

SITE INVESTIGATION FACTUAL REPORT

Report No: 411437
Client: Cunningham Lindsey - Morley (Leeds)
Site: 38 Crediton Hill
Client Ref: 6409065-Mr Christopher Stewart-Smith
Date of Visit: 06/03/17



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

☎ 0843 2272362
✉ 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: 411437

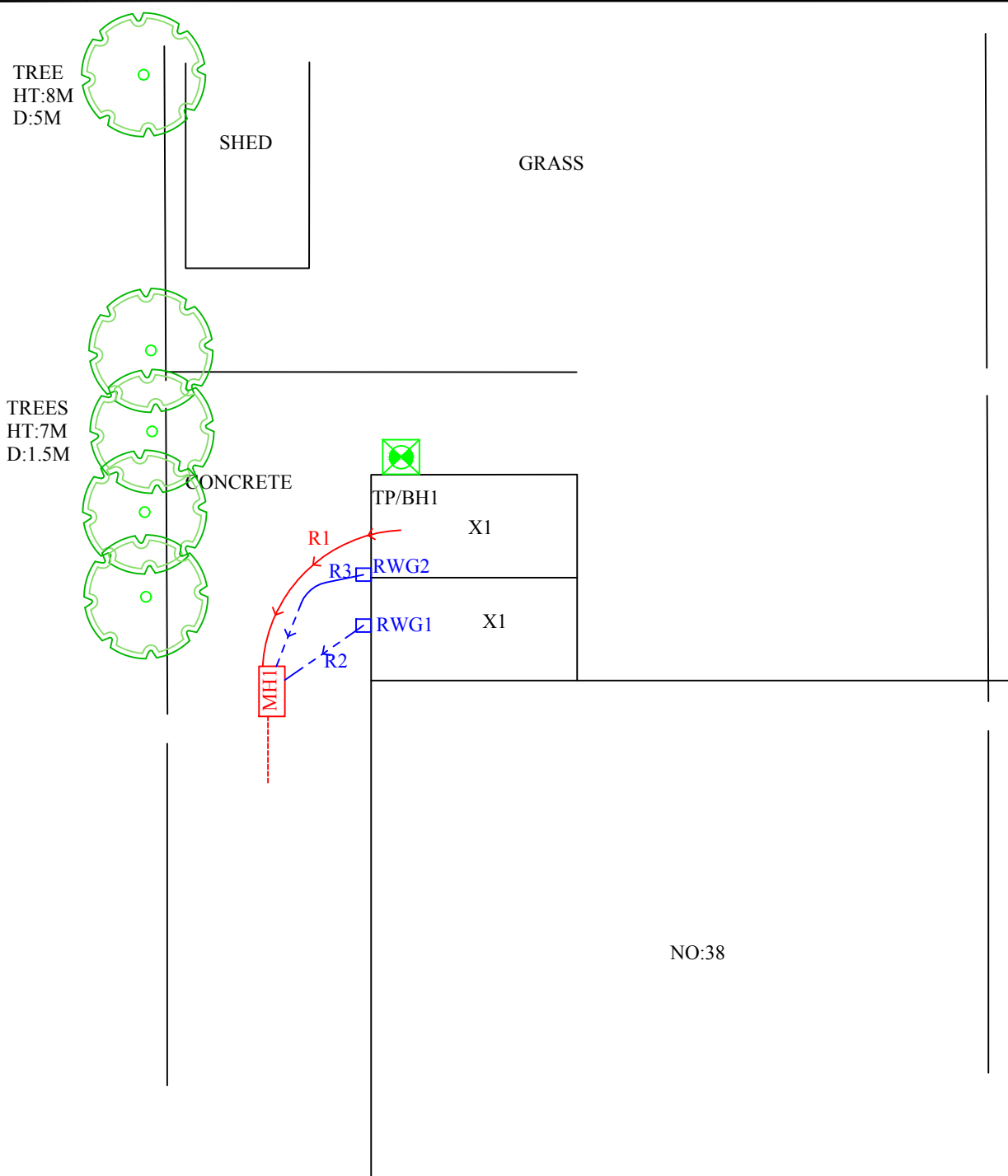
Date: 06/03/2017

Site: 38 Crediton Hill, NW6

JMC (SI) SA (Checked) SK (Drawn)

Weather: DRY

Work carried out for: Cunningham Lindsey



ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED.

