2/4 Little Lever Street, Manchester

APPENDIX Bii

SOILTECHNICS

ENVIRONMENTAL CONSULTANTS, GEOTECHNICAL ENGINEERS

Proposed Redevelopment
35 Back Piccadilly
Manchester

REPORT ON THE CLASSIFICATION OF WASTE SOILS FOR OFF SITE DISPOSAL
(Basic Categorisation – level 1)

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1.0 INTRODUCTION

1.1 Objectives

1.1.1 This report describes a ground investigation carried out for the redevelopment of a site at 35 Back Piccadilly, Manchester.

1.1.2 The principal objective of this report is to characterise soil waste generated by the above development for landfill purposes based on available investigatory data, following procedures described in current Environment Agency publications relating to the landfill directive.

1.2 Client Instructions and Confidentiality

1.2.2 Fieldwork and laboratory testing for the investigation was carried out in October 2005, with this report published in January 2006.

1.2.3 The investigation and report was produced acting on instructions received from Ashgate Developments Limited acting on behalf of Mount Services Limited. This report has been prepared for the sole benefit of our client, Mount Services Limited.

1.2.4 This report accompanies a general ground investigation report, which concentrates on geotechnical and geo-environmental issues.

1.3 Site Location and Development Proposals

1.3.1 The National Grid reference for the site is 384540 398320. A plan showing the location of the site is presented on Drawing STB0620D-02.

1.3.2 We have not received a proposed layout of the development, but we understand that it will comprise the construction of a nine storey building which will include two levels of car parking. We understand the existing basement void will not be utilised and no garden/landscaped areas are proposed at the site.

1.4 Report Format and Investigation Standards

1.4.2 Sections 1 to 5 of this report describe the factual aspects of the investigation. Section 6 describes the current background to current generation and management of waste and need for classification. Sections 7 and 8 detail the analysis of test data leading to the required 'basic categorisation' of waste for landfill in Section 9.

1.4.3 Investigation standards are described in the text of this report.

1.5 Status of this Report

1.5.2 This report is final based on our current instructions.

1.5.3 The investigation was carried out and reported based on our understanding of current guidance produced by the Environment Agency. Changes in guidance are likely, and thus may necessitate an alteration in the report, or indeed, supplementary investigations. Equally, if the nature of the development changes, Soiltechnics should be advised and reassessment carried out if considered appropriate.

2.0 DESCRIPTION AND HISTORY OF THE SITE AND GEOLOGY OF THE AREA

2.1 General

2.1.1 A full desk study for the site was carried out and is fully reported in our main ground investigation report. For completeness, however, a summary of the desk study in relation to characterising the site is provided in the following paragraphs.

2.2 Brief Description of the Site

2.2.1 We understand from Ashgate Developments Limited the site formerly comprised two, multi-storey buildings with basements. At the time of the investigation, the buildings which formerly occupied the site had been demolished. The basement retaining walls remained.

2.2.2 The site is bounded by roads in three directions, whilst the southeastern boundary comprises an adjoining multi storey building. Buildings overlooking the site comprise both commercial and residential usage.

2.2.3 A plan showing the observed site features and location of exploratory points is presented on Drawing STB0620D-02.

2.3 Brief History of the Site

2.3.1 Two buildings, concurrent with the layout of the buildings which have been recently demolished, were indicated at the site from 1892 to 1999. Though the usage of the buildings is not recorded on the historical maps, we understand from Ashgate Developments Limited that part of the site may have been formerly occupied by a mill.

2.4 Geology of the Area

2.4.1 Inspection of the geological map of the area (at 1: 50000 scale) published by the British Geological Survey indicates the topography local to the site (based on borehole/observations recorded on the map) is formed by Glacial Till (drift geology) overlying at depth Triassic Sandstone (solid geology). The thickness of the Glacial Till is not recorded on the map, but probably extends to depths in excess of 5m at the site.

3.0 FIELDWORK

3.1 Fieldwork comprised the formation of three hand excavated trial pits, together with two exploratory boreholes using cable and tool percussion drilling equipment.

3.2 A plan of the site showing observed/existing site features and position of exploratory points is presented on Drawing STB0620D-02.

3.3 Fieldwork records are presented in Appendix A.

3.4 All soils/rocks exposed in exploratory excavations were described by an experienced geo-environmental engineer, in accordance with BS5930: 1999 '*Code of Practice for Site Investigations*'.

3.5 Soil samples from exploratory excavations were taken using clean stainless steel sampling equipment with a view to minimising cross contamination. Soil samples were at least 2kg and deemed representative of the soil layer exposed in the excavation. The soil sample was placed in a new plastic container, which was labelled and sealed. Samples were taken by an experienced geo-environmental engineer.

4.0 GROUND CONDITIONS ENCOUNTERED

4.1 Each exploratory excavation encountered a similar profile of soils considered to be, in order of superposition: -

- Made Ground
- Glacial Till
- Permian and Triassic Sandstone

4.2 Made Ground comprised firm dark brown slightly sandy, gravelly clay with occasional cobbles of brick. Gravels comprised brick, flint, quartz, clinker and ash. For the purposes of the landfill waste classification testing, this material has been labelled composite sample CS01.

4.3 Glacial deposits comprised both cohesive and granular soils. The near surface glacial material comprised firm and stiff brown sandy slightly gravelly clay, with occasional cobbles at depth. Gravels and cobbles comprised flint and quartz. The cohesive, glacial deposits extended to depths of 9.5m and 11.0m within boreholes BH01 and BH02 respectively.

4.4 The underlying glacial deposits comprised banded cohesive and granular deposits. The more granular deposits comprised medium dense, dense and very dense brown sands and gravels with many cobbles. The gravel and cobbles comprised quartz and flint. The banded cohesive soils comprised stiff and very stiff dark brown sandy clay with occasional cobbles of flint and quartz. Glacial Till was encountered to depths of 21.0m and 19.7m within borehole BH01 and BH02 respectively. For the purposes of the landfill waste criteria testing, all glacial deposits have been categorised as a singular unit and have been labelled as composite sample CS02.

4.5 The Permian and Triassic Sandstone comprised very weak, poorly cemented, highly friable, red brown sandstone. Boreholes met with refusal within the sandstone at depths of 21.7m and 20.5m within boreholes BH01 and BH02 respectively. For the purposes of the landfill waste acceptance criteria testing, this geological deposit has been labelled as composite sample CS03.

5.0 LABORATORY TESTING

5.1 Laboratory testing was carried out as deemed necessary to characterise soils likely to be produced as waste by the development. Testing was limited to the following:

1) Following methods based on and incorporating procedures published in HMSO *'Methods for the Examination of Water and Associated Materials'* determination of concentration of chemical contaminants on soil (refer Section 7 for discussion).

2) Following methods described in the Environment Agency publication *'Guidance on sampling and testing of wastes to meet landfill waste acceptance procedures'* (December 2003) – suite of testing in accordance with Table 5.1.

5.2 Laboratory testing was carried out by an independent specialist testing house which operates quality assurance schemes and is progressing accreditation under the MCERTS scheme for the second (EA) testing suite.

5.3 Copies of laboratory testing results are presented in Appendices B and C.

6.0 THE LANDFILL DIRECTIVE AND ITS CONSEQUENCES IN RELATION TO SOILS FOR DISPOSAL TO LANDFILL.

6.1 General

6.1 The following is based on our understanding of current, and publicly available, information with relevant documents referred to in the text. Further reference documents are likely to be produced with full implementation of amendments to the Landfill (England and Wales) Regulations on 16th July 2005.

6.2 The Landfill Directive and Implementation in the UK

6.2.1 The Landfill Directive represents an important change in the way we dispose of waste. It encourages waste minimisation by promoting increased levels of recycling and recovery. The Landfill Directive became law in July 1999 and transcribed into the Landfill (England and Wales) Regulations when came into force in August 2002. These Regulations will further be amended on 16th July 2005 by introducing criteria to classify soils for disposal to landfill, but the Environment Agency are already recognising these classification criteria in advance of the statutory regulations.

6.3 Content of the Regulations with respect to disposal of soils to landfill

6.3.1 The regulations require the Environment Agency to classify landfill sites for acceptance of hazardous, non-hazardous and inert wastes. These regulations also prohibit the following wastes from landfill.

1) Waste in liquid form
2) Wastes, which are explosive, corrosive, oxidising, flammable or highly flammable
3) Hospital or clinical wastes and other infectious wastes
4) Whole used tyres (from 2003) and shredded tyres (from 2006) other than bicycle tyres or tyres over 1.4m diameter
5) Any other waste, which does not fulfil acceptance criteria

Mixing or dilution of the above type of wastes to meet acceptable criteria is prohibited.

6.3.2 It is a requirement of the landfill operator to accept materials for landfill, which has been subject to prior treatment unless:

a) It is inert waste for which treatment is not technically feasible; or
b) Waste, which cannot be treated to reduce its quantity or the hazards, which it poses to human health or the environment.

6.3.3 The operation of a landfill site for non-hazardous waste can accept:

a) municipal waste
b) non-hazardous wastes which meet acceptance criteria

6.4 Waste Acceptance Procedures

6.4.1 It is a requirement of the waste producer to characterise the waste for landfill purposes. The following criteria will be implemented by amendments to the current landfill regulations in July 2005 but is currently adopted by the Environment Agency (refer their regulatory guidance note 2 (revision 4) *'Interim waste acceptance criteria and procedures'*).

a) Source and origin of the waste
b) Information on the process producing the waste
c) Description of the waste treatment applied or a statement of reasons why such treatment is not considered necessary
d) Date on composition of the waste, and where relevant, the leaching behaviour
e) Appearance of the waste (smell, colour, physical form)
f) Code according to the European Waste Catalogue
g) For hazardous waste – relevant hazard properties
h) Information to demonstrate waste is not a prohibited waste
i) Landfill class at which the waste may be accepted
j) Additional precautions to be taken at landfill
k) Check material can be recycled or recovered

The above is deemed level 1 and '*Basic Characterisation*', the production of which is the objective of this report. The landfill operator has a responsibility to be satisfied that the waste is consistent and compliant with the basic characterisation. This is deemed level 2 *'Compliance'*. Level 3 is on site verification.

6.5 Waste Acceptance Criteria

6.5.1 The Environment Agency publication, *'Framework for the classification of contaminated soils as hazardous wastes'* (July 2004), provides an appropriate procedure for establishing if the soils are hazardous or non-hazardous.

6.5.2 The first stage is classifying a potentially 'contaminated' soil for disposal to landfill is to establish its chemical status by first identifying potential sources/types of chemical contamination (desk study) followed by intrusive site investigations to obtain samples for undefined testing of soil samples to measure concentrations of chemical contaminants. Such data will provide information to partly complete the basic characteristic checklist.

6.5.3 Laboratory test data is then compared with the Environment Agency publication '*hazardous waste – Interpretation of the definition and classification of hazardous waste*' to establish the European Waste Catalogue (EWC) code, and carry out a hazard assessment to categorise the material as hazardous or non-hazardous.

6.5.4 If the material is deemed non-hazardous and considered potentially inert then measurement of organic contaminants and leachable inorganic contaminants is required for comparison with values listed in the Environment Agency publication '*Guidance on sampling and testing of wastes to meet landfill waste acceptance procedures*' (December 2003). This document also provides guidance on sampling materials, and frequency as well as test procedures and quality assurance of testing.

6.5.5 The above procedures are described with respect to the subject site in Sections 7 and 8 of this report, leading to basic characterisation of soils for disposal. Subject to the results of the categorisation, and anticipated development methodology, consideration should be given by the developer to reduce volumes of disposal or treatment to allow reclassification.

7.0 PRIMARY CLASSIFICATION

7.1 Soil Types

7.1.1 Based on soils exposed in exploratory excavations, in combination with anticipated construction works, we assume that waste will result from piling arisings, and general excavation of demolition rubble/soils.

7.2 European Waste Catalogue coding

7.2.1 The Environment Agency publication *'Hazardous Waste – Interpretation of the definition and classification of hazardous waste'* (Technical Guidance WM2) allows the European Waste Catalogue (EWC) code for waste to be determined. Following this document the soils under consideration would be classified a **17 – 05 –04** defined a *'soil and stones'* other than those mentioned in EWC 17 – 05 – 03*.

7.3 Classification as hazardous or non-hazardous waste

7.3.1 The Environment Agency publication *'Framework for the classification of contaminated soils as hazardous wastes'* (July 2004) provides the following procedure for establishing if the soils are hazardous or non-hazardous. The first stage in classifying a potentially 'contaminated' soil for disposal is to establish its chemical status by first identifying potential sources/types of chemical contamination (desk study) followed by intrusive site investigations to obtain samples for laboratory testing of soil samples to measure concentrations of chemical contaminants.

7.3.2 Although historical records do not identify any past or recent uses of the site which may have generated specific contamination, we understand that the site may have been occupied by a mill. Such usage is highlighted in Tables 2.2 and 2.3 of the Contaminated Land Report (CLR) no. 8 *'Potential Contaminants for the Food and Rural Affairs* (DEFRA) in conjunction with the Environment Agency (EA). As a result we have scheduled testing to measure concentrations of the following contaminants.

- Cadmium
- Chromium
- Copper
- Mercury
- Boron
- Nitrate
- Sulfate
- Phenol
- Acetone
- Chlorinated Aliphatic Hydrocarbons
- Dieldrin
- Volatile Organic Compounds (VOCs)

- Semi Volatile Organic Compounds (SVOCs)
- Polychlorinated biphenyl's (PCBs)

7.3.3 Following Contaminated Land Report (CLR) no. 7 *'Assessment of risks to human health from Land Contamination. An overview of the development of soil guideline values related to research'*, we have carried out a statistical analysis of test data for each chemical contaminant considered in this investigation. A mean value test determines the 95th percentile value of test data for individual contaminants, which is also related to the number of test values under consideration. We have adopted the 95th percentile values in the following hazard assessment.

