



Mugen Geo Ltd
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HEBDEN BRIDGE, HX7 8AU

Groundsure Reference: GS-6415330
Your Reference: 1910_BD12_9LY

Report Date 22 Oct 2019

Report Delivery Method: Email - pdf

Enviro Insight

Address: LAND AT WESTFIELD LANE WYKE, BRADFORD, BD12 9LY

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Enviro 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,

REDACTED

Managing Director
Groundsure Limited

Enc.
Groundsure Enviroinsight

Address: LAND AT WESTFIELD LANE WYKE, BRADFORD, BD12 9LY

Date: 22 Oct 2019

Reference: GS-6415330

Client: Mugen Geo Ltd

NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 02-Jul-2018

Grid Reference: 416019,426212

Site Size: 0.6185ha

Report Reference: GS-6415330

Client Reference: 1910_BD12_9LY

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Overview of Findings

For further details on each dataset, please refer to each individual section in the main 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: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	1	1	10	75
1.2 Additional Information – Historical Tank Database	0	0	1	1
1.3 Additional Information – Historical Energy Features Database	0	0	6	9
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	5	4
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	0	6	62
Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	1	0
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	0	0
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	0
2.3.2 National Incidents Recording System, List 1	0	0	0	1
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	0	0	1	7
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	1	4
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	1	0	0	2	1
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	1	0	1	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	0	0	2

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	0	6	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	1	0
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Records of Artificial Ground and Made Ground present beneath the study site	None identified
5.2 Records of Superficial Ground and Drift Geology present beneath the study site	None identified
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology				0-500m		
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site				None identified		
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site				Identified		
	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	14
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	3
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	1	0	Not searched	Not searched

Section 6: Hydrogeology and Hydrology

0-500m

	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	10	24	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Environment Agency Zone 2 floodplains within 250m of the study site	None identified					
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	None identified					
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	Very Low					
7.4 Flood Defences within 250m of the study site	None identified					
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified					
7.6 Areas used for Flood Storage within 250m of the study site	None identified					
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Limited potential					
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	Low					

Section 8: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	0
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	2
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	0
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	0	0	0	1	0	0
8.14 Records of Green Belt land	1	0	2	0	1	1

Section 9: Natural Hazards	
9.1 Maximum risk of natural ground subsidence	Very Low
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Very Low
9.1.2 Maximum Landslides hazard rating identified on the study site	Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Negligible
9.2 Radon	
9.2.1 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 site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 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.

Section 10: Mining	
10.1 Coal mining areas within 75m of the study site	Identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	None identified
10.3 Brine affected areas within 75m of the study site	None identified

Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licences, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

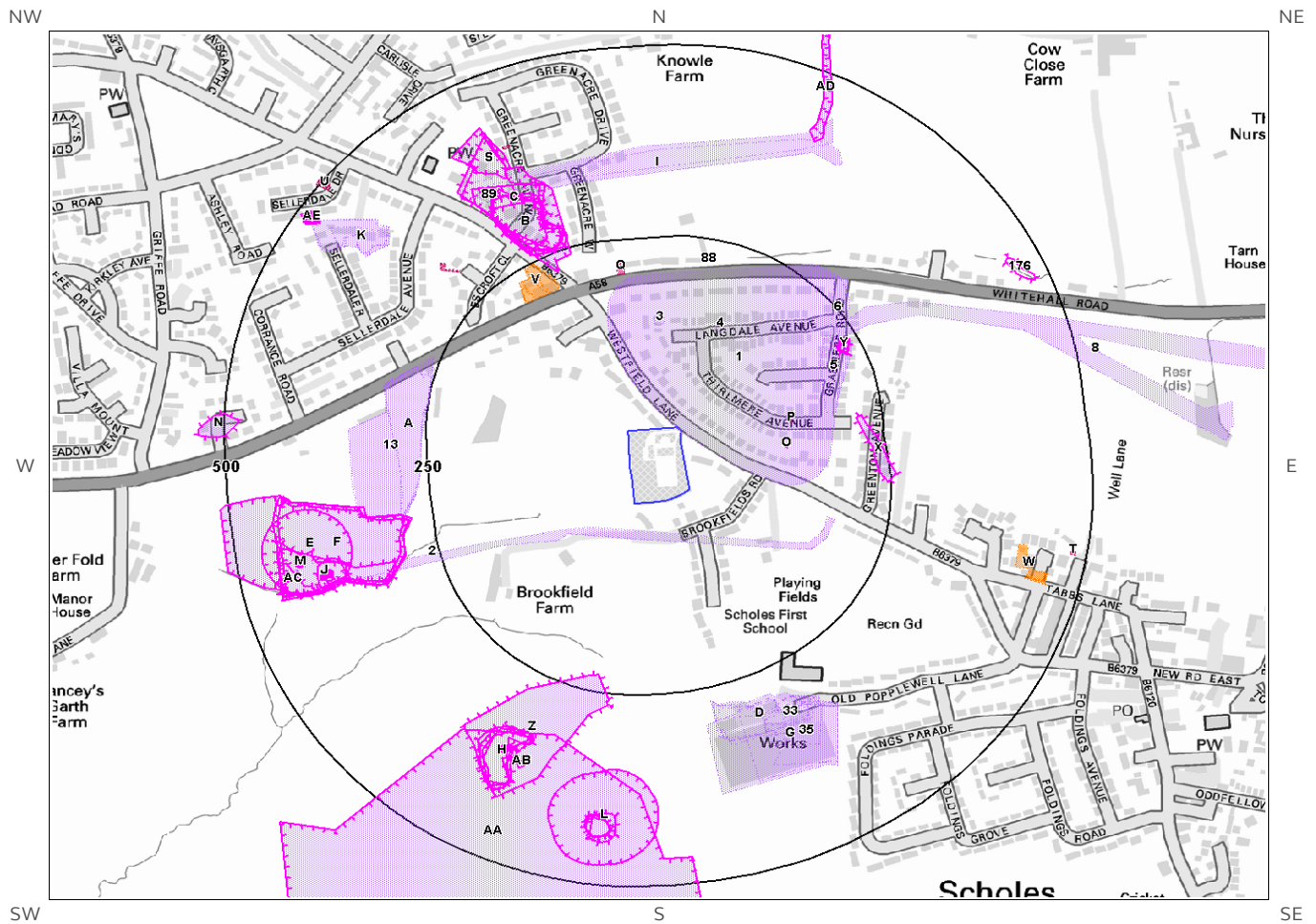
Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

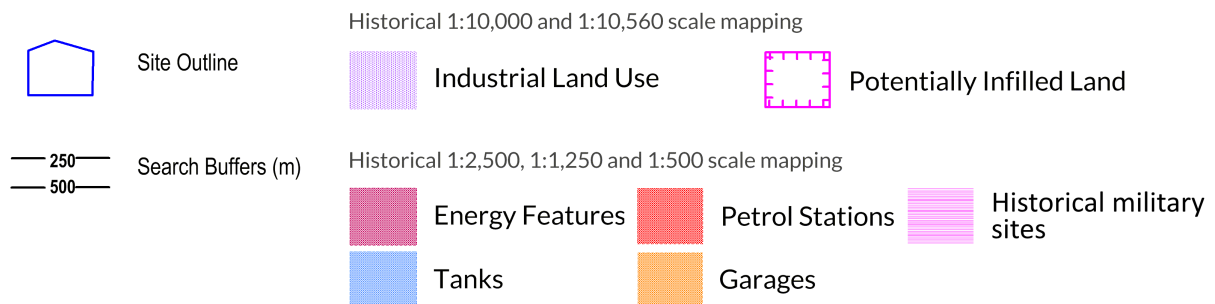
Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.

1. Historical Land Use



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1. Historical Industrial Sites

1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 87

ID	Distance [m]	Direction	Use	Date
1	0	On Site	Unspecified Factory	1967
2	35	S	Tramway Sidings	1905
3	135	N	Unspecified Tank	1967
4	136	N	Unspecified Tank	1967
5	181	E	Unspecified Commercial/Industrial	1905
6	212	NE	Tramway Sidings	1905
7X	217	E	Unspecified Ground Workings	1892
8	220	NE	Tramway Sidings	1892
9C	225	NW	Unspecified Pit	1892
10Z	228	S	Old Coal Pit	1905
11A	250	W	Nursery	1938
12A	250	W	Nursery	1948
13	251	W	Nursery	1955
14B	252	N	Refuse Heap	1938
15B	252	N	Refuse Heap	1938
16B	253	N	Refuse Heap	1967
17B	254	N	Refuse Heap	1955
18B	256	N	Refuse Heap	1948
19C	264	NW	Unspecified Pit	1905
20D	267	S	Unspecified Mills	1948
21C	270	N	Refuse Heap	1905
22C	270	N	Refuse Heap	1892
23D	270	S	Unspecified Mills	1938
24D	274	S	Unspecified Mill	1905
25F	276	W	Unspecified Disused Mine	1967
26E	280	W	Unspecified Disused Mine	1990
27E	280	W	Unspecified Disused Mine	1983
28D	281	S	Unspecified Mill	1892
29F	286	W	Unspecified Disused Pit	1948
30G	287	S	Unspecified Works	1983
31G	289	SE	Unspecified Works	1990
32D	293	S	Unspecified Mills	1955
33	303	SE	Unspecified Mills	1967

