

SITE INVESTIGATION FACTUAL REPORT

Report No: 169208
Client: Cunningham Lindsey - Solent
Site: 18, Crystal Way, Waterlooville
Waterlooville
Client Ref: 7468207-
Date of Visit: 14/11/2013



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: 169208E
Date: 14/11/13

Site: 18 Crystal Way, Waterloooville

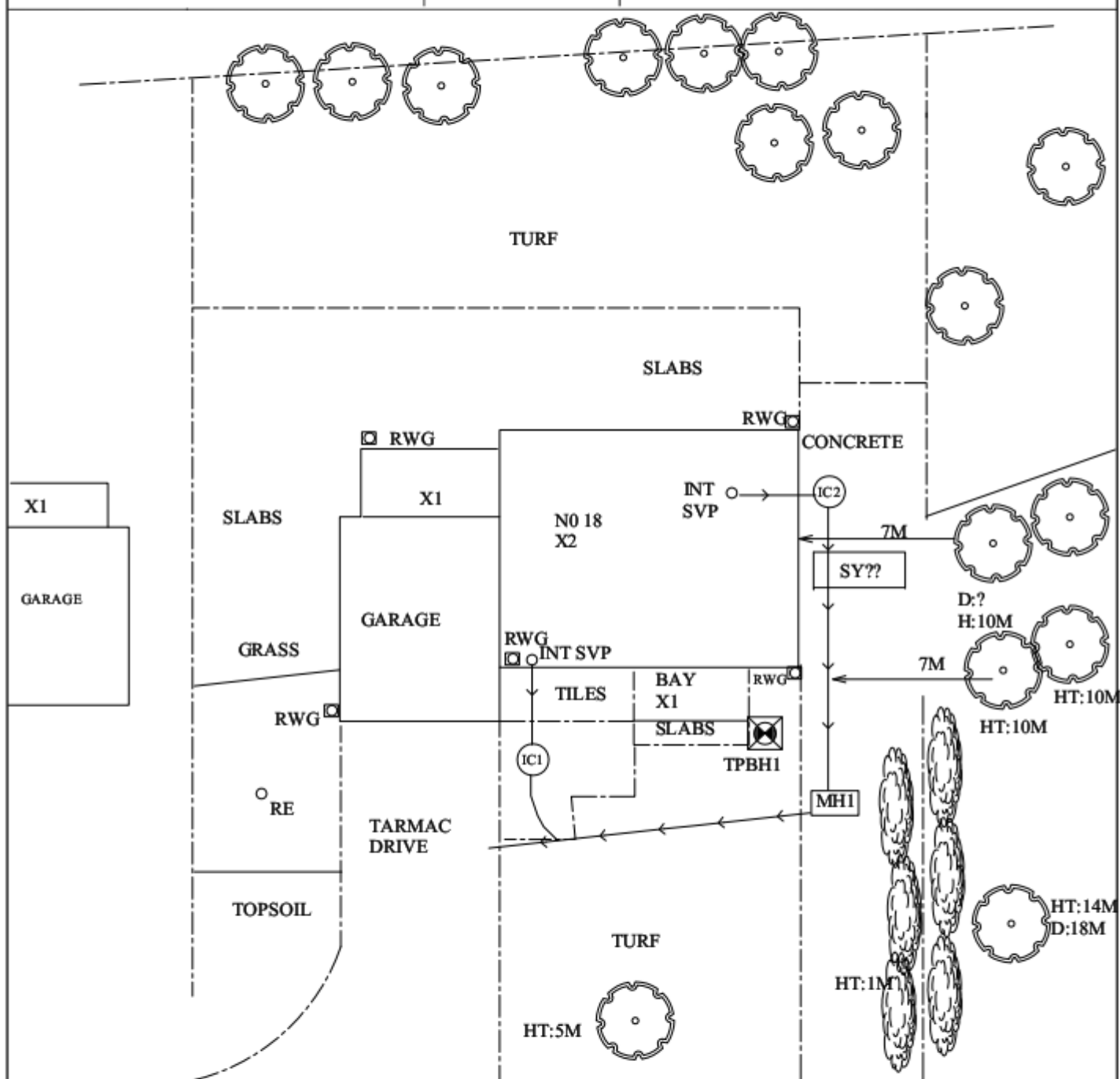
MH
(SI)

SE
(Checked)

GB
(Drawn)

Weather: Dry

Work carried out for: Cunningham Lindsey



ON SITE TREE IDENTIFICATION FOR GUIDANCE ONLY. NOT AUTHENTICATED.