Remarks:

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

Scale: N.T.S.

Trial Pit No: 1

Sheet: 1 of 1
 Job No: 411437
 Date: 6/3/17

Site: 38 Crediton Hill, NW6

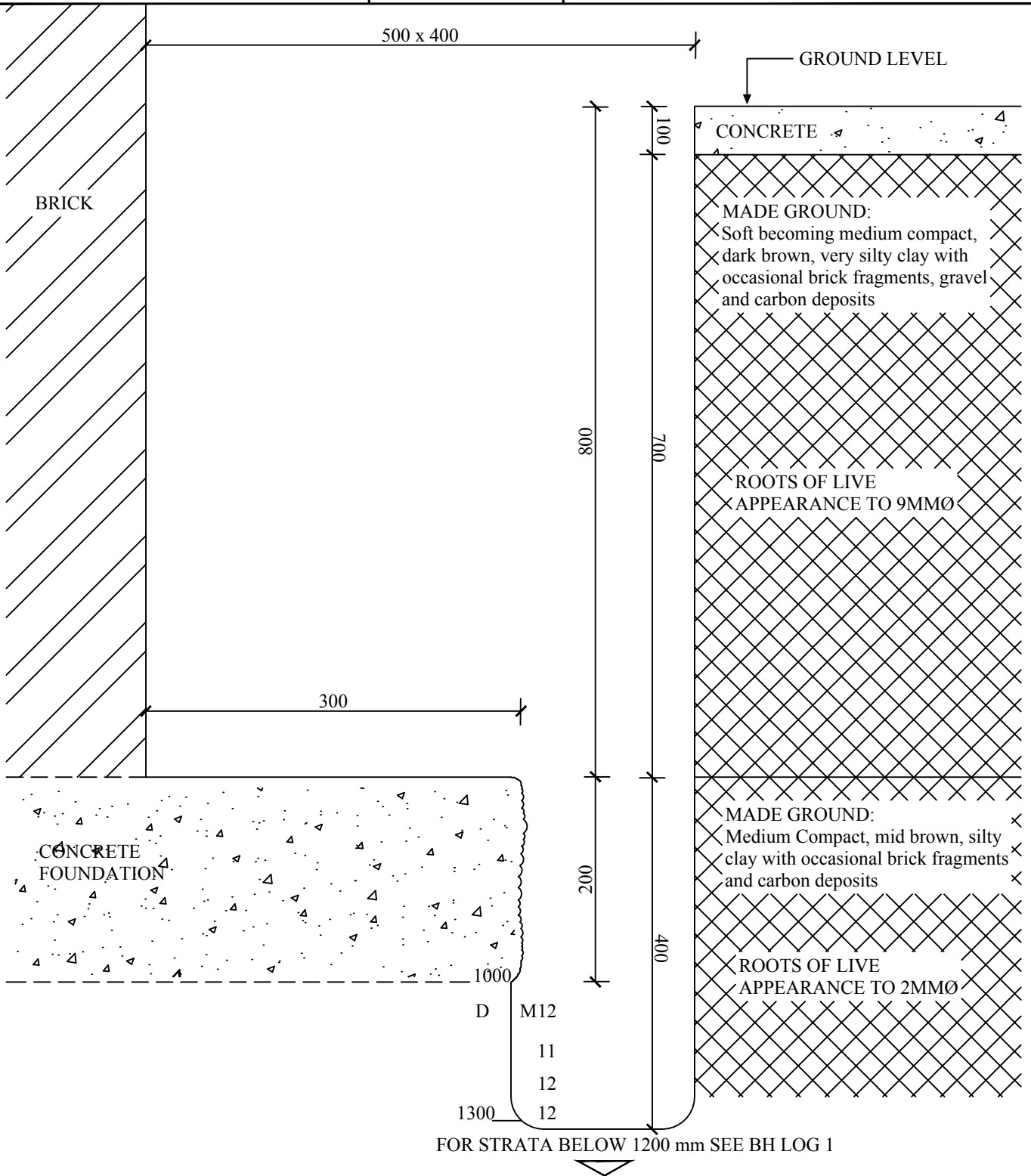
Work carried out for: Cunningham Lindsey

Hand Tools

Drawn by: SDL

Weather: DRY

Ground Level
 mOD:



Remarks: All measurements in millimetres.

