

Groundsure INSIGHTS

Site Details:

CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: LandLine
Map date: **2003**
Scale: 1:1,250
Printed at: 1:1,250

N
W E
S



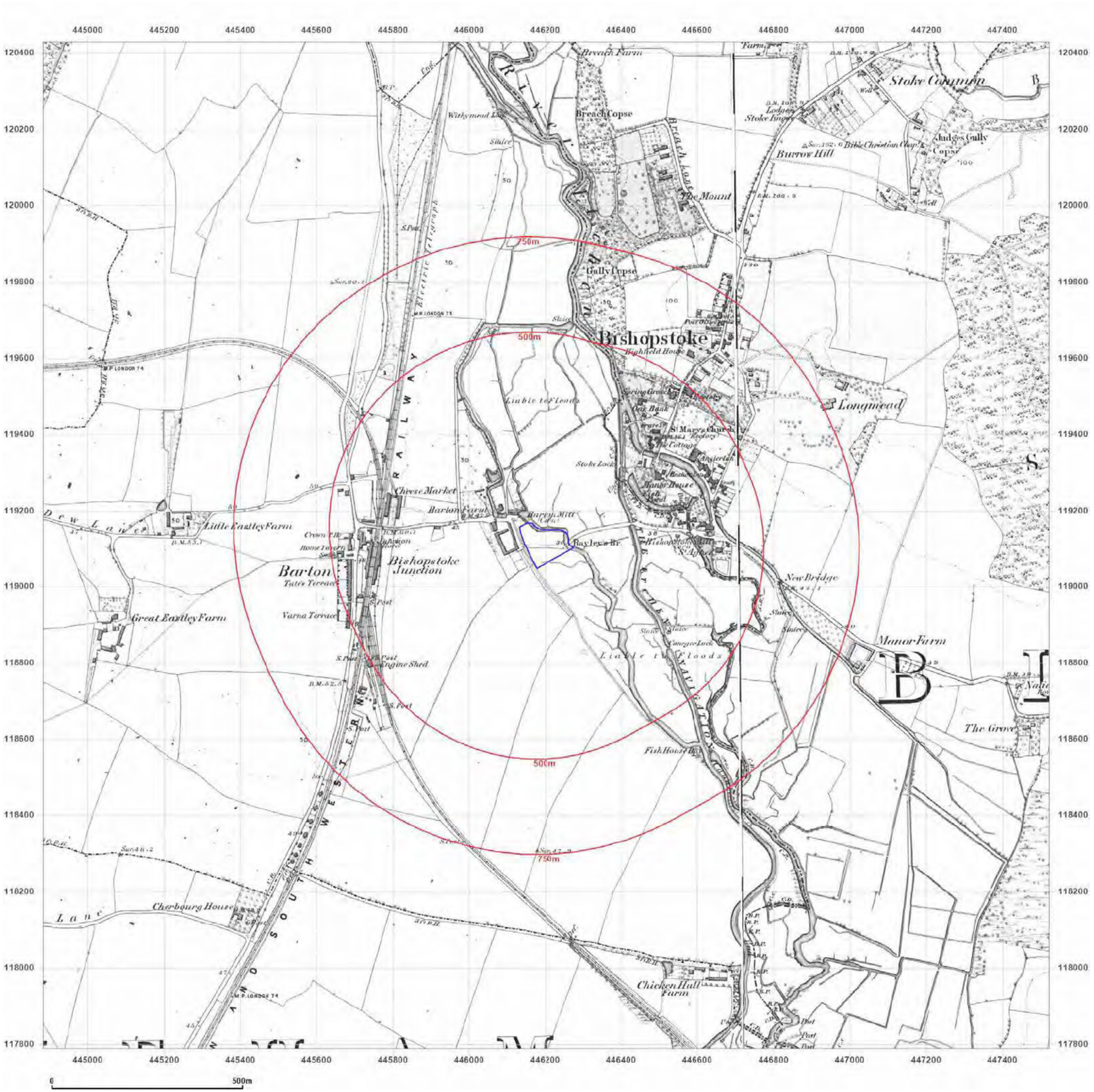
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

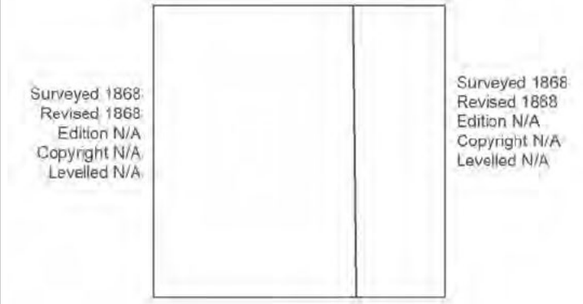
Site Details:

CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: County Series
Map date: **1868**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S



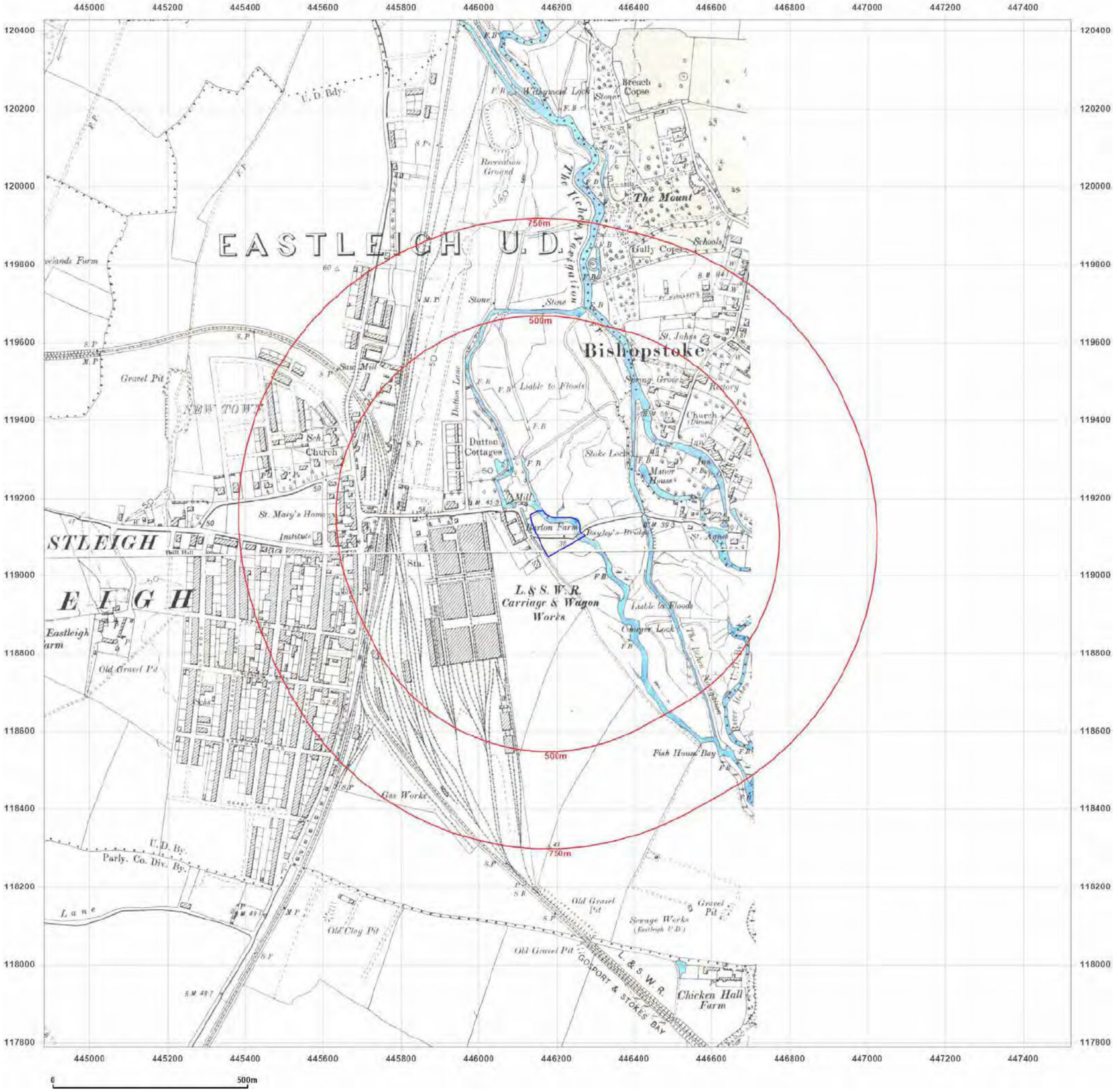
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

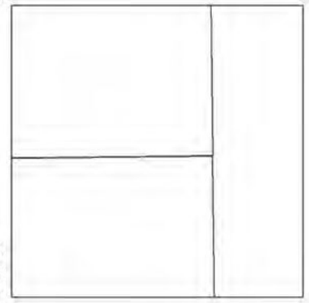
CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: County Series
Map date: **1895**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1869
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1868
Revised 1895
Edition N/A
Copyright N/A
Levelled N/A

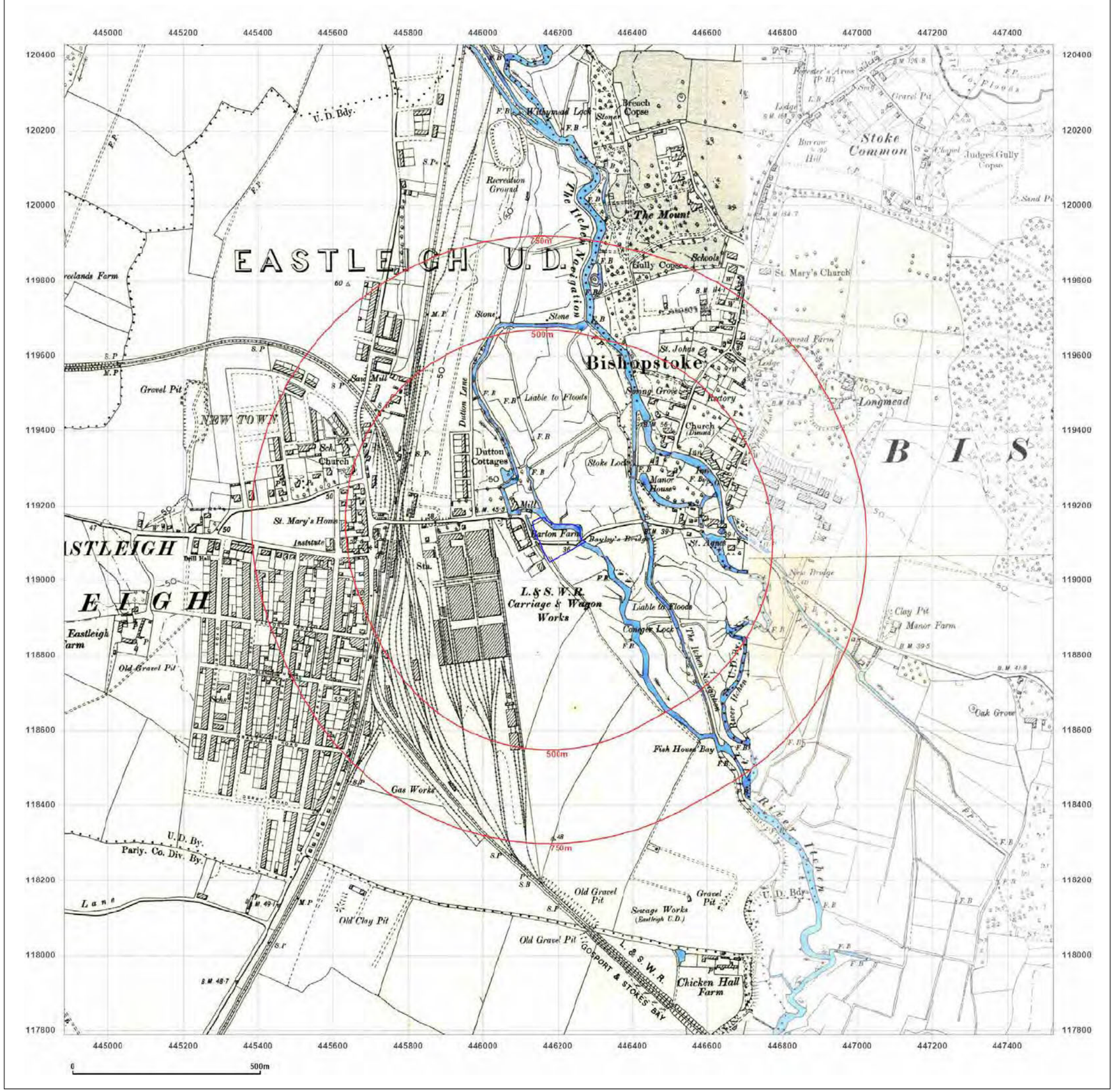
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: County Series
Map date: **1895-1897**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

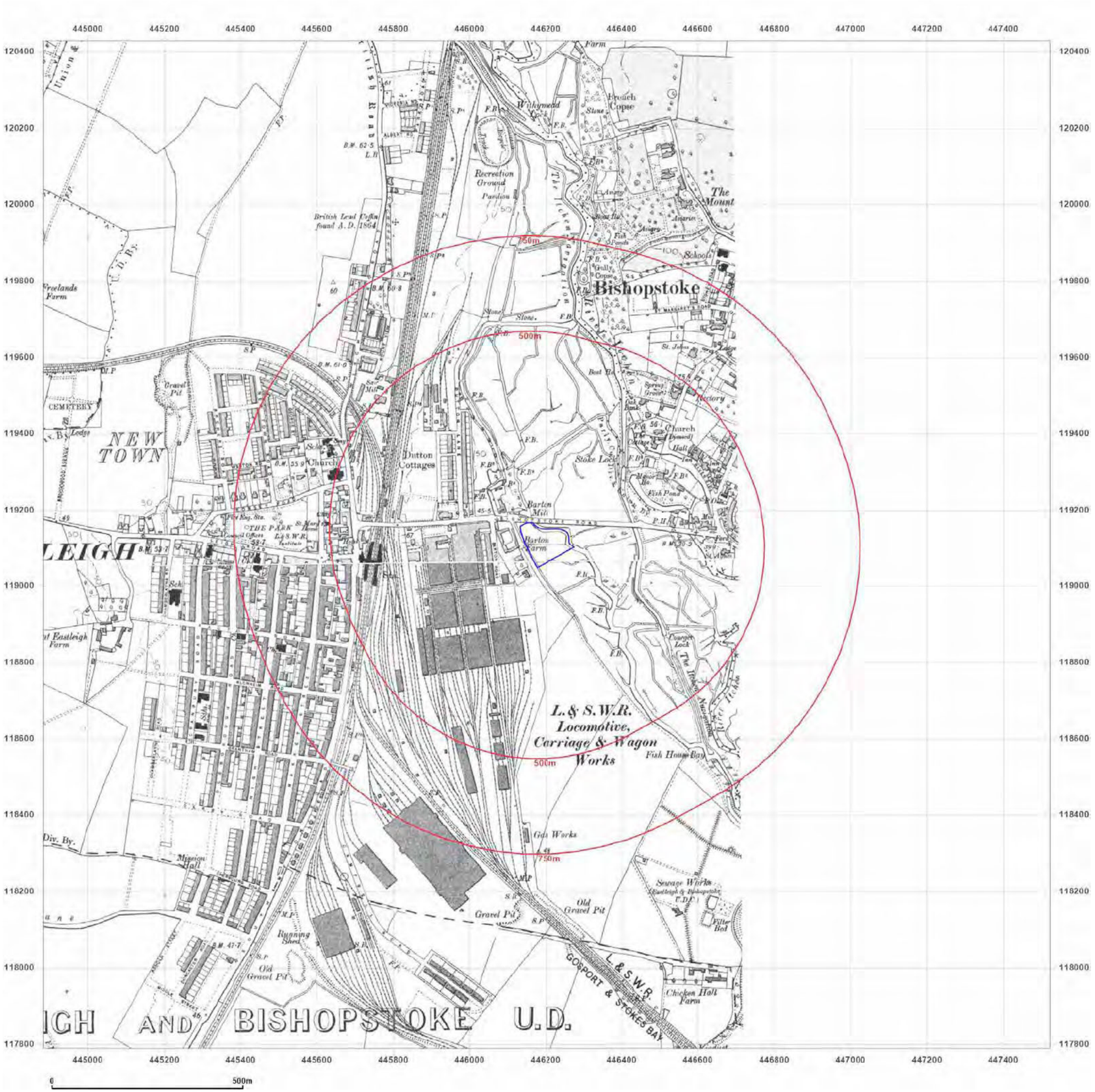
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

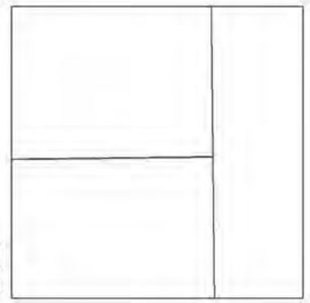
CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: County Series
Map date: **1908**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1868
Revised 1908
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1867
Revised 1908
Edition N/A
Copyright N/A
Levelled N/A

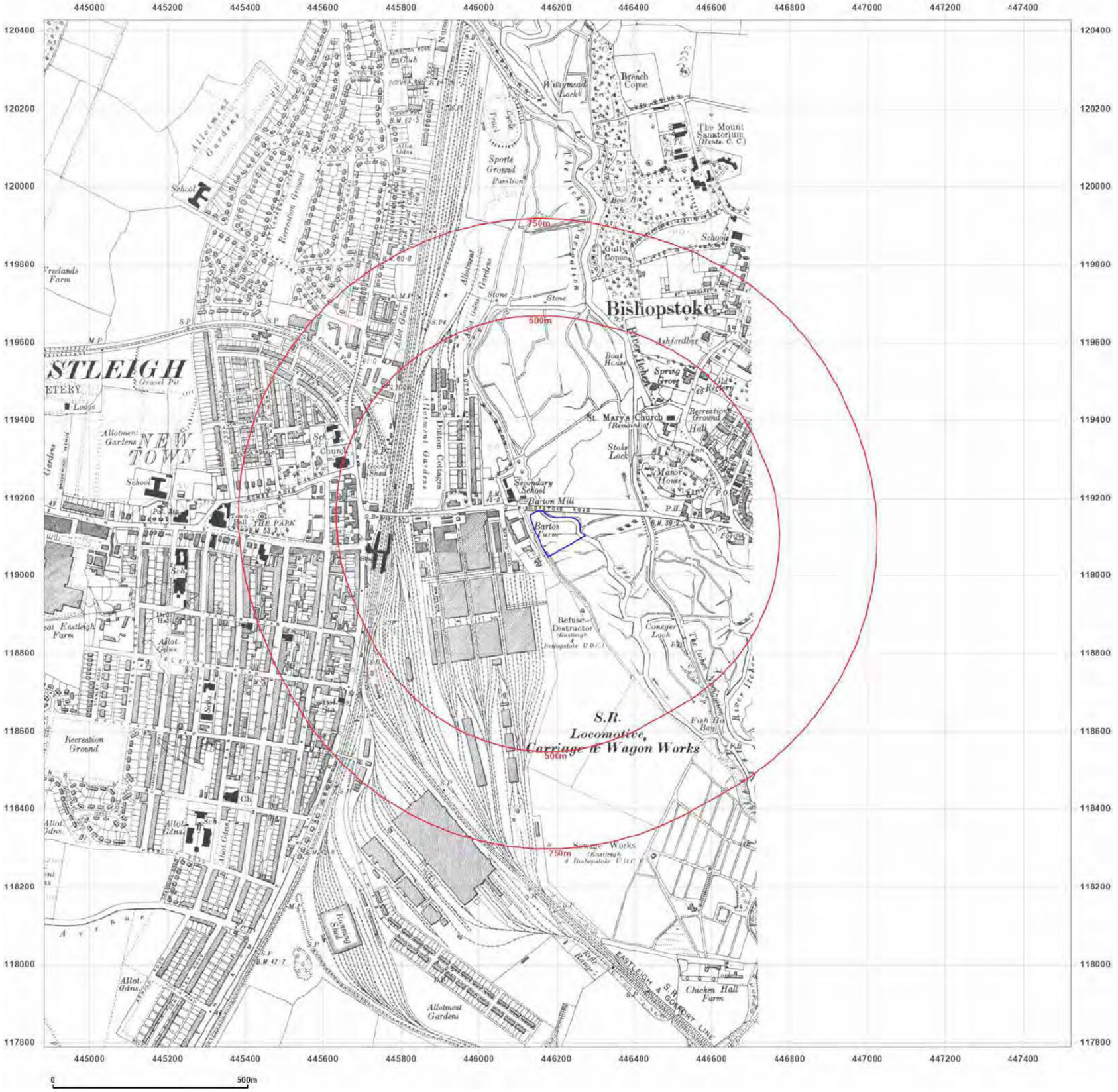
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

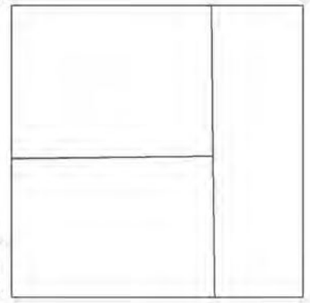
CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: County Series
Map date: **1931**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1868
Revised 1931
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1867
Revised 1931
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: County Series
Map date: **1938**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1868
Revised 1938
Edition 1938
Copyright N/A
Levelled 1907

Surveyed 1867
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1867
Revised 1938
Edition N/A
Copyright N/A
Levelled N/A

Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

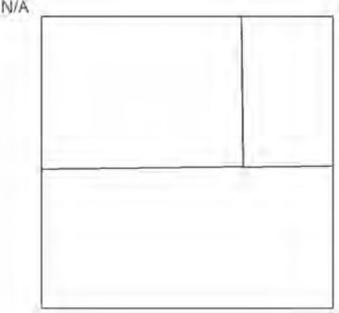
Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: County Series
Map date: **1938-1939**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1868
Revised 1932
Edition 1938
Copyright N/A
Levelled N/A

