

Envirocheck®

LANDMARK INFORMATION GROUP*

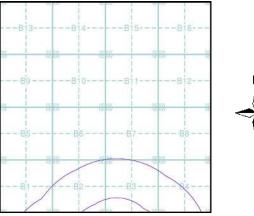
Agency and Hydrological (Boreholes)

BGS Borehole Depth 10 - 30m

For Borehole information please refer to the Borehole .csv file which

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice B



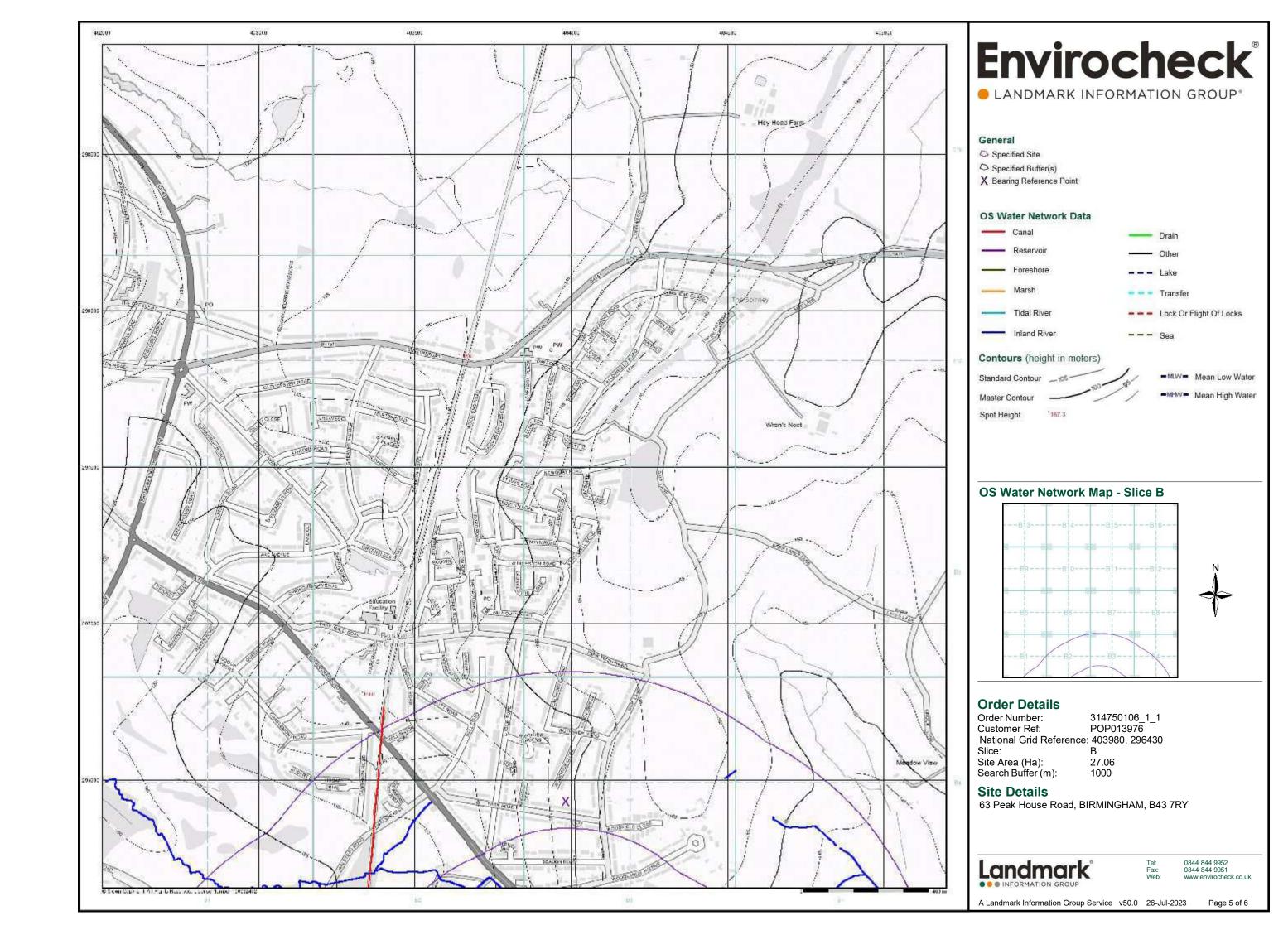
Order Number: 314750106_1_1
Customer Ref: POP013976
National Grid Reference: 403980, 296430

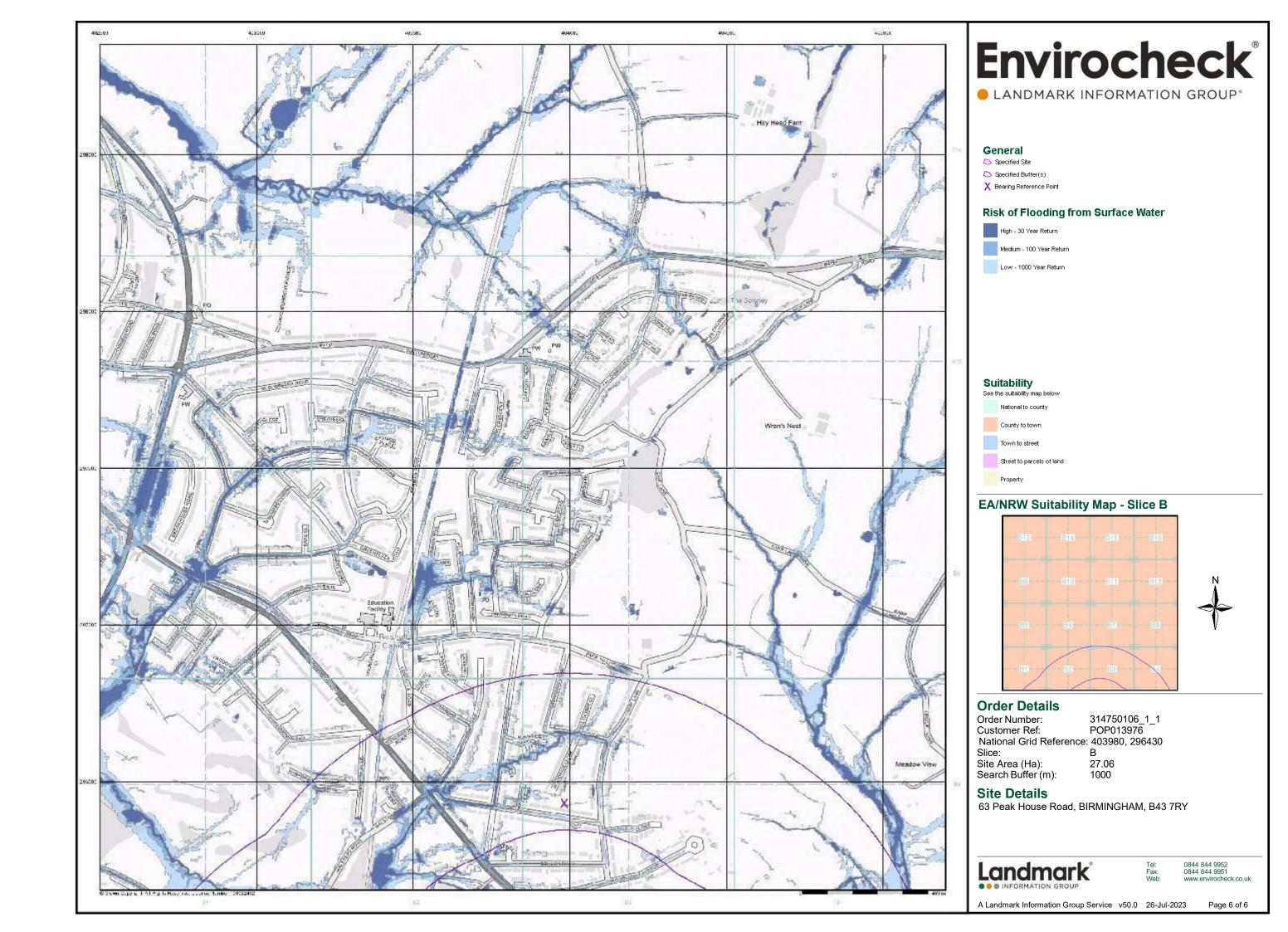
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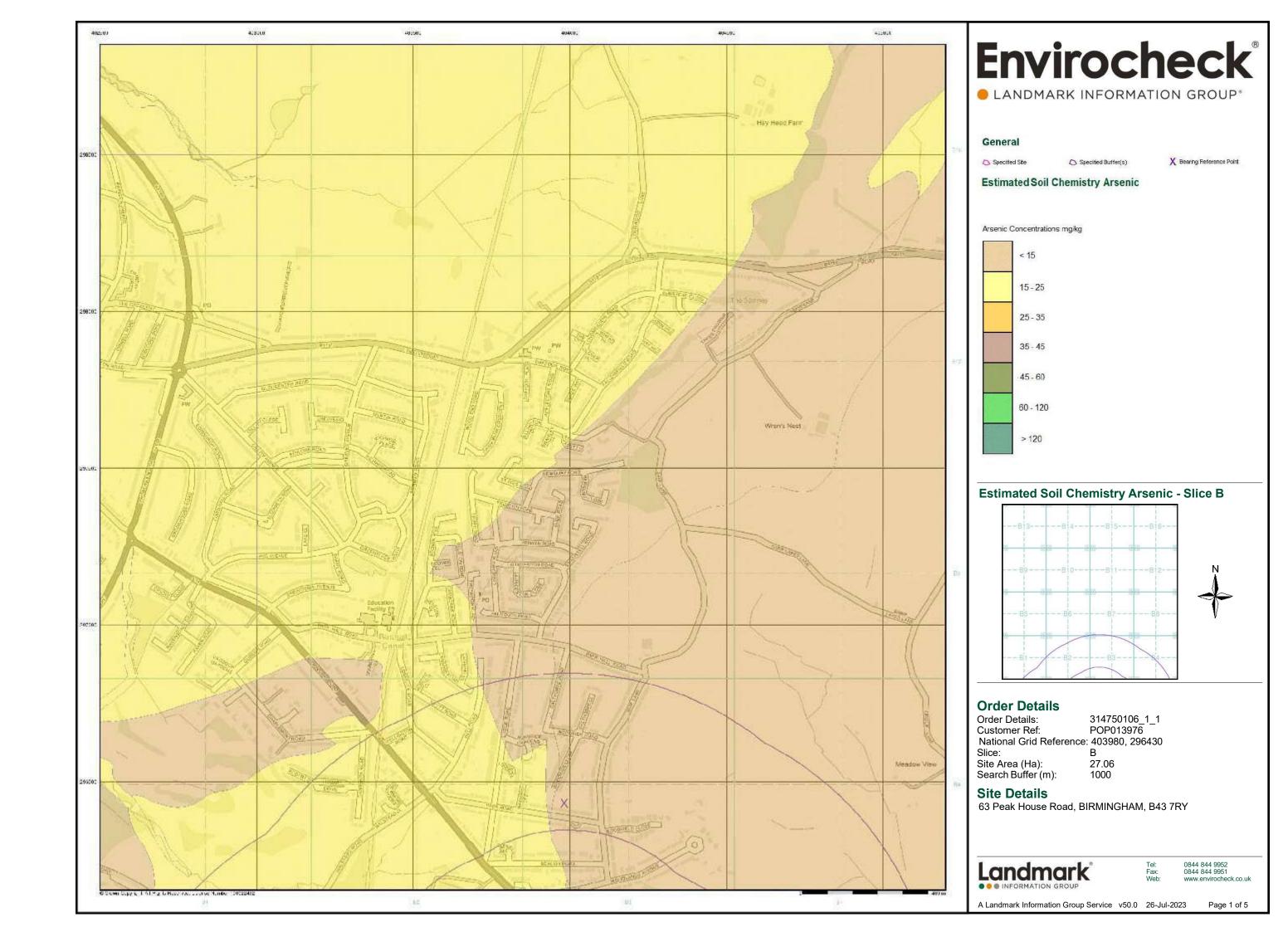
63 Peak House Road, BIRMINGHAM, B43 7RY