Key:

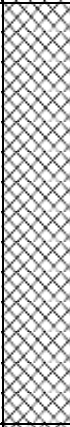
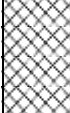
D	Small disturbed sample	J	Jar sample
B	Bulk disturbed sample	V	Pilcon Vane (kPa)
W	Water sample	M	Mackintosh probe
TDTD	Too dense to drive		

Logged: JMC

Checked: SA

Approved:

Scale: N.T.S.

Borehole		1		Sheet:	1 of 1		Site:	38 Crediton Hill				
Boring Method:		Hand Auger		Job No:	411437		Date:	06/03/2017				
Diameter (mm):		75		Weather:	dry		Ground Level:					
				Client:	Cunningham Lindsey - Morley (Leeds)							
Depth	Soil Description						Thickness	Legend	Samples and Tests			
(m)									Depth	Type	Result	
0.00	See Trial Pit						1.20					
1.20	MADEGROUND medium compact brown silty sandy clay with occasional brick fragments and carbon deposits						1.40		1.50	DM	13	
											12	
											12	
											11	
										2.00	DM	14
											12	
										15		
										12		
									2.50	DM	12	
2.60	MADEGROUND medium compact pungent,moist,stained brown silty sandy clay with occasional brick fragments						0.40				12	
											12	
											12	
3.00	End of BH								3.00	DM	11	
											12	
											13	
											12	
Remarks: BH ends at 3.0m.BH dry and open on completion,no roots observed below 1.8m.							Key:			To	Max	
							D - Disturbed Sample		Depth	Dia		
							B - Bulk Sample		(m)	(mm)		
							W - Water Sample	Roots	1.80	2		
							J - Jar Sample	Roots				
							V - Pilcon Shear Vane (kPa)	Roots				
							M - Mackintosh Probe	Depth to Water (m)				
							TDTD - Too Dense To Drive					
Logged:	jmc	SA	Checked:	Approved:	Version	V1.0 28/01/16			N.T.S.			

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 -

<u>Trial pit/ Borehole number</u>	<u>Root diameter (mm)</u>	<u>Tree, shrub or climber from which root originates</u>	<u>Result of starch test</u>
TP1 (USF)	1.5 mm	Tilia spp. 2 roots	Positive
BH1 (1.2-1.8m)	1 mm	Tilia spp. 2 roots	Positive

Tilia spp. are limes.



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 D P Aebischer B.Sc. (Hons), M.Sc., 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: Cunningham Lindsey - Morley (Leeds)
 Subsidence Scanning Centre
 Ground Floor
 Fountain Court
 West Yorkshire
 LS27 0JG

Our Ref: **411437**
 Your Ref: **6409065**
 Date: **14-Mar-17**

Ftiao: David Billington

ESTIMATE

Site:- 38 Crediton Hill

Item		Amount
1.0	Mh 1 upstream to Rwg 1 - Run 2	
Location	Yes with flats	£452.00
Shared System	B	
Condition Grade	Unserviceable	
Drain Serviceability		
Work Spec	Excavate and replace gully + pipework downstream to Mh.	
2.0	Mh 1 Works	£320.00
Location	Yes with flats	
Shared System	N/A	
Condition Grade	N/A	
Drain Serviceability	N/A	
Work Spec	Cut out and replace main drainage channel + rake out and repair defective benching within Mh.	