Surveyed 1868
Revised 1939
Edition N/A
Copyright N/A
Levelled N/A



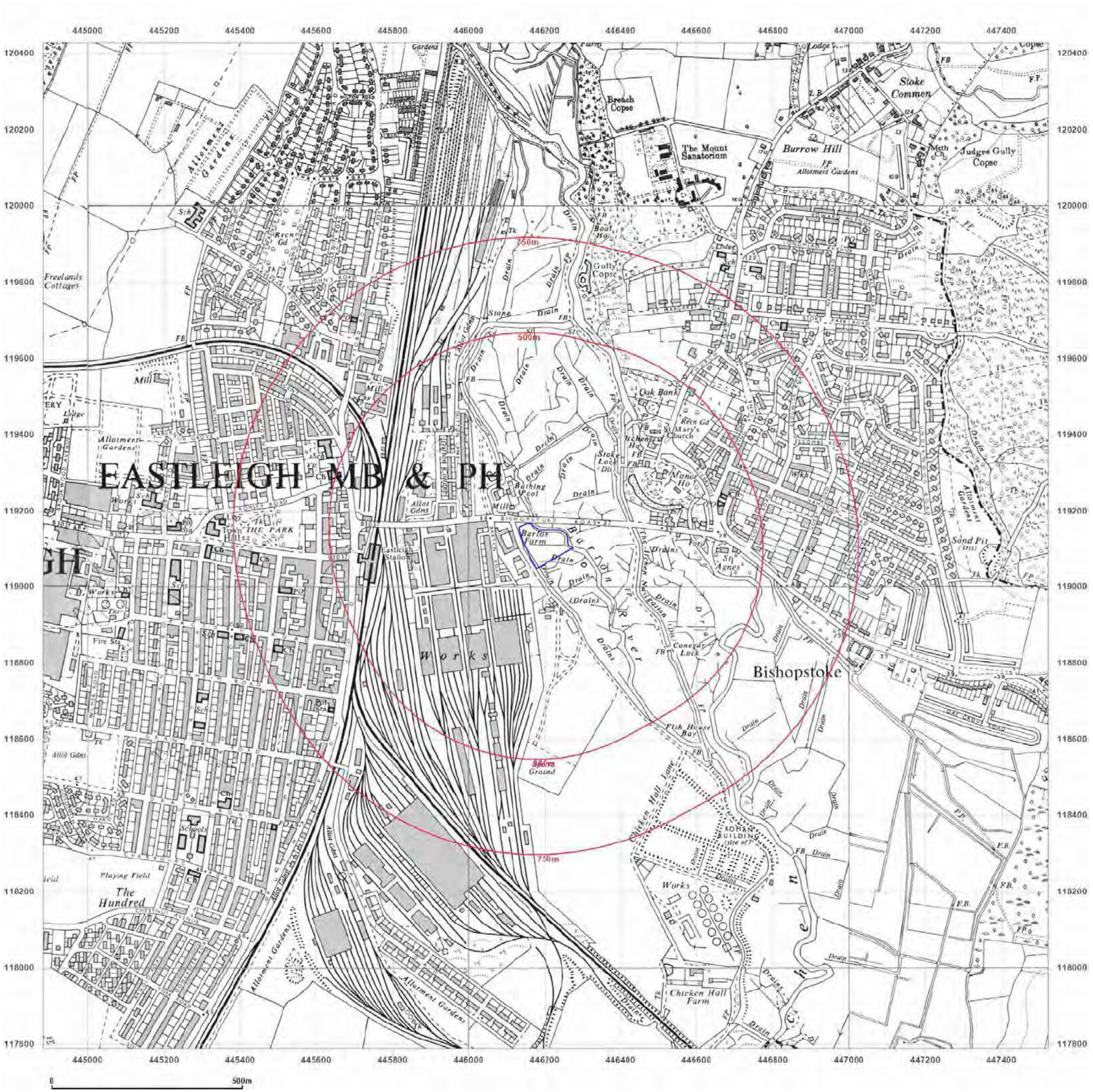
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

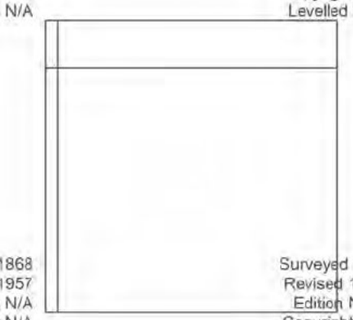
Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: Provisional
Map date: **1957-1958**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S

Surveyed 1958
Revised 1958
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1957
Revised 1957
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1868
Revised 1957
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1868
Revised 1957
Edition N/A
Copyright N/A
Levelled N/A

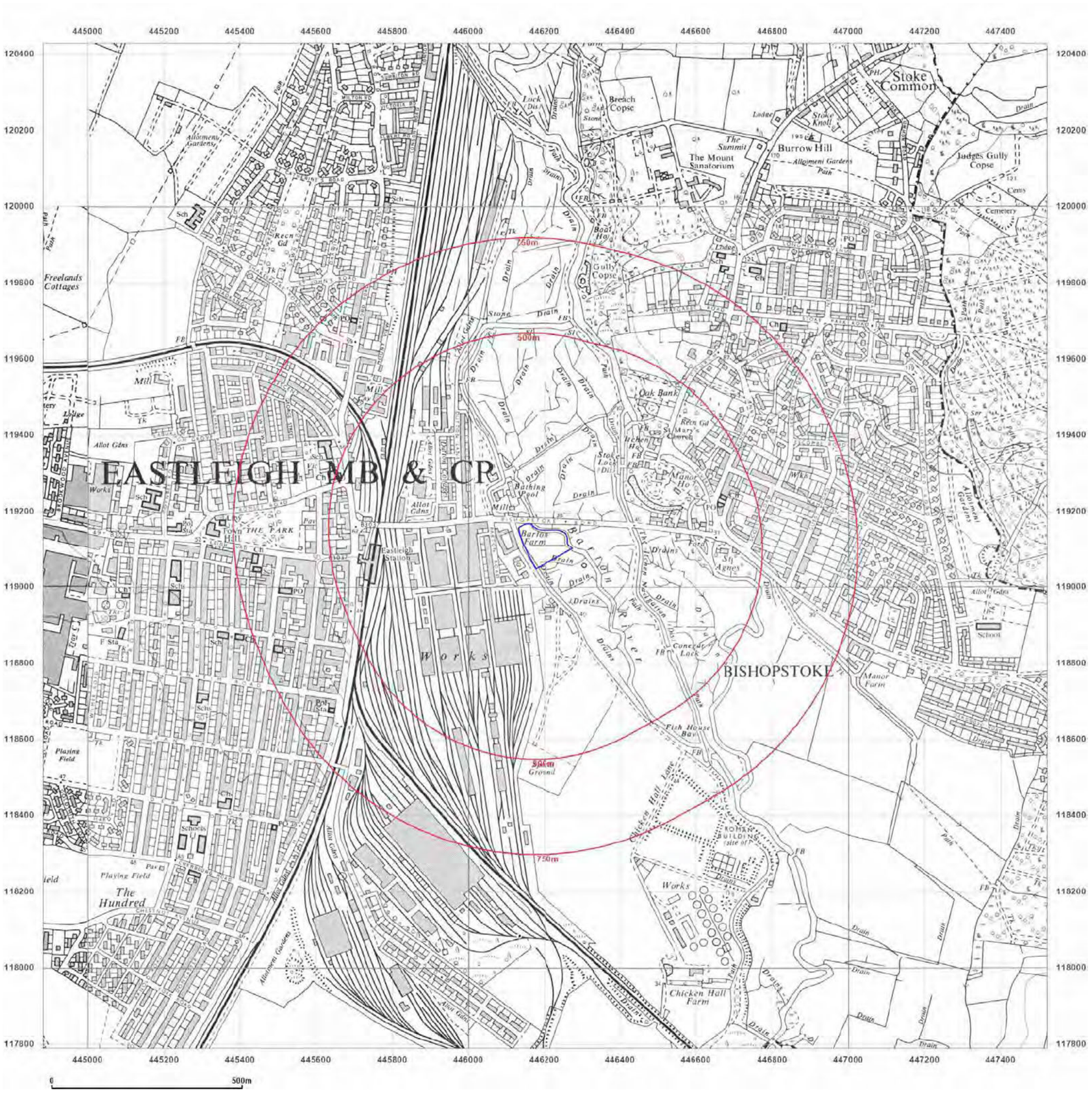
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

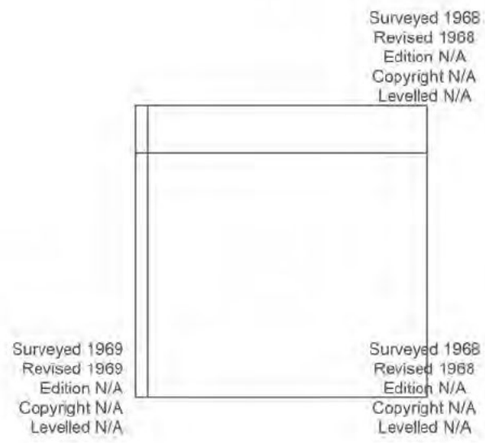
Site Details:

CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: Provisional
Map date: **1968-1969**
Scale: 1:10,560
Printed at: 1:10,560

N
W E
S



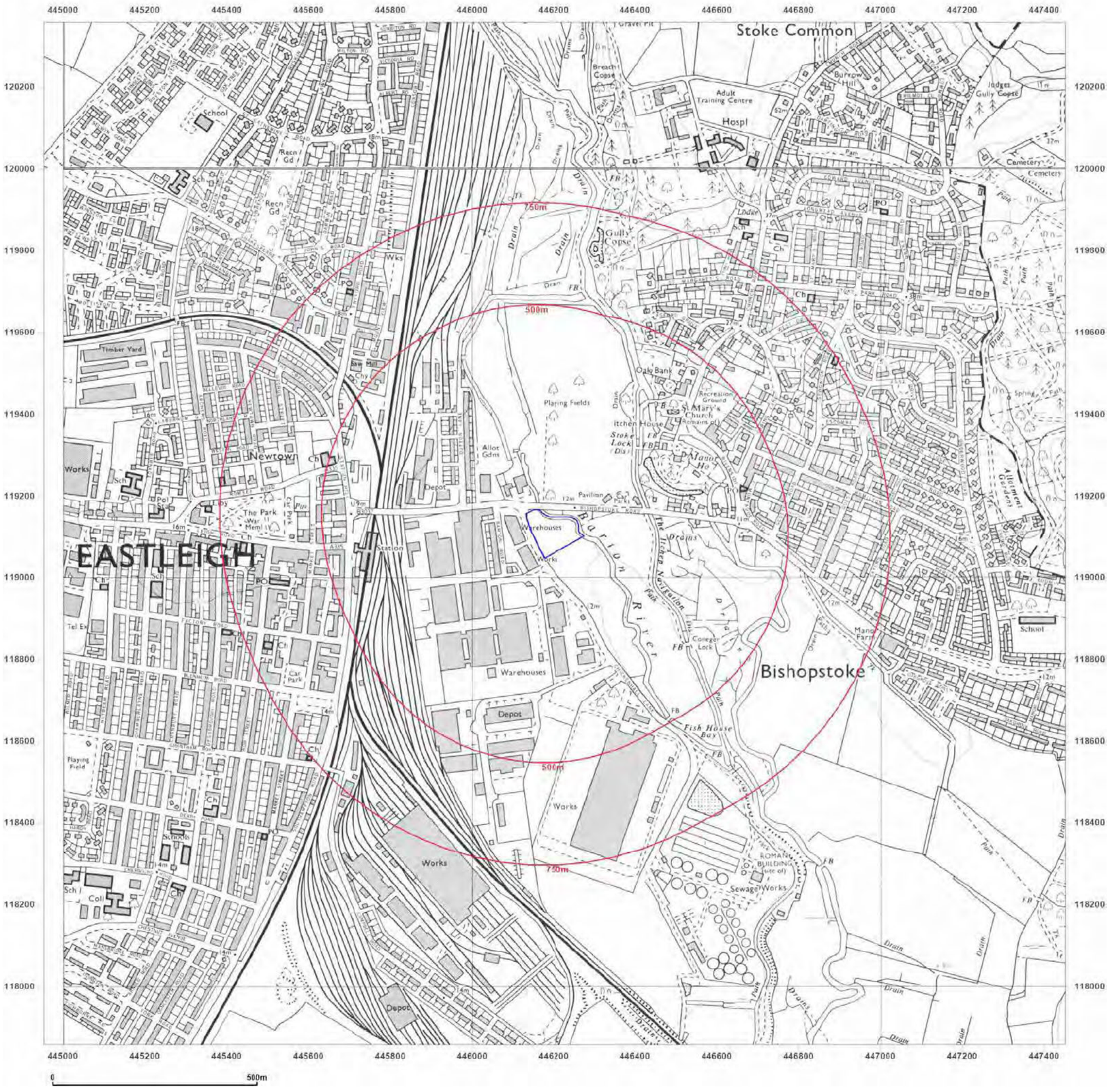
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: National Grid
Map date: **1980-1981**
Scale: 1:10,000
Printed at: 1:10,000

N
W E
S

Surveyed 1981
Revised 1981
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1975
Revised 1980
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1980
Revised 1981
Edition N/A
Copyright N/A
Levelled N/A

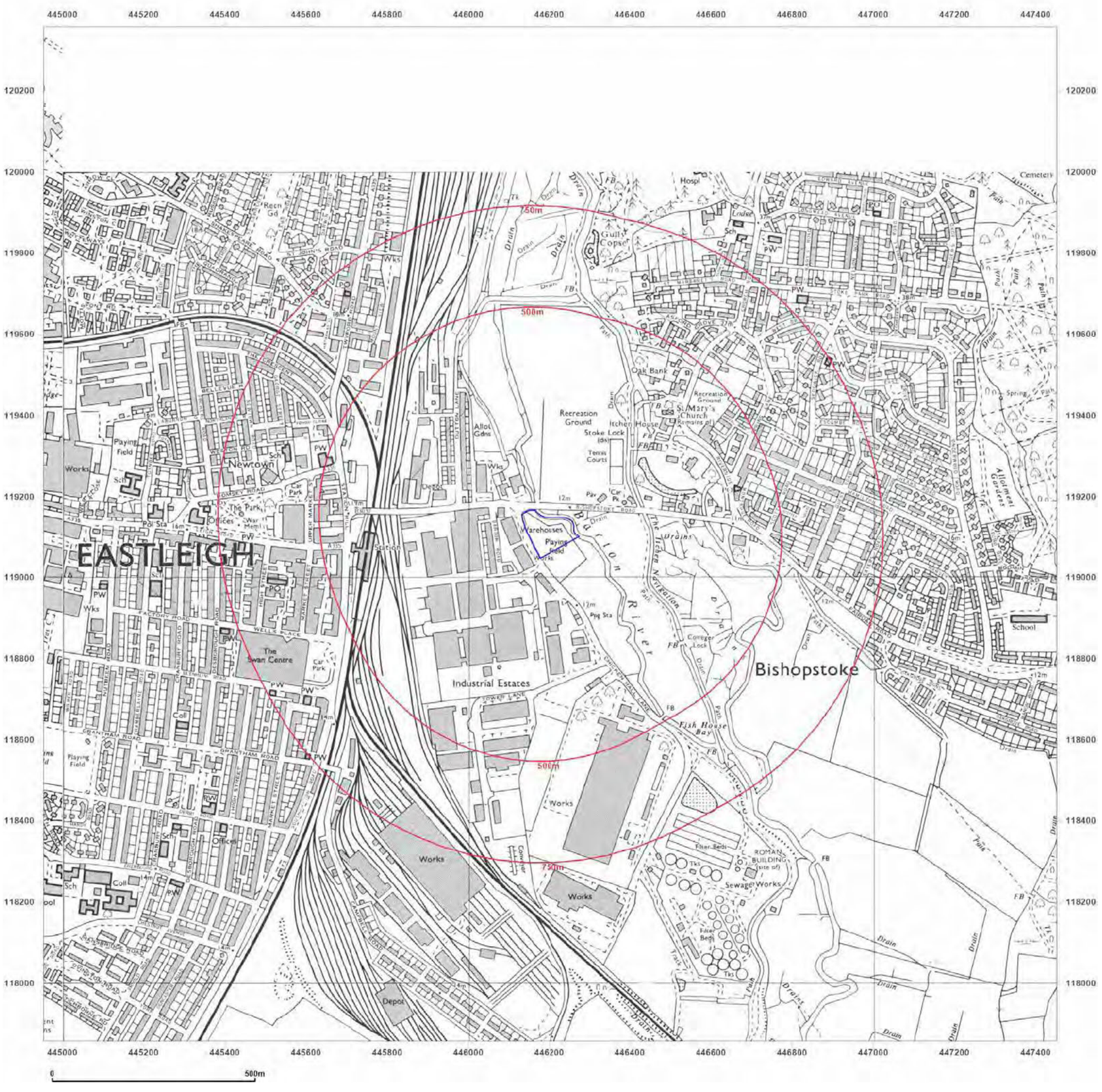
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: National Grid

Map date: **1988-1991**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S

Surveyed 1989
Revised 1991
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1987
Revised 1988
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1988
Revised 1989
Edition N/A
Copyright N/A
Levelled N/A

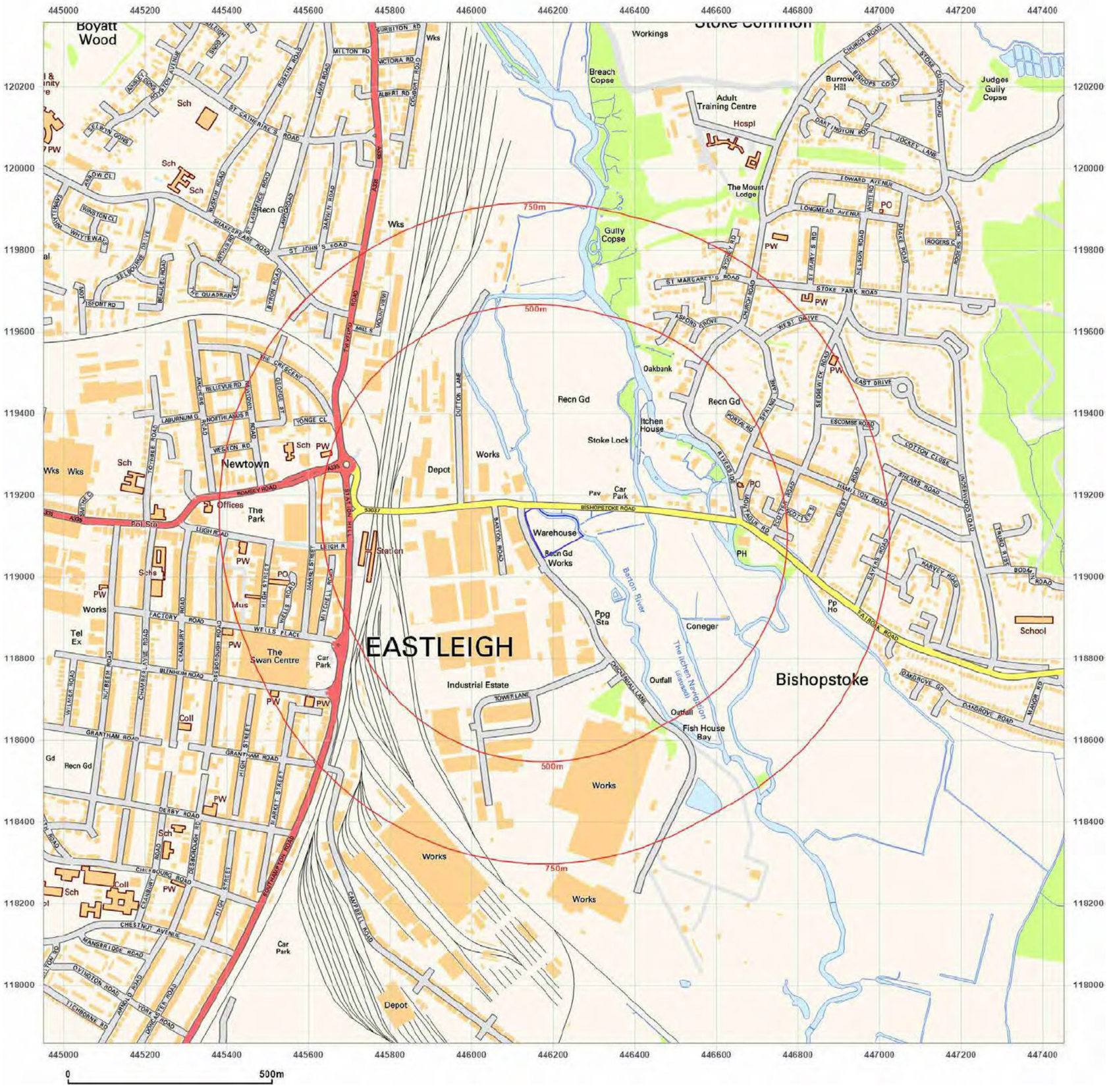
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: National Grid
Map date: 2001
Scale: 1:10,000
Printed at: 1:10,000

