APPENDIX E (Part 2 of 4)

Groundsure
LOCATION INTELLIGENCE

Chelmer Site Investigation Laboratories Ltd

TOWER BRIDGE BUSINESS CENTRE,46-48,
EAST SMITHFIELD,
LONDON, E1W 1AW

Groundsure Reference:	GS-3549239
Your Reference:	7596
Report Date	4 Jan 2017
Report Delivery Method:	Email - pdf

Groundsure Geo Insight

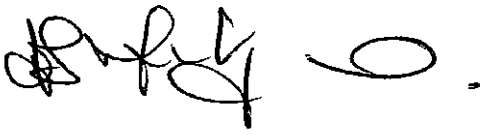
Address: 31, ST. MARKS CRESCENT, LONDON, NW1 7TT

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Geo Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Geoinsight

Groundsure Geo Insight

Address:	**31, ST. MARKS CRESCENT, LONDON, NW1 7TT**
Date:	**4 Jan 2017**
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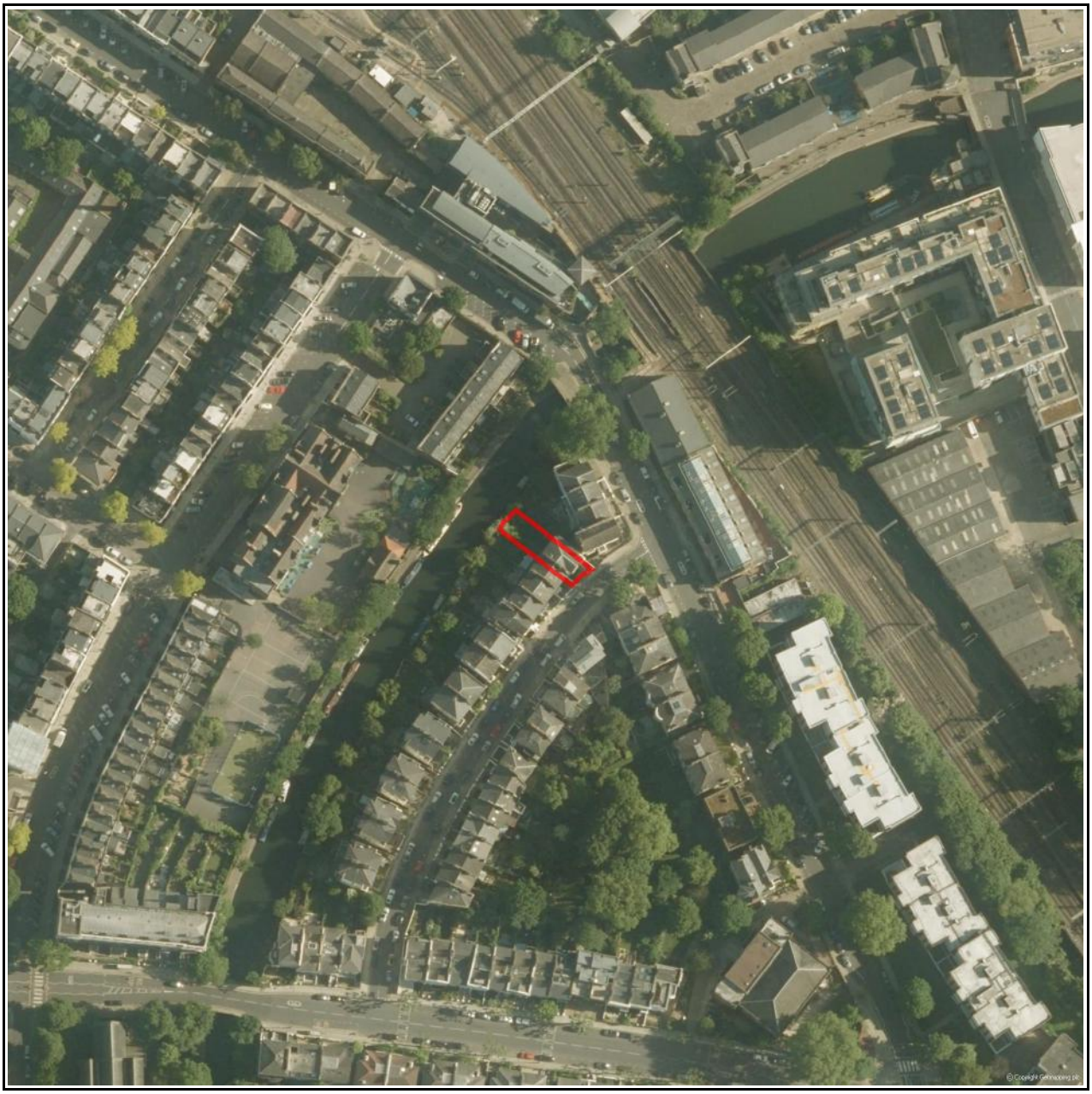
Client:	**Chelmer Site Investigation Laboratories Ltd**

NW N NE

W E



SW S SE

Aerial Photograph Capture date:	07-Jun-2015
Grid Reference:	528377,183893
Site Size:	0.02ha

Contents Page

Overview of Findings

The Groundsure Geo Insight provides high quality geo-environmental information that allows geo-environmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Shallow Mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and Groundsure's unique database including historical surface ground and underground workings.

For further details on each dataset, please refer to each individual section in the report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1:Geology		
1.1 Artificial Ground	1.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	No
	1.1.2 Are there any records relating to permeability of artificial ground within the study site* boundary?	No
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?	No
	1.2.2 Are there any records relating to permeability of superficial geology within the study site boundary?	No
	1.2.3 Are there any records of landslip within 500m of the study site boundary?	No
	1.2.4 Are there any records relating to permeability of landslips within the study site boundary?	No
1.3 Bedrock, Solid Geology & Faults	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	1.3.2 Are there any records relating to permeability of bedrock within the study site boundary?	Yes
	1.3.3 Are there any records of faults within 500m of the study site boundary?	No
1.4 Radon data	1.4.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level
	1.4.2 Is the property in an area where Radon Protection Measures are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary

Section 2:Ground Workings	On-site	0-50m	51-250	251-500	501-1000
2.1 Historical Surface Ground Working Features from Small Scale Mapping	0	9	7	Not Searched	Not Searched
2.2 Historical Underground Workings from Small Scale Mapping	0	0	1	9	14
2.3 Current Ground Workings	0	0	0	0	0

Section 3: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
3.1 Historical Mining	0	0	0	0	2
3.2 Coal Mining	0	0	0	0	0
3.3 Johnson Poole and Bloomer Mining Area	0	0	0	0	0
3.4 Non-Coal Mining	0	0	0	0	0
3.5 Non-Coal Mining Cavities	0	0	0	0	0
3.6 Natural Cavities	0	0	0	0	0
3.7 Brine Extraction	0	0	0	0	0
3.8 Gypsum Extraction	0	0	0	0	0
3.9 Tin Mining	0	0	0	0	0
3.10 Clay Mining	0	0	0	0	0

Section 4: Natural Ground Subsidence	On-site
4.1 Shrink Swell Clay	Moderate
4.2 Landslides	Very Low
4.3 Ground Dissolution of Soluble Rocks	Negligible
4.4 Compressible Deposits	Negligible
4.5 Collapsible Deposits	Very Low
4.6 Running Sand	Negligible

Section 5: Borehole Records	On-site	0-50m	51-250
5 BGS Recorded Boreholes	0	0	10

Section 6: Estimated Background Soil Chemistry	On-site	0-50m	51-250
6 Records of Background Soil Chemistry	1	0	5

Section 7: Railways and Tunnels	On-site	0-50m	51-250	251-500
7.1 Tunnels	0	0	0	Not Searched
7.2 Historical Railway and Tunnel Features	0	2	79	Not Searched
7.3 Historical Railways	0	0	4	Not Searched
7.4 Active Railways	0	0	37	Not Searched

Section 7:Railways and Tunnels	On-site	0-50m	51-250	251-500
7.5 Railway Projects	0	1	0	1