Notes

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

Total £772.00

Condition Grade

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

plus VAT @20% £154.40

Total + VAT	£926.40
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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:- **38 Crediton Hill**
 Client :- **Cunningham Lindsey - Morley (Leeds)**
 Attention of:- **David Billington**

Client ref: 6409065
 Job Number :- 411437
 Insurer: Zurich Personal Lines
 Date:- 14-Mar-17
 Recommendation: 1

Item No	Description	Unit	Quantity	Rate (£)	Price (£)
Mh 1 upstream to Rwg 1 - Run 2					
1.0	Emergency Drain Blockage Clearance				
1.1	Unblock drain 8am-6pm - First 1/2 Hour	Item		£70.00	£0.00
1.2	Unblock drain 8am-6pm- Subsequent 1/2 Hour	Item		£30.00	£0.00
1.3	Unblock drain 6pm-midnight	Item		£100.00	£0.00
1.4	Unblock drain 6pm-midnight - Subsequent 1/2 hour	Item		£35.00	£0.00
2.1	CCTV Surveys				
2.2	Undertake CCTV survey 8am-6pm (up to 3 hours)	Item		£130.00	£0.00
2.3	Additional 1/2 hr survey charge	Item		£30.00	£0.00
3.0	Replacing Underground Drainage				
3.1	Gullies				
3.2	Take out and replace gully (100mm outlet)	Item	1	£130.00	£130.00
3.3	Take out and replace rodding point (100mm outlet)	Item		£90.00	£0.00
3.4	Bends/junctions				
3.5	Excavate and replace rest bend (100mm outlet)	Item		£90.00	£0.00
3.6	Excavate and replace rest bend (150mm outlet)	Item		£120.00	£0.00
3.7	Excavate and replace junction/bend (100mmØ), Excavation depth 0-1m.	Item	2	£70.00	£140.00
3.8	Excavate and replace junction/bend (150mmØ), Excavation depth 0-1m	Item		£70.00	£0.00
3.9	Excavate and replace junction/bend (100mmØ), Excavation depth 1-1.5m.	Item		£70.00	£0.00
3.10	Excavate and replace junction/bend (150mmØ), Excavation depth 1-1.5m.	Item		£70.00	£0.00
3.11	Excavate and replace junction/bend (100mmØ), Excavation depth 1.5-2.0m.	Item		£70.00	£0.00
3.12	Excavate and replace junction/bend (150mmØ), Excavation depth 1.5-2.0m.	Item		£70.00	£0.00
3.13	Pipes				
3.14	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m, First 10m.	m	1	£95.00	£95.00
3.15	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m, First 10m.	m		£120.00	£0.00
3.16	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m.	m		£95.00	£0.00
3.17	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m.	m		£120.00	£0.00
3.18	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m, First 10m.	m		£150.00	£0.00
3.19	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m, First 10m.	m		£160.00	£0.00
3.20	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m.	m		£150.00	£0.00
3.21	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m.	m		£160.00	£0.00
3.22	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m, First 10m.	m		£270.00	£0.00
3.23	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m, First 10m.	m		£290.00	£0.00
3.24	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m.	m		£250.00	£0.00
3.25	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m.	m		£270.00	£0.00
3.26	Surface Reinstatement of Trenches				
3.27	Excavate through and reinstate turf.			£0.00	£0.00
3.28	Excavate through and replace concrete paving slabs	m		£30.00	£0.00
3.29	Excavate through and replace block paving	m		£50.00	£0.00
3.30	Excavate through and reinstate plain concrete, maximum thickness 100mm.	m	1	£47.00	£47.00
3.31	Excavate through and reinstate plain concrete, thickness 100- 200mm.	m		£95.00	£0.00
3.32	Excavate through and reinstate reinforced concrete, maximum thickness 100mm.	m		£90.00	£0.00
3.33	Excavate through and reinstate reinforced concrete, thickness 100-200mm.	m		£115.00	£0.00
3.34	Excavate through and reinstate Tarmac - Cold rolled	m		£48.00	£0.00
3.35	Excavate through and reinstate Tarmac - Hot rolled	m		POA	
3.36	Reinstatement of crazy paving	m		£75.00	£0.00
4.0	Lining				
4.1	Set up lining rig for drain lining including first 3m of lining per run, for 100mm or 150mm	Item		£290.00	£0.00
4.2	Line 100mmØ drain	m		£50.00	£0.00
4.3	Line 150mmØ drain	m		£70.00	£0.00
4.4	Post lining CCTV survey	no		£100.00	£0.00
4.5	Minimum lining charge	Item		£290.00	£0.00
4.6	Root cutting of drain prior to lining	hr		£65.00	£0.00
4.7	Set up lining rig for patch lining	Item		£0.00	£0.00
4.8	Patch line 100mmØ drain	no		£250.00	£0.00
4.9	Patch line 150mmØ drain	no		£280.00	£0.00
4.10	Post patch lining CCTV survey	Item		£100.00	£0.00
4.11	Minimum patch lining charge	Item		£250.00	£0.00
4.12	Re-open lateral branch up to 2m length, pipe up to 150mm	no		£190.00	£0.00
4.13	Re-open lateral branch over 2m length, pipe up to 150mm	no		£280.00	£0.00
5.0	Miscellaneous				
5.1	Excavation and backfill of soakaway (1m3) with stone	Item		£400.00	£0.00
5.2	% Uplift on disbursements and suppliers charges	%		1.25	£0.00
5.3	Daywork - Hourly labour rate	hr		£30.00	£0.00
5.4	Minimum project value	Item		£346.50	£0.00
5.5					£0.00
5.6					£0.00
5.7					£0.00
5.8					£0.00
6.0	Additional items				
6.1	De-scaling (fat/grime)	hr		£65.00	£0.00
6.2	De-scaling (scale using chain flails)	hr		£90.00	£0.00
6.3	Gully surround	item		£30.00	£0.00
6.4	Manhole works (up to 1.2m)	item		£80.00	£0.00
6.6	Oversize soakaway (1.5m3)	item		£600.00	£0.00
6.7	Soakaway >1.5m3	item		POA	
6.8	Waste disposal	m	2	£20.00	£40.00
6.9	Shoring	m		£40.00	£0.00
Total Estimate Price For Recommendation Number			1.0		£452.00
Subject to discount				0.00	£0.00
Total subject to VAT @ 20%					£452.00

