

Appendix C

ENVIROCHECK DATA REPORT



Earth Science Partnership Ltd
33, CARDIFF ROAD,
TAFFS WELL, CF15 7RB

Groundsure Reference: ESP-5731708
Your Reference: 7052b_Cowbridge_Comp_PO7261_BC
Report Date: 7 Jan 2019
Report Delivery Method: Email - pdf

Enviro Insight

Address: COWBRIDGE COMPREHENSIVE SCHOOL, COWBRIDGE COMPREHENSIVE SCHOOL,
ABERTHIN ROAD, COWBRIDGE, CF71 7EN

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 the Groundsure helpline on 08444 159 000 quoting the above report reference number.

Yours faithfully,

Earth Science Partnership Ltd

Enc.
Groundsure Enviroinsight

Address: COWBRIDGE COMPREHENSIVE SCHOOL, COWBRIDGE COMPREHENSIVE SCHOOL,
ABERTHIN ROAD, COWBRIDGE, CF71 7EN

Date: 7 Jan 2019

Reference: ESP-5731708

Client: Earth Science Partnership Ltd

NW

N

NE



W

E

SW

S

SE

Aerial Photograph Capture date: 19-Jul-2016
Grid Reference: 300037,174614
Site Size: 0.52ha
Report Reference: ESP-5731708
Client Reference: 7052b_Cowbridge_Comp_PO7261_BC

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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	10	19	39	39
1.2 Additional Information – Historical Tank Database	0	0	1	2
1.3 Additional Information – Historical Energy Features Database	0	0	0	20
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	0	8
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	6	2	15	32
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	0	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	6	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	1	2
2.3.2 National Incidents Recording System, List 1	0	0	0	0
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	0	0
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	0	0	6

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	1	12	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	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	0-500m
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	Identified
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.	

Section 6: Hydrogeology and Hydrology	On-site	0-50m	51-250	251-500	501-1000	1000-2000
0-500m						
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site				Identified		
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site				Identified		
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	1
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
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)	2	0	#250GWV #	#500GWV #	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	Yes	No	Yes
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	36	72	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	Identified					
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	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	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	Potential below Surface					
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	2	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	1	0	0	2	22
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	0	0	0
8.14 Records of Green Belt land	0	0	0	0	0	0

Section 9: Natural Hazards

9.1 Maximum risk of natural ground subsidence	Low
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Negligible
9.1.2 Maximum Landslides hazard rating identified on the study site	Very Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Low
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	Very Low
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 in a Radon Affected Area, as between 5 and 10% 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?	Basic radon protective measures are necessary.

Section 10: Mining

10.1 Coal mining areas within 75m of the study site	None 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).

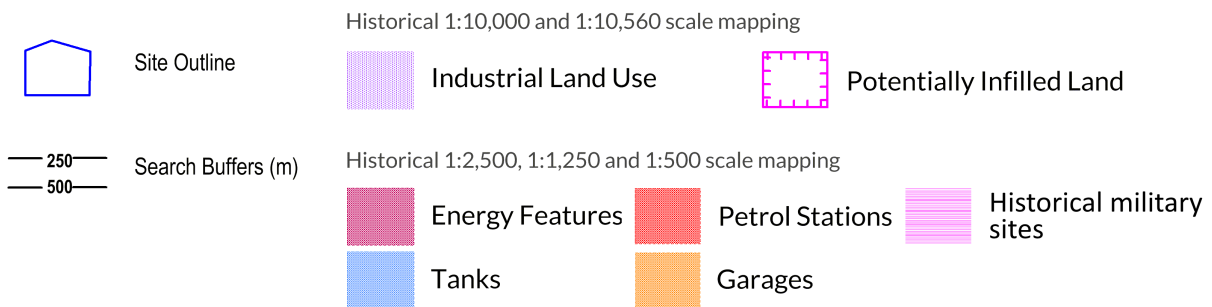
Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

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: 107

ID	Distance [m]	Direction	Use	Date
1B	0	On Site	Railway Sidings	1938
2A	0	On Site	Unspecified Ground Workings	1947
3A	0	On Site	Unspecified Ground Workings	1914
4	0	On Site	Railway Sidings	1921
5	0	On Site	Railway Sidings	1947
6A	0	On Site	Unspecified Ground Workings	1921
7A	0	On Site	Unspecified Ground Workings	1938
8A	0	On Site	Unspecified Ground Workings	1938
9	0	On Site	Railway Sidings	1947
10A	0	On Site	Unspecified Heaps	1947
11C	1	W	Railway Sidings	1948
12B	13	NW	Railway Sidings	1914
13B	13	NW	Railway Sidings	1897
14B	27	W	Railway Building	1914
15B	27	W	Railway Building	1947
16B	27	W	Railway Building	1897
17B	29	W	Railway Building	1938
18C	31	W	Railway Sidings	1878
19X	31	E	Unspecified Quarry	1947
20D	35	SW	Railway Station	1897
21D	35	SW	Railway Station	1947
22D	35	SW	Railway Station	1914
23D	35	SW	Railway Station	1938
24B	36	W	Railway Building	1921
25D	37	SW	Railway Station	1948
26E	42	W	Railway Building	1938
27D	45	SW	Railway Station	1921
28B	49	W	Railway Building	1878
29Y	49	SE	Unspecified Ground Workings	1878
30B	60	W	Railway Buildings	1938

31E	61	W	Railway Building	1948
32B	63	W	Railway Building	1878
33B	64	W	Railway Building	1948
34F	71	W	Goods Station	1947
35F	71	W	Goods Station	1914
36F	71	W	Goods Station	1897
37F	72	W	Goods Station	1921
38F	72	W	Railway Station	1878
39F	72	W	Goods Station	1938
40F	73	W	Goods Station	1948
41G	76	W	Railway Buildings	1878
42	78	NE	Unspecified Disused Tank	1989
43G	79	W	Railway Building	1938
44G	80	W	Railway Building	1948
45F	82	SW	Railway Building	1947
46F	83	SW	Railway Building	1938
47F	85	SW	Railway Building	1948
48G	87	W	Railway Building	1938
49G	88	W	Railway Building	1948
50C	91	W	Railway Building	1878
51	96	SW	Fire Station	1971
52	102	W	Railway Building	1948
53	102	S	Railway Sidings	1948
54H	114	S	Cuttings	1938
55H	118	S	Cuttings	1897
56H	118	S	Cuttings	1947
57H	118	S	Cuttings	1914
58H	124	S	Cuttings	1921
59I	175	E	Unspecified Quarry	1878
60I	178	E	Lime Kiln	1878
61J	223	E	Cuttings	1989
62J	223	E	Cuttings	1974
63L	242	S	Cuttings	1938
64K	242	S	Cuttings	1947
65K	242	S	Cuttings	1897
66K	242	S	Cuttings	1914
67L	243	S	Cuttings	1948
68K	247	S	Cuttings	1921
69Z	281	S	Cuttings	1938
70AA	283	S	Cuttings	1948
71AC	303	SW	Cemetery	1948
72M	339	SW	Unspecified Quarry	1914
73M	341	SW	Unspecified Quarry	1938
74M	346	SW	Unspecified Quarry	1921
75M	360	SW	Unspecified Old Quarry	1897
76M	360	SW	Unspecified Old Quarry	1947

77N	366	E	Unspecified Pit	1947
78N	370	E	Unspecified Pit	1938
79N	370	E	Unspecified Pit	1938
80N	372	E	Unspecified Pit	1947
81N	372	E	Unspecified Pit	1921
82N	372	E	Unspecified Pit	1878
83N	373	E	Unspecified Pit	1914
84O	394	W	Unspecified Commercial/Industrial	1947
85O	394	W	Gas Works	1921
86O	394	W	Gas Works	1878
87O	394	W	Gas Works	1914
88O	394	W	Gas Works	1897
89O	406	W	Gasometer	1878
90O	409	W	Unspecified Tanks	1947
91O	409	W	Unspecified Tanks	1897
92O	409	W	Unspecified Tanks	1914
93P	410	W	Cemetery	1947
94P	418	W	Gasometer	1921
95AE	418	W	Cemetery	1971
96O	422	W	Gasometer	1921
97Q	439	S	Cuttings	1947
98Q	439	S	Cuttings	1897
99Q	439	S	Cuttings	1914
100Q	440	S	Cuttings	1948
101R	441	SW	Unspecified Old Quarry	1948
102Q	444	S	Cuttings	1921
103R	446	SW	Unspecified Old Quarry	1914
104R	446	SW	Unspecified Old Quarry	1947
105R	446	SW	Unspecified Old Quarry	1897
106R	448	SW	Unspecified Old Quarry	1938
107R	456	SW	Unspecified Old Quarry	1921

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:

3

ID	Distance (m)	Direction	Use	Date
108	98	NE	Unspecified Tank	1988
109O	403	W	Gas Works	1876
110O	416	W	Gasometer	1876

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:

20

ID	Distance (m)	Direction	Use	Date
111S	270	S	Electricity Substation	1993
112S	270	S	Electricity Substation	1995
113T	277	S	Electricity Substation	1969
114T	277	S	Electricity Substation	1976
115T	277	S	Electricity Substation	1986
116T	277	S	Electricity Substation	1988
117U	290	SW	Electricity Substation	1995
118U	290	SW	Electricity Substation	1993
119U	291	SW	Electricity Substation	1969
120U	291	SW	Electricity Substation	1976
121U	293	SW	Electricity Substation	1986
122U	293	SW	Electricity Substation	1988
123O	403	W	Gas Works	1876
124O	416	W	Gasometer	1876
125V	424	W	Electricity Substation	1995
126V	429	W	Electricity Substation	1993
127V	432	W	Electricity Substation	1969
128V	432	W	Electricity Substation	1976
129V	434	W	Electricity Substation	1988
130V	434	W	Electricity Substation	1986

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: 8

ID	Distance (m)	Direction	Use	Date
131W	359	W	Garage	1995
132W	359	W	Garage	1993
133W	360	W	Garage	1976
134W	360	W	Garage	1969
135W	370	W	Garage	1986
136W	370	W	Garage	1988
137V	449	W	Garage	1993
138V	450	W	Garage	1995