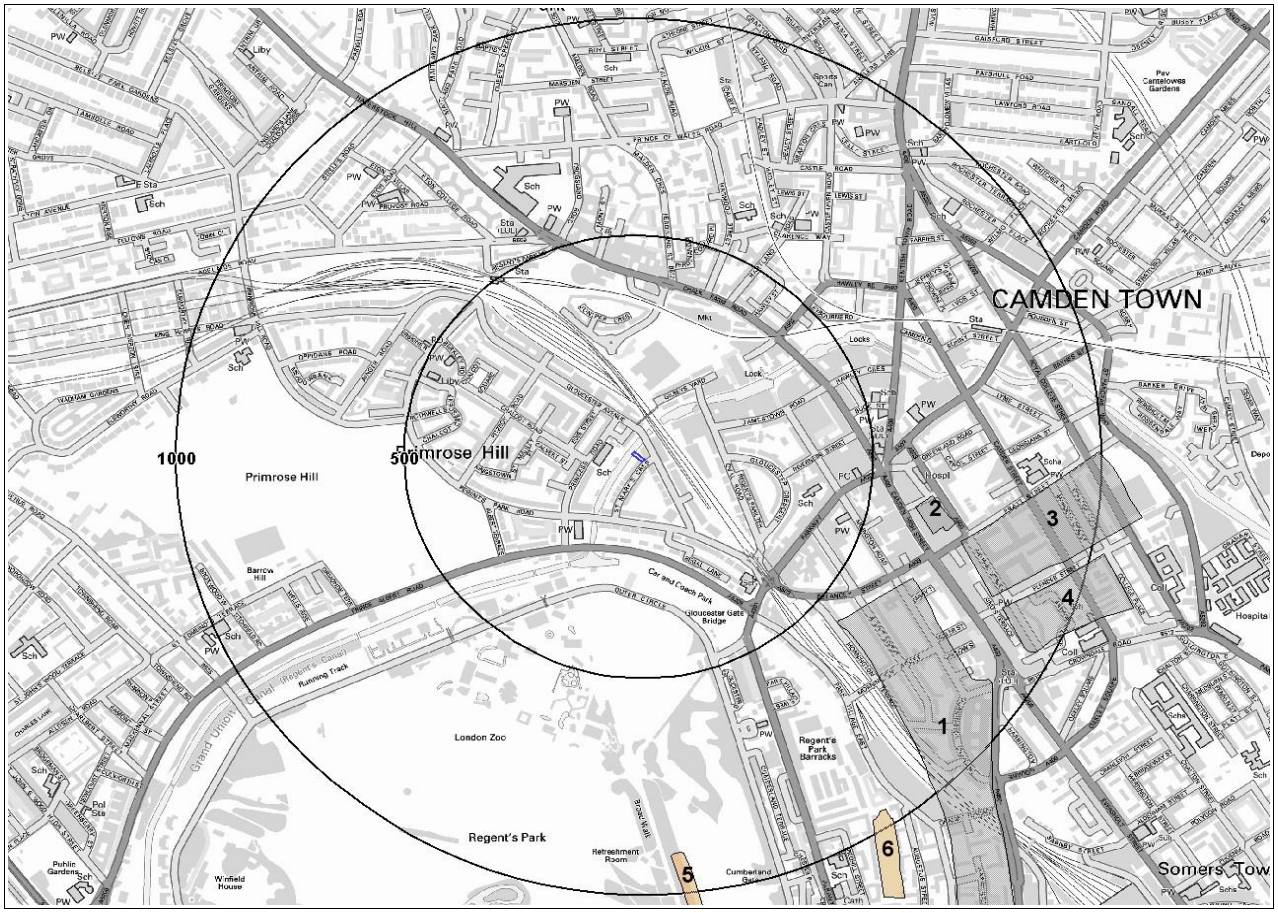
1 Geology

1.1 Artificial Ground Map

NW N NE

W E

SW S SE



Artificial Ground Legend

Site Outline

500
1000
Search Buffers (m)

Made Ground (undivided)

Worked Ground (undivided)

Infilled Ground

Disturbed Ground (undivided)

Landscaped Ground (undivided)

Reclaimed Ground

1 Geology

1.1 Artificial Ground

1.1.1Artificial/ Made Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:256

Are there any records of Artificial/Made Ground within 500m of the study site boundary? No

Database searched and no data found.

1.1.2 Permeability of Artificial Ground

Are there any records relating to permeability of artificial ground within the study site boundary? No

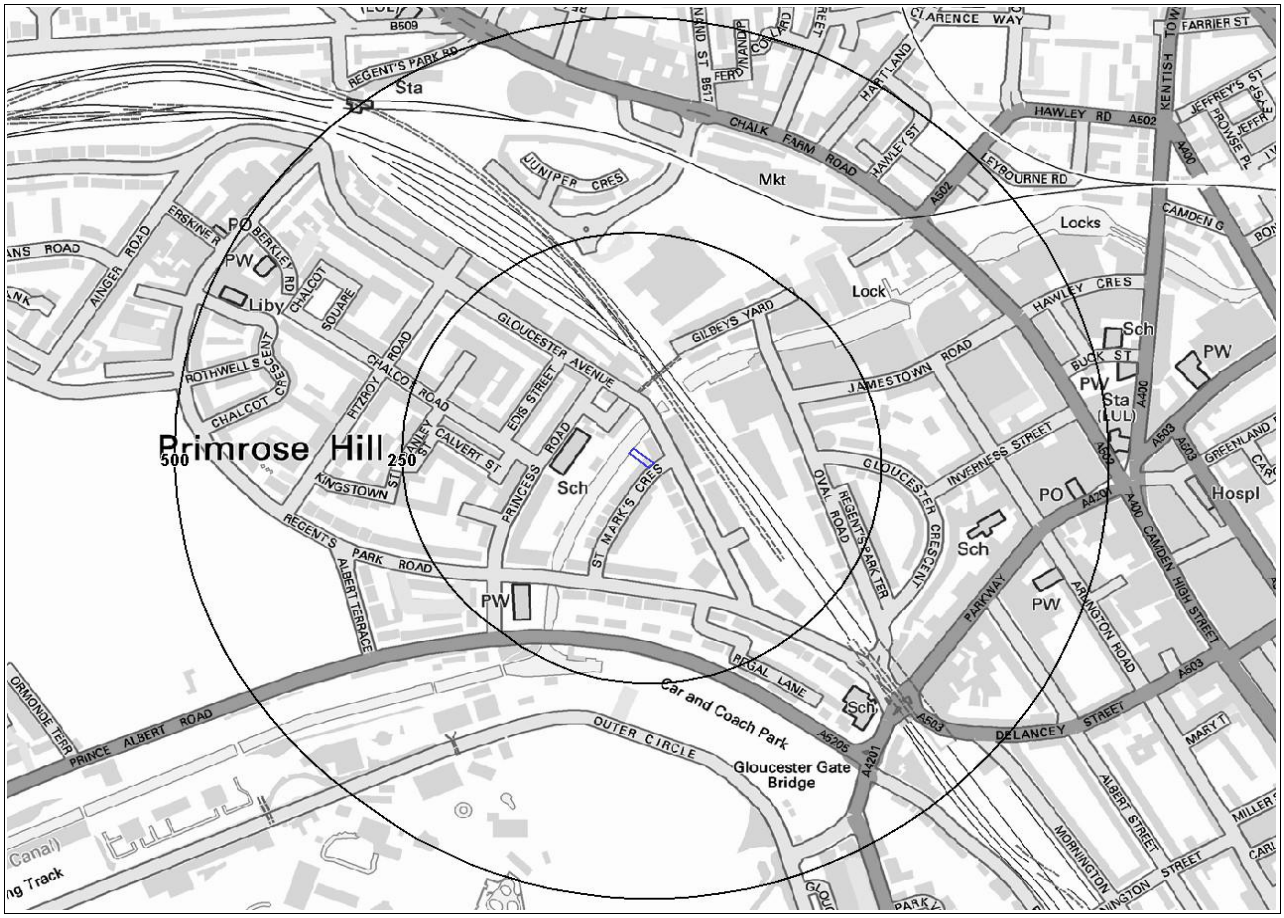
Database searched and no data found.

1.2 Superficial Deposits and Landslips Map

NW N NE

W E

SW S SE



Superficial Deposits and Landslips Legend

Site Outline

500
1000
Search Buffers (m)

1.2 Superficial Deposits and Landslips

1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary? No

Database searched and no data found.

1.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site boundary? No

Database searched and no data found.

1.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary? No

Database searched and no data found.

This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

1.2.4 Landslip Permeability

Are there any records relating to permeability of landslips within the study site* boundary? No

Database searched and no data found.