7.3.4 The above statistical analysis of test data is tabulated in Appendix D.

7.3.5 Laboratory test data measures the concentration of anions, which are unlikely to exist in the pure metallic form in the soil, but probably exist on a compound. Following guidance provided in the *'framework for the classification of contaminated soils as hazardous wastes,'* we have reviewed a variety of compounds for each of the metallic and semi metallic elements from Table 2.1 of CLR8, limiting our review to insoluble compounds (soluble compounds will have allowed soil leaching to reduce their concentration). Firstly, if the compound includes an anion of a 'light' molecular weight, and is listed in the *Approved Supply List* (seventh edition) (Published by the Health and Safety Executive) then this compound is used to convert the measured metallic concentration to the substance concentration using their respective molecular weights. This derived conversion factor is then used in the threshold concentration spreadsheet (refer paragraph 7.3.9 below).

7.3.6 The review of chemical compounds associated with each selected metallic and semi metallic element, includes selection of a 'worst case' substance from the approved supply list giving the most severe hazardous properties thus allowing a combined hazard assessment for all chemicals under consideration.

7.3.7 Our assessment of each of the chemical substances is maintained on our files and is available for confidential review/audit by the Environment Agency.

7.3.8 A spreadsheet detailing the hazard assessment following the procedures described in *'framework for the classification of contaminated soils as hazardous wastes'* is presented in Appendix D.

7.3.9 The spreadsheet indicates the soils are not hazardous.

8.0 SECONDARY ASSESSMENT

8.1 Following '*guidance on sampling and testing of wastes to meet landfill waste acceptance procedures*' produced by the Environment Agency (Version 4.3a December 2003) we have scheduled testing of three samples to measure the parameters listed in Table 5.1 (landfill waste acceptance criteria) included in the above publication. A copy of the test result certificate is presented in Appendix C.

8.2 The samples were deemed representative of each soil type described in Section 4. Each sample was formed by combining individual samples taken from exploratory excavations within each soil type. The combined sample for each soil type was then quartered in the laboratory to produce a representative sample for subsequent testing.

8.3 Laboratory test data has been compared with the landfill waste acceptable criteria (Table 5.1) to allow the secondary assessment to be completed. A copy of Table 5.1 is presented in Appendix E with test result data added for ease of comparison.

8.4 Comparison of test data for the Made Ground soils (ref to Section 4.0 for description of the soil type) with landfill waste acceptance criteria, indicates elevated concentrations of sulphate and (the associated) total dissolved solids. An elevated concentration of loss on ignition was also identified within the Made Ground sample. In our opinion this is likely to be a reflection of isolated partially combusted ask and clinker fragments within the near surface soils. The corresponding total organic carbon value was also only slightly elevated (marginally above inert waste criteria values), and as such, in our opinion, the **Made Ground** soils could be classified as **Stable Non-reactive waste.**

8.5 Comparison of test data for the glacial soils with landfill waste acceptance criteria indicates no elevated concentrations of contaminants within the defined suite of analysis, and as such, in our opinion the **Glacial Till** can be classified as **inert waste.**

8.6 Comparison of test data for the Permian and Triassic Sandstone deposits with landfill waste acceptance criteria indicates one slightly elevated concentration of total organic carbon (3.1% compared to the inert waste threshold of 3.0%). The landfill waste acceptance criteria classification recommends either total organic carbon or loss on ignitioin is used for the hazardous classification. The corresponding loss on ignition concentration however, is well below the associated criteria threshold value. As such, in our opinion, the **Permian and Triassic Sandstone** can be classified as **inert waste.**

9.0 BASIC CATEGORISATION

9.1 Based on the above we have produced a basic categorisation schedule, which is presented in loose leaf in Appendix F. This schedule should be provided together with a copy of this report to an appropriately licenced landfill facility to demonstrate the material can be deposited at this facility

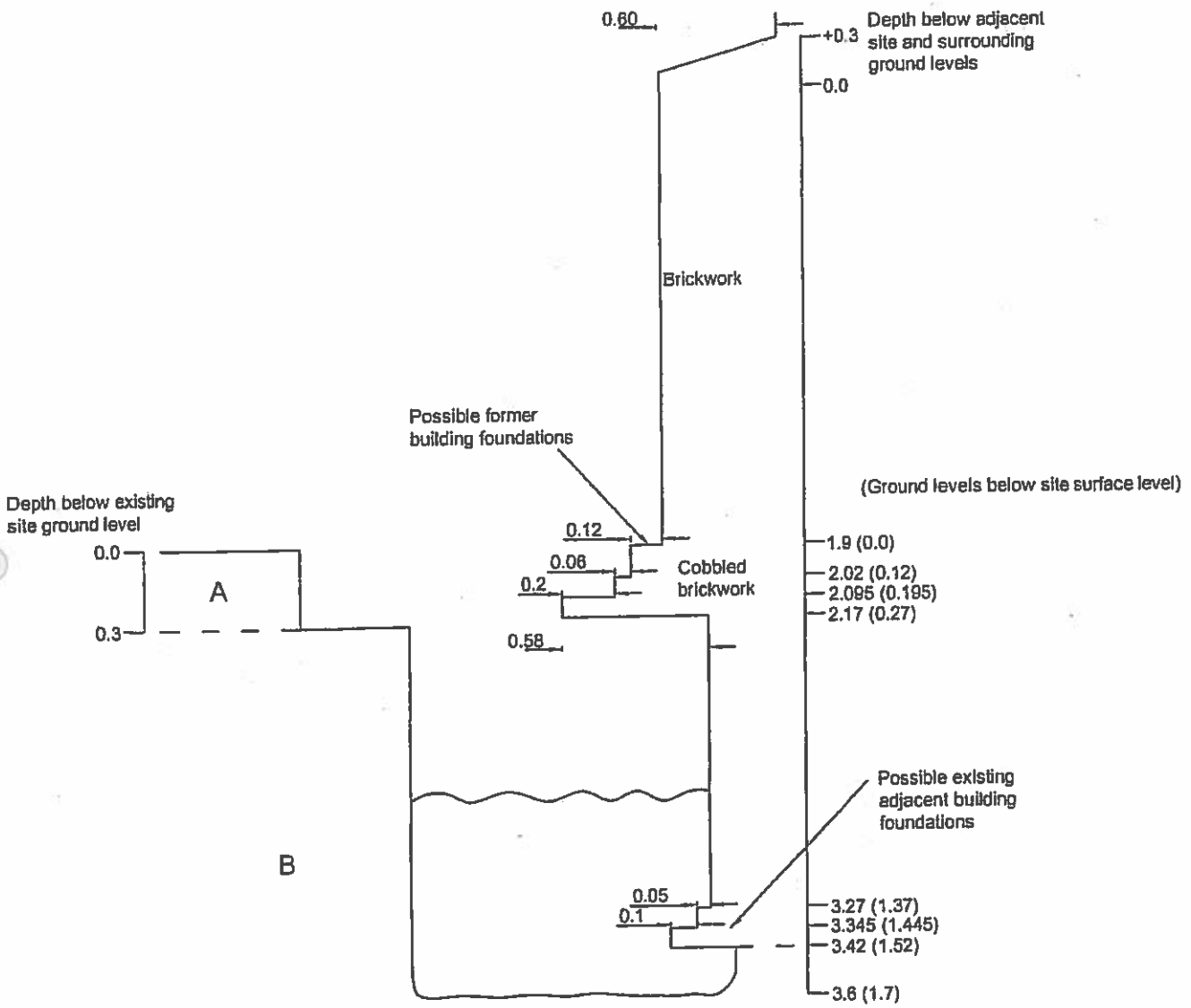
9.2 We understand that some landfill sites have licences which have restrictions on concentrations of chemical contaminants, and thus we recommend this report is provided to the selected landfill facility to confirm (or otherwise) it can accept the waste.

Sarah Drage BSc, (Hons)
Geo-environmental Engineer for Soiltechnics Limited

Ian Evetts HNC,
Associate Director for Soiltechnics Limited

APPENDIX A

Fieldwork records.



Key

A Loose and medium dense brown and dark grey very clayey gravelly SAND with many cobbles. Gravel and cobbles consist of brick, concrete and clinker.
(MADE GROUND)

B Stiff red brown and grey sandy CLAY.
(GLACIAL TILL)

Notes

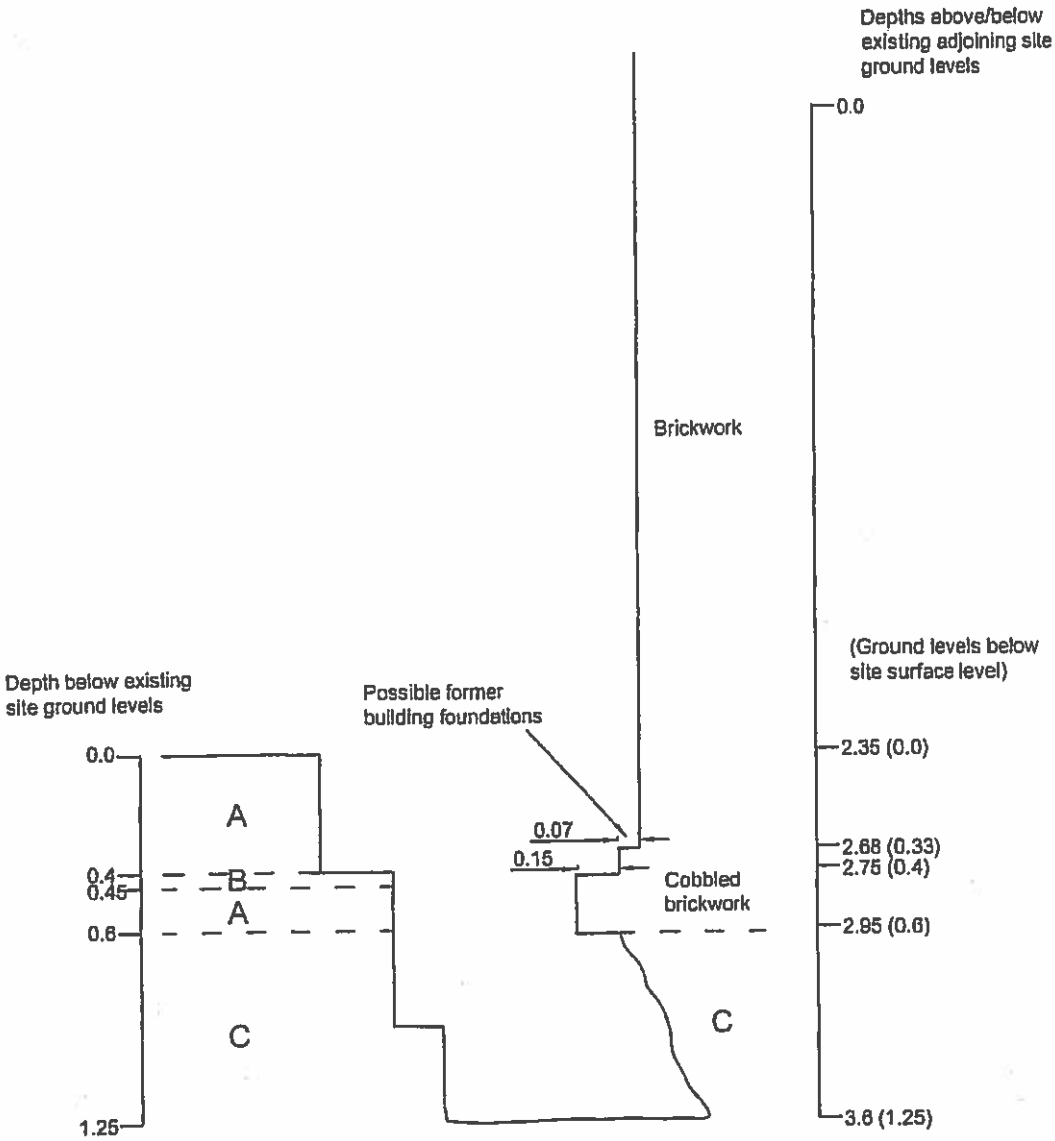
1.) Water standing at 0.75m below existing basement ground level.
2.) All measurements shown in metres
3.) Trial pit excavated using hand tools
4.) Pocket penetrometer testing undertaken:
0.4m - 2.0/2.75/2.5
1.0m - 3.0/3.0/3.25
5.) Disturbed samples taken at 0.1m and 0.3m

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Project
Proposed development
35 Back Picadilly, Manchester

Title
Cross section through Trial Pit TP01

scale	date	drawn by	checked by
NTS	11.11.05	LJM	
project ref		drg No.	revision
STB0620D		TP01	



Key

A Loose grey brown clayey very gravelly SAND with many cobbles of brick and concrete. Gravel consists of brick, concrete and ceramic. (MADE GROUND)

B Dense grey CONCRETE. (MADE GROUND)

C Stiff becoming very stiff brown and grey CLAY. (GLACIAL TILL)

Notes

1.) No groundwater encountered in trial pit
2.) All measurements shown in metres
3.) Trial pit excavated using hand tools
4.) Pocket penetrometer testing undertaken:
0.6m - 2.0/2.5/2.5
1.0m - 3.5/3.25/3.25
5.) Disturbed samples taken at 0.1m and 0.9m

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Project
Proposed development
35 Back Picadilly, Manchester

Title
Cross section through Trial Pit TP02

scale	date	drawn by	checked by
NTS	11.11.05	LJM	
project ref		drg No.	revision
STB0620D		TP02	

DESCRIPTION	LEGEND	DEPTH (m)	SAMPLE DEPTH	SAMPLE TYPE	INSITU SHEAR STRENGTH TEST DATA		
					DEPTH	TYPE	RESULT
Loose and medium dense brown and dark grey very clayey gravelly SAND with many cobbles. (MADE GROUND)		0.0	0.3				
		0.40					

REFER TO KEY AT BEGINNING OF THIS APPENDIX FOR EXPLANATION OF SYMBOLS

TRIAL PIT RECORD PAGE 1 OF 1

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GROUND LEVEL	METHOD OF EXCAVATION: Hand tools
LOCATION PLAN ON DRAWING No: STB0620D-02	DATE OF EXCAVATION: 11.11.05
PROJECT: Proposed development 35 Back Piccadilly, Manchester	
PROJECT REF.: STB0620D	TRIAL PIT No: TP03