N
W E
S



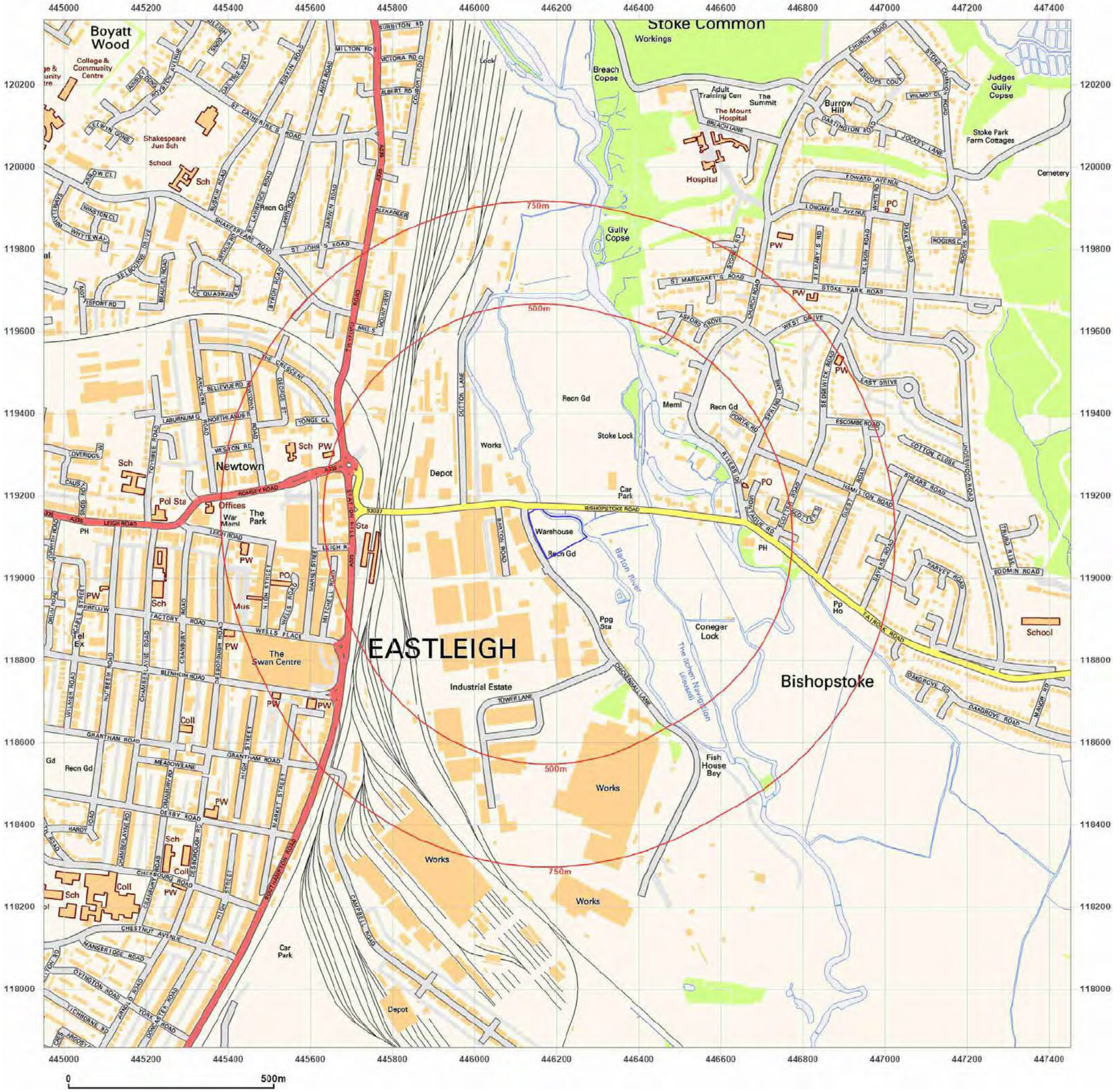
Powered by

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: National Grid

Map date: **2010**

Scale: 1:10,000

Printed at: 1:10,000

N
W E
S



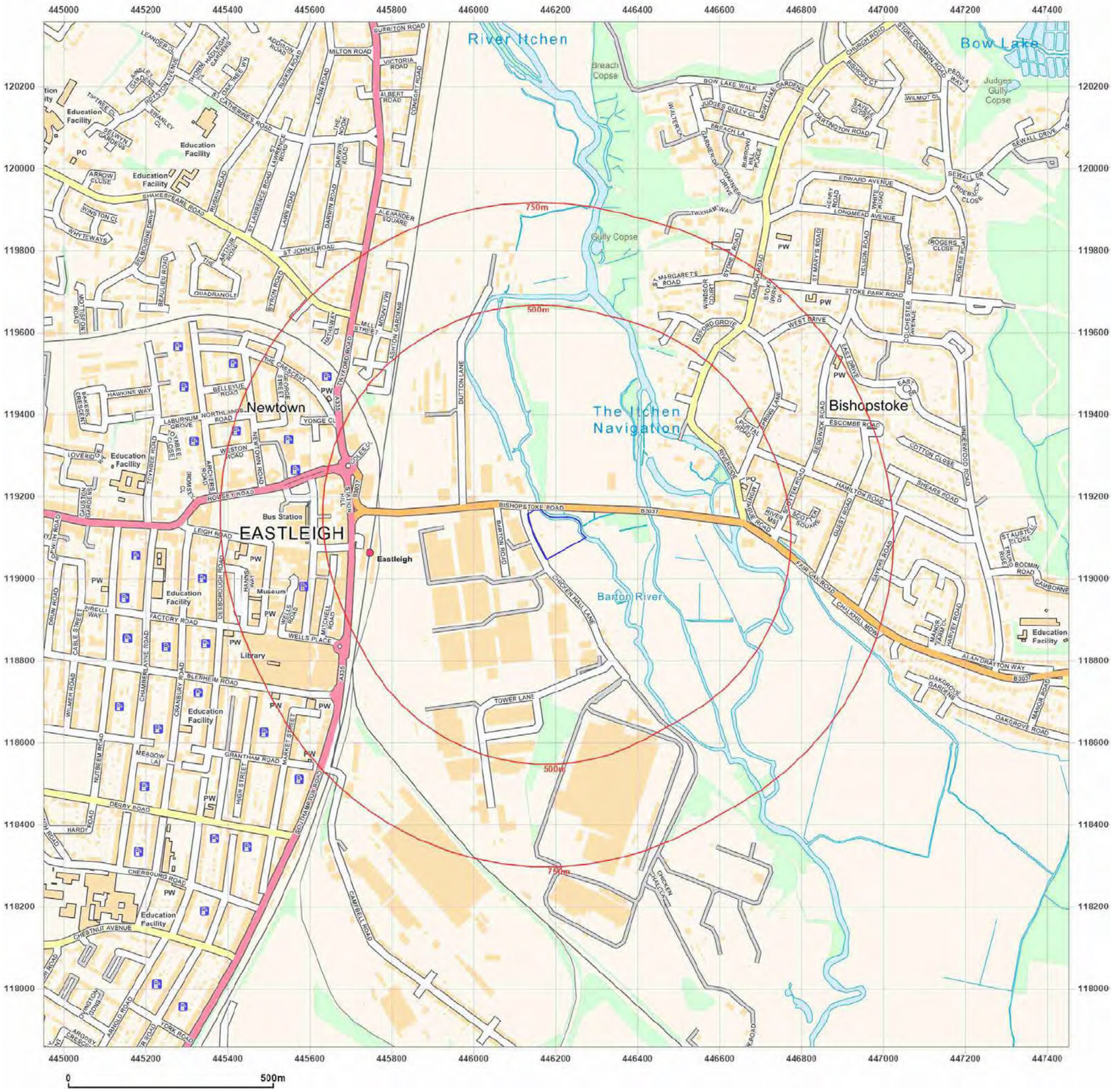
Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf



Groundsure INSIGHTS

Site Details:

CHICKENHALL LANE,
EASTLEIGH, HAMPSHIRE, SO50 6RP

Client Ref: J24-018 - Eastleigh
Report Ref: GS-YLD-JVG-P87-OKZ
Grid Ref: 446202, 119108

Map Name: National Grid
Map date: 2024
Scale: 1:10,000
Printed at: 1:10,000

N
W E
S



Powered by OS

Produced by
Groundsure Insights
T: 08444 159000
E: info@groundsure.com
W: www.groundsure.com

© Crown copyright and database rights 2024 Ordnance Survey 100035207

Production date: 03 September 2024

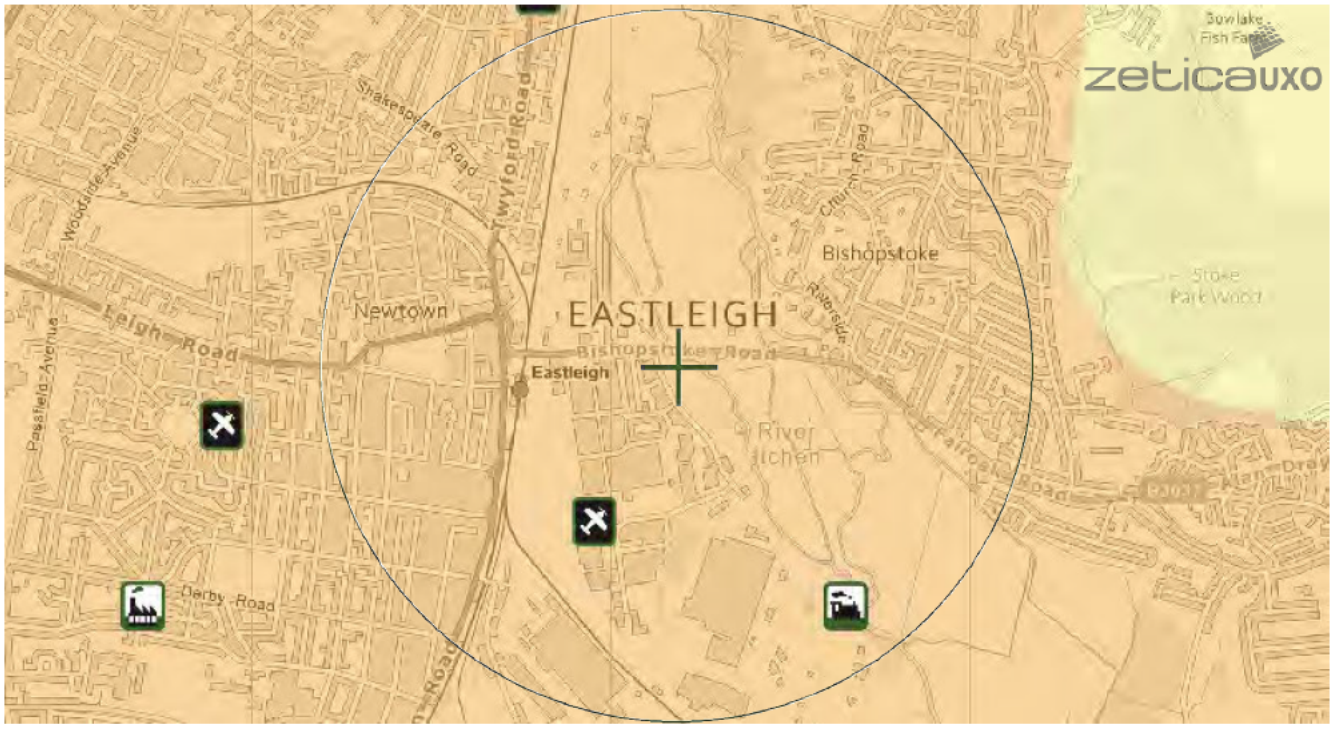
Map legend available at:
www.groundsure.com/sites/default/files/groundsure_legend.pdf

UNEXPLODED BOMB RISK MAP

zeticaUXO

SITE LOCATION

Map Centre: 446153,119136



This map principally indicates a hazard from Unexploded Bombs (UXB) due to WWII bombardment. Other sources of Unexploded Ordnance (UXO) may be present. It should be noted that this map does not represent UXO risk and should not be reported as such when reproduced.

LEGEND

- **High:** Areas indicated as having a bombing density of 50 bombs per 1000acre or higher.
- **Moderate:** Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.
- **Low:** Areas indicated as having 15 bombs per 1000acre or less.

Miltary | **Industry** | **UXO find** | **Other**

Transport | **Docks** | **Luftwaffe targets**

Utilities | **Bombing decoy** | **Airfields**

How to use your Unexploded Bomb (UXB) risk map?

This map indicates the potential for UXBs to be present because of World War Two (WWII) bombing. It can be incorporated into a technical report, such as a Phase 1 Desk Study, or similar document as an indication of the potential for UXO encounter on a Site. Other sources of UXO may also be indicated, although note that these are not comprehensive and more detailed research is required to confirm their presence.

What if my Site is in a moderate or high density area?

We typically recommend that a detailed UXO desk study and risk assessment is undertaken for sites in an area with a moderate or high bombing density.
Additionally, if your site is in close proximity to a strategic target, military establishment, airfield or bombing decoy, then additional detailed research is recommended.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirm that there is a low potential for UXO to be present on your site, then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

If you are unsure whether other sources of UXO may be present, you can request one of our pre-desk study assessments (PDSA) by emailing a site boundary and location to pdsa@zetica.com.

You should never plan site work or undertake a risk assessment using these maps alone. More detail is required, to include an assessment of the likelihood of a source of UXO hazard from other military activity not reflected on these maps.

If I have any questions, who do I contact?

tel: +44 (0) 1993 886682 **email:** uxo@zetica.com **web:** www.zeticauxo.com

The information in this UXB risk map is derived from a range of sources and should be used with the accompanying notes on our website.

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgement. The copyright remains with Zetica Ltd.

APPENDIX 3: ENGINEERING LOGS

Percussion Drilling Log

Project Name: Chickenhall Lane	Client: Highwood	Date: 17/09/2024
Location: Eastleigh	Contractor: Oakland SI	
Project No. : J24-018	Crew Name: D	Drilling Equipment: Premier 110

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS201	WLS		RP	1:30	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20 - 0.30	ES		0.20			Grass over soft brown silty sandy gravelly SILT with rootlets TOPSOIL
					0.50			Soft brown grey silty sandy gravelly SILT with rootlets and occasional red brick fragments. Gravel is fine to coarse angular to subrounded flint. MADE GROUND
	▼	1.30 - 1.50	ES					Soft dark brown slightly spongey fibrous silty sandy PEAT with frequent red brown relic spongey wood fragments. Strong organic and sulphurous odour. ALLUVIUM
		2.00 - 3.00	B					
	▽	3.60 - 3.70	ES		3.60			Interbeds of light brown very soft silty sandy PEAT and silty slightly gravelly fine to coarse SAND. Gravel is fine chalk and rare flint ALLUVIUM
		4.00 - 5.00	B		4.00			Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS
					5.00			End of Borehole at 5.00m

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

Groundwater encountered at 3.6m rising to 0.8m

Percussion Drilling Log

Project Name: Chickenhall Lane	Client: Highwood	Date: 17/09/2024
Location: Eastleigh	Contractor: Oakland SI	
Project No. : J24-018	Crew Name: D	Drilling Equipment: Premier 110

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS202	WLS		RP	1:30	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.40 - 0.50	ES		0.20			Grass over soft brown silty sandy gravelly SILT with rootlets (TS) Gravel is fine to coarse angular to subrounded flint TOPSOIL
					0.70			Soft brown grey clayey sandy gravelly SILT with rootlets. Gravel is fine to coarse angular to subrounded flint. ALLUVIUM
								Soft dark brown slightly spongey fibrous silty sandy PEAT with frequent red brown relic spongey wood fragments. ALLUVIUM
					2.30			Interbeds of light brown very soft silty sandy PEAT and silty slightly gravelly fine to coarse SAND. Gravel is fine chalk and rare flint. ALLUVIUM
					3.10			Brown clayey very silty sandy PEAT ALLUVIUM
					3.70			Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS
					4.50			Light grey slightly silty fine SAND. WHITECLIFF SAND MEMBER
					5.00			End of Borehole at 5.00m

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

Groundwater encountered at 2.5m rising to 1.0m

Percussion Drilling Log

Project Name: Chickenhall Lane	Client: Highwood	Date: 17/09/2024
Location: Eastleigh	Contractor: Oakland SI	
Project No. : J24-018	Crew Name: D	Drilling Equipment: Premier 110

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS203	WLS		RP	1:30	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.10 - 0.20	ES					Grass over soft brown grey silty sandy gravelly SILT with rootlets and occasional red brick fragments. Gravel is fine to coarse angular to subrounded flint. MADE GROUND
					0.40			Soft dark brown slightly spongey fibrous silty sandy PEAT with frequent red brown relic spongey wood fragments. ALLUVIUM
					3.20			
		3.30 - 3.50	ES					Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS
					4.30			Light grey slightly silty fine SAND. WHITECLIFF SAND MEMBER
					5.00			End of Borehole at 5.00m

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

Groundwater encountered at 2.1m rising to 1.0m

Percussion Drilling Log

Project Name: Chickenhall Lane	Client: Highwood	Date: 17/09/2024
Location: Eastleigh	Contractor: Oakland SI	
Project No. : J24-018	Crew Name: D	Drilling Equipment: Premier 110

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS204	WLS		RP	1:30	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20 - 0.40	ES					Grass over soft brown grey silty sandy gravelly SILT with rootlets and occasional red brick fragments. Gravel is fine to coarse angular to subrounded flint. MADE GROUND
					0.60			Soft brown silty CLAY with occasional fine to medium flint gravel ALLUVIUM
					0.90			Soft dark brown slightly spongey fibrous silty sandy PEAT with frequent red brown relic spongey wood fragments. ALLUVIUM
		1.30 - 1.50	ES					
					3.80			Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS
					4.70			Light grey slightly silty fine SAND. WHITECLIFF SAND MEMBER
					5.00			End of Borehole at 5.00m

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

Groundwater encountered at 3.1m rising to 1.0m

Percussion Drilling Log

Project Name: Chickenhall Lane	Client: Highwood	Date: 17/09/2024
Location: Eastleigh	Contractor: Oakland SI	
Project No. : J24-018	Crew Name: D	Drilling Equipment: Premier 110

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS205	WLS		RP	1:30	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.50 - 0.60	ES		0.20			Grass over soft brown silty sandy gravelly SILT with rootlets. Gravel is fine to coarse angular to subrounded flint TOPSOIL
								Soft brown grey silty sandy gravelly CLAY with frequent red brick fragments. Gravel is fine to coarse angular to subrounded flint. MADE GROUND
		1.00 - 1.10	ES		0.90			Soft brown silty CLAY with occasional small to medium flint gravel ALLUVIUM
					1.30			Soft dark brown slightly spongey fibrous silty sandy PEAT with frequent red brown relic spongey wood fragments. ALLUVIUM
		3.00 - 4.00	B					
					4.20			Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS
					4.80			Light grey slightly silty fine SAND. WHITECLIFF SAND MEMBER
					5.00			End of Borehole at 5.00m

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

Groundwater encountered at 3.8m rising to 1.0m

Percussion Drilling Log

Project Name: Chickenhall Lane	Client: Highwood	Date: 18/09/2024
Location: Eastleigh	Contractor: Oakland SI	
Project No. : J24-018	Crew Name: D	Drilling Equipment: Premier 110

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS206	WLS		RP	1:30	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.30 - 0.40	ES		0.10			Grass over soft brown silty sandy gravelly SILT with rootlets. Gravel is fine to coarse angular to subrounded flint TOPSOIL Soft brown grey silty sandy gravelly CLAY with frequent red brick and occasional tarmacadam fragments. Gravel is fine to coarse angular to subrounded flint. MADE GROUND
					0.80			Soft brown silty CLAY with occasional fine to medium flint gravel and wood fragments ALLUVIUM
					1.40			Soft dark brown slightly spongey fibrous silty sandy PEAT with frequent red brown relic spongey wood fragments ALLUVIUM
		2.30 - 2.50	ES		2.30			Soft grey very silty sandy CLAY with occasional small to medium flint gravel and wood fragments ALLUVIUM
					3.80			Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS
					4.60			End of Borehole at 4.60m

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

Groundwater encountered at 2.3m rising to 1.0m

Percussion Drilling Log

Project Name: Chickenhall Lane	Client: Highwood	Date: 18/09/2024
Location: Eastleigh	Contractor: Oakland SI	
Project No. : J24-018	Crew Name: D	Drilling Equipment: Premier 110

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS207	WLS		RP	1:30	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.30 - 0.40	ES		0.10			Hardcore (concrete, red brick, tarmacadam and flint gravel) MADE GROUND
								Stiff brown silty sandy gravelly CLAY with frequent red brick fragments. Gravel is fine to coarse angular to subrounded flint. MADE GROUND
					0.90			Firm to stiff brown silty CLAY with occasional fine to medium flint gravel ALLUVIUM
		1.60 - 1.70	ES		1.40			Soft dark brown grey very silty CLAY ALLUVIUM
		2.50 - 3.50	B		2.10			Soft dark brown grey slightly spongey fibrous silty sandy PEAT ALLUVIUM
					3.90			Brown fine SAND ALLUVIUM
					4.20			Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS
					4.50			End of Borehole at 4.50m

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

Groundwater encountered at 3.1m rising to 1.2m

Percussion Drilling Log

Project Name: Chickenhall Lane	Client: Highwood	Date: 18/09/2024
Location: Eastleigh	Contractor: Oakland SI	
Project No. : J24-018	Crew Name: D	Drilling Equipment: Premier 110

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS208	WLS		RP	1:30	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.20 - 0.30	ES		0.20			Soft dark brown sandy gravelly SILT with rootlets. Gravel is fine to medium angular to sub rounded flint. TOPSOIL
								Soft dark brown sandy gravelly SILT with rootlets. Gravel is fine to medium angular to sub rounded flint. ALLUVIUM
					1.10			
		1.20 - 1.30	ES					Soft brown grey silty CLAY with frequent fine to medium flint gravel ALLUVIUM
					1.30			Soft dark brown grey slightly spongey fibrous silty sandy PEAT ALLUVIUM
					2.10			Soft dark brown slightly spongey fibrous silty sandy PEAT with frequent red brown relic spongey wood fragments. ALLUVIUM
					2.90			Grey very silty fine SAND with occasional small to medium flint gravel ALLUVIUM
					4.60			Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS
					4.70			End of Borehole at 4.70m

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

Groundwater encountered at 2.9m rising to 1.5m

Percussion Drilling Log

Project Name: Chickenhall Lane	Client: Highwood	Date: 18/09/2024
Location: Eastleigh	Contractor: Oakland SI	
Project No. : J24-018	Crew Name: D	Drilling Equipment: Premier 110

Borehole Number	Hole Type	Level	Logged By	Scale	Page Number
WS209	WLS		RP	1:30	Sheet 1 of 1

Well	Water Strikes	Sample and In Situ Testing			Depth (m)	Level (m)	Legend	Stratum Description
		Depth (m)	Type	Results				
		0.30 - 0.40	ES					Soft dark brown sandy slightly gravelly SILT with rootlets. Gravel is fine to medium angular to sub rounded flint. TOPSOIL
					0.50			Soft to firm silty CLAY with frequent fine to medium flint gravel ALLUVIUM
					0.90			Firm brown silty CLAY with occasional fine to medium flint gravel ALLUVIUM
					1.40			Soft dark brown grey slightly spongey fibrous silty sandy PEAT ALLUVIUM
		2.10 - 2.30	ES					
					2.80			Soft dark brown slightly spongey fibrous silty sandy PEAT with frequent red brown relic spongey wood fragments. ALLUVIUM
					4.70			Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. RIVER TERRACE DEPOSITS
					4.90			End of Borehole at 4.90m

Hole Diameter		Casing Diameter		Chiselling				Inclination and Orientation			
Depth Base	Diameter	Depth Base	Diameter	Depth Top	Depth Base	Duration	Tool	Depth Top	Depth Base	Inclination	Orientation

Remarks

Groundwater encountered at 2.1m rising to 1.1m

BOREHOLE LOG MW101

PROJECT NUMBER J24-018
PROJECT NAME Chickenhall Lane
CLIENT Highwood Homes Ltd
ADDRESSEastleigh
DATE 27/03/2024

DRILLING COMPANY Oakland SI
DRILLING METHOD Windowless Sampling
DRILLING RIG Dando Terrier
LOGGED BY DP

CASING

COMMENTS Groundwater strike at 3.0m rising to 2.0m over 10 minutes. Borehole collapse/blowing from 5.0m to 4.5m bgl.