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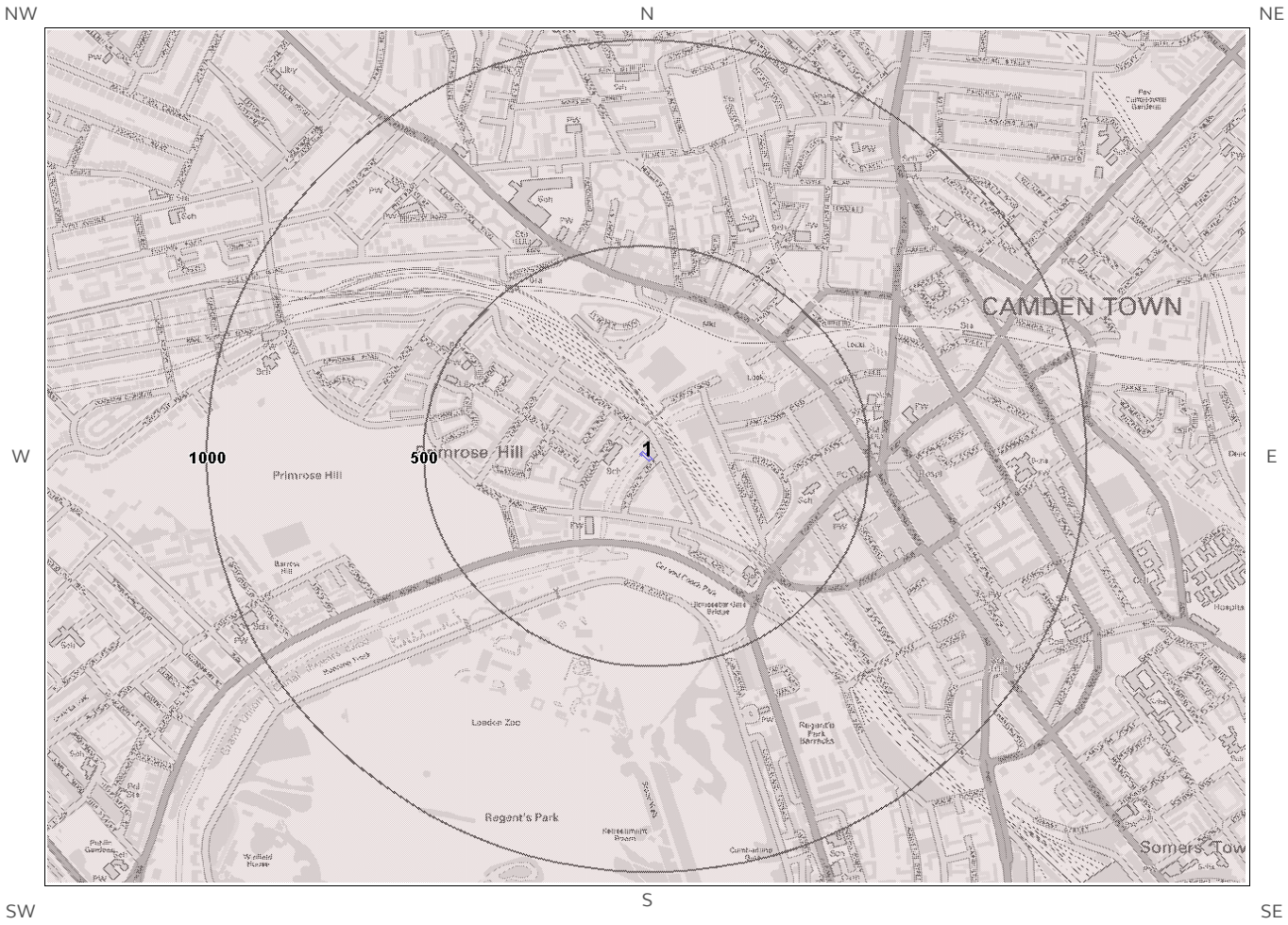
* This includes an automatically generated 50m buffer zone around the site

1.3 Bedrock and Faults Map



Bedrock and Faults Legend

Site Outline

500
1000
Search Buffers (m)

1.3 Bedrock, Solid Geology & Faults

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:256

1.3.1 Bedrock/ Solid Geology

Records of Bedrock/ Solid Geology within 500m of the study site boundary:

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
1	0.0	On Site	LC-CLSISA	London Clay Formation - Clay, Silt And Sand	No Details

1.3.2 Permeability of Bedrock Ground

Are there any records relating to permeability of bedrock ground within the study site* boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	Moderate	Very Low

1.3.3 Faults

Are there any records of Faults within 500m of the study site boundary? No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as Faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

* This includes an automatically generated 50m buffer zone around the site

1.4 Radon Data

1.4.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level

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1.4.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary

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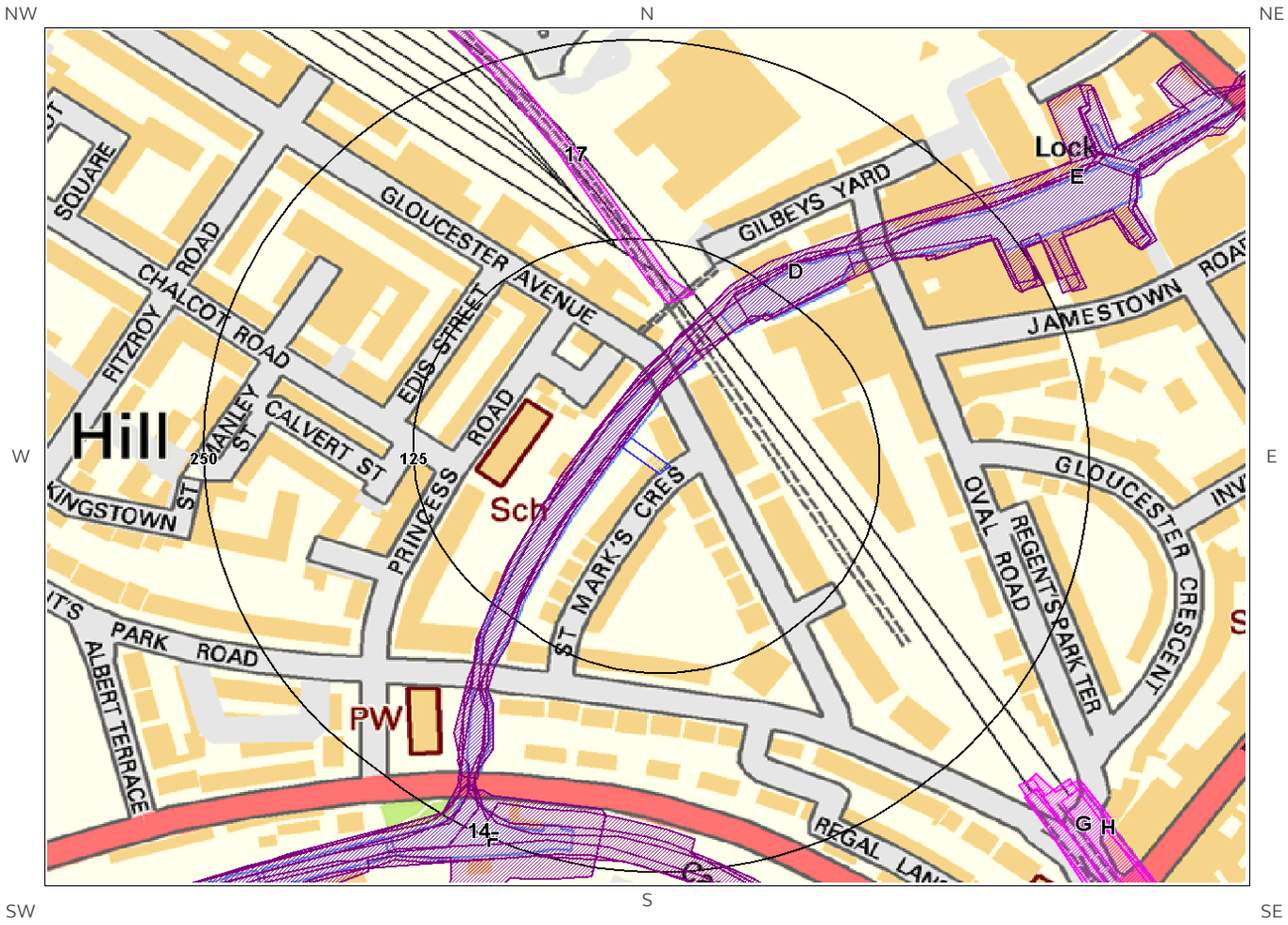
2 Ground Workings Map



Ground Workings Legend

Site Outline

125
250
Search Buffers (m)

Historic Surface Ground Workings

Historic Underground Workings

Current Ground Workings

2 Ground Workings

2.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on Groundsure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping.

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? Yes

The following Historical Surface Ground Working Features are provided by Groundsure:

ID	Distance (m)	Direction	NGR	Use	Date
1	1.0	NW	527867 183526	Canal	1894
2A	2.0	NW	527422 183270	Canal	1973
3A	2.0	NW	527422 183270	Canal	1968
4A	2.0	NW	527422 183270	Canal	1957
5A	2.0	NW	527422 183270	Canal	1989
6B	4.0	NW	528309 183832	Canal	1873
7B	4.0	NW	528309 183832	Canal	1873
8C	5.0	NW	528292 183795	Canal	1914
9C	5.0	NW	528292 183795	Canal	1938
10D	100.0	NE	528467 184001	Canal	1873
11D	100.0	NE	528467 184001	Canal	1873
12E	186.0	NE	528650 184092	Canal	1873
13E	186.0	NE	528650 184092	Canal	1873
14	224.0	SW	527387 183212	Canal	1940
15F	229.0	S	527876 183526	Canal	1873
16F	229.0	S	527876 183526	Canal	1873

2.2 Historical Underground Working Features derived from Historical Mapping

This data is derived from the Groundsure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary? Yes

The following Historical Underground Working Features are provided by Groundsure:

ID	Distance (m)	Direction	NGR	Use	Date
17	88.0	N	528256 184173	Tunnel	1989
18G	289.0	SE	528658 183631	Tunnel	1914
19G	289.0	SE	528658 183631	Tunnel	1938
20G	291.0	SE	528651 183636	Tunnel	1968
21G	291.0	SE	528651 183636	Tunnel	1940
22G	291.0	SE	528651 183636	Tunnel	1957
23G	296.0	SE	528642 183634	Tunnel	1989
24G	296.0	SE	528642 183634	Tunnel	1973
25H	314.0	SE	528675 183621	Tunnel	1973
26H	314.0	SE	528675 183621	Tunnel	1989
Not shown	660.0	NW	526978 184220	Tunnel	1968
Not shown	660.0	NW	526978 184220	Tunnel	1989
Not shown	660.0	NW	526978 184220	Tunnel	1973
Not shown	660.0	NW	526978 184220	Tunnel	1957
Not shown	801.0	NW	527650 184271	Air Shafts	1989
Not shown	863.0	NW	527589 184287	Air Shafts	1989
Not shown	872.0	W	527362 184138	Tunnel	1989
Not shown	872.0	W	527362 184138	Tunnel	1968
Not shown	872.0	W	527362 184138	Tunnel	1973
Not shown	874.0	W	527368 184142	Tunnels	1957
Not shown	896.0	NW	527028 184182	Tunnels	1957
Not shown	917.0	NW	527018 184178	Tunnel	1968

ID	Distance (m)	Direction	NGR	Use	Date
Not shown	917.0	NW	527018 184178	Tunnel	1973
Not shown	917.0	NW	527018 184178	Tunnel	1989

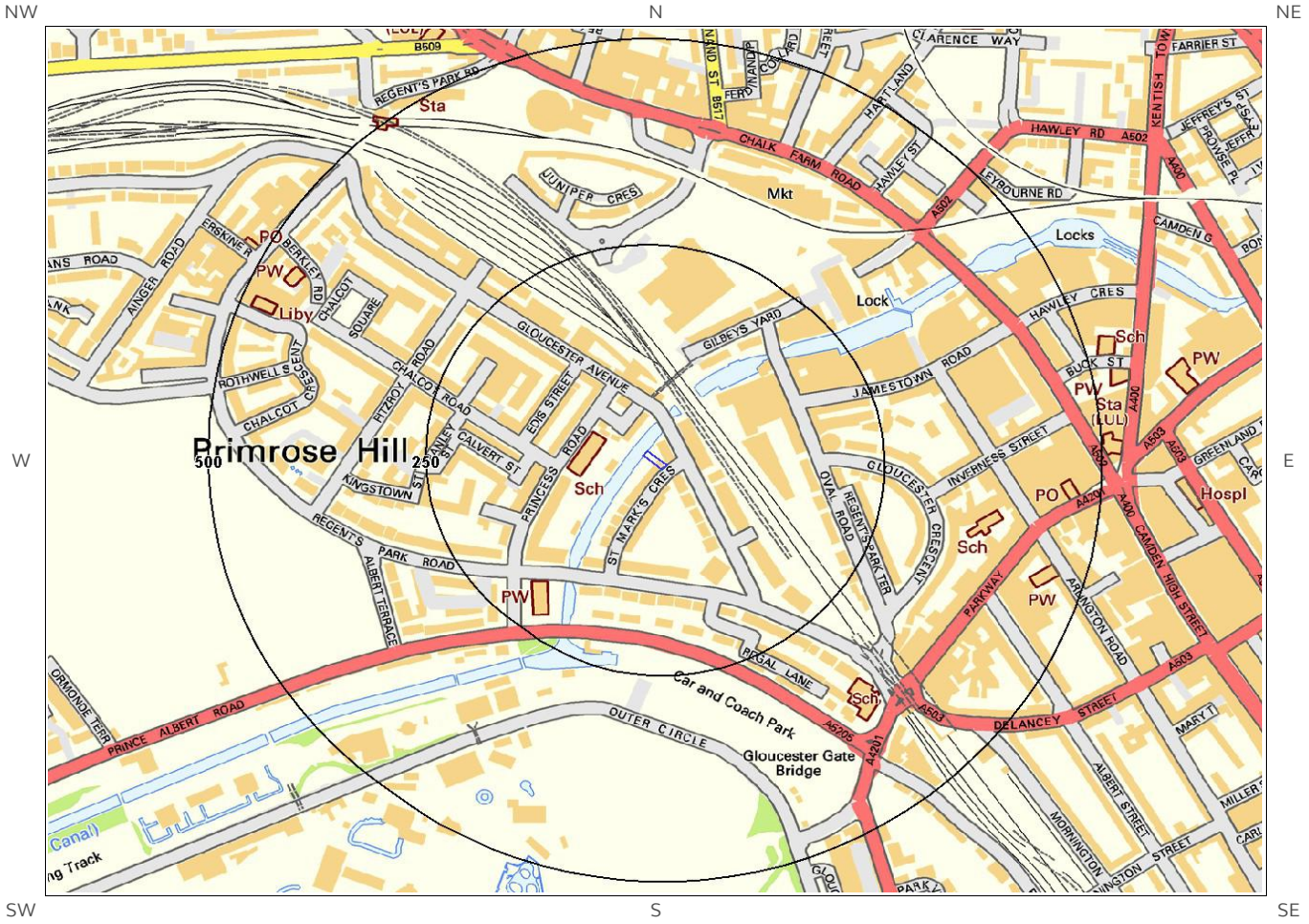
2.3 Current Ground Workings

This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

Are there any BGS Current Ground Workings within 1000m of the study site boundary? No

Database searched and no data found.

3 Mining, Extraction & Natural Cavities Map



Mining, Extraction and Natural Cavities Legend

3 Mining, Extraction & Natural Cavities

3.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary? Yes

The following Historical Mining information is provided by Groundsure:

ID	Distance (m)	Direction	NGR	Details	Date
Not shown	801.0	NW	527650 184271	Air Shafts	1989
Not shown	863.0	NW	527589 184287	Air Shafts	1989

3.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

3.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary? No

The following information provided by JPB is not represented on mapping: Database searched and no data found.

3.4 Non-Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

3.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled "Review of mining instability in Great Britain, 1990" PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary? No

Database searched and no data found.

3.6 Natural Cavities

This dataset provides information based on Peter Brett Associates natural cavities database.

Are there any Natural Cavities within 1000m of the study site boundary? No

Database searched and no data found.

3.7 Brine Extraction

This data provides information from the Coal Authority issued on behalf of the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

3.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

3.9 Tin Mining

This dataset provides information on tin mining areas and is derived from tin mining records. This search is based upon postcode information to a sector level.

Are there any Tin Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

3.10 Clay Mining

This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

Are there any Clay Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

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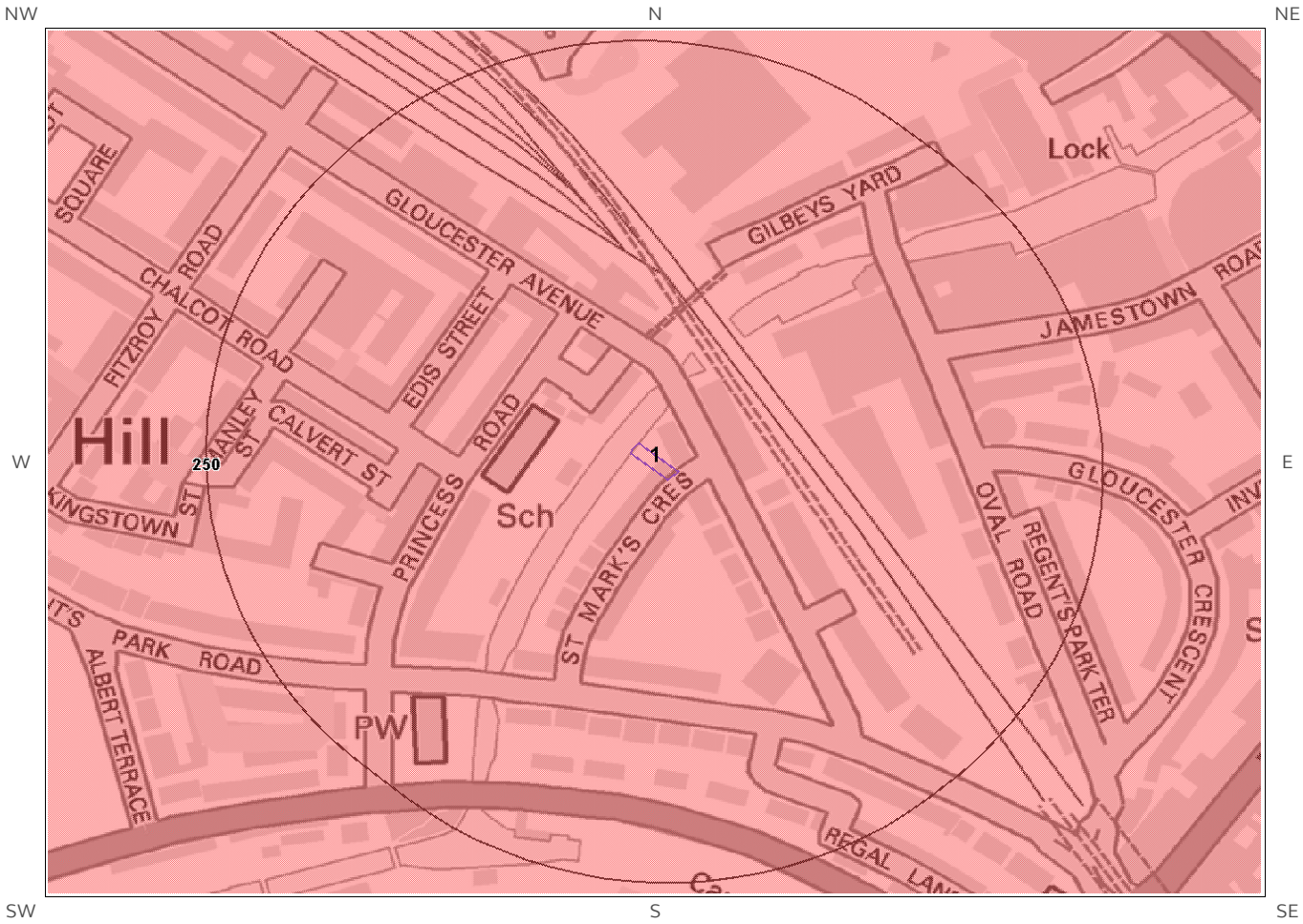
4 Natural Ground Subsidence

