

e-mail

**Date:** 13<sup>th</sup> June 2017  
**Ref:** E7501/JRCB (Rev 2)  
**To:** Paul Broadbent – StreetPlot  
**cc:** Thomas Fornvald - Pringuer-James Consulting Engineers Ltd  
**From:** John Bartley  
**Re:** Site investigation – 27A West End Lane, London NW6 4QJ

Dear Paul

As requested by Pringuer-James Consulting, we are pleased to provide a quotation for the investigation at this site. We understand that the scheme involves the construction of a 3-storey residential building; no basement is proposed. We have checked the published geology which indicates that the site is underlain by the London Clay, which appears to extend to depths in excess of 40m in this area.

The London Clay is a relatively competent stratum and is expected to be able to support moderately loaded spread foundations. The clay will be a shrinkable soil and due consideration will need to be given to desiccation effects if the new structure falls within the zone of influence of any existing trees. Piles may be required if the near-surface soils are not competent, if deep desiccation is present or or if the structural loads dictate.

Based upon PJCE's specification, the proposed scope of works is as follows:

**Desk study:** to identify the site history and potential on-site and off-site contaminative uses. The desk study will include a Preliminary Risk Assessment (PRA) which will allow targeting any potential contaminative sources

**Cable percussive borehole:** one borehole to 15m depth has been specified. We understand that access through the new hoarding on the eastern site boundary is available for a standard sized tripod rig, which is towed behind a 4x4 utility vehicle with an 8m tow length; a working area of approximately 8m x 3m is required. In-situ testing and sampling will be carried out at closely-spaced 1m intervals to optimise the information gained. Please note that EC7 requires a borehole depth at least 2m below any pile toe and therefore a strictly compliant design would limit the pile depth to 13m. A monitoring pipe will be installed to about 4m depth.

**Trial pits:** two pits have been requested to expose the foundations of the existing boundary walls – these will be hand-excavated. If access is available to the lock-up garages, we propose that four shallow trial pits are carried out to allow sampling for contamination testing (these garages are probably the main potential contamination source)

**Geotechnical laboratory testing:** this will include index property, undrained triaxial and soluble sulphate/pH tests as applicable

**Contamination testing:** we will carry out contamination testing to allow a preliminary assessment of potential on-site contamination sources together with WAC testing to assist in classification for disposal

**Groundwater/gas monitoring:** the Camden planning conditions require an assessment of ground gas risks. We recommend that initially three monitoring visits are allowed for. However, it should be noted that if potential gas risks are identified in by the desk study or intrusive investigation, additional visits may be required

**Factual/interpretative reporting:** as described below

Our charges for the proposed scope of works would be as follows:

Item	Description	Amount (+VAT)
1)	<p><b>Desk study and walkover survey:</b> this will be based upon a commercially available historical maps search, database search and consultation with the London Borough of Camden, together with observations made during a walkover survey (in conjunction with the fieldwork). The results will be incorporated in the main report</p>	
2)	<p><b>Cable percussive borehole (1 x 15m);</b> our rate includes the following:</p> <ul style="list-style-type: none"> <li>✚ mobilisation of standard full-sized rig and equipment</li> <li>✚ hand excavated service pit to 1.2m</li> <li>✚ single string drilling (150mm diameter)</li> <li>✚ sampling and in-situ testing at 1.0m intervals</li> <li>✚ monitoring pipe to 4.0m depth</li> <li>✚ geotechnical laboratory testing</li> <li>✚ disposal of excess arisings (assuming non-contaminated)</li> </ul> <p>Additional meterage, if requested, would be charged at ____+VAT per m</p>	
3)	<p><b>Hand excavated trial pits:</b> 2no trial pits are specified. Allow for 1no day attendance of a 2-man crew including breaker and hand tools at a rate of ____+VAT per day. We should be able to complete the specified number of pits in one day but it must be noted that the time taken to excavate and backfill the pits will clearly depend upon the thickness of any surface concrete, the depth of the existing foundations and the ease of access to the positions - this item would therefore be strictly re-measurable with additional days charged at the same rate. We would also include at least, say, 4no shallow pits within the lock-up garages to allow sampling for contamination testing</p> <p><b>Shoring:</b> if required, this would be charged at ____+VAT per trial pit</p> <p><b>Backfill and reinstatement:</b> we propose to backfill the pits with compacted arisings; any surplus would be mounded neatly over. If reinstatement with concrete is required this would be charged at ____+VAT per pit for materials, including spoil disposal (assuming uncontaminated). Any additional crew attendance, if required, would be charged at the above rate</p>	<p>Rate only</p> <p>Rate only</p>
4)	<p><b>Engineer attendance:</b> allow for one visit at ____+VAT to undertake walkover survey and log trial pits. Additional visits if required would be charged at the same rate</p>	
5)	<p><b>Groundwater/gas monitoring:</b> initially allow for 3no visits at ____+VAT per visit. Additional visits, if required, would be charged at the same rate</p>	