Recovery	Water	Depth (m)	Graphic Log	Material Description	Well Installation
Hand excavated		0.2		Dark brown sandy gravelly SILT with rootlets. Gravel is fine to coarse angular to subrounded flint and occasional red brick fragments. (MADE GROUND)	
		0.4		Soft to firm dark brown to orange brown sandy gravelly SILT. Gravel is fine to coarse angular to subrounded flint. (ALLUVIUM)	
WS 100%		1.2			
		1.4		Soft dark grey brown sandy slightly gravelly SILT. Gravel is fine to coarse angular to well rounded flint. Locally organic. (ALLUVIUM)	
WS 100%		2			
		2.2		Soft dark brown slightly spongey fibrous silty sandy PEAT with frequent relic reeds and roots. Organic odour. (ALLUVIUM)	
WS 80%		3			
		3.2			
		3.4		Soft dark brown slightly spongey fibrous silty sandy PEAT with frequent red brown relic spongey wood fragments. Strong organic and sulphurous odour. (ALLUVIUM)	
WS 30%		4			
		4.2			
		4.4			
		4.6		(Possibly dense) grey to orange brown sandy fine to medium angular to subrounded flint GRAVEL. (RIVER TERRACE DEPOSITS)	
		5		Termination Depth at: 5.0m	
		5.2			
		5.4			

produced by ESlog.ESdat.net on 28 Mar 2024

BOREHOLE LOG MW102

PROJECT NUMBER J24-018
PROJECT NAME Chickenhall Lane
CLIENT Highwood Homes Ltd
ADDRESSEastleigh
DATE 27/03/2024

DRILLING COMPANY Oakland SI
DRILLING METHOD Windowless Sampling
DRILLING RIG Dando Terrier
LOGGED BY DP

CASING

COMMENTS Groundwater strike at 2.7m rising to 1.4m over 10 minutes. Borehole collapse/blowing from 5.0m to 4.0m bgl.

Recovery	Water	Depth (m)	Graphic Log	Material Description	Well Installation
Hand excavated		0.2		Soft dark brown sandy slightly gravelly SILT with rootlets. Gravel is fine to medium angular to sub rounded flint. (MADE GROUND)	
		0.4		Orange brown silty sandy fine to coarse angular to well rounded flint GRAVEL. Occasional red brick fragments. (MDE GROUND)	
		0.6		Orange brown silty sandy fine to coarse angular to well rounded flint GRAVEL. (ALLUVIUM)	
		0.8		Soft brown sandy to very sandy slightly gravelly SILT. Gravel is fine to medium angular to subangular flint. (ALLUVIUM)	
		1			
		1.2			
WS 100%		1.4		Interbeds of soft light grey sandy slightly gravelly SILT and soft dark brown and brown slightly spongey fibrous silty sandy PEAT with frequent relic roots and reeds. (ALLUVIUM)	
		1.6			
		1.8			
WS 55%		2			
		2.2			
		2.4			
		2.6			
		2.8			
WS 15%		3		Very soft dark brown silty sandy PEAT recovered as loose soil in water. (ALLUVIUM)	
		3.2			
		3.4			
		3.6			
		3.8			
WS 15%		4			
		4.2			
		4.4			
		4.6			
		4.8		(Possibly dense) grey slightly silty sandy fine to coarse angular flint GRAVEL. (RIVER TERRACE DEPOSITS)	
		5		Termination Depth at: 5.0m	
		5.2			
		5.4			

produced by ESlog.ESdat.net on 28 Mar 2024

BOREHOLE LOG MW103

PROJECT NUMBER J24-018
PROJECT NAME Chickenhall Lane
CLIENT Highwood Homes Ltd
ADDRESSEastleigh
DATE 27/03/2024

DRILLING COMPANY Oakland SI
DRILLING METHOD Windowless Sampling
DRILLING RIG Dando Terrier
LOGGED BY DP

CASING

COMMENTS Groundwater strike at 2.0m rising to 0.7m over 10 minutes. Borehole collapse/blowing from 5.0m to 3.0m bgl.

Recovery	Water	Depth (m)	Graphic Log	Material Description	Well Installation
Hand excavated		0.2		Soft brown sandy gravelly SILT with rootlets. Gravel is fine to coarse angular to subrounded flint and occasional red brick fragments. (MADE GROUND)	
		0.4		Soft grey brown sandy gravelly SILT. Gravel is fine to medium angular to subangular flint and chalk. (ALLUVIUM)	
		0.6			
		0.8		Soft dark brown slightly spongey fibrous silty sandy PEAT with frequent relic roots and reeds. Organic odour. (ALLUVIUM)	
WS 100%		1			
		1.2			
		1.4			
		1.6			
		1.8			
WS 70%		2			
		2.2			
		2.4			
		2.6			
		2.8			
WS 10%		3			
		3.2			
		3.4			
		3.6			
		3.8		Dark brown and grey sandy fine to coarse angular to subangular flint GRAVEL (RIVER TERRACE DEPOSITS)	
WS 30%		4			
		4.2		(Possibly dense to very dense) light grey slightly silty fine SAND (WHITECLIFF SAND MEMBER)	
		4.4			
		4.6			
		4.8			
		5			
		5.2		Termination Depth at: 5.0m	
		5.4			

produced by ESlog.ESdat.net on 28 Mar 2024

BOREHOLE LOG MW104

PROJECT NUMBER J24-018
PROJECT NAME Chickenhall Lane
CLIENT Highwood Homes Ltd
ADDRESSEastleigh
DATE 27/03/2024

DRILLING COMPANY Oakland SI
DRILLING METHOD Windowless Sampling
DRILLING RIG Dando Terrier
LOGGED BY DP

CASING

COMMENTS Groundwater strike at 2.0m rising to 0.6m over 10 minutes. Borehole collapse/blowing from 5.0m to 4.0m bgl.

Recovery	Water	Depth (m)	Graphic Log	Material Description	Well Installation
Hand excavated		0.2		Soft brown sandy gravelly SILT with rootlets. Gravel is fine to coarse angular to subrounded flint. (MADE GROUND)	
		0.4		Light grey brown silty sandy fine to coarse flint GRAVEL with occasional red brick fragments. (MADE GROUND)	
		0.6		Soft dark brown slightly spongey fibrous silty sandy PEAT with frequent relic roots and reeds. Organic odour. (ALLUVIUM)	
WS 100%		0.8			
		1			
		1.2			
		1.4			
		1.6			
		1.8		Soft dark brown slightly spongey fibrous silty sandy PEAT with frequent red brown relic spongey wood fragments. Strong organic and sulphurous odour. (ALLUVIUM)	
WS 70%		2		Interbeds of light brown very soft silty sandy PEAT and silty slightly gravelly fine to coarse SAND. Gravel is fine chalk and rare flint. (ALLUVIUM)	
		2.2			
		2.4			
		2.6			
		2.8			
WS 20%		3			
		3.2			
		3.4			
		3.6			
		3.8		Dark grey slightly sandy slightly cobbly fine to coarse angular to rounded flint GRAVEL. (RIVER TERRACE DEPOSITS)	
WS 90%		4			
		4.2			
		4.4			
		4.6			
		4.8		Light grey slightly silty fine SAND. (WHITECLIFF SAND MEMBER)	
		5		Termination Depth at: 5.0m	
		5.2			
		5.4			

produced by ESlog.ESdat.net on 28 Mar 2024

APPENDIX 4: GENERIC ASSESSMENT CRITERIA

SOIL - HUMAN HEALTH SCREENING VALUES

Status	End Use	Issue No	Issue Date
ISSUE	Residential without Homegrown Produce	1	June 2015

Determinand	Units	SOIL ORGANIC MATTER 1%	SOIL ORGANIC MATTER 2.5%	SOIL ORGANIC MATTER 6%	SOURCE
pH		<5, >9			
Asbestos	%	Presence			
HEAVY METALS/METALLOIDS					
Arsenic	mg/kg	40			S4UL
Cadmium	mg/kg	85			S4UL
Chromium (III)	mg/kg	910			S4UL
Chromium (VI)	mg/kg	6			S4UL
Lead	mg/kg	310			C4SL
Mercury (Elemental)	mg/kg	1.2			S4UL
Mercury (Inorganic)	mg/kg	56			S4UL
Mercury (Methyl)	mg/kg	15			S4UL
Nickel	mg/kg	180			S4UL
Selenium	mg/kg	430			S4UL
Berylium	mg/kg	1.7			S4UL
Boron	mg/kg	11000			S4UL
Vanadium	mg/kg	1200			S4UL
Copper	mg/kg	7,100			S4UL
Zinc	mg/kg	40,000			S4UL
GENERAL INORGANICS					
Easily Liberatable Cyanide (free)	mg/kg				Acute effects infant 1 dose 3g soil
US EPA PRIORITY PAHs					
Acenaphthene	mg/kg	3000	4700	6000	S4UL
Acenaphthylene	mg/kg	2900	4600	6000	S4UL
Anthracene	mg/kg	31,000	35,000	37000	S4UL
Benzo(a)Anthracene	mg/kg	11	14	15	S4UL
Benzo(b)fluoranthene	mg/kg	3.9	4	4	S4UL
Benzo(k)fluoranthene	mg/kg	110	110	110.0	S4UL
Benzo(g,h,i)perylene	mg/kg	360	360	360	S4UL
Benzo(a)Pyrene	mg/kg	3.20	3.2	3.2	S4UL
Chrysene	mg/kg	30	31	32.0	S4UL
Di-benzo(a,h)anthracene	mg/kg	0.31	0.32	0.32	S4UL
Fluoranthene	mg/kg	1500	1600	1600	S4UL
Fluorene	mg/kg	2800	3800	4500	S4UL
Indeno(1,2,3-cd)pyrene	mg/kg	45.0	46	46.0	S4UL
Naphthalene	mg/kg	2.3	5.6	13.0	S4UL
Phenanthrene	mg/kg	1300	1500	1500	S4UL
Pyrene	mg/kg	3700	3800	3800	S4UL
Total PAHs	mg/kg	**No Sum**	**No Sum**	**No Sum**	
Chlorinated Solvents					
1,2-Dichloroethane (DCE)	mg/kg	0.0092	0.013	0.023	S4UL
1,1,1-Trichloroethane (111 TCA)	mg/kg	9	18	40	S4UL
1,1,1,2-Tetrachloroethane (1112 PCA)	mg/kg	1.5	3.5	8.20	S4UL
1,1,2,2-Tetrachloroethane (1122 PCA)	mg/kg	3.90	8	17	S4UL
Tetrachloroethene (PCE)	mg/kg	0.18	0.4	0.92	S4UL
Tetrachloromethane (Carbon Tetrachloride)	mg/kg	0.026	0.056	0.13	S4UL
Trichloroethene (TCE)	mg/kg	0.017	0.036	0.08	S4UL
Trichloromethane (Chloroform)	mg/kg	1.2	2.1	4.2	S4UL
Vinyl Chloride	mg/kg	0.00077	0.001	0.0015	S4UL
Chlorobenzene	mg/kg	0.46	1	2.4	S4UL
1,2-Dichlorobenzene	mg/kg	24	57	130	S4UL
1,3-Dichlorobenzene	mg/kg	0.44	1.1	2.5	S4UL
1,4-Dichlorobenzene	mg/kg	61	150	350	S4UL
1,2,3-Trichlorobenzene	mg/kg	1.5	3.7	8.8	S4UL
1,2,4-Trichlorobenzene	mg/kg	2.6	6.4	15	S4UL
1,3,5-Trichlorobenzene	mg/kg	0.33	0.81	1.9	S4UL
1,2,3,4-Tetrachlorobenzene	mg/kg	24	56	120	S4UL
1,2,3,5-Tetrachlorobenzene	mg/kg	0.75	1.9	4.3	S4UL
1,2,4,5-Tetrachlorobenzene	mg/kg	0.73	1.7	3.5	S4UL
Pentachlorobenzene	mg/kg	19	30	38	S4UL
Hexachlorobenzene	mg/kg	4.1	5.7	6.7	S4UL
Carbon Disulphide	mg/kg	0.14	0.29	0.62	S4UL
Hexachlorobutadiene	mg/kg	0.32	0.78	1.8	S4UL
Phenolics					
Phenol	mg/kg	750	1300	2300	S4UL
Chlorophenols	mg/kg	94	150	210	S4UL
Pentachlorophenol	mg/kg	27	29	31	S4UL
Explosives					
2,4,6 Trinitrotoluene (TNT)	mg/kg	65	66	66	S4UL
RDX	mg/kg	13000	13000	13000	S4UL
HMX	mg/kg	6700	6700	6700	S4UL
Insecticides/Herbicides					
Aldrin	mg/kg	7.3	7.4	7.5	S4UL
Dieldrin	mg/kg	7.0	7.3	7.4	S4UL
Atrazine	mg/kg	610.0	620.0	620.0	S4UL
Dichlorvos	mg/kg	6.4	6.5	6.6	S4UL
Alpha-Endosulfan	mg/kg	160	280	410	S4UL
Beta-Endosulfan	mg/kg	190	320	440	S4UL
Alpha-Hexachlorocyclohexane	mg/kg	6.9	9.2	11.0	S4UL
Beta-Hexachlorocyclohexane	mg/kg	3.7	3.8	3.8	S4UL
Gamma-Hexachlorocyclohexanes (Lindane)	mg/kg	2.9	3.3	3.5	S4UL

TPH					
TPH Aliphatic >C5-6	mg/kg	42	78	160	S4UL
TPH Aliphatic >C6-8	mg/kg	100	230	530	S4UL
TPH Aliphatic >C8-10	mg/kg	27	65	150	S4UL
TPH Aliphatic >C10-12	mg/kg	130	330	770	S4UL
TPH Aliphatic >C12-16	mg/kg	1100	2,400	4,400	S4UL
TPH Aliphatic >C16-35	mg/kg	65,000	92,000	110,000	S4UL
TPH Aliphatic >C35-44	mg/kg	65,000	92,000	110,000	S4UL
TPH Aromatic >EC5-7 (Benzene)	mg/kg	370.000	690.00	1400	S4UL
TPH Aromatic >EC7-8	mg/kg	860	1,800	3,900	S4UL
TPH Aromatic >EC8-10	mg/kg	47	110	270	S4UL
TPH Aromatic >EC10-12	mg/kg	250	590	1,200	S4UL
TPH Aromatic >EC12-16	mg/kg	1800	2,300	2,500	S4UL
TPH Aromatic >EC16-21	mg/kg	1900	1,900	1,900	S4UL
TPH Aromatic >EC21-35	mg/kg	1900	1,900	1,900	S4UL
TPH Aromatic >EC35-44	mg/kg	1900	1,900	1,900	S4UL
TPH Aliphatic & Aromatic >EC44-70	mg/kg	1,900	1,900	1,900	S4UL
Total TPH	mg/kg	**No Sum**	**No Sum**	**No Sum**	
BTEX					
Benzene	mg/kg	0.380	0.70	1.4	S4UL
Toluene	mg/kg	880^{vap} (869)	1,900	3900	S4UL
Ethylbenzene	mg/kg	83	190	440	S4UL
m-Xylene	mg/kg	88	210	480	S4UL
o-Xylene	mg/kg	82	190	450	S4UL
p-Xylene	mg/kg	79	180	430	S4UL

NOTES

1) Compare individual samples values against Soil Screening Values (SSV). If exceedences are noted consider further in relation to averaging areas and statistical analysis.

2) These values are for initial screening for potential **risk to human health only**. They are **not remediation thresholds**. **Screening for other receptors to be done separately as appropriate for the site, e.g. for water, ecology, building materials.**

3) Screening criteria denoted with an asterix (*) were capped at the lower vapour/aqueous saturation limits for Tier 1 human health risk assessment purposes and considered **conservative**. Where concentrations are recorded at levels greater that the SSV, free phase (NAPL) contamination may be present and should be considerwed qualitatively. Further information to support the interpretation of assessment criteria that exceed theoretical soil saturation limits is provided in Section 4.12 of the CLEA Software Handbook (SR4).

4) Screening criteria denoted with hash (#) were capped at 1000000mg/kg. It is noted that aesthetic (e.g. odour) and other site specific factors may also be relevant when providing advice relating to these compounds.

5) LQM/CIEH S4ULs November 2014 - Copyright Land Quality Management Limited reproduced with permission; Publication Number S4UL3439. All rights reserved.

6) SSVs derived for certain constituents may be low in relation to standard laboratory Limits of Detection (LoD). It is the responsibility of the project engineer to check with the laboratory that appropriate detection limits can be achieved. As a target, an LoD would be no larger than 10% of the SSV, but this is not practicable for some constituents. Clearly an LoD greater than the SSV would prevent use of this SSV screening and/or be interpreted as if all samples exceeded the SSV.

7) **Human Health Soil Screening Values (SSV) were** calculated using a Soil Organic Matter (SOM) value of 1.0%, 2.5% and 6%. This is equivanet to an Fraction Organic Carbon (FOC) values of approx. 0.6%, 1.45% and 3.5% respectively (For reference FOC = 0.58*SOM). **Note that some soils have different SOM/FOC, which may give require more stringent SSVs for organic compounds. It is the responsibility of the project engineer to check the SOM with the site specific conditions.**

8) In general, SSVs above 100mg/kg are rounded down to 3 significant figures. Similarly, SSVs below 100mg/kg are rounded down to 2 significant figures

APPENDIX 5: SOIL SCREENING SUMMARY

Project Name: CHL
Project Ref: J24-018
GAC Comparison: GCC - Residential without homegrown produce (1% SOM)

Sample ID	Units	GAC	WS201	WS201	WS201	WS202	WS203	WS204	WS204	WS205	WS205	WS206	WS206	WS207	WS207	WS208	WS208	WS209	WS209
Depth to Top			0.20	1.30	3.60	0.40	0.10	0.20	1.30	0.50	1.00	0.30	2.30	0.30	1.60	0.20	1.20	0.30	2.10
Depth to Bottom			0.30	1.50	3.70	0.50	0.20	0.40	1.50	0.60	1.10	0.40	2.50	0.40	1.70	0.30	1.30	0.40	2.30
Date Sampled			17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24
pH	pH	5-9	7.96	6.78	7.84	8.24	8.27	8.15	6.71	8.24	8.41	8.43	8.32	8.35	8.13	7.96	8.07	7.89	7.02
Cyanide (free)	mg/kg		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Phenols - Total by HPLC	mg/kg	750	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Organic Matter	% w/w		9.5	71.5	14.3	3.2	3.2	8	71.7	1.7	1.5	1.5	2.7	1.8	5.9	4.9	7.7	7.7	56
Total Organic Carbon	% w/w		5.52	41.5	8.28	1.87	1.84	4.63	41.6	0.98	0.86	0.9	1.59	1.02	3.41	2.88	4.49	4.46	32.5
Antimony	mg/kg		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arsenic	mg/kg	40	4	7	3	4	3	6	5	3	5	3	1	2	2	4	5	5	8
Cadmium	mg/kg	85	<0.5	<0.5	<0.5	0.6	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	0.6	0.7	<0.5
Copper	mg/kg	7100	25	8	7	127	289	37	10	28	12	20	2	14	4	24	25	53	51
Chromium	mg/kg		14	7	5	23	13	19	11	20	17	11	2	18	4	14	27	22	13
Chromium (hexavalent)	mg/kg	6	<1	<4	<1	<1	<1	<1	<4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead	mg/kg	310	42	5	5	122	168	60	8	53	25	99	2	27	<1	132	69	86	33
Mercury	mg/kg	56	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Nickel	mg/kg	180	18	19	10	34	48	20	20	17	13	10	3	18	10	14	30	23	36
Selenium	mg/kg	430	2	4	3	<1	<1	<1	3	<1	<1	<1	<1	<1	4	<1	2	<1	9
Zinc	mg/kg	40000	93	35	51	494	1300	99	38	69	40	79	19	77	27	149	82	227	189
Asbestos in soil		NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD	NAD
PAH-16MS (MSD order)																			
Naphthalene	mg/kg	2.3	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Acenaphthylene	mg/kg	2900	0.02	<0.01	<0.01	0.01	<0.01	0.01	<0.01	0.02	0.09	0.23	<0.01	0.04	<0.01	<0.01	<0.01	0.01	<0.01
Acenaphthene	mg/kg	3000	<0.01	<0.01	<0.01	<0.01	0.04	<0.01	<0.01	<0.01	0.18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.15
Fluorene	mg/kg	2800	<0.01	<0.01	<0.02	<0.01	0.03	<0.01	<0.01	<0.01	0.23	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.06
Phenanthrene	mg/kg	1300	0.04	<0.03	<0.03	0.05	0.16	0.04	<0.03	0.1	1.73	0.74	<0.03	<0.03	<0.03	0.05	<0.03	0.08	<0.03
Anthracene	mg/kg	31000	0.05	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	0.03	0.44	0.65	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	<0.02
Fluoranthene	mg/kg	1500	0.11	<0.08	<0.08	0.16	0.25	0.18	<0.08	0.46	3.61	5.07	<0.08	0.16	<0.08	0.18	<0.08	0.19	<0.08
Pyrene	mg/kg	3700	0.1	<0.07	<0.07	0.14	0.22	0.17	<0.07	0.42	3.15	4.25	<0.07	0.16	<0.07	0.16	<0.07	0.17	<0.07
Benzo(a)anthracene	mg/kg	11	0.06	<0.04	<0.04	0.09	0.16	0.12	<0.04	0.28	1.85	4.12	<0.04	0.13	<0.04	0.11	<0.04	0.11	<0.04
Chrysene	mg/kg	30	0.1	<0.06	<0.06	0.13	0.17	0.15	<0.06	0.31	1.94	3.81	<0.06	0.17	<0.06	0.12	<0.06	0.15	<0.06
Benzo(b)fluoranthene	mg/kg	3.9	0.12	<0.05	<0.05	0.15	0.18	0.19	<0.05	0.32	1.91	**4.8**	<0.05	0.21	<0.05	0.15	<0.05	0.16	<0.05
Benzo(k)fluoranthene	mg/kg	110	<0.07	<0.07	<0.07	<0.07	0.07	0.07	<0.07	0.13	0.71	1.82	<0.07	0.07	<0.07	<0.07	<0.07	<0.07	<0.07
Benzo(a)pyrene	mg/kg	3.2	0.09	<0.04	<0.04	0.12	0.16	0.13	<0.04	0.28	1.5	**3.54**	<0.04	0.19	<0.04	0.13	<0.04	0.12	<0.04
Indeno(123-cd)pyrene	mg/kg	45.0	0.09	<0.03	<0.03	0.12	0.13	0.12	<0.03	0.23	1.06	2.47	<0.03	0.18	<0.03	0.1	<0.03	0.11	<0.03
Dibenzo(ah)anthracene	mg/kg	0.31	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.21	**0.58**	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Benzo(ghi)perylene	mg/kg	360	0.08	<0.05	<0.05	0.1	0.11	0.1	<0.05	0.18	0.83	2.07	<0.05	0.14	<0.05	0.08	<0.05	0.09	<0.05
Total PAH-16MS (MSD order)	mg/kg		0.86	<0.08	<0.08	1.07	1.71	1.28	<0.08	2.76	19.4	34.1	<0.08	1.48	<0.08	1.08	<0.08	1.19	0.21
TPH CWG with Clean Up																			
Ali >C5-C6	mg/kg	42	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ali >C6-C8	mg/kg	100	<0.01	<0.01	0.19	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ali >C8-C10	mg/kg		<1	<1	16	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3
Ali >C10-C12	mg/kg		<1	<1	35	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ali >C12-C16	mg/kg		<1	<1	81	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ali >C16-C21	mg/kg		<1	<1	65	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	3
Ali >C21-C35	mg/kg		8	243	126	2	3	5	24	3	4	5	2	3	4	2	4	13	25
Total Aliphatics	mg/kg		8	243	323	2	3	5	24	3	7	5	2	3	4	2	4	13	31
Aro >C5-C7	mg/kg	370	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aro >C7-C8	mg/kg	860	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aro >C8-C10	mg/kg		<1	<1	3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aro >C10-C12	mg/kg		<1	<1	23	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3
Aro >C12-C16	mg/kg		<1	11	87	<1	<1	<1	<1	<1	27	2	<1	<1	<1	<1	<1	<1	9
Aro >C16-C21	mg/kg		3	6	45	<1	1	3	<1	2	126	29	<1	2	<1	<1	<1	1	15
Aro >C21-C35	mg/kg		6	28	16	3	3	10	12	12	260	172	<1	6	<1	2	3	5	21
Total Aromatics	mg/kg		9	45	174	3	4	13	12	14	413	203	<1	8	<1	3	3	7	49
TPH (Ali & Aro >C5-C35)	mg/kg		18	288	497	5	7	19	35	17	420	208	2	11	4	5	7	20	80
BTEX - Benzene	mg/kg	0.380	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - Toluene	mg/kg	869	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - Ethyl Benzene	mg/kg	83	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - m & p Xylene	mg/kg	79	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
BTEX - o Xylene	mg/kg	82	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MTBE	mg/kg		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