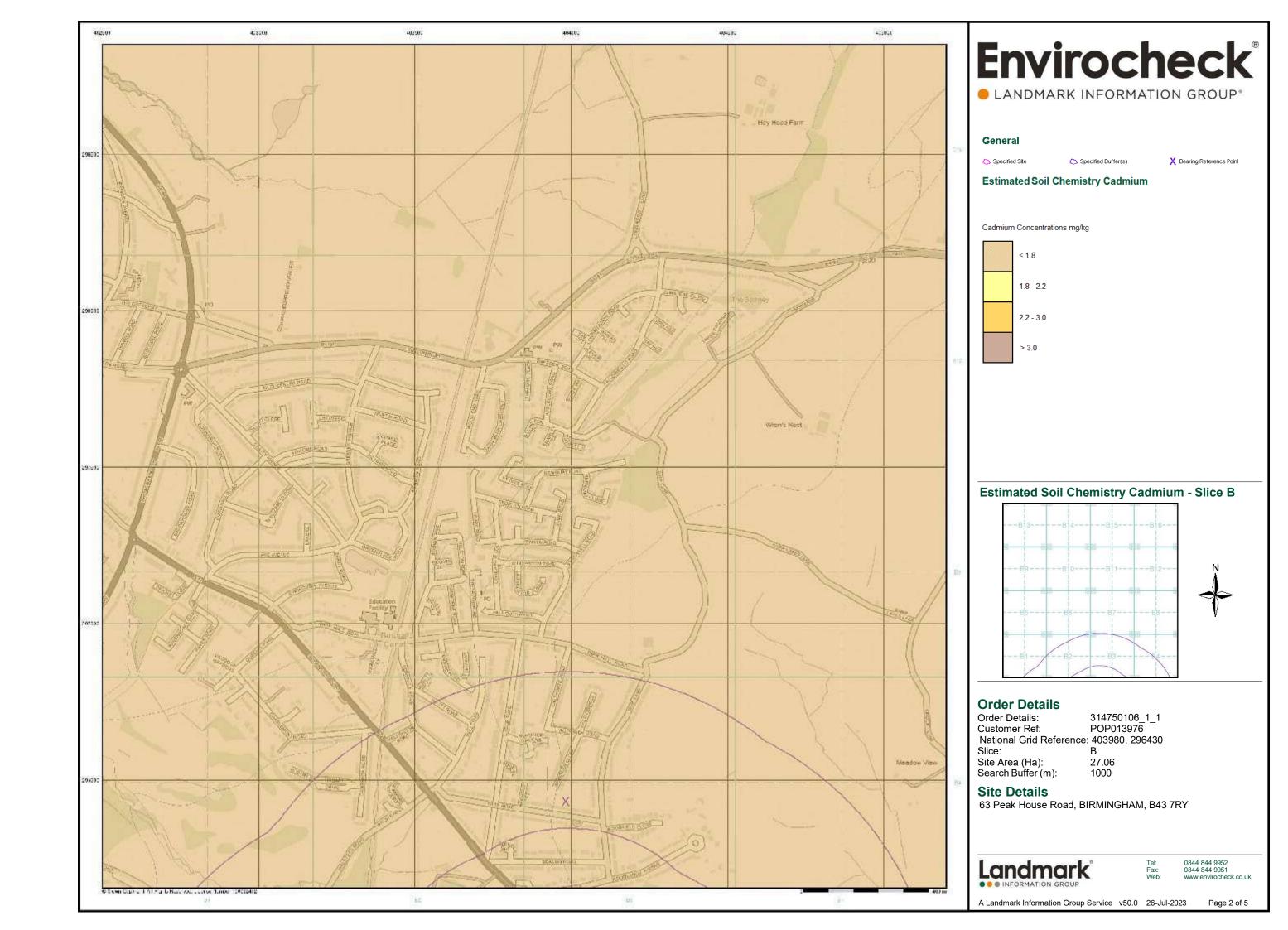
Landmark

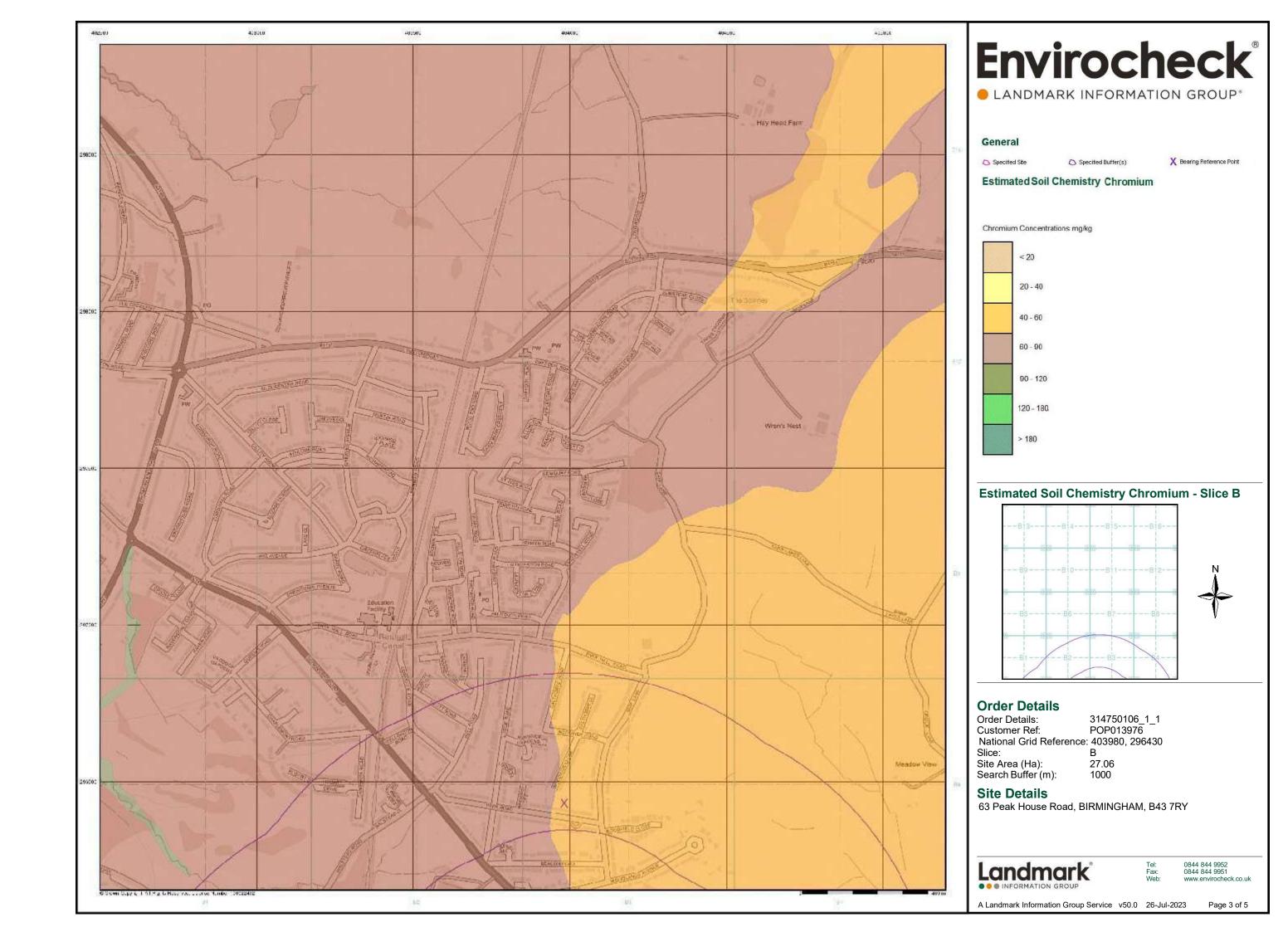
A Landmark Information Group Service v50.0 26-Jul-2023