Item	Description	Amount (+VAT)
6)	<b>Contamination/WAC testing and appraisal:</b> allow for the following testing (subject to the findings of the desk study/exploratory holes):	
	<ul style="list-style-type: none"> <li>✚ general soil/water suite - 8no at ____+VAT per sample</li> <li>✚ WAC testing - 1no at ____+VAT per sample</li> <li>✚ PCB testing - ____+VAT per sample (rate only)</li> <li>✚ TPH/CWG - ____+VAT per sample (rate only)</li> <li>✚ VOC/SVOC testing - ____+VAT per sample (rate only)</li> </ul>	
7)	<b>Reporting:</b> includes the following:	
	<ul style="list-style-type: none"> <li>✚ provision of borehole and trial pit logs</li> <li>✚ provision of borehole/trial pit logs and laboratory test results</li> <li>✚ advice on spread foundations and piles</li> <li>✚ ACEC concrete design</li> <li>✚ PRA, contamination appraisal, site specific risk assessment and conceptual model</li> </ul>	
<b>Provisional total</b>		____ +VAT

Our offer is based upon the following conditions:

- ✚ normal working hours (08:00-17:00 weekdays) shall apply
- ✚ parking is available on site
- ✚ full details of any buried services are provided as detailed in our standard terms of appointment. We would scan the borehole position with a Cable Avoidance Tool (CAT) and stay clear of any obvious service runs. Please note that we cannot accept responsibility for damage to buried services which are not shown on the information provided. If you require, we would be pleased to provide specialist service tracing at \_\_\_\_+VAT
- ✚ we have allowed for breaking out up to about 100mm of concrete/hard surfacing at the borehole and trial pit positions. If thicker concrete is present this may result in charges for additional dayworks and hire of breaking equipment
- ✚ any delays beyond our control will be charged at \_\_\_\_+VAT/hour

At present, we could commence the investigation about two to three weeks of instruction. The fieldwork is expected to take about one day to complete with our report being issued about three to four weeks later. We would be able to provide preliminary recommendations prior to final issue.

We trust that you find our quotation of interest and look forward to hearing from you. We enclose our Terms of Appointment for your information.