CASING DEPTH (m)	WATER (m)	STRATA DESCRIPTION	LEGEND	DEPTH (m)	TEST RESULTS		SAMPLING		
					TYPE AND DEPTH	RESULT	FROM (m)	TO (m)	TYPE
		Firm dark brown slightly sandy gravelly CLAY with occasional cobbles of brick. Gravel consists of brick, flint and quartz. (MADE GROUND)		0.0			0.0	0.7	B
1.0		Firm dark brown sandy slightly gravelly CLAY. Gravel consists of brick. (MADE GROUND)		0.7	SPT 1.0-1.45m	(4) 16	1.0	1.5	B
				1.45			1.45		J
2.0		Firm dark brown sandy CLAY. (GLACIAL TILL)			SPT 2.0-2.45m	(4) 13	2.45		J
							3.0	3.4	U100
4.0					SPT 4.0-4.45m	(4) 14	4.45		J
							4.5	5.0	B
5.0					SPT 5.0-5.45m	(4) 15	5.45		J

DRILLING			GROUNDWATER				
TYPE (DIAMETER)	FROM	TO	DEPTH STRUCK	BEHAVIOUR	DEPTH SEALED	DATE	DEPTH OF CASING
	0.0m	21.0m	0.4m 9.5m 18.0m 21.0m	Standing at 0.4m Rising to 0.8m in 10 minutes Rising to 17.2m in 10 minutes Rising to 15.0m in 10 minutes	1.0m 13.0m 18.4m -		

REFER TO KEY AT BEGINNING OF THIS APPENDIX FOR EXPLANATION OF SYMBOLS

BOREHOLE RECORD SHEET 1 OF 4

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GROUND LEVEL	CO-ORDINATES
LOCATION PLAN ON DRAWING No: STB0620D-02	DATE OF EXCAVATION: 24.10.05

PROJECT: **35 Back Piccadilly, Manchester**
Proposed development

PROJECT REF.	BOREHOLE No
STB0620D	BH01

CASING DEPTH (m)	WATER (m)	STRATA DESCRIPTION	LEGEND	DEPTH (m)	TEST RESULTS		SAMPLING		
					TYPE AND DEPTH	RESULT	FROM (m)	TO (m)	TYPE
		Firm becoming stiff dark brown sandy CLAY. (GLACIAL TILL)		6.8					
7.6					SPT 7.6-8.05m	(7) 23	7.6	8.1	B
							8.1	8.4	B
9.0					SPT 9.0-9.45m	(4) 24	9.0	9.5	B
		Medium dense dark brown mottled light brown gravelly SAND with occasional cobbles of flint. Gravel consists of flint and quartz. (GLACIAL TILL)		9.5			9.6		J
				10.0					
10.4		Medium dense light brown very gravelly SAND with occasional cobbles of flint. Gravel consists of flint and quartz. (GLACIAL TILL)			SPT 10.4-10.85m	(6) 17	10.4	10.9	B
							11.0		J
12.0		Very dense dark brown mottled light brown GRAVEL AND COBBLES of flint and quartz. (GLACIAL TILL)		12.0	SPT 12.0m	80 for 150mm penetration			
12.5		Very dense dark brown clayey sandy GRAVEL with occasional cobbles of flint and quartz. Gravel consists of flint and quartz. (GLACIAL TILL)		12.5	SPT 12.5-12.95m	(17) 64	12.5	13.0	B

DRILLING			GROUNDWATER				
TYPE (DIAMETER)	FROM	TO	DEPTH STRUCK	BEHAVIOUR	DEPTH SEALED	DATE	DEPTH OF CASING
	0.0m	21.0m	0.4m 9.5m 18.0m 21.0m	Standing at 0.4m Rising to 8.6m in 10 minutes Rising to 17.2m in 10 minutes Rising to 18.0m in 10 minutes	1.0m 13.0m 18.4m		

REFER TO KEY AT BEGINNING OF THIS APPENDIX FOR EXPLANATION OF SYMBOLS

BOREHOLE RECORD SHEET 2 OF 4

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GROUND LEVEL	CO-ORDINATES
LOCATION PLAN ON DRAWING No STB0620D-02	DATE OF EXCAVATION 24.10.05

PROJECT
35 Back Piccadilly, Manchester
Proposed development

PROJECT REF.	BOREHOLE No
STB0620D	BH01

CASING DEPTH (m)	WATER (m)	STRATA DESCRIPTION	LEGEND	DEPTH (m)	TEST RESULTS		SAMPLING		
					TYPE AND DEPTH	RESULT	FROM (m)	TO (m)	TYPE
				13.6	SPT 14.0-14.45m	(16) 85	14.0	14.5	B
		Very dense dark brown mottled light brown GRAVEL and COBBLES of flint and quartz. (GLACIAL TILL)		14.6			15.4	15.9	B
		Very dense dark brown mottled brown slightly sandy GRAVEL with occasional cobbles of flint. Gravel consists of flint and quartz. (GLACIAL TILL)		15.4			17.0	17.5	B
		Very stiff dark brown slightly sandy CLAY with occasional cobbles of flint. (GLACIAL TILL)		17.6	SPT © 18.0m	50 for 75mm penetration			
							19.0	19.5	B
					SPT © 20.3-20.75m	(13) 48	20.3	20.8	B

DRILLING			GROUNDWATER				
TYPE (DIAMETER)	FROM	TO	DEPTH STRUCK	BEHAVIOUR	DEPTH SEALED	DATE	DEPTH OF CASING
	0.0m	21.0m	0.4m 9.5m 18.0m	Standing at 0.4m Rising to 8.6m in 10 minutes Rising to 17.2m in 10 minutes Rising to 16.0m in 10 minutes	1.0m 13.0m 18.4m		

REFER TO KEY AT BEGINNING OF THIS APPENDIX FOR EXPLANATION OF SYMBOLS

BOREHOLE RECORD SHEET 3 OF 4

SOILTECHNICS

GEOTECHNICAL ENGINEERS, ENVIRONMENTAL CONSULTANTS

Cedar Barn, White Lodge, Walgrave, Northampton, NN6 9PY.
Tel: (01604) 781877 Fax: (01604) 781007 E-mail: mail@soiltechnics.net

GROUND LEVEL	CO-ORDINATES
LOCATION PLAN ON DRAWING No: STB0620D-02	DATE OF EXCAVATION: 24-25.10.05

PROJECT: 35 Back Piccadilly, Manchester
Proposed development

PROJECT REF.	BOREHOLE No
STB0620D	BH01

CASING DEPTH (m)	WATER (m)	STRATA DESCRIPTION	LEGEND	DEPTH (m)	TEST RESULTS		SAMPLING		
					TYPE AND DEPTH	RESULT	FROM (m)	TO (m)	TYPE
				21.0					
		Red SANDSTONE. (PERMIAN AND TRIASSIC SANDSTONE)			SPT © 21.3m	(30) 50 for 150mm penetration	21.3		J
				21.7					
		BOREHOLE TERMINATED AT 21.7m Notes 1.) Chiselling from 12.0-12.5m and 14.5-15.0m for a total of 2 hours							

DRILLING			GROUNDWATER				
TYPE (DIAMETER)	FROM	TO	DEPTH STRUCK	BEHAVIOUR	DEPTH SEALED	DATE	DEPTH OF CASING
	0.0m	21.0m	0.4m 9.5m 18.0m	Standing at 0.4m Rising to 8.6m in 10 minutes Rising to 17.2m in 10 minutes Rising to 18.0m in 10 minutes	1.0m 13.0m 18.4m		

REFER TO KEY AT BEGINNING OF THIS APPENDIX FOR EXPLANATION OF SYMBOLS

BOREHOLE RECORD SHEET 4 OF 4

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GROUND LEVEL	CO-ORDINATES
LOCATION PLAN ON DRAWING No STB0620D-02	DATE OF EXCAVATION 24-25.10.05

PROJECT
35 Back Piccadilly, Manchester
Proposed development

PROJECT REF.	BOREHOLE No
STB0620D	BH01

CASING DEPTH (m)	WATER (m)	STRATA DESCRIPTION	LEGEND	DEPTH (m)	TEST RESULTS		SAMPLING		
					TYPE AND DEPTH	RESULT	FROM (m)	TO (m)	TYPE
		Firm dark brown slightly sandy gravelly CLAY with occasional cobbles of brick. Gravel consists of brick, flint and quartz. (MADE GROUND)		0.0			0.0	0.7	B
1.0		Firm becoming stiff dark brown slightly sandy CLAY. (GLACIAL TILL)		0.7	SPT 1.0-1.45m	(4) 14	1.45		J
							1.5	2.0	B
2.0					SPT 2.0-2.45m	(4) 14	2.0	2.5	B
3.0					SPT 3.0-3.45m	(3) 12	3.0	3.5	B
							3.45		J
4.5					SPT 4.5-4.95m	(3) 14	4.5		J
5.5					SPT 5.5-5.95m	(5) 16	5.5		J

DRILLING			GROUNDWATER				
TYPE (DIAMETER)	FROM	TO	DEPTH STRUCK	BEHAVIOUR	DEPTH SEALED	DATE	DEPTH OF CASING
	0.0m	20.5m	11.0m 19.0m	Rising to 10.4m in 10 minutes Rising to 15.0m in 10 minutes	13.5m		

REFER TO KEY AT BEGINNING OF THIS APPENDIX FOR EXPLANATION OF SYMBOLS

BOREHOLE RECORD SHEET 1 OF 4

SOILTECHNICS
GEOTECHNICAL ENGINEERS, ENVIRONMENTAL CONSULTANTS
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GROUND LEVEL	CO-ORDINATES
LOCATION PLAN ON DRAWING No STB620D-02	DATE OF EXCAVATION 25-26.10.05

PROJECT
35 Back Piccadilly, Manchester
Proposed development

PROJECT REF.	BOREHOLE No
STB620D	BH02

CASING DEPTH (m)	WATER (m)	STRATA DESCRIPTION	LEGEND	DEPTH (m)	TEST RESULTS		SAMPLING		
					TYPE AND DEPTH	RESULT	FROM (m)	TO (m)	TYPE
7.0		Firm becoming stiff dark brown slightly sandy CLAY. (GLACIAL TILL)			SPT 7.0-7.45m	(6) 29	7.0	7.5	B
							7.45		J
8.5					SPT 8.5-8.95m	(4) 25			
							8.95		J
				9.6					
9.9		Stiff brown slightly sandy slightly gravelly CLAY with occasional cobbles. Occasional of flint and quartz. (GLACIAL TILL)			SPT © 9.9-10.35m	(8) 33	9.9	10.4	B
				11.0					
11.5		Medium dense brown very sandy GRAVEL with occasional flint cobbles. Gravel consists of flint and quartz. (GLACIAL TILL)			SPT 11.5-11.95m	(6) 26	11.5	12.0	B
13.0					SPT 13.0-13.45m	(6) 30	13.0	13.5	B

DRILLING			GROUNDWATER				
TYPE (DIAMETER)	FROM	TO	DEPTH STRUCK	BEHAVIOUR	DEPTH SEALED	DATE	DEPTH OF CASING
	0.0m	20.5m	11.0m 19.0m	Rising to 10.4m in 10 minutes Rising to 15.0m in 10 minutes	13.5m		

REFER TO KEY AT BEGINNING OF THIS APPENDIX FOR EXPLANATION OF SYMBOLS

BOREHOLE RECORD SHEET 2 OF 4

SOILTECHNICS
GEOTECHNICAL ENGINEERS, ENVIRONMENTAL CONSULTANTS
Cedar Barn, White Lodge, Walgrave, Northampton. NN6 9PY.
Tel: (01604) 781877 Fax: (01604) 781007 E-mail: mail@soiltechnics.net

GROUND LEVEL	CO-ORDINATES
LOCATION PLAN ON DRAWING No: STB620D-02	DATE OF EXCAVATION: 26.10.05

PROJECT: 35 Back Piccadilly, Manchester
Proposed development

PROJECT REF.	BOREHOLE No
STB620D	BH02

CASING DEPTH (m)	WATER (m)	STRATA DESCRIPTION	LEGEND	DEPTH (m)	TEST RESULTS		SAMPLING		
					TYPE AND DEPTH	RESULT	FROM (m)	TO (m)	TYPE
13.5		Stiff dark brown slightly sandy CLAY with occasional cobbles of flint. (GLACIAL TILL)		13.5	SPT © 13.5-13.95m	(10) 34	13.5	14.0	B
14.6		Very dense light brown mottled yellow brown very sandy GRAVEL with some cobbles of flint. (GLACIAL TILL)		14.6	SPT © 14.6m	(51) 50 for 150mm penetration	14.6	15.1	B
16.0					SPT © 16.0-16.45m	(16) 69	16.0	16.5	B
17.4		Very stiff dark brown sandy CLAY with occasional cobbles of flint. (GLACIAL TILL)			SPT © 17.4-17.85m	(12) 58	17.4	17.9	B
18.3		Dense brown and pink-brown SAND and GRAVEL with cobbles of flint and quartz. (GLACIAL TILL)		18.3	SPT © 18.3-18.75m	(10) 54	18.3	18.8	B
19.2		Weak red brown poorly cemented highly friable SANDSTONE. (PERMIAN AND TRIASSIC SANDSTONE)		19.0	SPT © 19.2-19.65m	(7) 41	19.2	19.7	
20.2				19.7	SPT © 20.2-20.65m	(50)	19.7		J

DRILLING			GROUNDWATER				
TYPE (DIAMETER)	FROM	TO	DEPTH STRUCK	BEHAVIOUR	DEPTH SEALED	DATE	DEPTH OF CASING
	0.0m	20.5m	11.0m 19.0m	Rising to 10.4m in 10 minutes Rising to 15.0m in 10 minutes	13.5m		

REFER TO KEY AT BEGINNING OF THIS APPENDIX FOR EXPLANATION OF SYMBOLS

BOREHOLE RECORD SHEET 3 OF 4

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GROUND LEVEL	CO-ORDINATES
LOCATION PLAN ON DRAWING No STB620D-02	DATE OF EXCAVATION 26.10.05

PROJECT
35 Back Piccadilly, Manchester
Proposed development

PROJECT REF.	BOREHOLE No
STB620D	BH02

CASING DEPTH (m)	WATER (m)	STRATA DESCRIPTION	LEGEND	DEPTH (m)	TEST RESULTS		SAMPLING		
					TYPE AND DEPTH	RESULT	FROM (m)	TO (m)	TYPE
		Weak red brown poorly cemented highly friable SANDSTONE. (PERMIAN AND TRIASSIC SANDSTONE)		20.5			20.5		J
		BOREHOLE TERMINATED AT 20.5m							
		Notes 1.)Chiselling from 9.6-9.9m, 14.1-14.3m, 14.7-15.0m, 16.5-16.9m and 20.2-20.5m for a total time of 3 hours 15 minutes. 2.) Water added to assist drilling at 14.6-18.3m							

DRILLING			GROUNDWATER				
TYPE (DIAMETER)	FROM	TO	DEPTH STRUCK	BEHAVIOUR	DEPTH SEALED	DATE	DEPTH OF CASING
	0.0m	20.5m	11.0m 19.0m	Rising to 10.4m in 10 minutes Rising to 15.0m in 10 minutes	13.5m		

REFER TO KEY AT BEGINNING OF THIS APPENDIX FOR EXPLANATION OF SYMBOLS

BOREHOLE RECORD SHEET 4 OF 4

SOILTECHNICS
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GROUND LEVEL	CO-ORDINATES
LOCATION PLAN ON DRAWING No STB620D-02	DATE OF EXCAVATION 26.10.05

PROJECT
35 Back Piccadilly, Manchester
Proposed development

PROJECT REF.	BOREHOLE No
STB620D	BH02

APPENDIX B

Copy of laboratory test result certificates (Total concentration of metallic and semimetals).