34J	304	W	Unspecified Pit	1905
35	306	SE	Unspecified Works	1974
36AA	318	S	Opencast Workings	1967
37H	327	SW	Refuse Heap	1955
38H	327	SW	Refuse Heap	1948
39I	330	N	Tramway Sidings	1892
40H	332	SW	Unspecified Heaps	1905
41H	332	SW	Unspecified Heap	1892
42H	332	SW	Refuse Heap	1938
43H	332	SW	Refuse Heap	1938
44I	336	N	Tramway Sidings	1905
45L	348	S	Old Coal Pit	1905
46H	350	SW	Old Air Shaft	1955
47H	352	SW	Old Air Shaft	1938
48H	352	SW	Unspecified Shafts	1905
49H	355	SW	Old Air Shaft	1948
50E	355	W	Unspecified Old Shaft	1955
51H	357	SW	Old Air Shaft	1955
52H	358	SW	Unspecified Old Shaft	1938
53H	358	SW	Unspecified Old Shaft	1938
54H	358	SW	Unspecified Shafts	1905
55AB	363	S	Unspecified Old Shaft	1948
56S	364	NW	Refuse Heap	1905
57J	364	W	Unspecified Disused Pit	1938
58J	364	W	Unspecified Disused Pit	1938
59J	367	W	Refuse Heap	1892
60K	383	NW	Unspecified Mill	1892
61K	383	NW	Unspecified Mill	1905
62K	383	NW	Unspecified Disused Mill	1948
63J	384	W	Unspecified Disused Shafts	1967
64K	385	NW	Unspecified Disused Mill	1938
65J	385	W	Unspecified Disused Shafts	1983
66J	385	W	Unspecified Disused Shafts	1974
67J	385	W	Unspecified Disused Shafts	1990
68K	387	NW	Unspecified Disused Mill	1955
69J	393	W	Old Air Shaft	1948
70J	394	W	Old Air Shaft	1938
71J	395	W	Old Air Shaft	1955
72L	406	S	Sand Pit	1892
73L	409	S	Unspecified Heap	1948
74L	409	S	Unspecified Heap	1955
75AD	411	NE	Unspecified Ground Workings	1955

76AC	413	W	Unspecified Disused Pit	1955
77L	414	S	Unspecified Heap	1938
78L	414	S	Unspecified Heap	1938
79M	418	W	Unspecified Disused Shafts	1990
80M	418	W	Unspecified Disused Shafts	1983
81M	418	W	Unspecified Disused Shafts	1974
82M	418	W	Unspecified Disused Shafts	1967
83M	421	W	Unspecified Old Shaft	1948
84M	421	W	Unspecified Old Shaft	1938
85M	421	W	Unspecified Old Shaft	1938
86N	483	W	Unspecified Heap	1892
87N	483	W	Unspecified Heap	1905

1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary:

2

ID	Distance (m)	Direction	Use	Date
88	220	N	Unspecified Tank	1956
89	349	NW	Unspecified Tank	1893

1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary:

15

ID	Distance (m)	Direction	Use	Date
90O	124	E	Electricity Substation	1994
91O	124	E	Electricity Substation	1994
92P	134	E	Electricity Substation	1956
93P	135	E	Electricity Substation	1956
94Q	204	N	Electricity Substation	1971
95Q	213	N	Electricity Substation	1990
96R	294	NW	Electricity Substation	1971
97R	313	NW	Electricity Substation	1990

98S	398	N	Electricity Substation	1992
99S	400	NW	Electricity Substation	1970
100T	479	E	Gas Substation	1956
101T	480	E	Gas Substation	1956
102U	487	NW	Electricity Substation	1992
103U	489	NW	Electricity Substation	1968
104U	489	NW	Electricity Substation	1970

1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary: 0

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 9

ID	Distance (m)	Direction	Use	Date
105V	204	NW	Garage	1956
106V	204	NW	Garage	1990
107V	205	NW	Garage	1956
108V	205	NW	Garage	1962
109V	205	NW	Garage	1971
110W	415	E	Garage	1956
111W	437	E	Garage	1994
112W	437	E	Garage	1994
113W	438	E	Garage	1956

1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary:

0

Database searched and no data found.

1.7 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site:

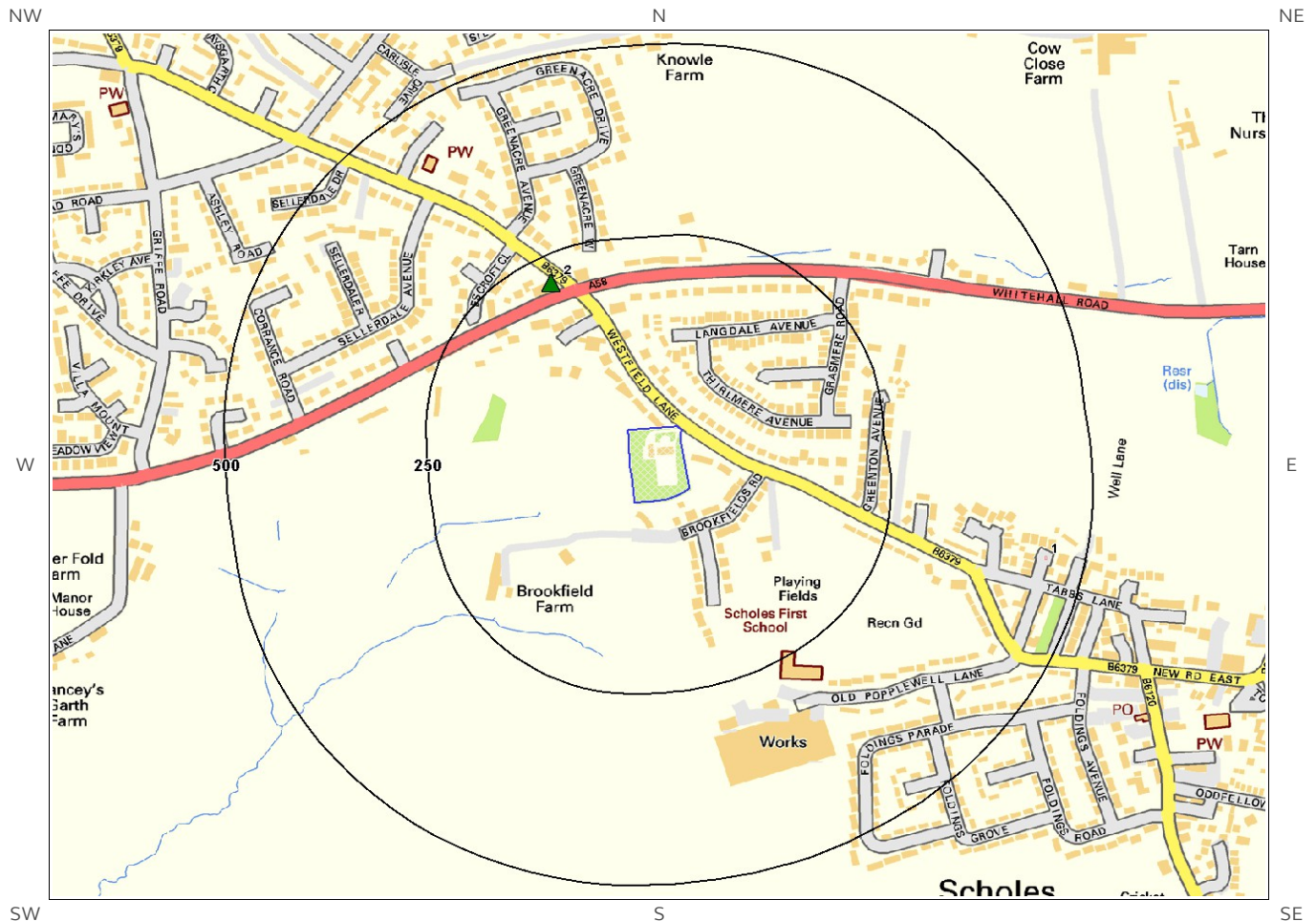
68

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:

ID	Distance(m)	Direction	Use	Date
114X	217	E	Unspecified Ground Workings	1892
115Y	220	NE	Reservoir	1938
116Y	220	NE	Reservoir	1955
117Y	223	NE	Reservoir	1948
118C	225	NW	Unspecified Pit	1892
119Z	228	S	Old Coal Pit	1905
120B	252	N	Refuse Heap	1938
121B	252	N	Refuse Heap	1938
122B	253	N	Refuse Heap	1967
123B	254	N	Refuse Heap	1955
124B	256	N	Refuse Heap	1948
125C	264	NW	Unspecified Pit	1905
126C	270	N	Refuse Heap	1905
127C	270	N	Refuse Heap	1892
128F	276	W	Unspecified Disused Mine	1967
129E	280	W	Unspecified Disused Mine	1983
130E	280	W	Unspecified Disused Mine	1990
131F	286	W	Unspecified Disused Pit	1948
132J	304	W	Unspecified Pit	1905
133AA	318	S	Opencast Workings	1967
134AB	327	SW	Refuse Heap	1955
135AB	327	SW	Refuse Heap	1948
136AB	332	SW	Unspecified Heaps	1905
137AB	332	SW	Unspecified Heap	1892
138AB	332	SW	Refuse Heap	1938
139AB	332	SW	Refuse Heap	1938
140L	348	S	Old Coal Pit	1905
141H	350	SW	Old Air Shaft	1955
142H	352	SW	Old Air Shaft	1938
143H	352	SW	Unspecified Shafts	1905
144H	355	SW	Old Air Shaft	1948
145E	355	W	Unspecified Old Shaft	1955
146H	357	SW	Old Air Shaft	1955
147H	358	SW	Unspecified Old Shaft	1938
148H	358	SW	Unspecified Old Shaft	1938

149AB	358	SW	Unspecified Shafts	1905
150AB	363	S	Unspecified Old Shaft	1948
151S	364	NW	Refuse Heap	1905
152AC	364	W	Unspecified Disused Pit	1938
153J	364	W	Unspecified Disused Pit	1938
154J	367	W	Refuse Heap	1892
155J	384	W	Unspecified Disused Shafts	1967
156J	385	W	Unspecified Disused Shafts	1990
157J	385	W	Unspecified Disused Shafts	1983
158J	385	W	Unspecified Disused Shafts	1974
159J	393	W	Old Air Shaft	1948
160J	394	W	Old Air Shaft	1938
161J	395	W	Old Air Shaft	1955
162L	406	S	Sand Pit	1892
163L	409	S	Unspecified Heap	1948
164L	409	S	Unspecified Heap	1955
165AD	411	NE	Unspecified Ground Workings	1955
166AC	413	W	Unspecified Disused Pit	1955
167L	414	S	Unspecified Heap	1938
168L	414	S	Unspecified Heap	1938
169M	418	W	Unspecified Disused Shafts	1990
170M	418	W	Unspecified Disused Shafts	1983
171M	418	W	Unspecified Disused Shafts	1974
172M	418	W	Unspecified Disused Shafts	1967
173M	421	W	Unspecified Old Shaft	1948
174M	421	W	Unspecified Old Shaft	1938
175M	421	W	Unspecified Old Shaft	1938
176	457	NE	Pond	1892
177AE	468	NW	Reservoir	1938
178AE	468	NW	Reservoir	1948
179AE	471	NW	Reservoir	1955
180N	483	W	Unspecified Heap	1905
181N	483	W	Unspecified Heap	1892

2. Environmental Permits, Incidents and Registers Map



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- | | | | | | |
|---|-------------------------------|---|--|---|---|
|  | Site Outline |  | Recorded Pollution Incident |  | RAS 3 & 4 Authorisations |
|  | Dangerous Substances (List 1) |  | Part A(1) Authorised Processes and Historic IPC Authorisations |  | Part A(2) and Part B Authorised Processes |
|  | Dangerous Substances (List 2) |  | COMAH / NIHHS Sites |  | Sites Determined as Contaminated Land |
|  | Water Industry Referrals |  | Hazardous Substance Consents and Enforcements | | |
|  | Licenced Discharge Consents | | | | |
|  | Red List Discharge Consents | | | | |

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

0

Database searched and no data found.