Remarks:

Key:

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

Scale: N.T.S.

Trial Pit No: 1

Sheet: 1 of 1

Job No: 169208E

Date: 14/11/13

Site: 18, Crystal Way, Waterloooville

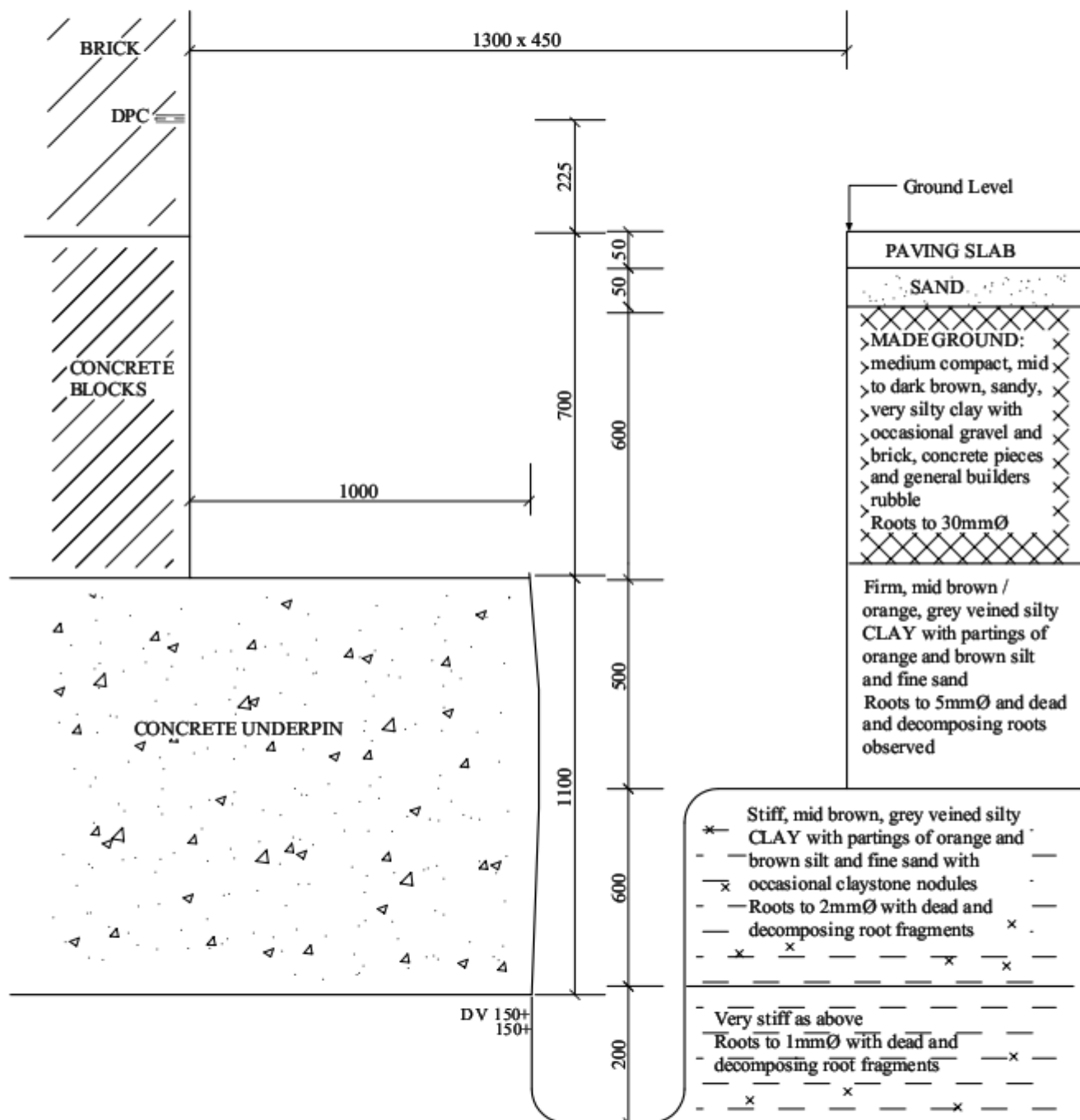
Excavation Method: Hand Tools

Drawn by: Jo F

Work carried out for: Cunningham Lindsey

Weather: Dry

Ground Level
mOD:



FOR STRATA BELOW 2000mm SEE BH LOG 1

Remarks:

All measurements in millimetres.
Used 100mm plate auger from 1200mm to achieve depth. U/S thought to be at 1800mm, hammered curved steel pin under 150mm, house and bay foundations are of similar depth, water seepage at U/S of the foundation

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: MH

Checked By: SE

Approved:

Scale: N.T.S.

Borehole No: 1			Sheet: 1 of 1		Site: 18, Crystal Way, Waterloooville									
Boring Method: Hand Auger			Job No: 169208E							Date: 14/11/2013				
Diameter: 75mm		Coordinates:		Ground Level mOD:						Work Carried out for: Cunningham Lindsey				
Depth (m)	Description of Strata		Thick-ness (m)	Legend	Sample	Test Type	Result	Depth (m)	Field Records/Comments	Depth to water (m)				
2.00	As trial pit 1		2.00											
3.00	Very stiff, mid brown, grey veined silty CLAY with partings of orange and brown silt and fine sand with occasional claystone nodules		1.00		D	V	150+ 150+	2.00	Roots to 1mm diameter to 2.5m					
					D	V	150+ 150+	2.50	Dead and decomposing root fragments to 3.0m					