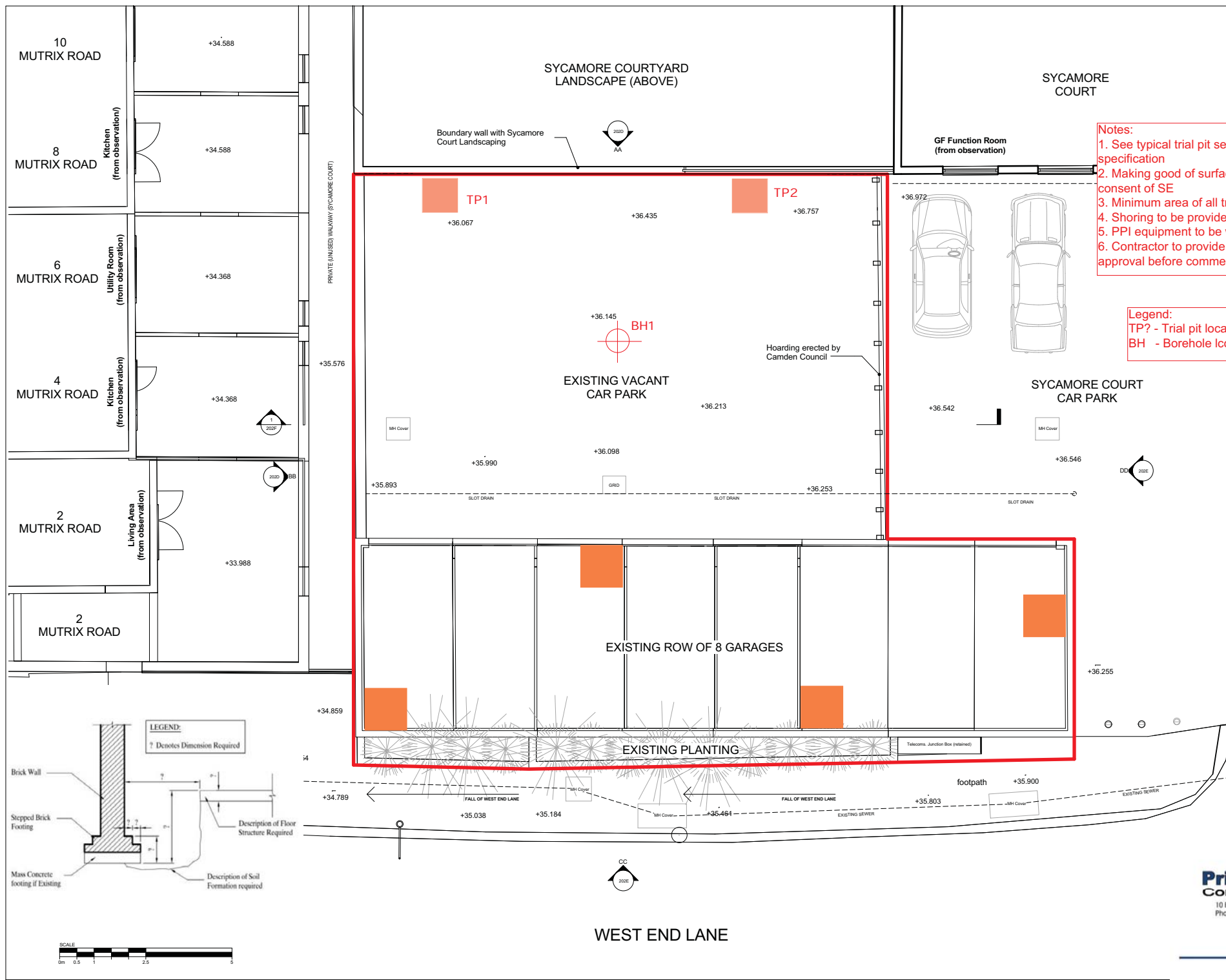
Yours faithfully  
For Soil Consultants Ltd

**John Bartley**

Encl SCL Standard Terms



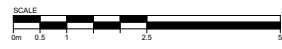
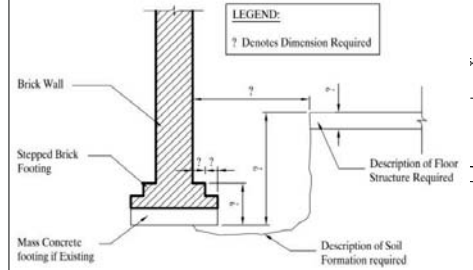
Do not scale dimensions.  
All dimensions are in millimetres unless noted otherwise.  
StreetPlot Ltd. shall be notified in writing of any discrepancies.



- Notes:**
1. See typical trial pit section enclosed with specification
  2. Making good of surfaces to be done only after consent of SE
  3. Minimum area of all trial pits to be 1,00mx1,00m
  4. Shoring to be provided as necessary
  5. PPI equipment to be worn at all times
  6. Contractor to provide method statement for approval before commencement of works

**Legend:**  
TP? - Trial pit location  
BH - Borehole location

**LEGEND:**  
? Denotes Dimension Required



**Pringuer-James**  
Consulting Engineers  
10 Beulah Road, Wimbledon, London SW19 3SB  
Phone - 0208 940 4159 Email - Mail@pjce.com