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

0

Database searched and no data found.

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

1

The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
2	212	NW	415887 426457	Address: Westfield Filling Station, Whitehall Road, Bradford, BD12 9LP Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B Enforcement: No Enforcement Notified Date of Enforcement: No Enforcement Notified Comment: No Enforcement Notified

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

0

Database searched and no data found.

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

0

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site:

0

Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

0

Database searched and no data found.

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

1

The following NIRS List 1 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance(m)	Direction	NGR	Details
1	451	E		Incident Date: 08-Feb-2001 Incident Identification: 15947.0 Catchments Name: CALDER AND TRIBS Water Description: NOT APPLICABLE Water Course: NON-WATER Incident Substantiated: Yes Priority Description: 1 Day (24 Hours) Waste Description: Not Available Water Impact: No Impact Land Impact: Significant Impact Air Impact: No Impact Action Taken: Not Available

2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site

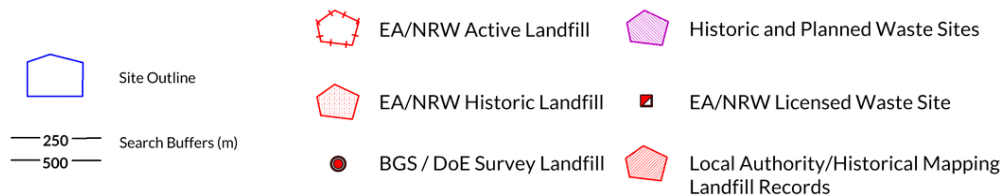
0

Database searched and no data found.

3. Landfill and Other Waste Sites Map



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3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

0

Database searched and no data found.

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

8

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
8	626	E		Site Address: Top Tip, Whitehall Road, Wyke, Near Bradford, West Yorkshire Waste Licence: - Site Reference: - Waste Type: Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Midland Yorkshire Tar Distillers Limited Licence Holder: - First Recorded: 31-Dec-1936 Last Recorded: -
Not shown	1081	E		Site Address: Low Tip, Whitehall Road, Wyke, Near Bradford, West Yorkshire Waste Licence: - Site Reference: - Waste Type: Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Midland Yorkshire Tar Distillers Limited Licence Holder: - First Recorded: 31-Dec-1927 Last Recorded: -
Not shown	1197	E		Site Address: Whitehall Road Tip, Wesfields, Dyke, Near Bradford, West Yorkshire Waste Licence: - Site Reference: - Waste Type: Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Charles Hoist and Sons Limited Licence Holder: - First Recorded: 31-Dec-1927 Last Recorded: -
Not shown	1226	W		Site Address: Bailiff Bridge Tip, Bradford Road, Brighouse, West Yorkshire Waste Licence: - Site Reference: C1117 Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Brighouse Borough Cleansing Department Licence Holder: Calderdale Metropolitan Borough Council

ID	Distance (m)	Direction	NGR	Details
				(Waste) Reference: - First Recorded: 31-Dec-1932 Last Recorded: 31-Dec-1971
Not shown	1226	S		Site Address: Birkhouse Lane, Birkby Lane, Brighouse, West Yorkshire Waste Licence: - Site Reference: C1904 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: Bond Farm, Birkby Lane, Bailiff Bridge Brighouse Operator: J Collins Licence Holder: J Collins First Recorded: 01-Jan-1973 Last Recorded: 31-Dec-1989
Not shown	1318	N		Site Address: Wood Ash Pit, Wilson Road, Wyke, Bradford Waste Licence: - Site Reference: 4700/W0066 Waste Type: Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: 01-Jan-1978 Last Recorded: -
Not shown	1344	N		Site Address: Storr Hill Brick Works, Wilson Road, Bradford, Wyke, West Yorkshire Waste Licence: Yes Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: DUR/L/EMO001 Licence Issue: 13-Jul-1982 Licence Surrendered: 17-Nov-2008 Licence Holder Address: 12 Kenley Mount, Bradford, Wibsey, West Yorkshire Operator: H Birkby & Sons Ltd Licence Holder: H Birkby & Sons Ltd First Recorded: - Last Recorded: -
Not shown	1476	N		Site Address: Wood Ash Pit, Wilson Road, Wyke, Bradford Waste Licence: - Site Reference: 4700/W0066 Waste Type: Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: 01-Jan-1978 Last Recorded: -

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

5

The following landfill records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
Not shown	749	E	416800.0 426300.0	Address: Top Tip, Whitehall Rd, Wyke nr Bradford BGS Number: 1099.0 Risk: No risk to aquifer Waste Type: N/A
Not shown	1159	E	417200.0 426400.0	Address: Law Tip, Whitehall Rd, Wyke nr Bradford BGS Number: 1098.0 Risk: Risk to minor aquifer Waste Type: Oily waste (40000 galls)
Not shown	1236	S	415600.0 425000.0	Address: Birkhouse Lane, Birkby Lane, Brighouse, W. Yorks BGS Number: 1903.0 Risk: No risk to aquifer Waste Type: N/A
Not shown	1258	E	417300.0 426400.0	Address: Whitehall Rd Tip, Wesfields, Dyke, nr Bradford BGS Number: 1140.0 Risk: No risk to aquifer Waste Type: N/A
Not shown	1343	W	414700.0 425800.0	Address: Bailiff Bridge Tip, Bradford Road, Brighouse, Yorks BGS Number: 739.0 Risk: No risk to aquifer Waste Type: N/A

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

4

The following landfill records are represented as points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
18	44	S	415990 426121	Refuse Tip	1962 mapping	Polygon
Not shown	818	NW	415382 426874	Refuse Tip	1962 mapping	Polygon
Not shown	818	NW	415382 426874	Refuse Tip	1962 mapping	Polygon
Not shown	1226	W	414723 425819	Refuse Tip	1974 mapping	Polygon

3.2 Other Waste Sites

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

2

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details		
6	15	SE	416091 426167	Type of Site: IT Recycling Business (Conversion) Site Address: Brookfield Farm, Brookfields Road, Wyke, Bradford, West Yorkshire, BD12 9LU	Planning Application Reference: 2016/62/91287/E Date: 16/10/2017	Further Details: Scheme comprises change of use of agricultural buildings to IT recycling business. Data Source: Historic Planning Application Data Type: Point
7	336	SW	415817 425836	Type of Site: Ground Workings and Refuse Heap Site Address: N/A	Planning Application Reference: N/A Date: 1933	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon

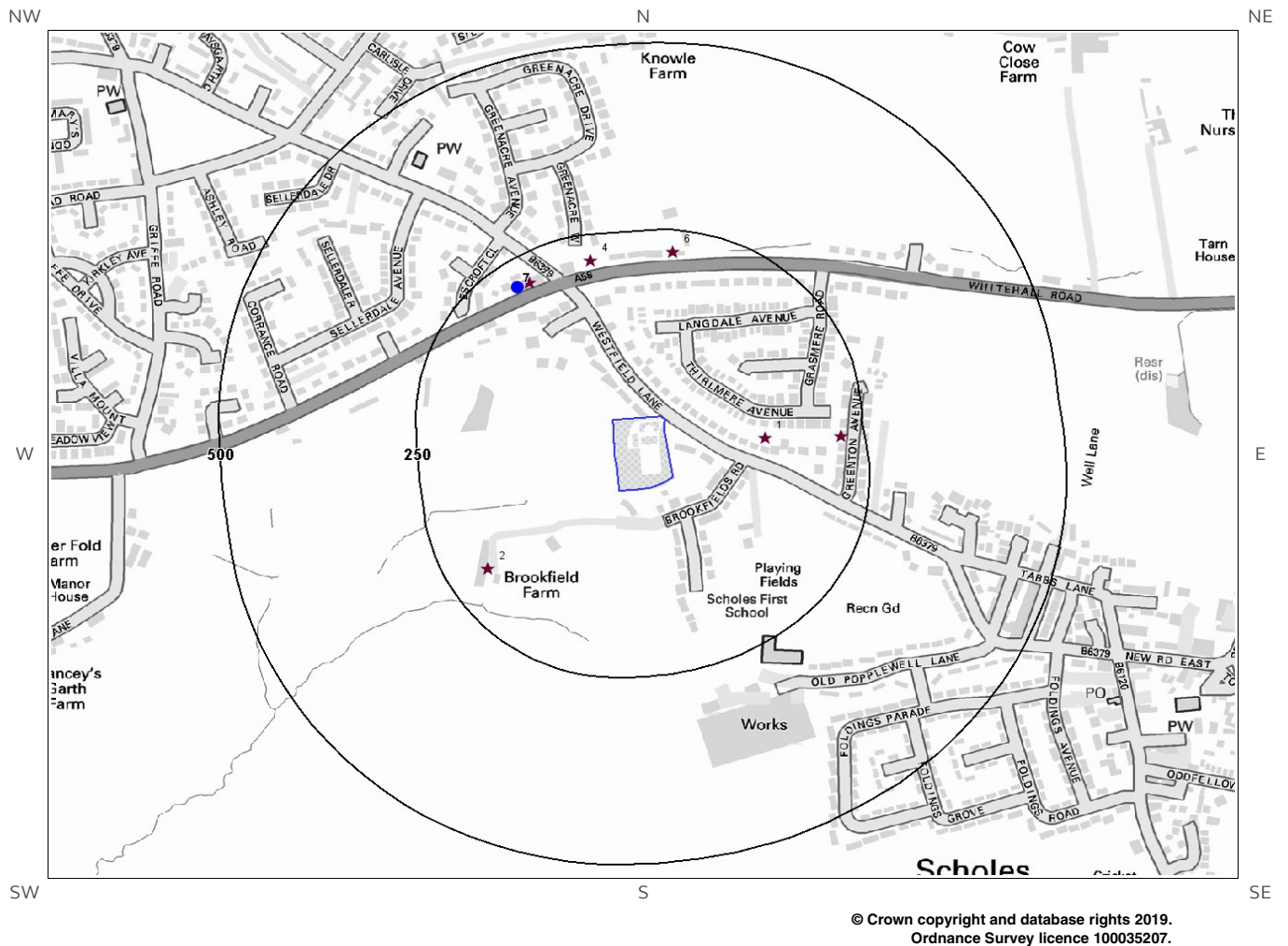
3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