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: 55

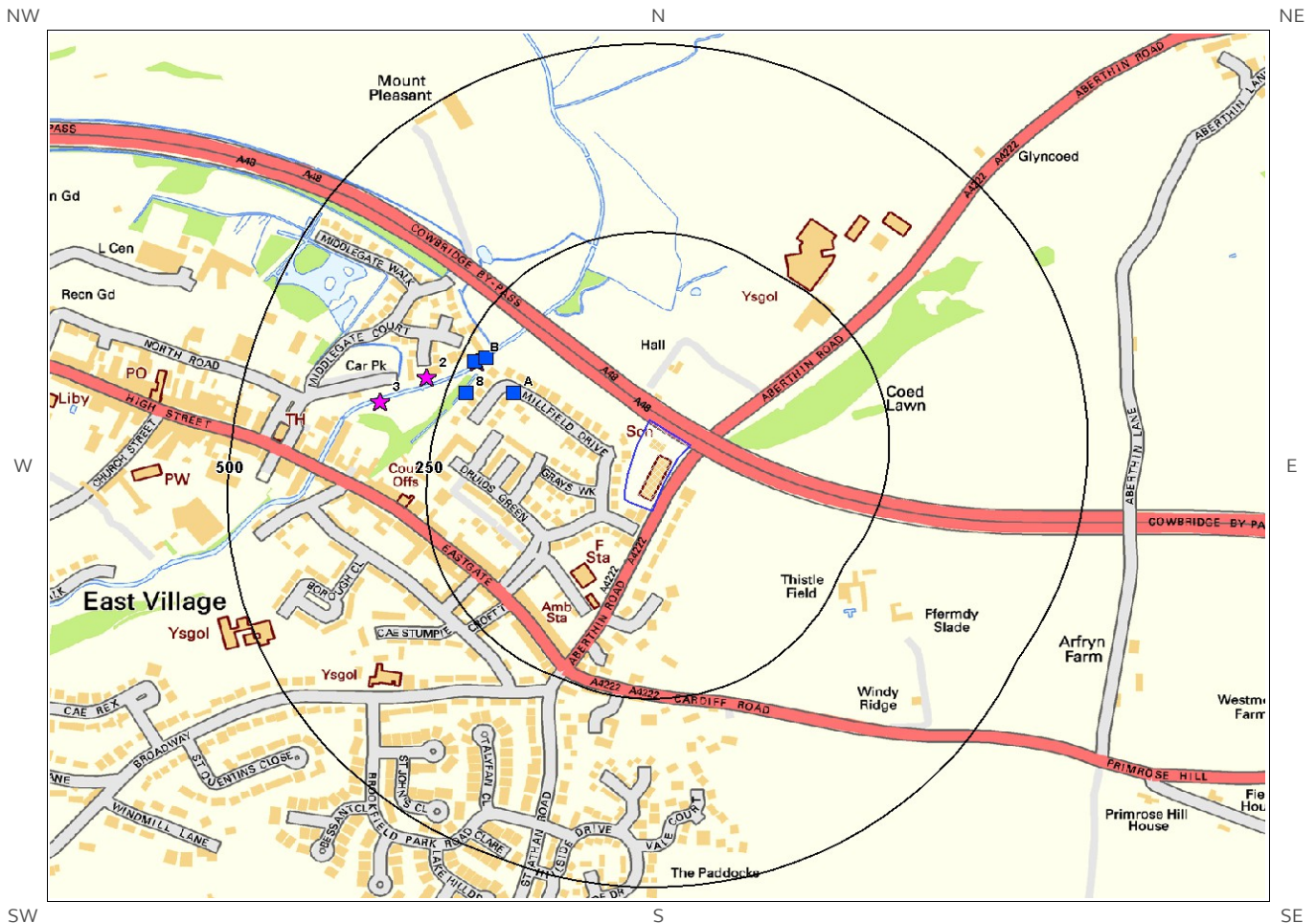
The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:

ID	Distance(m)	Direction	Use	Date
139A	0	On Site	Unspecified Ground Workings	1921
140A	0	On Site	Unspecified Heaps	1947
141A	0	On Site	Unspecified Ground Workings	1914
142A	0	On Site	Unspecified Ground Workings	1947
143A	0	On Site	Unspecified Ground Workings	1938
144A	0	On Site	Unspecified Ground Workings	1938
145X	31	E	Unspecified Quarry	1947
146Y	49	SE	Unspecified Ground Workings	1878
147H	114	S	Cuttings	1938
148H	118	S	Cuttings	1914














149H	118	S	Cuttings	1947
150H	118	S	Cuttings	1897
151H	124	S	Cuttings	1921
152H	167	S	Ponds	1878
153I	175	E	Unspecified Quarry	1878
154J	223	E	Cuttings	1989
155J	223	E	Cuttings	1974
156L	242	S	Cuttings	1938
157K	242	S	Cuttings	1914
158K	242	S	Cuttings	1897
159K	242	S	Cuttings	1947
160L	243	S	Cuttings	1948
161K	247	S	Cuttings	1921
162Z	281	S	Cuttings	1938
163AA	283	S	Cuttings	1948
164AB	298	NW	Pond	1947
165AB	298	NW	Pond	1897
166AC	303	SW	Cemetery	1948
167AD	338	E	Pond	1947
168AD	338	E	Pond	1897
169M	339	SW	Unspecified Quarry	1914
170M	341	SW	Unspecified Quarry	1938
171M	346	SW	Unspecified Quarry	1921
172M	360	SW	Unspecified Old Quarry	1947
173M	360	SW	Unspecified Old Quarry	1897
174AD	366	E	Unspecified Pit	1947
175N	370	E	Unspecified Pit	1938
176N	370	E	Unspecified Pit	1938
177N	372	E	Unspecified Pit	1921
178N	372	E	Unspecified Pit	1947
179N	372	E	Unspecified Pit	1878
180N	373	E	Unspecified Pit	1914
181P	410	W	Cemetery	1947
182AE	418	W	Cemetery	1971
183Q	439	S	Cuttings	1914
184Q	439	S	Cuttings	1947
185Q	439	S	Cuttings	1897
186Q	440	S	Cuttings	1948
187R	441	SW	Unspecified Old Quarry	1948
188Q	444	S	Cuttings	1921
189R	446	SW	Unspecified Old Quarry	1914
190R	446	SW	Unspecified Old Quarry	1947
191R	446	SW	Unspecified Old Quarry	1897
192R	448	SW	Unspecified Old Quarry	1938
193R	456	SW	Unspecified Old Quarry	1921



2. Environmental Permits, Incidents and Registers Map



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

0

Database searched and no data found.

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:

6

The following Licensed Discharge Consents records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
4A	170	NW	299860 174700	Address: COWBRIDGE - MILLFIELD DRIVE PU, COWBRIDGE - MILLFIELD DRIVE PU, UNKNOWN, UNKNOWN, UNKNOWN, UNKNOWN Effluent Type: UNSPECIFIED Permit Number: AF4028401 Permit Version: 1 Receiving Water: RIVER THAW Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV Issue date: 15/11/1978 Effective Date: 15-Nov-1978 Revocation Date:
5A	170	NW	299860 174700	Address: COWBRIDGE - MILLFIELD DRIVE PU, COWBRIDGE - MILLFIELD DRIVE PU, UNKNOWN, UNKNOWN, UNKNOWN, UNKNOWN Effluent Type: UNSPECIFIED Permit Number: AG0014701 Permit Version: 1 Receiving Water: THAW Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV Issue date: 11/01/1983 Effective Date: 11-Jan-1983 Revocation Date:
6B	221	NW	299825 174747	Address: SPS MILLFIELD DRIVE COWBRIDGE, SEWAGE PUMPING STATION, MILLFIELD DRIVE, COWBRIDGE, VALE OF GLAMORGAN Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: AJ0028001 Permit Version: 2 Receiving Water: RIVER THAW Status: Effective Issue date: 04/11/2003 Effective Date: 05-Nov-2003 Revocation Date:
7B	221	NW	299825 174747	Address: SPS MILLFIELD DRIVE COWBRIDGE, SEWAGE PUMPING STATION, MILLFIELD DRIVE, COWBRIDGE, VALE OF GLAMORGAN Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY Permit Number: AJ0028001 Permit Version: 2 Receiving Water: RIVER THAW Status: Effective Issue date: 04/11/2003 Effective Date: 05-Nov-2003 Revocation Date:
8	226	W	299800 174700	Address: REAR OF TOWN HALL PS COWBRIDGE ,, REAR OF TOWN HALL PS COWBRIDGE, COWBRIDGE ,, COWBRIDGE ,, COWBRIDGE ,, , Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Receiving Water: R THAW Status: Effective Issue date: 31/03/1990 Effective Date: 31-Mar-1990 Revocation Date:

ID	Distance (m)	Direction	NGR	Details	
Permit Number: AN0215001 Permit Version: 1					
9B	232	NW	299811 174742	Address: MILLFIELD DRIVE COWBRIDGE P.S.- EME, MILLFIELD DRIVE COWBRIDGE P.S.-, COWBRIDGE P.S.- EMERGENCY OVER, UNKNOWN, UNKNOWN, UNKNOWN Effluent Type: UNSPECIFIED Permit Number: AJ0028001 Permit Version: 1	Receiving Water: RIVER THAW Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88) Issue date: 12/01/1983 Effective Date: 12-Jan-1983 Revocation Date:

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:

3

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
1B	230	NW	299813 174742	Incident Date: 26-Apr-2003 Incident Identification: 154642 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
2	281	W	299749 174721	Incident Date: 27-Jun-2013 Incident Identification: 1126463 Pollutant: Sewage Materials	Water Impact: Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

ID	Distance (m)	Direction	NGR	Details	
Pollutant Description: Grey Water					
3	327	W	299691 174689	Incident Date: 02-Jul-2001 Incident Identification: 12883 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

0

Database searched and no data found.

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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-  Site Outline
-  EA/NRW Active Landfill
-  Historic and Planned Waste Sites
-  EA/NRW Historic Landfill
-  EA/NRW Licensed Waste Site
-  BGS / DoE Survey Landfill
-  Local Authority/Historical Mapping Landfill Records
-  250 Search Buffers (m)
-  500 Search Buffers (m)

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:

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

3.2 Other Waste Sites

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

0

Database searched and no data found.