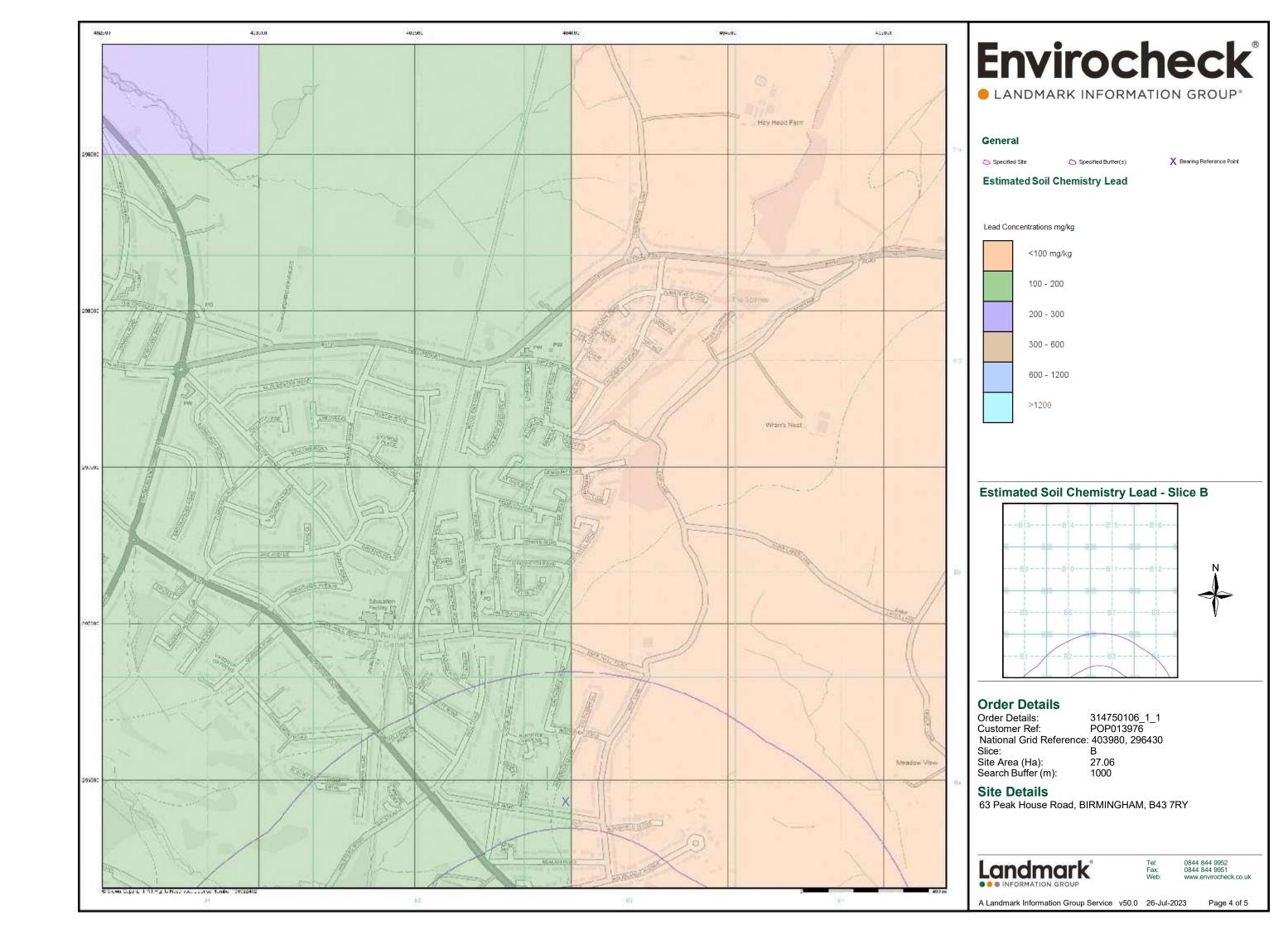


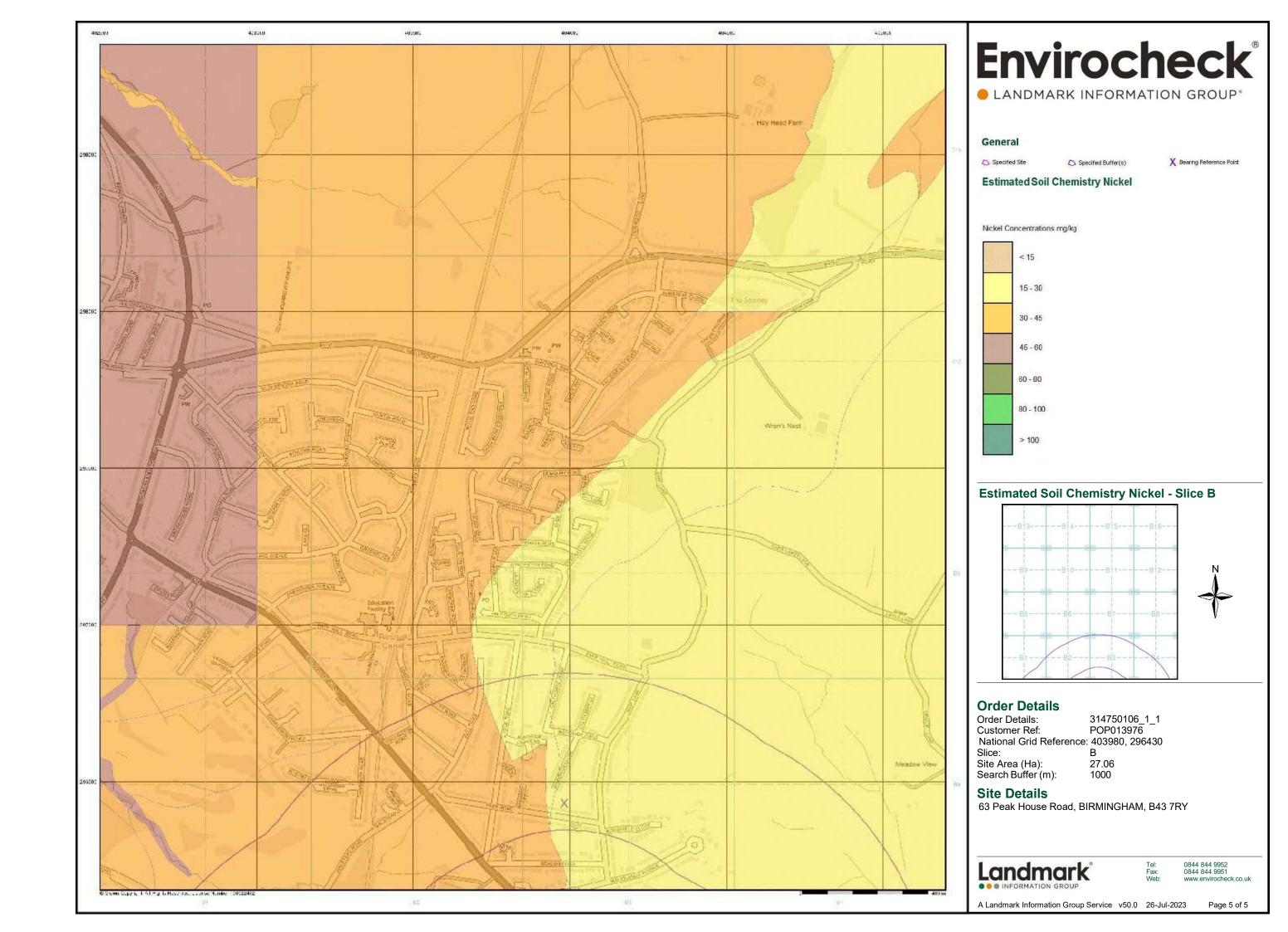














APPENDIX D

Mining & Ground Stability Report



Envirocheck® Report:

Mining and Ground Stability Datasheet

Order Details:

Order Number:

314750106_1_1

Customer Reference:

POP013976

National Grid Reference:

403860, 295250

Slice:

Λ

Site Area (Ha):

27.06

Search Buffer (m):

1000

Site Details:

63 Peak House Road BIRMINGHAM B43 7RY

Client Details:

Mr N Birchenough Card Geotechnics 4 Oak Spinney Park Leicester LE3 3AW







Roport Coolion and Botano	r ago mambo.
Summary	-
The Summary section provides an overview of the data contained within the report, detailing the or the existence of a data set in relation to the buffer selected. For ease of reference, the report is broken down into 4 sections of data; Mining and Natural Cav Use Information (1:2,500), Historical Land Use Information (1:10,000) and Ground Stability Data	ities Data, Historical Land
Mining and Natural Cavities Data	1
The Mining and Natural Cavities Data section features data sets related to the existence of minir hazards; and details of naturally formed cavities. Data sets within this section are not plotted, with the exception of BGS Recorded Mineral Sites a which feature on the Historical Land Use Information (1:10.000) map.	,

Report Section and Details

Historical Land Use Information (1:2,500)

2

Page Number

The Historical Land Use Information (1:2,500) section contains data captured from analysis carried out by Landmark of 1:1,250 and 1:2,500 scale historical Ordnance Survey mapping, identifying areas where, historically, the land uses were potentially contaminative.

For the purpose of this Envirocheck module, only historical data relating to mining and ground stability has been included and plotted on the corresponding Historical Land Use Information (1:2,500) map. This section also includes the Subterranean Features data set, which details various man-made and man-used underground spaces obtained from the Subterranea Britannica society.

Historical Land Use Information (1:10,000)

3

The Historical Land Use (1:10,000) section covers data captured from the systematic analysis carried out by Landmark of 1:10, 560 and 1:10,000 scale historical Ordnance Survey mapping dating back to the mid-19th century, identifying potentially contaminative past industrial land uses.

For the purpose of this Envirocheck module, only data relating to mining and ground stability has been included and plotted on the accompanying Historical Land Use Information (1:10,000) map.

Ground Stability Data (1:50,000)

4

The Ground Stability (1:50,000) section includes the BGS Geosure data suite, reporting features to 250m and plotted onto 3 separate maps. Also reported is brine subsidence, brine mining and salt mining data sets, of which Brine Pumping and Salt Mining Related Features are plotted, and subsidence insurance claims and insurance investigations data, which is not plotted.

Historical Map List	6

The Historical Map List section details the historical mapping that has been analysed for your site, in relation to the Historical Land Use Information sections.

Data Currency	8
Data Suppliers	9
Useful Contacts	10

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The brine subsidence data relating to the Driotwich area as provided in this report is derived from JPB studies and physical monitoring undertaken annually over more than 35 years. For more detailed interpretation contact enquiries@jpb.co.uk. JPB retain the copyright and intellectual rights to this data and accept no liability for any loss or damage, including in direct or consequential loss, arising from the use of this data.

The Mining Instability data was obtained on licence from Ove Arup & Partners Limited (for further information, contact mining.review@arup.com). No reproduction or further use of such Data is to be made without the prior written consent of Ove Arup & Partners Limited. The supplied Mining Instability data is derived from publicly available records and other third party sources and neither Ove Arup & Partners nor Landmark warrant the accuracy or completeness of such information or data.

Report Version v53.0





Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m
Mining and Natural Cavities Data					
BGS Recorded Mineral Sites	pg 1				3
Coal Mining Affected Areas	pg 1	Yes	n/a	n/a	n/a
Man Made Mining Cavities					
Mining Instability			n/a	n/a	n/a
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 1	Yes	Yes	n/a	n/a
Potential Mining Areas	pg 1		1		
Historical Land Use Information (1:2,500)					
Extractive Industries or Potential Excavations from 1855-1909 (100m)	pg 2		1	n/a	n/a
Extractive Industries or Potential Excavations from 1893-1915 (100m)	pg 2		2	n/a	n/a
Extractive Industries or Potential Excavations from 1906-1937 (100m)	pg 2		1	n/a	n/a
Extractive Industries or Potential Excavations from 1924-1949 (100m)	pg 2		1	n/a	n/a
Extractive Industries or Potential Excavations from 1950-1980 (100m)	pg 2	2	3	n/a	n/a
Subterranean Features (100m)				n/a	n/a
Historical Land Use Information (1:10,000)					
Air Shafts					
Disturbed Ground					
General Quarrying					
Heap, unknown constituents					
Mineral Railway					
Mining & quarrying general					
Mining of coal & lignite					
Quarrying of sand & clay, operation of sand & gravel pits	pg 3				3
Former Marshes					
Potentially Infilled Land (Non-Water)	pg 3			1	3
Potentially Infilled Land (Water)	pg 3			2	1
Ground Stability Data (1:50,000)					
CBSCB Compensation District			n/a	n/a	n/a
Brine Pumping Related Features					
Brine Subsidence Solution Area					
Potential for Collapsible Ground Stability Hazards	pg 4	Yes	Yes	n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 4	Yes	Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards	pg 4	Yes	Yes	n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 4	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 4	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 4	Yes	Yes	n/a	n/a
Salt Mining Related Features					





Report Version v53.0

Order Number: 314750106_1_1 Date: 26-Jul-2023 rpr_ec_datasheet v53.0 A Landmark Information Group Service



Mining and Natural Cavities Data

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Recorded Min	eral Sites				
1	Periodic Type: Geology: Commodity:	Great Barr Great Barr, West Bromwich, West Midlands British Geological Survey, National Geoscience Information Service 39028 Opencast Ceased Unknown Operator Not Supplied Triassic Chester Formation (Kidderminster Formation) Sand and Gravel Located by supplier to within 10m	A11SE (SE)	548	1	404511 294919
	BGS Recorded Min	eral Sites				
2	Periodic Type: Geology: Commodity:	Great Barr Great Barr, West Bromwich, West Midlands British Geological Survey, National Geoscience Information Service 39027 Opencast Ceased Unknown Operator Not Supplied Triassic Chester Formation (Kidderminster Formation) Sand and Gravel Located by supplier to within 10m	A12SW (E)	551	1	404578 294986
	BGS Recorded Min	eral Sites				
3	Periodic Type: Geology: Commodity:	Shustoke Bridge Brick Works The Delves, Walsall, Walsall, West Midlands British Geological Survey, National Geoscience Information Service 65748 Opencast Ceased Unknown Operator Not Supplied Silurian Coalbrookdale Formation Common Clay and Shale Located by supplier to within 10m	A14NW (NW)	555	1	403250 295944
	Coal Mining Affects	ed Areas				
	Description:	In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A11NW (NE)	0	2	403864 295251
	Non Coal Mining A	reas of Great Britain				
	Risk: Source:	Highly Unlikely British Geological Survey, National Geoscience Information Service	A10NE (NW)	0	1	403737 295350
	Non Coal Mining A	reas of Great Britain				
	Risk: Source:	Rare British Geological Survey, National Geoscience Information Service	A15NW (N)	9	1	403990 295853
	Potential Mining Ar					
4	Name: Ceased Operation: Commodity: Reference: Alternate Name/Mine: Custodian:	Bilston Mill 1896 Coal; Thick; Heathen 3559 Not Supplied Not Supplied	A15NW (N)	122	4	403856 295965

Page 1 of 10



Historical Land Use Information (1:2,500)

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	Extractive Industries or Potential Excavations from 1855-1909 Use: Unspecified Pit First Map Published 1886 Date: Last Map Published Not Applicable Date:	A11SW (SE)	79	-	404022 295116
6	Extractive Industries or Potential Excavations from 1893-1915 Use: Unspecified Pits First Map Published 1903 Date: Last Map Published Not Applicable Date:	A11SW (SE)	80	-	404022 295115
7	Extractive Industries or Potential Excavations from 1893-1915 Use: W First Map Published 1903 Date: Last Map Published Not Applicable Date:	A15NW (NE)	93	-	404119 295862
8	Extractive Industries or Potential Excavations from 1906-1937 Use: Unspecified Pits First Map Published 1918 Date: Last Map Published Not Applicable Date:	A11SW (SE)	81	-	404024 295116
9	Extractive Industries or Potential Excavations from 1924-1949 Use: Unspecified Pits First Map Published 1937 Date: Last Map Published Not Applicable Date:	A11SW (SE)	82	-	404024 295115
10	Extractive Industries or Potential Excavations from 1950-1980 Use: Pond First Map Published 1960 Date: Last Map Published N/A Date:	A11NW (NE)	0	-	404040 295355
11	Extractive Industries or Potential Excavations from 1950-1980 Use: Pond First Map Published 1960 Date: Last Map Published N/A Date:	A15SW (NE)	0	-	404095 295703
12	Extractive Industries or Potential Excavations from 1950-1980 Use: Pond First Map Published 1960 Date: Last Map Published N/A Date:	A15NW (N)	2	-	403966 295822
13	Extractive Industries or Potential Excavations from 1950-1980 Use: Unspecified Pit First Map Published 1960 Date: Last Map Published N/A Date:	A15SW (N)	4	-	403852 295753
14	Extractive Industries or Potential Excavations from 1950-1980 Use: Pond First Map Published 1960 Date: Last Map Published N/A Date:	A15NW (N)	62	-	403994 295907