**STANDARD TERMS OF APPOINTMENT OF**  
**SOIL CONSULTANTS LTD FOR GEOTECHNICAL SERVICES**

- 1 Unless previously withdrawn, our offer remains valid for a period of 60 days from date of offer. If an instruction is given after the 60 days we reserve the right to reasonably adjust any cost associated with the project to reflect any variance on the original offer. In placing an instruction to proceed with exploratory work, whether directly from the Client or Client's representative, the client is deemed to have accepted our Terms of Appointment.
- 2 In our quotation we will provide an estimate of any mobilisation period following an instruction to proceed. This estimate will be accurate at the time of quotation but it should be noted that the mobilisation period may vary at a later date due to factors such as sub-contractor availability and workload.
- 3 We will take responsibility for the scope of the exploratory work within the available access and any budgetary constraints using reasonable skill and care. In undertaking this work, the Client has a responsibility for the welfare/health and safety of operatives invited to undertake work on their site. The Client shall indemnify us in respect of any failure by the Client to fulfil the Client's obligations in connection with all relevant and current Health and Safety Regulations.
- 4 Eurocodes were introduced for geotechnical design in April 2010. Unless specifically requested or access restrictions limit the sampling methods available to us, our quotation will be based on the British Standards relevant to Site Investigation and Laboratory testing such as BS 5930, BS1377 and Specification for Site Investigation Part 3. At present, the open drive tube sampling method traditionally used throughout the UK (i.e.U100) does not comply with Eurocode BS EN 1997-2:2007 for obtaining Class 1 samples of cohesive materials. Such samples are required for laboratory strength and compressibility testing under the Eurocodes. In-situ strength testing will therefore be carried out either by Standard Penetration Tests or by vane tests, whenever possible, which are compliant with the Eurocodes. U100 samples will still be obtained and tested where investigations are undertaken in accordance with the British Standards. Unless otherwise stated, our Report should be construed as being a Ground Investigation Report (GIR) as defined in BS EN1997-2. Our Report is not intended to be and should not be viewed or treated as a Geotechnical Design Report (GDR) as defined in EN1997-2. Any 'design' recommendations which are provided are for guidance only and are intended to allow the designer to assess the results and implications of our investigation/testing and to permit preliminary design of relevant elements of the proposed scheme.
- 5 Where excavation is required as part of the exploratory work, the Client shall provide drawings or plans showing accurate and complete locations of all underground services and structures. In performing our service, we shall take reasonable precautions to avoid damage to underground services or structures. We will not be responsible for any damage caused to underground services or structures and will not be liable for any claims for damage, expenses arising or losses unless the location of all underground services or structures are accurately shown on drawings and those plans have been provided to us in good time prior to commencement of the exploratory work. Risk to the Client can be further reduced by undertaking a scan of the site using a specialist underground scanning service which would identify traceable services at shallow depth.
- 6 With some sites, especially those in certain areas of London, there may be a risk of unexploded ordnance (UXO) being present. Unless otherwise stated we will proceed on the basis that the Client or their representative provides a preliminary risk rating for the site. It should be noted that if the site is deemed to be in an area of risk then additional fees may be required to undertake a detailed site specific UXO assessment and/or to provide site scanning. If the client requires, we will be pleased to provide an estimate to undertake the preliminary assessment before commencement.
- 7 An indication of the scope of the development will be provided by the Client. The Client will supply a site plan (to a rational scale) and arrange access.
- 8 We will instigate and control the exploratory work, including subsequent laboratory soil tests.
- 9 Should the Client terminate the contract after instruction, we reserve the right to recover costs associated to work carried out between the time of instruction and the point of termination. Cancellation fees, and material costs shall be charged at Cost plus 20% (+VAT) and engineer time shall be charged at £95 + VAT per hour.