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

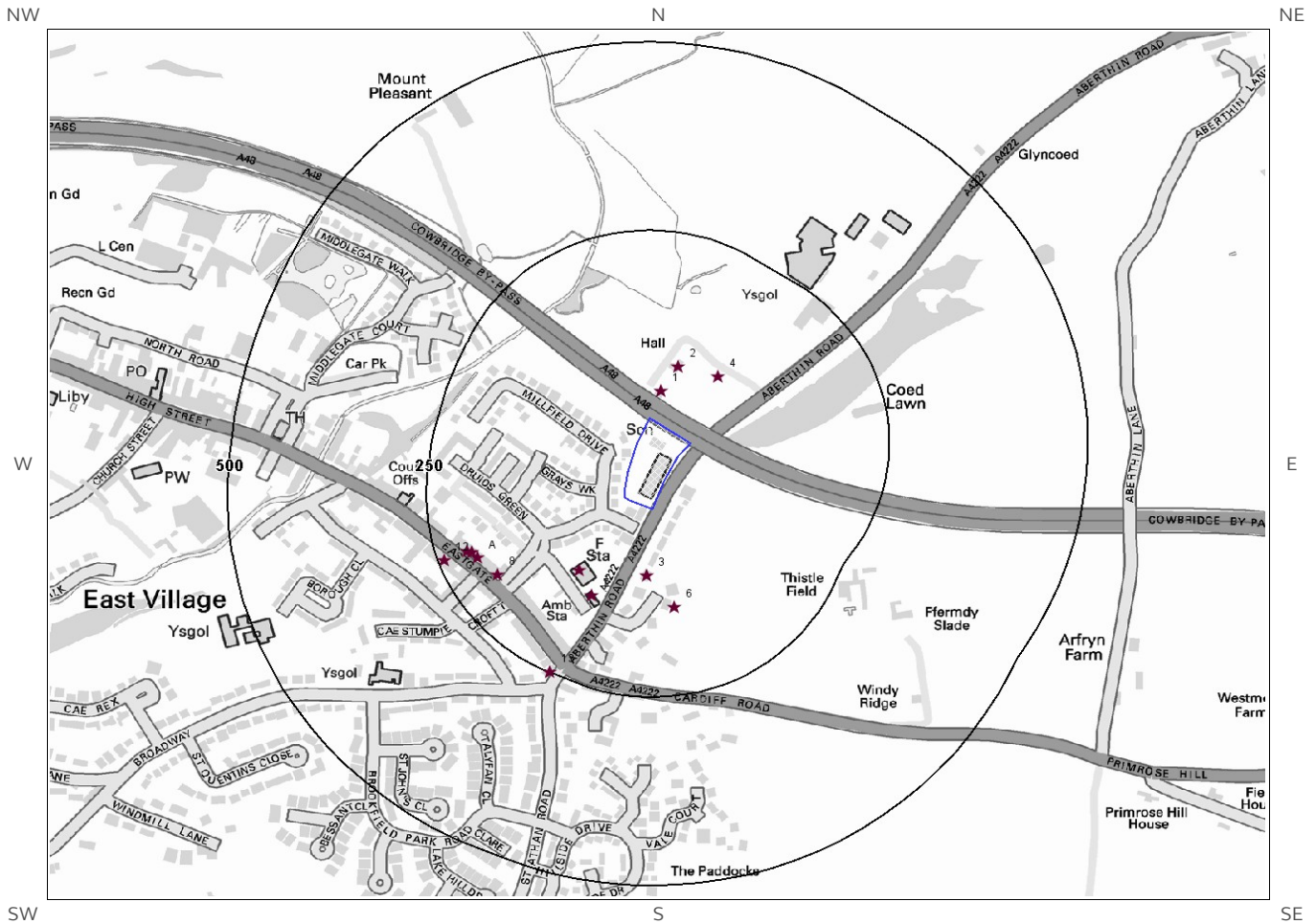
6

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	1275	NW	298850 175150	<p>Site Address: The Lodge, Llwynhelig, Gibbots Hill, Cowbridge, Vale Of Glamorg, CF71 7FF</p> <p>Type: Composting Facility</p> <p>Size: Unknown</p> <p>Environmental Permitting Regulations (Waste) Licence Number: ENV386</p> <p>EPR reference: BP3095SR/V005</p> <p>Operator: Cowbridge Compost Ltd</p> <p>Waste Management licence No: 100525</p> <p>Annual Tonnage: 0.0</p> <p>Issue Date: 19/02/2009</p> <p>Effective Date: -</p> <p>Modified: 04/02/2015</p> <p>Surrendered Date: 0</p> <p>Expiry Date: 0</p> <p>Cancelled Date: 0</p> <p>Status: Modified</p> <p>Site Name: Cowbridge Compost Ltd</p> <p>Correspondence Address: -</p>
Not shown	1302	W	298800 175100	<p>Site Address: The Lodge, Llwynhelig, Cowbridge, Vale Of Glam, CF71 7FF</p> <p>Type: Composting Facility</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: ENV386</p> <p>EPR reference: EA/EPR/BP3095SR/V004</p> <p>Operator: Cowbridge Compost Ltd</p> <p>Waste Management licence No: 100525</p> <p>Annual Tonnage: 34999.0</p> <p>Issue Date: 19/02/2009</p> <p>Effective Date: -</p> <p>Modified: 10/05/2012</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Modified</p> <p>Site Name: Cowbridge Compost Ltd</p> <p>Correspondence Address: -</p>
Not shown	1302	W	298800 175100	<p>Site Address: Cowbridge Compost Ltd, The Lodge, Gibbots Hill, Vale Of Glamorg, Cowbridge, Vale of Glamorgan, CF71 7FF</p> <p>Type: Composting Facility</p> <p>Size: Unknown</p> <p>Environmental Permitting Regulations (Waste) Licence Number: BP3095SR</p> <p>EPR reference: -</p> <p>Operator: Cowbridge Compost Ltd</p> <p>Waste Management licence No: 100525</p> <p>Annual Tonnage: 34999.0</p> <p>Issue Date: 19/02/2009</p> <p>Effective Date: 19/02/2009</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Effective</p> <p>Site Name: -</p> <p>Correspondence Address: -</p>
Not shown	1302	W	298800 175100	<p>Site Address: Cowbridge Compost Ltd, The Lodge, Gibbots Hill, Cowbridge, Vale Of Glamorg, CF71 7FF</p> <p>Type: Composting Facility</p> <p>Size: Unknown</p> <p>Environmental Permitting Regulations (Waste) Licence Number: BP3095SR</p> <p>EPR reference: -</p> <p>Operator: -</p> <p>Waste Management licence No: 100525</p> <p>Annual Tonnage: 34999.0</p> <p>Issue Date: 19/02/2009</p> <p>Effective Date: 19/02/2009</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Effective</p> <p>Site Name: -</p> <p>Correspondence Address: -</p>
Not shown	1302	W	298800 175100	<p>Site Address: The Lodge, Llwynhelig, Gibbots Hill, Cowbridge, Vale Of Glam, CF71 7FF</p> <p>Type: Composting in closed vessels</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: ENV386</p> <p>EPR reference: EA/EPR/BP3095SR/A001</p> <p>Operator: Cowbridge Compost Ltd</p> <p>Waste Management licence No: 100525</p> <p>Annual Tonnage: 24999.0</p> <p>Issue Date: 19/02/2009</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: Cowbridge Compost Ltd</p> <p>Correspondence Address: -</p>
Not	1302	W	298800	<p>Site Address: Cowbridge Compost Ltd, The</p> <p>Issue Date: 19/02/2009</p>

ID	Distance (m)	Direction	NGR	Details
shown			175100	Lodge, Gibbotts Hill, Cowbridge, Vale of Glamorgan, CF71 7FF Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: BP3095SR EPR reference: - Operator: Cowbridge Compost Ltd Waste Management licence No: 0 Annual Tonnage: 34999.0 Effective Date: 19/02/2009 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -

4. Current Land Use Map



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4. Current Land Uses

4.1 Current Industrial Data

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

13

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	41	N	Gas Valve Compound	300045 174702	South Glamorgan, CF71	Gas Features	Infrastructure and Facilities
2	78	NE	Air Training Corps Cadet Centre	300066 174734	Aberthin Road, Cowbridge, South Glamorgan, CF71 7EN	Armed Services	Central and Local Government
3	88	S	Featherless Game	300027 174457	6, New Forest View, Cowbridge, South Glamorgan, CF71 7ET	Shooting Facilities	Sports Complex
4	94	NE	Settling Bed (Disused)	300116 174721	South Glamorgan, CF71	Waste Storage, Processing and Disposal	Infrastructure and Facilities
5	112	SW	Cowbridge Fire Station	299942 174464	Cowbridge Fire Station, Druids Green, Cowbridge, South Glamorgan, CF71 7EL	Fire Brigade Stations	Central and Local Government
6	132	S	Electricity Poles	300062 174415	South Glamorgan, CF71	Electrical Features	Infrastructure and Facilities
7	134	S	Cowbridge Ambulance Station	299958 174430	Cowbridge Ambulance Station, Eastgate, Cowbridge, South Glamorgan, CF71 7EL	Ambulance and Medical Transportation Services	Health Support Services
8	191	SW	Ctronix	299839 174458	New Druids 41, Eastgate, Cowbridge, South Glamorgan, CF71 7EL	Electronic Equipment	Industrial Products
9A	203	SW	Strange Strange & Gardner	299814 174480	51, Eastgate, Cowbridge, South Glamorgan, CF71 7EL	Civil Engineers	Engineering Services
10A	207	W	The Glamorgan Gem	299807 174487	Graig House 53, Eastgate, Cowbridge, South Glamorgan, CF71 7EL	Published Goods	Industrial Products
11A	212	W	Keith Brown & Sons Ltd	299801 174489	55, Eastgate, Cowbridge, South Glamorgan, CF71 7EL	Published Goods	Industrial Products
12	243	W	Cowbridge Flooring Studio	299772 174477	42, Eastgate, Cowbridge, South Glamorgan, CF71 7DG	Construction Completion Services	Construction Services
13	248	SW	Hayward Utility Services	299905 174329	Rear Of Junction House, 2 Eastgate, Cowbridge, South Glamorgan, CF71 7DG	Civil Engineers	Engineering Services

4.2 Petrol and Fuel Sites

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

0

Database searched and no data found.