Historical Land Use Information (1:10,000)

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Quarrying of sand	& clay, operation of sand & gravel pits				
15	Use: Date of Mapping:	Not Supplied 1890	A11SE (SE)	551	-	404523 294926
	Quarrying of sand	& clay, operation of sand & gravel pits				
16	Use: Date of Mapping:	Not Supplied 1904 - 1955	A12SW (E)	558	-	404597 295000
	Quarrying of sand	& clay, operation of sand & gravel pits				
17	Use: Date of Mapping:	Not Supplied 1955	A11SE (SE)	559	-	404507 294884
	Potentially Infilled	Land (Non-Water)				
18	Use: Date of Mapping:	Unknown Filled Ground (Pit, quarry etc) 1992	A14NW (NW)	495	-	403309 295908
	Potentially Infilled	Land (Non-Water)				
19	Use: Date of Mapping:	Unknown Filled Ground (Pit, quarry etc) 1980	A11SE (SE)	551	-	404523 294926
	Potentially Infilled	Land (Non-Water)				
20	Use: Date of Mapping:	Unknown Filled Ground (Pit, quarry etc) 1992	A12SW (E)	558	-	404597 295000
	Potentially Infilled	Land (Non-Water)				
21	Use: Date of Mapping:	Unknown Filled Ground (Pit, quarry etc) 1980	A11SE (SE)	559	-	404507 294884
	Potentially Infilled	Land (Water)				
22	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1938	A15NW (N)	300	-	404163 296092
	Potentially Infilled	Land (Water)				
23	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1955	A15NE (NE)	300	-	404204 296057
	Potentially Infilled	Land (Water)				
24	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1955	A6NE (S)	659	-	403681 294489

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Ground Stability Data (1:50,000)

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	CBSCB Compensation District				
	The site does not fall within the brine compensation area.				
	Brine Subsidence Solution Area				
	The site does not fall within the brine subsidence solution area.				
	Potential for Collapsible Ground Stability Hazards				
25	Hazard Potential: Very Low Source: Very Low British Geological Survey, National Geoscience Information Service	A11NW (NE)	0	1	403864 295251
26	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low	A11SW	111	1	403864
	Source: British Geological Survey, National Geoscience Information Service	(S)			295000
27	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A11NW (SE)	18	1	403979 295160
28	Potential for Compressible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SW (S)	139	1	403963 294979
	Potential for Compressible Ground Stability Hazards	. ,			
	Hazard Potential: No Hazard Source: No Hazard Geoscience Information Service	A11NW (NE)	0	1	403864 295251
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SW (S)	111	1	403864 295000
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11NW (NE)	0	1	403864 295251
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SW (S)	111	1	403864 295000
29	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11NW (NE)	0	1	403864 295251
30	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A15SW (N)	0	1	403951 295759
31	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SW (S)	111	1	403864 295000
	Potential for Landslide Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11NE (E)	177	1	404321 295335
32	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11NW (SE)	18	1	403979 295160
33	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A11SW (S)	139	1	403963 294979
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11NW (NE)	0	1	403864 295251
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11SW (S)	111	1	403864 295000
34	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A10NE (NW)	0	1	403737 295350
35	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A15SW (N)	0	1	403951 295759
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A11NW (NE)	0	1	403864 295251



Ground Stability Data (1:50,000)

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Shrin	king or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	A11SW (S)	111	1	403864 295000

Order Number: 314750106_1_1 Date: 26-Jul-2023 rpr_ec_datasheet v53.0 A Landmark Information Group Service Page 5 of 10



Historical Map List

The following mapping has been analysed for Historical Land Use Information (1:2,500):

1:2,500	Mapsheet	Published Date
Staffordshire	063_15	1886
Staffordshire	063_16	1886
Staffordshire	063_16	1886
Staffordshire	068_03	1886
Staffordshire	068_03	1886
Staffordshire	068_04	1886
Staffordshire	063_15	1903
Staffordshire	063_16	1903
Staffordshire	063_16	1903
Staffordshire	068_04	1903
Staffordshire	068_03	1904
Staffordshire	068_03	1904
Staffordshire	063_15	1914
Staffordshire	063_16	1914
Staffordshire	063_16	1914
Staffordshire	068_03	1918
Staffordshire	068_03	1918
Staffordshire	068_04	1918
Staffordshire	068_03	1937
Staffordshire	068_03	1937
Staffordshire	068_04	1937
Staffordshire	063_16	1938
Staffordshire	063_16	1938



Historical Map List

The following mapping has been analysed for Historical Land Use Information (1:10,000):

1:10,560	Mapsheet	Published Date
Staffordshire	063_SE	1890
Staffordshire	068_NE	1890
Staffordshire	063_SE	1903
Staffordshire	068_NE	1904
Staffordshire	063_SE	1920
Warwickshire	007_NE	1921
Staffordshire	068_NE	1921
Warwickshire	007_NE	1938
Staffordshire	063_SE	1938
Staffordshire	068_NE	1946
Ordnance Survey Plan	SP09NE	1955
Ordnance Survey Plan	SP09NW	1955
Ordnance Survey Plan	SP09SW	1955
Ordnance Survey Plan	SP09SE	1956
1:10,000	Mapsheet	Published Date
Ordnance Survey Plan	SP09SW	1980
Ordnance Survey Plan	SP09NE	1991
Ordnance Survey Plan	SP09NW	1992
Ordnance Survey Plan	SP09SE	1994



Data Currency

Mining and Cavities Data	Version	Update Cycle
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	June 2023	Bi-Annually
Coal Mining Affected Areas The Coal Authority - Property Searches	February 2023	Annual Rolling Update
Man Made Mining Cavities Stantec UK Ltd	December 2022	Bi-Annually
Mining Instability Ove Arup & Partners	June 1998	Not Applicable
Natural Cavities Stantec UK Ltd	December 2022	Bi-Annually
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Historical Land Use Information (1:2,500)	Version	Update Cycle
Subterranean Features Landmark Information Group Limited	July 2023	Bi-Annually
Ground Stability Data (1:50,000)	Version	Update Cycle
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	As notified
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
		A (15)
•	January 2019	As notified
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019 January 2019	As notified As notified



Data Suppliers

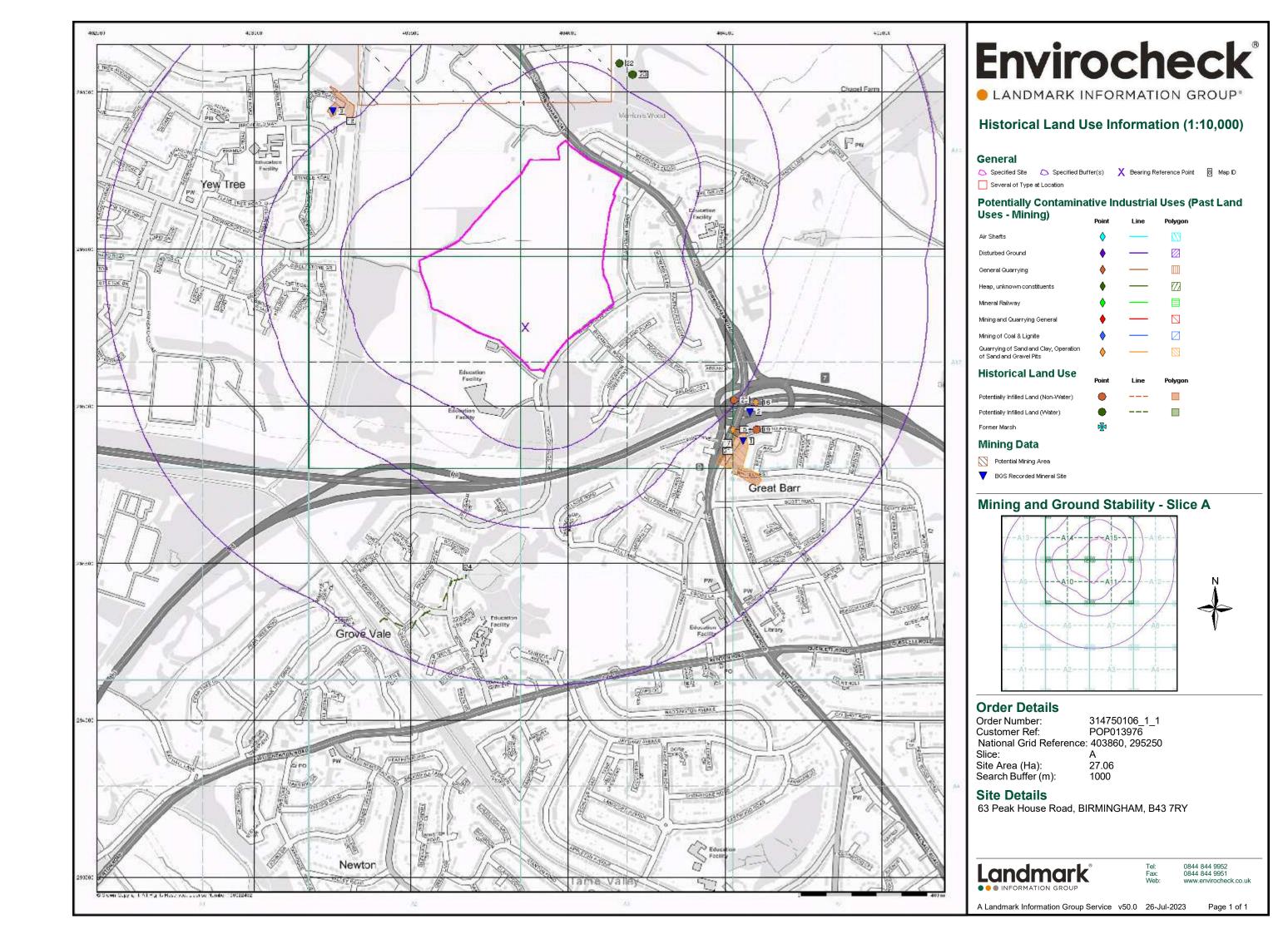
A selection of organisations who provide data within this report

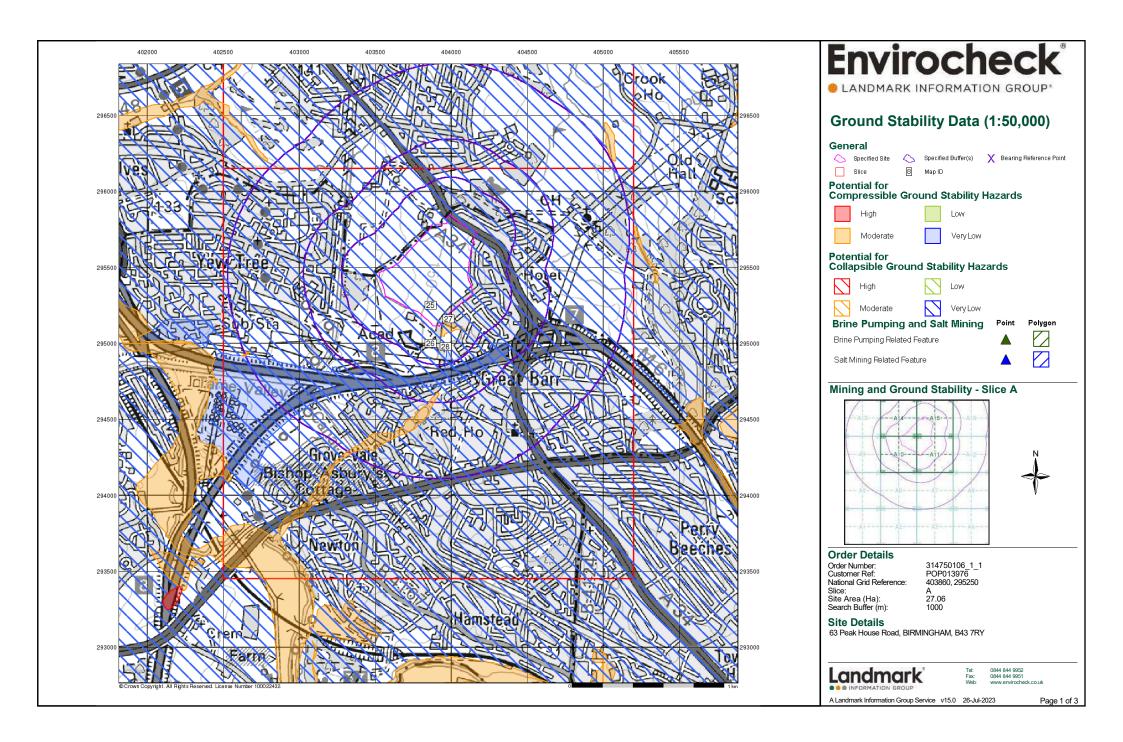
Data Supplier	Data Supplier Logo
Ordnance Survey	Mop data
British Geological Survey	British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
The Coal Authority	The Coal Authority
Ove Arup	ARUP
Stantec UK Ltd	Stantec
Wardell Armstrong	wardell armstrong your earth our world
Johnson Poole & Bloomer	JPB