ALcontrol Technichem
Sample Description

Job Number: 05-08849
Client: Soiltechnics
Project Code: STB0620D

Matrix: Soil
Project Name: 35 Back Picadilly, Manchester

Laboratory Reference No	Sample Reference	Sample Depth (m)	Date Sampled	Sample Description
105151	TP01	0.1	24/10/05	Dark brown sandy clay with stones and brick
105152	TP02	0.1	24/10/05	Dark brown clay with stones and brick
105153	TP02	0.9	24/10/05	Dark brown clay
105154	TP03	0.3	24/10/05	Dark grey sandy clay with stones and brick
105155	BH01	0.7	24/10/05	Dark brown sandy clay with brick
105156	BH01	4.0	24/10/05	Dark brown clay
105157	BH01	10.4	24/10/05	Dark brown sand with stones

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Soil
Project Code: STB0620D

Sample Reference	TP01	TP02	TP02	TP03	BH01	BH01	Method No	Units
Sample Depth (m)	0.1	0.1	0.9	0.3	0.7	4.0		
Date Sampled	24/10/05	24/10/05	24/10/05	24/10/05	24/10/05	24/10/05		
Date Scheduled	31/10/05	31/10/05	31/10/05	31/10/05	31/10/05	31/10/05		
Laboratory Reference No	105151	105152	105153	105154	105155	105156		
Analysis								
Moisture Content (Dry Weight)	28.8	28.3	17.7	26.9	29.3	22.1		%
Moisture Content (Wet Weight)	22.4	22.0	15.1	21.2	22.6	18.1		%
Arsenic	16	31	6.5	38	14	6.5	069[IH]	mg/kg
Beryllium	1.8	2.1	1.6	2.3	2.1	1.4	069[IH]	mg/kg
Cadmium	1.9	2.4	1.6	2.7	5.2	2.5	069[IH]	mg/kg
Chromium	30	46	34	27	43	28	069[IH]	mg/kg
Lead	550	890	25	1000	450	33	069[IH]	mg/kg
Mercury	0.6	1.3	< 0.3	1.9	0.6	< 0.3	069[IH]	mg/kg
Nickel	32	31	34	31	59	32	069[IH]	mg/kg
Selenium	1.9	2.5	3.3	1.5	4.7	2.8	069[IH]	mg/kg
W/S Sulphate as SO4	1.6	1.6	0.12	1.6	0.58	0.17	074[IN]	g/l
Vanadium	38	38	33	40	57	29	069[IH]	mg/kg
Free Cyanide	<5	<5	<5	<5	<5	<5	061[I]	mg/kg
Complex Cyanide	<5	<5	<5	<5	<5	<5	061[I]	mg/kg
Total Cyanide	<5	<5	<5	<5	<5	<5	061[IH]	mg/kg
Organic Matter	2.6	2.7	0.84	4.8	2.3	1.6	026[I]	%
pH	8.0	8.0	8.2	8.3	8.1	8.3	009[IH]	pH Units
Elemental Sulphur	<100	<100	<100	<100	<100	<100	032[IH]	mg/kg
PCB SUITE								
PCB Congener 28	<0.03	-	<0.03	-	-	-	039S[I]	mg/kg
PCB Congener 52	<0.02	-	<0.02	-	-	-	039S[I]	mg/kg
PCB Congener 101	<0.03	-	<0.03	-	-	-	039S[IH]	mg/kg
PCB Congener 118	< 0.035	-	< 0.035	-	-	-	039S[IH]	mg/kg
PCB Congener 138	<0.05	-	<0.05	-	-	-	039S[IH]	mg/kg
PCB Congener 153	< 0.035	-	< 0.035	-	-	-	039S[IH]	mg/kg
PCB Congener 180	< 0.055	-	< 0.055	-	-	-	039S[IH]	mg/kg
PCB's (Sum of ICES Congeners)	ND	-	ND	-	-	-	039S[I]	mg/kg

[I] Determination is Accredited to ISO 17025.
[H] Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Soil
Project Code: STB0620D

Sample Reference	TP01	TP02	TP02	TP03	BH01	BH01	Method No	Units
Sample Depth (m)	0.1	0.1	0.9	0.3	0.7	4.0		
Date Sampled	24/10/05	24/10/05	24/10/05	24/10/05	24/10/05	24/10/05		
Date Scheduled	31/10/05	31/10/05	31/10/05	31/10/05	31/10/05	31/10/05		
Laboratory Reference No	105151	105152	105153	105154	105155	105156		
Analysis								
Pentachloroethane	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Hexachloroethane	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
1,3,5-trichlorobenzene	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
1,2,4-trichlorobenzene	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
1,2,3-trichlorobenzene	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Hexachlorobutadiene	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
1,2,4,5-tetrachlorobenzene	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Dichlobenil	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Pentachlorobenzene	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Tecnazene	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Trifluralin	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
alpha-HCH	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Hexachlorobenzene	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
beta-HCH	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
gamma-HCH (lindane)	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Quintozene	<0.1	-	<0.1	-	-	-	076	mg/kg
Propyzamide	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
delta-HCH	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Chlorothalonil	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Triallate	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Heptachlor	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Aldrin	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Triadimefon	<0.1	-	<0.1	-	-	-	076	mg/kg
Isodrin	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Pendimethalin	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Cis-Heptachlor Epoxide	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
gamma-Chlordane (trans)	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
o,p-DDE	<0.1	-	<0.1	-	-	-	076[I]	mg/kg

[I] Determination is Accredited to ISO 17025.
[II] Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Soil
Project Code: STB0620D

Sample Reference	TP01	TP02	TP02	TP03	BH01	BH01	Method No	Units
Sample Depth (m)	0.1	0.1	0.9	0.3	0.7	4.0		
Date Sampled	24/10/05	24/10/05	24/10/05	24/10/05	24/10/05	24/10/05		
Date Scheduled	31/10/05	31/10/05	31/10/05	31/10/05	31/10/05	31/10/05		
Laboratory Reference No	105151	105152	105153	105154	105155	105156		
Analysis								
alpha-Endosulphan	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
alpha-Chlordane (cis)	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
p,p-DDE	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Dieldrin	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
o,p-TDE	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Endrin	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
beta-Endosulphan	<0.1	-	<0.1	-	-	-	076	mg/kg
Iprodione	<0.1	-	<0.1	-	-	-	076	mg/kg
p,p-TDE	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
o,p-DDT	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Propiconazole I	<0.1	-	<0.1	-	-	-	076	mg/kg
Endosulphan sulphate	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
p,p-DDT	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Propiconazole II	<0.1	-	<0.1	-	-	-	076	mg/kg
o,p-Methoxychlor	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Fluroxypyr	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
p,p-Methoxychlor	<0.1	-	<0.1	-	-	-	076[I]	mg/kg
Permethrin I	<0.1	-	<0.1	-	-	-	076	mg/kg
Permethrin II	<0.1	-	<0.1	-	-	-	076[I]	mg/kg

[I] Determination is Accredited to ISO 17025.
[M] Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Soil
Project Code: STB0620D

Sample Reference	BH01						Method No	Units
Sample Depth (m)	10.4							
Date Sampled	24/10/05							
Date Scheduled	31/10/05							
Laboratory Reference No	105157							
Analysis								
Moisture Content (Dry Weight)	17.7							%
Moisture Content (Wet Weight)	15.0							%
Arsenic	2.9						069[IM]	mg/kg
Beryllium	0.8						069[IM]	mg/kg
Cadmium	0.9						069[IM]	mg/kg
Chromium	23						069[IM]	mg/kg
Lead	9.7						069[IM]	mg/kg
Mercury	< 0.3						069[IM]	mg/kg
Nickel	12						069[IM]	mg/kg
Selenium	1.6						069[IM]	mg/kg
W/S Sulphate as SO4	0.11						074[IM]	g/l
Vanadium	10						069[IM]	mg/kg
Free Cyanide	<5						061[I]	mg/kg
Complex Cyanide	<5						061[I]	mg/kg
Total Cyanide	<5						061[IM]	mg/kg
Organic Matter	<0.1						026[I]	%
pH	8.2						009[IM]	pH Units
Elemental Sulphur	<100						032[IM]	mg/kg
PCB SUITE								
PCB Congener 28	-						039S[I]	mg/kg
PCB Congener 52	-						039S[I]	mg/kg
PCB Congener 101	-						039S[IM]	mg/kg
PCB Congener 118	-						039S[IM]	mg/kg
PCB Congener 138	-						039S[IM]	mg/kg
PCB Congener 153	-						039S[IM]	mg/kg
PCB Congener 180	-						039S[IM]	mg/kg
PCB's (Sum of ICES Congeners)	-						039S[I]	mg/kg

[I] Determination is Accredited to ISO 17025.
[K] Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Soil
Project Code: STB0620D

Sample Reference	BH01						Method No	Units
Sample Depth (m)	10.4							
Date Sampled	24/10/05							
Date Scheduled	31/10/05							
Laboratory Reference No	105157							
Analysis								
Pentachloroethane	-						076[I]	mg/kg
Hexachloroethane	-						076[I]	mg/kg
1,3,5-trichlorobenzene	-						076[I]	mg/kg
1,2,4-trichlorobenzene	-						076[I]	mg/kg
1,2,3-trichlorobenzene	-						076[I]	mg/kg
Hexachlorobutadiene	-						076[I]	mg/kg
1,2,4,5-tetrachlorobenzene	-						076[I]	mg/kg
Dichlobenil	-						076[I]	mg/kg
Pentachlorobenzene	-						076[I]	mg/kg
Tecnazene	-						076[I]	mg/kg
Trifluralin	-						076[I]	mg/kg
alpha-HCH	-						076[I]	mg/kg
Hexachlorobenzene	-						076[I]	mg/kg
beta-HCH	-						076[I]	mg/kg
gamma-HCH (lindane)	-						076[I]	mg/kg
Quintozene	-						076	mg/kg
Propyzamide	-						076[I]	mg/kg
delta-HCH	-						076[I]	mg/kg
Chlorothalonil	-						076[I]	mg/kg
Triallate	-						076[I]	mg/kg
Heptachlor	-						076[I]	mg/kg
Aldrin	-						076[I]	mg/kg
Triadimefon	-						076	mg/kg
Isodrin	-						076[I]	mg/kg
Pendimethalin	-						076[I]	mg/kg
Cis-Heptachlor Epoxide	-						076[I]	mg/kg
gamma-Chlordane (trans)	-						076[I]	mg/kg
o,p-DDE	-						076[I]	mg/kg

[I] Determination is Accredited to ISO 17025.
[M] Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Soil
Project Code: STB0620D

Sample Reference	BH01						Method No	Units
Sample Depth (m)	10.4							
Date Sampled	24/10/05							
Date Scheduled	31/10/05							
Laboratory Reference No	105157							
Analysis								
alpha-Endosulphan	-						076[I]	mg/kg
alpha-Chlordane (cis)	-						076[I]	mg/kg
p,p-DDE	-						076[I]	mg/kg
Dieldrin	-						076[I]	mg/kg
o,p-TDE	-						076[I]	mg/kg
Endrin	-						076[I]	mg/kg
beta-Endosulphan	-						076	mg/kg
Iprodione	-						076	mg/kg
p,p-TDE	-						076[I]	mg/kg
o,p-DDT	-						076[I]	mg/kg
Propiconazole I	-						076	mg/kg
Endosulphan sulphate	-						076[I]	mg/kg
p,p-DDT	-						076[I]	mg/kg
Propiconazole II	-						076	mg/kg
o,p-Methoxychlor	-						076[I]	mg/kg
Fluroxypyr	-						076[I]	mg/kg
p,p-Methoxychlor	-						076[I]	mg/kg
Permethrin I	-						076	mg/kg
Permethrin II	-						076[I]	mg/kg

[I] Determination is Accredited to ISO 17025.
[K] Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Soil
Project Code: STB0620D