APPENDIX 6: CHEMICAL LABORATORY TEST CERTIFICATES

envirolab
Hattersley Science & Technology Park
Stockport Road, Hattersley, SK14 3QU

FINAL ANALYTICAL TEST REPORT

Envirolab Job Number: 24/09139
Issue Number: 1 **Date:** 07 October, 2024

Client: Ground Condition Consultants Ltd
10 Waldegrave Close
Southampton
SO19 9RY

Project Manager: Antony Platt/David Pethica/Rasmus Palmgren
Project Name: CHL
Project Ref: J24-018
Order No: J24-018
Date Samples Received: 19/09/24
Date Instructions Received: 20/09/24
Date Analysis Completed: 07/10/24

Approved by:

[redacted]

Gemma Berrisford
Deputy Client Services Supervisor

Envirolab Job Number: 24/09139

Client Project Name: CHL

Client Project Ref: J24-018

Lab Sample ID	24/09139/1	24/09139/2	24/09139/3	24/09139/4	24/09139/5	24/09139/6	24/09139/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	WS201	WS201	WS201	WS202	WS203	WS204	WS204			
Depth to Top	0.20	1.30	3.60	0.40	0.10	0.20	1.30			
Depth To Bottom	0.30	1.50	3.70	0.50	0.20	0.40	1.50			
Date Sampled	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6AE	6AE	6AE	5A	6AB	6ABE	6A			
Hazardous Waste Assessment	Appended	-	-	-	-	-	Appended			Assessment
% Moisture at <40C$_A$	22.5	-	-	-	-	-	74.5	% w/w	0.1	A-T-044
% Stones >10mm$_A$	19.6	<0.1	<0.1	7.2	21.8	11.1	<0.1	% w/w	0.1	A-T-044
pH$_D$$^{M\#}$	7.96	6.78	7.84	8.24	8.27	8.15	6.71	pH	0.01	A-T-031s
Ammonium NH4 (exchangeable/water soluble)$_D$	6.19	-	-	-	-	-	14.9	mg/kg	0.26	A-T-033s
Sulphate (water sol 2:1)$_D$$^{M\#}$	0.02	-	-	-	-	-	0.17	g/l	0.01	A-T-026s
Cyanide (free)$_A$$^{M\#}$	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	0.2	A-T-050s
Organic Matter$_D$$^{M\#}$	9.5	71.5	14.3	3.2	3.2	8.0	71.7	% w/w	0.1	A-T-032s
Total Organic Carbon$_D$$^{M\#}$	5.52	41.5	8.28	1.87	1.84	4.63	41.6	% w/w	0.03	A-T-032s
Antimony$_D$	<5	<5	<5	<5	<5	<5	<5	mg/kg	5	A-T-024s
Arsenic$_D$$^{M\#}$	4	7	3	4	3	6	5	mg/kg	1	A-T-024s
Beryllium$_D$	<0.5	-	-	-	-	-	<0.5	mg/kg	0.5	A-T-024s
Boron (water soluble)$_D$$^{M\#}$	<1.0	-	-	-	-	-	3.9	mg/kg	1	A-T-027s
Cadmium$_D$$^{M\#}$	<0.5	<0.5	<0.5	0.6	0.5	<0.5	<0.5	mg/kg	0.5	A-T-024s
Copper$_D$$^{M\#}$	25	8	7	127	289	37	10	mg/kg	1	A-T-024s
Chromium$_D$$^{M\#}$	14	7	5	23	13	19	11	mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	<4	<1	<1	<1	<1	<4	mg/kg	1	A-T-040s
Lead$_D$$^{M\#}$	42	5	5	122	168	60	8	mg/kg	1	A-T-024s
Mercury$_D$	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	mg/kg	0.17	A-T-024s
Nickel$_D$$^{M\#}$	18	19	10	34	48	20	20	mg/kg	1	A-T-024s
Selenium$_D$$^{M\#}$	2	4	3	<1	<1	<1	3	mg/kg	1	A-T-024s
Zinc$_D$$^{M\#}$	93	35	51	494	1300	99	38	mg/kg	5	A-T-024s

Envirolab Job Number: 24/09139

Client Project Name: CHL

Client Project Ref: J24-018

Lab Sample ID	24/09139/1	24/09139/2	24/09139/3	24/09139/4	24/09139/5	24/09139/6	24/09139/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	WS201	WS201	WS201	WS202	WS203	WS204	WS204			
Depth to Top	0.20	1.30	3.60	0.40	0.10	0.20	1.30			
Depth To Bottom	0.30	1.50	3.70	0.50	0.20	0.40	1.50			
Date Sampled	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6AE	6AE	6AE	5A	6AB	6ABE	6A			
Asbestos in Soil (inc. matrix)										
Asbestos in soil$_D^{\#}$	NAD	NAD	NAD	NAD	NAD	NAD	NAD			A-T-045
Asbestos Matrix (visual)$_D$	-	-	-	-	-	-	-			A-T-045
Asbestos Matrix (microscope)$_D$	-	-	-	-	-	-	-			A-T-045
Asbestos ACM - Suitable for Water Absorption Test?$_D$	N/A	N/A	N/A	N/A	N/A	N/A	N/A			A-T-045

Envirolab Job Number: 24/09139

Client Project Name: CHL

Client Project Ref: J24-018

Lab Sample ID	24/09139/1	24/09139/2	24/09139/3	24/09139/4	24/09139/5	24/09139/6	24/09139/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	WS201	WS201	WS201	WS202	WS203	WS204	WS204			
Depth to Top	0.20	1.30	3.60	0.40	0.10	0.20	1.30			
Depth To Bottom	0.30	1.50	3.70	0.50	0.20	0.40	1.50			
Date Sampled	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6AE	6AE	6AE	5A	6AB	6ABE	6A			
PAH-16MS (MSD order)										
Naphthalene$_A^{M\#}$	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	0.03	A-T-019s
Acenaphthylene$_A^{M\#}$	0.02	<0.01	<0.01	0.01	<0.01	0.01	<0.01	mg/kg	0.01	A-T-019s
Acenaphthene$_A^{M\#}$	<0.01	<0.01	<0.01	<0.01	0.04	<0.01	<0.01	mg/kg	0.01	A-T-019s
Fluorene$_A^{M\#}$	<0.01	<0.01	<0.02	<0.01	0.03	<0.01	<0.01	mg/kg	0.01	A-T-019s
Phenanthrene$_A^{M\#}$	0.04	<0.03	<0.03	0.05	0.16	0.04	<0.03	mg/kg	0.03	A-T-019s
Anthracene$_A^{M\#}$	0.05	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	mg/kg	0.02	A-T-019s
Fluoranthene$_A^{M\#}$	0.11	<0.08	<0.08	0.16	0.25	0.18	<0.08	mg/kg	0.08	A-T-019s
Pyrene$_A^{M\#}$	0.10	<0.07	<0.07	0.14	0.22	0.17	<0.07	mg/kg	0.07	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	0.06	<0.04	<0.04	0.09	0.16	0.12	<0.04	mg/kg	0.04	A-T-019s
Chrysene$_A^{M\#}$	0.10	<0.06	<0.06	0.13	0.17	0.15	<0.06	mg/kg	0.06	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	0.12	<0.05	<0.05	0.15	0.18	0.19	<0.05	mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	<0.07	<0.07	<0.07	0.07	0.07	<0.07	mg/kg	0.07	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	0.09	<0.04	<0.04	0.12	0.16	0.13	<0.04	mg/kg	0.04	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	0.09	<0.03	<0.03	0.12	0.13	0.12	<0.03	mg/kg	0.03	A-T-019s
Dibenzo(ah)anthracene$_A$	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	0.04	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	0.08	<0.05	<0.05	0.10	0.11	0.10	<0.05	mg/kg	0.05	A-T-019s
Total PAH-16MS (MSD order)$_A$	0.86	<0.08	<0.08	1.07	1.71	1.28	<0.08	mg/kg	0.03	A-T-019s
TPH Total with ID + GC Trace										
TPH total (>C6-C40)$_A^{M\#}$	59	-	-	-	-	-	118	mg/kg	10	A-T-007s
TPH FID Chromatogram$_A$	Appended	-	-	-	-	-	Appended			A-T-007s
TPH ID Interpretation$_A$	C6-44 with PAHs and other unresolved hydrocarbons	-	-	-	-	-	C6-44 with PAHs and other unresolved hydrocarbons			A-T-007s

Envirolab Job Number: 24/09139

Client Project Name: CHL

Client Project Ref: J24-018

Lab Sample ID	24/09139/1	24/09139/2	24/09139/3	24/09139/4	24/09139/5	24/09139/6	24/09139/7	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	WS201	WS201	WS201	WS202	WS203	WS204	WS204			
Depth to Top	0.20	1.30	3.60	0.40	0.10	0.20	1.30			
Depth To Bottom	0.30	1.50	3.70	0.50	0.20	0.40	1.50			
Date Sampled	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24	17-Sep-24			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	6AE	6AE	6AE	5A	6AB	6ABE	6A			
TPH CWG with Clean Up										
Ali >C5-C6$_A$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Ali >C6-C8$_A$	<0.01	<0.01	0.19	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Ali >C8-C10$_A$	<1	<1	16	<1	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C10-C12$_A$$^{M\#}$	<1	<1	35	<1	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C12-C16$_A$$^{M\#}$	<1	<1	81	<1	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C16-C21$_A$$^{M\#}$	<1	<1	65	<1	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C21-C35$_A$$^{M\#}$	8	243	126	2	3	5	24	mg/kg	1	A-T-055s
Total Aliphatics$_A$	8	243	323	2	3	5	24	mg/kg	1	Calc-As Recd
Aro >C5-C7$_A$$^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Aro >C7-C8$_A$$^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Aro >C8-C10$_A$	<1	<1	3	<1	<1	<1	<1	mg/kg	1	A-T-055s
Aro >C10-C12$_A$	<1	<1	23	<1	<1	<1	<1	mg/kg	1	A-T-055s
Aro >C12-C16$_A$	<1	11	87	<1	<1	<1	<1	mg/kg	1	A-T-055s
Aro >C16-C21$_A$$^{M\#}$	3	6	45	<1	1	3	<1	mg/kg	1	A-T-055s
Aro >C21-C35$_A$$^{M\#}$	6	28	16	3	3	10	12	mg/kg	1	A-T-055s
Total Aromatics$_A$	9	45	174	3	4	13	12	mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	18	288	497	5	7	19	35	mg/kg	1	Calc-As Recd
BTEX - Benzene$_A$$^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - Toluene$_A$$^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene$_A$$^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - m & p Xylene$_A$$^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - o Xylene$_A$$^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
MTBE$_A$$^{\#}$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s

Envirolab Job Number: 24/09139

Client Project Name: CHL

Client Project Ref: J24-018

Lab Sample ID	24/09139/8	24/09139/9	24/09139/10	24/09139/11	24/09139/12	24/09139/13	24/09139/14	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	WS205	WS205	WS206	WS206	WS207	WS207	WS208			
Depth to Top	0.50	1.00	0.30	2.30	0.30	1.60	0.20			
Depth To Bottom	0.60	1.10	0.40	2.50	0.40	1.70	0.30			
Date Sampled	17-Sep-24	17-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	5AB	5AB	4AB	7	6AB	4A	6AE			
% Stones >10mm$_A$	1.2	6.9	30.2	<0.1	19.4	<0.1	35.1	% w/w	0.1	A-T-044
pH$_D$[M#]	8.24	8.41	8.43	8.32[U]	8.35	8.13	7.96	pH	0.01	A-T-031s
Cyanide (free)$_A$[M#]	<1	<1	<1	<1[U]	<1	<1	<1	mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	0.2	A-T-050s
Organic Matter$_D$[M#]	1.7	1.5	1.5	2.7[U]	1.8	5.9	4.9	% w/w	0.1	A-T-032s
Total Organic Carbon$_D$[M#]	0.98	0.86	0.90	1.59[U]	1.02	3.41	2.88	% w/w	0.03	A-T-032s
Antimony$_D$	<5	<5	<5	<5	<5	<5	<5	mg/kg	5	A-T-024s
Arsenic$_D$[M#]	3	5	3	1[U]	2	2	4	mg/kg	1	A-T-024s
Cadmium$_D$[M#]	<0.5	<0.5	<0.5	<0.5[U]	<0.5	<0.5	0.5	mg/kg	0.5	A-T-024s
Copper$_D$[M#]	28	12	20	2[U]	14	4	24	mg/kg	1	A-T-024s
Chromium$_D$[M#]	20	17	11	2[U]	18	4	14	mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-040s
Lead$_D$[M#]	53	25	99	2[U]	27	<1	132	mg/kg	1	A-T-024s
Mercury$_D$	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	mg/kg	0.17	A-T-024s
Nickel$_D$[M#]	17	13	10	3[U]	18	10	14	mg/kg	1	A-T-024s
Selenium$_D$[M#]	<1	<1	<1	<1[U]	<1	4	<1	mg/kg	1	A-T-024s
Zinc$_D$[M#]	69	40	79	19[U]	77	27	149	mg/kg	5	A-T-024s

Envirolab Job Number: 24/09139

Client Project Name: CHL

Client Project Ref: J24-018

Lab Sample ID	24/09139/8	24/09139/9	24/09139/10	24/09139/11	24/09139/12	24/09139/13	24/09139/14	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	WS205	WS205	WS206	WS206	WS207	WS207	WS208			
Depth to Top	0.50	1.00	0.30	2.30	0.30	1.60	0.20			
Depth To Bottom	0.60	1.10	0.40	2.50	0.40	1.70	0.30			
Date Sampled	17-Sep-24	17-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	5AB	5AB	4AB	7	6AB	4A	6AE			
Asbestos in Soil (inc. matrix)										
Asbestos in soil$_D^{\#}$	NAD	NAD	NAD	NAD^U	NAD	NAD	NAD			A-T-045
Asbestos Matrix (visual)$_D$	-	-	-	-	-	-	-			A-T-045
Asbestos Matrix (microscope)$_D$	-	-	-	-	-	-	-			A-T-045
Asbestos ACM - Suitable for Water Absorption Test?$_D$	N/A	N/A	N/A	N/A	N/A	N/A	N/A			A-T-045

Envirolab Job Number: 24/09139

Client Project Name: CHL

Client Project Ref: J24-018

Lab Sample ID	24/09139/8	24/09139/9	24/09139/10	24/09139/11	24/09139/12	24/09139/13	24/09139/14	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	WS205	WS205	WS206	WS206	WS207	WS207	WS208			
Depth to Top	0.50	1.00	0.30	2.30	0.30	1.60	0.20			
Depth To Bottom	0.60	1.10	0.40	2.50	0.40	1.70	0.30			
Date Sampled	17-Sep-24	17-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	5AB	5AB	4AB	7	6AB	4A	6AE			
PAH-16MS (MSD order)										
Naphthalene$_A^{M\#}$	<0.03	<0.03	<0.03	<0.03^U	<0.03	<0.03	<0.03	mg/kg	0.03	A-T-019s
Acenaphthylene$_A^{M\#}$	0.02	0.09	0.23	<0.01^U	0.04	<0.01	<0.01	mg/kg	0.01	A-T-019s
Acenaphthene$_A^{M\#}$	<0.01	0.18	<0.01	<0.01^U	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-019s
Fluorene$_A^{M\#}$	<0.01	0.23	<0.01	<0.01^U	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-019s
Phenanthrene$_A^{M\#}$	0.10	1.73	0.74	<0.03^U	<0.03	<0.03	0.05	mg/kg	0.03	A-T-019s
Anthracene$_A^{M\#}$	0.03	0.44	0.65	<0.02^U	0.03	<0.02	<0.02	mg/kg	0.02	A-T-019s
Fluoranthene$_A^{M\#}$	0.46	3.61	5.07	<0.08^U	0.16	<0.08	0.18	mg/kg	0.08	A-T-019s
Pyrene$_A^{M\#}$	0.42	3.15	4.25	<0.07^U	0.16	<0.07	0.16	mg/kg	0.07	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	0.28	1.85	4.12	<0.04^U	0.13	<0.04	0.11	mg/kg	0.04	A-T-019s
Chrysene$_A^{M\#}$	0.31	1.94	3.81	<0.06^U	0.17	<0.06	0.12	mg/kg	0.06	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	0.32	1.91	4.80	<0.05^U	0.21	<0.05	0.15	mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	0.13	0.71	1.82	<0.07^U	0.07	<0.07	<0.07	mg/kg	0.07	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	0.28	1.50	3.54	<0.04^U	0.19	<0.04	0.13	mg/kg	0.04	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	0.23	1.06	2.47	<0.03^U	0.18	<0.03	0.10	mg/kg	0.03	A-T-019s
Dibenzo(ah)anthracene$_A$	<0.04	0.21	0.58	<0.04	<0.04	<0.04	<0.04	mg/kg	0.04	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	0.18	0.83	2.07	<0.05^U	0.14	<0.05	0.08	mg/kg	0.05	A-T-019s
Total PAH-16MS (MSD order)$_A$	2.76	19.4	34.1	<0.08^U	1.48	<0.08	1.08	mg/kg	0.03	A-T-019s

Envirolab Job Number: 24/09139

Client Project Name: CHL

Client Project Ref: J24-018

Lab Sample ID	24/09139/8	24/09139/9	24/09139/10	24/09139/11	24/09139/12	24/09139/13	24/09139/14	Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	WS205	WS205	WS206	WS206	WS207	WS207	WS208			
Depth to Top	0.50	1.00	0.30	2.30	0.30	1.60	0.20			
Depth To Bottom	0.60	1.10	0.40	2.50	0.40	1.70	0.30			
Date Sampled	17-Sep-24	17-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24	18-Sep-24			
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES	SOLID	SOIL - ES	SOIL - ES	SOIL - ES			
Sample Matrix Code	5AB	5AB	4AB	7	6AB	4A	6AE			
TPH CWG with Clean Up										
Ali >C5-C6$_A$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Ali >C6-C8$_A$	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Ali >C8-C10$_A$	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C10-C12$_A^{M\#}$	<1	<1	<1	<1^U	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C12-C16$_A^{M\#}$	<1	<1	<1	<1^U	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C16-C21$_A^{M\#}$	<1	2	<1	<1^U	<1	<1	<1	mg/kg	1	A-T-055s
Ali >C21-C35$_A^{M\#}$	3	4	5	2^U	3	4	2	mg/kg	1	A-T-055s
Total Aliphatics$_A$	3	7	5	2	3	4	2	mg/kg	1	Calc-As Recd
Aro >C5-C7$_A^{\#}$	<0.01	<0.01	<0.01	<0.01^U	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Aro >C7-C8$_A^{\#}$	<0.01	<0.01	<0.01	<0.01^U	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
Aro >C8-C10$_A$	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-055s
Aro >C10-C12$_A$	<1	<1	<1	<1	<1	<1	<1	mg/kg	1	A-T-055s
Aro >C12-C16$_A$	<1	27	2	<1	<1	<1	<1	mg/kg	1	A-T-055s
Aro >C16-C21$_A^{M\#}$	2	126	29	<1^U	2	<1	<1	mg/kg	1	A-T-055s
Aro >C21-C35$_A^{M\#}$	12	260	172	<1^U	6	<1	2	mg/kg	1	A-T-055s
Total Aromatics$_A$	14	413	203	<1	8	<1	3	mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	17	420	208	2	11	4	5	mg/kg	1	Calc-As Recd
BTEX - Benzene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01^U	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - Toluene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01^U	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01^U	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - m & p Xylene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01^U	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
BTEX - o Xylene$_A^{\#}$	<0.01	<0.01	<0.01	<0.01^U	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s
MTBE$_A^{\#}$	<0.01	<0.01	<0.01	<0.01^U	<0.01	<0.01	<0.01	mg/kg	0.01	A-T-022s