	Borehole ends at 3.0m				D	V	150+ 150+	3.00						
Remarks: Borehole dry and open on completion					Key: T,D,T,D. Too Dense to Drive D Small disturbed sample J Jar sample B Bulk disturbed sample V Pilcon Vane (kPa) W Water sample M Mackintosh Probe									
Logged: MH	Checked: SE	Drawn by Jo F			Scale: NTS			Weather: Dry						

EPSL**European Plant Science Laboratory**

Sheet: 1 of 1

Job No: **169208**Date: **21/11/2013**Order No: **Ø1576**EPSL Ref: **R3898**Site: **18 Crystal Way, Waterloooville,**Work carried
out for: **Cunningham Lindsey*****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	Quercus spp. 3 roots	Positive
TP1 (USF)	<1 mm	broadleaved species, too juvenile for positive identification * 2 roots	Negative
TP1 (USF)	2 mm	not a tree or shrub root **	Negative
BH1 (to 2.5m)	<1 mm	Quercus spp. *** 4 roots	Positive

* Possibly poplar or willow.

** Conifer twig.

*** Very juvenile.

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


GST

Address for correspondence: EPSL, Intec, Parc Menai, Bangor, Gwynedd, North Wales, LL57 4FG

Telephone: 01248 672 652

e-mail: lab@marishalthompson.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

Consultant: Dr M P Denne B.Sc. (Hons), M.Sc., Ph.D

Registered in England. No 295427, Registered Office: 6G Greensfield Court, Alnwick, Northumberland, NE66 2DE

To: Cunningham Lindsey - Solent
Solent House
Solent Business Park
Whiteley
Hants
PO15 7AF