Note: Subject to the attached Terms and Conditions
 A - When calculating prices, all measurements are rounded up
 C - Every effort will be made to match existing surfaces where disturbed although this cannot be guaranteed
 G - Daywork rates do not include for materials that are charged at cost plus 25%
 KEY: ne = not exceeding, eo = extra over rate, m = linear metre, nr = number, hr = hour

B - Depths are taken to the base of excavations
 D - All rates exclude VAT
 F - The above rates are subject to re-measurement
 E - Depths are taken to the base of excavations

ESTIMATING & COSTING SHEET - DOMESTIC DRAINAGE

Site:-

38 Crediton Hill

Client :-
Attention of:-

Cunningham Lindsey - Morley (Leeds)
David Billington

Client ref	6409065
Job Number :-	411437
Insurer	Zurich Personal Lines
Date:-	14-Mar-17
Recommendation	2

Item No	Description	Unit	Quantity	Rate (£)	Price (£)
Mh T Works					
1.0	Emergency Drain Blockage Clearance				
1.1	Unblock drain 8am-6pm - First 1/2 Hour	Item		£70.00	£0.00
1.2	Unblock drain 8am-6pm- Subsequent 1/2 Hour	Item		£30.00	£0.00
1.3	Unblock drain 6pm-midnight	Item		£100.00	£0.00
1.4	Unblock drain 6pm-midnight - Subsequent 1/2 hour	Item		£35.00	£0.00
2.1	CCTV Surveys				
2.2	Undertake CCTV survey 8am-6pm (up to 3 hours)	Item		£130.00	£0.00
2.3	Additional 1/2 hr survey charge	Item		£30.00	£0.00
3.0	Replacing Underground Drainage				
3.1	Gullies				
3.2	Take out and replace gully (100mm outlet)	Item		£130.00	£0.00
3.3	Take out and replace rodding point (100mm outlet)	Item		£90.00	£0.00
3.4	Bends/junctions				
3.5	Excavate and replace rest bend (100mm outlet)	Item		£90.00	£0.00
3.6	Excavate and replace rest bend (150mm outlet)	Item		£120.00	£0.00
3.7	Excavate and replace junction/bend (100mmØ), Excavation depth 0-1m.	Item		£70.00	£0.00
3.8	Excavate and replace junction/bend (150mmØ), Excavation depth 0-1m	Item		£70.00	£0.00
3.9	Excavate and replace junction/bend (100mmØ), Excavation depth 1-1.5m.	Item		£70.00	£0.00
3.10	Excavate and replace junction/bend (150mmØ), Excavation depth 1-1.5m.	Item		£70.00	£0.00
3.11	Excavate and replace junction/bend (100mmØ), Excavation depth 1.5-2.0m.	Item		£70.00	£0.00
3.12	Excavate and replace junction/bend (150mmØ), Excavation depth 1.5-2.0m.	Item		£70.00	£0.00
3.13	Pipes				
3.14	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m, First 10m.	m		£95.00	£0.00
3.15	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m, First 10m.	m		£120.00	£0.00
3.16	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m.	m		£95.00	£0.00
3.17	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m.	m		£120.00	£0.00
3.18	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m, First 10m.	m		£150.00	£0.00
3.19	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m, First 10m.	m		£160.00	£0.00
3.20	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m.	m		£150.00	£0.00