Sample Reference	TP01	TP02	TP02	TP03	BH01	BH01	Method No	Units
Sample Depth (m)	0.1	0.1	0.9	0.3	0.7	4.0		
Date Sampled	24/10/05	24/10/05	24/10/05	24/10/05	24/10/05	24/10/05		
Date Scheduled	31/10/05	31/10/05	31/10/05	31/10/05	31/10/05	31/10/05		
Laboratory Reference No	105151	105152	105153	105154	105155	105156		
Analysis								
** PAH SUITE **								
Naphthalene	<0.1	0.15	<0.1	0.11	<0.1	<0.1	022S[IH]	mg/kg
Acenaphthylene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	022S[I]	mg/kg
Acenaphthene	<0.1	0.10	<0.1	<0.1	<0.1	<0.1	022S[IH]	mg/kg
Fluorene	<0.1	0.14	<0.1	<0.1	<0.1	<0.1	022S[I]	mg/kg
Phenanthrene	0.41	1.7	<0.1	1.1	<0.1	0.27	022S[IH]	mg/kg
Anthracene	0.10	0.41	<0.1	0.29	<0.1	0.17	022S[IH]	mg/kg
Fluoranthene	0.42	1.8	<0.1	1.4	<0.1	0.18	022S[IH]	mg/kg
Pyrene	0.44	1.9	<0.1	1.4	<0.1	0.16	022S[IH]	mg/kg
Benzo(a)anthracene	0.18	0.74	<0.1	0.66	<0.1	<0.1	022S[IH]	mg/kg
Chrysene	0.23	0.89	<0.1	0.82	<0.1	0.15	022S[IH]	mg/kg
Benzo(b)fluoranthene	0.12	0.44	<0.1	0.43	<0.1	<0.1	022S[IH]	mg/kg
Benzo(k)fluoranthene	0.15	0.62	<0.1	0.61	<0.1	<0.1	022S[IH]	mg/kg
Benzo(a)pyrene	0.13	0.55	<0.1	0.55	<0.1	<0.1	022S[IH]	mg/kg
Indeno(1,2,3-cd)pyrene	<0.1	0.24	<0.1	0.25	<0.1	<0.1	022S[IH]	mg/kg
Dibenzo(a,h)anthracene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	022S[I]	mg/kg
Benzo(g,h,i)perylene	<0.1	0.36	<0.1	0.41	<0.1	<0.1	022S[IH]	mg/kg
PAH (Sum of EPA 16)	2.19	10.06	ND	8.02	ND	0.93	022S[I]	mg/kg

[I] Determination is Accredited to ISO 17025.
[H] Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Soil
Project Code: STB0620D

Sample Reference	BH01						Method(No)	Units
Sample Depth (m)	10.4							
Date Sampled	24/10/05							
Date Scheduled	31/10/05							
Laboratory Reference No	105157							
Analysis								
PAH SUITE								
Naphthalene	<0.1						022S[IH]	mg/kg
Acenaphthylene	<0.1						022S[I]	mg/kg
Acenaphthene	<0.1						022S[IH]	mg/kg
Fluorene	<0.1						022S[I]	mg/kg
Phenanthrene	<0.1						022S[IH]	mg/kg
Anthracene	<0.1						022S[IH]	mg/kg
Fluoranthene	<0.1						022S[IH]	mg/kg
Pyrene	<0.1						022S[IH]	mg/kg
Benzo(a)anthracene	<0.1						022S[IH]	mg/kg
Chrysene	<0.1						022S[IH]	mg/kg
Benzo(b)fluoranthene	<0.1						022S[IH]	mg/kg
Benzo(k)fluoranthene	<0.1						022S[IH]	mg/kg
Benzo(a)pyrene	<0.1						022S[IH]	mg/kg
Indeno(1,2,3-cd)pyrene	<0.1						022S[IH]	mg/kg
Dibenzo(a,h)anthracene	<0.1						022S[I]	mg/kg
Benzo(g,h,i)perylene	<0.1						022S[IH]	mg/kg
PAH (Sum of EPA 16)	ND						022S[I]	mg/kg

[I] Determination is Accredited to ISO 17025.
[H] Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Soil
Project Code: STB0620D

Sample Reference	TP01	TP02						
Sample Depth (m)	0.1	0.9						
Date Sampled	24/10/05	24/10/05						
Date Scheduled	31/10/05	31/10/05						
Laboratory Reference No	105151	105153						
Analysis								
** SVOC SUITE **								
Naphthalene	540	< 150					053S[IH]	µg/kg
2-Chloronaphthalene	< 150	< 150					053S[IH]	µg/kg
Acenaphthylene	610	< 150					053S[IH]	µg/kg
Acenaphthene	260	< 150					053S[IH]	µg/kg
Fluorene	710	< 150					053S[IH]	µg/kg
Phenanthrene	2500	< 150					053S[IH]	µg/kg
Anthracene	820	< 150					053S[IH]	µg/kg
Fluoranthene	2500	< 150					053S[IH]	µg/kg
Pyrene	2600	< 150					053S[IH]	µg/kg
Benz(a)anthracene	2000	< 150					053S	µg/kg
Chrysene	1700	< 150					053S[IH]	µg/kg
Benzo(b)fluoranthene	2800	< 150					053S[IH]	µg/kg
Benzo(k)fluoranthene	1400	< 150					053S[IH]	µg/kg
Benzo(a)pyrene	2300	< 150					053S	µg/kg
Dibenzo(a,h)anthracene	510	< 150					053S[IH]	µg/kg
Indeno(1,2,3-cd)pyrene	1400	< 150					053S[IH]	µg/kg
Benzo(g,h,i)perylene	1800	< 150					053S[IH]	µg/kg
Phenol	< 150	< 150					053S[I]	µg/kg
2-Chlorophenol	< 150	< 150					053S[IH]	µg/kg
2-Methylphenol	< 200	< 200					053S[I]	µg/kg
4-Methylphenol	< 200	< 200					053S[IH]	µg/kg
2-Nitrophenol	< 300	< 300					053S[IH]	µg/kg
2,4-Dimethylphenol	< 250	< 250					053S[IH]	µg/kg
2,4-Dichlorophenol	< 200	< 200					053S[IH]	µg/kg
2,6-Dichlorophenol	< 200	< 200					053S[IH]	µg/kg
4-Chloro-3-methyl phenol	< 150	< 150					053S[IH]	µg/kg
2,4,6-Trichlorophenol	< 150	< 150					053S[IH]	µg/kg
2,4,5-Trichlorophenol	< 200	< 200					053S[IH]	µg/kg
4-Nitrophenol	< 300	< 300					053S	µg/kg

[I] Determination is Accredited to ISO 17025.
[H] Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Soil
Project Code: STB0620D

Sample Reference	TP01	TP02					Method No.	Units
Sample Depth (m)	0.1	0.9						
Date Sampled	24/10/05	24/10/05						
Date Scheduled	31/10/05	31/10/05						
Laboratory Reference No	105151	105153						
Analysis								
SVOC SUITE Cont.								
2,3,4,6-Tetrachlorophenol	< 250	< 250					053S	µg/kg
Pentachlorophenol	< 250	< 250					053S	µg/kg
Dimethyl Phthalate	< 200	< 200					053S^{IM}	µg/kg
Diethyl Phthalate	< 200	< 200					053S^{IM}	µg/kg
Di-n-butyl phthalate	< 150	< 150					053S^{IM}	µg/kg
Butyl benzyl phthalate	< 150	< 150					053S^{IM}	µg/kg
Bis(2-chloroethyl)ether	< 150	< 150					053S^{IM}	µg/kg
Bis(2-chloroisopropyl)ether	< 200	< 200					053S^{IM}	µg/kg
4-Chlorophenyl phenyl ether	< 150	< 150					053S^{IM}	µg/kg
Bromo phenyl phenyl ether	< 200	< 200					053S^{IM}	µg/kg
1,3-Dichlorobenzene	< 200	< 200					053S^{IM}	µg/kg
1,2-Dichlorobenzene	< 150	< 150					053S^{IM}	µg/kg
1,4-Dichlorobenzene	< 200	< 200					053S^{IM}	µg/kg
Nitrobenzene	< 150	< 150					053S^{IM}	µg/kg
1,2,4-Trichlorobenzene	< 200	< 200					053S^{IM}	µg/kg
2,6-Dinitrotoluene	< 200	< 200					053S^{IM}	µg/kg
2,4-Dinitrotoluene	< 200	< 200					053S^{IM}	µg/kg
Azobenzene	< 200	< 200					053S^{IM}	µg/kg
Hexachlorobenzene	< 200	< 200					053S^{IM}	µg/kg
Hexachloroethane	< 150	< 150					053S^{IM}	µg/kg
n-Nitro-n-propyl-1-propanamine	< 200	< 200					053S^{IM}	µg/kg
Isophorone	< 200	< 200					053S^{IM}	µg/kg
Bis(2-chloroethoxy)methane	< 150	< 150					053S^{IM}	µg/kg
Hexachlorobutadiene	< 150	< 150					053S^{IM}	µg/kg
Anthraquinone	210	< 150					053S^{IM}	µg/kg
Aniline	< 100	< 100					053S^{I}	µg/kg

^{I} Determination is Accredited to ISO 17025.
^{M} Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Soil
Project Code: STB0620D

Sample Reference	TP01	TP02					Method No	Units
Sample Depth (m)	0.1	0.9						
Date Sampled	24/10/05	24/10/05						
Date Scheduled	31/10/05	31/10/05						
Laboratory Reference No	105151	105153						
Analysis								
Dichlorodifluoromethane	< 20	< 20					071S[I][H]	µg/kg
Chloromethane	< 20	< 20					071S[I][H]	µg/kg
Vinyl Chloride	< 10	< 10					071S	µg/kg
Bromomethane	< 20	< 20					071S[I][H]	µg/kg
Chloroethane	< 10	< 10					071S[I][H]	µg/kg
Trichlorofluoromethane	< 10	< 10					071S[I][H]	µg/kg
1,1-Dichloroethene	< 20	< 20					071S	µg/kg
112-Trichl-122-Trifluoroethane	< 25	< 25					071S[I][H]	µg/kg
Dichloromethane	< 25	< 25					071S	µg/kg
Carbon Disulfide	< 20	< 20					071S[I][H]	µg/kg
Trans-1,2 Dichloroethene	< 10	< 10					071S	µg/kg
MTBE	< 10	< 10					071S	µg/kg
1,1 -Dichloroethane	< 10	< 10					071S	µg/kg
Cis-1,2 Dichloroethene	< 10	< 10					071S[I][H]	µg/kg
Bromochloromethane	< 10	< 10					071S[I][H]	µg/kg
Chloroform	< 10	< 10					071S[I][H]	µg/kg
2,2-Dichloropropane	< 20	< 20					071S[I][H]	µg/kg
1,1,1-Trichloroethane	< 20	< 20					071S	µg/kg
1,2-Dichloroethane	< 20	< 20					071S	µg/kg
1,1-Dichloropropene	< 10	< 10					071S[I][H]	µg/kg
Benzene	< 20	< 20					071S	µg/kg
Carbon Tetrachloride	< 20	< 20					071S[I][H]	µg/kg
Dibromomethane	< 20	< 20					071S[I][H]	µg/kg
1,2-Dichloropropane	< 10	< 10					071S[I][H]	µg/kg
Trichloroethene	< 20	< 20					071S[I][H]	µg/kg
Bromodichloromethane	< 20	< 20					071S[I][H]	µg/kg
Cis-1,3 Dichloropropene	< 20	< 20					071S[I][H]	µg/kg
Trans-1,3 Dichloropropene	< 20	< 20					071S[I][H]	µg/kg
1,1,2-Trichloroethane	< 20	< 20					071S	µg/kg
Toluene	< 20	< 20					071S[I][H]	µg/kg
1,3 -Dichloropropane	< 20	< 20						

[I] Determination is Accredited to ISO 17025.
[H] Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Soil
Project Code: STB0620D

Sample Reference	TP01	TP02					Method No	Units
Sample Depth (m)	0.1	0.9						
Date Sampled	24/10/05	24/10/05						
Date Scheduled	31/10/05	31/10/05						
Laboratory Reference No	105151	105153						
Analysis								
VOC SUITE Contd.								
Dibromochloromethane	< 20	< 20					071S[IN]	µg/kg
1,2-Dibromoethane	< 20	< 20					071S[IN]	µg/kg
Tetrachloroethene	< 20	< 20					071S	µg/kg
1,1,1,2-Tetrachloroethane	< 10	< 10					071S	µg/kg
Chlorobenzene	< 20	< 20					071S[IN]	µg/kg
Ethyl Benzene	< 20	< 20					071S	µg/kg
m,p-Xylenes	< 30	< 30					071S	µg/kg
Bromoform	< 10	< 10					071S[IN]	µg/kg
Styrene	< 20	< 20					071S[IN]	µg/kg
o-Xylene	< 20	< 20					071S	µg/kg
1,1,2,2 Tetrachloroethane	< 10	< 10					071S	µg/kg
1,2,3-Trichloropropane	< 20	< 20					071S[IN]	µg/kg
Isopropylbenzene	< 20	< 20					071S[IN]	µg/kg
Bromobenzene	< 10	< 10					071S[IN]	µg/kg
n-propylbenzene	< 20	< 20					071S[IN]	µg/kg
2-Chlorotoluene	< 20	< 20					071S[IN]	µg/kg
4-Chlorotoluene	< 20	< 20					071S[IN]	µg/kg
1,3,5 Trimethylbenzene	< 20	< 20					071S	µg/kg
tert-butylbenzene	< 20	< 20					071S[IN]	µg/kg
1,2,4 Trimethylbenzene	< 20	< 20					071S	µg/kg
sec-butylbenzene	< 20	< 20					071S[IN]	µg/kg
1,3 Dichlorobenzene	< 20	< 20					071S	µg/kg
1,4 Dichlorobenzene	< 20	< 20					071S	µg/kg
4-Isopropyltoluene	< 20	< 20					071S[IN]	µg/kg
1,2 Dichlorobenzene	< 20	< 20					071S	µg/kg
n-butylbenzene	< 20	< 20					071S	µg/kg
1,2,4-Trichlorobenzene	< 20	< 20					071S	µg/kg
1,2-Dibromo-3-Chloropropane	< 20	< 20					071S	µg/kg
Hexachlorobutadiene	< 20	< 20					071S	µg/kg
1,2,3-Trichlorobenzene	< 20	< 20					071S	µg/kg