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

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

Lex Code	Description	Rock Type
GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL

5.3 Bedrock and Solid Geology

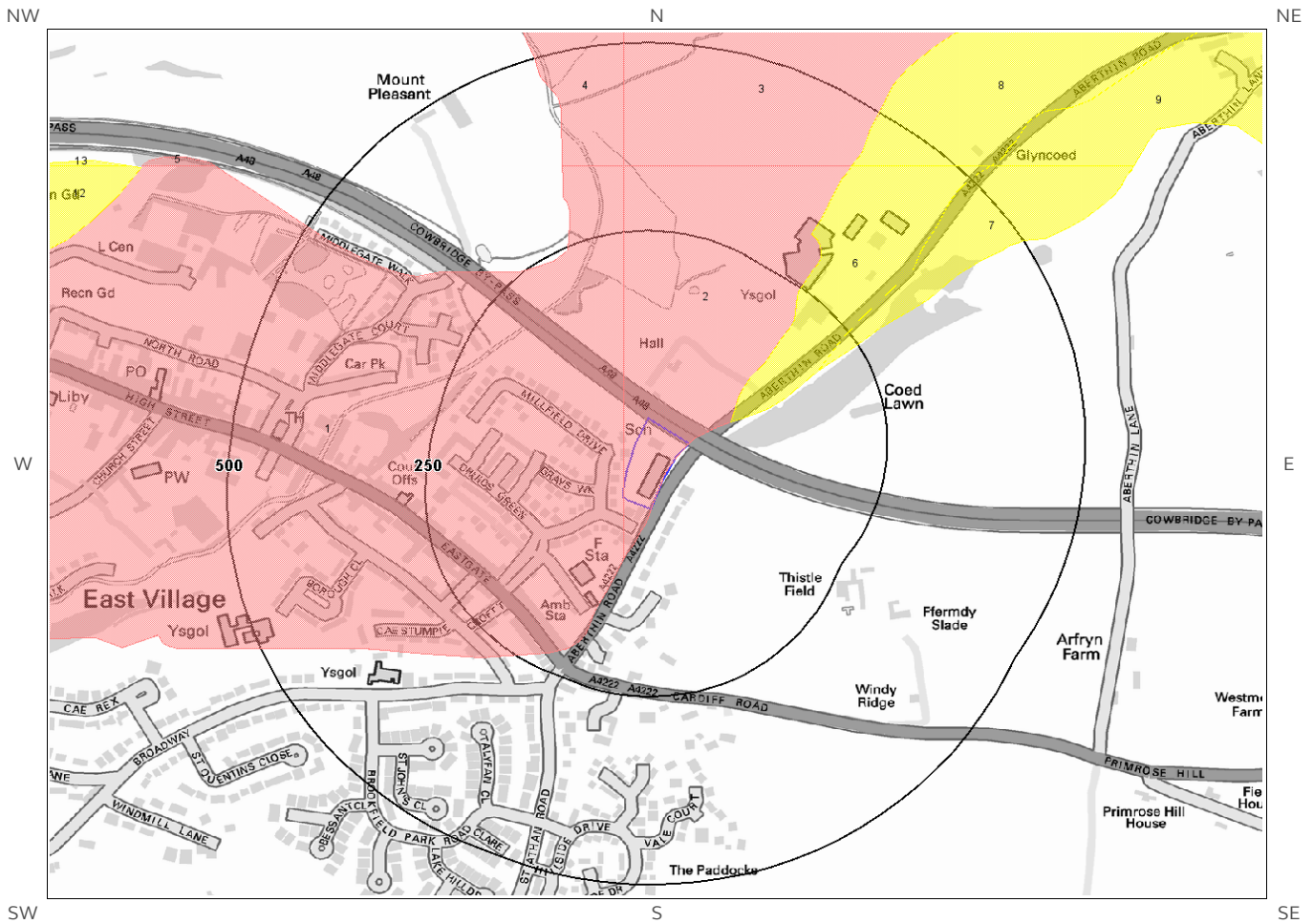
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
MMMMF-CONG	MERCIA MUDSTONE GROUP (MARGINAL FACIES)	CONGLOMERATE

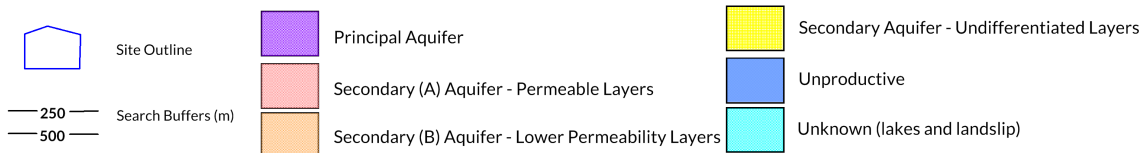
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology

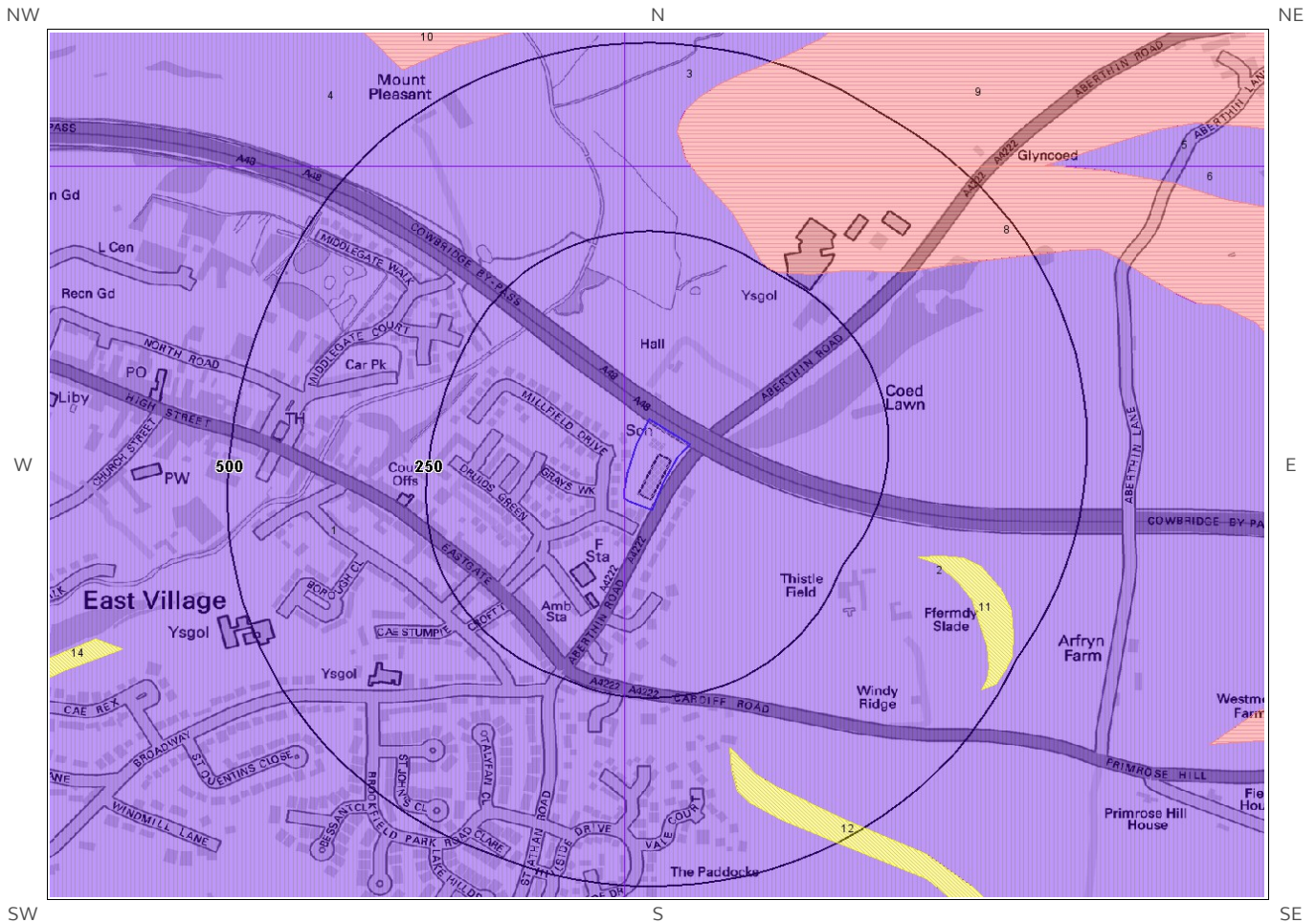


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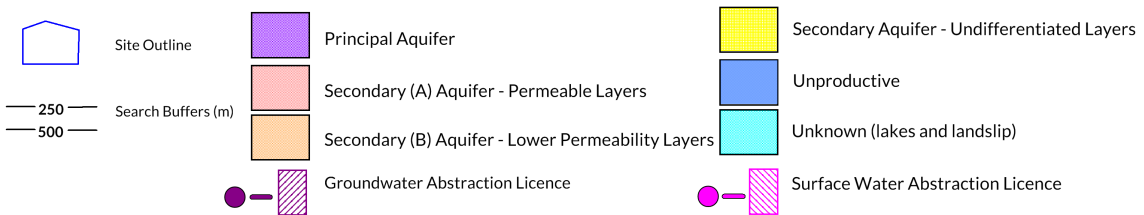