2

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
Not shown	1243	SW	414945 425500	Site Address: Clifton Mills, Bailiff Br, Bailiff Bridge, Brighouse, West Yorkshire, HD6 4EJ Type: Landfill taking Non-Biodegradable Wastes Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: FIR003 EPR reference: EA/EPR/TP3199ZX/S002 Operator: Firth Carpets Ltd Waste Management licence No: 60739 Annual Tonnage: 150000.0 Issue Date: 11/06/1981 Effective Date: - Modified: - Surrendered Date: Jan 29 1999 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Former Mill Pond Correspondence Address: -
Not shown	1345	N	415800 427600	Site Address: Wilson Road, Wyke, Bradford, West Yorkshir Type: Landfill taking Non-Biodegradable Wastes Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EMO001 EPR reference: EA/EPR/CP3493LW/S002 Operator: H Birkby & Sons Ltd Waste Management licence No: 60621 Annual Tonnage: 0.0 Issue Date: 13/07/1982 Effective Date: - Modified: - Surrendered Date: Nov 17 2008 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Storr Hill Brick Works Correspondence Address: -

4. Current Land Use Map



Site Outline

★ Current Industrial Sites

— Electricity Transmission Cables

— 250 — Search Buffers (m)
— 500 —

● Petrol & Fuel Sites

— Gas Transmission Pipelines

4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

6

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	125	E	Electricity Sub Station	416176 426244	West Yorkshire, BD12	Electrical Features	Infrastructure and Facilities
2	196	SW	Ucan Recycling	415823 426069	Brookfields Farm, Brookfields Road, Wyke, Bradford, West Yorkshire, BD12 9LU	Recycling, Reclamation and Disposal	Recycling Services
3	213	NW	Texaco	415876 426452	Whitehall Road, Wyke, Bradford, West Yorkshire, BD12 9LN	Petrol and Fuel Stations	Road and Rail
4	216	N	Electricity Sub Station	415954 426481	West Yorkshire, BD12	Electrical Features	Infrastructure and Facilities
5	219	E	Spen Valley Hearing Care Ltd	416271 426245	17, Greenton Avenue, Scholes, Cleckheaton, West Yorkshire, BD19 6DT	Disability and Mobility Equipment	Consumer Products
6	222	N	Terry's Transport	416058 426493	Timbertops, 338 Whitehall Road, Wyke, Bradford, West Yorkshire, BD12 9DP	Vehicle Repair, Testing and Servicing	Repair and Servicing

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site:

1

The following petrol or fuel site records provided by Catalist are represented as points on the Current Land Use map:

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
7	215	NW	415860 426444	TEXACO	Whitehall Road, Westfield Lane, Westfield, Wyke, Bradford, West Yorkshire, BD12 9LN	No	Open

4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site:

0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site:

0

Database searched and no data found.

5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

5.2 Superficial Ground and Drift Geology

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

5.3 Bedrock and Solid Geology

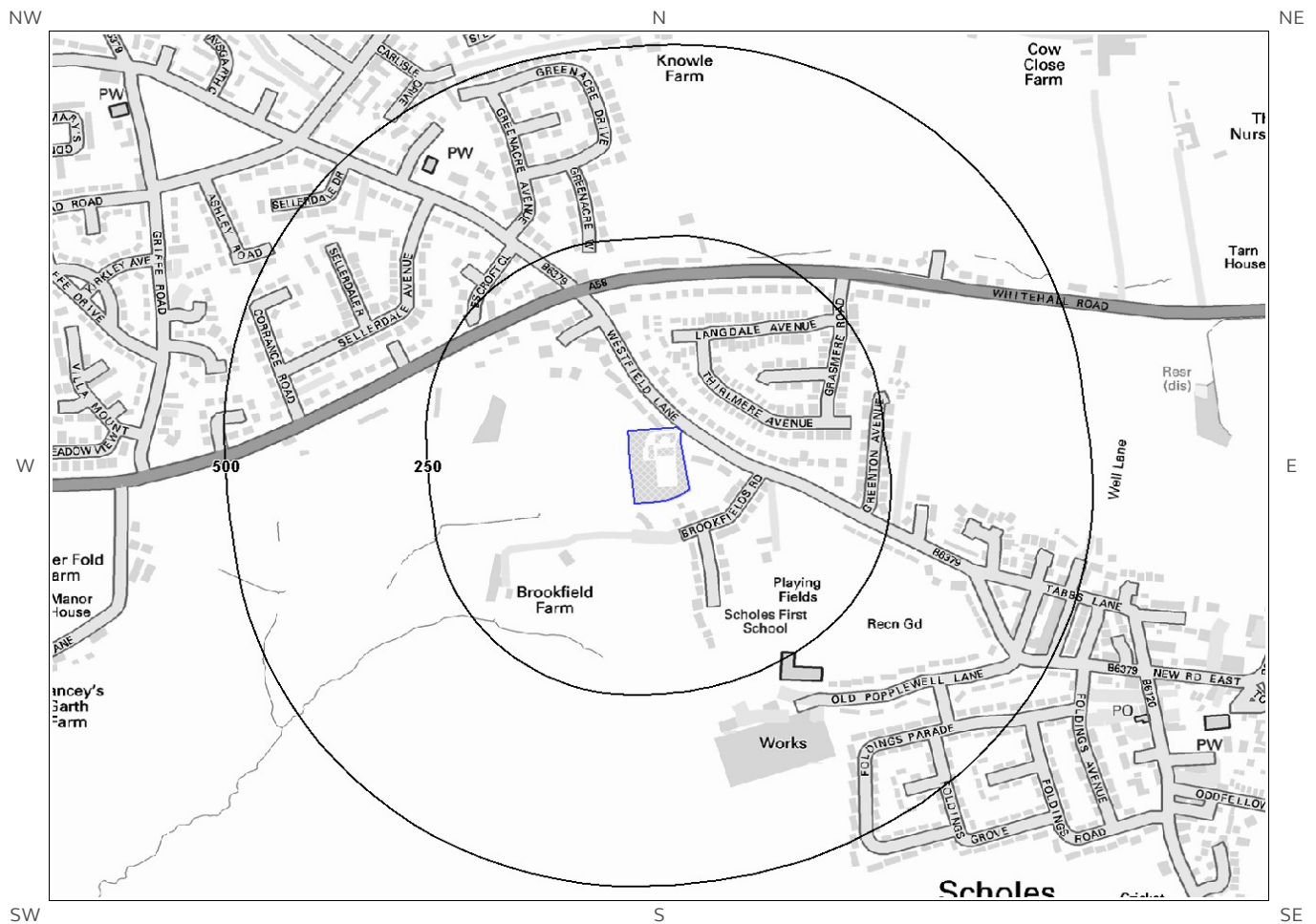
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION	SANDSTONE
PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE
PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION	SANDSTONE
PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE

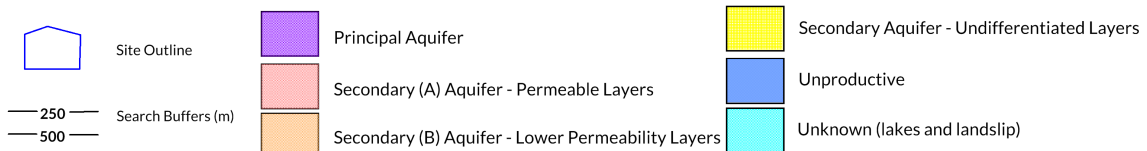
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology



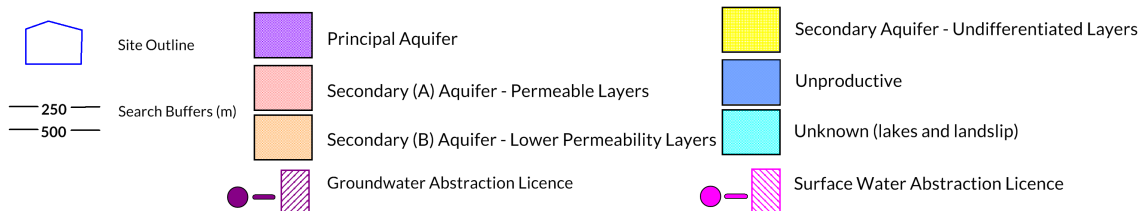
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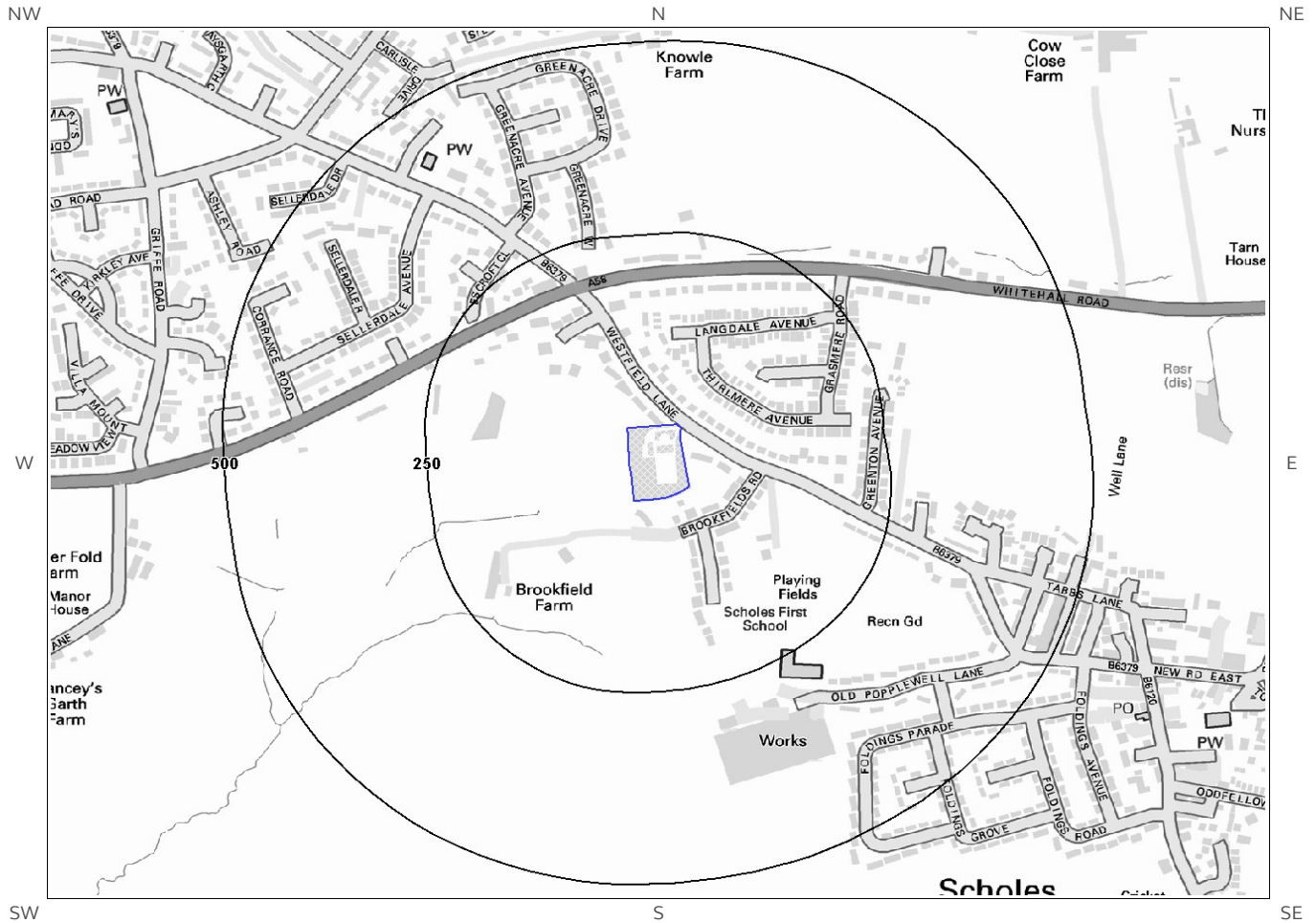
6b. Aquifer Within Bedrock Geology and Abstraction Licences



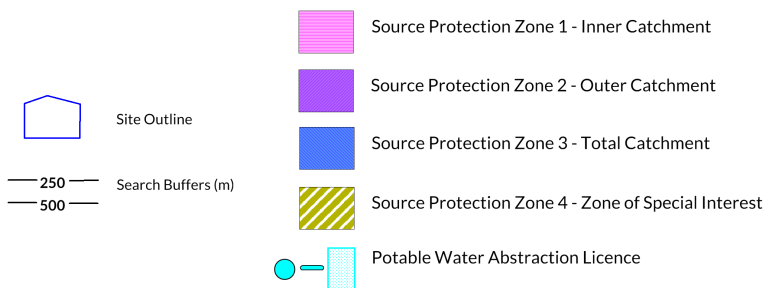
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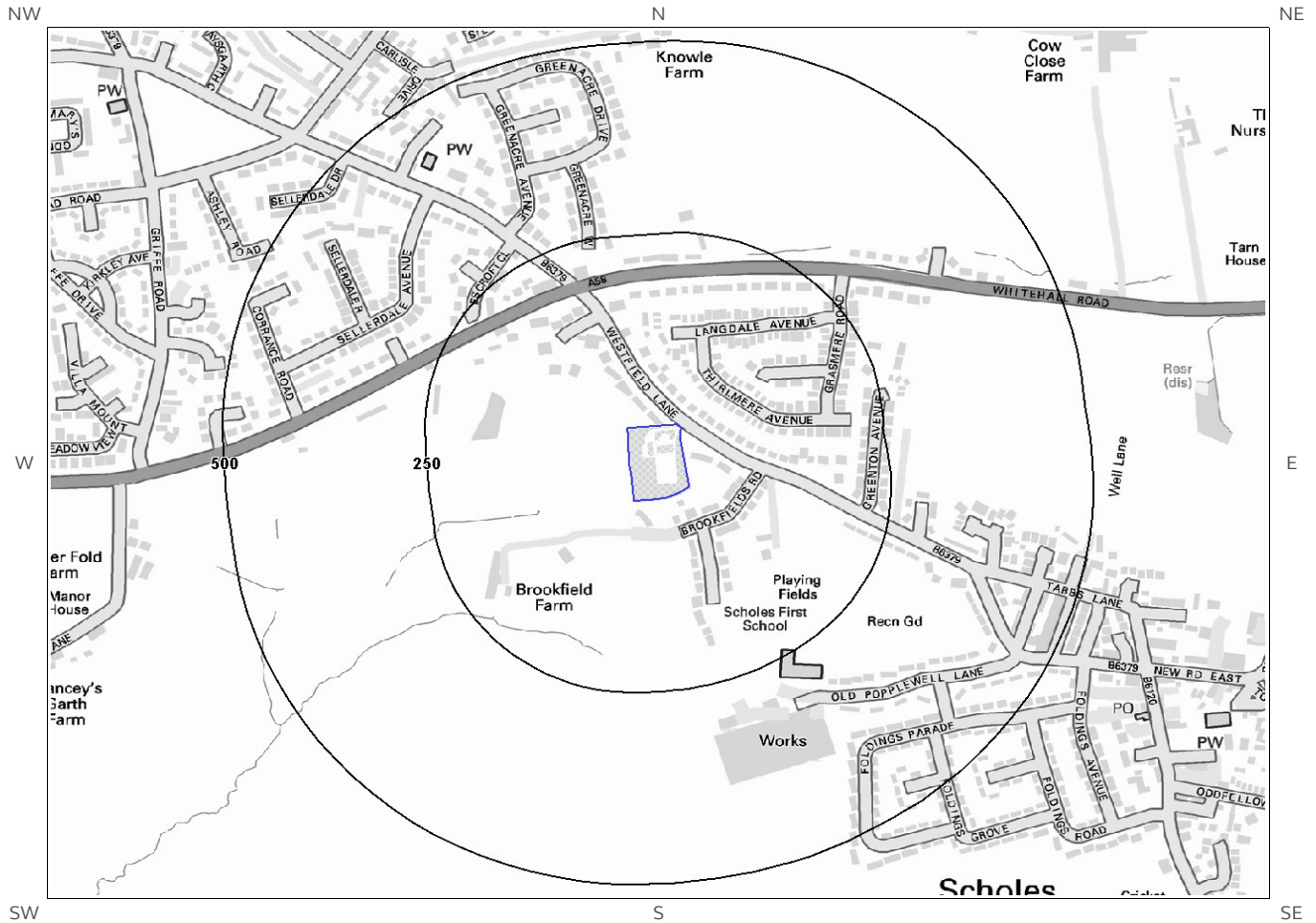
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