4.1 Shrink-Swell Clay Map



Shrink Swell Clay Legend

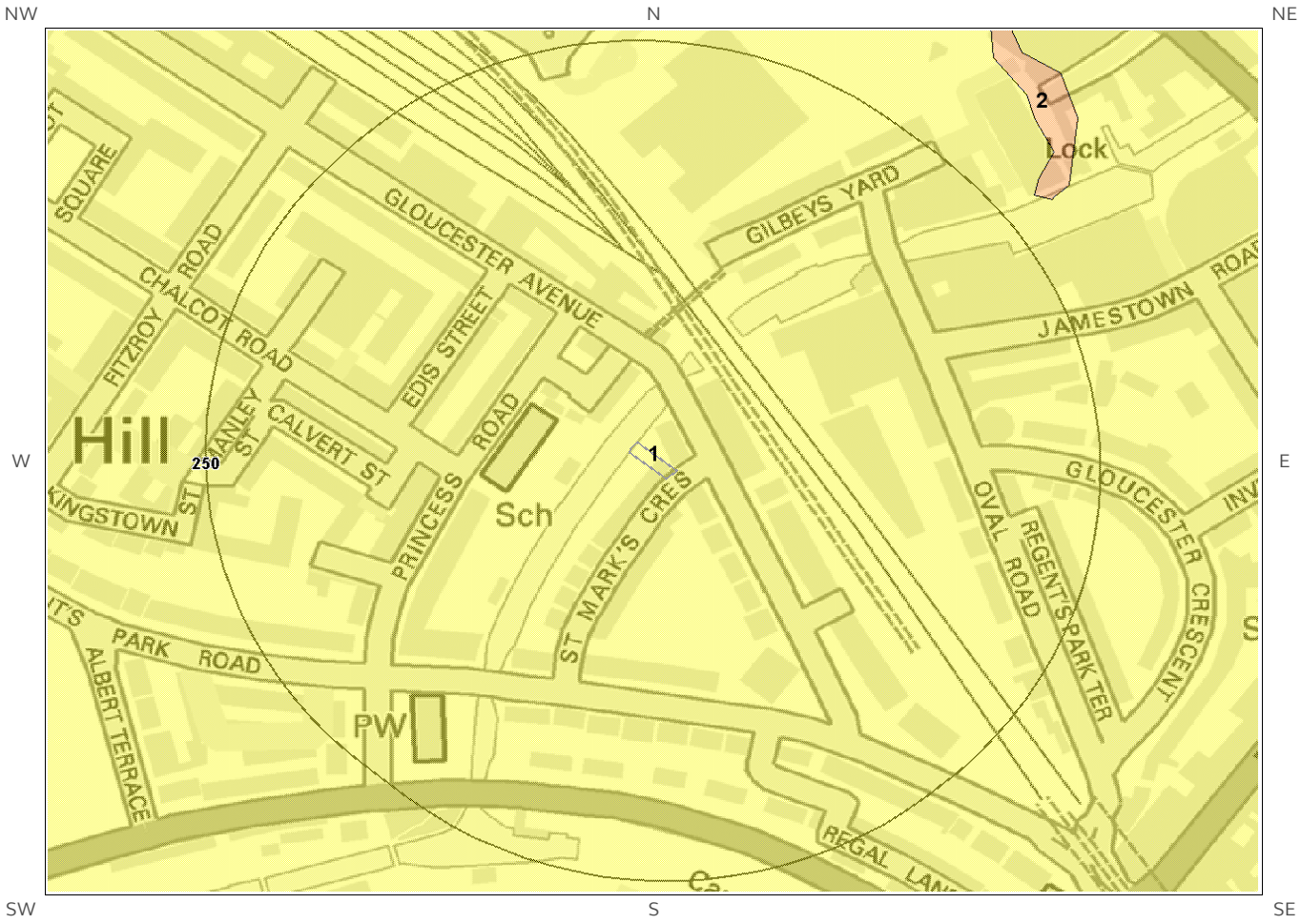
Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

4.2 Landslides Map



Landslides Legend

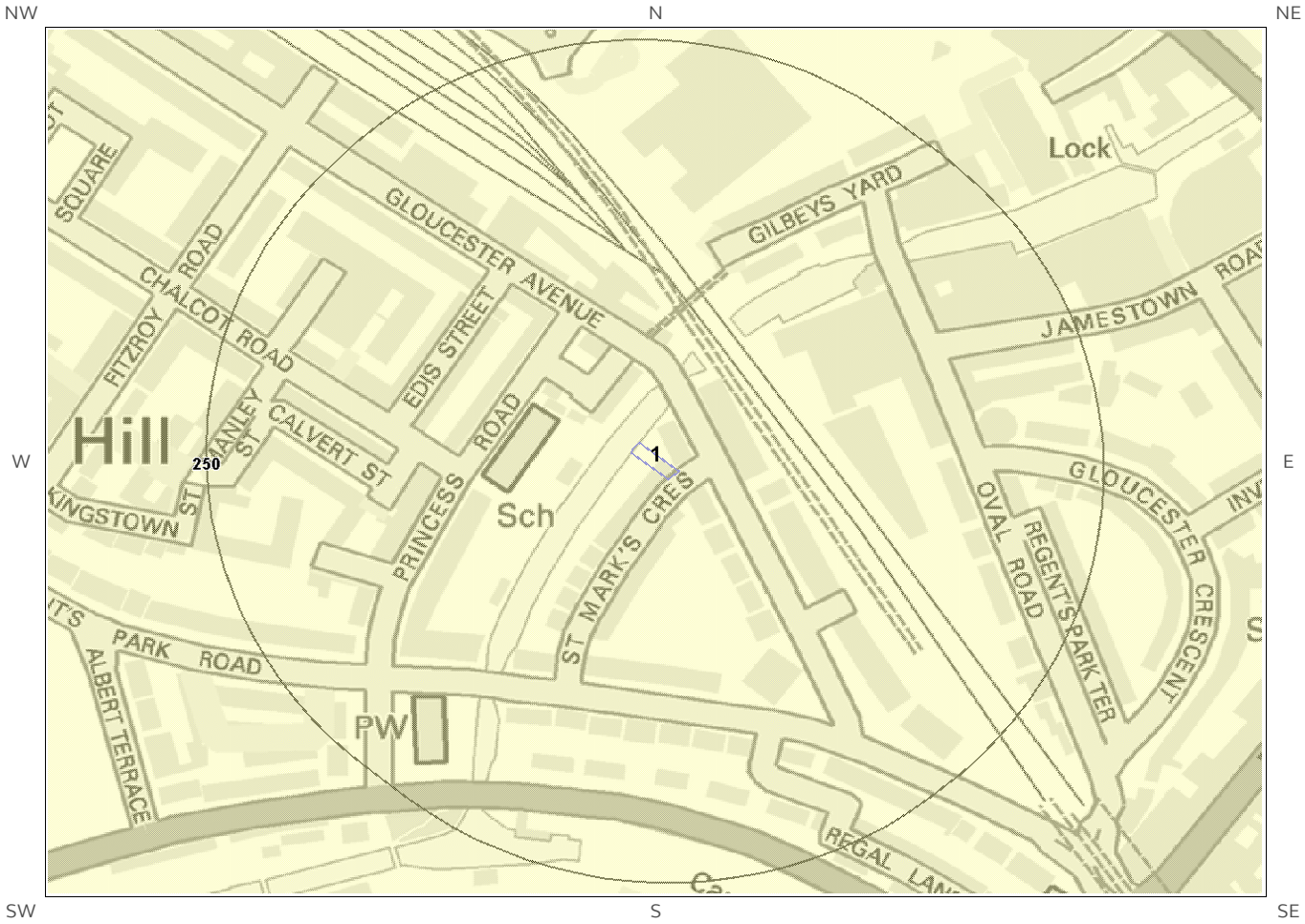
Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