6b. Aquifer Within Bedrock Geology and Abstraction Licences

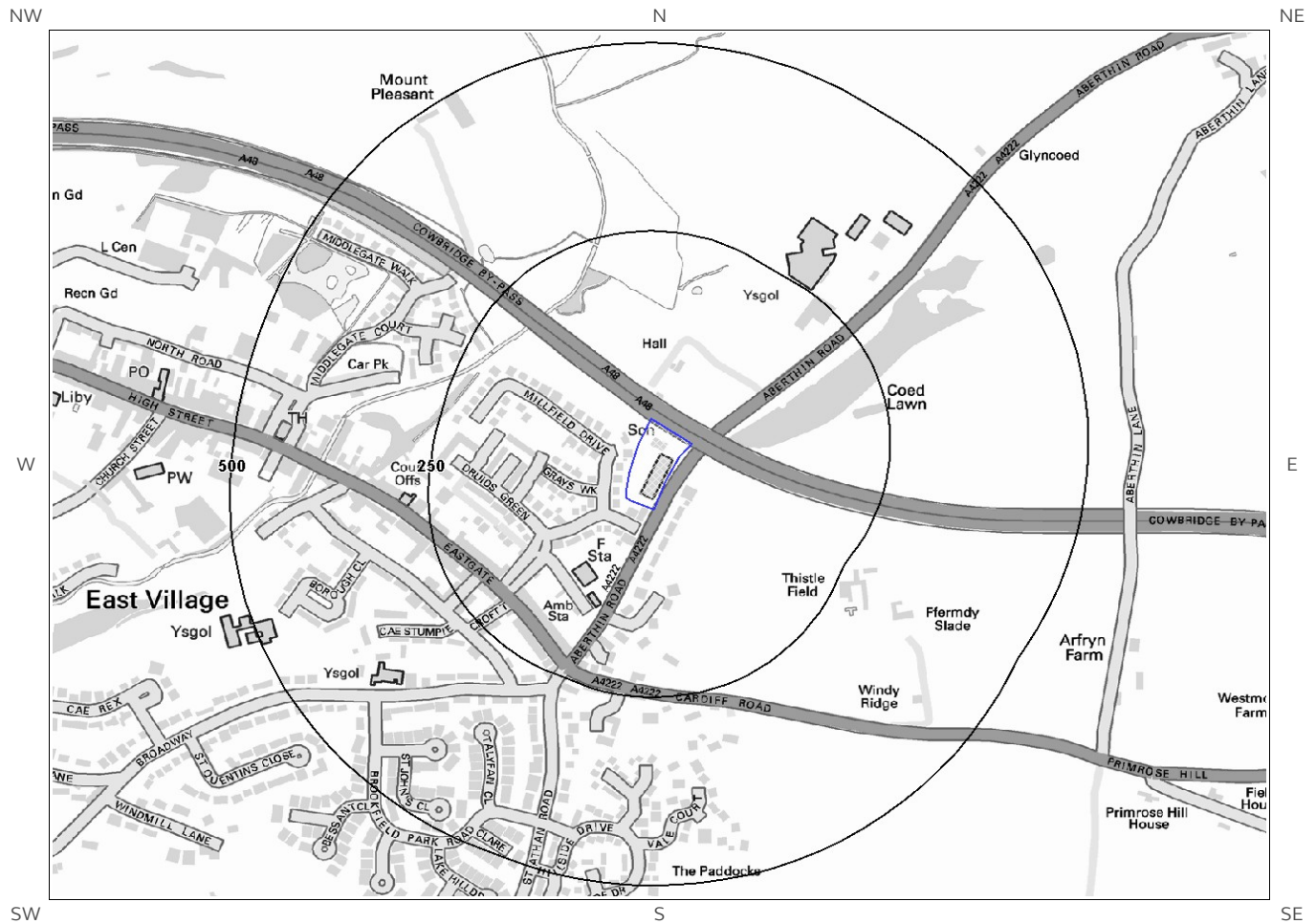


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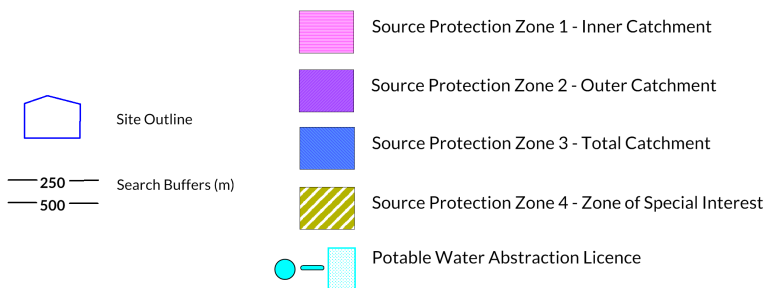




6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences

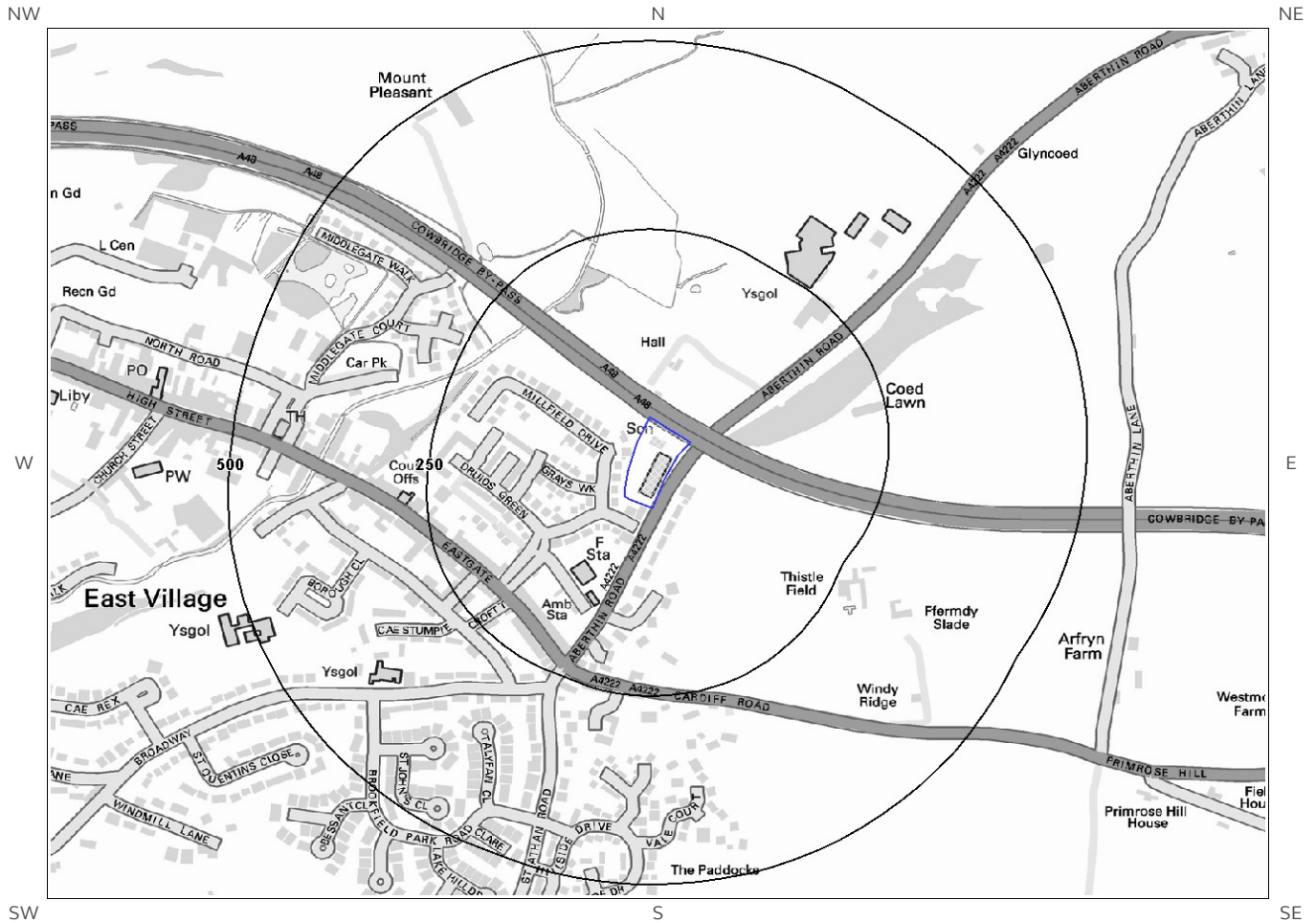


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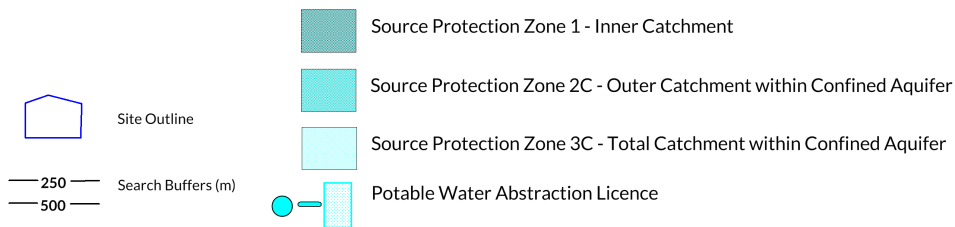