- 10 We will prepare a comprehensive report giving our professional recommendations on the design and construction aspects of foundations. Our reports are not a site characterisation and ground conditions and hazards could occur which have not been detected. In general, when instructed, an agreed number of contamination tests will be carried out to give an outline assessment of potential contaminants. In some circumstances it may be necessary to recommend further monitoring, contamination testing and assessment and the scope of this work would be agreed with the Client. Notwithstanding this additional scope, local Regulatory Authorities may have specific requirements which need to be addressed. Unless otherwise agreed or stated our reporting will constitute neither a Quantitative Risk Assessment nor a Remediation Statement or Strategy.
- 11 Our reports are counter-checked by one of our suitably qualified and experienced engineers/geologists.
- 12 Notwithstanding anything to the contrary contained in these terms, our liability under or in connection with these terms whether in contract or in tort, in negligence, for breach of statutory duty or otherwise (other than in respect of personal injury or death) shall not exceed the sum equivalent to ten times our contract fee or £100,000 whichever is less for each and every claim in geotechnical matters and in the aggregate for environmental matters unless otherwise agreed.
- 13 Without prejudice to any other exclusion or limitation of liability, damages, loss, expense or costs our liability for any claim or claims under this agreement be further limited to such sum as it would be just and equitable for us to pay having regard to the extent of our responsibility for the loss or damage giving rise to such claim or claims ("the loss and damage") and on the assumptions that:-
  - (a) All other consultants, contractors, sub-contractors, project managers or advisers engaged in connection with the Property have provided contractual undertakings on terms no less onerous than those set out in the original contracts to you in respect of them carrying out of their obligations; and
  - (b) There are no exclusions of or limitations of liability nor joint insurance or co insurance provisions between you and any other party referred to in this clause and any such other party who is responsible to any extent for the loss and damage is contractually liable to you for the loss and damage; and
  - (c) All such other consultants, contractors, sub-contractors, project managers or advisers have paid to you such sum as it would be just and equitable for them to pay having regard to the extent of their responsibility for the loss and damage.
- 14 Further and notwithstanding anything to the contrary contained in this agreement and without prejudice to any provision in this agreement whereby liability is excluded or limited to a lesser amount, our liability under or in connection with this agreement whether in contract or in tort, in negligence, for breach of statutory duty or otherwise for any claim shall not exceed the amount, if any, recoverable by us by way of indemnity against the claim in question under professional indemnity insurance taken out by us and in force at the time that the claims or (if earlier) circumstances that may give rise to the claim is or are reported to the insurers in question. The limitation shall not apply if no such amount is recoverable due to us having been in breach of our obligations or the terms of any insurance maintained in accordance therewith or having failed to report any such claim or circumstances to the Insurers in question timeously.
- 15 We are unable to accept liability for Asbestos related matters and there is no longer any significant indemnity available in the insurance market for such. Our work must not be taken as sufficient to identify the presence or absence of asbestos in or on the ground. In placing a contract with us the Client accepts this restriction on Asbestos. If we find or strongly suspect that Asbestos is or may be present in or on the ground we will inform the Client and advise specialist investigation. Where the fabric of a building is to be disturbed, an Asbestos survey shall be provided to us by the client prior to exploratory work.
- 16 The Client agrees that they shall not bring any claim personally against any director/employee or consultant to us in respect of loss or damage suffered by the Client arising out of this contract.
- 17 Our reports are non-assignable, unless we give consent, and are prepared for the benefit of the Client. No reliance can be assumed by others without written agreement from Soil Consultants Ltd. If we consent to a re-assignment or further reliance this shall be subject to payment in advance of our administration charge and the beneficiary should be aware that the information shall only apply to the scheme for which the report was originally produced and the original rights and benefits will apply.

- 18 Our appointment shall be under simple agreement and our liability under this contract shall be for a period of six years from date of issue of the report.
- 19 We cannot be held responsible for omissions where contract documents, warranties, reliance or reassignments are required and are not made known to us at tender stage. In this respect, warranties, reliance and reassignments will only be granted subject our company terms which are non-negotiable (copies available on request) and subject to payment of our administration fee (10% of contract value subject to a minimum fee of £750 plus VAT).
- 20 A VAT invoice (at current rate) will be presented in respect of the work undertaken. Payment of our account is to be made within 28 days of issue of our invoice unless otherwise agreed. On no account shall payment be on a 'pay-when-paid' basis. The information contained within our report remains the property of Soil Consultants Ltd and no reliance may be assumed by any party with an interest in the project until payment has been received in full. After one calendar month interest shall be chargeable at 10% above the Bank of England Rate and compensation claimed in accordance with 'Late Payments of Commercial Debts (Interest) Act 1998 and subsequent revisions. If the debt is referred to a debt collection agency then we have the right to recover associated fees under the terms of our contract.