4.3 Ground Dissolution Soluble Rocks Map



Ground Dissolution Soluble Rocks Legend

Site Outline

125
250
Search Buffers (m)

No Data / Null

Negligible

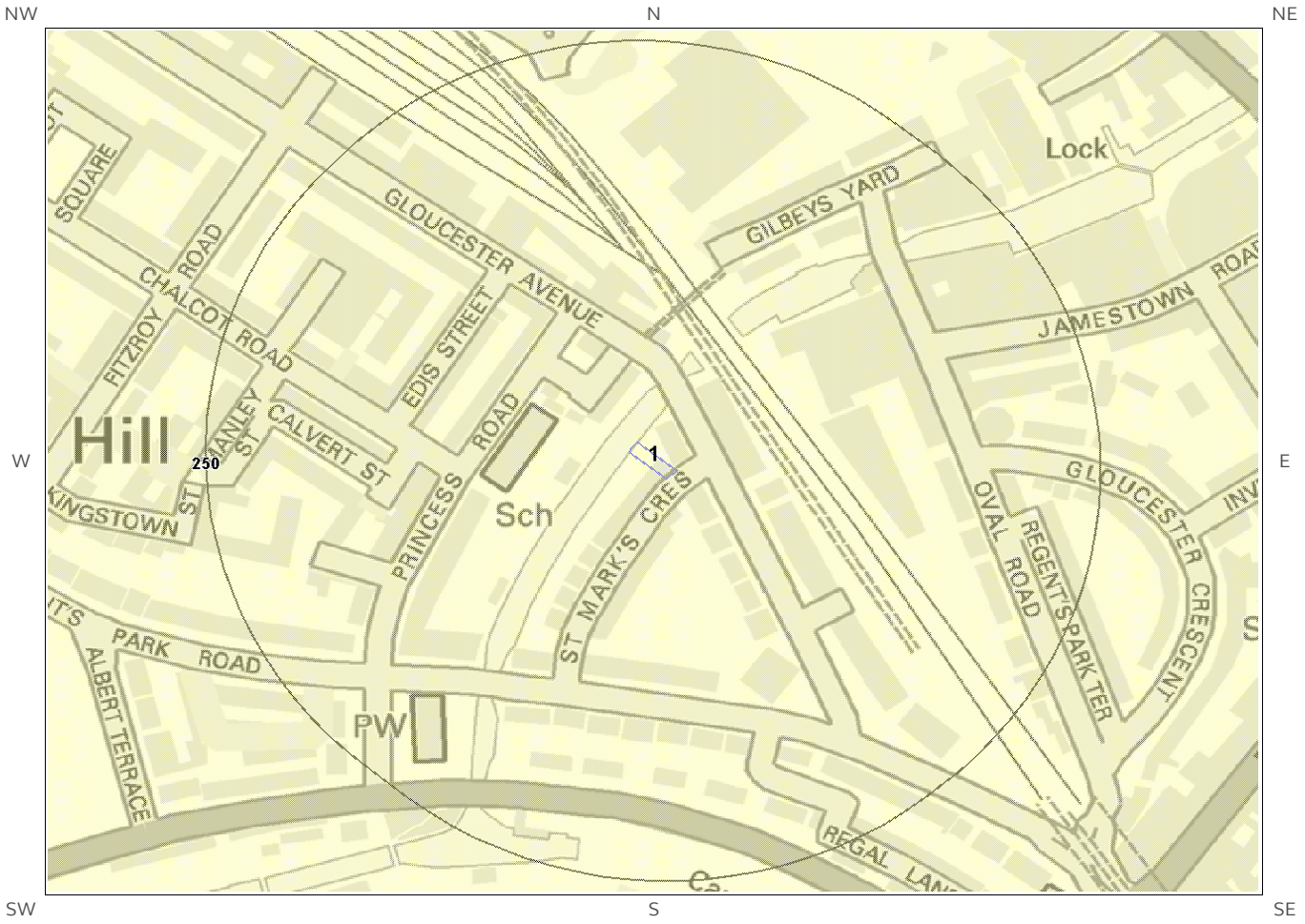
Very Low

Low

Moderate

High

4.4 Compressible Deposits Map



Compressible Deposits Legend

Site Outline

125
250
Search Buffers (m)

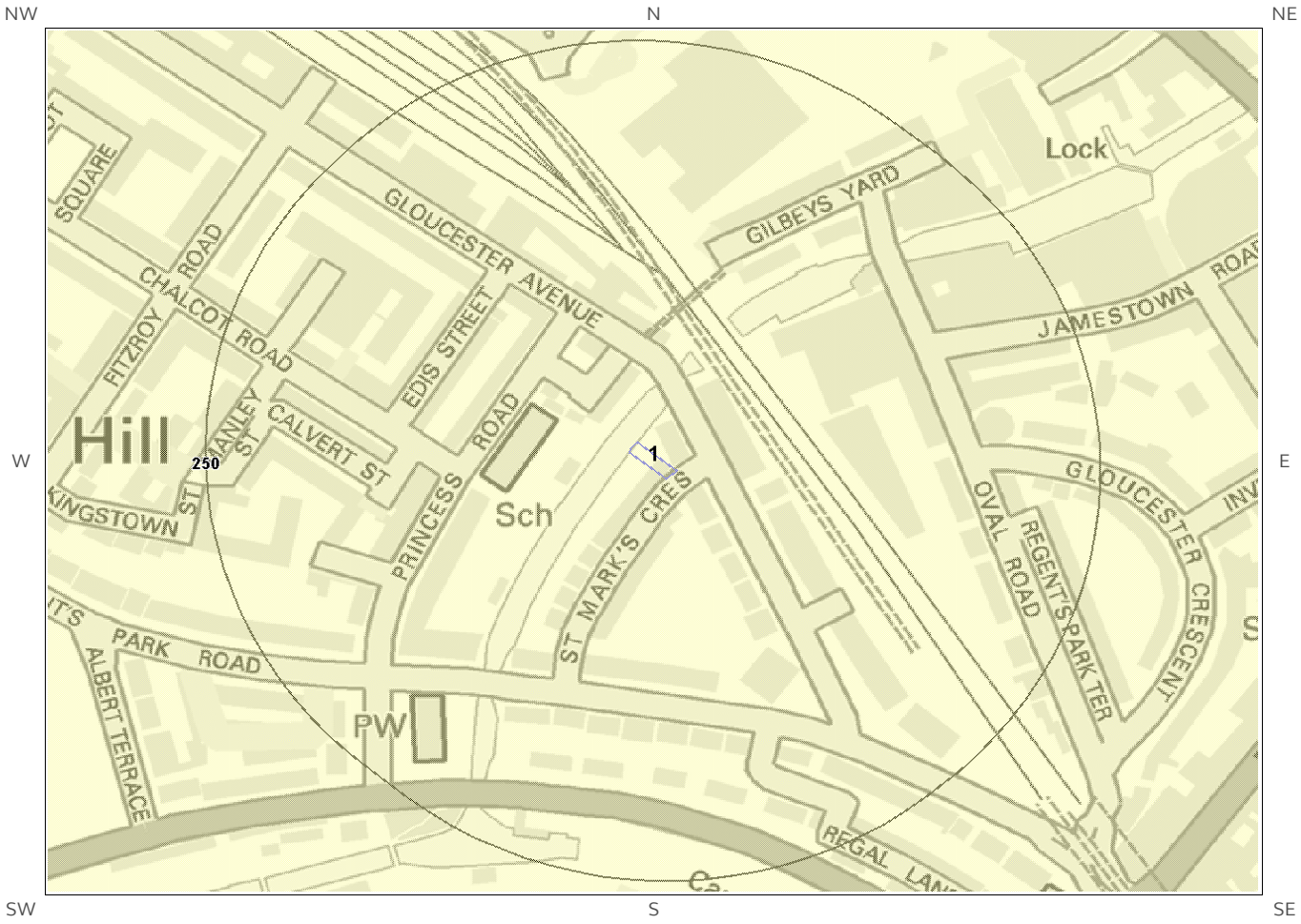
No Data / Null
Negligible
Very Low

Low
Moderate
High

4.5 Collapsible Deposits Map

Collapsible Deposits Legend

4.6 Running Sand Map



Running Sand Legend

Site Outline

125
250
Search Buffers (m)

No Data / Null
Negligible
Very Low

Low
Moderate
High

4 Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site** boundary? Moderate

4.1 Shrink-Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Moderate	Ground conditions predominantly high plasticity. Do not plant or remove trees or shrubs near to buildings without expert advice about their effect and management. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a probable increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a probable increase in insurance risk during droughts or where vegetation with high moisture demands is present.

4.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

4.3 Ground Dissolution of Soluble Rocks

The following Ground Dissolution information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

* This includes an automatically generated 50m buffer zone around the site

4.4 Compressible Deposits

The following Compressible Deposits information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for compressible ground identified. No special actions required to avoid problems due to compressible ground. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible ground.