Our Ref: 169208
Your Ref: 7468207
Date: 15-Nov-13

From: Lee Swain

ESTIMATE

Site:- 18, Crystal Way, Waterlooville

Item		Amount
1.0	Location Shared System Condition Grade DRAIN Serviceability Work Spec	
	Inspection chamber 2 upstream to the internal Syp. Run A No B Unserviceable Line from I/c 2 upstream for 1.0 metre using elasto liner	
2.0	Location Shared System Condition Grade DRAIN Serviceability Work Spec	
	Inspection chamber 2 downstream to manhole 1. Run X No B Unserviceable Line from I/c 2 downstream for 1.0 metre	
3.0	Location Shared System Condition Grade DRAIN Serviceability Work Spec	
	Manhole 1 downstream to the boundary. Run X No B Unserviceable High pressure water jet to remove the roots. Line from manhole 1 downstream for 1.0 metre	

Notes

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

Total

Condition Grade

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

plus VAT @20%

Total + VAT

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:- 18, Crystal Way, Waterlooville

Client :- Cunningham Lindsey - Solent
Attention of:- Lee Swain

Client ref	7468207
Job Number :-	169208
Insurer	Saga Insurance
Date:-	15-Nov-13
Recommendation	1

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

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:- 18, Crystal Way, Waterlooille

Client :- Cunningham Lindsey - Solent
Attention of:- Lee Swain

Client ref	7468207
Job Number :	169208
Insurer	Saga Insurance
Date:-	15-Nov-13
Recommendation	2

Item No	Description	Unit	Quantity	Rate (£)	Price (£)
	Inspection chamber 2 downstream to manhole 1. Run X				
1.0	Emergency Drain Blockage Clearance				
1.1	Unblock drain 8am-6pm - First 1/2 Hour	Item			
1.2	Unblock drain 8am-6pm- Subsequent 1/2 Hour	Item			
1.3	Unblock drain 6pm-midnight	Item			
1.4	Unblock drain 6pm-midnight - Subsequent 1/2 hour	Item			
2.1	CCTV Surveys				
2.2	Undertake CCTV survey 8am-6pm (up to 3 hours)	Item			
2.3	Additional 1/2 hr survey charge	Item			
3.0	Replacing Underground Drainage				
3.1	Gullies				
3.2	Take out and replace gully (100mm outlet)	Item			
3.3	Take out and replace rodding point (100mm outlet)	Item			
3.4	Bends/junctions				
3.5	Excavate and replace rest bend (100mm outlet)	Item			
3.6	Excavate and replace rest bend (150mm outlet)	Item			
3.7	Excavate and replace junction/bend (100mmØ), Excavation depth 0-1m.	Item			
3.8	Excavate and replace junction/bend (150mmØ), Excavation depth 0-1m	Item			
3.9	Excavate and replace junction/bend (100mmØ), Excavation depth 1-1.5m.	Item			
3.10	Excavate and replace junction/bend (150mmØ), Excavation depth 1-1.5m.	Item			
3.11	Excavate and replace junction/bend (100mmØ), Excavation depth 1.5-2.0m.	Item			
3.12	Excavate and replace junction/bend (150mmØ), Excavation depth 1.5-2.0m.	Item			
3.13	Pipes				
3.14	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m, First 10m.	m			
3.15	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m, First 10m.	m			
3.16	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m.	m			
3.17	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m.	m			
3.18	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m, First 10m.	m			
3.19	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m, First 10m.	m			
3.20	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m.	m			
3.21	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m.	m			
3.22	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m, First 10m.	m			
3.23	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m, First 10m.	m			
3.24	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m.	m			
3.25	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m.	m			
3.26	Surface Reinstatement of Trenches				
3.27	Excavate through and reinstate turf.				
3.28	Excavate through and replace concrete paving slabs	m			
3.29	Excavate through and replace block paving	m			
3.30	Excavate through and reinstate plain concrete, maximum thickness 100mm.	m			
3.31	Excavate through and reinstate plain concrete, thickness 100- 200mm.	m			
3.32	Excavate through and reinstate reinforced concrete, maximum thickness 100mm.	m			
3.33	Excavate through and reinstate reinforced concrete, thickness 100-200mm.	m			
3.34	Excavate through and reinstate Tarmac - Cold rolled	m			
3.35	Excavate through and reinstate Tarmac - Hot rolled	m			
3.36	Reinstatement of crazy paving	m			
4.0	Lining				
4.1	Set up lining rig for drain lining including first 3m of lining per run, for 100mm or 150mm	Item	1		
4.2	Line 100mmØ drain	m			
4.3	Line 150mmØ drain	m			
4.4	Post lining CCTV survey	no			
4.5	Minimum lining charge	Item			
4.6	Root cutting of drain prior to lining	hr			
4.7	Set up lining rig for patch lining	Item			
4.8	Patch line 100mmØ drain	no			
4.9	Patch line 150mmØ drain	no			
4.10	Post patch lining CCTV survey	Item			
4.11	Minimum patch lining charge	Item			
4.12	Re-open lateral branch up to 2m length, pipe up to 150mm	no			
4.13	Re-open lateral branch over 2m length, pipe up to 150mm	no			
5.0	Miscellaneous				
5.1	Excavation and backfill of soakaway (1m3) with stone	Item			
5.2	% Uplift on disbursements and suppliers charges	%			
5.3	Daywork - Hourly labour rate	hr			
5.4	Minimum project value	Item			
5.5					
5.6					
5.7					
5.8					
6.0	Additional Items				
6.1	De-scaling (fat/grime)	hr			
6.2	De-scaling (scale using chain flails)	hr			
6.3	Gully surround	item			
6.4	Manhole works (up to 1.2m)	item			
6.6	Oversize soakaway (1.5m3)	item			
6.7	Soakaway >1.5m3	item			
6.8	Waste disposal	m			
6.9	Shoring	m			
	Total Estimate Price For Recommendation Number		2.0		
	Subject to discount			0.10	
	Total subject to VAT @ 20%				