3.21	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m.	m		£160.00	£0.00
3.22	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m, First 10m.	m		£270.00	£0.00
3.23	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m, First 10m.	m		£290.00	£0.00
3.24	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m.	m		£250.00	£0.00
3.25	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m.	m		£270.00	£0.00
3.26	Surface Reinstatement of Trenches				
3.27	Excavate through and reinstate turf.			£0.00	£0.00
3.28	Excavate through and replace concrete paving slabs	m		£30.00	£0.00
3.29	Excavate through and replace block paving	m		£50.00	£0.00
3.30	Excavate through and reinstate plain concrete, maximum thickness 100mm.	m		£47.00	£0.00
3.31	Excavate through and reinstate plain concrete, thickness 100- 200mm.	m		£95.00	£0.00
3.32	Excavate through and reinstate reinforced concrete, maximum thickness 100mm.	m		£90.00	£0.00
3.33	Excavate through and reinstate reinforced concrete, thickness 100-200mm.	m		£115.00	£0.00
3.34	Excavate through and reinstate Tarmac - Cold rolled	m		£48.00	£0.00
3.35	Excavate through and reinstate Tarmac - Hot rolled	m		POA	
3.36	Reinstatement of crazy paving	m		£75.00	£0.00
4.0	Lining				
4.1	Set up lining rig for drain lining including first 3m of lining per run, for 100mm or 150mm	Item		£290.00	£0.00
4.2	Line 100mmØ drain	m		£50.00	£0.00
4.3	Line 150mmØ drain	m		£70.00	£0.00
4.4	Post lining CCTV survey	no		£100.00	£0.00
4.5	Minimum lining charge	Item		£290.00	£0.00
4.6	Root cutting of drain prior to lining	hr		£65.00	£0.00
4.7	Set up lining rig for patch lining	Item		£0.00	£0.00
4.8	Patch line 100mmØ drain	no		£250.00	£0.00
4.9	Patch line 150mmØ drain	no		£280.00	£0.00
4.10	Post patch lining CCTV survey	Item		£100.00	£0.00
4.11	Minimum patch lining charge	Item		£250.00	£0.00
4.12	Re-open lateral branch up to 2m length, pipe up to 150mm	no		£190.00	£0.00
4.13	Re-open lateral branch over 2m length, pipe up to 150mm	no		£280.00	£0.00
5.0	Miscellaneous				
5.1	Excavation and backfill of soakaway (1m3) with stone	Item		£400.00	£0.00
5.2	% Uplift on disbursements and suppliers charges	%		£1.25	£0.00
5.3	Daywork - Hourly labour rate	hr		£30.00	£0.00
5.4	Minimum project value	Item		£346.50	£0.00
5.5				£0.00	£0.00
5.6				£0.00	£0.00
5.7				£0.00	£0.00
5.8				£0.00	£0.00
6.0	Additional items				
6.1	De-scaling (fat/grime)	hr		£65.00	£0.00
6.2	De-scaling (scale using chain flails)	hr		£90.00	£0.00
6.3	Gully surround	item		£30.00	£0.00
6.4	Manhole works (up to 1.2m)	item	4	£80.00	£320.00
6.6	Oversize soakaway (1.5m3)	item		£600.00	£0.00
6.7	Soakaway >1.5m3	item		POA	
6.8	Waste disposal	m		£20.00	£0.00
6.9	Shoring	m		£40.00	£0.00
Total Estimate Price For Recommendation Number			2.0		£320.00
Subject to discount				0.00	£0.00
Total subject to VAT @ 20%					£320.00