[I] Determination is Accredited to ISO 17025.
[II] Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Leachate
Project Code: STB0620D

Sample Reference	TP01	TP03						
Sample Depth (m)	0.1	0.3						
Date Sampled	24/10/05	24/10/05						
Date Scheduled	31/10/05	31/10/05						
Laboratory Reference No	105151	105154						
Analysis								
Arsenic	0.010	0.013					016[I]	mg/l
Barium	0.040	0.031					062[I]	mg/l
Beryllium	< 0.005	< 0.005					062[I]	mg/l
Boron	0.07	0.08					016[I]	mg/l
Cadmium	< 0.001	< 0.001					016[I]	mg/l
Chromium	< 0.01	< 0.01					016[I]	mg/l
Copper	< 0.005	< 0.005					016[I]	mg/l
Lead	< 0.01	< 0.01					016[I]	mg/l
Mercury	< 0.00005	< 0.00005					028[I]	mg/l
Nickel	< 0.005	< 0.005					016[I]	mg/l
Selenium	< 0.01	< 0.01					016[I]	mg/l
Vanadium	< 0.02	< 0.02					062[I]	mg/l
Zinc	< 0.005	0.006					016[I]	mg/l
pH	7.9	7.9					084	pH Units
Free Cyanide	< 0.03	< 0.03					061[I]	mg/l
Complex Cyanide	< 0.03	< 0.03					061[I]	mg/l
Total Cyanide	< 0.03	< 0.03					061[I]	mg/l
Nitrate as N	<1	<1					011[I]	mg/l
Sulphide	<0.05	<0.05					055[I]	mg/l
Sulphate	360	440					011[I]	mg/l

[I] Determination is Accredited to ISO 17025.
[M] Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results

Project Name: 35 Back Picadilly, Manchester
Client : Soiltechnics

Job Number : 05-08849
Matrix : Leachate
Project Code: STB0620D

Sample Reference	TP01	TP03					Method No	Units
Sample Depth (m)	0.1	0.3						
Date Sampled	24/10/05	24/10/05						
Date Scheduled	31/10/05	31/10/05						
Laboratory Reference No	105151	105154						
Analysis								
PAH SUITE								
Naphthalene	< 0.0001	< 0.0001					022L[I]	mg/l
Acenaphthalene	< 0.0001	< 0.0001					022L[I]	mg/l
Acenaphthene	< 0.0001	< 0.0001					022L[I]	mg/l
Fluorene	< 0.0001	< 0.0001					022L[I]	mg/l
Phenanthrene	< 0.0001	0.0001					022L[I]	mg/l
Anthracene	< 0.0001	< 0.0001					022L[I]	mg/l
Fluoranthene	< 0.0001	< 0.0001					022L[I]	mg/l
Pyrene	< 0.0001	< 0.0001					022L[I]	mg/l
Benzo(a)anthracene	< 0.0001	< 0.0001					022L[I]	mg/l
Chrysene	< 0.0001	< 0.0001					022L[I]	mg/l
Benzo(b)fluoranthene	< 0.0001	< 0.0001					022L[I]	mg/l
Benzo(k)fluoranthene	< 0.0001	< 0.0001					022L[I]	mg/l
Benzo(a)pyrene	< 0.0001	< 0.0001					022L[I]	mg/l
Indeno(1,2,3-cd)pyrene	< 0.0001	< 0.0001					022L[I]	mg/l
Dibenzo(a,h)anthracene	< 0.0001	< 0.0001					022L[I]	mg/l
Benzo(g,h,i)perylene	< 0.0001	< 0.0001					022L[I]	mg/l
PAH (Sum of EPA 16)	ND	0.0001					022L[I]	mg/l

[I] Determination is Accredited to ISO 17025.
[M] Determination is Accredited to MCERTS.

ALcontrol Technichem
Table Of Results - Appendix

Summary of methods contained within report :

Method No	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Analysis
053S	In-house method	Determination of semi-volatile organic compounds in soil samples by dichloromethane extraction and GC-MS detection	Y	Y	W
022S	In-house method	Determination of PAH compounds in soil samples by hexane / acetone extraction followed by GC-MS detection	Y	Y	W
009	In-house method referencing BS1377: Part 3: 1990 and Second Site Property: Environmental Assessment Guidance Version 3: March 2003	Determination of pH by addition of water followed by electrometric measurement	Y	Y	W
084	In-house method	Determination of pH in aqueous samples by direct electrometric measurement	N	N	W
080	In-house method based on MEWAM "Inductively Coupled Plasma Spectrometry", HMSO, 1996	Determination of metals in aqueous samples by nitric acid digestion followed by Inductively Coupled Plasma - Mass Spectrometry detection (ICP-MS)	N	N	W
076	In-house method	Determination of organochlorine pesticides in soil samples by hexane/acetone extraction followed by GC-MS detection	Y	N	W
071S	In-house method	Determination of volatile organic compounds in soil samples by headspace GC-MS analysis	N	N	W
065	In-house method	Determination of total petroleum hydrocarbons in soil samples using hexane:acetone extraction followed by silica-alumina "clean-up" and GC-FID detection	N	N	W

ALcontrol Technichem
Table Of Results - Appendix

Summary of methods contained within report :

Method No:	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Analysis
062	In-house method based on MEWAM "Inductively Coupled Plasma Spectrometry", HMSO, 1996	Determination of metals in aqueous samples by nitric digestion followed by ICP-OES detection	Y	N	W
061	In-house method based on Method 4500-CN, "Standard Methods for the Examination of Water and Waste Water", APHA AWWA WEF, Edition 18, 1992	Determination of cyanides and thiocyanate in aqueous samples by continuous flow colorimetry (Skalar)	Y	N	W
055	In-house method based on MEWAM "Sulphide in Waters and Effluents", HMSO, 1983	Determination of sulphide in aqueous samples by direct colourimetry	Y	N	W
029	In-house method based on MEWAM "Suspended, Settleable and Total Dissolved Solids in Waters and Effluents", HMSO, 1980	Determination of total, settleable and suspended solids in aqueous samples by filtration and gravimetry	N	N	W
028	In-house method	Determination of mercury in aqueous samples by bromine digestion and atomic fluorescence detection	Y	N	W
022L	In-house method	Determination of PAH compounds in aqueous samples by pentane extraction followed by GC-MS detection	Y	N	W
016	In-house method based on MEWAM "Inductively Coupled Plasma Spectrometry", HMSO, 1996	Determination of metals in aqueous samples by nitric digestion followed by ICP-OES detection	Y	N	W
011	In-house method	Determination of anion content in aqueous samples using ion chromatographic determination with electrical conductivity detector	N	N	W

ALcontrol Technichem
Table Of Results - Appendix

Summary of methods contained within report :

Method No	Reference	Description	ISO 17025 Accredited	MCERTS Accredited	Wet/Dry Analysis
074	In-house method based on BS1377 Part 3, "Chemical and Electrochemical Tests", 1990	Determination of 2:1 water soluble sulphate in soil samples by Inductively Coupled Plasma - Optical Emission Spectrometry (ICP-OES)	Y	Y	D
069	In-house method based on MEWAM "Methods for the Determination of Metals in Soil", HMSO, 1986	Determination of metals in soil samples by aqua-regia digestion followed by ICP-OES detection	Y	Y	D
032	In-house method	Determination of elemental sulphur (with simultaneous PAH screening) by dichloromethane extraction followed by HPLC-UV detection	Y	Y	D
026	In-house method based on BS1377 Part 3, "Chemical and Electrochemical Tests", 1990	Determination of organic matter in soil samples by oxidation (Walkley & Black method) followed by titration	Y	N	D

Soil results are expressed on a dry weight basis. Where the test uses as-received sample, a moisture correction factor is applied to the wet weight result to convert it. This factor is determined gravimetrically using loss of moisture on drying at 30 (+/-5) degrees C.

APPENDIX C

Copy of laboratory test result certificate (landfill waste acceptance criteria – table 5.1).

ALcontrol Technichem

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Brian Thomson
Cedar Barn
White Lodge
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NN6 9PY

24th November 2005

TEST REPORT

Our Report No: 05-08849B

Your Order No: Instns. of 31.10.2005

3 soil samples submitted for analysis on 31.10.2005

Project Name: 35 Back Picadilly, Manchester

Project Code: STB06200

Results enclosed: Pages 2-5

Laboratory analysis started on 31.10.2005
All laboratory analysis completed by 24th November 2005

Rexona Rahman
Analytical Reporting Manager
ALCONTROL TECHNICHEM

Leigh Barker
Project Co-ordinator
ALCONTROL TECHNICHEM

Test Methods are Documented In House Procedures or where appropriate Standard Methods.
Non accredited tests are identified in the appendix. Procedures for sampling are outside the scope of the laboratory UKAS accreditation. Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.
All samples connected with this report, including any 'on hold', will be stored and disposed of according to Company policy. A copy of this policy is available on request.

UKAS TESTING
1141

ALcontrol Technichem is a trading division of ALcontrol UK Limited.
Registered Office: Templeborough House, Mill Close, Rotherham S60 1BZ. Registered in England and Wales No. 4057291

TEST REPORT

WAC ANALYTICAL RESULTS

Our Report No: 05-08849B

Your Order No: Instns. of 31.10.2005

CLIENT: Cedar Barn

3 soil samples submitted for analysis on 31.10.2005

DATE OF ISSUE: 24th November 2005

Project Name: 35 Back Picadilly, Manchester

Project Code: STB06200

Lab Reference	105158				Landfill Waste Acceptance Criteria Limits		
Sampling Date	24.10.2005				Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Sample ID	CS01						
Sample Depth (m)	-						
Solid Waste Analysis							
026 Total Organic Carbon (%)	3.1				3	5	6
019 Loss on Ignition (%)	10.7				-	-	10
040 Sum of BTEX (mg/kg)	<0.01				6	-	-
039 Sum of 7 PCBs (mg/kg)	<0.035				1	-	-
065 Mineral Oil (mg/kg)	180				500	-	-
022 PAH Sum of 17 (mg/kg)	12.14				100	-	-
pH (pH Units)	7.8				-	>6	-
ANC to pH 6 (mol/kg)	0.29				-	to be evaluated	to be evaluated
ANC to pH 4 (mol/kg)	2.09				-	to be evaluated	to be evaluated
Eluate Analysis	2:1	8:1	2:1	Cumulative 10:1	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
	mg/l		mg/kg				
080 Arsenic	0.007	0.008	0.014	0.079	0.5	2	25
080 Barium	0.064	0.038	0.13	0.41	20	100	300
080 Cadmium	< 0.001	< 0.001	<0.002	<0.01	0.04	1	5
080 Chromium	< 0.005	< 0.005	<0.01	<0.05	0.5	10	70
080 Copper	0.024	0.010	0.048	0.12	2	50	100
080 Mercury	< 0.00005	< 0.00005	<0.0001	<0.0005	0.01	0.2	2
080 Molybdenum	0.018	< 0.005	0.036	<0.05	0.5	10	30
080 Nickel	< 0.005	< 0.005	<0.01	<0.05	0.4	10	40
080 Lead	< 0.005	0.006	<0.01	0.052	0.5	10	50
080 Antimony	0.004	0.002	0.008	0.023	0.06	0.7	5
080 Selenium	< 0.005	< 0.005	<0.01	<0.1	0.1	0.5	7
080 Zinc	0.012	0.013	0.024	0.13	4	50	200
011 Chloride	< 10	< 10	<20	<100	800	15000	25000
056 Fluoride	0.50	0.30	1.0	3.3	10	150	500
011 Sulphate as SO_4	1600	680	3200	8000	1000	20000	50000
Total Dissolved Solids	2100	670	4200	8600	4000	60000	100000
020 Phenol Index	<0.01	<0.01	<0.02	<0.1	1	-	-
010 Dissolved Organic Carbon	9.3	5.1	19	57	500	800	1000
Leach Test Information							
009 pH (pH Units)	8.1	8.0					
033 Conductivity (µS/cm)	2520	1430					
078 Temperature (°C)	20.0	20.0					
021 Mass Sample (kg)	0.150						
021 Dry Matter (kg)	0.1162						
021 Moisture (% Dry Weight)	29.04						
Stage 1							
078 Volume Leachant, L_2 (l)	0.199						
078 Filtered Eluate Volume, VE_1 (l)	0.154						
Stage 2							
078 Volume Leachant, L_8 (l)	0.930						

Results are expressed on a dry weight basis, after correction for moisture content where applicable

Stated limits are for guidance only and ALcontrol cannot be held responsible for any discrepencies with current legislation

