



Earth Environmental & Geotechnical Ltd
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WELLINGTON ROAD NORTH,
STOCKPORT, SK4 5DA

Groundsure Reference: GS-6498260

Your Reference: A3341

Report Date 3 Dec 2019

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Enviro Insight

Address: 16, WILLOW COURT, ACREFAIR, WREXHAM, LL14 3UJ

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

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

Yours faithfully,

A large rectangular area of the document has been completely redacted with black ink, obscuring the signature and any accompanying text.

Managing Director
Groundsure Limited

Enc.
Groundsure Enviroinsight

Address: 16, WILLOW COURT, ACREFAIR, WREXHAM, LL14 3UJ

Date: 3 Dec 2019

Reference: GS-6498260

Client: Earth Environmental & Geotechnical Ltd

NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 07-May-2017

Grid Reference: 328163,343180

Site Size: 1.1160ha

Report Reference: GS-6498260

Client Reference: A3341

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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	17	22	143	262
1.2 Additional Information – Historical Tank Database	2	4	6	25
1.3 Additional Information – Historical Energy Features Database	0	0	0	22
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	5
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	22	123	209
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	0	1
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	1
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	4
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	1	3	0	3	2
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	3	0	7	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	18	0

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	0	3	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	1
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

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

Section 6: Hydrogeology and Hydrology	0-500m					
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site	Identified					
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site	Identified					
	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	2
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	5
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	2
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	1	0	Not searched	Not searched

Section 6: Hydrogeology and Hydrology

0-500m

	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	Yes	Yes
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	0	26	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	No	Not searched	Not searched	Not searched

Section 7: Flooding

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

Section 8: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	0	2
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	2
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	8	71
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	0
8.8 Records of World Heritage Sites	0	0	2	0	0	2
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	1
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	Very Low
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Very Low
9.1.2 Maximum Landslides hazard rating identified on the study site	Moderate
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	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 3 and 5% 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	Identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	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.