4.5 Collapsible Deposits

The following Collapsible Rocks information provided by the British Geological Survey:

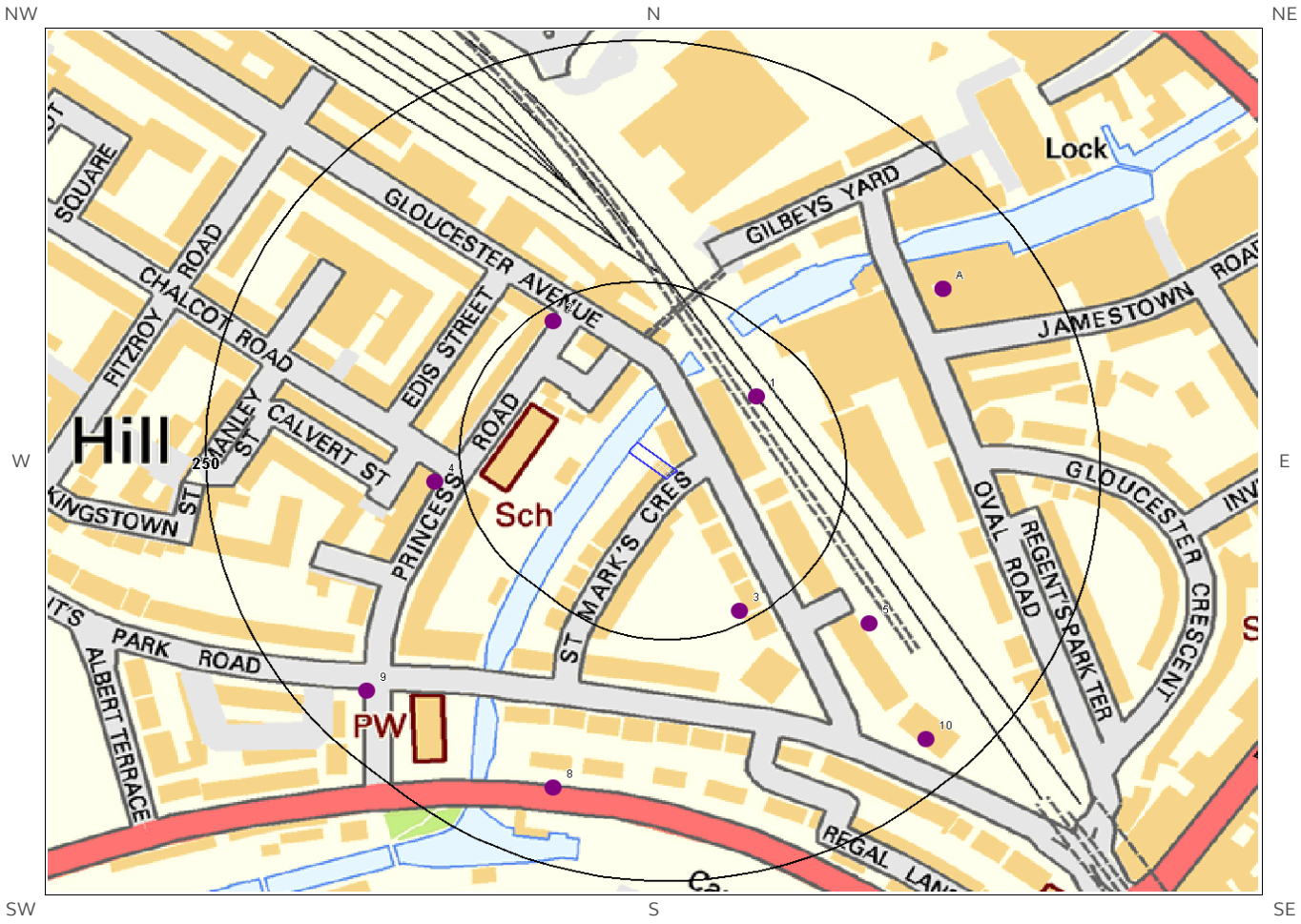
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

4.6 Running Sands

The following Running Sands information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

5 Borehole Records Map



Borehole Records Legend

Site Outline

Borehole Locations

125
250
Search Buffers (m)

5 Borehole Records

The systematic analysis of data extracted from the BGS Borehole Records database provides the following information.

Records of boreholes within 250m of the study site boundary: 10

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	66.0	NE	528440 183933	TQ28SE1829	2.81	CHANNEL TUNNEL RAIL LINK TP3739
2	90.0	NW	528320 183980	TQ28SE1215	10.0	GLOUCESTER AVE SEWER 1
3	93.0	SE	528430 183800	TQ28SE637	18.29	GLOUCESTER AVENUE NW.1 1
4	117.0	W	528250 183880	TQ28SE1216	15.0	GLOUCESTER AVE SEWER 2
5	148.0	SE	528506 183792	TQ28SE7	90.53	PICKFORDS CAMDEN TOWN ST PANCRAS
6A	193.0	NE	528550 184000	TQ28SE686/A	3.0	GILBEY'S WAREH'SE CAMDEN.BH.1-
7A	193.0	NE	528550 184000	TQ28SE686/A-D	3.96	GILBEYS WAREHOUSE CAMDEN TOWN BH1-3
8	203.0	S	528320 183690	TQ28SE308	10.39	ALBERT ROAD C31 ST PANCRAS
9	215.0	SW	528210 183750	TQ28SE1217	20.0	GLOUCESTER AVE SEWER 3
10	222.0	SE	528540 183720	TQ28SE309	13.03	ALBERT ROAD C32 ST PANCRAS

The borehole records are available using the hyperlinks below: Please note that if the donor of the borehole record has requested the information be held as commercial-in-confidence, the additional data will be held separately by the BGS and a formal request must be made for its release.

#1: scans.bgs.ac.uk/sobi_scans/boreholes/15614879
#2: scans.bgs.ac.uk/sobi_scans/boreholes/592796
#3: scans.bgs.ac.uk/sobi_scans/boreholes/592204
#4: scans.bgs.ac.uk/sobi_scans/boreholes/592797
#5: scans.bgs.ac.uk/sobi_scans/boreholes/591491
#6A: scans.bgs.ac.uk/sobi_scans/boreholes/592259
#7A: scans.bgs.ac.uk/sobi_scans/boreholes/592260
#8: scans.bgs.ac.uk/sobi_scans/boreholes/591827
#9: scans.bgs.ac.uk/sobi_scans/boreholes/592798
#10: scans.bgs.ac.uk/sobi_scans/boreholes/591828

6 Estimated Background Soil Chemistry

Records of background estimated soil chemistry within 250m of the study site boundary: 6

For further information on how this data is calculated and limitations upon its use, please see the Groundsure Geo Insight User Guide, available on request.

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	London	No data	No data	No data	No data	No data
95.0	N	London	No data	No data	No data	No data	No data
95.0	N	London	No data	No data	No data	No data	No data
107.0	E	London	No data	No data	No data	No data	No data
156.0	NE	London	No data	No data	No data	No data	No data
156.0	NE	London	No data	No data	No data	No data	No data

*As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.

7 Railways and Tunnels Map

Railways and Tunnels Legend

- Site Outline
- 250 / 500 Search Buffers (m)
- Underground or Partially Underground Railway / Subway System
- Railway Tunnel (OS Mapping)
- Abandoned or Dismantled Railway (OpenStreetMap)
- Railway Track (OS Mapping)
- Railway Track (OpenStreetMap)
- High Speed 2
- High Speed 2 Revised Proposed Route
- Crossrail 1
- Railway and/or Tunnel Feature from Historical Mapping

7 Railways and Tunnels

7.1 Tunnels

This data is derived from OpenStreetMap and provides information on the possible locations of underground railway systems in the UK - the London Underground, the Tyne & Wear Metro and the Glasgow Subway.

Have any underground railway lines been identified within the study site boundary? No

Have any underground railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels Map.

This data is derived from Ordnance Survey mapping and provides information on the possible locations of railway tunnels forming part of the UK overground railway network.

Have any other railway tunnels been identified within the site boundary? No

Have any other railway tunnels been identified within 250m of the site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels Map.

7.2 Historical Railway and Tunnel Features

This data is derived from Groundsure's unique Historical Land-use Database and contains features relating to tunnels, railway tracks or associated works that have been identified from historical Ordnance Survey mapping.