6d. Hydrogeology – Source Protection Zones within confined aquifer

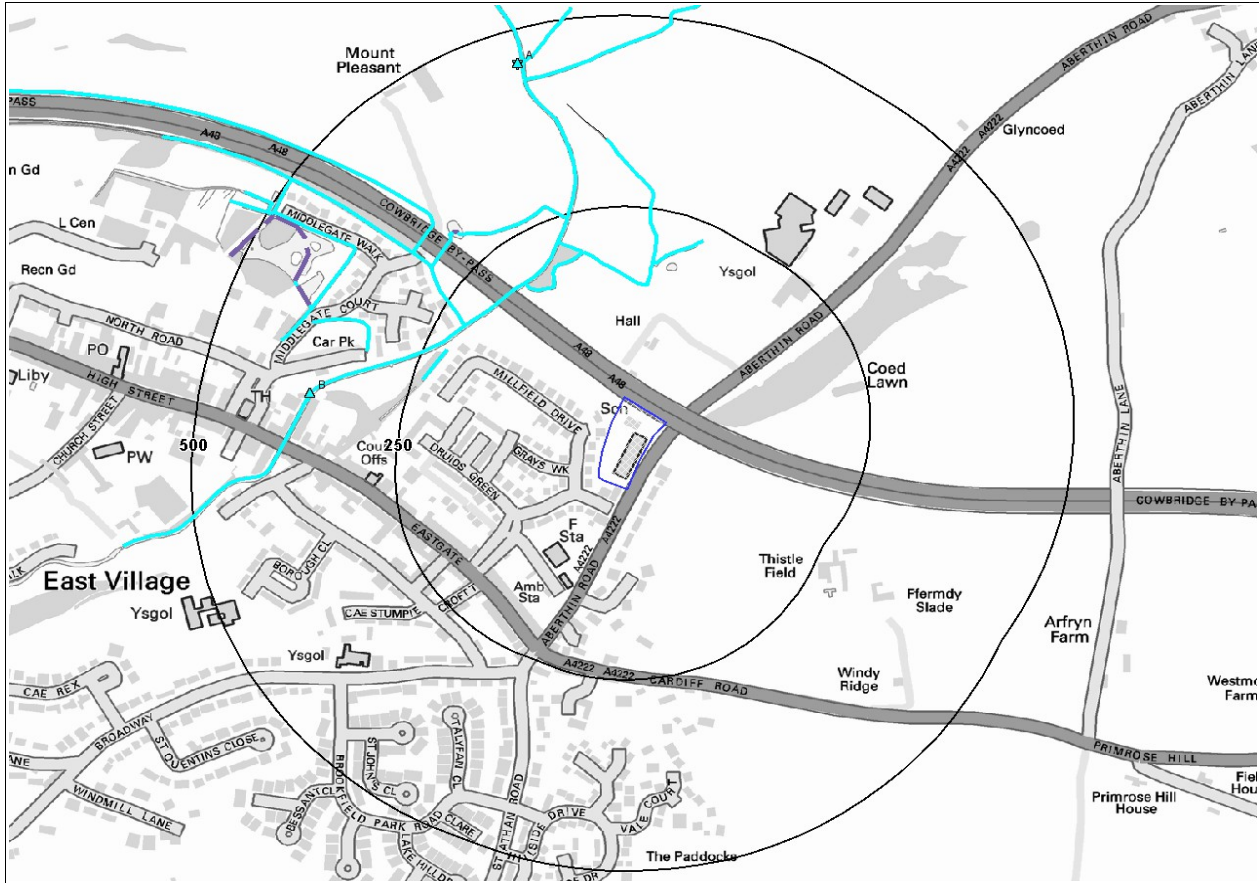


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6e. Hydrology – Watercourse Network and River Quality













NW N NE





W E

SW S SE

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-  Tidal River
-  Inland River
-  Underground or Elevated Tidal River
-  Underground or Elevated Inland River
-  Foreshore
-  General Quality Assessment: Chemistry
-  Canal
-  Underground or Elevated Canal
-  Lock or Flight of Locks
-  Lake, Reservoir, or Marsh
-  Drain or Transfer
-  General Quality Assessment: Biology

 Site Outline

 250 Search Buffers (m)

 500 Search Buffers (m)

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 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 Superficial Geology Map (6a):

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
2	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	60	NE	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
7	189	NE	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
3	336	N	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
4	337	N	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
8	421	NE	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

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	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

ID	Distance (m)	Direction	Designation	Description
2	0	On Site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
8	250	NE	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
11	323	SE	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
12	331	S	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
3	336	N	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
4	337	N	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
9	340	N	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	1610	N	300240 176260	Status: Historical Licence No: 21/58/21/0026 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: BOREHOLE AT NEWTON HOUSE FARM Data Type: Point Name: J Thomas % Son Annual Volume (m ³): 7300 Max Daily Volume (m ³): 20 Original Application No: - Original Start Date: 15/08/2000 Expiry Date: - Issue No: 1 Version Start Date: 11/12/2002 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

None identified

Database searched and no data found.

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	Major Aquifer/High Leaching Potential	H1	Soils which readily transmit liquid discharges because they are shallow or susceptible to rapid flow directly to rock, gravel or groundwater.
0	On Site	Major Aquifer/High Leaching Potential	H1	Soils which readily transmit liquid discharges because they are shallow or susceptible to rapid flow directly to rock, gravel or groundwater.
96	S	Major Aquifer/High Leaching Potential	H3	Coarse textured or moderately shallow soils which readily transmit non-adsorbed pollutants and liquid discharges but have some ability to attenuate adsorbed pollutants because of their clay or organic matter content.
231	N	Minor Aquifer/High Leaching Potential	H1	Soils which readily transmit liquid discharges because they are shallow or susceptible to rapid flow directly to rock, gravel or groundwater.
231	N	Minor Aquifer/Intermediate Leaching Potential	I1	Soils which can possibly transmit a wide range of pollutants.
333	NE	Minor Aquifer/High Leaching Potential	H3	Coarse textured or moderately shallow soils which readily transmit non-adsorbed pollutants and liquid discharges but have some ability to attenuate adsorbed pollutants because of their clay or organic matter content.
443	NW	Major Aquifer/High Leaching Potential	H3	Coarse textured or moderately shallow soils which readily transmit non-adsorbed pollutants and liquid discharges but have some ability to attenuate adsorbed pollutants because of their clay or organic matter content.

6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site

Identified

Biological Quality data describes water quality in terms of 83 groups of macroinvertebrates, some of which are pollution sensitive. The results are graded from A ('Very Good') to F ('Bad').

The following Biological Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Biological Quality Grade				
					2005	2006	2007	2008	2009
55A	455	N	299900 175100	River Name: Thaw Reach: Conf.aberthin Bk.-conf.newton Bk. End/Start of Stretch: End of Stretch NGR	A	B	B	A	A
56A	455	N	299900 175100	River Name: Thaw Reach: Conf.factory Bk. -conf.aberthin Bk. End/Start of Stretch: Start of Stretch NGR	A	B	B	A	A
Not shown	1235	SW	298900 174000	River Name: Thaw Reach: Conf.at Llandough- Conf.factory Bk. End/Start of Stretch: Start of Stretch NGR	A	A	A	B	B
Not shown	1235	SW	298900 174000	River Name: Thaw Reach: Conf.factory Bk. -conf.aberthin Bk. End/Start of Stretch: End of Stretch NGR	A	B	B	A	A
Not shown	1268	NW	299300 175700	River Name: Thaw Reach: Conf.newton Bk. - Church Fm. End/Start of Stretch: End of Stretch NGR	A	B	B	A	A
Not shown	1268	NW	299300 175700	River Name: Thaw Reach: Conf.aberthin Bk.-conf.newton Bk. End/Start of Stretch: Start of Stretch NGR	A	B	B	A	A

Chemical quality data is based on the General Quality Assessment Headline Indicators scheme (GQAH). In England, each chemical sample is measured for ammonia and dissolved oxygen. In Wales, the samples are measured for biological oxygen demand (BOD), ammonia and dissolved oxygen. The results are graded from A ('Very Good') to F ('Bad').

The following Chemical Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Chemical Quality Grade				
					2005	2006	2007	2008	2009
61B	366	W	299646 174669	River Name: Thaw Reach: Conf.factory Bk. -conf.aberthin Bk. End/Start of Stretch: Sample Point NGR	B	B	A	A	-
62B	366	W	299646 174669	River Name: Thaw Reach: Conf.newton Bk. - Church Fm. End/Start of Stretch: Sample Point NGR	B	B	A	A	-
63B	366	W	299646 174669	River Name: Thaw Reach: Conf.aberthin Bk.-conf.newton Bk. End/Start of Stretch: Sample Point NGR	B	B	A	A	-
64A	455	N	299900 175100	River Name: Thaw Reach: Conf.factory Bk. -conf.aberthin Bk. End/Start of Stretch: Start of Stretch NGR	B	B	A	A	-
65A	455	N	299900 175100	River Name: Thaw Reach: Conf.aberthin Bk.-conf.newton Bk. End/Start of Stretch: End of Stretch NGR	B	B	A	A	-
Not shown	1235	SW	298900 174000	River Name: Thaw Reach: Conf.factory Bk. -conf.aberthin Bk. End/Start of Stretch: End of Stretch NGR	B	B	A	A	-
Not shown	1235	SW	298900 174000	River Name: Thaw Reach: Conf.at Llandough- Conf.factory Bk. End/Start of Stretch: Start of Stretch NGR	B	B	A	A	-
Not shown	1268	NW	299300 175700	River Name: Thaw Reach: Conf.aberthin Bk.-conf.newton Bk. End/Start of Stretch: Start of Stretch NGR	B	B	A	A	-
Not shown	1268	NW	299300 175700	River Name: Thaw Reach: Conf.newton Bk. - Church Fm. End/Start of Stretch: End of Stretch NGR	B	B	A	A	-
Not shown	1472	S	299590 173141	River Name: Thaw Reach: Conf.at Llandough- Conf.factory Bk. End/Start of Stretch: Sample Point NGR	B	B	A	A	-

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	149 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
19	149 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton 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	168 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.1
20	168 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.1
3	177 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.0
21	177 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.0
4	180 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.2
5	180 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
22	180 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.2

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
23	180 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton 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	192 NW	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.1
24	192 NW	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.1
7	194 NW	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.3
25	194 NW	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.3
8	197 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
9	197 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.9
26	197 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
27	197 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.9
10	198 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
28	198 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton 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	217 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.4
12	217	Afon Ddawan Alternative Name:	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	NW	River Thaw		Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.3
13	217 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.4
29	217 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.4
30	217 NW	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.3
31	217 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 0.4
14	219 N	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.0
32	219 N	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.0
15	223 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
33	223 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
16	245 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
17	245 N	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.8
34	245 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
35	245 N	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton 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): 3.8
18	248 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
36	248 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
19	261 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
37	261 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
20	262 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
38	262 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
21	291 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
22	291 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
39	291 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
40	291 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
23	297 NW	Not Specified	Lake, loch or reservoir.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.1
41	297 NW	Not Specified	Lake, loch or reservoir.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.1