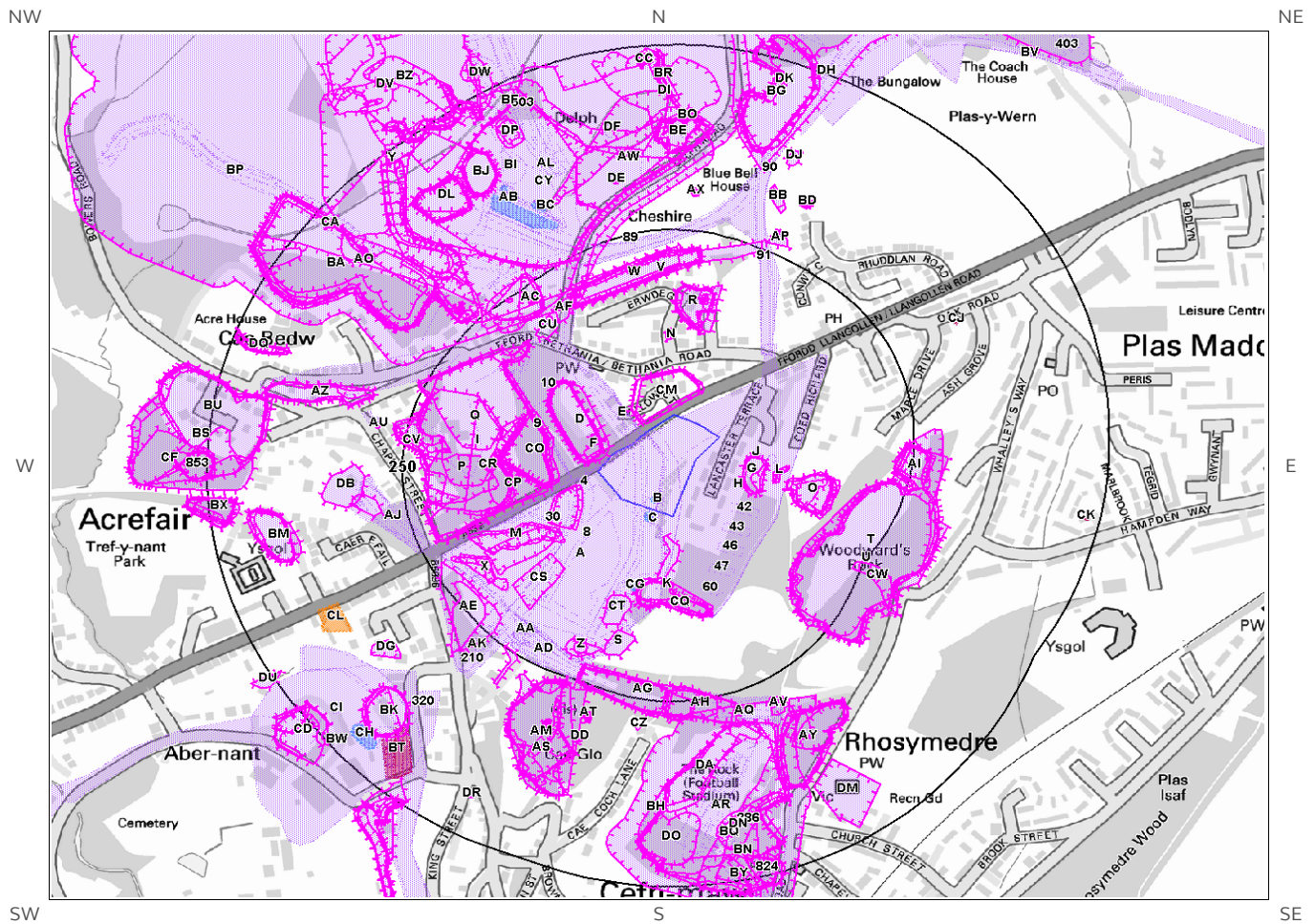
Note: Maps

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).

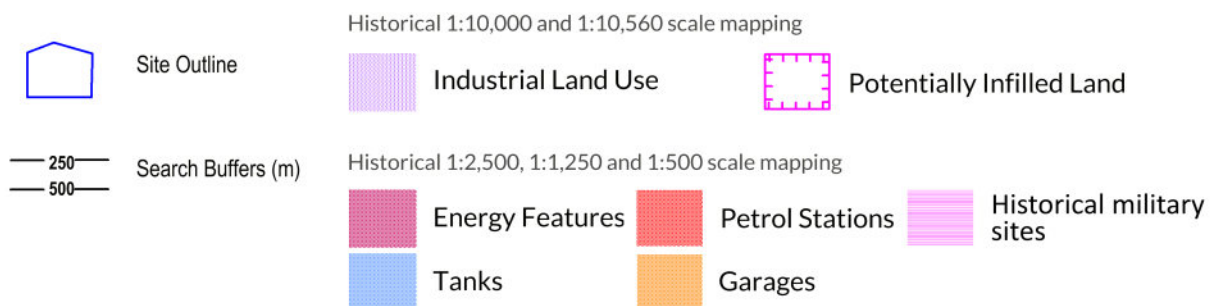
Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

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: 444

ID	Distance [m]	Direction	Use	Date
1A	0	On Site	Engineering Works	1898
2A	0	On Site	Unspecified Works	1985
3A	0	On Site	Unspecified Works	1994
4	0	On Site	Railway Sidings	1949
5B	0	On Site	Unspecified Tank	1898
6A	0	On Site	Engineering Works	1949
7A	0	On Site	Unspecified Works	1974
8	0	On Site	Railway Sidings	1938
9	0	On Site	Railway Sidings	1873
10	0	On Site	Railway Sidings	1898
11A	0	On Site	Unspecified Works	1960
12A	0	On Site	Unspecified Commercial/Industrial	1938
13C	0	On Site	Iron Works	1873
14B	0	On Site	Unspecified Tank	1873
15H	0	On Site	Railway Sidings	1873
16CN	0	On Site	Railway Sidings	1910
17A	0	On Site	Engineering Works	1910
18C	3	S	Unspecified Tank	1873
19B	4	S	Unspecified Tank	1938
20D	6	NW	Unspecified Heap	1873
21C	8	S	Unspecified Tank	1898
22C	9	S	Unspecified Tank	1960
23E	11	NW	Railway Building	1910
24D	12	NW	Unspecified Heap	1960
25E	12	NW	Railway Building	1938
26D	13	NW	Unspecified Heap	1949
27D	13	NW	Unspecified Heap	1910
28D	14	NW	Unspecified Heap	1938
29D	14	NW	Unspecified Heap	1938
30	15	W	Railway Sidings	1960
31F	16	NW	Unspecified Ground Workings	1974
32F	16	NW	Unspecified Ground Workings	1994