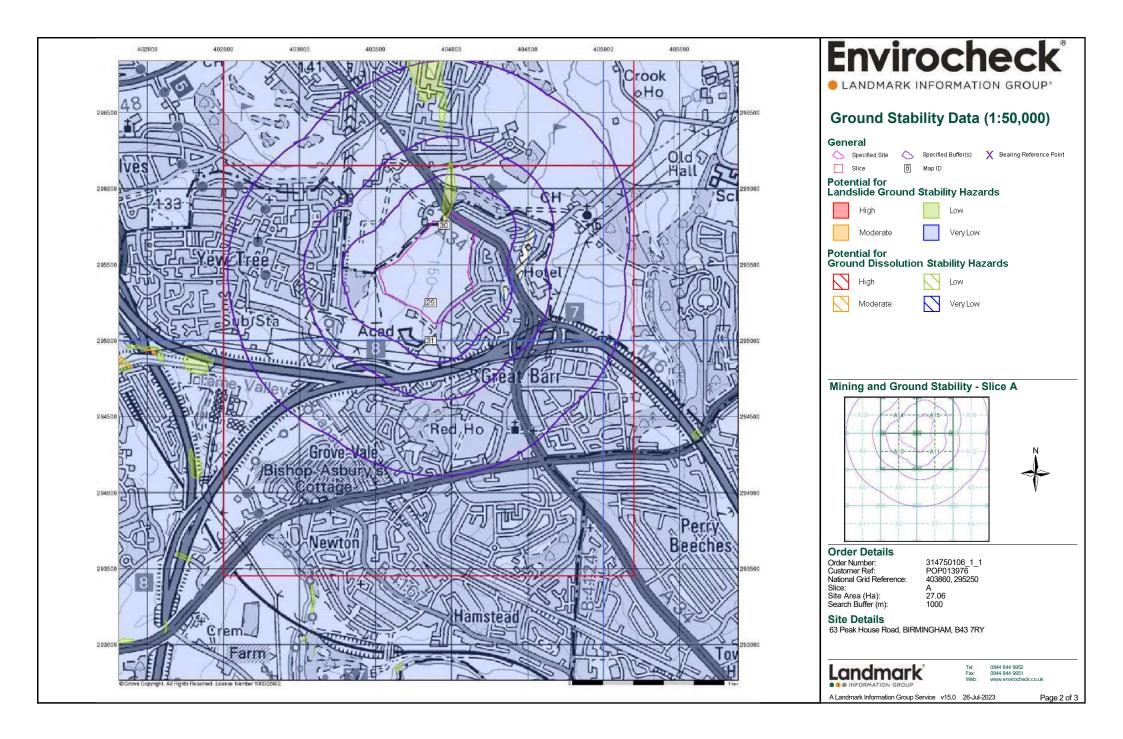


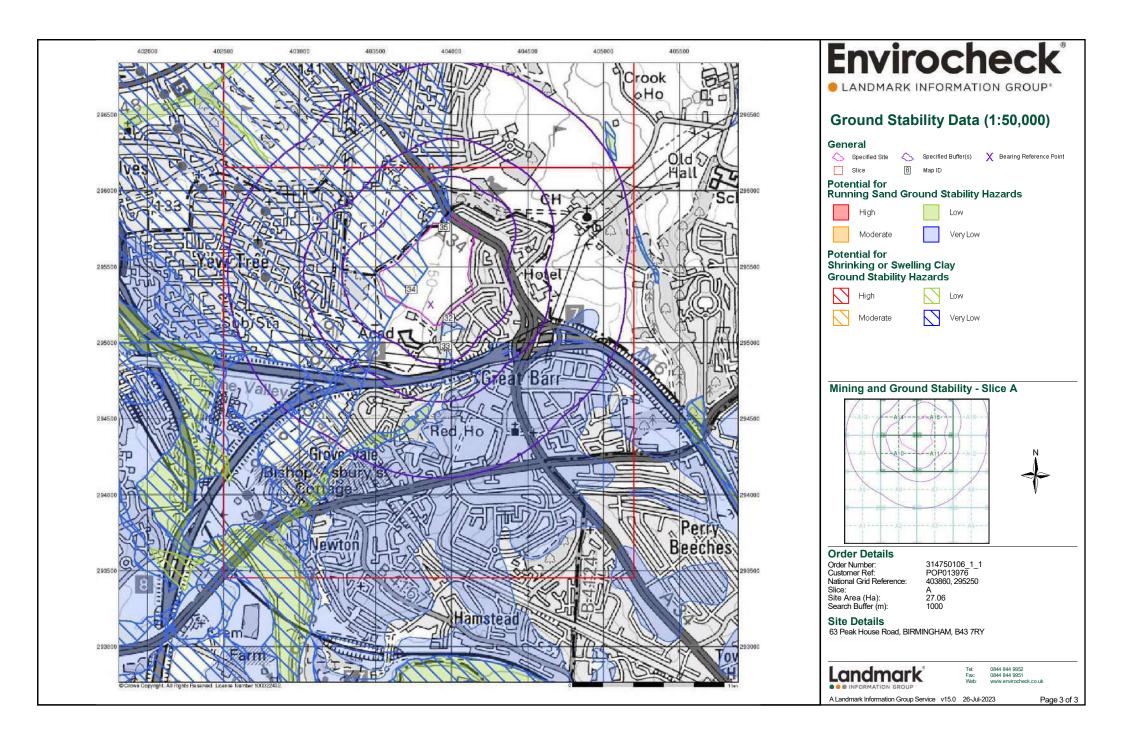
Useful Contacts

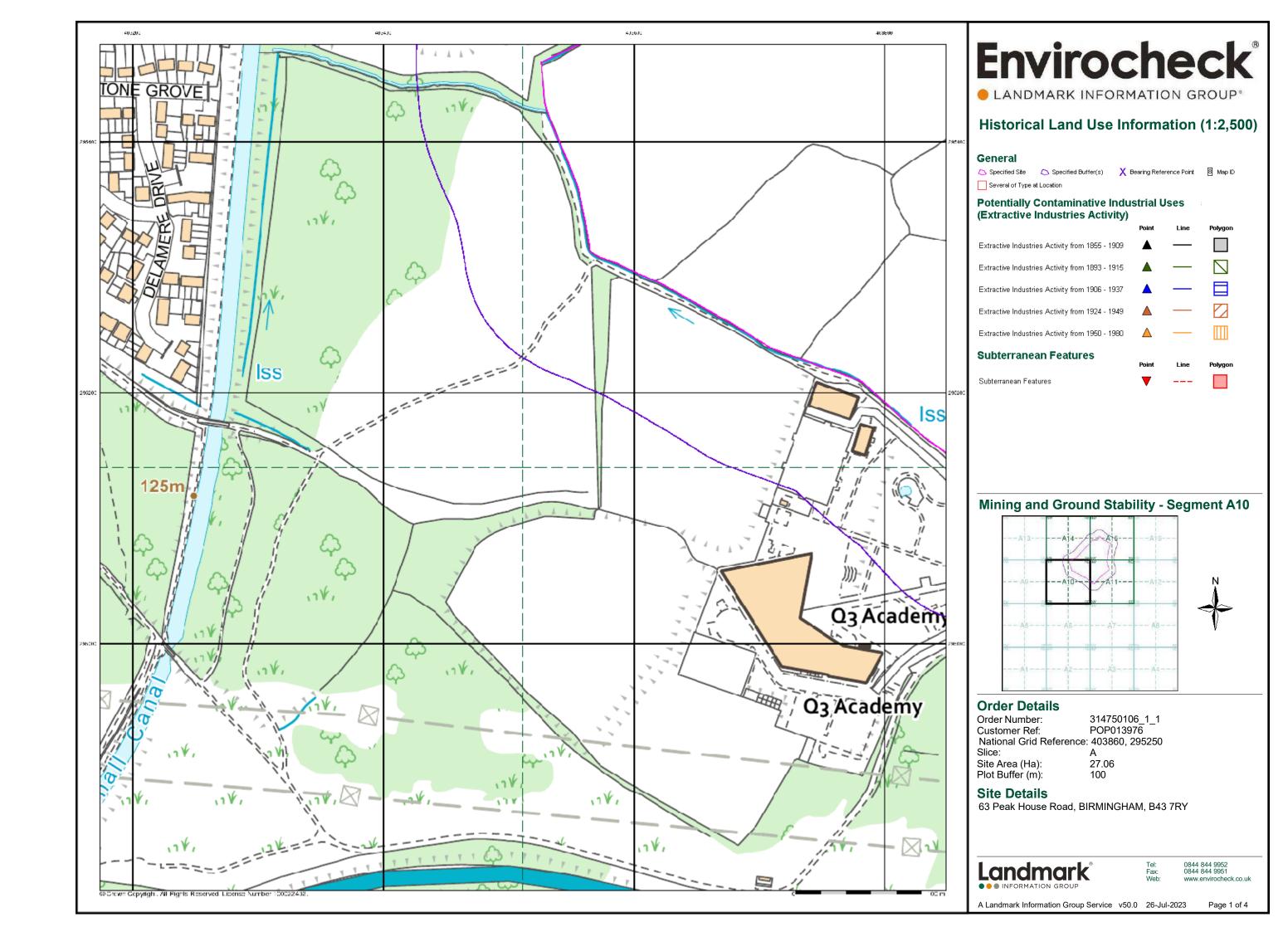
Contact	Name and Address	Contact Details
1	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	The Coal Authority - Property Searches 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
3	Ove Arup & Partners Central Square, Forth Street, Newcastle upon Tyne, Tyne and Wear, NE1 3PL	Telephone: 0191 261 6080 Fax: 0191 261 7879
4	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9960 Fax: 0844 844 9951 Email: customerservice@promap.co.uk Website: www.landmarkinfo.co.uk
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