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
24	314 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
42	314 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
25	321 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
26	321 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
43	321 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
44	321 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
27	340 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton 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	340 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
28	357 N	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	357 N	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
29	362 N	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.6
Not shown	362 N	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.6
30	365	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	W			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
48	365 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
31	368 W	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 5.5
49	368 W	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 5.5
32	382 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
50	382 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
33	397 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.3
34	397 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.4
51	397 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.3
52	397 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.4
35	401 W	Not Specified	Lake, loch or reservoir.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.3
53	401 W	Not Specified	Lake, loch or reservoir.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.3
36	403 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton 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): 3.8
54	403 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.8
37	404 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.6
55	404 W	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.6
38	424 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
56	424 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
39	430 NW	Not Specified	Lake, loch or reservoir.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.1
57	430 NW	Not Specified	Lake, loch or reservoir.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.1
40	432 N	Nant Aberthin	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.5
Not shown	432 N	Nant Aberthin	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.5
41	435 N	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.9
Not shown	435 N	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.9
42	457 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface 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
Not shown	457 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
43	458 N	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.4
Not shown	458 N	Afon Ddawan Alternative Name: River Thaw	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.4
44	462 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	462 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
45	465 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton 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	465 N	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
46	491 NW	Not Specified	Lake, loch or reservoir.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.8
47	491 NW	Not Specified	Lake, loch or reservoir.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.3
Not shown	491 NW	Not Specified	Lake, loch or reservoir.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.8
Not shown	491 NW	Not Specified	Lake, loch or reservoir.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.3
48	493 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.8
49	493	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	NW			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.9
50	493 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.3
Not shown	493 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.8
Not shown	493 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.9
Not shown	493 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.3
51	494 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.5
Not shown	494 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.5
52	496 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
Not shown	496 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
53	498 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.1
54	498 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.3
Not shown	498 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.1
Not shown	498 NW	Not Specified	Inland river not influenced by normal tidal action.	Catchment Area: Thaw Cadoxton 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): 3.3				

6.11 Surface Water Features

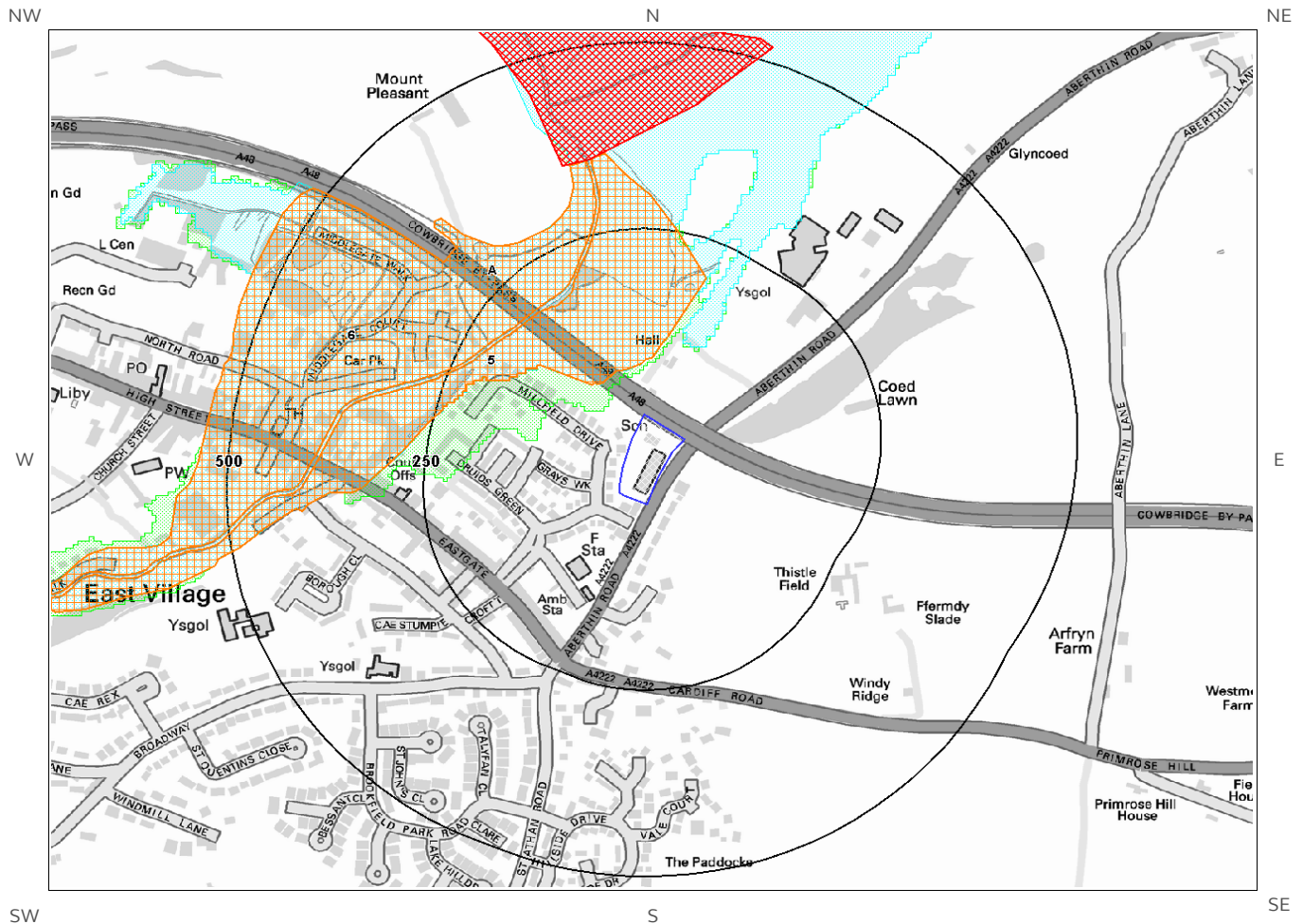
Surface water features within 250m of the study site

Identified

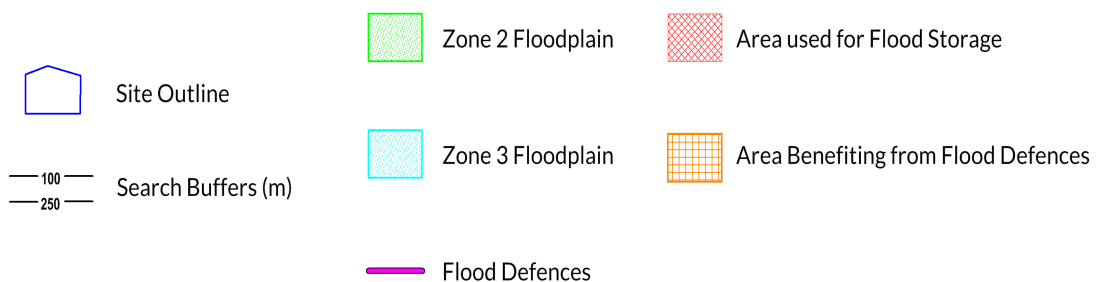
The following surface water records are not represented on mapping:

Distance (m)	Direction
149	N
167	NW
180	N
182	N
196	NW
198	N
222	NW
222	NW
243	W

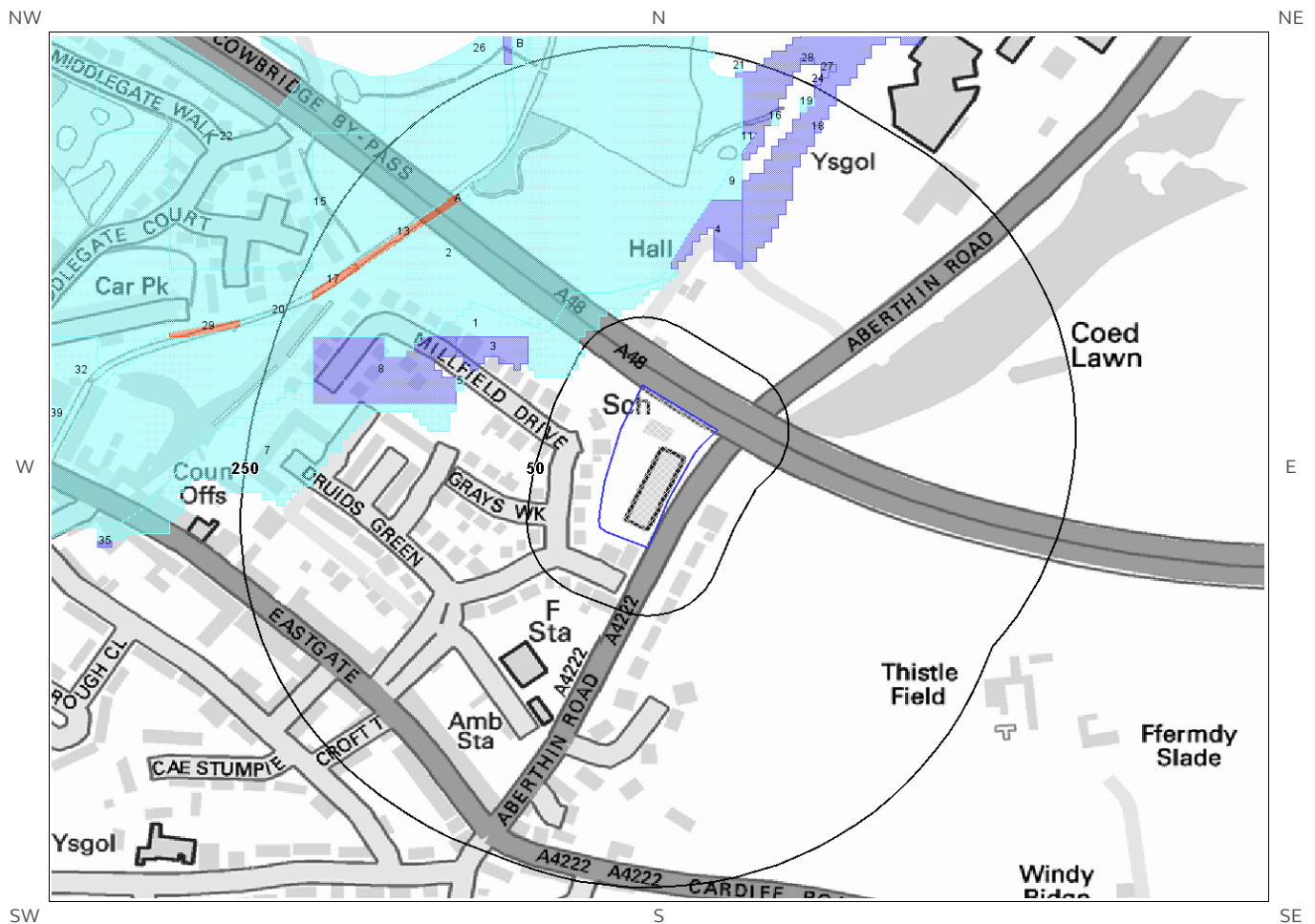
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



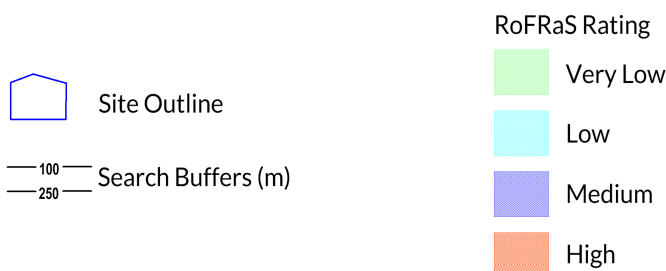
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7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m

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:

ID	Distance (m)	Direction	Update	Type
1A	46	NW	12-Oct-2018	Zone 2 - (Fluvial /Tidal Models)

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m

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.