33F	16	NW	Unspecified Ground Workings	1985
34K	26	S	Unspecified Ground Workings	1910
35G	45	SE	Unspecified Heap	1938
36G	45	SE	Unspecified Heap	1938
37G	45	SE	Unspecified Heap	1949
38J	48	SE	Unspecified Kilns	1873
39H	48	SE	Unspecified Heap	1960
40I	57	W	Unspecified Ground Workings	1938
41I	57	W	Unspecified Ground Workings	1938
42	65	E	Coke Ovens	1873
43	65	E	Coke Ovens	1873
44CP	67	W	Unspecified Heap	1873
45J	69	SE	Unspecified Kilns	1873
46	70	SE	Coke Ovens	1873
47	81	SE	Coke Ovens	1873
48L	85	SE	Unspecified Ground Workings	1949
49K	85	S	Unspecified Heap	1994
50K	85	S	Unspecified Heap	1985
51K	85	S	Unspecified Heap	1974
52L	87	SE	Unspecified Ground Workings	1960
53M	88	SW	Unspecified Heap	1938
54M	88	SW	Unspecified Heap	1938
55K	89	S	Unspecified Heap	1938
56K	89	S	Unspecified Heap	1938
57M	91	SW	Unspecified Ground Workings	1949
58K	91	S	Unspecified Heap	1949
59M	95	SW	Unspecified Ground Workings	1873
60	101	SE	Coke Ovens	1873
61N	102	N	Unspecified Old Shafts	1960
62N	103	N	Old Coal Shafts	1949
63N	104	N	Old Coal Shafts	1910
64O	105	SE	Unspecified Old Quarries	1938
65N	105	N	Old Coal Shafts	1938
66O	106	SE	Unspecified Old Quarries	1910
67P	108	W	Unspecified Ground Workings	1994
68P	108	W	Unspecified Ground Workings	1974
69P	108	W	Unspecified Ground Workings	1985
70CQ	108	S	Unspecified Heap	1960
71N	108	N	Unspecified Disused	1985

Shafts				
72N	108	N	Unspecified Disused Shafts	1974
73CR	109	W	Unspecified Heap	1898
74O	112	SE	Unspecified Old Quarries	1960
75Q	113	NW	Unspecified Heap	1873
76Q	113	W	Unspecified Ground Workings	1960
77I	115	W	Unspecified Ground Workings	1910
78I	116	W	Unspecified Heap	1949
79CS	117	SW	Cuttings	1873
80R	118	N	Unspecified Heap	1910
81R	118	N	Unspecified Heap	1949
82O	118	SE	Unspecified Old Quarries	1949
83O	118	SE	Unspecified Old Quarry	1898
84R	118	N	Unspecified Old Shafts	1960
85R	120	N	Unspecified Heap	1873
86R	120	N	Unspecified Heap	1938
87R	120	N	Unspecified Heap	1938
88CT	121	S	Unspecified Ground Workings	1873
89	123	NE	Railway Sidings	1949
90	124	NE	Railway Sidings	1910
91	125	NE	Railway Sidings	1938
92R	154	N	Unspecified Old Shafts	1960
93R	155	N	Old Coal Shafts	1910
94R	156	N	Old Coal Shafts	1949
95R	156	N	Old Coal Shafts	1938
96R	161	N	Unspecified Disused Shafts	1985
97R	161	N	Unspecified Disused Shafts	1974
98S	167	S	Unspecified Pit	1994
99S	167	S	Unspecified Pit	1974
100S	167	S	Unspecified Pit	1985
101T	167	SE	Refuse Heap	1985
102T	167	SE	Refuse Heap	1974
103T	167	SE	Refuse Heap	1994
104T	170	E	Unspecified Old Quarries	1938
105T	170	SE	Unspecified Old Quarries	1910
106U	173	E	Unspecified Old Quarries	1949
107U	173	E	Unspecified Old Quarry	1898
108U	173	E	Unspecified Heap	1873
109T	174	SE	Unspecified Old Quarries	1960
110CU	176	NW	Cuttings	1873
111V	180	NW	Cuttings	1873
112V	181	NW	Cuttings	1960