Note: Subject to the attached Terms and Conditions

A - When calculating prices, all measurements are rounded up

C - Every effort will be made to match existing surfaces where disturbed although this cannot be guaranteed

G - Daywork rates do not include for materials that are charged at cost plus 25%

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

B - Depths are taken to the base of excavations

D - All rates exclude VAT

F - The above rates are subject to re-measurement

E - Depths are taken to the base of excavations

Coding Sheet	Sheet:		Site:	38 Crediton Hill
	Job No.:	411437		
	Date:	06/03/17	Client:	Cunningham Lindsey - Morley (Leeds)

Run: 1											
From:		MH1		Invert Level:		825		Direction:		U/S	
To:		U/S		Invert Level:				Function:		unknown	
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:				
							If Shared How:				
0.00	ST						Remarks		Surface Material	Length (m)	
0.00	DE				5		Debris		concrete	4	
0.10	ESM	12	12		10		Scale medium		under building	0.4	
3.70	LR						Line deviates right				
4.40	FH						Reached old disused gully				

Comments:
Disused Run

Run: 2											
From:		MH1		Invert Level:		300		Direction:		U/S	
To:		Rwg1		Invert Level:				Function:		S/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:		Yes		
							If Shared How:		With flats		
0.00	ST						Remarks		Surface Material	Length (m)	
0.30	LL						slight				
0.40	JDM						Joint displaced medium		concrete	0.6	
0.60	FH						reached rwg1				

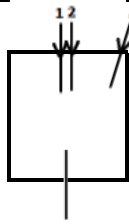
Comments:

Run: 3											
From:		MH1		Invert Level:		825		Direction:		U/S	
To:		Rwg2		Invert Level:				Function:		S/W	
Pipe Material:		Cast Iron		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:		Yes		
							If Shared How:		With flats		
0.00	ST						Remarks		Surface Material	Length (m)	
0.00	DES				15		Debris silt				
2.10	LR						Line deviates right				
2.30	SA						unable to push cam		concrete	2.3	

Comments:

Manhole Details	Sheet:	1 of 1	Site:	38 Crediton Hill
	Job No.:	411437		
	Date:	06/03/17	Client:	Cunningham Lindsey - Morley (Leeds)

MH:- Depth:- (mm)



Depths of run if different to invert level:-

Run	Depth (mm)
2	300

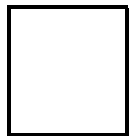
Manhole Condition:-

Reasons for poor condition.

cracking to benching
crack in drainage
Channel

Chamber Dimension:- / (mm)

MH:- Depth:- (mm)



Depths of run if different to invert level:-

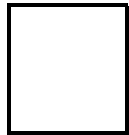
Run	Depth (mm)

Manhole Condition:-

Reasons for poor condition.

Chamber Dimension:- / (mm)

MH:- Depth:- (mm)



Depths of run if different to invert level:-

Run	Depth (mm)

Manhole Condition:-

Reasons for poor condition.

Chamber Dimension:- / (mm)

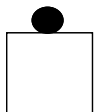
Key



Interceptor



Internal Back Drop.



External Back Drop.

Additional Comments for Poor Condition