ID	Distance (m)	Direction	Update	Type
1A	64	N	12-Oct-2018	Zone 3 - (Fluvial Models)

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.

Any relevant data within 250m is represented on the RoFRaS Flood map. Data to 50m is reported in the table below.

ID	Distance (m)	Direction	RoFRaS flood Risk
1	46.0	NW	Low

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 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

Potential below Surface

Where potential for groundwater flooding of property situated below ground level is indicated, this means that given the geological conditions there may be a groundwater flooding hazard to basements and other below surface infrastructure. 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. If there are records of previous incidences of groundwater flooding, then is recommended that other information e.g. rainfall history, property type, and land drainage information in addition to previous records of flooding be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

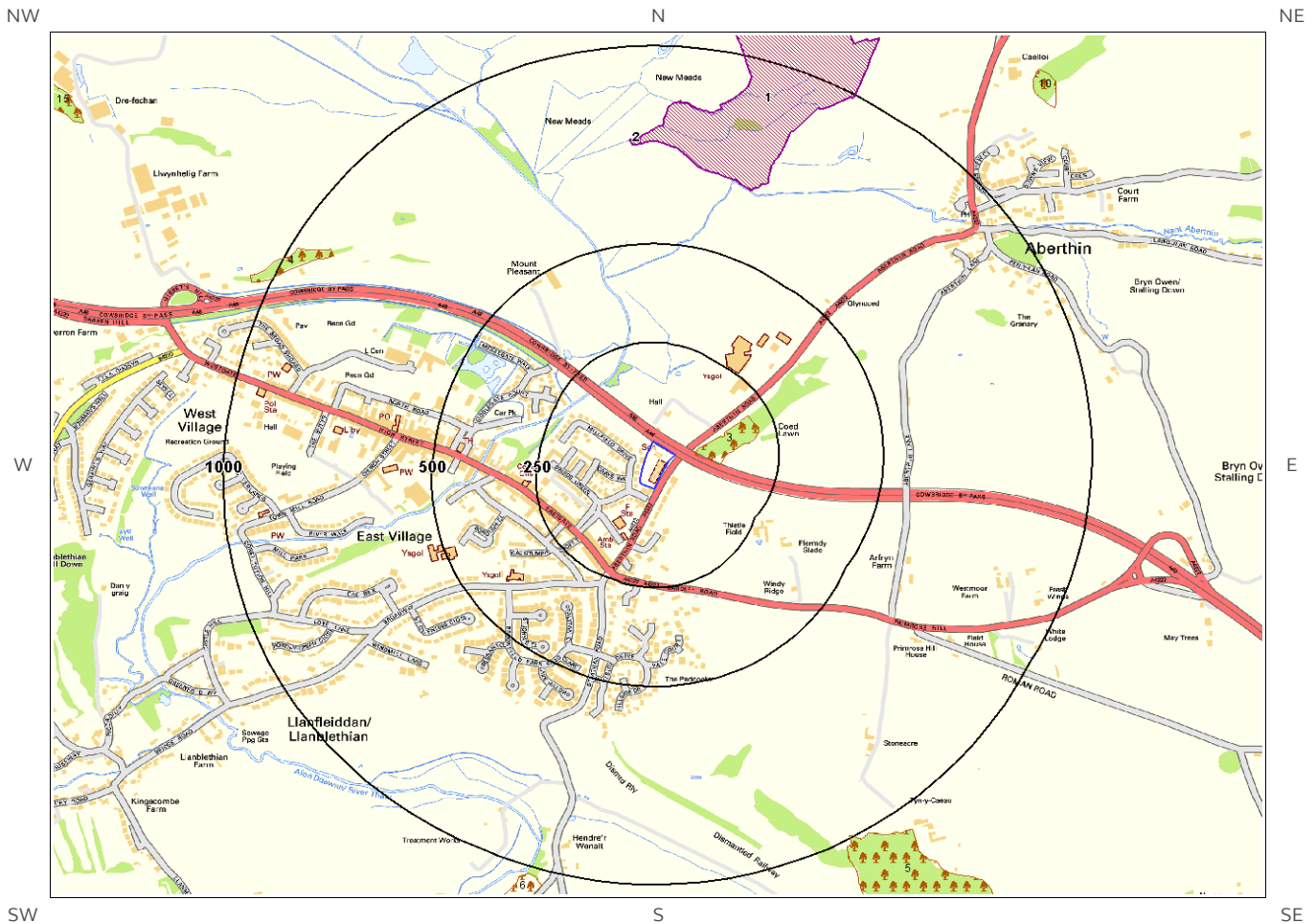
7.8 Groundwater Flooding Confidence Areas

British Geological Survey confidence rating in this result Low

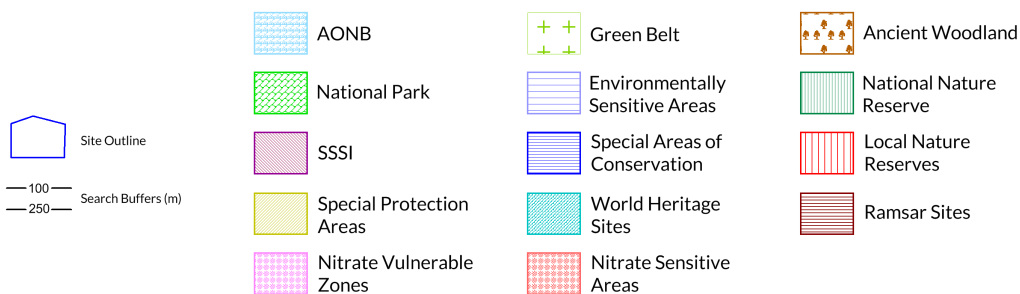
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

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:

2

The following Site of Special Scientific Interest (SSSI) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SSSI Name	Data Source
1	676	N	CORS ABERTHIN	Natural Resources Wales
2	750	N	CORS ABERTHIN	Natural Resources Wales

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:

25

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
3	47	E	UNKNOWN	Restored Ancient Woodland Site
4	900	NW	UNKNOWN	Ancient and Semi-Natural Woodland
5	992	SE	UNKNOWN	Ancient and Semi-Natural Woodland
6	1018	S	UNKNOWN	Restored Ancient Woodland Site
Not shown	1090	S	UNKNOWN	Restored Ancient Woodland Site
Not shown	1111	S	UNKNOWN	Restored Ancient Woodland Site
Not shown	1185	SW	UNKNOWN	Ancient and Semi-Natural Woodland
10	1256	NE	UNKNOWN	Restored Ancient Woodland Site
Not shown	1338	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1365	S	UNKNOWN	Restored Ancient Woodland Site
Not shown	1371	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1445	W	UNKNOWN	Ancient and Semi-Natural Woodland
15	1585	NW	UNKNOWN	Restored Ancient Woodland Site
Not shown	1609	SE	UNKNOWN	Restored Ancient Woodland Site
Not shown	1667	SW	UNKNOWN	Restored Ancient Woodland Site
Not shown	1674	SE	UNKNOWN	Restored Ancient Woodland Site
Not shown	1738	E	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1757	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1789	E	UNKNOWN	Restored Ancient Woodland Site
Not shown	1799	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1823	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1843	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1845	E	UNKNOWN	Restored Ancient Woodland Site
Not shown	1852	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1875	E	UNKNOWN	Restored Ancient Woodland Site

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:

0

Database searched and no data found.

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

Database searched and no data found.

0

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 Negligible

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

Hazard
Ground conditions predominantly non-plastic. 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 likely due to potential problems with shrink-swell clays.

9.1.2 Landslides

Maximum Landslide* 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
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.

9.1.3 Soluble Rocks

Maximum Soluble Rocks* 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
Significant soluble rocks are present. Low possibility of subsidence occurring naturally, but may be possible in adverse conditions such as high surface or subsurface water flow. Consider implications for stability when changes to drainage or new construction are planned. For new build site investigation should consider potential for dissolution problems on the site and its surroundings. Care should be taken with local drainage into the bedrock. Some possibility groundwater pollution. For existing property possible increase in insurance risk due to 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

Very Low

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

Hazard

Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. 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 in a Radon Affected Area, as between 5 and 10% 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? Basic radon protective measures are necessary.

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

None identified

Database searched and no data found.

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

Earth Science Partnership Ltd
Telephone: 08444 159 000
enquiries@earthsciencepartnership.com
Earth Science Partnership Ltd



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



Natural Resources Wales
Ty Cambria
29 Newport Road
Cardiff
CF24 0TP
Tel: 0300 065 3000
Email: enquiries@naturalresourceswales.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



Public Health England

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



The Coal Authority

Ordnance Survey
Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505



Local Authority
Authority: Bro Morgannwg - Vale of Glamorgan Council
Phone: 01446 700 111
Web: <http://www.valeofglamorgan.gov.uk>
Address: Civic Offices, Holton Road, Barry, CF63 4RU

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



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