113W	182	NW	Cuttings	1910
114W	183	N	Cuttings	1949
115X	183	SW	Unspecified Pit	1938
116X	183	SW	Unspecified Pit	1938
117W	183	N	Cuttings	1938
118X	185	SW	Unspecified Ground Workings	1949
119AF	185	NW	Cuttings	1873
120W	189	N	Cuttings	1985
121W	189	N	Cuttings	1974
122Y	194	NW	Opencast Workings	1974
123Y	194	NW	Opencast Workings	1985
124Z	199	S	Unspecified Heap	1910
125Z	199	S	Unspecified Ground Workings	1873
126AA	204	SW	Railway Station	1938
127AA	206	SW	Railway Station	1910
128Z	206	SW	Railway Sidings	1960
129AA	206	SW	Railway Station	1960
130AB	208	NW	Brick and Tile Works	1873
131AD	208	SW	Railway Sidings	1898
132AA	209	SW	Railway Station	1949
133AA	209	SW	Railway Station	1898
134AC	209	NW	Unspecified Heap	1960
135AB	211	NW	Brick and Tile Works	1898
136AC	214	NW	Unspecified Heap	1910
137AC	215	NW	Unspecified Heap	1938
138AC	215	NW	Unspecified Heap	1938
139AD	215	SW	Railway Sidings	1949
140CV	217	W	Unspecified Ground Workings	1949
141AE	219	SW	Unspecified Heap	1873
142AG	223	S	Cuttings	1938
143	224	N	Tramway Sidings	1938
144AE	225	SW	Unspecified Heap	1938
145AE	225	SW	Unspecified Heap	1938
146AF	225	NW	Unspecified Disused Old Shafts	1960
147AA	226	SW	Railway Station	1873
148AK	226	SW	Railway Sidings	1949
149AG	226	S	Cuttings	1898
150AG	226	S	Cuttings	1949
151AG	226	S	Cuttings	1873
152AG	226	S	Cuttings	1974
153AG	226	S	Cuttings	1994
154AG	226	S	Cuttings	1985
155AG	226	S	Cuttings	1960

156AG	226	S	Cuttings	1910
157AC	228	NW	Old Coal Shafts	1949
158AI	229	E	Unspecified Old Quarries	1949
159AC	229	NW	Old Coal Shafts	1938
160AC	229	NW	Old Coal Shafts	1910
161AH	229	S	Cuttings	1949
162AH	229	S	Cuttings	1898
163AH	232	S	Cuttings	1873
164AD	232	SW	Railway Sidings	1910
165AJ	232	SW	Railway Sidings	1938
166AH	236	S	Cuttings	1994
167AH	236	S	Cuttings	1974
168AH	236	S	Cuttings	1985
169AH	236	S	Cuttings	1960
170AI	236	E	Unspecified Quarry	1898
171AI	236	E	Unspecified Pit	1873
172AJ	238	SW	Railway Sidings	1949
173AK	238	SW	Railway Sidings	1960
174AD	238	SW	Railway Building	1898
175CW	239	E	Cuttings	1873
176AC	243	NW	Coal Shafts	1873
177AL	245	NW	Brick and Tile Works	1938
178AL	245	NW	Brick and Tile Works	1938
179AJ	246	SW	Railway Sidings	1960
180CX	247	SW	Unspecified Ground Workings	1910
181CY	248	NW	Brick and Tile Works	1949
182AB	248	NW	Brick and Tile Works	1910
183AJ	251	W	Railway Sidings	1910
184AQ	253	S	Railway Sidings	1949
185AM	254	S	Unspecified Heaps	1938
186AM	254	S	Unspecified Heaps	1938
187AO	256	NW	Unspecified Heaps	1960
188AM	256	S	Unspecified Heaps	1960
189AL	256	NW	Unspecified Works	1960
190AM	256	S	Unspecified Ground Workings	1873
191AM	257	S	Unspecified Ground Workings	1910
192AN	259	NW	Unspecified Ground Workings	1949
193AM	260	S	Unspecified Heaps	1949
194AN	260	NW	Unspecified Heap	1938
195AN	260	NW	Unspecified Heap	1938
196AO	260	NW	Unspecified Ground Workings	1910
197AP	261	NE	Unspecified Heap	1985