Have any historical railway or tunnel features been identified within the study site boundary? No

Have any historical railway or tunnel features been identified within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Details	Date
33	49	NE	n/a	Railway	1930
1	50	NE	528377 184105	Railway Sidings	1957
2	51	NE	528395 184032	Railway Sidings	1973
3	51	NE	528395 184032	Railway Sidings	1968
12D	54	NE	528442 183911	Tunnel	1969
13E	54	NE	528460 183888	Tunnel	1968

ID	Distance (m)	Direction	NGR	Details	Date
14D	54	NE	528445 183911	Tunnel	1978
15E	54	NE	528460 183887	Tunnel	1971
16D	54	NE	528442 183913	Tunnel	1987
17D	54	NE	528442 183913	Tunnel	1991
34L	54	NE	528381 184023	Railway Sidings	1916
35H	55	NE	n/a	Railways	1875
36H	55	NE	n/a	Railways	1871
37H	55	NE	n/a	Railways	1930
38I	56	NE	n/a	Railways	1916
39I	56	NE	n/a	Railways	1871
40J	56	NE	n/a	Railways	1930
41J	56	NE	n/a	Railways	1875
42J	56	NE	n/a	Railways	1897
4A	57	N	528135 184166	Railway Sidings	1882
43	58	N	n/a	Railway	1879
44K	58	NE	528395 183973	Railway Sidings	1952
45K	58	NE	528396 183973	Railway Sidings	1952
46	61	E	528477 183856	Railway Sidings	1952
47	62	N	528348 184140	Railway Sidings	1875
48	62	E	528530 183770	Railway Sidings	1952
49L	64	NE	528383 184019	Railway Sidings	1896
50	64	NE	n/a	Railway	1896
5A	78	N	528162 184160	Railway Sidings	1948
6C	78	NE	528366 184156	Railway Sidings	1894
7B	79	N	528320 184188	Railway Sidings	1920
8B	79	N	528320 184188	Railway Sidings	1938
9	83	N	528199 184182	Railway Sidings	1989
10M	84	N	528201 184135	Railway Sidings	1911
81	88	N	528256 184173	Tunnel	1989
11C	89	NE	528412 184158	Railway Sidings	1911
51M	95	N	528218 184126	Railway Sidings	1996
52M	95	N	528218 184126	Railway Sidings	1994
53M	95	N	528218 184126	Railway Sidings	1995

ID	Distance (m)	Direction	NGR	Details	Date
54	95	N	528250 184173	Railway Sidings	1965
55	95	N	528196 184140	Railway Sidings	1952
56N	95	N	528298 184181	Railway Sidings	1952
57N	95	N	528298 184181	Railway Sidings	1952
58A	95	N	528250 184174	Railway Sidings	1973
18F	96	N	528261 184167	Tunnel	1965
19F	96	N	528261 184167	Tunnel	1996
20F	96	N	528261 184167	Tunnel	1995
21F	96	N	528261 184167	Tunnel	1994
22F	96	N	528261 184167	Tunnel	1973
59O	96	N	528205 184149	Railway Sidings	1991
60O	96	N	528205 184149	Railway Sidings	1987
61O	96	N	528205 184149	Railway Sidings	1991
62	96	N	528250 184155	Railway Sidings	1982
63	96	N	528321 184174	Railway Sidings	1970
64N	96	N	528298 184181	Railway Sidings	1968
23F	97	N	528259 184167	Tunnel	1987
24F	97	N	528259 184167	Tunnel	1991
25F	97	N	528259 184167	Tunnel	1982
26F	97	N	528259 184167	Tunnel	1991
27F	97	N	528263 184167	Tunnel	1970
28F	97	N	528261 184167	Tunnel	1968
65	97	E	n/a	Railway	1870
66	99	N	n/a	Railway	1930
67	103	E	n/a	Railway	1870
68	105	NE	528368 184155	Railway Sidings	1952
69	110	N	n/a	Railway	1916
29G	121	SE	528517 183803	Tunnel	1969
30G	121	SE	528518 183803	Tunnel	1982
31G	121	SE	528518 183803	Tunnel	1991

ID	Distance (m)	Direction	NGR	Details	Date
32G	121	SE	528518 183803	Tunnel	1995
70P	122	SE	528538 183759	Railway Sidings	1952
71P	122	SE	528538 183759	Railway Sidings	1952
72Q	132	SE	528563 183757	Railway Sidings	1952
73Q	132	SE	528563 183757	Railway Sidings	1968
74	148	NW	528224 183986	Railway Sidings	1896
75	155	W	528222 183990	Railway Sidings	1916
76R	163	NE	528504 184024	Railway Sidings	1963
77R	163	NE	528504 184024	Railway Sidings	1952
78	164	SE	n/a	Railway	1897
79S	178	NE	528501 184034	Railway Sidings	1975
80S	178	NE	528501 184034	Railway Sidings	1975

Any records that have been identified are represented on the Railways and Tunnels Map.

7.3 Historical Railways

This data is derived from OpenStreetMap and provides information on the possible alignments of abandoned or dismantled railway lines in proximity to the study site.

Have any historical railway lines been identified within the study site boundary? No

Have any historical railway lines been identified within 250m of the study site boundary? Yes

Distance (m)	Direction	Status
57	NE	Disused
58	NE	Abandoned
65	NE	Abandoned
180	SE	Disused

Note: multiple sections of the same track may be listed in the detail above

Any records that have been identified are represented on the Railways and Tunnels Map.

7.4 Active Railways

These datasets are derived from Ordnance Survey mapping and OpenStreetMap and provide information on the possible locations of active railway lines in proximity to the study site.

Have any active railway lines been identified within the study site boundary? No

Have any active railway lines been identified within 250m of the study site boundary? Yes

Distance (m)	Direction	Name	Type
56	NE	Not given	Rail
60	NE	Down Fast	Rail
61	NE	Not given	Rail
65	NE	Not given	Rail
66	NE	Euston Station Railway Bridges	Rail
66	NE	Not given	Rail
66	NE	Not given	Multi Track
69	NE	Euston Station Railway Bridges	Rail
70	NE	West Coast Main Line	Rail
74	NE	Not given	Rail
75	NE	Not given	Rail
76	NE	Euston Station Railway Bridges	Rail
76	NE	Not given	Multi Track
77	NE	Down Fast	Rail
79	NE	Euston Station Railway Bridges	Rail
79	NE	Up Fast	Rail
82	NE	Not given	Rail
84	E	Not given	Rail
84	NE	Euston Station Railway Bridges	Rail
86	NE	West Coast Main Line	Rail
88	NE	Euston Station Railway Bridges	Rail
91	NE	Not given	Rail
94	NE	Up Fast	Rail
100	N	Not given	Rail
105	N	Not given	Multi Track
105	N	Not given	Multi Track
120	N	Not given	Rail
120	N	Not given	Multi Track
120	N	Not given	Multi Track
127	N	Not given	Rail
144	N	Not given	Rail
146	N	Not given	Rail
160	N	Not given	Rail
160	N	Not given	Rail
174	N	Not given	Rail
179	N	Not given	Rail
192	N	Not given	Rail

Note: multiple sections of the same track may be listed in the detail above
Any records that have been identified are represented on the Railways and Tunnels Map.

7.5 Railway Projects

These datasets provide information on the location of large scale railway projects High Speed 2 and Crossrail 1 .

Is the study site within 5km of the route of the High Speed 2 rail project?	Yes
Is the study site within 500m of the route of the Crossrail 1 rail project?	No

Further information on proximity to these routes, the project construction status and associated works can be obtained through the purchase of a Groundsure HS2 and Crossrail 1 Report.

Crossrail route data has been digitised from publicly available maps by Groundsure. The route as provided relates to the Crossrail 1 project only, and does not include any details of the Crossrail 2 project, as final details of the route for Crossrail 2 are still under consultation.

Please note that this assessment takes account of both the original Phase 2b proposed route and the amended route proposed in 2016. As the Phase 2b route is still under consultation, Groundsure are providing information on both options until the final route is formally confirmed. Practitioners should take account of this uncertainty when advising clients.

Contact Details

Groundsure Helpline

Telephone: 08444 159 000
info@groundsure.com

British Geological Survey Enquiries

Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:**enquiries@bgs.ac.uk**
Web:**www.bgs.ac.uk**
BGS Geological Hazards Reports and general geological enquiries

British Gypsum

British Gypsum Ltd
East Leake
Loughborough
Leicestershire
LE12 6HX

The Coal Authority

200 Lichfield Lane
Mansfield
Notts NG18 4RG
Tel: 0345 7626 848
DX 716176 Mansfield 5
www.coal.gov.uk

Public Health England

Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
https://www.gov.uk/government/organisations/public-health-england
Email: **enquiries@phe.gov.uk**
Main switchboard: 020 7654 8000

Johnson Poole & Bloomer Limited

Harris and Pearson Building, Brettel Lane
Brierley Hill, West Midlands
DY5 3LH
Tel: +44 (0) 1384 262 000
Email:**enquiries.gs@jpb.co.uk**
Website: **www.jpb.co.uk**

Ordnance Survey

Adanac Drive, Southampton
SO16 0AS

Tel: 08456 050505
Website: http://www.ordnancesurvey.co.uk/

Getmapping PLC

Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444
Website:**http://www1.getmapping.com/**

Contact Details

Peter Brett Associates

Caversham Bridge House
Waterman Place
Reading
Berkshire RG1 8DN
Tel: +44 (0)118 950 0761 E-mail:**reading@pba.co.uk**
Website:**http://www.peterbrett.com/home**

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