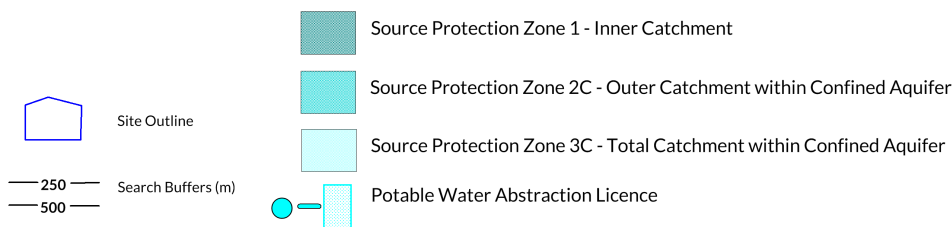
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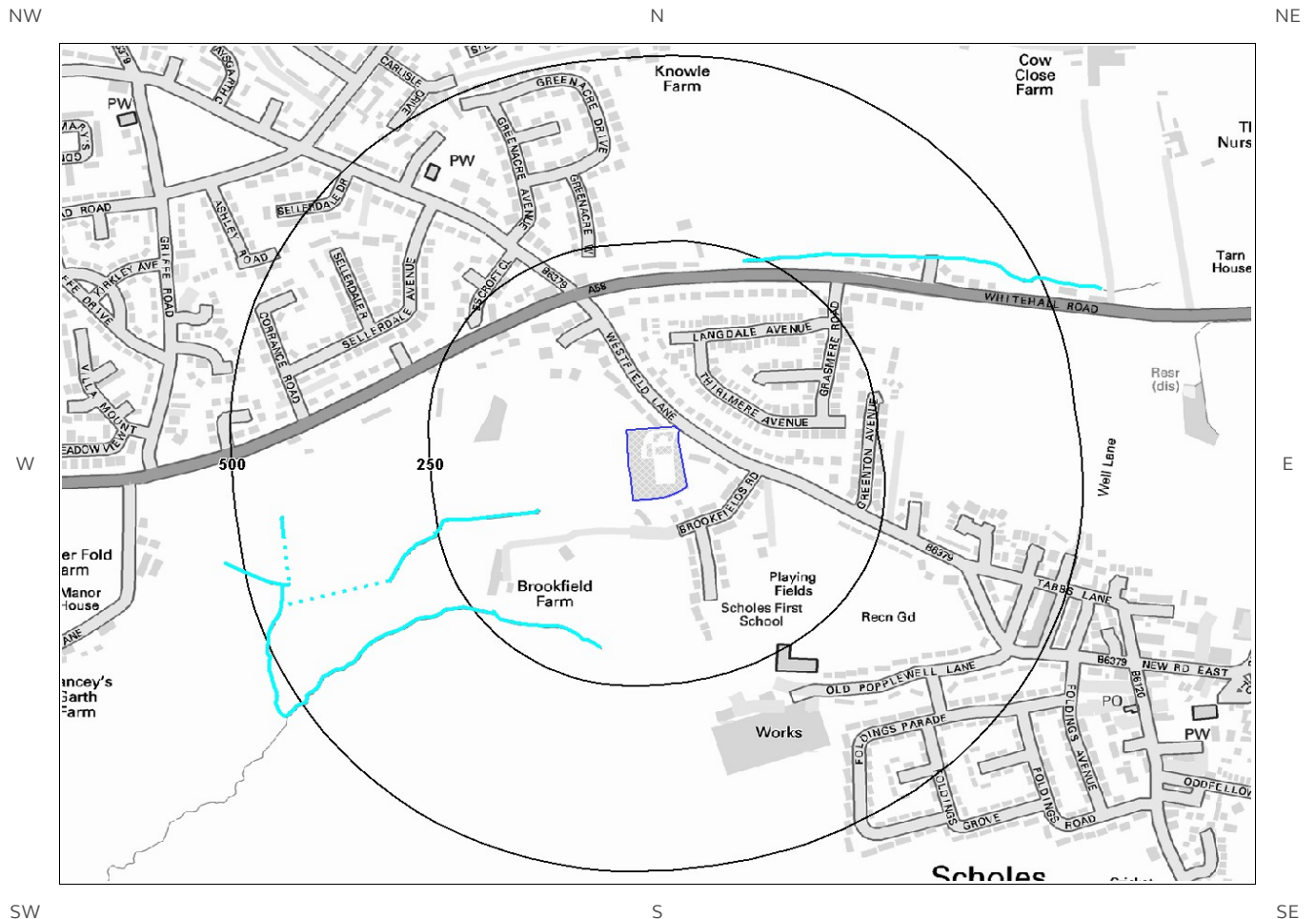
6d. Hydrogeology – Source Protection Zones within confined aquifer



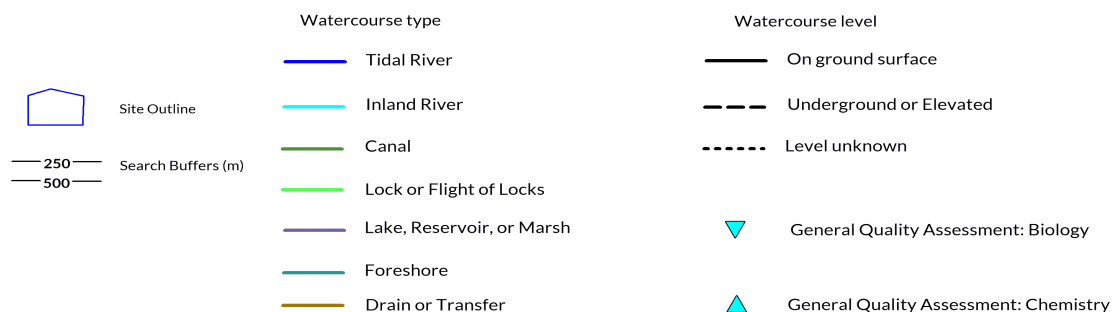
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6e. Hydrology – Watercourse Network and River Quality



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6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property No

Database searched and no data found.

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site Identified

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
Not shown	1753	SW	414900 424800	Status: Historical Licence No: 2/27/12/074 Details: General use relating to Secondary Category (High Loss) Direct Source: GROUNDWATERS Point: SPRING - COAL MEASURES - BRIGHOUSE Data Type: Point Name: INTERFACE EUROPE LIMITED Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 03/01/1999 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1753	SW	414900 424800	Status: Historical Licence No: 2/27/12/074 Details: Boiler Feed Direct Source: GROUNDWATERS Point: SPRING - COAL MEASURES - BRIGHOUSE Data Type: Point Name: INTERFACE EUROPE LTD	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 03/01/1999 Version End Date:
Not shown	1755	N	415890 428020	Status: Active Licence No: 2/27/13/121 Details: Evaporative Cooling Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - LOW MOOR Data Type: Point Name: Solenis UK Industries Ltd	Annual Volume (m³): 280,000 Max Daily Volume (m³): 1,360 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 31/01/2019 Version End Date:
Not shown	1755	N	415890 428020	Status: Active Licence No: 2/27/13/121 Details: Non-Evaporative Cooling Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - LOW MOOR Data Type: Point Name: Solenis UK Industries Ltd	Annual Volume (m³): 280,000 Max Daily Volume (m³): 1,360 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 31/01/2019 Version End Date:
Not shown	1756	SW	414770 424910	Status: Historical Licence No: 2/27/12/268 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - BRIGHOUSE Data Type: Point Name: BLACKSHAW HOLDINGS LTD	Annual Volume (m³): 170,000 Max Daily Volume (m³): 500 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 01/07/2005 Version End Date:
Not shown	1812	SW	414700 424900	Status: Historical Licence No: 2/27/12/268 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - BRIGHOUSE Data Type: Point Name: INTERFACE EUROPE LTD	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 03/01/1999 Version End Date:
Not shown	1894	SW	414800 424700	Status: Historical Licence No: 2/27/12/098 Details: General use relating to Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE-ELLAND FLAGS-BAILIFF BRIDGE Data Type: Point Name: H & C WHITEHEAD LTD	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 20/01/1966 Version End Date:
Not shown	1894	SW	414800 424700	Status: Active Licence No: 2/27/12/098 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: GROUNDWATERS Point: BOREHOLE - ELLAND FLAGS - BAILIFF BRIDGE Data Type: Point Name: H & C WHITEHEAD LTD	Annual Volume (m³): 29,549 Max Daily Volume (m³): 109 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 20/01/1966 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1901	E	417900 426700	Status: Historical Licence No: 2/27/13/187 Details: Spray Irrigation - Direct Direct Source: GROUNDWATERS Point: BOREHOLE Data Type: Point Name: CLECKHEATON & DISTRICT GOLF CLUB Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 10/03/1997 Version End Date:
Not shown	1901	E	417900 426700	Status: Historical Licence No: 2/27/13/187 Details: Spray Irrigation - Direct Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - CLECKHEATON Data Type: Point Name: CLECKHEATON & DISTRICT GOLF CLUB Annual Volume (m³): 13,500 Max Daily Volume (m³): 168 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 10/03/1997 Version End Date:
Not shown	1901	E	417900 426700	Status: Historical Licence No: 2/27/13/221 Details: Spray Irrigation - Direct Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - CLECKHEATON Data Type: Point Name: CLECKHEATON & DISTRICT GOLF CLUB Annual Volume (m³): 6,750 Max Daily Volume (m³): 168 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 01/01/2007 Version End Date:
Not shown	1902	E	417901 426699	Status: Historical Licence No: 2/27/13/221 Details: Spray Irrigation - Direct Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - CLECKHEATON Data Type: Point Name: CLECKHEATON & DISTRICT GOLF CLUB Annual Volume (m³): 6,750 Max Daily Volume (m³): 168 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 01/01/2007 Version End Date:
Not shown	1902	E	417901 426699	Status: Active Licence No: 2/27/13/221/R01 Details: Spray Irrigation - Direct Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - CLECKHEATON Data Type: Point Name: CLECKHEATON & DISTRICT GOLF CLUB Annual Volume (m³): 6,750 Max Daily Volume (m³): 168 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 01/04/2015 Version End Date:
Not shown	1992	S	416700 424300	Status: Historical Licence No: 2/27/13/197 Details: Spray Irrigation - Direct Direct Source: GROUNDWATERS Point: BOREHOLE - COAL MEASURES - CLIFTON BRIGHOUSE Data Type: Point Name: NEWSMITH STAINLESS LIMITED Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 27/05/1998 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

Identified

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
Not shown	1320	SW	415000 425300	Status: Historical Licence No: 2/27/12/073 Annual Volume (m³): - Max Daily Volume (m³): -

ID	Distance (m)	Direction	NGR	Details
				Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: SURFACE WATER Point: CLIFTON BECK AND UNNAMED TRIBUTARY Data Type: Point Name: INTERFACE EUROPE LTD Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 101 Version Start Date: 03/01/1999 Version End Date:
Not shown	1417	W	414600 425900	Status: Historical Licence No: 2/27/12/307 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER Point: SPRING - NORWOOD GREEN Data Type: Point Name: SALAMA Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 29/03/1995 Expiry Date: 30/09/2006 Issue No: 101 Version Start Date: 02/03/2000 Version End Date:
Not shown	1614	W	414400 425900	Status: Historical Licence No: 2/27/12/307 Details: Spray Irrigation - Direct Direct Source: SURFACE WATER Point: SPRING - NORWOOD GREEN Data Type: Point Name: SALAMA Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 29/03/1995 Expiry Date: 30/09/2006 Issue No: 101 Version Start Date: 02/03/2000 Version End Date:

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

None identified

Database searched and no data found.