198AP	261	NE	Unspecified Heap	1994
199AQ	264	S	Railway Sidings	1898
200AQ	264	S	Railway Sidings	1960
201AR	266	S	Unspecified Disused Quarry	1974
202AR	266	S	Unspecified Disused Quarry	1985
203AQ	267	S	Railway Sidings	1910
204AN	272	NW	Coal Shafts	1873
205AN	272	NW	Unspecified Disused Old Shafts	1960
206AN	274	NW	Old Coal Shafts	1949
207AN	275	NW	Old Coal Shafts	1938
208AN	275	NW	Old Coal Shafts	1910
209AV	275	SE	Cuttings	1898
210	277	SW	Railway Buildings	1960
211AK	277	SW	Railway Building	1898
212AK	277	SW	Railway Building	1873
213AN	280	NW	Coal Shafts	1873
214AS	281	S	Unspecified Ground Workings	1994
215AS	281	S	Unspecified Ground Workings	1974
216AS	281	S	Unspecified Ground Workings	1985
217AJ	281	W	Unspecified Heap	1994
218AJ	281	W	Unspecified Heap	1974
219AJ	281	W	Unspecified Heap	1985
220CZ	282	S	Unspecified Old Shafts	1960
221AT	285	S	Unspecified Disused Shafts	1974
222AT	285	S	Unspecified Disused Shafts	1994
223AT	285	S	Unspecified Disused Shafts	1985
224AU	285	W	Unspecified Old Shaft	1898
225AB	286	NW	Unspecified Tanks	1898
226AU	286	W	Smithy	1898
227AT	287	S	Unspecified Old Shafts	1938
228AT	287	S	Unspecified Old Shafts	1938
229AR	288	S	Unspecified Quarry	1898
230AV	288	SE	Cuttings	1873
231AT	289	S	Unspecified Old Shafts	1960
232AT	289	S	Old Coal Shafts	1910
233AR	290	S	Unspecified Quarry	1910
234AT	291	S	Old Coal Shaft	1949
235AR	291	S	Unspecified Quarry	1938
236AW	292	N	Unspecified Ground Workings	1938

237AW	292	N	Unspecified Ground Workings	1938
238AB	293	NW	Unspecified Tanks	1949
239AR	293	S	Unspecified Quarry	1960
240DA	294	S	Unspecified Quarry	1949
241AB	296	NW	Unspecified Tanks	1910
242AX	297	N	Old Coal Shaft	1949
243AX	297	N	Unspecified Old Shaft	1898
244AB	297	NW	Unspecified Tanks	1938
245AB	297	NW	Unspecified Kilns	1873
246DB	298	W	Unspecified Heap	1873
247AV	298	SE	Railway Building	1873
248AO	299	NW	Unspecified Heaps	1938
249AO	299	NW	Unspecified Heaps	1938
250AX	299	N	Unspecified Old Shaft	1960
251AX	300	N	Old Coal Shaft	1910
252AX	303	N	Old Coal Shaft	1938
253AZ	303	W	Unspecified Heap	1960
254BB	304	NE	Unspecified Heap	1949
255AO	305	NW	Unspecified Heaps	1873
256AY	305	SE	Unspecified Heaps	1938
257AY	305	SE	Unspecified Heaps	1938
258AZ	306	W	Unspecified Heap	1938
259AZ	306	W	Unspecified Heap	1938
260BA	307	NW	Unspecified Heap	1949
261AY	307	SE	Unspecified Heaps	1949
262BA	308	NW	Unspecified Heap	1974
263BA	308	NW	Unspecified Heap	1985
264BA	308	NW	Unspecified Heap	1994
265AZ	308	W	Unspecified Ground Workings	1910
266AY	309	SE	Unspecified Ground Workings	1910
267AY	312	SE	Unspecified Heaps	1985
268AY	312	SE	Unspecified Heaps	1960
269AY	312	SE	Unspecified Heaps	1994
270AY	312	SE	Unspecified Heaps	1974
271AY	312	SE	Unspecified Heap	1873
272AR	312	S	Railway Sidings	1949
273AM	313	S	Unspecified Old Shafts	1938
274AM	313	S	Unspecified Old Shafts	1938
275AM	313	S	Unspecified Disused Shafts	1994
276AM	313	S	Unspecified Disused Shafts	1985
277AM	313	S	Unspecified Disused Shafts	1974
278AM	315	S	Unspecified Old Shafts	1960