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:- 18, Crystal Way, Waterlooville

Client :- Cunningham Lindsey - Solent
Attention of:- Lee Swain

Client ref	7468207
Job Number :-	169208
Insurer	Saga Insurance
Date:-	15-Nov-13
Recommendation	3

Item No	Description	Unit	Quantity	Rate (£)	Price (£)
	Manhole 1 downstream to the boundary. Run X				
1.0	Emergency Drain Blockage Clearance				
1.1	Unblock drain 8am-6pm - First 1/2 Hour	Item			
1.2	Unblock drain 8am-6pm- Subsequent 1/2 Hour	Item			
1.3	Unblock drain 6pm-midnight	Item			
1.4	Unblock drain 6pm-midnight - Subsequent 1/2 hour	Item			
2.1	CCTV Surveys				
2.2	Undertake CCTV survey 8am-6pm (up to 3 hours)	Item			
2.3	Additional 1/2 hr survey charge	Item			
3.0	Replacing Underground Drainage				
3.1	Gullies				
3.2	Take out and replace gully (100mm outlet)	Item			
3.3	Take out and replace rodding point (100mm outlet)	Item			
3.4	Bends/junctions				
3.5	Excavate and replace rest bend (100mm outlet)	Item			
3.6	Excavate and replace rest bend (150mm outlet)	Item			
3.7	Excavate and replace junction/bend (100mmØ), Excavation depth 0-1m.	Item			
3.8	Excavate and replace junction/bend (150mmØ), Excavation depth 0-1m	Item			
3.9	Excavate and replace junction/bend (100mmØ), Excavation depth 1-1.5m.	Item			
3.10	Excavate and replace junction/bend (150mmØ), Excavation depth 1-1.5m.	Item			
3.11	Excavate and replace junction/bend (100mmØ), Excavation depth 1.5-2.0m.	Item			
3.12	Excavate and replace junction/bend (150mmØ), Excavation depth 1.5-2.0m.	Item			
3.13	Pipes				
3.14	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m, First 10m.	m			
3.15	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m, First 10m.	m			
3.16	Excavate trench and replace 100mmØ pipework, Excavation depth 0-1m.	m			
3.17	Excavate trench and replace 150mmØ pipework, Excavation depth 0-1m.	m			
3.18	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m, First 10m.	m			
3.19	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m, First 10m.	m			
3.20	Excavate trench and replace 100mmØ pipework, Excavation depth 1-1.5m.	m			
3.21	Excavate trench and replace 150mmØ pipework, Excavation depth 1-1.5m.	m			
3.22	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m, First 10m.	m			
3.23	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m, First 10m.	m			
3.24	Excavate trench and replace 100mmØ pipework, Excavation depth 1.5-2.0m.	m			
3.25	Excavate trench and replace 150mmØ pipework, Excavation depth 1.5-2.0m.	m			
3.26	Surface Reinstatement of Trenches				
3.27	Excavate through and reinstate turf.				
3.28	Excavate through and replace concrete paving slabs	m			
3.29	Excavate through and replace block paving	m			