Envirolab Job Number: 24/09139

Client Project Name: CHL

Client Project Ref: J24-018

Lab Sample ID	24/09139/15	24/09139/16	24/09139/17					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	WS208	WS209	WS209							
Depth to Top	1.20	0.30	2.10							
Depth To Bottom	1.30	0.40	2.30							
Date Sampled	18-Sep-24	18-Sep-24	18-Sep-24							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6A	6AE	6AE							
% Stones >10mm$_A$	1.3	0.4	3.0					% w/w	0.1	A-T-044
pH$_D$$^{M\#}$	8.07	7.89	7.02					pH	0.01	A-T-031s
Cyanide (free)$_A$$^{M\#}$	<1	<1	<1					mg/kg	1	A-T-042sFCN
Phenols - Total by HPLC$_A$	<0.2	<0.2	<0.2					mg/kg	0.2	A-T-050s
Organic Matter$_D$$^{M\#}$	7.7	7.7	56.0					% w/w	0.1	A-T-032s
Total Organic Carbon$_D$$^{M\#}$	4.49	4.46	32.5					% w/w	0.03	A-T-032s
Antimony$_D$	<5	<5	<5					mg/kg	5	A-T-024s
Arsenic$_D$$^{M\#}$	5	5	8					mg/kg	1	A-T-024s
Cadmium$_D$$^{M\#}$	0.6	0.7	<0.5					mg/kg	0.5	A-T-024s
Copper$_D$$^{M\#}$	25	53	51					mg/kg	1	A-T-024s
Chromium$_D$$^{M\#}$	27	22	13					mg/kg	1	A-T-024s
Chromium (hexavalent)$_D$	<1	<1	<1					mg/kg	1	A-T-040s
Lead$_D$$^{M\#}$	69	86	33					mg/kg	1	A-T-024s
Mercury$_D$	<0.17	<0.17	<0.17					mg/kg	0.17	A-T-024s
Nickel$_D$$^{M\#}$	30	23	36					mg/kg	1	A-T-024s
Selenium$_D$$^{M\#}$	2	<1	9					mg/kg	1	A-T-024s
Zinc$_D$$^{M\#}$	82	227	189					mg/kg	5	A-T-024s

Envirolab Job Number: 24/09139

Client Project Name: CHL

Client Project Ref: J24-018

Lab Sample ID	24/09139/15	24/09139/16	24/09139/17					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	WS208	WS209	WS209							
Depth to Top	1.20	0.30	2.10							
Depth To Bottom	1.30	0.40	2.30							
Date Sampled	18-Sep-24	18-Sep-24	18-Sep-24							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6A	6AE	6AE							
Asbestos in Soil (inc. matrix)										
Asbestos in soil$_{D}^{\#}$	NAD	NAD	NAD							A-T-045
Asbestos Matrix (visual)$_{D}$	-	-	-							A-T-045
Asbestos Matrix (microscope)$_{D}$	-	-	-							A-T-045
Asbestos ACM - Suitable for Water Absorption Test?$_{D}$	N/A	N/A	N/A							A-T-045

Envirolab Job Number: 24/09139

Client Project Name: CHL

Client Project Ref: J24-018

Lab Sample ID	24/09139/15	24/09139/16	24/09139/17					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	WS208	WS209	WS209							
Depth to Top	1.20	0.30	2.10							
Depth To Bottom	1.30	0.40	2.30							
Date Sampled	18-Sep-24	18-Sep-24	18-Sep-24							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6A	6AE	6AE							
PAH-16MS (MSD order)										
Naphthalene$_A^{M\#}$	<0.03	<0.03	<0.03					mg/kg	0.03	A-T-019s
Acenaphthylene$_A^{M\#}$	<0.01	0.01	<0.01					mg/kg	0.01	A-T-019s
Acenaphthene$_A^{M\#}$	<0.01	<0.01	0.15					mg/kg	0.01	A-T-019s
Fluorene$_A^{M\#}$	<0.01	<0.01	0.06					mg/kg	0.01	A-T-019s
Phenanthrene$_A^{M\#}$	<0.03	0.08	<0.03					mg/kg	0.03	A-T-019s
Anthracene$_A^{M\#}$	<0.02	<0.02	<0.02					mg/kg	0.02	A-T-019s
Fluoranthene$_A^{M\#}$	<0.08	0.19	<0.08					mg/kg	0.08	A-T-019s
Pyrene$_A^{M\#}$	<0.07	0.17	<0.07					mg/kg	0.07	A-T-019s
Benzo(a)anthracene$_A^{M\#}$	<0.04	0.11	<0.04					mg/kg	0.04	A-T-019s
Chrysene$_A^{M\#}$	<0.06	0.15	<0.06					mg/kg	0.06	A-T-019s
Benzo(b)fluoranthene$_A^{M\#}$	<0.05	0.16	<0.05					mg/kg	0.05	A-T-019s
Benzo(k)fluoranthene$_A^{M\#}$	<0.07	<0.07	<0.07					mg/kg	0.07	A-T-019s
Benzo(a)pyrene$_A^{M\#}$	<0.04	0.12	<0.04					mg/kg	0.04	A-T-019s
Indeno(123-cd)pyrene$_A^{M\#}$	<0.03	0.11	<0.03					mg/kg	0.03	A-T-019s
Dibenzo(ah)anthracene$_A$	<0.04	<0.04	<0.04					mg/kg	0.04	A-T-019s
Benzo(ghi)perylene$_A^{M\#}$	<0.05	0.09	<0.05					mg/kg	0.05	A-T-019s
Total PAH-16MS (MSD order)$_A$	<0.08	1.19	0.21					mg/kg	0.03	A-T-019s

Envirolab Job Number: 24/09139

Client Project Name: CHL

Client Project Ref: J24-018

Lab Sample ID	24/09139/15	24/09139/16	24/09139/17					Units	Limit of Detection	Method ref
Client Sample No										
Client Sample ID	WS208	WS209	WS209							
Depth to Top	1.20	0.30	2.10							
Depth To Bottom	1.30	0.40	2.30							
Date Sampled	18-Sep-24	18-Sep-24	18-Sep-24							
Sample Type	SOIL - ES	SOIL - ES	SOIL - ES							
Sample Matrix Code	6A	6AE	6AE							
TPH CWG with Clean Up										
Ali >C5-C6$_A$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
Ali >C6-C8$_A$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
Ali >C8-C10$_A$	<1	<1	3					mg/kg	1	A-T-055s
Ali >C10-C12$_A^{M\#}$	<1	<1	<1					mg/kg	1	A-T-055s
Ali >C12-C16$_A^{M\#}$	<1	<1	<1					mg/kg	1	A-T-055s
Ali >C16-C21$_A^{M\#}$	<1	<1	3					mg/kg	1	A-T-055s
Ali >C21-C35$_A^{M\#}$	4	13	25					mg/kg	1	A-T-055s
Total Aliphatics$_A$	4	13	31					mg/kg	1	Calc-As Recd
Aro >C5-C7$_A^{\#}$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
Aro >C7-C8$_A^{\#}$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
Aro >C8-C10$_A$	<1	<1	<1					mg/kg	1	A-T-055s
Aro >C10-C12$_A$	<1	<1	3					mg/kg	1	A-T-055s
Aro >C12-C16$_A$	<1	<1	9					mg/kg	1	A-T-055s
Aro >C16-C21$_A^{M\#}$	<1	1	15					mg/kg	1	A-T-055s
Aro >C21-C35$_A^{M\#}$	3	5	21					mg/kg	1	A-T-055s
Total Aromatics$_A$	3	7	49					mg/kg	1	Calc-As Recd
TPH (Ali & Aro >C5-C35)$_A$	7	20	80					mg/kg	1	Calc-As Recd
BTEX - Benzene$_A^{\#}$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
BTEX - Toluene$_A^{\#}$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
BTEX - Ethyl Benzene$_A^{\#}$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
BTEX - m & p Xylene$_A^{\#}$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
BTEX - o Xylene$_A^{\#}$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s
MTBE$_A^{\#}$	<0.01	<0.01	<0.01					mg/kg	0.01	A-T-022s

Report Notes

General

•This report shall not be reproduced, except in full, without written approval from Envirolab.
•The client Sample No, Client Sample ID, Depth to top, Depth to Bottom and Date Sampled are all provided by the client and can affect the validity of results.
•The results reported herein relate only to the material supplied to the laboratory.
•The residue of any samples contained within this report, and any received within the same delivery, will be disposed of **four weeks** after the initial scheduling. For samples tested for Asbestos we will retain a portion of the dried sample for a minimum of **six months** after the initial Asbestos testing is completed.
•Analytical results reflect the quality of the sample at the time of analysis only.
•Opinions and Interpretations expressed are outside our scope of accreditation.
•A deviating sample report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid.
•If a sample is outside of the calibration range or affected by interferences then it may need diluting. This will result in the limit of detection (LOD) being raised.
•Subcontracted Analysis: Please see the appended report for any deviations, current LODs and accreditation status of the test.

Key

Superscript "#"	Accredited to ISO 17025
Superscript "M"	Accredited to MCertS
Superscript "U"	Individual result not accredited
None of the above symbols	Analysis unaccredited
Subscript "A"	Analysis performed on as-received Sample
Subscript "D"	Analysis performed on the dried sample, crushed to pass 2mm sieve.
Subscript "D" on Asbestos	Analysis performed on a dried aliquot of sample provided.
Subscript "^"	Analysis has dependant options against results. Details appear in the comments of your Sample receipt
IS	Insufficient Sample for analysis
US	Unsuitable Sample for analysis
NDP	No Determination Possible
NAD	No Asbestos Detected
Trace	Asbestos found not suitable for Gravimetric Quantification – not enough to accurately weigh.
N/A	Not applicable

Asbestos

Identification: Asbestos in soil analysis is performed on a dried aliquot of the submitted sample and cannot guarantee to identify asbestos if only present in small numbers as discrete fibres/fragments in the original sample.
Stones etc. are not removed from the sample prior to analysis
"Trace Asbestos Identified" will be reported if there is not enough present to verify the type.
Quantification: Generally a 2 stage process including visual identification, hand picking and weighing, and fibre counting. Where ACMs are found a percentage asbestos is assigned to each with reference to 'HSG264, Asbestos: The survey guide' and the calculated asbestos content is expressed as a percentage of the dried soil sample aliquot used. If asbestos is identified as being present but is not in a form that is suitable for analysis by hand picking and weighing (normally if the asbestos is present as free fibres). "TRACE" will be reported as a quantification result.
PLEASE INFORM THE LABORATORY IF YOU WOULD LIKE THE STAGE 3 SEDIMENTATION PROCESS CARRIED OUT. Note this will be subcontracted.

Assigned Matrix Codes

1	SAND	6	CLAY/LOAM	A	Contains Stones
2	LOAM	7	OTHER	B	Contains Construction Rubble
3	CLAY	8	Asbestos Bulk (Only Asbestos ID accredited)	C	Contains visible hydrocarbons
4	LOAM/SAND	9	Incinerator Ash (some Metals accredited)	D	Contains glass / metal
5	SAND/CLAY			E	Contains roots / twigs
Note: 7,8,9 matrices are not covered by our ISO 17025 or MCertS accreditation, unless stated above.					

Soil Chemical Analysis:
All results are reported as dry weight (<40°C).
For samples with Matrix Codes 1 - 6 natural stones, brick and concrete fragments >10mm and any extraneous material (visible glass, metal or twigs) are removed and excluded from the sample prior to analysis and reported results corrected to a whole sample basis. This is reported as '% stones >10mm'.
For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis and this supersedes any "A" subscripts
All analysis is performed on the sample as received for soil samples which are positive for asbestos or the client has informed asbestos may be present and/or if they are from outside the European Union and this supersedes any "D" subscripts.

TPH by method A-T-007:
For waters, free and visible oils are excluded from the sample used for analysis, so the reported result represents the dissolved phase only.
Results "with Clean up" indicates samples cleaned up with Silica during extraction.

EPH CWG (method A-T-055) from TPH CWG:
EPH CWG results have humics mathematically subtracted through instrument calculation.
Where these humic substances have been identified in any IDs from "TPH CWG with clean up" please note that the concentration is **NOT** included in the quantified results but present in the ID for information.

Electrical Conductivity of water by method A-T-037:
Results greater than 12900µS/cm @ 25^0C / 11550µS/cm @ 20^0C fall outside the calibration range and as such are unaccredited.

Please contact your client manager if you require any further information.

Envirolab Deviating Samples Report

Hattersley Science & Technology Park, Stockport Road, Hattersley, SK14 3QU
Tel. 0161 368 4921 email. ask@envlab.co.uk

Client: Ground Condition Consultants Ltd, 10 Waldegrave Close, Southampton, SO19 9RY

Project: CHL

Clients Project No: J24-018

Project No: 24/09139

Date Received: 20/09/2024 (am)

Cool Box Temperatures (°C): 16.1, 16.4

NO DEVIATIONS IDENTIFIED

If, at any point before reaching the laboratory, the temperature of the samples has breached those set in published standards, e.g. BS-EN 5667-3, ISO 18400-102:2017, then the concentration of any affected analytes may differ from that at the time of sampling.

Envirolab Analysis Dates

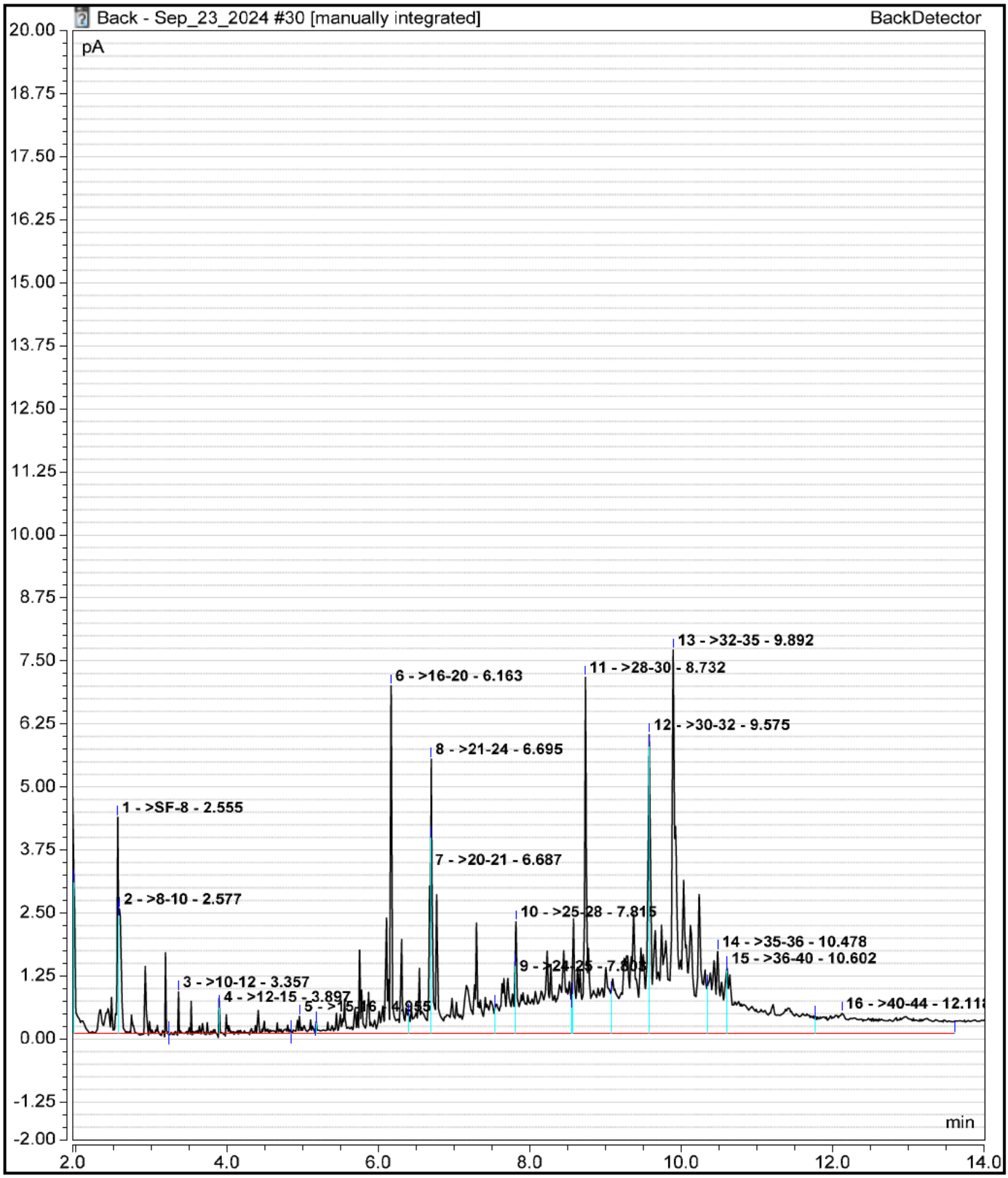
Lab Sample ID	24/09139/1	24/09139/2	24/09139/3	24/09139/4	24/09139/5	24/09139/6	24/09139/7	24/09139/8	24/09139/9	24/09139/10	24/09139/11	24/09139/12
Client Sample No												
Client Sample ID/Depth	WS201 0.20-0.30m	WS201 1.30-1.50m	WS201 3.60-3.70m	WS202 0.40-0.50m	WS203 0.10-0.20m	WS204 0.20-0.40m	WS204 1.30-1.50m	WS205 0.50-0.60m	WS205 1.00-1.10m	WS206 0.30-0.40m	WS206 2.30-2.50m	WS207 0.30-0.40m
Date Sampled	17/09/24	17/09/24	17/09/24	17/09/24	17/09/24	17/09/24	17/09/24	17/09/24	17/09/24	18/09/24	18/09/24	18/09/24
A-T-004s	25/09/2024						25/09/2024					
A-T-007s	25/09/2024						25/09/2024					
A-T-019s	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	26/09/2024	25/09/2024	25/09/2024
A-T-022s	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024
A-T-024s	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024
A-T-025w	26/09/2024						26/09/2024					
A-T-026s	26/09/2024						26/09/2024					
A-T-026w	26/09/2024						26/09/2024					
A-T-026w (F)	26/09/2024						26/09/2024					
A-T-027s	26/09/2024						26/09/2024					
A-T-030s	26/09/2024						26/09/2024					
A-T-031s	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024
A-T-031w	26/09/2024						26/09/2024					
A-T-032s	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024
A-T-032w	26/09/2024						26/09/2024					
A-T-033s	25/09/2024						25/09/2024					
A-T-037w	26/09/2024						26/09/2024					
A-T-040s	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024
A-T-042sFCN	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024
A-T-044	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024
A-T-045	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024
A-T-050s	26/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024
A-T-050w	26/09/2024						26/09/2024					
A-T-055s	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024
A-T-ANCs	26/09/2024						26/09/2024					
Assessment	07/10/2024						07/10/2024					
Calc-As Recd	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024
Calc-no stones	26/09/2024						26/09/2024					
Probe (w)	26/09/2024						26/09/2024					

Lab Sample ID	24/09139/13	24/09139/14	24/09139/15	24/09139/16	24/09139/17
Client Sample No					
Client Sample ID/Depth	WS207 1.60-1.70m	WS208 0.20-0.30m	WS208 1.20-1.30m	WS209 0.30-0.40m	WS209 2.10-2.30m
Date Sampled	18/09/24	18/09/24	18/09/24	18/09/24	18/09/24
A-T-004s					
A-T-007s					
A-T-019s	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024
A-T-022s	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024
A-T-024s	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024
A-T-025w					
A-T-026s					
A-T-026w					
A-T-026w (F)					
A-T-027s					
A-T-030s					
A-T-031s	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024
A-T-031w					
A-T-032s	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024
A-T-032w					
A-T-033s					
A-T-037w					
A-T-040s	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024
A-T-042sFCN	24/09/2024	24/09/2024	24/09/2024	24/09/2024	24/09/2024
A-T-044	26/09/2024	26/09/2024	26/09/2024	26/09/2024	26/09/2024
A-T-045	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024
A-T-050s	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024
A-T-050w					
A-T-055s	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024
A-T-ANCs					
Assessment					
Calc-As Recd	25/09/2024	25/09/2024	25/09/2024	25/09/2024	25/09/2024
Calc-no stones					
Probe (w)					

The above dates are the analysis completion dates, please note that these are not necessarily the date that the analysis was weighed/extracted.