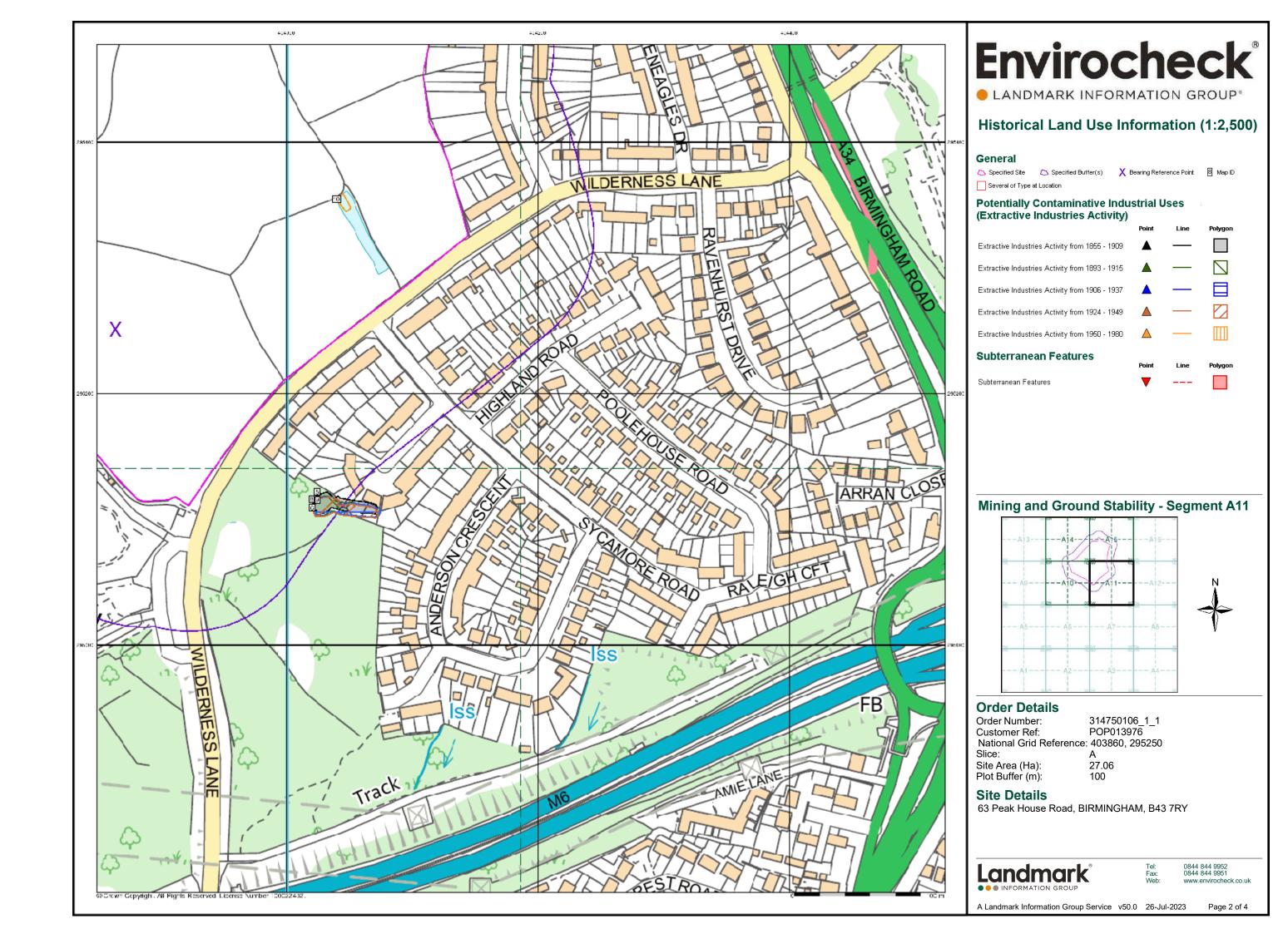


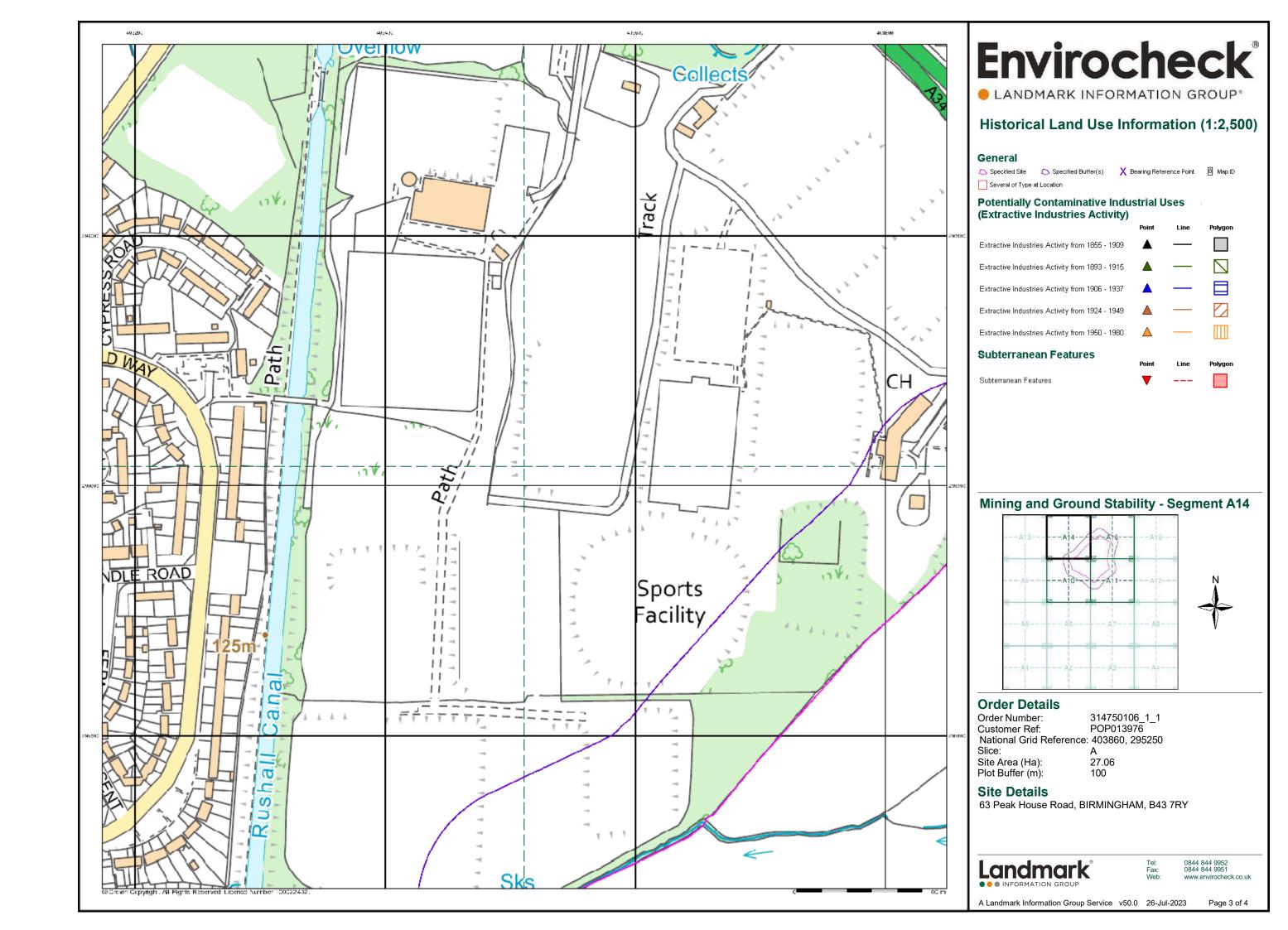


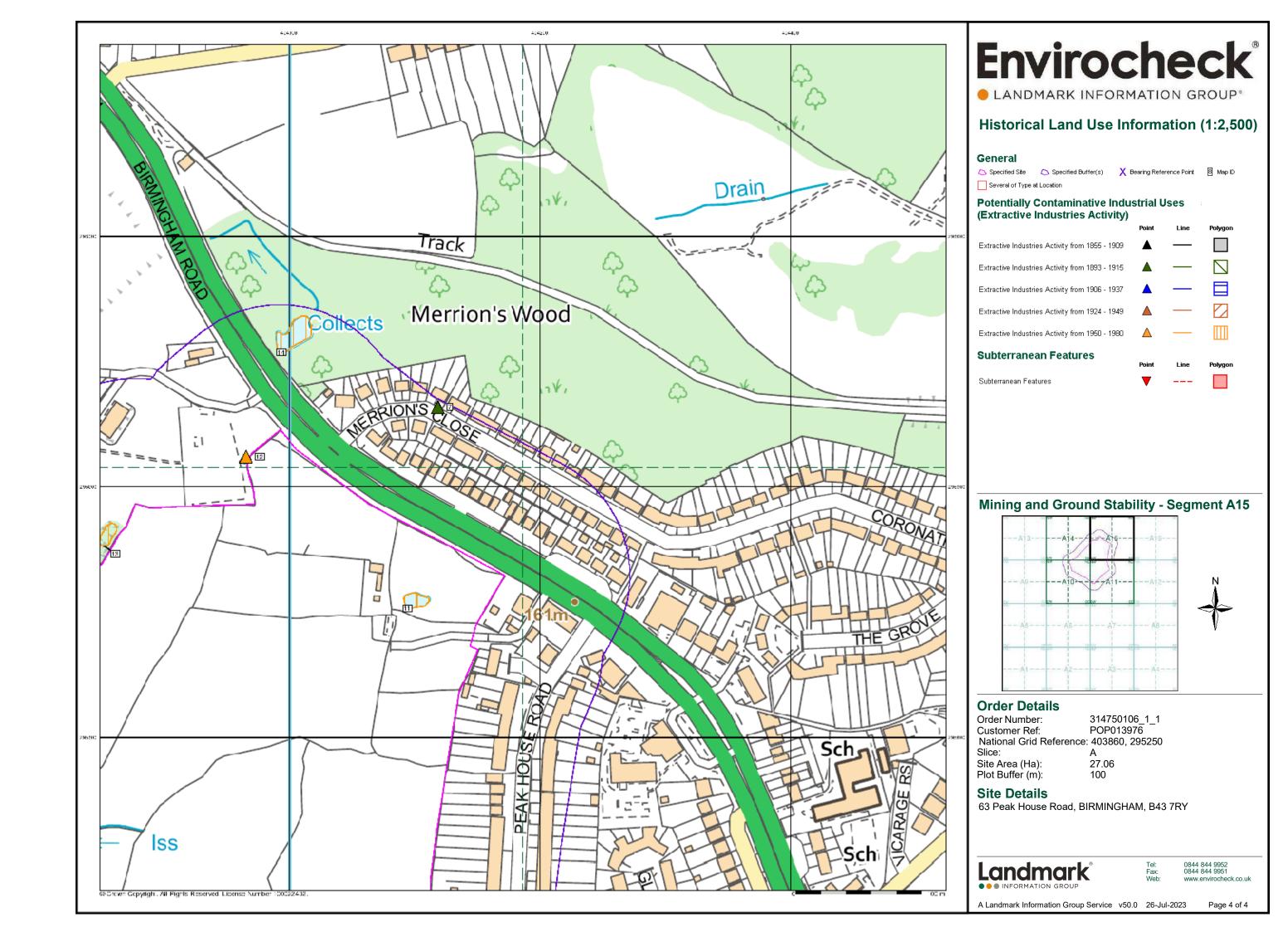


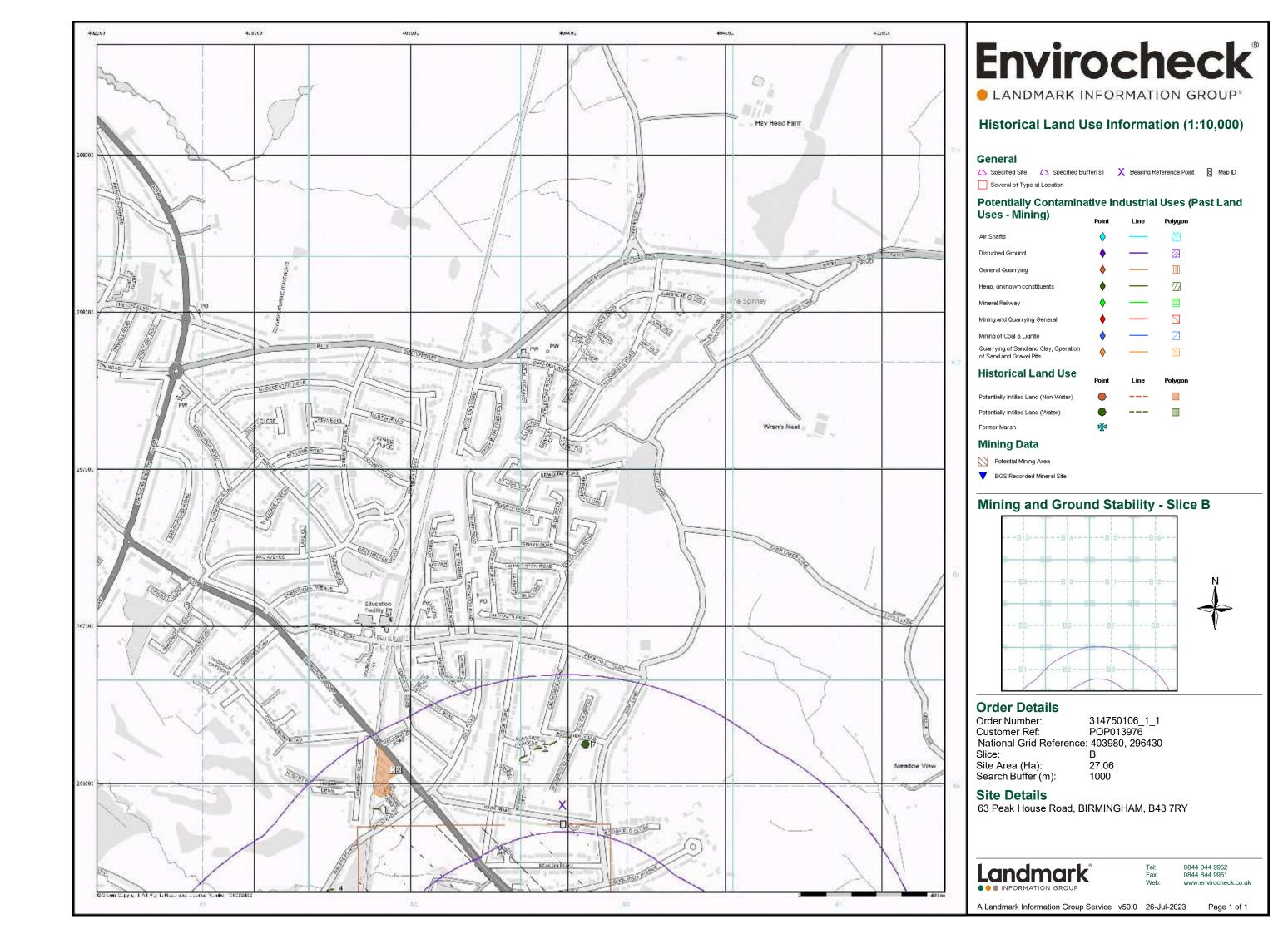


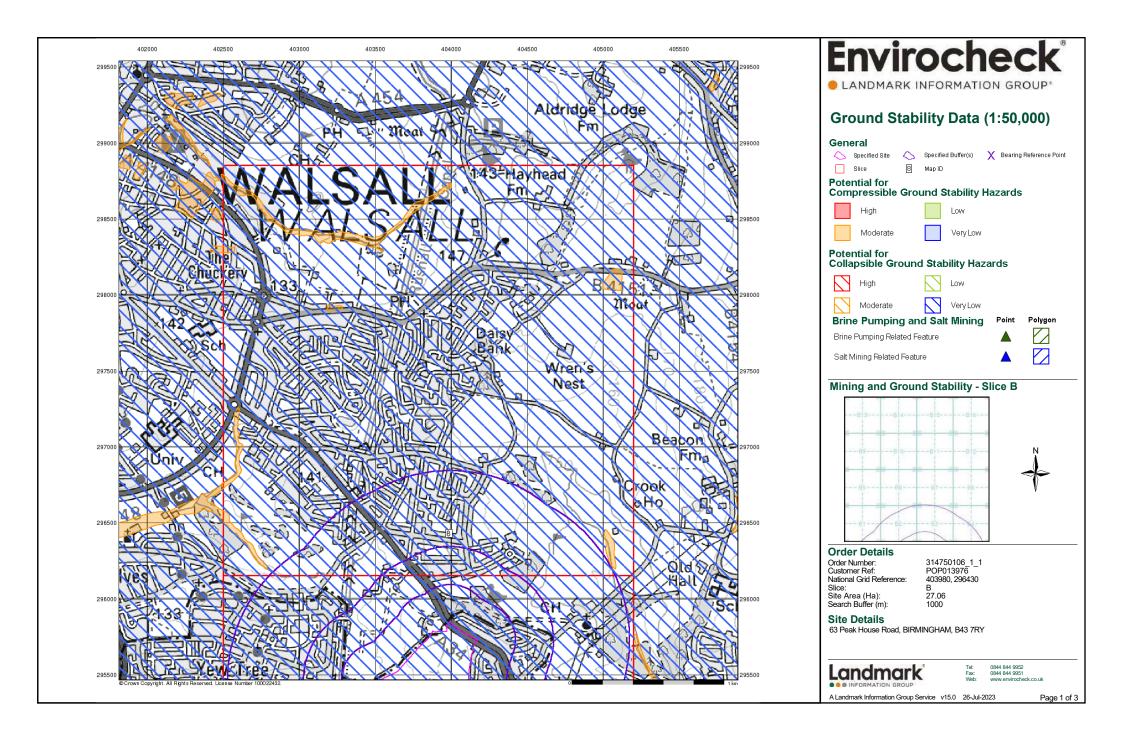


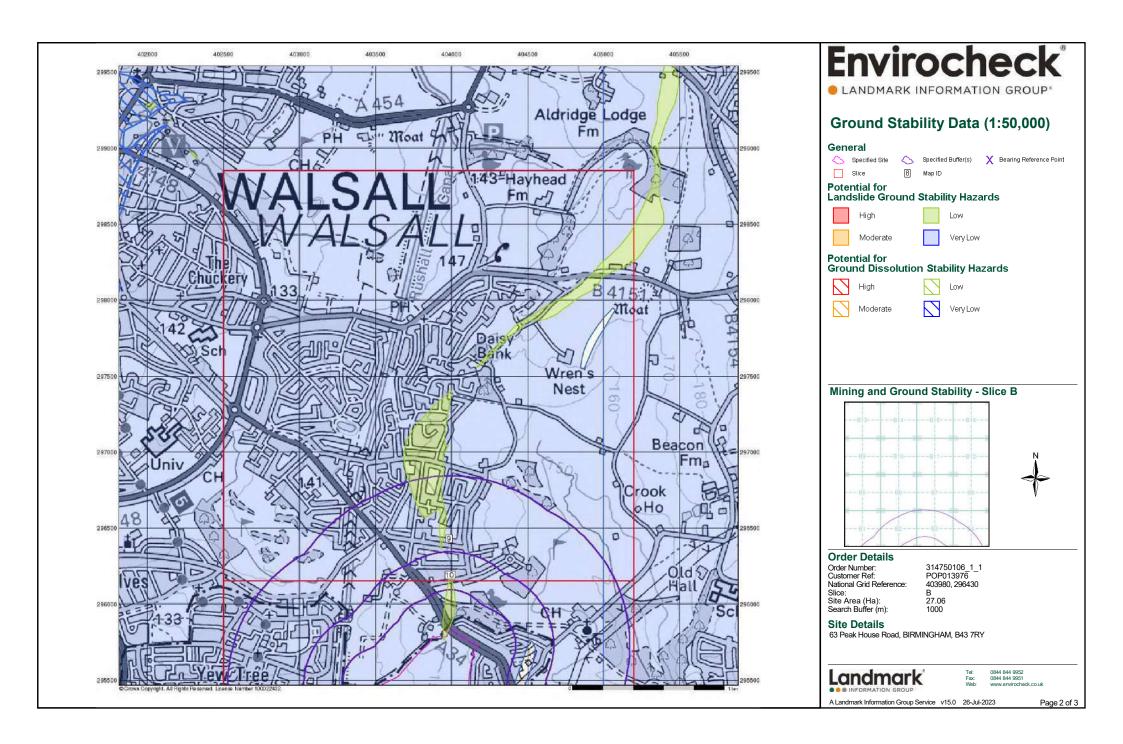


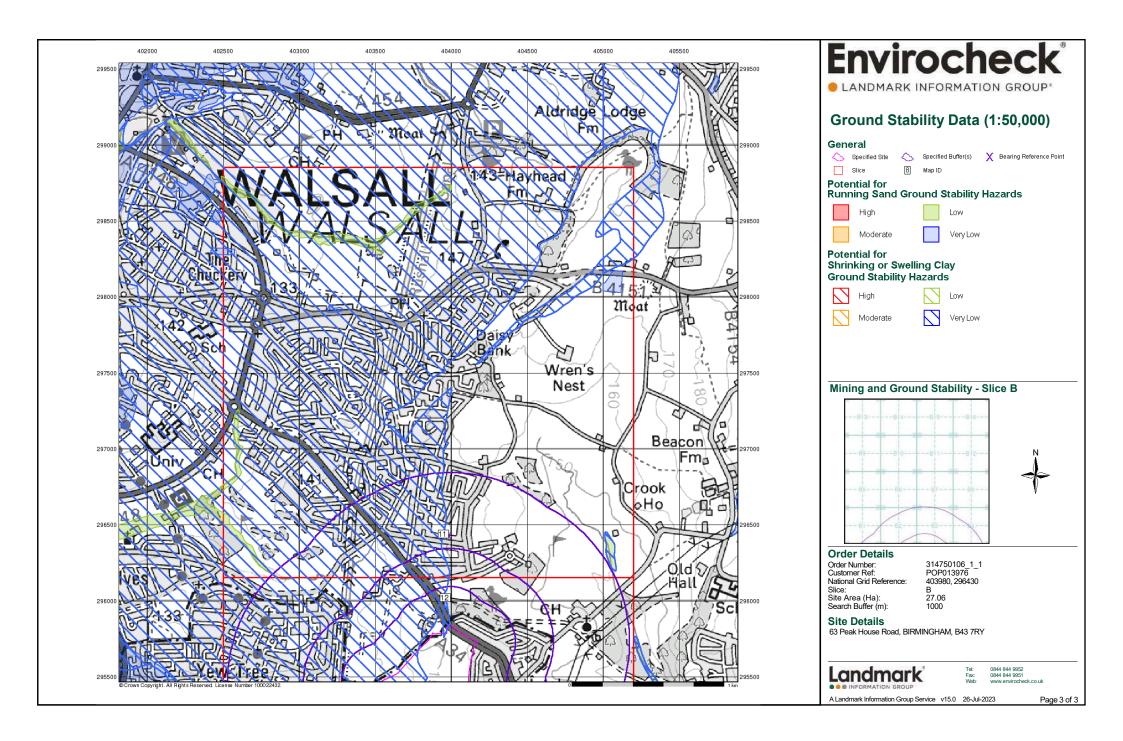














Envirocheck® Report:

Mining and Ground Stability Datasheet

Order Details:

Order Number:

314750106_1_1

Customer Reference:

POP013976

National Grid Reference:

403980, 296430

Slice:

В

Site Area (Ha):

27.06

Search Buffer (m):

1000

Site Details:

63 Peak House Road BIRMINGHAM B43 7RY

Client Details:

Mr N Birchenough Card Geotechnics 4 Oak Spinney Park Leicester LE3 3AW





Page Number



Report Section and Details	Page Number		
Summary	-		
The Summary section provides an overview of the data contained within the report, detailing the or the existence of a data set in relation to the buffer selected. For ease of reference, the report is broken down into 4 sections of data; Mining and Natural Cav Use Information (1:2,500), Historical Land Use Information (1:10,000) and Ground Stability Data	ities Data, Historical Land		
Mining and Natural Cavities Data	1		
The Mining and Natural Cavities Data section features data sets related to the existence of mining areas and their potential hazards; and details of naturally formed cavities. Data sets within this section are not plotted, with the exception of BGS Recorded Mineral Sites and Potential Mining Areas which feature on the Historical Land Use Information (1:10,000) map.			
Historical Land Use Information (1:2,500)	-		
The Historical Land Use Information (1:2,500) section contains data captured from analysis carried out by Landmark of 1:1,250 and 1:2,500 scale historical Ordnance Survey mapping, identifying areas where, historically, the land uses were potentially contaminative. For the purpose of this Envirocheck module, only historical data relating to mining and ground stability has been included and plotted on the corresponding Historical Land Use Information (1:2,500) map. This section also includes the Subterranean Features data set, which details various man-made and man-used underground spaces obtained from the Subterranea Britannica society.			
Historical Land Use Information (1:10,000)	2		
The Historical Land Use (1:10,000) section covers data captured from the systematic analysis of 1:10, 560 and 1:10,000 scale historical Ordnance Survey mapping dating back to the mid-19th contaminative past industrial land uses. For the purpose of this Environment of the purpose of the purpose of the second bloomer of the purpose of the second bloomer of the purpose of the second bloomer of the purpose of t	entury, identifying potentially		

Report Section and Details

Ground Stability Data (1:50,000)

on the accompanying Historical Land Use Information (1:10,000) map.