TEST REPORT

WAC ANALYTICAL RESULTS

Our Report No: 05-08849B

CLIENT: Cedar Barn

Your Order No: Instns. of 31.10.2005

DATE OF ISSUE: 24th November 2005

3 soil samples submitted for analysis on 31.10.2005

Project Code: STB06200

Project Name: 35 Back Picadilly, Manchester

Lab Reference	105159		Landfill Waste Acceptance Criteria Limits		
Sampling Date	24.10.2005		Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Sample ID	CS02				
Sample Depth (m)	-				
Solid Waste Analysis					
026 Total Organic Carbon (%)	1.2		3	5	6
019 Loss on Ignition (%)	4.0		-	-	10
040 Sum of BTEX (mg/kg)	<0.01		6	-	-
039 Sum of 7 PCBs (mg/kg)	<0.035		1	-	-
065 Mineral Oil (mg/kg)	< 50		500	-	-
022 PAH Sum of 17 (mg/kg)	<2.1		100	-	-
009 pH (pH Units)	8.4		-	>6	-
ANC to pH 6 (mol/kg)	0.27		-	to be evaluated	to be evaluated
ANC to pH 4 (mol/kg)	1.32		-	to be evaluated	to be evaluated
Eluate Analysis	10:1	10:1	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
	mg/l	mg/kg			
080 Arsenic	< 0.005	<0.05	0.5	2	25
080 Barium	0.033	0.33	20	100	300
080 Cadmium	< 0.001	<0.01	0.04	1	5
080 Chromium	< 0.005	<0.05	0.5	10	70
080 Copper	< 0.005	<0.05	2	50	100
080 Mercury	< 0.00005	<0.0005	0.01	0.2	2
080 Molybdenum	< 0.005	<0.05	0.5	10	30
080 Nickel	< 0.005	<0.05	0.4	10	40
080 Lead	< 0.005	<0.05	0.5	10	50
080 Antimony	< 0.001	<0.01	0.06	0.7	5
080 Selenium	< 0.005	<0.05	0.1	0.5	7
080 Zinc	< 0.005	<0.05	4	50	200
011 Chloride	< 10	<100	800	15000	25000
056 Fluoride	0.30	3.0	10	150	500
011 Sulphate as SO_4	14	140	1000	20000	50000
029 Total Dissolved Solids	280	2800	4000	60000	100000
020 Phenol Index	<0.01	<0.1	1	-	-
010 Dissolved Organic Carbon	8.1	81	500	800	1000
Leach Test Information					
009 pH (pH Units)	3.0				
033 Conductivity (µS/cm)	199				
078 Temperature (°C)	20				
021 Mass Sample (kg)	0.15				
021 Dry Matter (kg)	0.1282				
021 Moisture (% Dry Weight)	16.97				
078 Volume Leachant (l)	1.261				

Results are expressed on a dry weight basis, after correction for moisture content where applicable

Stated limits are for guidance only and ALcontrol cannot be held responsible for any discrepencies with current legislation

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TEST REPORT

WAC ANALYTICAL RESULTS

Our Report No: 05-08849B — Page 4 of 5 pages

Your Order No: Instns. of 31.10.2005 — CLIENT: Cedar Barn

3 soil samples submitted for analysis on 31.10.2005 — DATE OF ISSUE: 24th November 2005

Project Name: 35 Back Picadilly, Manchester — Project Code: STB06200

Lab Reference	105160				Landfill Waste Acceptance Criteria Limits		
Sampling Date	24.10.2005				Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Sample ID	CS03						
Sample Depth (m)	-						
Solid Waste Analysis							
026 Total Organic Carbon (%)	3.1				3	5	6
019 Loss on Ignition (%)	1.6				-	-	10
040 Sum of BTEX (mg/kg)	<0.01				6	-	-
039 Sum of 7 PCBs (mg/kg)	<0.035				1	-	-
065 Mineral Oil (mg/kg)	< 50				500	-	-
022 PAH Sum of 17 (mg/kg)	<2.1				100	-	-
pH (pH Units)	8.4				-	>6	-
ANC to pH 6 (mol/kg)	0.17				-	to be evaluated	to be evaluated
ANC to pH 4 (mol/kg)	0.63				-	to be evaluated	to be evaluated
Eluate Analysis	2:1	8:1	2:1	Cumulative 10:1	Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
	mg/l		mg/kg				
080 Arsenic	< 0.005	< 0.005	<0.01	<0.05	0.5	2	25
080 Barium	0.031	0.073	0.062	0.66	20	100	300
080 Cadmium	< 0.001	< 0.001	<0.002	<0.01	0.04	1	5
080 Chromium	< 0.005	< 0.005	<0.01	<0.05	0.5	10	70
080 Copper	< 0.005	< 0.005	<0.01	<0.05	2	50	100
080 Mercury	< 0.00005	< 0.00005	<0.0001	<0.0005	0.01	0.2	2
080 Molybdenum	< 0.005	< 0.005	<0.01	<0.1	0.5	10	30
080 Nickel	< 0.005	< 0.005	<0.01	<0.05	0.4	10	40
080 Lead	< 0.005	< 0.005	<0.01	<0.1	0.5	10	50
080 Antimony	< 0.001	< 0.001	<0.002	<0.01	0.06	0.7	5
080 Selenium	< 0.005	< 0.005	<0.01	<0.1	0.1	0.5	7
080 Zinc	< 0.005	< 0.005	<0.01	<0.05	4	50	200
011 Chloride	< 10	< 10	<20	<100	800	15000	25000
056 Fluoride	0.20	< 0.1	0.40	<1	10	150	500
011 Sulphate as SO_4	75	< 10	150	130	1000	20000	50000
Total Dissolved Solids	190	120	380	1300	4000	60000	100000
020 Phenol Index	<0.01	<0.01	<0.02	<0.1	1	-	-
010 Dissolved Organic Carbon	1.9	2.2	3.8	21	500	800	1000
Leach Test Information							
009 pH (pH Units)	8.2	8.2					
033 Conductivity (µS/cm)	279	237					
078 Temperature (°C)	20.0	20.0					
021 Mass Sample (kg)	0.150						
021 Dry Matter (kg)	0.1391						
021 Moisture (% Dry Weight)	7.8						
Stage 1							
078 Volume Leachant, L_2 (l)	0.267						
078 Filtered Eluate Volume, VE_1 (l)	0.242						
Stage 2							
078 Volume Leachant, L_3 (l)	1.113						

Results are expressed on a dry weight basis, after correction for moisture content where applicable

Stated limits are for guidance only and ALcontrol cannot be held responsible for any discrepencies with current legislation

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Waste Acceptance Method Appendix

Our Report No: 05-08849B

Your Order No: Instns. of 31.10.2005

3 soil samples submitted for analysis on 31.10.2005

Project Name: 35 Back Picadilly, Manchester

CLIENT: Cedar Barn

DATE OF ISSUE: 24th November 2005

Project Code: STB06200

Method Reference / Parameter	Extraction Summary	Detection Technique	ISO17025 Accredited?
Solid Waste Analysis			
026 Total Organic Carbon	Wet oxidation	Titration	✓
019 Loss on Ignition	Oven heated at 450°C	Gravimetry	✓
040 Sum of BTEX	Headspace	GC-MS	
Benzene			✓
Toluene			✓
Ethylbenzene			✓
m,p-Xylenes			✓
o-Xylene			✓
039 Sum of 7 PCBs	Hexane / acetone	GC-MS	
PCB Congener 28			✓
PCB Congener 52			✓
PCB Congener 101			✓
PCB Congener 118			✓
PCB Congener 138			✓
PCB Congener 153			✓
PCB Congener 180			✓
065 Mineral Oil (C_6-C_{40})	Hexane / acetone with silica / alumina clean-up	GC-FID	×
022 PAH (Sum of 17 listed)	Hexane / acetone	GC-MS	
Naphthalene			✓
Acenaphthylene			✓
Acenaphthene			✓
Fluorene			✓
Phenanthrene			✓
Anthracene			✓
Fluoranthene			✓
Pyrene			✓
Benzo (a) anthracene			✓
Chrysene			✓
Benzo (b) fluoranthene			✓
Benzo (k) fluoranthene			✓
Benzo (a) pyrene			✓
Indeno (1,2,3-cd) pyrene			✓
Dibenzo (a,h) anthracene			✓
Benzo (g,h,i) perylene			×
Coronene			✓
009 pH	Water addition	Potentiometric	×
Acid Neutralisation Capacity (ANC)	Water addition	Titration	✓
021 Moisture Content	Dried at 105 (+/-5) °C	Gravimetry	
Leachate Analysis†			
078 Leachate Preparation	In accordance with BS EN 12457-3	-	×
	Selected samples in accordance with BS EN 12457-2 (single stage 10:1) ‡	-	×
080 Metals	Nitric acidification	ICP-MS	✓
011 Chloride	-	Ion chromatography	✓
056 Fluoride	-	Ion selective electrode	✓
011 Sulphate	-	Ion chromatography	✓
029 Total Dissolved Solids	Evaporation	Gravimetry	✓
020 Monohydric Phenols (Phenol Index)	-	HPLC - electrochemical detection	✓
010 Dissolved Organic Carbon	Persulphate oxidation	Infra-red detection	✓
009 pH	-	pH meter	✓
033 Conductivity	-	Conductivity meter	✓

†Note: ISO17025 accreditation does not cover leachate analysis as the preparation stage is not accredited

‡ Note: 2 stage leaching process (BS EN 12457-3) not suitable due to low solids content of sample, therefore single stage 10:1 extraction carried out

APPENDIX D

Hazard assessment spread sheet.

Table Comparing Cumulative Compound Concentrations with Hazardous Waste Threshold Values

Category/Endanger		Irritant	Harmful	Toxic		Carcinogenic		Teratogenic		Mutagenic	Ecotoxic		
Risk Phrase		Xi	Xn	T+	T	Carc Cat.1 or 2	Carc Cat.3	Repr.Cat.1	Repr.Cat.3	Muta Cat.3	ΣN_i R60-53/0.25 + ΣN_i R51-58/25 + ΣN_i R52-53/25	ΣN_i R50-58 + ΣN_i R50	ΣN_i R50-53 + ΣN_i R51-53 + ΣN_i R52-54 + ΣN_i R53
Contaminant	95th percentile concentration	H4 (%)	H5 (%)	H6 (%)	H6 (%)	H7 (%)	H7 (%)	H10 (%)	H10 (%)	H11 (%)	H14	H14	H14
Arsenic	26.19				0.0035						0.0254		
Beryllium	2.11	0.0006		0.0006	0.0006	0.0006							
Cadmium	12.82		0.0015		0.0015	0.0015							
Chromium	39.29					0.0063							
Lead	729.63		0.0787					0.0787	0.0787				
Mercury	1.21			0.0001									
Nickel	43.07		0.0055				0.0055		0.0055				
Selenium	3.44				0.0003								
Vanadium	45.35	0.0067	0.0067		0.0067				0.0067	0.0067			
Total		0.0073	0.0923	0.0007	0.0125	0.0084	0.0055	0.0787	0.0908	0.0067	0.0254	0.1017	0.1017
Threshold		20%	25%	0.10%	3%	0.10%	1%	0.50%	5%	1%	1	25%	25%
Exceeded Y/N		N	N	N	N	N	N	N	N	N	N	N	N

APPENDIX E

Comparison of test data with landfill waste acceptance criteria (table 5.1) (Secondary assessment procedures).

Table Comparing Test Data With Landfill Waste Criteria

Parameter	Landfill waste acceptance criteria			Laboratory test data
	Inert waste landfill	Stable non-reactive hazardous waste in non – hazardous landfill	Hazardous waste landfill	CS01 Made Ground
Parameters determined on the waste				
Total organic carbon (w/w%)	3%	5%	6%*	3.1
Loss of Ignition			10%*	10.7
BTEX (mg kg^{-1})	6			<0.01
PCBs (7 congeners) (mg kg^{-1})	1			<0.035
Mineral oil C_{10}-C_{40} (mg kg^{-1})	500			180
PAH sum of 17 (mg kg^{-1})	100			12.14
pH		>6		7.8
Acid neutralisation capacity to pH 6		To be evaluated	To be evaluated	0.29
Limit values (mg kg^{-1}) for compliance leaching test using BS EN 12457-3 at L/S 10 l kg^{-1}				
As (arsenic)	0.5	2	25	0.079
Ba (barium)	20	100	300	0.41
Cd (cadmium)	0.04	1 (UK0.1)§	5 (UK1)§	<0.01
Cr (chromium (total))	0.5	10	70	<0.05
Cu (copper)	2	50	100	0.12
Hg (mercury)	0.01	0.2 (UK0.02)§	2(UK0.4)§	<0.0005
Mo (molybdenum)	0.5	10	30	<0.05
Ni (nickel)	0.4	10	40	<0.05
Pb (lead)	0.5	10	50	0.052
Sb (antimony)	0.06	0.7	5	0.023
Se (selenium)	0.1	0.5	7	<0.1
Zn (zinc)	4	50	200	0.13
Cl (chloride)	800	15,000	25,000	<100
F (fluoride)	10	150	500	3.3
SO_4 (sulphate)	1,000#	20,000	50,000	8000
Total dissolved solids (TDS)+	4,000	60,000	100,000	8600
Phenol Index	1			<0.1
Dissolved organic carbon at own pH or pH 7.5 – 8.0@	500	800	1,000	57

* Either TOC or LOI must be used for hazardous wastes

§ The lower limit values for Cd and Hg may apply within the UK (see above)

\# If an inert waste does not meet the SO_4 L/S10 limit, alternative values of 1500 mg l^{-1} SO_4 at C_o (initial eluate from The percolation test (prEN 14405) and 6000 mg kg^{-1} SO_4 at L/S10 (either from the percolation test or batch test BS EN 12457-3), can be used to demonstrate compliance with the acceptance criteria for inert wastes

\+ The value for TDS can be used instead of the values for Cl and SO_4

@ DOC at pH 7.5-8.0 and L/S10 can be determined or eluate derived from a modified version of the pH dependence Test, prEN 14429, if the limit value at own pH (BS EN 12457 eluate) is not met

Assessed waste type

Stable Non-reactive Hazardous Waste

Table Comparing Test Data With Landfill Waste Criteria

Parameter	Landfill waste acceptance criteria			Laboratory test data	
	Inert waste landfill	Stable non-reactive hazardous waste in non – hazardous landfill	Hazardous waste landfill	CS02 Glacial Till	CS03 Permian and Triassic Sandstone
Parameters determined on the waste					
Total organic carbon (w/w%)	3%	5%	6%*	1.2	3.1
Loss of ignition			10%*	4.0	1.6
BTEX ($mg\ kg^{-1}$)	6			<0.01	<0.01
PCBs (7 congeners) ($mg\ kg^{-1}$)	1			<0.035	<0.035
Mineral oil C_{10}-C_{40} ($mg\ kg^{-1}$)	500			<50	<50
PAH sum of 17 ($mg\ kg^{-1}$)	100			<2.1	<2.1
pH		>6		8.4	8.4
Acid neutralisation capacity to pH 6		To be evaluated	To be evaluated	0.27	0.17
Limit values ($mg\ kg^{-1}$) for compliance leaching test using BS EN 12457-3 at L/S 10 l kg^{-1}					
As (arsenic)	0.5	2	25	<0.05	<0.05
Ba (barium)	20	100	300	0.33	0.66
Cd (cadmium)	0.04	1 (UK0.1)§	5 (UK1)§	<0.1	<0.1
Cr (chromium (total))	0.5	10	70	<0.05	<0.05
Cu (copper)	2	50	100	<0.05	<0.05
Hg (mercury)	0.01	0.2 (UK0.02)§	2(UK0.4)§	<0.0005	<0.0005
Mo (molybdenum)	0.5	10	30	<0.05	<0.05
Ni (nickel)	0.4	10	40	<0.05	<0.05
Pb (lead)	0.5	10	50	<0.05	<0.05
Sb (antimony)	0.06	0.7	5	<0.01	<0.01
Se (selenium)	0.1	0.5	7	<0.05	<0.05
Zn (zinc)	4	50	200	<0.05	<0.05
Cl (chloride)	800	15,000	25,000	<100	<100
F (fluoride)	10	150	500	3.0	<1
SO_4 (sulphate)	1,000#	20,000	50,000	140	130
Total dissolved solids (TDS)+	4,000	60,000	100,000	2800	1300
Phenol index	1			<0.1	<0.1
Dissolved organic carbon at own pH or pH 7.5 – 8.0@	500	800	1,000	81	21

* Either TOC or LOI must be used for hazardous wastes

§ The lower limit values for Cd and Hg may apply within the UK (see above)

\# If an inert waste does not meet the SO_4 L/S10 limit, alternative values of 1500 mg l^{-1} SO_4 at C_o (initial eluate from The percolation test (prEN 14405) and 6000 mg kg^{-1} SO_4 at L/S10 (either from the percolation test or batch test BS EN 12457-3), can be used to demonstrate compliance with the acceptance criteria for inert wastes

\+ The value for TDS can be used instead of the values for C1 and SO_4

@ DOC at pH 7.5-8.0 and L/S10 can be determined or eluate derived from a modified version of the pH dependence Test, prEN 14429, if the limit value at own pH (BS EN 12457 eluate) is not met

Assessed waste type

Inert waste

APPENDIX F

Basic categorisation schedule.