3.30	Excavate through and reinstate plain concrete, maximum thickness 100mm.	m			
3.31	Excavate through and reinstate plain concrete, thickness 100-200mm.	m			
3.32	Excavate through and reinstate reinforced concrete, maximum thickness 100mm.	m			
3.33	Excavate through and reinstate reinforced concrete, thickness 100-200mm.	m			
3.34	Excavate through and reinstate Tarmac - Cold rolled	m			
3.35	Excavate through and reinstate Tarmac - Hot rolled	m			
3.36	Reinstatement of crazy paving	m			
4.0	Lining				
4.1	Set up lining rig for drain lining including first 3m of lining per run, for 100mm or 150mm	Item	1		
4.2	Line 100mmØ drain	m			
4.3	Line 150mmØ drain	m			
4.4	Post lining CCTV survey	no			
4.5	Minimum lining charge	Item			
4.6	Root cutting of drain prior to lining	hr	1		
4.7	Set up lining rig for patch lining	Item			
4.8	Patch line 100mmØ drain	no			
4.9	Patch line 150mmØ drain	no			
4.10	Post patch lining CCTV survey	Item			
4.11	Minimum patch lining charge	Item			
4.12	Re-open lateral branch up to 2m length, pipe up to 150mm	no			
4.13	Re-open lateral branch over 2m length, pipe up to 150mm	no			
5.0	Miscellaneous				
5.1	Excavation and backfill of soakaway (1m3) with stone	Item			
5.2	% Uplift on disbursements and suppliers charges	%			
5.3	Daywork - Hourly labour rate	hr			
5.4	Minimum project value	Item			
5.5					
5.6					
5.7					
5.8					
6.0	Additional Items				
6.1	De-scaling (fat/grime)	hr			
6.2	De-scaling (scale using chain flails)	hr			
6.3	Gully surround	item			
6.4	Manhole works (up to 1.2m)	item			
6.6	Oversize soakaway (1.5m3)	item			
6.7	Soakaway >1.5m3	item			
6.8	Waste disposal	m			
6.9	Shoring	m			
	Total Estimate Price For Recommendation Number		3.0		
	Subject to discount				
	Total subject to VAT @ 20%			0.10	

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

Underground Drainage Report	Sheet: 1 of 2	Site: 18, Crystal Way, Waterloooville
	Job No: 169208	
	Date: 14-Nov-13	
	Work carried out for: Cunningham Lindsey - Solent	

MANHOLE DETAILS

Manhole	Depth to Invert	Condition
IC1	700mm	As built
IC2	850mm	As built
MH1	1250mm	As built

CCTV Survey:-

1. Drainage Run:

From inspection chamber 1 run A to internal waste pipe- 100mm clay foul water- upstream(not shared)

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0		Start	
0.0	LL		
1.8	LU		
2.2	FH	Camera reached INT WP	

2. Drainage Run:

From inspection chamber 2 run A to internal soil vent pipe- 100mm unknown foul water- upstream (not shared)

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0		Start	
0.3	OJ		
0.5	LU		
1.1	FH	Camera reached INT SVP	

Water Test Grade:

0 - Unable to fill	2 - Medium Loss over 2 minutes
1 - Heavy Loss	3 - Slow Loss over 5 minutes
	4 - No Loss

