphate Content * (g/l) SO_4 *[15]*	* Class *[16]*
1	U/S 0.75	D	17	15	47	17	30	-0.01	25	CI					> 130					
	1.0	D	16	11	46	19	27	-0.11	24	CI					> 130					

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 : 1981 : Figure 31 - Plasticity Chart for the classification of fine soils

[8] In-house method S9a adapted from BRE IP 4/93

[9] In-house Test Procedure S17a: One Dimensional Swell/Strain Test

[10] Estimated Heave Potential (Dd)

[11] Values of shear strength were determined in situ by CET using a Pilcon hand vane or Geonor vane (GV).

[12] BS 1377 : Part 3 : 1990, Test No 4

[13] BS 1377 : Part 2 : 1990, Test No 9

[14] BS 1377 : Part 3 : 1990, Test No 5.6

[15] $SO_4 = 1.2 \times SO_3$

[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 soluable magnesium testing is undertaken to prove otherwise.

* 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

Version: 5BH V1.4 - 11/05/15

UKAS TESTING

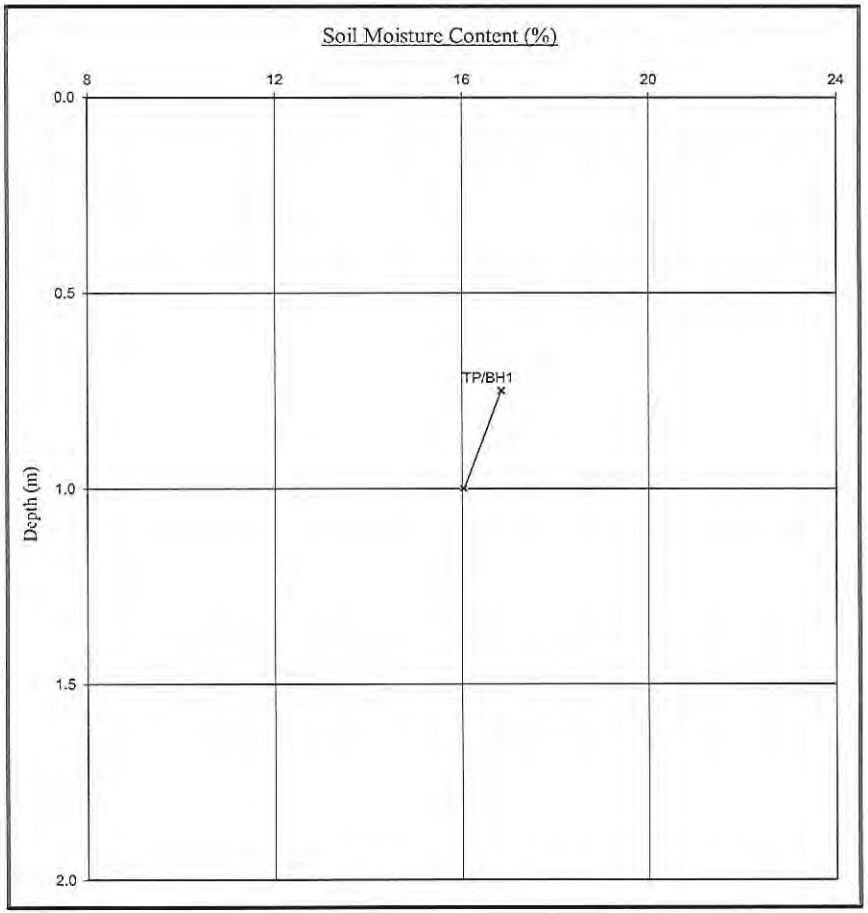
8618

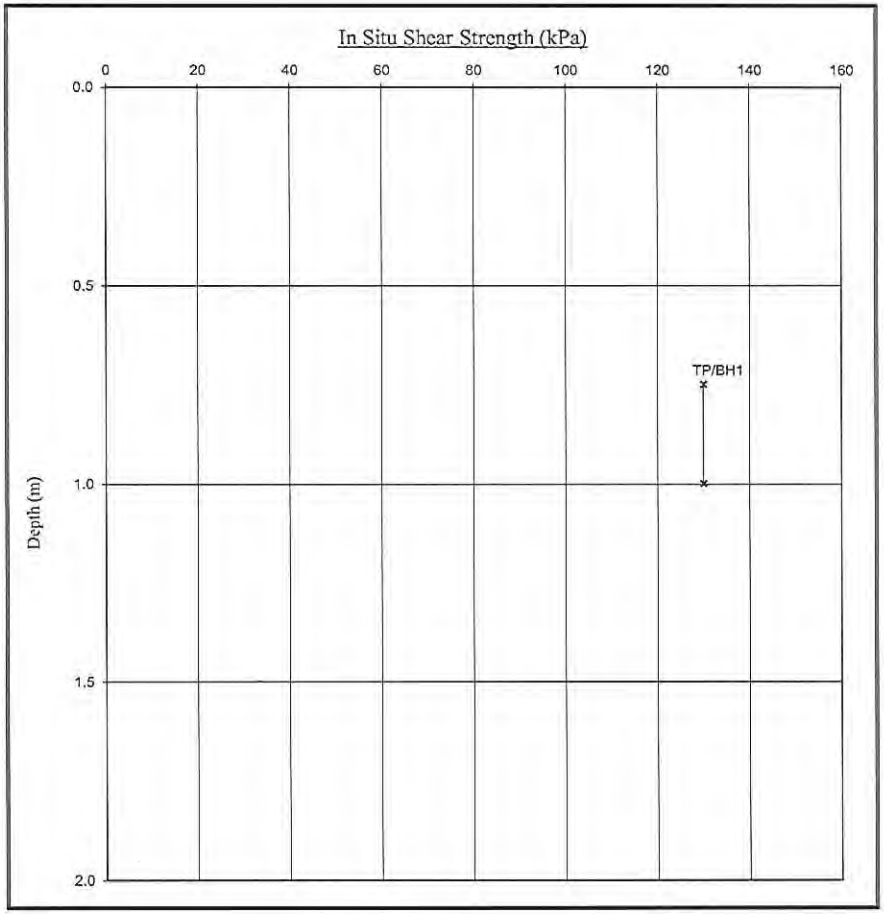
Moisture Content Profiles

Shear Strength Profiles

Our Ref : 474758
Location : 79, Pixmore Way, Letchworth Garden City
Work carried out for: Crawford Claims Management

Date Sampled : 06/12/17
Date Received : 08/12/17
Date Tested : 12/12/17
Date of Report : 17/12/17





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 CET 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.

EPSL ***European Plant Science Laboratory***	Sheet: 1 of 1 Job No: **474758** Date: **13/12/2017** Order No: **1077905** EPSL Ref: **R21053**	Site: **79 Pixmore Way, Hertfordshire,** Work carried out for: **Crawford Claims MGMT SUS**

Certificate of Analysis

The following work was commissioned by CET on behalf of their client. Root samples were obtained in sealed packets from the above site with no reference given as to the types of tree or shrub from which they may have originated.
The results were as follows -

Trial pit/ Borehole number	Root diameter (mm)	Tree, shrub or climber from which root originates	Result of starch test