3

The Ground Stability (1:50,000) section includes the BGS Geosure data suite, reporting features to 250m and plotted onto 3 separate maps. Also reported is brine subsidence, brine mining and salt mining data sets, of which Brine Pumping and Salt Mining Related Features are plotted, and subsidence insurance claims and insurance investigations data, which is not plotted.

Historical Map List	4

The Historical Map List section details the historical mapping that has been analysed for your site, in relation to the Historical Land Use Information sections.

Data Currency	5
Data Suppliers	6
Useful Contacts	7

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The brine subsidence data relating to the Driotwich area as provided in this report is derived from JPB studies and physical monitoring undertaken annually over more than 35 years. For more detailed interpretation contact enquiries@jpb.co.uk. JPB retain the copyright and intellectual rights to this data and accept no liability for any loss or damage, including in direct or consequential loss, arising from the use of this data.

The Mining Instability data was obtained on licence from Ove Arup & Partners Limited (for further information, contact mining.review@arup.com). No reproduction or further use of such Data is to be made without the prior written consent of Ove Arup & Partners Limited. The supplied Mining Instability data is derived from publicly available records and other third party sources and neither Ove Arup & Partners nor Landmark warrant the accuracy or completeness of such information or data.

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Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m
Mining and Natural Cavities Data					
BGS Recorded Mineral Sites					
Coal Mining Affected Areas	pg 1	Yes	n/a	n/a	n/a
Man Made Mining Cavities					
Mining Instability			n/a	n/a	n/a
Natural Cavities					
Non Coal Mining Areas of Great Britain	pg 1	Yes	Yes	n/a	n/a
Potential Mining Areas	pg 1		1		
Historical Land Use Information (1:2,500)					
Extractive Industries or Potential Excavations from 1855-1909 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1893-1915 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1906-1937 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1924-1949 (100m)				n/a	n/a
Extractive Industries or Potential Excavations from 1950-1980 (100m)				n/a	n/a
Subterranean Features (100m)				n/a	n/a
Historical Land Use Information (1:10,000)					
Air Shafts					
Disturbed Ground					
General Quarrying					
Heap, unknown constituents					
Mineral Railway					
Mining & quarrying general					
Mining of coal & lignite					
Quarrying of sand & clay, operation of sand & gravel pits	pg 2				1
Former Marshes					
Potentially Infilled Land (Non-Water)	pg 2				1
Potentially Infilled Land (Water)	pg 2				4
Ground Stability Data (1:50,000)					
CBSCB Compensation District			n/a	n/a	n/a
Brine Pumping Related Features					
Brine Subsidence Solution Area					
Potential for Collapsible Ground Stability Hazards	pg 3	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 3	Yes		n/a	n/a
Potential for Ground Dissolution Stability Hazards	pg 3	Yes		n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 3	Yes		n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 3	Yes		n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 3	Yes		n/a	n/a
Salt Mining Related Features					





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Mining and Natural Cavities Data

	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
Coal Mining Affects	ed Areas				
Description:	In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	B3SW (E)	0	1	403982 296431
Non Coal Mining A	reas of Great Britain				
Risk: Source:	Highly Unlikely British Geological Survey, National Geoscience Information Service	B3SW (W)	0	3	403925 296423
Non Coal Mining A	reas of Great Britain				
Risk: Source:	Rare British Geological Survey, National Geoscience Information Service	B3SW (S)	9	3	403990 296190
Potential Mining Ar	eas				
Name: Ceased Operation: Commodity: Reference: Alternate Name/Mine:	Bilston Mill 1896 Coal; Thick; Heathen 3559 Not Supplied	B3SW (S)	122	4	403983 296369
	Description: Non Coal Mining Al Risk: Source: Non Coal Mining Al Risk: Source: Potential Mining Ar Name: Ceased Operation: Commodity: Reference: Alternate	Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report. Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service Non Coal Mining Areas of Great Britain Risk: Rare Source: British Geological Survey, National Geoscience Information Service Potential Mining Areas Name: Bilston Mill Ceased Operation: 1896 Commodity: Coal; Thick; Heathen Reference: 3559 Alternate Non Supplied Name/Mine:	Details Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report. Non Coal Mining Areas of Great Britain Risk: Highly Unlikely Source: British Geological Survey, National Geoscience Information Service Non Coal Mining Areas of Great Britain Risk: Rare Source: British Geological Survey, National Geoscience Information Service (W) Potential Mining Areas Name: Bilston Mill Ceased Operation: 1896 Commodity: Coal; Thick; Heathen Reference: 3559 Alternate Not Supplied Name/Mine:	Details Coal Mining Affected Areas	Details Coal Mining Affected Areas



Historical Land Use Information (1:10,000)

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Quarrying of sand	& clay, operation of sand & gravel pits				
2	Use: Date of Mapping:	Not Supplied 1890	B2NW (W)	814	-	403460 296541
	Potentially Infilled	Land (Non-Water)				
3	Use: Date of Mapping:	Unknown Filled Ground (Pit, quarry etc) 1992	B2NW (W)	814	-	403460 296541
	Potentially Infilled	Land (Water)				
4	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1955	B2SW (W)	706	-	403276 296166
	Potentially Infilled	Land (Water)				
5	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1955	B3NW (N)	749	-	403927 296613
	Potentially Infilled	Land (Water)				
6	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1955	B2SW (W)	772	-	403429 296414
	Potentially Infilled	Land (Water)				
7	Use: Date of Mapping:	Unknown Filled Ground (Pond, marsh, river, stream, dock etc) 1955	B3NW (N)	782	-	404054 296625

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Ground Stability Data (1:50,000)

Map ID		Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	CBSCB Compensa	ation District				
	The site does not fa	all within the brine compensation area.				
	Brine Subsidence	Solution Area				
	The site does not fa	all within the brine subsidence solution area.				
	Potential for Colla	psible Ground Stability Hazards				
8	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	B3SW (E)	0	3	403982 296431
	Potential for Comp	pressible Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	B3SW (E)	0	3	403982 296431
	Potential for Grou	nd Dissolution Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	B3SW (E)	0	3	403982 296431
	Potential for Land	slide Ground Stability Hazards				
9	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	B3SW (E)	0	3	403982 296431
	Potential for Land	slide Ground Stability Hazards				
10	Hazard Potential: Source:	Low British Geological Survey, National Geoscience Information Service	B3SW (S)	0	3	403990 296190
	Potential for Runn	ing Sand Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	B3SW (E)	0	3	403982 296431
	Potential for Shrin	king or Swelling Clay Ground Stability Hazards				
11	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	B3SW (W)	0	3	403946 296438
	Potential for Shrin	king or Swelling Clay Ground Stability Hazards				
12	Hazard Potential: Source:	Very Low British Geological Survey, National Geoscience Information Service	(S)	0	3	403960 296021
	Potential for Shrin	king or Swelling Clay Ground Stability Hazards				
	Hazard Potential: Source:	No Hazard British Geological Survey, National Geoscience Information Service	B3SW (E)	0	3	403982 296431





No Historical Land Use information available.

The following mapping has been analysed for Historical Land Use Information (1:10,000):

1:10,560	Mapsheet	Published Date
Staffordshire	063_NE	1889
Staffordshire	063_SE	1890
Staffordshire	063_NE	1903
Staffordshire	063_SE	1903
Staffordshire	063_NE	1920
Staffordshire	063_SE	1920
Staffordshire	063_NE	1938
Staffordshire	063_SE	1938
Ordnance Survey Plan	SP09NE	1955
Ordnance Survey Plan	SP09NW	1955
1:10,000	Mapsheet	Published Date
Ordnance Survey Plan	SP09NE	1991
Ordnance Survey Plan	SP09NW	1992



Data Currency

Mining and Cavities Data	Version	Update Cycle
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	June 2023	Bi-Annually
Coal Mining Affected Areas The Coal Authority - Property Searches	February 2023	Annual Rolling Update
Man Made Mining Cavities Stantec UK Ltd	December 2022	Bi-Annually
Mining Instability Ove Arup & Partners	June 1998	Not Applicable
Natural Cavities Stantec UK Ltd	December 2022	Bi-Annually
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Historical Land Use Information (1:2,500)	Version	Update Cycle
Subterranean Features Landmark Information Group Limited	July 2023	Bi-Annually
Ground Stability Data (1:50,000)	Version	Update Cycle
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	As notified
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
•	January 2019	As notified
British Geological Survey - National Geoscience Information Service Potential for Running Sand Ground Stability Hazards	January 2019 January 2019	As notified As notified
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service		1.12.112.112.11



Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	Mop data
British Geological Survey	British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
The Coal Authority	The Coal Authority
Ove Arup	ARUP
Stantec UK Ltd	Stantec
Wardell Armstrong	wardell armstrong your earth our world
Johnson Poole & Bloomer	JPB



Useful Contacts

Contact	Name and Address	Contact Details
1	The Coal Authority - Property Searches 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
2	Ove Arup & Partners Central Square, Forth Street, Newcastle upon Tyne, Tyne and Wear, NE1 3PL	Telephone: 0191 261 6080 Fax: 0191 261 7879
3	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
4	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9960 Fax: 0844 844 9951 Email: customerservice@promap.co.uk Website: www.landmarkinfo.co.uk
-	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

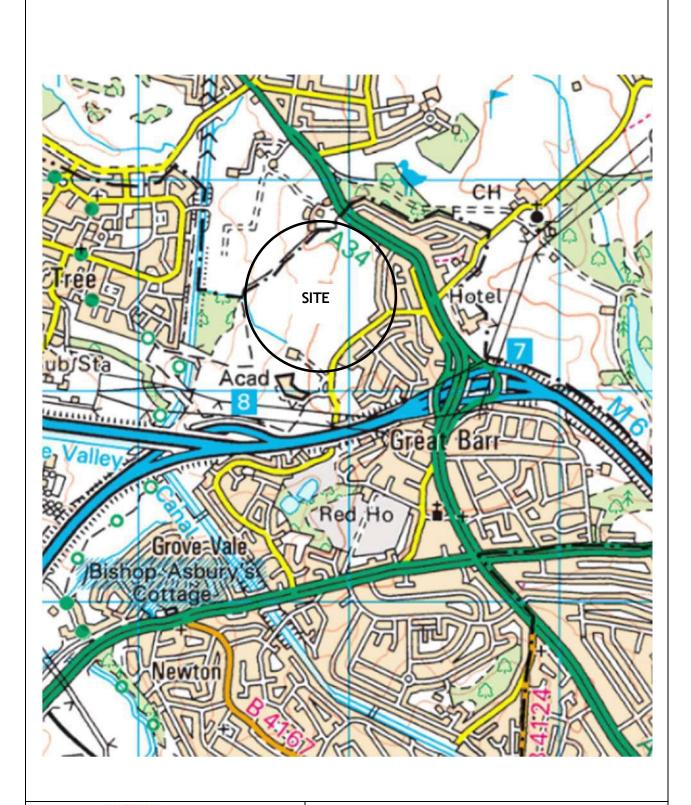


DRAWINGS

CGM/00191-DR/01 - Site Location Plan

FPCR 09364-FPCR_XX_ZZ_DR_L-0010-P11 - Proposed Development Framework Plan

FPCR 09364-FPCR_XX_ZZ_DR_L-0012-P07 - Proposed Illustrative Masterplan





Client:

Wain Estates (Land) Ltd

Project: Land West of Birmingham Road, Great Barr, West Midlands.

Drawing No:Title:Date:CGM/00191-DR/01Site Location PlanAugust 2023