Underground Drainage Report	Sheet: 2 of 2	Site: 18, Crystal Way, Waterloooville
	Job No: 169208	
	Date: 14-Nov-13	
	Work carried out for: Cunningham Lindsey - Solent	

3. Drainage Run:

From inspection chamber 2 run X to manhole 1 - 100mm clay foul water- downstream(not shared)

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0		Start	
0.1	JDM		
7.5	LR		
7.9	FH	Camera reached MH1	

4. Drainage Run:

From manhole 1 run X to boundary- 100mm clay foul water- downstream(not shared)

Metres:	Code:	Observations:	Surface Material/ Condition:
0.0		Start	
0.1	RFJ		
6.0	JN	At 3 o'clock, 100mm IC1 run X	
6.0	FH	Reached beyond problem	

END OF SURVEY

Our assessment of the drainage system is based on our visual inspection and on information collated at the time of the survey. Where assumptions have been made these are based on our experience and do not constitute any form of guarantee, nor do we guarantee that further deterioration will not occur following this survey. CCTV video records will be stored for a period of 3 months from date of inspection and then destroyed.

Water Test Grade:

0 - Unable to fill	2 - Medium Loss over 2 minutes
1 - Heavy Loss	3 - Slow Loss over 5 minutes
	4 - No Loss

CET STRUCTURES LTD TERMS AND CONDITIONS

Site:- 18, Crystal Way, Waterloooville

Client Ref:- 7468207

Client :- Cunningham Lindsey - Solent

Job Number:- 169208

Attention of:- Lee Swain

Insurer:- Saga Insurance

Date:- 15-Nov-13

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

The bend/s in the drainage run/s may cause the liner to fail. Which would result in excavation of the failed liner. This will be done on day-work rate and materials 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	SWM	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	Vermín (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 seep at (or from... to...) o'clock (at joint)	FH	End of survey
JDM	Joint displaced medium		
JDL	Joint displaced large		

Contract: 169208

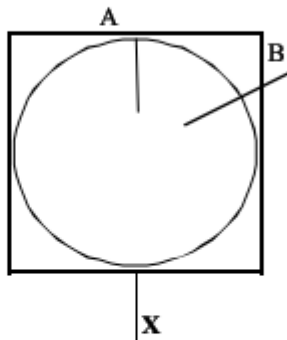
Date: 14-Nov-13

Operative Initial: SA

Site Address: 18, Crystal Way, Waterloooville

Page: 1 of 1

I/C: 1 Depth: 700mm



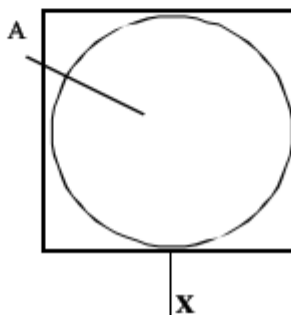
Chamber Dimension (mm) 300mm diameter

Depths of run if different to invert level:-

A _____
B _____
C _____
D _____
E _____
F _____
G _____
H _____

Manhole Condition
As built

I/C: 2 Depth: 850mm



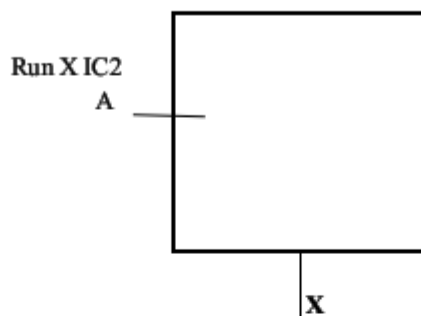
Chamber Dimension (mm) 300mm diameter

Depths of run if different to invert level:-

A _____
B _____
C _____
D _____
E _____
F _____
G _____
H _____

Manhole Condition
As built

MH: 1 Depth: 1250mm



Chamber Dimension (mm) 860/680mm

Depths of run if different to invert level:-

A _____
B _____
C _____
D _____
E _____
F _____
G _____
H _____

Manhole Condition
As built

KEY...



Internal Back Drop



External Back Drop



Run X Interceptor

Water Pressure Test Results

From:

To:

Pass / Fail