TP1 (USF)	4 mm	Populus spp. †	Positive
TP1 (USF)	1 mm	Ailanthus spp. 2 roots	Positive
BH1 (to 1.4m)	1 mm	Ailanthus spp. 3 roots	Positive

Populus spp. are poplars and aspens.
Ailanthus spp. include the Tree of heaven.

† EPSL research has developed a unique ability to differentiate Willows from Poplars. We believe no other laboratory in the UK can currently provide this service. We now offer this benefit at no extra cost.

MDM

Address for correspondence: EPSL, Intec, Parc Menai, Bangor, Gwynedd, North Wales, LL57 4FG
Telephone: 01248 672 652
e-mail: lab@innovation-environmental.co.uk
Head of Laboratory Services : M D Mitchell B.Sc. (Hons), M.Phil.
Plant Anatomist : Dr G S Turner B.Sc. (Hons), M.Sc., Ph.D
Plant Anatomist : Dr R J Shaw B.Sc. (Hons), Ph.D
Consultant: Dr M P Denne B.Sc. (Hons), M.Sc., Ph.D
Registered in England. No 3256771, Registered Office:Yarmouth House, 1300 Parkway, Solent Business Park, Hampshire, PO15 7AE

To:	**Crawford Claims Management**	Client Ref:	SU1703302
Ftao: Matt Deller		Job No.	474758
		Claim No:	
Site:	**79 Pixmore Way**	Date:	16-Dec-17

ESTIMATE

Item			Amount
1.0	Location	**RWP 1 downstream - Run 1.**	£651.49
	Shared System	No	
	Condition Grade	A	
	Drain Serviceability	Unserviceable	
	Work Spec	Excavate and replace rest bend plus 2 metres of pipe work and then complete cctv(high pressure water jet if required), repair as necessary. If findings or repair exceptional then discuss with engineer before repair.	
2.0	Location	**SVP downstream - Run 2.**	£323.45
	Shared System	No	
	Condition Grade	B	
	Drain Serviceability	Unserviceable	
	Work Spec	Excavate and replace rest bend plus pipe work downstream to main run.	

Item 1 - Any further repairs that may be required will be done on agreed rates, terms and conditions.

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

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

Total	£974.95
plus VAT @20%	£194.99
Total + VAT	**£1,169.94**

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.

ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:- 79 Pixmore Way

Client :- Crawford Claims Management

Client Ref SU1703302
Job No. 474758
Claim No
Date
Recommendation 1

Rate Code	Description RWP 1 downstream - Run 1.	Unit	Qty	Rate	Amount
TITLE	**Survey**				
SN0511	CCTV Survey of underground drainage & report - including up to 1 hr HP Water Jetting or other cleaning.	nr	1	£165.11	£165.11
TITLE	**Gullies / Rest Bend / Rodding Eye - 110mm Isolated repair or connections to lined drains**				
SN0650	Rest-bend. Remove existing and replace with new PVCu item. Bed, surround and backfill.	nr	1	£110.38	£110.38
TITLE	**110mm Pipework - Isolated repair of lengths up to 1.0m**				
SN0605	Excavate & remove isolated length. Replace in new 110mm PVCu. Bed, surround & backfill. n.e. 1000mm deep.	nr	1	£125.52	£125.52
TITLE	**110mm Pipe Replacement - Replacement of lengths in excess of 1.0m**				
SN0825	Excavate & remove pipework. Replace with new 110mm PVCu. Bed, surround & backfill. n.e. 1000mm deep.	m	1	£78.10	£78.10
TITLE	**Extra-Over Surfacing Costs for drainage Repair / Replacement**				
SN1040	Removal, set aside and reinstatement of block paving n.e 100mm thick.	m2	2	£39.18	£78.35
TITLE	**Preparations / General Groundworks / Reinstatements**				
SN0025	Protection Temporary works to floors, 1000 gauge polythene.	m2	2	£1.65	£3.30
SN2050005	Disposal by hand excavated contaminated/saturated material off site.	m3	2	£44.01	£88.01
SN006	1 Litre of disinfectant.	nr	1	£2.72	£2.72
	Total subject to VAT @ 20%		1		£651.49

Note: Subject to the attached Terms and Condtions

Depths are taken to the base of excavations. Every effort will be made to match existing surfaces where disturbed although this cannot be guaranteed. All rates exclude VAT. Depths are taken to the base of excavations. The above rates are subject to re-measurement. Daywork rates do not include for materials that are charged at cost plus

KEY: ne = not exceeding, eo = extra over rate, m = linear metre, nr = number, hr = hour

ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:-	79 Pixmore Way	Client Ref	SU1703302
Client :-	Crawford Claims Management	Job No.	474758
		Claim No	
		Date	16-Dec-17
		Recommendation	2

Rate Code	Description SVP downstream - Run 2.	Unit	Qty	Rate	Amount
TITLE	**Gullies / Rest Bend / Rodding Eye - 110mm Isolated repair or connections to lined drains**				
SN0650	Rest-bend. Remove existing and replace with new PVCu item. Bed, surround and backfill.	nr	1	£110.38	£110.38
TITLE	**110mm Pipework - Isolated repair of lengths up to 1.0m**				
SN0605	Excavate & remove isolated length. Replace in new 110mm PVCu. Bed, surround & backfill. n.e. 1000mm deep.	nr	1	£125.52	£125.52
TITLE	**Extra-Over Surfacing Costs for drainage Repair / Replacement**				
SN1040	Removal, set aside and reinstatement of block paving n.e 100mm thick.	m2	1	£39.18	£39.18
TITLE	**Preparations / General Groundworks / Reinstatements**				
SN0025	Protection Temporary works to floors, 1000 gauge polythene.	m2	1	£1.65	£1.65
SN2050005	Disposal by hand excavated contaminated/saturated material off site.	m3	1	£44.01	£44.01
SN006	1 Litre of disinfectant.	nr	1	£2.72	£2.72
	Total subject to VAT @ 20%		2		£323.45

Note: Subject to the attached Terms and Condtions

Depths are taken to the base of excavations. Every effort will be made to match existing surfaces where disturbed although this cannot be guaranteed. All rates exclude VAT. Depths are taken to the base of excavations. The above rates are subject to re-measurement. Daywork rates do not include for materials that are charged at cost plus

KEY: ne = not exceeding, eo = extra over rate, m = linear metre, nr = number, hr = hour

Coding Sheet

Sheet:	1	Site:	79 Pixmore Way	
Job No.:	474758			
Date:	06/12/17	Client:	Crawford Claims Management	

Run: 1

From:	rwp 1	Invert Level:	350	Direction:	D/S
To:	D/S	Invert Level:		Function:	S/W
Pipe Material:	PVC	Pipe Dia:	75		
Water/Pressure Test:		Drain Break-In:	Yes	Gully Condition:	
				Shared Run:	No
				If Shared How:	

Distance (m)	Code	Clock Ref at	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Remarks	Surface Material	Length (m)
0.00	ST								
0.40	DES				100		Debris silt	block paving	0.4
0.40	FH						unable to push further		

Comments:

Run: 2

From:	svp 1	Invert Level:	600	Direction:	D/S
To:	D/S	Invert Level:		Function:	F/W
Pipe Material:	PVC	Pipe Dia:	100		
Water/Pressure Test:		Drain Break-In:	Yes	Gully Condition:	
				Shared Run:	No
				If Shared How:	

Distance (m)	Code	Clock Ref at	Clock Ref to	Dia mm	Intrusion %	Intrusion mm	Remarks	Surface Material	Length (m)
0.00	ST								
0.00	LD						Line deviates down	block paving	5
0.60	MC			100			to vc		
1.00	GO						line levels out		
1.20	RFJ				10		Roots fine at joint		
1.40	RFJ				10		Roots fine at joint		
1.70	JN	3	9				at main run		
5.00	FH						at 3m past damage		

Comments: