

CCG-C-25-15180

**VALIDATION REPORT
FOR LAND TO THE REAR OF NO. 309 DICKENSON ROAD
LONGSIGHT
MANCHESTER
M13 0NR**

FEBRUARY 2025

Prepared for:

JCT BUILDING SERVICES (NW) LTD
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DOCUMENT CONTROL FORM

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Project Title:	Validation Report For; Dickenson Road, Manchester
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Signature	
For and behalf of CC GEOTECHNICAL LTD	
Date:	February 2025
Revision Number:	0
Comments:	
Status:	
Distribution:	

Standard Terms and Conditions of Engagement

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1.0 INTRODUCTION

CC GEOTECHNICAL LIMITED (CCG) is providing consultancy services to **JCT BUILDING SERVICES (NW) LTD** in connection with the redevelopment of a parcel of land at the rear of No. 309 Dickenson Road, Manchester M13.

The site has been redeveloped for residential use by the construction of 2nr x 3-storey residential dwellings fronting onto Honor Street, each constructed in traditional brick elevations under pitched roofs, together with associated off-road car parking facilities and front and rear private gardens. A layout of the development is presented in Appendix A.

The site is located within the jurisdiction of **MANCHESTER CITY COUNCIL**.

This report was prepared as part of the hierarchy of documentation required to demonstrate that the development was constructed in accordance with the recommendations in "Ground Investigation Report for Land to the Rear of No. 309 Dickenson Road, Longsight, Manchester" produced by **CCG**, report reference CCG-C-23-13693.

This report pertains to the validation of the gardens and soft landscaped areas.

The report recommended the following principal measures be incorporated in the development:

- **Proposed Capping Thickness – Soft Landscaping Areas**

It is recommended that site levels within all proposed gardens be reduced by 600mm below proposed finished garden level, or to the surface of undisturbed natural drift deposits, whichever is the lesser, with site levels being reconstructed by the placement of clean imported topsoil. Where made ground remaining in place beyond 600mm, imported topsoil is to be placed on a suitable geotextile fabric such as 'Terram 1000, or similar.

It is recommended that all imported topsoil be placed under a strict validation regime comprising 1nr analyses per 50m³, with a minimum of 4nr analyses per source material. Cover thickness on all gardens is to be independently validated by excavation and photography for inclusion in a Validation Report.

2.0 VALIDATION RECORDS

The primary objective of a validation report is to compile records which demonstrate compliance with the recommendations provided, in relation to discharge of the planning conditions.

2.1 Imported Garden Cover

CCG attended site to independently to sample soils - 3nr of imported topsoil (no subsoil was used). The samples were despatched by courier the same day to a UKAS / MCERTs chemical laboratory. The client had carried out 1nr analysis prior to delivery of the soils to site.

Evidence of the capping protective measures:

- Verification showing placement of geotextile at surface of natural soil deposits as determined by the contractor (S1 350mm bgl, S2 350mm bgl, S3 680mm bgl) – Appendix B.
- Independent validation analysis records for imported soils (contamination test certificates) sampled on site – Appendix C.
- Independent validation analysis records for imported soils (contamination assessment worksheets) – Appendix D.
- Imported topsoil delivery documentation – Appendix E.
- Declaration from client that all made ground deposits were removed prior to placement of geotextile and no unanticipated contamination was encountered during the construction process – Appendix E.

3.0 CONCLUSIONS

The contractor confirmed no made ground deposits remained prior to placement of the geotextile onto natural soils.

The evidence of the inspections/sampling/analyses is that the requisite garden/soft landscape cover construction is satisfactory.

APPENDIX A

SITE DRAWINGS

Development Layout

APPENDIX B

SOFT LANDSCAPED AREA CONSTRUCTION PHOTOGRAPHS AND CLIENT PROVIDED EXCAVATION PHOTOGRAPHS



Site	DICKENSON ROAD, MANCHESTER
Job No.	CCG-C-25-15180
Photograph location	S1



Site	DICKENSON ROAD, MANCHESTER
Job No.	CCG-C-25-15180
Photograph location	S1



Site	DICKENSON ROAD, MANCHESTER
Job No.	CCG-C-25-15180
Photograph location	S1



Site	DICKENSON ROAD, MANCHESTER
Job No.	CCG-C-25-15180
Photograph location	S2



Site	DICKENSON ROAD, MANCHESTER
Job No.	CCG-C-25-15180
Photograph location	S2



Site	DICKENSON ROAD, MANCHESTER
Job No.	CCG-C-25-15180
Photograph location	S2



Site	DICKENSON ROAD, MANCHESTER
Job No.	CCG-C-25-15180
Photograph location	S3



Site	DICKENSON ROAD, MANCHESTER
Job No.	CCG-C-25-15180
Photograph location	S3



Site	DICKENSON ROAD, MANCHESTER
Job No.	CCG-C-25-15180
Photograph location	S3





APPENDIX C

TOPSOIL CHEMICAL ANALYSES



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e: reception@i2analytical.com

Analytical Report Number : 25-003651

Project / Site name:	Dickenson Road, Manchester	Samples received on:	27/01/2025
Your job number:	CCG-C-25-15180	Samples instructed on/ Analysis started on:	27/01/2025
Your order number:	CCG-PO-15180	Analysis completed by:	31/01/2025
Report Issue Number:	1	Report issued on:	31/01/2025
Samples Analysed:	3 soil samples		

Signed: _____

Dominika Liana
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting
air	- once the analysis is complete

Excel copies of reports are only valid when accompanied by this PDF certificate.

Retention period for records and reports is minimum 6 years from the date of issue of the final report.
Some records may be kept for longer according to other legal/best practice requirements.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement. Application



Analytical Report Number: 25-003651
Project / Site name: Dickenson Road, Manchester
Your Order No: CCG-PO-15180

Lab Sample Number				435230	435231	435232
Sample Reference				S1	S2	S3
Sample Number				None Supplied	None Supplied	None Supplied
Water Matrix				N/A	N/A	N/A
Depth (m)				0.20	0.20	0.20
Date Sampled				24/01/2025	24/01/2025	24/01/2025
Time Taken				1000	1000	1000
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status			

Stone Content	%	0.1	NONE	3.7	2.2	< 0.1
Moisture Content	%	0.01	NONE	17	19	19
Total mass of sample received	kg	0.1	NONE	0.8	0.9	0.9

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DOC	DOC	DOC

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	6.9	7.8	7.8
Free Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Total Sulphate as SO ₄	%	0.005	MCERTS	0.059	0.057	0.062
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	170	150	170
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	85.7	75.3	83.5
Sulphide	mg/kg	1	MCERTS	2.7	2.7	1.9
Organic Matter (automated)	%	0.1	MCERTS	4.5	4.4	4.5

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.07	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.34	0.16	0.09
Fluorene	mg/kg	0.05	MCERTS	0.24	0.09	0.06
Phenanthrene	mg/kg	0.05	MCERTS	2.8	1.6	0.94
Anthracene	mg/kg	0.05	MCERTS	0.63	0.35	0.18
Fluoranthene	mg/kg	0.05	MCERTS	4.8	3.4	2
Pyrene	mg/kg	0.05	MCERTS	4.5	3.2	2
Benzo(a)anthracene	mg/kg	0.05	MCERTS	2.2	1.5	0.93
Chrysene	mg/kg	0.05	MCERTS	2.2	1.7	1.1
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	2.5	2	1.3
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.1	0.72	0.52
Benzo(a)pyrene	mg/kg	0.05	MCERTS	2.4	1.8	1.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.99	0.78	0.56
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.17	0.12	0.09
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1	0.89	0.62

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	26	18.3	11.7
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Analytical Report Number: 25-003651
Project / Site name: Dickenson Road, Manchester
Your Order No: CCG-PO-15180

Lab Sample Number	435230	435231	435232
Sample Reference	S1	S2	S3
Sample Number	None Supplied	None Supplied	None Supplied
Water Matrix	N/A	N/A	N/A
Depth (m)	0.20	0.20	0.20
Date Sampled	24/01/2025	24/01/2025	24/01/2025
Time Taken	1000	1000	1000
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status

Heavy Metals / Metalloids

Antimony (aqua regia extractable)	mg/kg	1	ISO 17025	2.5	2.6	2.6
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	12	10	13
Boron (water soluble)	mg/kg	0.2	MCERTS	0.8	0.9	0.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.4	0.3	0.4
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	14	14	17
Copper (aqua regia extractable)	mg/kg	1	MCERTS	35	35	39
Lead (aqua regia extractable)	mg/kg	1	MCERTS	90	78	97
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	0.3	< 0.3
Molybdenum (aqua regia extractable)	mg/kg	0.25	MCERTS	1.3	1.3	1.7
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	12	12	13
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	80	84	88

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	MCERTS	< 2.0	< 2.0	< 2.0
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
TPHCWG - Aliphatic >EC35 - EC40 _{EH_CU_1D_AL}	mg/kg	10	NONE	< 10	< 10	< 10
TPHCWG - Aliphatic >EC5 - EC40 _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	< 10	< 10	< 10

TPHCWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.01	MCERTS	< 0.010	< 0.010	< 0.010
TPHCWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.02	MCERTS	< 0.020	< 0.020	< 0.020
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	MCERTS	< 2.0	< 2.0	2.2
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	< 10	< 10	< 10
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	MCERTS	25	19	13
TPHCWG - Aromatic >EC35 - EC40 _{EH_CU_1D_AR}	mg/kg	10	NONE	< 10	< 10	< 10
TPHCWG - Aromatic >EC5 - EC40 _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	25	19	15

TPH Total >EC5 - EC40 _{EH_CU+HS_1D_TOTAL}	mg/kg	10	NONE	25	19	15
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VOCS

MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0
p & m-Xylene	µg/kg	8	MCERTS	< 8.0	< 8.0	< 8.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 25-003651
Project / Site name: Dickenson Road, Manchester

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
435230	S1	None Supplied	0.2	Brown loam and clay with vegetation and stones
435231	S2	None Supplied	0.2	Brown loam and clay with vegetation and stones
435232	S3	None Supplied	0.2	Brown loam and clay with gravel and vegetation

Analytical Report Number : 25-003651
Project / Site name: Dickenson Road, Manchester

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Total sulphate (as SO ₄ in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088-PL	D/W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080-PL	W	MCERTS
Free cyanide in soil	Determination of free cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	MCERTS



Analytical Report Number : 25-003651
Project / Site name: Dickenson Road, Manchester

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters Heating/Cooling (PrW) DI Process Water (DI PrW)
Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099-PL	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution



Final Report

Report No.: 24-31587-1

Initial Date of Issue: 07-Oct-2024

Re-Issue Details:

Client Huperade Ltd

Client Address: Bridge House Farm
Brooks Drive
Timperley
Cheshire
WA15 7DQ

Contact(s): Lesley Cox

Project Soil Testing

Quotation No.: Q24-33623

Date Received: 30-Sep-2024

Order No.:

Date Instructed: 30-Sep-2024

No. of Samples: 1

Turnaround (Wkdays): 5

Results Due: 04-Oct-2024

Date Approved: 07-Oct-2024

Approved By:

Details: David Smith, Technical Director

For details about application of accreditation to specific matrix types, please refer to the Table at the back of this report

Results - Soil

Project: Soil Testing

Client: Huperade Ltd		Chemtest Job No.:		24-31587		
Quotation No.: Q24-33623		Chemtest Sample ID.:		1874123		
		Client Sample ID.:		1		
		Sample Type:		SOIL		
		Asbestos Lab:		DURHAM		
Determinand	HWOL Code	Accred.	SOP	Units	LOD	
ACM Type		U	2192		N/A	-
Asbestos Identification		U	2192		N/A	No Asbestos Detected
Moisture		N	2030	%	0.020	14
Stones and Removed Materials		N	2030	%	0.020	< 0.020
Soil Colour		N	2040		N/A	Brown
Other Material		N	2040		N/A	Stones
Soil Texture		N	2040		N/A	Sand
pH at 20C		M	2010		4.0	[A] 7.4
Boron (Hot Water Soluble)		M	2120	mg/kg	0.40	[A] 0.91
Sulphate (2:1 Water Soluble) as SO4		M	2120	g/l	0.010	[A] 0.075
Cyanide (Free)		M	2300	mg/kg	0.50	[A] < 0.50
Cyanide (Total)		M	2300	mg/kg	0.50	[A] < 0.50
Thiocyanate		M	2300	mg/kg	5.0	[A] < 5.0
Sulphide (Easily Liberatable)		N	2325	mg/kg	0.50	[A] 6.8
Sulphate (Total)		U	2430	%	0.010	[A] 0.074
Arsenic		M	2455	mg/kg	0.5	9.5
Cadmium		M	2455	mg/kg	0.10	0.13
Chromium		M	2455	mg/kg	0.5	12
Copper		M	2455	mg/kg	0.50	32
Mercury		M	2455	mg/kg	0.05	0.22
Nickel		M	2455	mg/kg	0.50	11
Lead		M	2455	mg/kg	0.50	89
Selenium		M	2455	mg/kg	0.25	0.30
Zinc		M	2455	mg/kg	0.50	74
Chromium (Hexavalent)		N	2490	mg/kg	0.50	< 0.50
Organic Matter		M	2625	%	0.40	[A] 9.0
Naphthalene		M	2800	mg/kg	0.10	0.14
Acenaphthylene		N	2800	mg/kg	0.10	< 0.10
Acenaphthene		M	2800	mg/kg	0.10	0.28
Fluorene		M	2800	mg/kg	0.10	0.16
Phenanthrene		M	2800	mg/kg	0.10	1.6
Anthracene		M	2800	mg/kg	0.10	0.41
Fluoranthene		M	2800	mg/kg	0.10	3.2
Pyrene		M	2800	mg/kg	0.10	3.0
Benzo[a]anthracene		M	2800	mg/kg	0.10	1.4
Chrysene		M	2800	mg/kg	0.10	1.4
Benzo[b]fluoranthene		M	2800	mg/kg	0.10	1.9
Benzo[k]fluoranthene		M	2800	mg/kg	0.10	0.65
Benzo[a]pyrene		M	2800	mg/kg	0.10	1.7
Indeno(1,2,3-c,d)Pyrene		M	2800	mg/kg	0.10	1.0

Results - Soil

Project: Soil Testing

Client: Huperade Ltd		Chemtest Job No.:	24-31587			
Quotation No.: Q24-33623		Chemtest Sample ID.:	1874123			
		Client Sample ID.:	1			
		Sample Type:	SOIL			
		Asbestos Lab:	DURHAM			
Determinand	HWOL Code	Accred.	SOP	Units	LOD	
Dibenz(a,h)Anthracene		N	2800	mg/kg	0.10	< 0.10
Benzo[g,h,i]perylene		M	2800	mg/kg	0.10	1.0
Total Of 16 PAH's		N	2800	mg/kg	2.0	18
Total Phenols		M	2920	mg/kg	0.10	< 0.10

Deviations

In accordance with UKAS Policy on Deviating Samples TPS 63. Chemtest have a procedure to ensure 'upon receipt of each sample a competent laboratory shall assess whether the sample is suitable with regard to the requested test(s)'. This policy and the respective holding times applied, can be supplied upon request. The reason a sample is declared as deviating is detailed below. Where applicable the analysis remains UKAS/MCERTs accredited but the results may be compromised.

Sample:	Sample Ref:	Sample ID:	Sample Location:	Sampled Date:	Deviation Code(s):	Containers Received:
1874123		1			A	Amber Glass 250ml
1874123		1			A	Plastic Tub 1000g

Test Methods

SOP	Title	Parameters included	Method summary	Water Accred.
2010	pH Value of Soils	pH at 20°C	pH Meter	
2030	Moisture and Stone Content of Soils(Requirement of MCERTS)	Moisture content	Determination of moisture content of soil as a percentage of its as received mass obtained at <30°C.	
2040	Soil Description(Requirement of MCERTS)	Soil description	As received soil is described based upon BS5930	
2120	Water Soluble Boron, Sulphate, Magnesium & Chromium	Boron; Sulphate; Magnesium; Chromium	Aqueous extraction / ICP-OES	
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry	
2300	Cyanides & Thiocyanate in Soils	Free (or easy liberatable) Cyanide; total Cyanide; complex Cyanide; Thiocyanate	Alkaline extraction followed by colorimetric determination using Automated Flow Injection Analyser.	
2325	Sulphide in Soils	Sulphide	Steam distillation with sulphuric acid / analysis by 'Aquakem 600' Discrete Analyser, using N,N-dimethyl-p-phenylenediamine.	
2430	Total Sulphate in soils	Total Sulphate	Acid digestion followed by determination of sulphate in extract by ICP-OES.	
2455	Acid Soluble Metals in Soils	Metals, including: Arsenic; Barium; Beryllium; Cadmium; Chromium; Cobalt; Copper; Lead; Manganese; Mercury; Molybdenum; Nickel; Selenium; Vanadium; Zinc	Acid digestion followed by determination of metals in extract by ICP-MS.	
2490	Hexavalent Chromium in Soils	Chromium [VI]	Soil extracts are prepared by extracting dried and ground soil samples into boiling water. Chromium [VI] is determined by 'Aquakem 600' Discrete Analyser using 1,5-diphenylcarbazine.	
2625	Total Organic Carbon in Soils	Total organic Carbon (TOC)	Determined by high temperature combustion under oxygen, using an Eltra elemental analyser.	
2800	Speciated Polynuclear Aromatic Hydrocarbons (PAH) in Soil by GC-MS	Acenaphthene*; Acenaphthylene; Anthracene*; Benzo[a]Anthracene*; Benzo[a]Pyrene*; Benzo[b]Fluoranthene*; Benzo[ghi]Perylene*; Benzo[k]Fluoranthene; Chrysene*; Dibenzo[ah]Anthracene; Fluoranthene*; Fluorene*; Indeno[123cd]Pyrene*; Naphthalene*; Phenanthrene*; Pyrene*	Dichloromethane extraction / GC-MS	
2920	Phenols in Soils by HPLC	Phenolic compounds including Resorcinol, Phenol, Methylphenols, Dimethylphenols, 1-Naphthol and TrimethylphenolsNote: chlorophenols are excluded.	60:40 methanol/water mixture extraction, followed by HPLC determination using electrochemical detection.	

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"
SOP	Standard operating procedure
LOD	Limit of detection

This report shall not be reproduced except in full, and only with the prior approval of the laboratory.

Any comments or interpretations are outside the scope of UKAS accreditation.

The Laboratory is not accredited for any sampling activities and reported results relate to the samples 'as received' at the laboratory.

Uncertainty of measurement for the determinands tested are available upon request .

None of the results in this report have been recovery corrected.

All results are expressed on a dry weight basis.

The following tests were analysed on samples 'as received' and the results subsequently corrected to a dry weight basis EPH, VPH, TPH, BTEX, VOCs, SVOCs, PCBs, Phenols.

For all other tests the samples were dried at $\leq 30^{\circ}\text{C}$ prior to analysis.

All Asbestos testing is performed at the indicated laboratory .

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1.

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 30 days from the date of receipt.

All water samples will be retained for 14 days from the date of receipt.

Charges may apply to extended sample storage.

Water Sample Category Key for Accreditation

- DW - Drinking Water
- GW - Ground Water
- LE - Land Leachate
- NA - Not Applicable

Report Information

PL - Prepared Leachate
PW - Processed Water
RE - Recreational Water
SA - Saline Water
SW - Surface Water
TE - Treated Effluent
TS - Treated Sewage
UL - Unspecified Liquid

Clean Up Codes

NC - No Clean Up
MC - Mathematical Clean Up
FC - Florisil Clean Up

HWOL Acronym System

HS - Headspace analysis
EH - Extractable hydrocarbons – i.e. everything extracted by the solvent
CU - Clean-up – e.g. by Florisil, silica gel
1D - GC – Single coil gas chromatography
Total - Aliphatics & Aromatics
AL - Aliphatics only
AR - Aromatic only
2D - GC-GC – Double coil gas chromatography
#1 - EH_2D_Total but with humics mathematically subtracted
#2 - EH_2D_Total but with fatty acids mathematically subtracted
+ - Operator to indicate cumulative e.g. EH+EH_Total or EH_CU+HS_Total

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

APPENDIX D

CHEMICAL ASSESSMENT TABLES



METALS DATA SUMMARY AND RISK ASSESSMENT SHEET

Job number: CCG-C-25-15180

Site name: DICKENSON ROAD,
MANCHESTER

Prepared by: DK

Authorised by: CB

Proposed land use: Residential with plant uptake

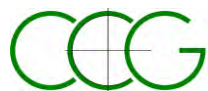
SOM % used: 2.5

 = Threshold exceeded

 = Below Limit of detection

n/t = Not tested

			Metals							
Contaminants			Cadmium	Chromium III	Chromium VI	Copper	Lead	Mercury (elemental)	Nickel	Zinc
Units			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Limit of Detection			0.5	5.0	0.8	5.0	5.0	0.5	5.0	5.0
Human Health Risk Assessment (GAC)			11	910	6	2400	200	1.2	180	3700
Sample Location	Sample Depth (m)	Sample type								
S1	0.20	SOIL	0.4	14	< 1.8	35	90	< 0.3	12	80
S2	0.20	SOIL	0.3	14	< 1.8	35	78	0.3	12	84
S3	0.20	SOIL	0.4	17	< 1.8	39	97	< 0.3	13	88
Human Health Risk Assessment (GAC)			11	910	6	2400	200	1.2	180	3700



SEMI-METALS, NON-METALS, INORGANICS AND OTHER DATA SUMMARY AND RISK ASSESSMENT SHEET

Job number: CCG-C-25-15180

Site name: DICKENSON ROAD,
MANCHESTER

Prepared by: DK

Authorised by: CB

Proposed land use: Residential with plant uptake

SOM % used: 2.5

 = Threshold exceeded

 = Below Limit of detection

n/t = Not tested

			Semi/non-metals		Inorganics			Other		
Contaminants			Arsenic	Boron	Selenium	Cyanide (free)	Sulphate (water soluble)	Sulphate (water soluble)	pH (units)	Soil Organic Matter %
Units			mg/kg	mg/kg	mg/kg	mg/kg	g/l	mg/l	units	units
Limit of Detection			1.0	0.5	1.0	1.0	0.02	20.0	0.1	0.1
Human Health Risk Assessment (GAC)			37	290	350	22	NA	NA	NA	NA
Sample Location	Sample Depth (m)	Sample type								
S1	0.20	SOIL	12	0.8	< 1.0	< 1.0	n/t	85.7	6.9	4.5
S2	0.20	SOIL	10	0.9	< 1.0	< 1.0	n/t	75.3	7.8	4.4
S3	0.20	SOIL	13	0.9	< 1.0	< 1.0	n/t	83.5	7.8	4.5
Human Health Risk Assessment (GAC)			37	290	350	22	NA	NA	NA	NA



SPECIATED PAH'S DATA SUMMARY AND RISK ASSESSMENT SHEET

Job number: CCG-C-25-15180

Site name: DICKENSON ROAD,
MANCHESTER

Prepared by: DK

Authorised by: CB

Proposed land use: Residential with plant uptake

SOM % used: 2.5

 = Threshold exceeded

 = Below Limit of detection

n/t = Not tested

Contaminants

PAH's

Contaminants			Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[ghi]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[ah]anthracene	Flouranthene	Flourene	Indeno[123-cd]pyrene	Napthalene	Pheanthrene	Pyrene	Total PAH's
Units			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Limit of Detection			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4
Human Health Risk Assessment (GAC)			510	420	5400	11	2.7	3.3	340	93	22	0.28	560	400	36	5.6	220	1200	NA
Sample Location	Sample Depth (m)	Sample type																	
S1	0.20	SOIL	0.34	0.05	0.63	2.2	2.4	2.5	1.1	1.1	2.2	0.17	4.8	0.24	0.99	0.07	2.8	4.5	26
S2	0.20	SOIL	0.16	< 0.05	0.35	1.5	1.8	2	0.89	0.72	1.7	0.12	3.4	0.09	0.78	< 0.05	1.6	3.2	18.3
S3	0.20	SOIL	0.09	< 0.05	0.18	0.93	1.2	1.3	0.62	0.52	1.1	0.09	2	0.06	0.56	< 0.05	0.94	2	11.7
Human Health Risk Assessment (GAC)			510	420	5400	11	2.7	3.3	340	93	22	0.28	560	400	36	5.6	220	1200	NA



SPECIATED TPH'S DATA SUMMARY AND RISK ASSESSMENT SHEET

Job number: CCG-C-25-15180

Site name: DICKENSON ROAD,
MANCHESTER

Prepared by: DK

Authorised by: CB

Proposed land use: Residential with plant uptake

SOM % used: 2.5

	=	Threshold exceeded
	=	Below Limit of detection
n/t	=	Not tested

Contaminants			Speciated TPH's															
			Aromatics							Aliphatics							TOTAL TPH'S	
			EC5-7	EC7-8	EC8-10	EC10-12	EC12-16	EC16-21	EC21-35	EC35-44	EC5-6	EC6-8	EC8-10	EC10-12	EC12-16	EC16-35		EC35-44
Units			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Limit of Detection			0.01	0.01	1.0	1.0	1.0	1.0	1.0	1.0	0.01	0.01	1.0	1.0	1.0	1.0	1.0	1.0
Human Health Risk Assessment (GAC)			140	290	83	180	330	540	1500	1500	78	230	65	330	2400	92000	92000	NA
Sample Location	Sample Depth (m)	Sample type																
S1	0.20	SOIL	< 0.010	< 0.010	< 0.020	< 1.0	< 2.0	< 10	25	< 10	< 0.010	< 0.010	< 0.010	< 1.0	< 2.0	n/t	< 10	25
S2	0.20	SOIL	< 0.010	< 0.010	< 0.020	< 1.0	< 2.0	< 10	19	< 10	< 0.010	< 0.010	< 0.010	< 1.0	< 2.0	n/t	< 10	19
S3	0.20	SOIL	< 0.010	< 0.010	< 0.020	< 1.0	2.2	< 10	13	< 10	< 0.010	< 0.010	< 0.010	< 1.0	< 2.0	n/t	< 10	15
Human Health Risk Assessment (GAC)			140	290	83	180	330	540	1500	1500	78	230	65	330	2400	92000	92000	NA



BTEX DATA SUMMARY AND RISK ASSESSMENT SHEET

Job number: CCG-C-25-15180

Site name: DICKENSON ROAD,
MANCHESTER

Prepared by: DK

Authorised by: CB

Proposed land use: Residential with plant uptake

SOM % used: 2.5

 = Threshold exceeded

 = Below Limit of detection

 = Not tested

			BTEX			
Contaminants			Benzene	Toluene	Ethylbenzene	Total Xylenes
Units			µg/kg	µg/kg	µg/kg	µg/kg
Limit of Detection			10	10	10	10
Human Health Risk Assessment (GAC)			0.33	610	350	NA
Sample Location	Sample Depth (m)	Sample type				
S1	0.20	SOIL	< 5.0	< 5.0	< 5.0	< 8.0
S2	0.20	SOIL	< 5.0	< 5.0	< 5.0	< 8.0
S3	0.20	SOIL	< 5.0	< 5.0	< 5.0	< 8.0
Human Health Risk Assessment (GAC)			0.33	610	350	NA



METALS DATA SUMMARY AND RISK ASSESSMENT SHEET

Job number: CCG-C-25-15180

Site name: DICKENSON ROAD,
MANCHESTER

Prepared by: DK

Authorised by: CB

Proposed land use: Residential with plant uptake

SOM % used: 2.5

 = Threshold exceeded

 = Below Limit of detection

 = Not tested

			Metals							
Contaminants			Cadmium	Chromium III	Chromium VI	Copper	Lead	Mercury (elemental)	Nickel	Zinc
Units			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Limit of Detection			0.5	5.0	0.8	5.0	5.0	0.5	5.0	5.0
Human Health Risk Assessment (GAC)			11	910	6	2400	200	1.2	180	3700
Sample Location	Sample Depth (m)	Sample type								
-	-	SOIL	0.13	12	<0.5	32	89	0.22	11	74
Human Health Risk Assessment (GAC)			11	910	6	2400	200	1.2	180	3700



SEMI-METALS, NON-METALS, INORGANICS AND OTHER DATA SUMMARY AND RISK ASSESSMENT SHEET

Job number: CCG-C-25-15180

Site name: DICKENSON ROAD,
MANCHESTER

Prepared by: DK

Authorised by: CB

Proposed land use: Residential with plant uptake

SOM % used: 2.5

 = Threshold exceeded

 = Below Limit of detection

 = Not tested

			Semi/non-metals		Inorganics			Other		
Contaminants			Arsenic	Boron	Selenium	Cyanide (free)	Sulphate (water soluble)	Sulphate (water soluble)	pH (units)	Soil Organic Matter %
Units			mg/kg	mg/kg	mg/kg	mg/kg	g/l	mg/l	units	units
Limit of Detection			1.0	0.5	1.0	1.0	0.02	20.0	0.1	0.1
Human Health Risk Assessment (GAC)			37	290	350	22	NA	NA	NA	NA
Sample Location	Sample Depth (m)	Sample type								
-	-	SOIL	9.5	0.91	89	<0.5	n/t	n/t	0	0
Human Health Risk Assessment (GAC)			37	290	350	22	NA	NA	NA	NA



SPECIATED PAH'S DATA SUMMARY AND RISK ASSESSMENT SHEET

Job number: CCG-C-25-15180

Site name: DICKENSON ROAD,
MANCHESTER

Prepared by: DK

Authorised by: CB

Proposed land use: Residential with plant uptake

SOM % used: 2.5

	=	Threshold exceeded
	=	Below Limit of detection
n/t	=	Not tested

Contaminants

PAH's

Contaminants			Acenaphthene	Acenaphthylene	Anthracene	Benz[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[ghi]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[ah]anthracene	Flouranthene	Flourene	Indeno[123-cd]pyrene	Napthalene	Pheanthrene	Pyrene	Total PAH's
Units			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Limit of Detection			0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4
Human Health Risk Assessment (GAC)			510	420	5400	11	2.7	3.3	340	93	22	0.28	560	400	36	5.6	220	1200	NA
Sample Location	Sample Depth (m)	Sample type																	
-	-	SOIL	0.28	<0.1	0.41	1.4	1.7	1.9	1	0.65	1.4	<0.1	3.2	0.16	1	0.14	1.6	3	18
Human Health Risk Assessment (GAC)			510	420	5400	11	2.7	3.3	340	93	22	0.28	560	400	36	5.6	220	1200	NA

APPENDIX E

CLIENT DECLARATION & IMPORTED SOILS DELIVERY DOCUMENTATION



Company Registration Number: 08217148
Address:
10 Braemar Ave
Manchester
M41 6HP
www.jct-bs.com

Date: 23/01/2025

Declaration Statement

Site Address

309 Dickenson rd
2a & 2b Honor Street
Manchester
M13 0WY

Groundwork & Landscaping

JCT Building Services (NW) Ltd can confirm the following:

All made ground deposits in landscaped areas were removed prior to placement of geotextile and no unanticipated made ground deposits were encountered during the construction process.

Your Sincerely

A handwritten signature in blue ink, appearing to read 'Jonathan Clarke', is shown on a light blue background.

Jonathan Clarke

[Tel: 07860457300](tel:07860457300)

Email: jon@jct-bs.com



No. 26506

17349

HUPERADE LTD.

SOIL HAULAGE CONTRACTORS

Bridge House Farm
Brooks Drive, Timperley, Cheshire WA15 7DQ
Telephone & Fax: 0161 980 5350

DELIVERY NOTE

Delivered to: 12 Walsley St

Order No: 17349

A) - Paid by Cash/Card/Cheque ☐ B) - Invoice to be sent ☐

£ inc. VAT

SOIL	<u>20 Fine</u>	Tonnes / Bags
MANURE		Cubic Yards / Bags
WOODCHIP		Cubic Yards / Bags

Delivered by: T. J. Walsley No responsibility
Date: 12.11.2006 will be taken for
Time Order received: any damage to
Received by: customer's property
while deliveries are
being made.

We are not responsible for the germination
of any plant etc., in this soil/manure / Rootzone

VAT Reg. No: 151 4052 09

No. 26508

HUPERADE LTD.

SOIL HAULAGE CONTRACTORS

Bridge House Farm
Brooks Drive, Timperley, Cheshire WA15 7DQ
Telephone & Fax: 0161 980 5350

DELIVERY NOTE

Delivered to: Market Street

Order No:

A) - Paid by Cash/Card/Cheque ☐ B) - Invoice to be sent ☐

£ inc. VAT

SOIL	Tonnes / Bags
MANURE	Cubic Yards / Bags
WOODCHIP	Cubic Yards / Bags

Delivered by: No responsibility
Date: 12.11.2024 will be taken for
Time Order received: any damage to
Received by: customer's property
while deliveries are
being made.

We are not responsible for the germination
of any plant etc., in this soil/manure / Rootzone

VAT Reg. No: 151 4052 09

NOTES ON LIMITATIONS

Notes on Limitations For Geoenvironmental and Geotechnical Consultancy Services

General

This document has been prepared by CC GEOTECHNICAL LTD within the terms of the contract, scope of work, and resources agreed in writing with the client. The limitations of liability of CC GEOTECHNICAL LTD for the contents of this document have been agreed with the Client, as set out in the terms and conditions of offer and related contract documentation.

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The findings and opinions provided in this document are made in good faith and are subject to the limitations imposed by employing site assessment methods and techniques, appropriate to the time of investigation and within the limitations and constraints defined in this document.