BASIC CATEGORISATION SCHEDULE

Produced following the requirements of The Landfill (England and Wales) (Amendment) Regulations 2004 Part 2 (5)

(a)	*Source and origin of waste* **Proposed redevelopment at 35 Back Piccadilly, Manchester.**
(b)	*Process producing the waste* **Piling arisings and general site clearance**
(c)	*Statement on waste treatment* **Made Ground deposits classified as Stable Non-reactive Hazardous waste.**
(d)	*Composition of the waste* **Dark brown, sandy, gravelly clay with occasional cobbles.**
(e)	*Appearance of the waste* **As above**
(f)	*European waste catalogue code* **17-05-04**
(g)	*Hazardous waste properties* **Elevated concentrations (above inert criteria) of total organic carbon, loss on ignition, sulphate and total dissolved solids.**
(h)	*Is the waste prohibited under regulation 9?* **No**
(i)	*Landfill class* **Stable Non-reactive Hazardous Waste**
(j)	*Additional precautions required at landfill* **None**
(k)	*Can soil be recycled or recovered?* **No**
(l)	*Name and address of waste producer* **Mount Services Limited, 9 Berkeley Square, London, W1J 8DW**
(m)	*Name and address of consultant* **Soiltechnics Limited, Cedar Barn, White Lodge, Walgrave, Northampton. NN6 9PY.** **Tel: (01604) 781877 Fax: (01604) 781007 E-mail: mail@soiltechnics.net**

Schedule Date: **4th Janurary 2006**	signed 
Soiltechnics reference **R-STB0620D-WC01**	**IAN EVETTS HNC, Associate Director for Soiltechnics Limited.**

BASIC CATEGORISATION SCHEDULE

Produced following the requirements of The Landfill (England and Wales) (Amendment) Regulations 2004 Part 2 (5)

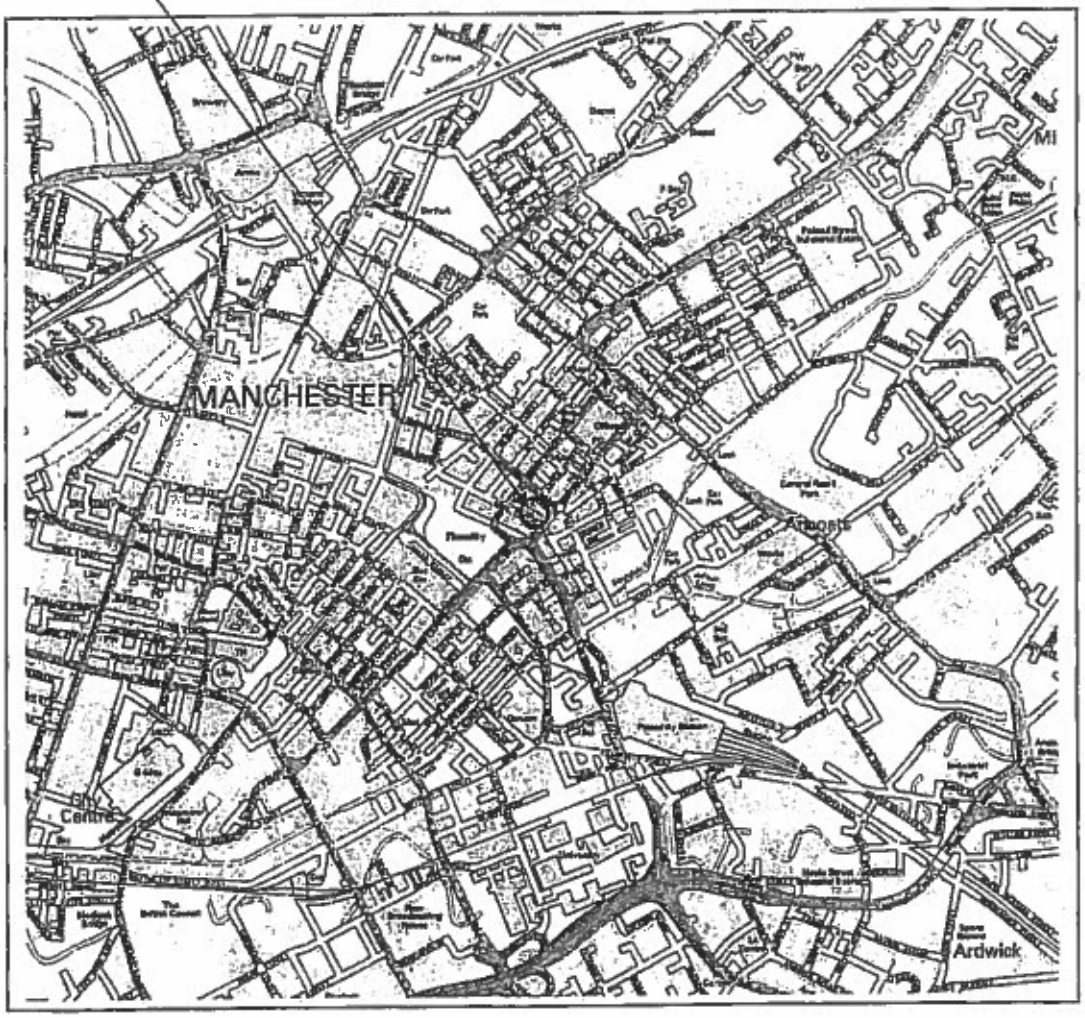
(a)	*Source and origin of waste* **Proposed redevelopment at 35 Back Piccadilly, Manchester.**
(b)	*Process producing the waste* **Piling arisings and general site clearance**
(c)	*Statement on waste treatment* **Made Ground deposits classified as Stable Non-reactive Hazardous waste.**
(d)	*Composition of the waste* **Dark brown, sandy, gravelly clay with occasional cobbles.**
(e)	*Appearance of the waste* **As above**
(f)	*European waste catalogue code* **17-05-04**
(g)	*Hazardous waste properties* **Elevated concentrations (above inert criteria) of total organic carbon, loss on ignition, sulphate and total dissolved solids.**
(h)	*Is the waste prohibited under regulation 9?* **No**
(i)	*Landfill class* **Stable Non-reactive Hazardous Waste**
(j)	*Additional precautions required at landfill* **None**
(k)	*Can soil be recycled or recovered?* **No**
(l)	*Name and address of waste producer* **Mount Services Limited, 9 Berkeley Square, London, W1J 8DW**
(m)	*Name and address of consultant* **Soiltechnics Limited, Cedar Barn, White Lodge, Walgrave, Northampton. NN6 9PY.** **Tel: (01604) 781877 Fax: (01604) 781007 E-mail: mail@soiltechnics.net**

Schedule Date: **4th Janurary 2006**	signed **IAN EVETTS HNC, Associate Director for Soiltechnics Limited.**
Soiltechnics reference **R-STB0620D-WC01**	

DRAWING STB0620D - 01

Site location plan.

The Site.



SOILTECHNICS
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Project
Proposed redevelopment at
35 Back Piccadilly, Manchester

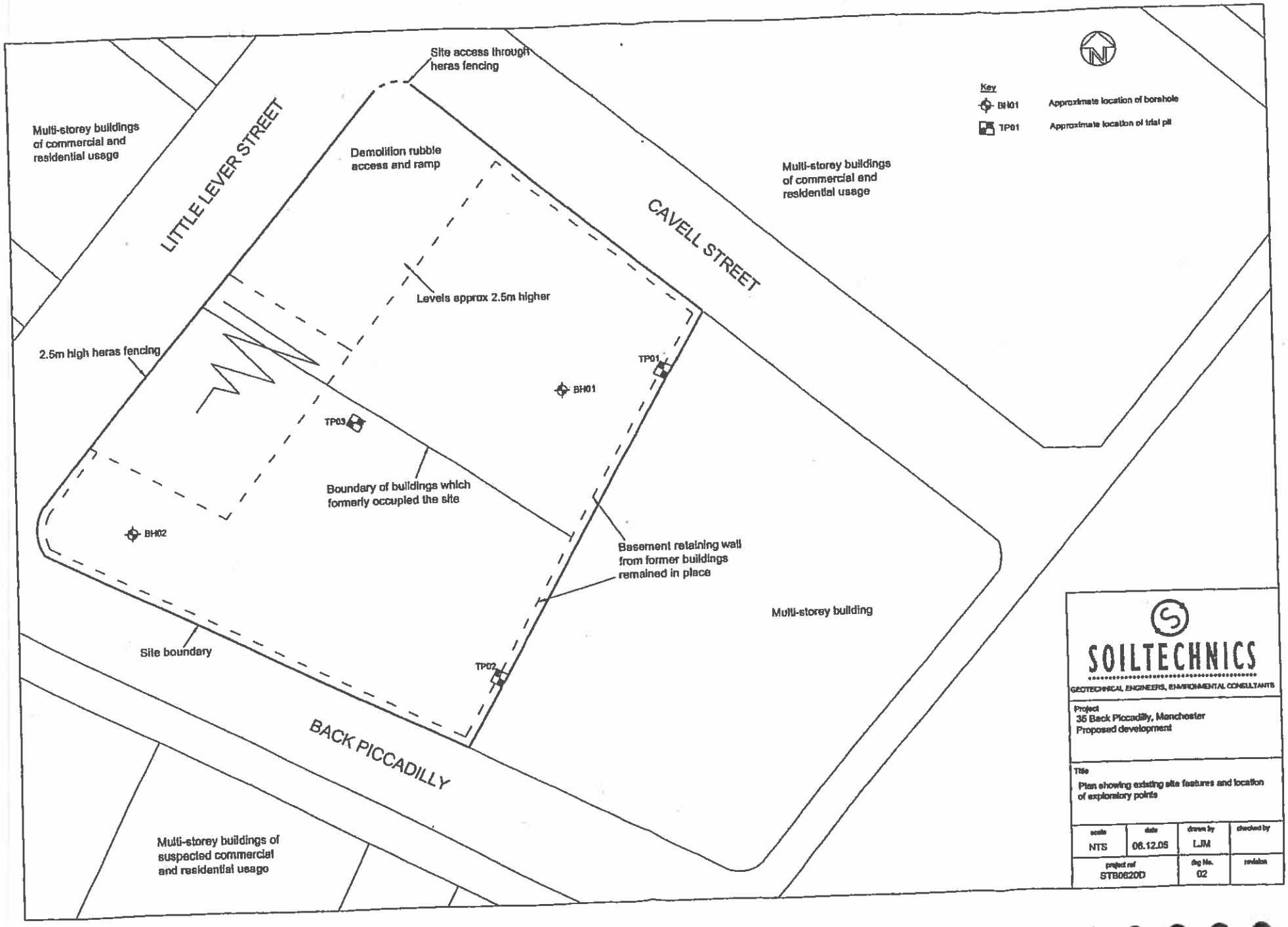
Title
Site Location Plan

scale	date	drawn by	checked by
NTS	04.01.06	SD	
project ref		drg no	revision
STB0620D		01	

dwg.01

DRAWING STB0620D - 02

Plan showing location of exploratory points and existing site features.


Site access through heras fencing
Multi-storey buildings of commercial and residential usage
LITTLE LEVER STREET
Demolition rubble access and ramp
CAVELL STREET
Multi-storey buildings of commercial and residential usage
Levels approx 2.5m higher
2.5m high heras fencing
TP01
BH01
TP03
Boundary of buildings which formerly occupied the site
BH02
Basement retaining wall from former buildings remained in place
Multi-storey building
Site boundary
TP02
BACK PICCADILLY
Multi-storey buildings of suspected commercial and residential usage
Key
BH01 Approximate location of borehole
TP01 Approximate location of trial pit
SOILTECHNICS
GEOTECHNICAL ENGINEERS, ENVIRONMENTAL CONSULTANTS
Project
35 Back Piccadilly, Manchester
Proposed development
Title
Plan showing existing site features and location of exploratory points
scale NTS
date 06.12.05
drawn by LJM
checked by
project ref STB0620D
dwg No. 02
revision