279AM	316	S	Old Coal Shafts	1910
280AM	316	S	Old Coal Shafts	1949
281DC	316	NW	Unspecified Ground Workings	1949
282BC	319	NW	Unspecified Tank	1960
283DD	319	S	Unspecified Old Shaft	1898
284DE	320	N	Old Coal Shafts	1949
285AY	321	SE	Unspecified Heap	1898
286	322	SE	Railway Sidings	1898
287BB	322	NE	Old Coal Shaft	1910
288BC	323	NW	Unspecified Tanks	1910
289BD	324	NE	Old Coal Shaft	1949
290BD	324	NE	Unspecified Old Shaft	1960
291BD	326	NE	Old Coal Shaft	1938
292BC	329	NW	Unspecified Tank	1960
293AR	331	S	Railway Sidings	1960
294BQ	335	S	Railway Sidings	1938
295	338	S	Railway Sidings	1910
296BW	348	SW	Unspecified Commercial/Industrial	1960
297DG	348	SW	Unspecified Heap	1873
298DH	350	N	Disused Brick Works	1938
299BF	351	N	Railway Sidings	1873
300BE	353	N	Unspecified Ground Workings	1949
301BE	353	N	Unspecified Pit	1960
302BE	355	N	Unspecified Ground Workings	1910
303	356	NW	Railway Sidings	1949
304BF	357	NW	Tramway Sidings	1910
305DI	359	N	Unspecified Ground Workings	1873
306DJ	368	NE	Unspecified Heap	1873
307AB	369	NW	Unspecified Tank	1960
308BH	370	S	Railway Sidings	1938
309BG	371	N	Unspecified Heap	1938
310BG	371	N	Unspecified Heap	1938
311DK	371	N	Unspecified Ground Workings	1910
312BI	372	NW	Abattoir	1873
313AB	372	NW	Unspecified Tank	1910
314BG	373	N	Unspecified Heap	1949
315BH	374	S	Railway Sidings	1910
316BG	374	N	Unspecified Heap	1985
317BG	374	N	Unspecified Heap	1974
318BG	374	N	Unspecified Heap	1960
319BG	374	N	Unspecified Heap	1994
320	374	SW	Unspecified Tank	1960