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

None identified

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site

None identified

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
52	SW	Minor Aquifer/Low Leaching Potential	L	Soils in which pollutants are unlikely to penetrate the soil layer because either water movement is largely horizontal, or they have the ability to attenuate diffuse pollutants.

6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site None identified

6.9.1 Biological Quality:

Database searched and no data found.

6.9.2 Chemical Quality:

Database searched and no data found.

6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	120 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
1	120 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
2	192 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
2	192 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
3	229 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
3	229 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	233 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	233 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
5	239 N	Stubs Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
5	239 N	Stubs Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	253 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
7	253 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): Not Provided
6	253 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
7	253 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	300 NE	Stubs Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	300 NE	Stubs Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
9	326 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
9	326 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
10	429 NE	Stubs Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
10	429 NE	Stubs Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
11	442 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	442 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
12	444 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	444 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
13	448 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	448 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
14	457 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
15	457 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	457 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	457 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
16	467 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	467 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
17	497 NE	Stubs Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	497 NE	Stubs Beck	Inland river not influenced by normal tidal action.	Catchment Area: Aire and Calder Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

6.11 Surface Water Features

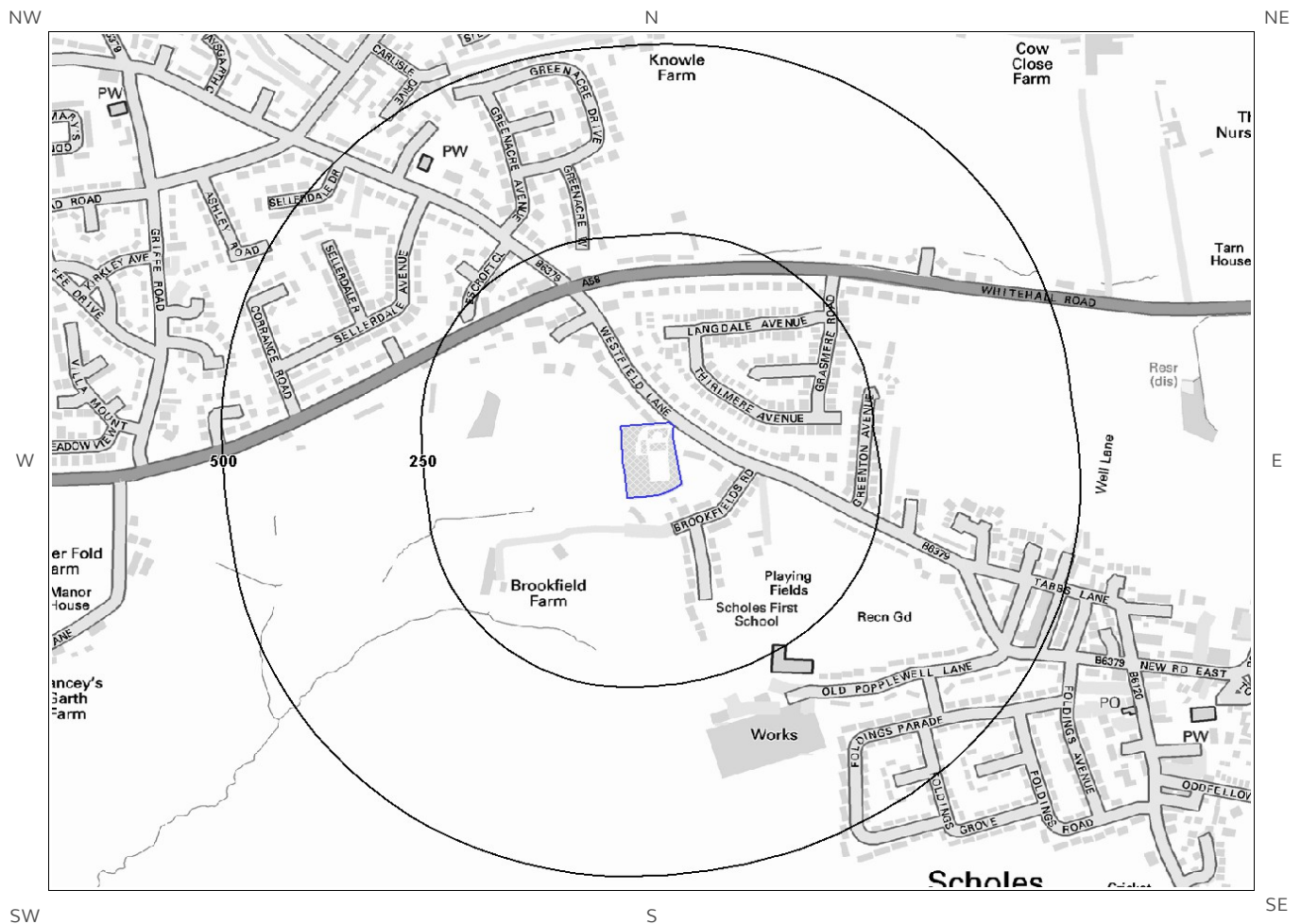
Surface water features within 250m of the study site

Identified

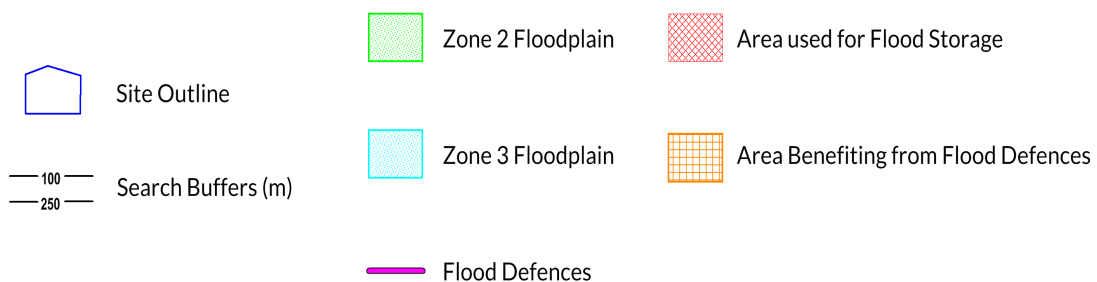
The following surface water records are not represented on mapping:

Distance (m)	Direction
120	W
154	W
192	SW
233	SW
239	N

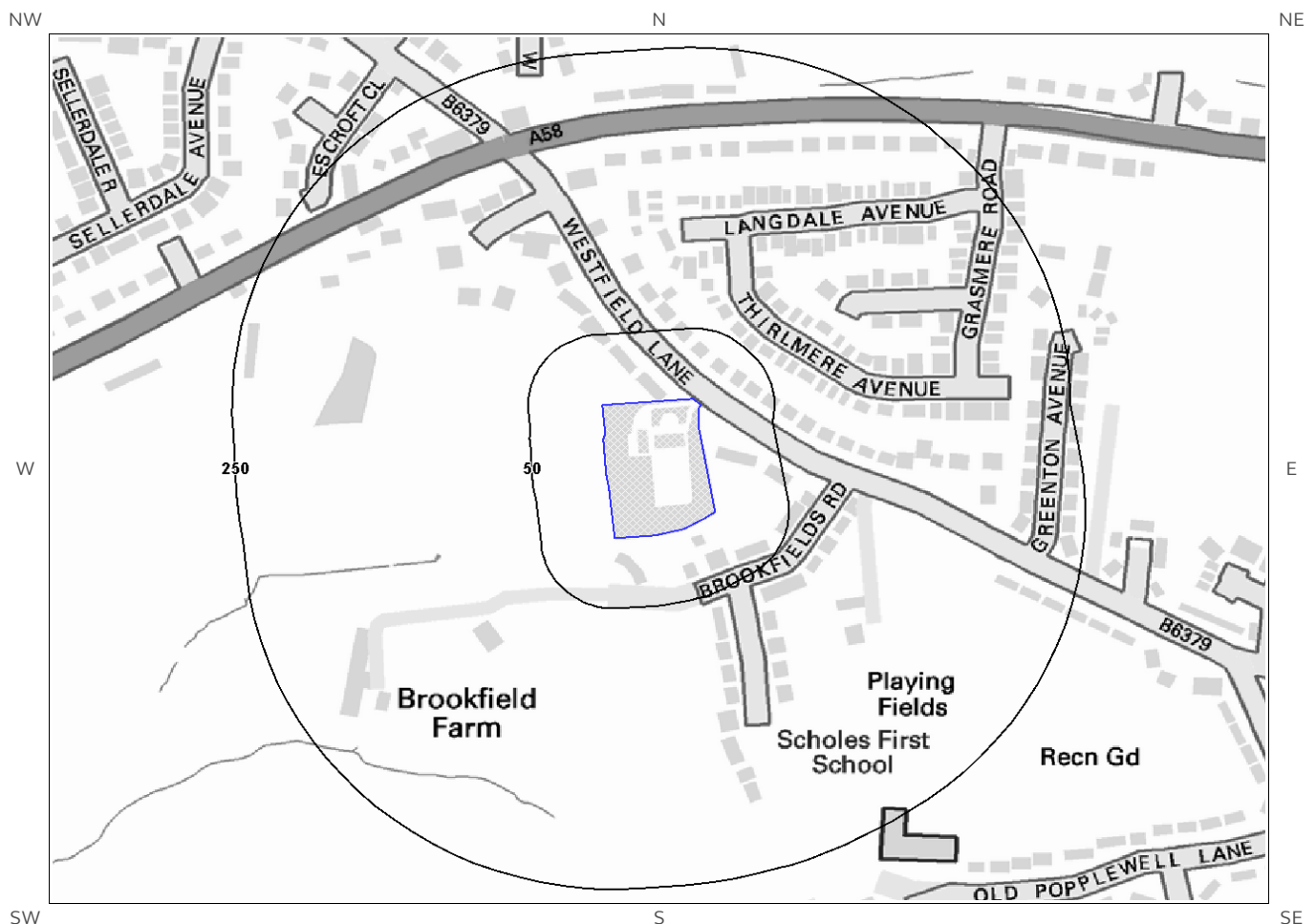
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



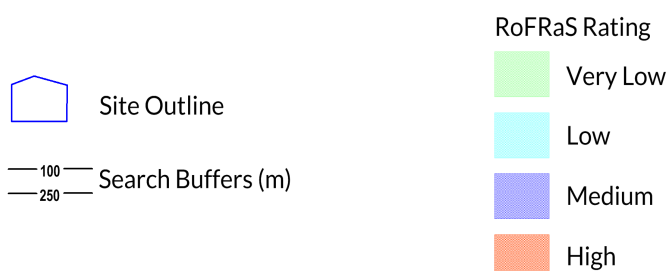
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7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m None identified

Environment Agency/Natural Resources Wales Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m None identified

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

Database searched and no data found.