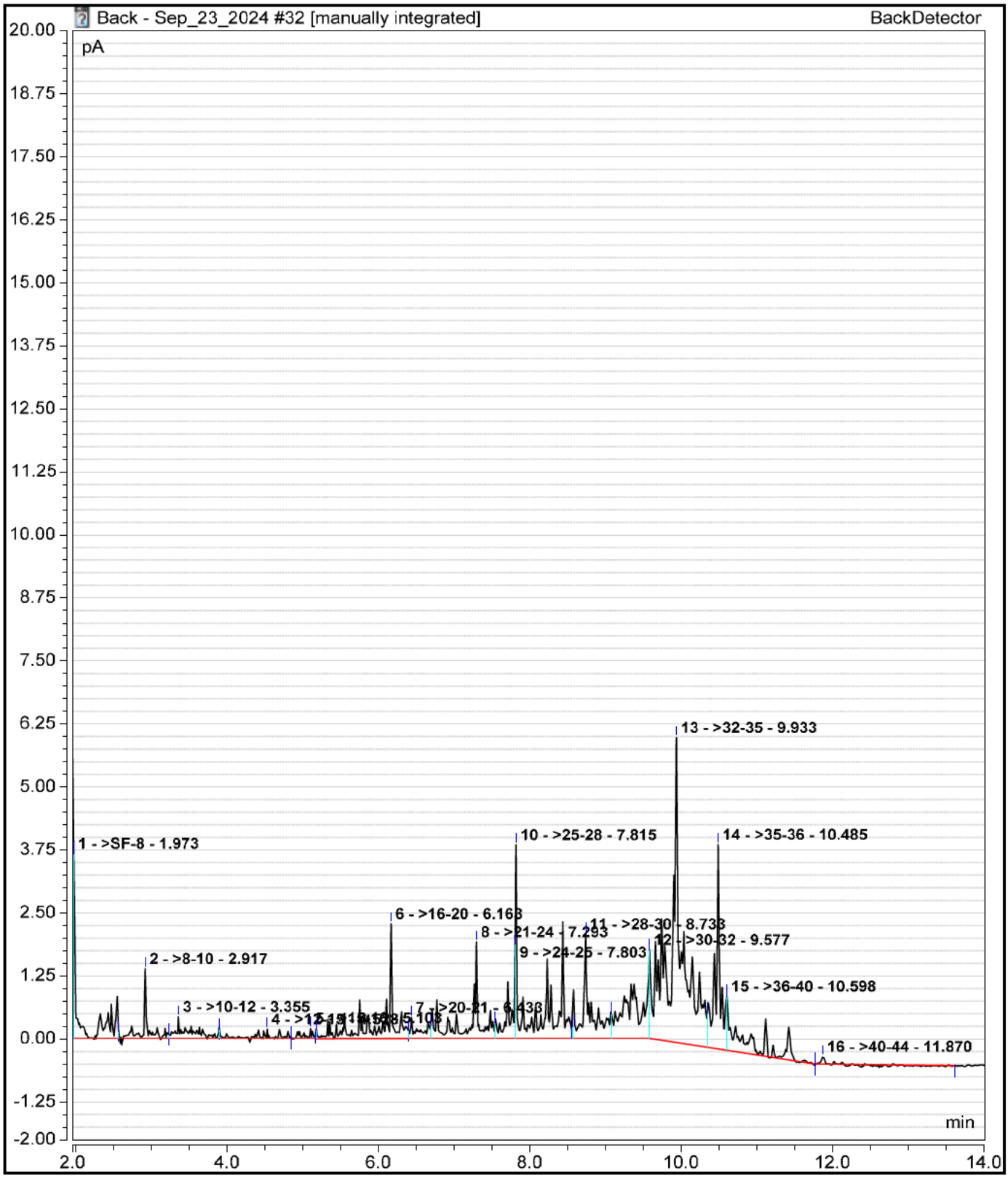
End of Report

Chromatogram



© 2009-2020 Thermo Fisher Scientific Inc. All rights reserved.
Chromeleon 7.2.10.24543

Chromatogram



© 2009-2020 Thermo Fisher Scientific Inc. All rights reserved.
Chromeleon 7.2.10.24543

Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

HAZARDOUS WASTE CLASSIFICATION REPORT

Envirolab Job Number: 24/09139
Issue Number: **Date:07/10/2024**

Client: Ground Condition Consultants Ltd

Project Manager: Antony Platt/David Pethica/Rasmus Palmgren
Project Name: CHL
Project Ref: J24-018
Order No: J24-018
Date Samples Received: 19/09/2024
Date Instructions Received: 20/09/2024

Appended hazardous waste assessment, RSK ref 3020010-R224, pages.1 of 17

Approved by:

[redacted]

Gemma Berrisford
Deputy Client Services Supervisor

WM3 PRELIMINARY WASTE ASSESSMENT AND CLASSIFICATION REPORT

RSK REPORT REFERENCE: 3020010-R224

INTRODUCTION

On behalf of Envirolab, RSK was requested to undertake waste assessment and classification on two (2) soil samples collected by a third party from an unknown site on 17 September 2024.

Information relating to historical operations at the site was not reviewed as part of RSK's assessment. In addition, RSK was not present during the collection of the samples nor had any input on the chemical testing suite. Therefore, the waste assessment and classification detailed in this report are based solely on the laboratory chemical data that were provided to RSK by Envirolab and were completed without prejudice for our client, Envirolab.

CHEMICAL TESTING

Two (2) samples were analysed for a **chemical testing suite** comprising: TPH (C6-C40 total) with oil source ID, TPH CWG with BTEX and MTBE, speciated PAH, heavy metals including hexavalent chromium, pH, organic matter, total phenols, free cyanide, water soluble sulphate, asbestos screen and moisture content.

A copy of the certificate of chemical analysis is provided in **Appendix B**.

WASTE ASSESSMENT AND CLASSIFICATION

The following assessments assume the material tested is classified subsequently as waste. Envirolab, an RSK company, has developed a waste soils characterisation assessment tool (HASWASTE), which follows the guidance within Technical Guidance WM3. The analytical results have been assessed using this tool to determine if the samples contain hazardous properties.

The results of the assessment are summarised below. A copy of the HASWASTE assessment spreadsheet is provided in **Appendix C**.

Sample Reference	Waste classification of sample	Hazardous property code(s)	Hazardous chemical component(s) and concentration(s)
WS201 0.20-0.30m	**Non-hazardous**	Not applicable	Not applicable
WS204 1.30-1.50m	**Non-hazardous**	Not applicable	Not applicable

CONCLUSIONS

Waste assessment and classification were completed by RSK solely on the basis of chemical data provided by Envirolab. Using the data available for assessment the assessed samples may be classified as

non-hazardous waste.

We are not aware of the source of the material that the samples were taken from therefore we cannot definitively assign the appropriate List of Waste (LoW) code (formerly the European Waste Catalogue (EWC)). However, if the samples were taken from material that is CONSTRUCTION AND DEMOLITION WASTE (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES) it may be possible for the waste producer to assign the non-hazardous waste LoW code **17 05 04 soil and stones** to the samples.

RSK REPORT REFERENCE: 3020010-R224
In the absence of specific information on the potential waste volume(s) and the waste stream(s) the tested samples are representative of, it is noted that the chemical testing and assessment undertaken on two (2) samples may not necessarily be representative of the waste stream(s) requiring disposal. Therefore, further testing and assessment may be required to robustly characterise the waste and satisfy the requirements of the waste receiving facility. Furthermore, specific waste receiving sites that are identified as potential disposal routes may have additional analytical requirements (e.g., WAC testing) before they are either able or willing to accept the waste. However, it should be noted that that sample WS204 (1.30-1.50m) reported an elevated moisture content and total organic content, which may indicate the presence of peat which would be considered unsuitable for disposal at inert landfill. Therefore, it is advised that potential disposal sites are contacted at the earliest possible convenience so any further specific requirements to support disposal can be established.

Report author: **Abigail Edwards** Technical reviewer: **Karl Hall**

APPENDIX A
RSK SERVICE CONSTRAINTS

APPENDIX A
SERVICE CONSTRAINTS

1. Service Constraints for all Reports

1.1. This Report (the “Report”) and any study, inspection, investigation, sampling, testing and or interpretation carried out in connection with the Report (together the "Services") were compiled and carried out by RSK Environment Limited (RSK) trading as Carbon Zero Consulting, Leap Environmental or RSK Geosciences, for the Client named in the first paragraph of the Report (the "Client") in accordance with the terms of an RSK Fee Proposal including RSK Environment Standard Terms and Conditions (the “Appointment”) between RSK and the Client, unless otherwise stated in the first paragraph of the Report. The Services were performed by RSK with the reasonable skill and care ordinarily exercised by a geo-environmental consultant at the time the Services were performed. Nothing in this Report shall be construed as imposing any fitness for purpose obligation. Further, and in particular, the Services were performed by RSK taking into account the limits of the scope of works required by the Client, the time scale involved and the resources, including financial and manpower resources, agreed between RSK and the Client.

1.2 Other than that, expressly contained in paragraph 1 above, RSK provides no other representation or warranty whether express or implied, in relation to the Services. RSK shall not be liable in respect of any action or proceedings arising out of or in connection with this Report whether in contract, in tort, for breach of statutory duty or otherwise after the expiry of six (6) years from either (i) the date of the Report or (ii) such earlier date as prescribed by law, unless varied in the terms of the Appointment.

1.3 Unless otherwise agreed in writing, the Services were performed by RSK exclusively for the purposes of the Client. RSK is not aware of any interest of or reliance by any party other than the Client in or on the Services. Unless expressly provided in writing, RSK does not authorise, consent, or condone any party, other than the Client relying upon the Services. Should this Report or any part of this Report, or details of the Services or any part of the Services, be made known to any such party, and such party relies thereon, that party does so wholly at its own and sole risk, and RSK disclaims any liability to such parties. Any such party would be well advised to seek independent advice from a competent geo-environmental consultant and/or lawyer.

1.4 The Client shall not, without the prior written consent of RSK, assign, transfer, charge, mortgage, subcontract, or deal in any other manner with all or any of the benefits provided in this Report. Unless specified in the Appointment, RSK shall not be obliged to assign the benefit of the Report whether by collateral warranty, third party rights pursuant to the Contracts (Rights of Third Parties) Act 1999, letter of reliance or otherwise. If RSK agrees to any assignment of the benefit of this Report, in whatever form, benefits to third parties through collateral warranties, third party rights or letters of reliance shall not be provided unless a fee for each right, warranty or letter is agreed. The form of wording used in the warranty or letter shall be provided by RSK for agreement by the Client. Any reasonable changes to the form of wording will be implemented by mutual agreement, however the terms in the warranty or letter cannot offer the third party any greater benefit than the Appointment offered to the Client.

1.5 It is the understanding of RSK that this Report is to be used for the purpose described in the introduction to the Report. That purpose was a significant factor in determining the scope and level of the Services. Should the purpose for which the Report is used, or the proposed use of the site change, this Report may no longer be valid and any further use of or reliance upon the Report in those circumstances by the Client without the review and advice of RSK shall be at the Client's sole and own risk. RSK shall not be liable for any use of this Report for any purpose other than that for which it was provided.

1.6 The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the Report inaccurate or unreliable. The information and conclusions contained in this Report should not be relied upon in the future without the written advice of RSK. In the absence of such written advice of RSK, reliance on the Report in the future shall be at the Client's own and sole risk.

1.7 The observations and conclusions described in this Report are based solely upon the Services which were provided pursuant to the agreement between the Client and RSK. RSK has not performed any observations, investigations, studies or testing not specifically set out, or required by the Appointment between the Client and RSK. RSK is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the Services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this Report, RSK did not seek to evaluate the presence on or off site of asbestos, invasive plants, electromagnetic fields, lead paint, heavy metals, radon gas, fuel storage, persistent bio-accumulative or toxic chemicals (including PFAS and related compounds) or other radioactive or hazardous materials, unless specifically identified in the Services.

1.8 The Services are based upon RSK's observations of existing physical conditions at the Site gained from a visual inspection of the site together with RSK's interpretation of desk based publicly available information, including documentation, obtained from third parties and from the Client on the history and usage of the site, unless specifically identified in the Services and the limitations below:

a. The Services were based on information and/or analysis provided by independent testing and information services or laboratories upon which RSK was reasonably entitled to rely.

b. The Services were limited by the accuracy of the information, including documentation, reviewed by RSK and the observations possible at the time of the visual inspection.

c. The Services did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the Client or third parties, including laboratories and information services, during the performance of the Services.

d. The Client has identified in writing to RSK, the information, reports, findings, surveys and preliminary works RSK may not rely upon when providing the Services.

RSK is not liable for any inaccurate information or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to RSK, and including the doing of any independent investigation of the information provided to RSK, save as otherwise provided in the terms of the Appointment between the Client and RSK.

1.9 Any site drawing(s) provided in this Report is (are) not meant to be an accurate base plan for scale measurement but is (are) used to present the general relative locations of features on, and surrounding, the site. Features (intrusive and sample locations etc) annotated on site plans are not drawn to scale but are centred over the approximate location. Such features should not be used for accurate setting out and should be considered indicative only.

1.10 Should RSK be requested to review the Report after the date of issue of this Report, RSK shall be entitled to additional payment at the existing rates, or such other terms as agreed between RSK and the Client.

2. Service Constraints where the Report provides an intrusive assessment of ground conditions:

2.1 The intrusive environmental ground investigation aspects of the Services are a limited sampling of soil from the site, at pre-determined locations based on the known historic / operational configuration of the site. The conclusions given in this Report are based on information gathered at the specific test locations and can only be extrapolated to an undefined limited area around those locations. The extent of the limited area depends on the properties of the materials adjacent and local conditions, together

with the position of any current structures and underground utilities and facilities, and natural and other activities on site. In addition, chemical analysis was carried out for a limited number of parameters (as stipulated in the scope agreed between the Client and RSK, based on an understanding of the available operational and historical information) and it should not be inferred that other chemical species (not tested) are not present.

2.2 The comments given in this Report and the opinions expressed are based on the ground conditions encountered during the site work and on the results of tests made in the field and in the laboratory. The extent of the exploratory holes, laboratory testing and monitoring undertaken may have been restricted due to a number of factors including accessibility, the presence of buried or overhead services, current development, site usage, timescales or the Client's specification. The exploratory holes only assess a small proportion of the site area with respect to the site as a whole, and as such may only provide an indicative assessment of ground conditions on site. There may be conditions pertaining to the site that have not been disclosed by the investigation and therefore could not be taken into account. In particular, it should be noted that there may be areas of made ground not detected due to the limited nature of the investigation or the thickness and quality of made ground across the site may be variable. In addition, groundwater levels and ground gas concentrations and flows, may vary from those reported due to seasonal, or other, effects and the limitations stated in the data should be recognised. The presence of hotspots of undisclosed contamination or exceptional and unforeseen ground conditions cannot be discounted.

2.3 Where the Services include Investigation of an exploratory nature or relating to physical ground works, any costings and prices provided in the Report are estimated and provided for guidance purposes only. The actual cost and time quantities shall be remeasured and shall be dependent upon the ground or other conditions, constraints present, and number and depth of the investigation locations, which shall influence the number of samples and tests required, and the quantities of soil being classified.

2.4 Asbestos is often observed to be present in soils in discrete areas. Whilst asbestos-containing materials may have been locally encountered during the fieldworks or supporting laboratory analysis, the history of brownfield and demolition sites indicates that asbestos fibres may be present more widely in soils and aggregates, which could be encountered during more extensive ground works. However, this Report does not constitute an asbestos survey. On this basis, the presence of asbestos on site cannot be discounted and a full asbestos survey should be undertaken.

2.5 Unless stated otherwise, only preliminary geotechnical recommendations are presented in this Report and these should be verified in a Geotechnical Design Report, once proposed construction and structural design proposals are confirmed. Eurocode 7 gives guidance on the type of sampling, sample quality, number and spacing of intrusive investigations, and number of laboratory tests required. It is intended that the Geotechnical Information section of this Report will fulfil the general requirements of the Ground Investigation Report as set out in section 6 of Eurocode7, although this is subject to the restrictions imposed on the investigation, as listed above. For geotechnical design, Eurocode 7 requires the Geotechnical Design Report to address both the geotechnical and structural aspects of the geotechnical design for both the limit and serviceability states. The Geotechnical Appraisal section of this Report will not meet the requirements of a Geotechnical Design Report (GDR) and should therefore be used for preliminary guidance only.

3. Service Constraints where the Report relates to Surface Water Management:

3.1 The Surface Water Management Inspection (SWMI) Report, documents provided, observations, actions, and recommendations, with respect to the management of potential pollution issues to surface waters, made during the site Inspection visit, are those present at the time of the visit, and may not represent those recorded by others on the same day.

3.2 The comments given in this Report and the opinions expressed are based on the weather, ground and ground water conditions encountered during the site work and on the results of tests made in the field and in the laboratory. However, there may be conditions pertaining to the site that have not

been disclosed by the inspection and therefore could not be taken into account. In addition, groundwater levels and flows, may vary from those Reported due to seasonal, or other, effects and the limitations stated in the data should be recognised.

3.3 RSK places a degree of dependence upon oral information provided by site representatives, which is not readily verifiable through visual inspection, or supported by any available written documentation. RSK shall not be held responsible for conditions or consequences arising from relevant facts that were not fully disclosed by facility or site representatives at the time this Report was prepared.

3.4 This Report is a live document, to be continually reviewed and updated as the development progresses or other changes occur on site. RSK can only maintain the currency of this Report through the Client requesting support with supplementary site visits or attendance at meetings ahead of key stages of the development in relation to surface water management. Our risk rating assesses a number of risk factors in line with the source-pathway- receptor model and is therefore subject to constant change.

3.5 Standard design drawings are indicative. Material types, dimensions and construction details will need to be adjusted by the Client to suit the specific conditions / flows on Site.

3.6 The full responsibly for implementing the site-specific protection and maintenance measures to protect the surface water system as stated in this Report, remains with the Client and their site management team. Additional control measures may be required to achieve the objectives set out in the Surface Water Management Plan to be implemented and financed by the Client.

4. Service Constraints where the Report relates to Waste Management:

4.1 In accordance with the definition provided in the Waste Framework Directive (WFD), materials are only considered waste if 'they are discarded, intended to be discarded or required to be discarded, by the holder'. Naturally occurring soils are not considered waste if re-used on the site of origin for the purposes of development. Soils such as made ground that are not of clean and natural origin (irrespective of whether they are contaminated or not) and other materials such as recycled aggregate, do not necessarily become waste until the criteria above are met. Excavation arisings from the development may therefore be classified as waste if surplus to requirements and/or unsuitable for re-use.

4.2 It is the duty of the waste producer, to ensure that all waste is accurately classified prior to waste disposal. Technical Guidance WM3 (EA, 2018) sets out in its Appendix D requirements for waste sampling. It is a legal requirement to correctly assess and classify waste. The level of sampling should be proportionate to the volume of waste and its heterogeneity. Unless otherwise stated, the waste assessment presented in this Report should be considered as preliminary and further testing and assessment of the waste under the provisions of a Waste Sampling Plan may be required to obtain the necessary level of data required for basic characterisation of the waste in support of disposal.

4.3 Unless stated otherwise in the Report, information relating to historical operations at the site was not reviewed as part of the assessment by RSK. In addition, unless otherwise stated in the Services, RSK was not present during the collection of the samples nor had any input on the chemical testing suite. Therefore, the waste assessment and classification detailed in this Report are based solely on any information that were provided to RSK (e.g., laboratory chemical data, exploratory hole records) and were completed without prejudice for our Client.

4.4 RSK's assumes that any ground investigation data, chemical testing results etc., that were provided by the Client to inform the waste assessment and supporting review were carried out in accordance with current best practice and relevant guidance/ standards, where applicable. Thus, the comments given in this Report and the opinions expressed are based solely on the information provided by the Client. However, it is noted that there may be conditions pertaining to the site that have not been disclosed by the investigation and therefore could not be taken into account as part of the RSK assessment.

5. Service Constraints for Construction Environmental Management Plan Reports:

5.1 This Report should be considered in the light of any changes in legislation, statutory requirement or industry practices that may have occurred subsequent to the date of issue.

5.2 The measures and comments outlined in this Report and any opinions expressed are based on the plans provided at the time and discussions with relevant parties. However, there may be conditions pertaining to the site that have not been disclosed by investigations and therefore could not be taken into account.

5.3 This CEMP is a live document and is subject to change throughout the project, as and when necessary, to ensure management of environmental aspects remains relevant, and to ensure continued compliance with legislation and commitments as they may change. RSK understands that this CEMP will be reviewed by the Client every six months and updated as and when necessary.

5.4 It is the full responsibility of the Principal Contractor/ Client to ensure that their works do not contravene legal requirements, and adherence to this CEMP alone cannot be a full defence regarding legal action against the Principal Contractor.

6. Service Constraints where the Report relates to Ground Gas Membrane Verification:

6.1 This Report is limited to the verification of the gas resistant membrane/vapour membrane/ radon barrier after installation and no inspections were undertaken of the substrate (i.e. prepared ground). The Report therefore does not constitute as a full verification of ground gas protection system.

6.2 The comments given in this Report and the opinions expressed, are based on the condition of the ground gas membrane as encountered at the time of inspection by suitably qualified personnel. RSK cannot accept liability for any subsequent change to the status of the gas membrane by follow-on trades or other construction activity.

6.3 Where not designed by RSK, the verification of protection measures is carried out with reference to the gas protection design provided by the Client. RSK assume the scope of gas protection measures as determined by third parties to be correct and to have achieved any required approval from authorities.

6.4 The Ground Gas Design Report/Remediation Strategy and Verification Plan contains details of the procedures to be adopted for inspection and validation of the works. However, it should be noted that responsibility for the correct implementation of the strategy lies with the appointed contractor. RSK cannot be held responsible for any remedial works that are carried out without the agreed procedures involving either direct supervision by RSK, or inspection and validation of the works by a representative from RSK.

7. Service Constraints for Environmental Due Diligence (EDD)Reports:

7.1 The comments given in this Report and the opinions expressed are based on the information obtained and reviewed as part of the desk-based assessment. However, there may be conditions pertaining to the Site that have not been disclosed by the assessment and therefore could not be taken into account. Furthermore, no intrusive investigations, monitoring or sampling have been undertaken to confirm the environmental status of the site, therefore any comments relating to ground conditions and subsurface contamination are based solely on a review of desk-based information.

7.2 This Report describes the results of the EDD exercise. The scope of this EDD Report, where appropriate, covers legal or regulatory compliance with respect to UK or international regulations associated with environmental matters.

7.3 As with any EDD exercise, there is a certain degree of dependence upon information provided by the target company. The EDD does not include a site walkover / visit or liaison with site representatives unless identified in the Services. Therefore, the assessment is based on the available desk study information. Also, there is a certain degree of dependence upon oral information provided

by site representatives, which is not readily verifiable through visual inspection, or supported by any available written documentation. RSK shall not be held responsible for conditions or consequences arising from relevant facts that were not fully disclosed by facility or site representatives at the time this EDD exercise was performed.

7.4 This Report, including all supporting data and notes (collectively referred to hereinafter as "information"), was prepared or collected by RSK for the benefit of its Client.

7.5 The comments given in this Report and the opinions expressed are based on the information obtained and reviewed as part of the desk-based assessment and the site inspection visit. However, there may be conditions pertaining to the Site that have not been disclosed by the assessment and therefore could not be taken into account. Furthermore, no intrusive investigations, monitoring or sampling have been undertaken to confirm the environmental status of the Site therefore any comments relating to ground conditions and subsurface contamination are based solely on a review of desk-based information and observations collected during the site inspection visit.

8. Service Constraints for Ground source heat energy Reports:

8.1 It is understood that this is a desktop survey only and that there are no requirements for a site walkover, service utility survey, or provision of service plans. These services can be provided upon request if required.