321BG	378	N	Unspecified Heap	1873
322BI	380	NW	Unspecified Heap	1949
323BJ	381	NW	Unspecified Heap	1960
324BJ	382	NW	Unspecified Heap	1910
325DF	383	N	Delph	1910
326BJ	385	NW	Unspecified Heap	1938
327BJ	385	NW	Unspecified Heap	1938
328BK	386	SW	Unspecified Heap	1873
329BL	386	SW	Railway Sidings	1949
330BK	386	SW	Unspecified Heap	1938
331BK	386	SW	Unspecified Heap	1938
332BL	386	SW	Railway Sidings	1960
333DM	387	SE	Grave Yard	1873
334BK	388	SW	Unspecified Heap	1910
335BK	393	SW	Unspecified Heap	1994
336BK	393	SW	Unspecified Heap	1974
337BK	393	SW	Unspecified Heap	1985
338BK	393	SW	Unspecified Heap	1960
339BM	393	W	Unspecified Heap	1873
340BM	393	W	Unspecified Heap	1898
341BM	393	W	Unspecified Heap	1949
342BN	394	S	Unspecified Heap	1949
343BN	396	S	Unspecified Ground Workings	1898
344BO	398	N	Old Coal Shafts	1949
345BO	400	N	Old Coal Shafts	1910
346BO	400	N	Unspecified Old Shafts	1960
347DN	400	S	Unspecified Heap	1873
348DO	401	S	Unspecified Heap	1949
349BP	402	NW	Railway Sidings	1949
350BO	402	N	Old Coal Shafts	1938
351BM	402	W	Unspecified Heap	1960
352BP	402	NW	Railway Sidings	1960
353BM	402	W	Unspecified Heap	1938
354BM	402	W	Unspecified Heap	1938
355BM	404	W	Unspecified Heap	1910
356BV	412	NE	Railway Sidings	1873
357AO	413	NW	Unspecified Shaft	1960
358BP	413	NW	Tramway Sidings	1938
359BT	413	SW	Unspecified Commercial/Industrial	1949
360BP	415	NW	Tramway Sidings	1910
361AO	417	NW	Unspecified Heap	1910
362BQ	419	S	Railway Sidings	1873
363BR	423	N	Unspecified Ground Workings	1949
364BR	424	N	Unspecified Ground	1960

Workings				
365BS	426	W	Unspecified Ground Workings	1898
366BS	426	W	Unspecified Heap	1873
367BT	427	SW	Gas Works	1873
368BS	430	W	Unspecified Ground Workings	1960
369BS	430	W	Unspecified Ground Workings	1985
370BS	430	W	Unspecified Ground Workings	1974
371BS	432	W	Unspecified Ground Workings	1949
372BU	432	W	Unspecified Heap	1938
373BU	432	W	Unspecified Heap	1938
374BU	434	W	Unspecified Ground Workings	1910
375BV	439	NE	Railway Sidings	1898
376DR	442	SW	Unspecified Old Shaft	1898
377BT	443	SW	Gasometer	1873
378BT	443	SW	Unspecified Tank	1898
379BW	444	SW	Unspecified Tanks	1960
380BT	446	SW	Unspecified Tanks	1960
381BT	448	SW	Unspecified Tank	1949
382BT	449	SW	Gasometer	1910
383BT	449	SW	Unspecified Tank	1949
384BW	450	SW	Unspecified Tank	1974
385BW	450	SW	Unspecified Tank	1985
386BW	450	SW	Unspecified Tank	1994
387BT	451	SW	Unspecified Tank	1898
388BT	452	SW	Unspecified Tank	1974
389BT	452	SW	Unspecified Tank	1994
390BT	452	SW	Unspecified Tank	1985
391BW	453	SW	Unspecified Tank	1949
392BT	458	SW	Unspecified Tank	1949
393BT	459	SW	Gasometer	1910
394CI	460	SW	Unspecified Tank	1960
395BX	461	W	Unspecified Heap	1873
396BN	461	S	Cuttings	1898
397BY	463	S	Unspecified Heap	1873
398BX	466	W	Unspecified Heap	1960
399BX	466	W	Unspecified Heap	1938
400BX	466	W	Unspecified Heap	1938
401BX	467	W	Unspecified Heap	1949
402BY	468	S	Unspecified Heap	1873
403	468	NE	Railway Sidings	1938
404BX	469	W	Unspecified Heap	1910
405DS	469	NW	Unspecified Ground	1949