The findings and opinions are relevant to the dates when the assessment was undertaken, but should not necessarily be relied upon to represent conditions at a substantially later date. In particular, seasonal groundwater levels, with the effects of precipitation, may affect the conditions found during the investigation. The report should be read in conjunction with the further Notes on Limitations included in Appendix A.

Where opinions expressed in this report are based on current available guidance and legislation, no liability can be accepted by CC GEOTECHNICAL LTD for the effects of any future changes to such guidelines and legislation. Additional information, improved practices, new guidance, changes in legislation, or amendments to design proposals, may necessitate this report having to be reviewed in whole or in part after that date. Opinions and interpretations are not accredited by UKAS.

Factual data contained in this report may have been obtained from enquiries with reputable third parties, the results of which are relied on unless indicated to be inaccurate by contradictory information.

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CC GEOTECHNICAL LTD accepts no responsibility or liability for:

1. the consequences of this document being used for any purpose or project other than for which it was commissioned
- and/or
2. the consequences of use of this document by any party with whom an agreement has not been executed.

Phase I Environmental Audits / Desk Studies

The work undertaken to provide the basis of a Phase 1 Desk Study report comprises a study of available documented information from a variety of sources (including the client), together with (where appropriate) a brief walk over inspection of the site and meetings and discussions with relevant authorities and other interested parties. The opinions given in a Desk Study report have been dictated by finite data on which they are based and are relevant only to the purpose for which the report was commissioned. The information reviewed should not be considered exhaustive and has been accepted in good faith as providing true and representative data pertaining to site conditions. Should additional information become available which may affect the opinions expressed in the report, CC GEOTECHNICAL LTD reserves the right to review such information and to modify the opinions accordingly.

It should be noted that any risks identified in this report are perceived risks based on the information reviewed; actual risks can only be assessed following a physical investigation of the site.

Factual Ground Investigations

The investigation of the site has been carried out in accordance with the scope and specification instructed by the Client. No interpretations of the data generated by the investigation have been provided or implied. The exploratory holes undertaken in this commission, investigate only a small volume of the ground in relation to the size of the site, and can only provide a general indication of site conditions. Conditions may exist on the site which have not been detected by the works undertaken. Furthermore, the number of sampling points and the methods of sampling and testing do not preclude the existence of localised "hotspots" or more widespread contamination where concentrations may be significantly higher than those actually encountered.

Interpretative Phase II Environmental Audits

The investigation of the site has been carried out with the intention of providing sufficient information concerning the type and degree of contamination, and ground and groundwater conditions to allow a reasonable risk assessment to be made. The objectives of the investigation have been limited to establishing the risks associated to potential human targets, building materials, the environment (including adjacent land), and surface and groundwater.

The amount of exploratory work and chemical testing undertaken may have been restricted by factors including inter alia the Clients budget, the available timescale, access to all parts of the site, the existence of buried services etc., and where this is the case, a more comprehensive investigation may be required if the site is to be redeveloped, since a number of important engineering and environmental issues may need further assessment.

For those reasons, if costs have been included in relation to site remediation these must be considered as tentative only and must, in any event, be confirmed by a qualified quantity surveyor.

It must be borne in mind, that the exploratory holes undertaken, investigate only a small volume of the ground in relation to the size of the site, and can only provide a general indication of site conditions. The opinions provided and recommendations given in this report are based on the ground conditions apparent at the site of each of the exploratory holes. There may be ground conditions present on the site which have not been disclosed by this investigation, and which have therefore not been taken into account in this report. The number of sampling points and the methods of sampling and testing do not preclude the existence of localised "hotspots" or more widespread contamination where concentrations may be significantly higher than those actually encountered. The findings of the investigation are valid for the time of investigation and the passage of time may result in changes to the contamination status of the site, and a reassessment of the site may be required where significant time has elapsed.

Geoenvironmental Ground Investigations

The investigation of the site has been carried out within the constraints of Client budget, available timeframe, access to all parts of the site, the existence of buried services and a more comprehensive investigation may be required to provide sufficient information regarding the type and degree of contamination, geotechnical characteristics, and ground and groundwater conditions, to formulate a reasonable assessment of the environmental risks together with engineering and development implications.

If costs have been included in relation to the site remediation, these must be confirmed by a qualified quantity surveyor.

The exploratory holes undertaken, investigate only a small volume of the ground in relation to the size of the site, and can only provide a general indication of the site conditions. The opinions provided and recommendations given in this report are based on the ground conditions apparent at the site of each of the exploratory holes. There may be ground conditions present on the site which have not been disclosed by this investigation, and which have therefore not been taken into account in this report. The findings of the investigation are valid for the time of investigation and the passage of time may result in changes to the contamination status of the site, and a reassessment of the site may be required where significant time has elapsed.

The comments made on groundwater conditions are based on observations made at the time that site work was carried out. It should be noted that groundwater levels will vary owing to seasonal, tidal, weather, or other effects.

The risk assessment and opinions provided, inter alia, take into consideration currently available guidance relating to acceptable contamination concentrations and no liability can be accepted for the retrospective effects of any future changes or amendments to these values.