8.2 At a later stage, it is possible that a thermal response test (TRT) will need to be completed, for which a test borehole will have to be drilled, and these would be costed at the time. RSK can provide all aspects of subsequent site work for a GSHP system if required.

9. Service Constraints for Water Abstraction Borehole Reports:

9.1 The Report aims principally to only identify and assess the suitability of the site for a water abstraction borehole. This Report should be considered in the light of any changes in legislation, statutory requirements, and industry practices, that have occurred subsequent to the date of the Report.

9.2 Unless stated in the Report, the opinions expressed in this Report including all comments and recommendations provided are on the basis of the information obtained from a desk-based assessment.

APPENDIX B
CERTIFICATES OF CHEMICAL ANALYSIS

Envirolab Job Number: 24/09139
Client:
Client Project Name:
Client Project Ref:

Lab Sample ID				24/09139/1	24/09139/7
Client Sample No					
Client Sample ID				WS201	WS204
Depth to Top				0.20	1.30
Depth to Bottom				0.30	1.50
Date Sampled				17-Sep-24	17-Sep-24
Sample Type				Soil - ES	Soil - ES
Sample Matrix Code	Units	Limit of Detection	Method	6AE	6A
% Moisture at <40C	% w/w	0.1	A-T-044	22.5	74.5
% Stones >10mm	% w/w	0.1	A-T-044	19.6	<0.1
pH	pH	0.01	A-T-031s	7.96	6.71
Ammonium NH4 (exchangeable/water soluble)	mg/kg	0.26	A-T-033s	6.19	14.9
Sulphate (water sol 2:1)	g/l	0.01	A-T-026s	0.02	0.17
Cyanide (free)	mg/kg	1	A-T-042sFCN	<1	<1
Phenols - Total by HPLC	mg/kg	0.2	A-T-050s	<0.2	<0.2
Organic Matter	% w/w	0.1	A-T-032s	9.5	71.7
Total Organic Carbon	% w/w	0.03	A-T-032s	5.52	41.6
Antimony	mg/kg	5	A-T-024s	<5	<5
Arsenic	mg/kg	1	A-T-024s	4	5
Beryllium	mg/kg	0.5	A-T-024s	<0.5	<0.5
Boron (water soluble)	mg/kg	1	A-T-027s	<1.0	3.9
Cadmium	mg/kg	0.5	A-T-024s	<0.5	<0.5
Copper	mg/kg	1	A-T-024s	25	10
Chromium	mg/kg	1	A-T-024s	14	11
Chromium (hexavalent)	mg/kg	1	A-T-040s	<1	<4
Lead	mg/kg	1	A-T-024s	42	8
Mercury	mg/kg	0.17	A-T-024s	<0.17	<0.17
Nickel	mg/kg	1	A-T-024s	18	20
Selenium	mg/kg	1	A-T-024s	2	3
Zinc	mg/kg	5	A-T-024s	93	38
Asbestos in Soil (inc. matrix)					
Asbestos in soil			A-T-045	NAD	NAD
Asbestos ACM - Suitable for Water Absorption Test?			A-T-045	N/A	N/A
PAH-16MS (MSD order)					
Naphthalene	mg/kg	0.03	A-T-019s	<0.03	<0.03
Acenaphthylene	mg/kg	0.01	A-T-019s	0.02	<0.01
Acenaphthene	mg/kg	0.01	A-T-019s	<0.01	<0.01
Fluorene	mg/kg	0.01	A-T-019s	<0.01	<0.01
Phenanthrene	mg/kg	0.03	A-T-019s	0.04	<0.03
Anthracene	mg/kg	0.02	A-T-019s	0.05	<0.02
Fluoranthene	mg/kg	0.08	A-T-019s	0.11	<0.08
Pyrene	mg/kg	0.07	A-T-019s	0.1	<0.07
Benzo(a)anthracene	mg/kg	0.04	A-T-019s	0.06	<0.04
Chrysene	mg/kg	0.06	A-T-019s	0.1	<0.06
Benzo(b)fluoranthene	mg/kg	0.05	A-T-019s	0.12	<0.05
Benzo(k)fluoranthene	mg/kg	0.07	A-T-019s	<0.07	<0.07
Benzo(a)pyrene	mg/kg	0.04	A-T-019s	0.09	<0.04
Indeno(123-cd)pyrene	mg/kg	0.03	A-T-019s	0.09	<0.03
Dibenzo(ah)anthracene	mg/kg	0.04	A-T-019s	<0.04	<0.04
Benzo(ghi)perylene	mg/kg	0.05	A-T-019s	0.08	<0.05
Total PAH-16MS (MSD order)	mg/kg	0.03	A-T-019s	0.86	<0.08
TPH Total with ID + GC Trace					

Envirolab Job Number: 24/09139
Client:
Client Project Name:
Client Project Ref:

Lab Sample ID				24/09139/1	24/09139/7
Client Sample No					
Client Sample ID				WS201	WS204
Depth to Top				0.20	1.30
Depth to Bottom				0.30	1.50
Date Sampled				17-Sep-24	17-Sep-24
Sample Type				Soil - ES	Soil - ES
Sample Matrix Code	**Units**	**Limit of Detection**	**Method**	6AE	6A
TPH total (>C6-C40)	mg/kg	10	A-T-007s	59	118
TPH FID Chromatogram			A-T-007s	Appended C6-44 with PAHs and other unresolved	Appended C6-44 with PAHs and other unresolved
TPH ID Interpretation			A-T-007s	hydrocarbons	hydrocarbons
TPH CWG with Clean Up					
Ali >C5-C6	mg/kg	0.01	A-T-022s	<0.01	<0.01
Ali >C6-C8	mg/kg	0.01	A-T-022s	<0.01	<0.01
Ali >C8-C10	mg/kg	1	A-T-055s	<1	<1
Ali >C10-C12	mg/kg	1	A-T-055s	<1	<1
Ali >C12-C16	mg/kg	1	A-T-055s	<1	<1
Ali >C16-C21	mg/kg	1	A-T-055s	<1	<1
Ali >C21-C35	mg/kg	1	A-T-055s	8	24
Total Aliphatics	mg/kg	1	Calc-As Recd	8	24
Aro >C5-C7	mg/kg	0.01	A-T-022s	<0.01	<0.01
Aro >C7-C8	mg/kg	0.01	A-T-022s	<0.01	<0.01
Aro >C8-C10	mg/kg	1	A-T-055s	<1	<1
Aro >C10-C12	mg/kg	1	A-T-055s	<1	<1
Aro >C12-C16	mg/kg	1	A-T-055s	<1	<1
Aro >C16-C21	mg/kg	1	A-T-055s	3	<1
Aro >C21-C35	mg/kg	1	A-T-055s	6	12
Total Aromatics	mg/kg	1	Calc-As Recd	9	12
TPH (Ali & Aro >C5-C35)	mg/kg	1	Calc-As Recd	18	35
BTEX - Benzene	mg/kg	0.01	A-T-022s	<0.01	<0.01
BTEX - Toluene	mg/kg	0.01	A-T-022s	<0.01	<0.01
BTEX - Ethyl Benzene	mg/kg	0.01	A-T-022s	<0.01	<0.01
BTEX - m & p Xylene	mg/kg	0.01	A-T-022s	<0.01	<0.01
BTEX - o Xylene	mg/kg	0.01	A-T-022s	<0.01	<0.01
MTBE	mg/kg	0.01	A-T-022s	<0.01	<0.01

APPENDIX C
‘HASWASTE’ SPREADSHEET

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

3020010-R224

Ref. 1		WS201	WS204							
Ref. 2		0.20-0.30m	1.30-1.50m							
Date		17-Sep-24	17-Sep-24							
% Moisture	%	22.5	74.5							
pH (soil)		7.96	6.71							
pH (leachate)										
Arsenic	mg/kg	4	5							
Cadmium	mg/kg	0.5	0.5							
Copper	mg/kg	25	10							
CrVI or Chromium	mg/kg	1	1							
Lead	mg/kg	42	8							
Mercury	mg/kg	0.17	0.17							
Nickel	mg/kg	18	20							
Selenium	mg/kg	2	3							
Zinc	mg/kg	93	38							
Barium	mg/kg									
Beryllium	mg/kg	0.5	0.5							
Vanadium	mg/kg									
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg									
Antimony	mg/kg	5	5							
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg	14	11							
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg	1.0	3.9							
PAH (Input Total PAH **OR** individual PAH results)										
Acenaphthene	mg/kg	0.01	0.01							
Acenaphthylene	mg/kg	0.02	0.01							
Anthracene	mg/kg	0.05	0.02							
Benzo(a)anthracene	mg/kg	0.06	0.04							
Benzo(a)pyrene	mg/kg	0.09	0.04							
Benzo(b)fluoranthene	mg/kg	0.12	0.05							
Benzo(ghi)perylene	mg/kg	0.08	0.05							
Benzo(k)fluoranthene	mg/kg	0.07	0.07							
Chrysene	mg/kg	0.10	0.06							
Dibenzo(ah)anthracene	mg/kg	0.04	0.04							
Fluoranthene	mg/kg	0.11	0.08							
Fluorene	mg/kg	0.01	0.01							
Indeno(123cd)pyrene	mg/kg	0.09	0.03							
Naphthalene	mg/kg	0.03	0.03							
Phenanthrene	mg/kg	0.04	0.03							
Pyrene	mg/kg	0.10	0.07							
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg									
TPH										
Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil	mg/kg									
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg	59.0	118.0							
Unknown TPHCWG	mg/kg									
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg									
Free (or Total) Cyanide	mg/kg	1	1							
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									
Phenols Input Total Phenols HPLC **OR** individual Phenol results.										
Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg	0.2	0.2							
BTEX Input Total BTEX **OR** individual BTEX results.										
Benzene	mg/kg	0.01	0.01							
Toluene	mg/kg	0.01	0.01							
Ethylbenzene	mg/kg	0.01	0.01							
Xylenes	mg/kg	0.01	0.01							
Total BTEX	mg/kg									
PCBs (POPs)										
PCBs Total (eg EC7/WHO12)	mg/kg									
PBBs (POPs)										
Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

3020010-R224

Ref. 1		WS201	WS204						
Ref. 2		0.20-0.30m	1.30-1.50m						
Date		17-Sep-24	17-Sep-24						
POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.									
2,3,7,8-TeCDD	mg/kg								
1,2,3,7,8-PeCDD	mg/kg								
1,2,3,4,7,8-HxCDD	mg/kg								
1,2,3,6,7,8-HxCDD	mg/kg								
1,2,3,7,8,9-HxCDD	mg/kg								
1,2,3,4,6,7,8-HpCDD	mg/kg								
OCDD	mg/kg								
2,3,7,8-TeCDF	mg/kg								
1,2,3,7,8-PeCDF	mg/kg								
2,3,4,7,8-PeCDF	mg/kg								
1,2,3,4,7,8-HxCDF	mg/kg								
1,2,3,6,7,8-HxCDF	mg/kg								
2,3,4,6,7,8-HxCDF	mg/kg								
1,2,3,7,8,9-HxCDF	mg/kg								
1,2,3,4,6,7,8-HpCDF	mg/kg								
1,2,3,4,7,8,9-HpCDF	mg/kg								
OCDF	mg/kg								
Total Dioxins and Furans	mg/kg								
Some Pesticides (POPs unless otherwise stated)									
Aldrin	mg/kg								
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg								
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg								
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg								
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg								
Dieldrin	mg/kg								
Endrin	mg/kg								
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg								
Heptachlor	mg/kg								
Hexachlorobenzene	mg/kg								
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg								
p,p'-DDT ***OR*** *Total DDT*	mg/kg								
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg								
Chlordecone (kepone)	mg/kg								
Pentachlorobenzene	mg/kg								
Mirex	mg/kg								
Toxaphene (camphechlor)	mg/kg								
Tin									
Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg								
Organotin									
Dibutyltin; DiBT	mg/kg								
Tributyltin; TriBT	mg/kg								
Triphenyltin; TriPT	mg/kg								
Tetrabutyltin; TeBT	mg/kg								
Tin excluding Organotin									
Tin excl Organotin	mg/kg								

envirolab

Haswaste, developed by Dr. Iain Haslock.

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

3020010-R224

Ref. 1	WS201	WS204							
Ref. 2	0.20-0.30m	1.30-1.50m							
Date	17-Sep-24	17-Sep-24							
Asbestos in Soil	Thresholds								
Asbestos detected in Soil (enter Y or N)	Y	N	N						
		If Asbestos in Soil above is "Y", the soil is Hazardous Waste HP5 and HP7							
Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below	%							
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		If Asbestos in Soil above is "Y", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.							
Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y	N	N						

If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05.
Therefore, if Asbestos in Soil above is "Y", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.
All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property	Thresholds	Cut Off Value	If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.								
Corrosive HP8	≥5%	<1%	0.00057	0.00022	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥10%	<1%	0.00261	0.00046	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥20%	<1%	0.00522	0.00139	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00015	0.00005	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00018	0.00006	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00282	0.00103	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥10%		0.00457	0.00301	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Aspiration Toxicity HP5	≥10%		0.00458	0.00301	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.1%	<0.1%	0.00015	0.00005	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00042	0.00017	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥5%	<0.1%	0.00056	0.00022	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥25%	<1%	0.00880	0.00170	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.25%	<0.1%	0.00016	0.00005	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥2.5%	<0.1%	0.00015	0.00005	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥15%	<0.1%	0.00002	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥55%	<1%	0.00050	0.00017	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.1%	<0.1%	0.00015	0.00005	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥0.5%	<0.1%	0.00038	0.00012	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥3.5%	<0.1%	0.00023	0.00011	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6	≥22.5%	<1%	0.00826	0.00152	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.00326	0.00103	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00047	0.00015	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		45.73	30.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		0.11822	0.00864	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		7.96	6.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		7.96	6.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Toxic for Reproduction HP10	≥0.3%		0.00326	0.00103	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Toxic for Reproduction HP10	≥3%		0.00457	0.00301	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11	≥0.1%		0.00015	0.00005	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		45.73	30.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		0.11822	0.00864	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00282	0.00103	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.00282	0.00103	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.01833	0.00314	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

envirolab

Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

3020010-R224

Ref. 1			WS201	WS204					
Ref. 2			0.20-0.30m	1.30-1.50m					
Date			17-Sep-24	17-Sep-24					
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	0.02308	0.00621	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% (except Be, V, Te, Tl, Petrol, Diesel, Crude Oil, Kerosene, White Spirit, Crosote, TPH, TPHCWG, Phenol, Cresols, Xylenols, T-Phenols, CompCN, Thiocyanate, Toluene, Ethylbenzene, Xylene + BTEX 1%).	1.87928	0.34463	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

envirolab
Hattersley Science & Technology Park
Stockport Road, Hattersley, SK14 3QU

Final Test Report

Envirolab Job Number:	24/09139
Issue Number:	1
Date:	14-Oct-24

Client: Ground Condition Consultants Ltd
10 Waldegrave Close
Southampton
SO19 9RY

Project Manager:	Antony Platt/David Pethica/Rasmus Palmgren
Project Name:	CHL
Project Ref:	J24-018
Order No:	J24-018
Date Samples Received:	19-Sep-24
Date Instructions Received:	20-Sep-24
Date Analysis Completed:	7-Oct-24

Notes - Soil analysis

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Notes - General

This report shall not be reproduced, except in full, without written approval from Envirolab.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid

Predominant Matrix Codes: 1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

Secondary Matrix Codes: A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

HWOL TPH Code: EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:



Gemma Berrisford
Deputy Client Services Supervisor

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	24/09139/1				
Client Sample Number						Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				WS201				
Depth to Top				0.2				
Depth to Bottom				0.30				
Date Sampled				17/09/2024				
Sample Type				Soil - ES				
Sample Matrix Code				6AE				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**7.96**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**3.15**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.12**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**12.2**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**5.52**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**0.92**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH\_CU\_1D\_AL}$	A-T-007	N	N	**24**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1** mg/l	**10:1** mg/kg	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic	A-T-025	N	N	<0.001	**<0.01**	0.5	2	25
Barium	A-T-025	N	N	0.018	**0.180**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	<0.001	**<0.01**	0.5	10	70
Copper	A-T-025	N	N	0.008	**0.080**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.001	**0.010**	0.5	10	30
Nickel	A-T-025	N	N	0.005	**0.050**	0.4	10	40
Lead	A-T-025	N	N	0.003	**0.030**	0.5	10	50
Antimony	A-T-025	N	N	<0.001	**<0.01**	0.06	0.7	5
Selenium	A-T-025	N	N	0.001	**0.010**	0.1	0.5	7
Zinc	A-T-025	N	N	0.022	**0.220**	4	50	200
Chloride	A-T-026	N	N	1	**10**	800	15000	25000
Fluoride	A-T-026	N	N	0.2	**2.0**	10	150	500
Sulphate as SO_4	A-T-026	N	N	2	**21**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	76	**760**	4000	60000	100000
Phenol Index	A-T-050	N	N	<0.01	**<0.1**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	8.0				
Conductivity (µS/cm)	A-T-037	N	N	153				
Mass Sample (kg)				0.226				
Dry Matter (%)	A-T-044	N	N	77.5				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Sample Details						Landfill Waste Acceptance Criteria Limits		
Lab Sample ID	Method	ISO17025	MCERTS	24/09139/7				
Client Sample Number						Inert Waste Landfill	Stable Non-reactive Hazardous Waste in Non-Hazardous Landfill	Hazardous Waste Landfill
Client Sample ID				WS204				
Depth to Top				1.3				
Depth to Bottom				1.50				
Date Sampled				17/09/2024				
Sample Type				Soil - ES				
Sample Matrix Code				6A				
Solid Waste Analysis								
pH (pH Units)$_D$	A-T-031	N	N	**6.71**		-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC	N	N	**0.24**		-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC	N	N	**0.04**		-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030	N	N	**79.1**		-	-	10
Total Organic Carbon (%)$_D$	A-T-032	N	N	**41.6**		3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019	N	N	**<0.08**		100	-	-
Mineral Oil (mg/kg)$_{A\ EH\_CU\_1D\_AL}$	A-T-007	N	N	**43**		500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004	N	N	**<0.007**		1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022	N	N	**<0.01**		6	-	-
Eluate Analysis				**10:1 mg/l**	**10:1 mg/kg**	Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic	A-T-025	N	N	0.001	**0.010**	0.5	2	25
Barium	A-T-025	N	N	0.002	**0.020**	20	100	300
Cadmium	A-T-025	N	N	<0.001	**<0.01**	0.04	1	5
Chromium	A-T-025	N	N	<0.001	**<0.01**	0.5	10	70
Copper	A-T-025	N	N	<0.004	**<0.04**	2	50	100
Mercury	A-T-025	N	N	<0.0005	**<0.005**	0.01	0.2	2
Molybdenum	A-T-025	N	N	0.002	**0.020**	0.5	10	30
Nickel	A-T-025	N	N	<0.002	**<0.02**	0.4	10	40
Lead	A-T-025	N	N	<0.001	**<0.01**	0.5	10	50
Antimony	A-T-025	N	N	<0.001	**<0.01**	0.06	0.7	5
Selenium	A-T-025	N	N	<0.001	**<0.01**	0.1	0.5	7
Zinc	A-T-025	N	N	0.030	**0.300**	4	50	200
Chloride	A-T-026	N	N	2	**19**	800	15000	25000
Fluoride	A-T-026	N	N	<0.10	**<1**	10	150	500
Sulphate as SO_4	A-T-026	N	N	10	**103**	1000	20000	50000
Total Dissolved Solids	A-T-035	N	N	25	**250**	4000	60000	100000
Phenol Index	A-T-050	N	N	0.03	**0.30**	1	-	-
Dissolved Organic Carbon	A-T-032	N	N	<2.0	**<200**	500	800	1000
Leach Test Information								
pH (pH Units)	A-T-031	N	N	7.7				
Conductivity (µS/cm)	A-T-037	N	N	51				
Mass Sample (kg)				0.685				
Dry Matter (%)	A-T-044	N	N	25.5				

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

APPENDIX 7: DISCOVERY STRATEGY

Attn: Ground Works Contractors

Chickenhall Lane – Discovery Strategy

Background

This document presents a brief summary of the actions to be taken if suspected contamination of the soil or groundwater is encountered during the development of the site and follows on from the GCC Ground Condition Assessment dated September 2024. To date, asbestos and PAH have been identified in the near surface soils

Evidence of contamination

Evidence of contamination may be in the following forms, although other indicators may be observed.

- Dark staining of the soil
- Ash in soil
- Oily sheen on soil or water
- Tanks and pipework
- Smell of oil/diesel/petrol
- Asbestos containing material fragments
- Large deposits of made ground (e.g. waste deposits)

Actions following identification of evidence of contamination

Contractors encountering evidence of contamination are to report the discovery to the site office/site manager.

- Further development of the potentially contaminated area should cease and Site Manager should contact GCC (ask@groundcc.com) to attend site and assess the implications of the discovered impact.
- GCC will in turn inform the Local Authority and/or the Environment Agency as appropriate.
- Potentially contaminated material is to be left in situ where possible, or stockpiled in bunded areas where it is not possible to leave in situ, until an assessment is complete and appropriate action is agreed with the relevant regulator.
- Potentially contaminated material to be disposed of off site may require further chemical testing.

APPENDIX 8: GROUNDWATER LEVEL MONITORING DATA

Site: Eastleigh
Job No: J24-018

Date:	27/03/2024	09/04/2024	22/04/2024	18/09/2024	28/10/2024	27/11/2024					Shallowest	Deepest
Borehole ID	Standing Water Level (mbgl)	Standing Water Level (mbgl)	Standing Water Level (mbgl)	Standing Water Level (mbgl)	Standing Water Level (mbgl)	Standing Water Level (mbgl)	Standing Water Level (mbgl)	Standing Water Level (mbgl)	Standing Water Level (mbgl)	Standing Water Level (mbgl)	Standing Water Level (mbgl)	Standing Water Level (mbgl)
MW101	1.22	1.16	1.39	1.58	1.28	0.56					0.56	1.58
MW102	0.97	0.98	1.05	1.28	1.13	0.77					0.77	1.28
MW103	0.60	0.65	0.81								0.60	0.81
MW104	0.58	0.66	0.88	1.04	0.86	0.31					0.31	1.04
WS103				1.06	0.83	0.30					0.30	1.06
											0.00	0.00
											0.00	0.00
											0.00	0.00
											0.00	0.00
											0.00	0.00
											0.00	0.00