7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

Highest risk of flooding onsite Very Low

The Environment Agency/Natural Resources Wales RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a Very Low (less than 1 in 1000) chance of flooding in any given year.

7.4 Flood Defences

Flood Defences within 250m of the study site None identified
Database searched and no data found.

7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site None identified

7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site

None identified

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site

Identified

Clearwater Flooding or Superficial Deposits Flooding

Clearwater Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Limited potential

Where limited potential for groundwater flooding to occur is indicated, this means that although given the geological conditions there may be a groundwater flooding hazard, unless other relevant information, e.g. records of previous flooding, suggests groundwater flooding has occurred before in this area, you need take no further action in relation to groundwater flooding hazard.

7.8 Groundwater Flooding Confidence Areas

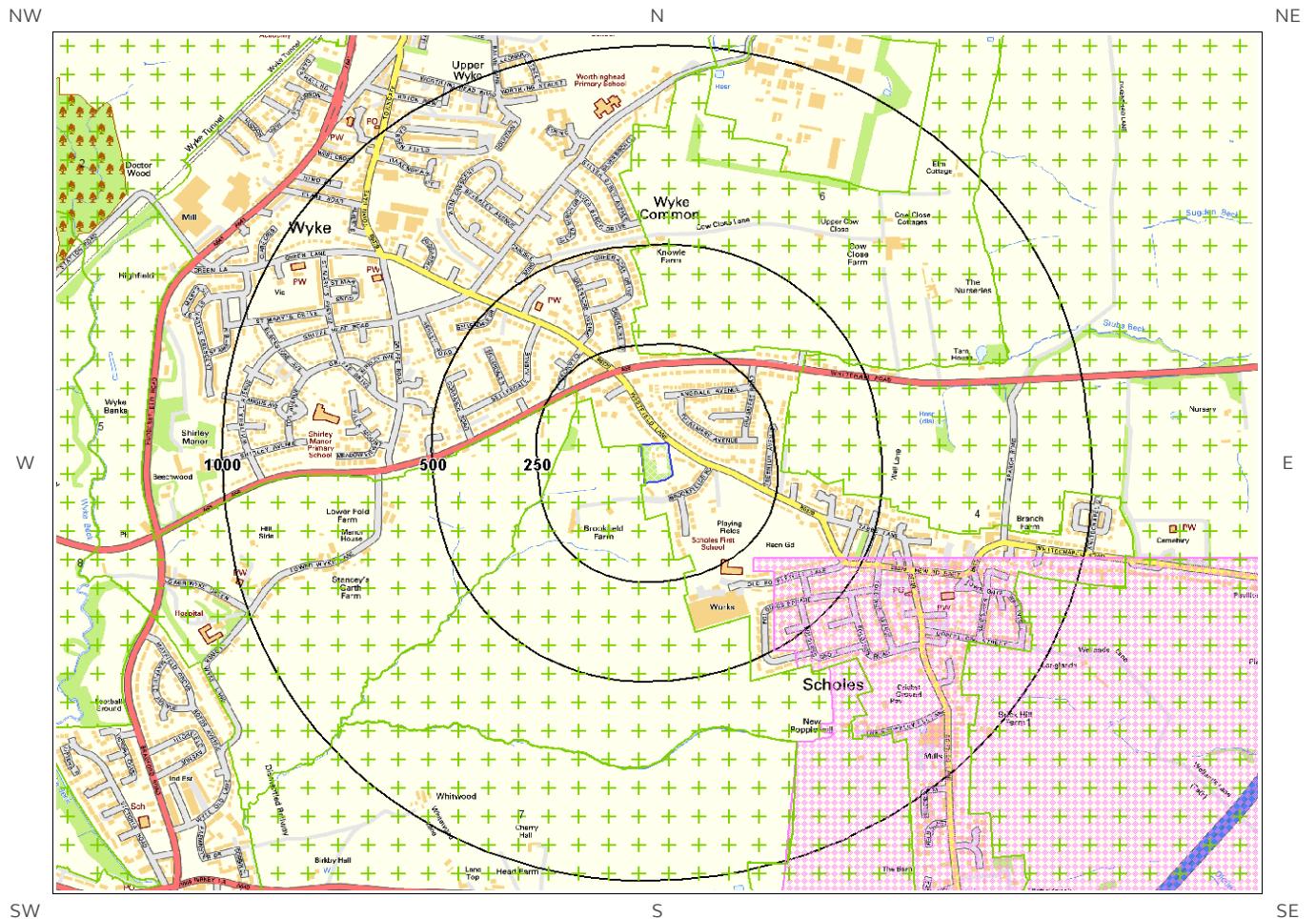
British Geological Survey confidence rating in this result

Low

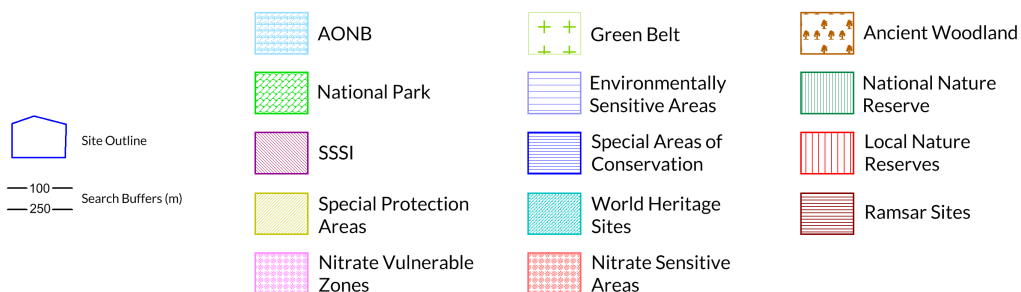
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

8. Designated Environmentally Sensitive Sites Map



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8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site	Identified
---	------------

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

0

Database searched and no data found.

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

0

Database searched and no data found.

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

0

Database searched and no data found.

8.5 Records of Ramsar sites within 2000m of the study site:

0

Database searched and no data found.

8.6 Records of Ancient Woodland within 2000m of the study site:

2

The following records of Designated Ancient Woodland provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
2	1382	NW	OLD HANNA/LOW WOODS	Ancient & Semi-Natural Woodland
Not shown	1816	NW	OLD HANNA/LOW WOODS	Ancient Replanted Woodland

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

0

Database searched and no data found.

8.8 Records of World Heritage Sites within 2000m of the study site:

0

Database searched and no data found.

8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

0

Database searched and no data found.

8.11 Records of National Parks (NP) within 2000m of the study site:

0

Database searched and no data found.

8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

1

The following Nitrate Vulnerable Zone records produced by DEFRA are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	NVZ Name	Data Source
1	283	SE	Existing	DEFRA

8.14 Records of Green Belt land within 2000m of the study site:

5

Green Belt data contains Ordnance Survey data © Crown copyright and database right [2015].

ID	Distance	Direction	Green Belt Name	Local Authority Name
4	0	On Site	Liverpool, Manchester and West Yorks Greenbelt	Kirklees District (B)
5	176	W	Liverpool, Manchester and West Yorks Greenbelt	Bradford District (B)
6	223	N	Liverpool, Manchester and West Yorks Greenbelt	Bradford District (B)
7	632	S	Liverpool, Manchester and West Yorks Greenbelt	Calderdale District (B)
8	1225	W	Liverpool, Manchester and West Yorks Greenbelt	Calderdale District (B)

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a **Groundsure Geo Insight**, available from our **website**. The following information has been found:

9.1.1 Shrink Swell

Maximum Shrink-Swell** hazard rating identified on the study site Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Possibility of slope instability problems after major changes in ground conditions. Consideration should be given to stability if changes to drainage or excavations take place. Possible increase in construction cost to reduce potential slope stability problems. Existing property no significant increase in insurance risk due to natural slope instability problems.

9.1.3 Soluble Rocks

Maximum Soluble Rocks* hazard rating identified on the study site Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
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 indicates an automatically generated 50m buffer and site.

9.1.4 Compressible Ground

Maximum Compressible Ground* hazard rating identified on the study site

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site

Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
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.

9.1.6 Running Sand

Maximum Running Sand** hazard rating identified on the study site

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
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.

* This indicates an automatically generated 50m buffer and site.

9.2 Radon

9.2.1 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 site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 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.

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

Identified

The following coal mining information provided by the Coal Authority is not represented on Mapping:

Distance (m)	Direction	Details
0	On Site	The site lies in or in proximity to the coal mining reporting area as defined by the Coal Authority

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary

None identified

Database searched and no data found.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site

None identified

Guidance: No Guidance Required.

Contact Details

Groundsure Helpline
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info@groundsure.com

British Geological Survey Enquiries

Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:

Web: www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries:
enquiries@bgs.ac.uk

Environment Agency

National Customer Contact Centre, PO Box 544
Rotherham, S60 1BY
Tel: 03708 506 506

Web: www.environment-agency.gov.uk

Email: enquiries@environment-agency.gov.uk

Public Health England

Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
www.gov.uk/phe

Email: enquiries@phe.gov.uk
Main switchboard: 020 7654 8000

The Coal Authority

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

Ordnance Survey

Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505

Local Authority

Authority: Kirklees Council
Phone: 01484 221 000
Web: <http://www.kirklees.gov.uk/>
Address: Civic Centre 3, Market Street, Huddersfield, HD1 2EY

Gemapping PLC

Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444



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