Workings				
406BZ	470	NW	Unspecified Heaps	1938
407BZ	470	NW	Unspecified Heaps	1938
408CE	470	NW	Unspecified Heap	1960
409DT	470	NW	Unspecified Ground Workings	1910
410BR	473	N	Unspecified Old Shaft	1898
411CA	473	NW	Unspecified Shaft	1960
412CC	475	N	Old Coal Shafts	1949
413CA	476	NW	Unspecified Shaft	1949
414CB	476	SW	Unspecified Ground Workings	1938
415CB	476	SW	Unspecified Ground Workings	1938
416CA	477	NW	Unspecified Shaft	1910
417CC	477	N	Old Coal Shafts	1910
418BV	477	NE	Railway Sidings	1949
419CC	477	N	Unspecified Old Shafts	1960
420CD	479	SW	Unspecified Ground Workings	1938
421CD	479	SW	Unspecified Ground Workings	1938
422CC	480	N	Old Coal Shafts	1938
423CE	480	NW	Unspecified Ground Workings	1949
424CD	482	SW	Unspecified Ground Workings	1910
425BX	483	W	Unspecified Heap	1974
426BX	483	W	Unspecified Heap	1985
427BX	483	W	Unspecified Heap	1994
428	486	SW	Railway Sidings	1898
429DU	486	SW	Unspecified Heap	1873
430CD	488	SW	Unspecified Pit	1960
431CF	490	W	Unspecified Ground Workings	1994
432CD	490	SW	Unspecified Pit	1949
433DV	491	NW	Unspecified Heaps	1873
434CF	492	W	Unspecified Pit	1949
435CF	492	W	Unspecified Pit	1938
436CF	492	W	Unspecified Pit	1938
437DW	493	NW	Unspecified Pit	1873
438CB	495	SW	Unspecified Ground Workings	1910
439BY	495	S	Unspecified Ground Workings	1960
440CB	495	SW	Unspecified Ground Workings	1960
441CB	495	SW	Unspecified Ground Workings	1949
442CD	496	SW	Unspecified Shaft	1898

443CB	498	SW	Unspecified Quarry and Ground Workings	1873
444CD	499	SW	Unspecified Tank	1960

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:

37

ID	Distance (m)	Direction	Use	Date
445B	0	On Site	Unspecified Tank	1873
446B	0	On Site	Unspecified Tank	1899
447B	4	S	Unspecified Tank	1961
448C	8	S	Unspecified Tank	1912
449C	8	S	Unspecified Tank	1873
450C	8	S	Unspecified Tank	1899
451CG	103	S	Tanks	1994
452CG	103	S	Tanks	1989
453CG	108	S	Tanks	1989
454CG	109	S	Unspecified Tank	1971
455CG	110	S	Unspecified Tank	1988
456CG	110	S	Unspecified Tank	1980
457BC	294	NW	Tanks	1899
458BC	294	NW	Tanks	1912
459BC	322	NW	Tanks	1899
460BC	322	NW	Tanks	1912
461AB	370	NW	Unspecified Tank	1912
462AB	370	NW	Unspecified Tank	1899
463BT	413	SW	Gas Works	1912
464BT	426	SW	Gas Works	1899
465BT	430	SW	Gas Works	1873
466BT	435	SW	Gas Works	1912
467BT	435	SW	Gas Works	1875
468BT	435	SW	Gas Works	1899
469BT	435	SW	Gas Works	1875
470BT	447	SW	Gasometer	1875
471BT	447	SW	Gasometer	1875
472BT	447	SW	Gasometers	1912
473BT	447	SW	Gasometers	1899
474CH	451	SW	Tanks	1977
475CH	451	SW	Tanks	1961
476CH	454	SW	Tanks	1988

477CH	454	SW	Tanks	1992
478CI	462	SW	Unspecified Tank	1977
479CI	462	SW	Unspecified Tank	1961
480CI	464	SW	Unspecified Tank	1988
481CI	464	SW	Unspecified Tank	1992

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:

22

ID	Distance (m)	Direction	Use	Date
482CJ	339	NE	Electricity Substation	1988
483CJ	339	NE	Electricity Substation	1980
484CJ	339	NE	Electricity Substation	1994
485CJ	339	NE	Electricity Substation	1967
486CJ	340	NE	Electricity Substation	1989
487CJ	340	NE	Electricity Substation	1971
488BT	413	SW	Gas Works	1912
489BT	426	SW	Gas Works	1899
490BT	430	SW	Gas Works	1873
491BT	435	SW	Gas Works	1875
492BT	435	SW	Gas Works	1899
493BT	435	SW	Gas Works	1912
494BT	435	SW	Gas Works	1875
495BT	447	SW	Gasometer	1875
496BT	447	SW	Gasometer	1875
497BT	447	SW	Gasometers	1899
498BT	447	SW	Gasometers	1912
499CK	480	E	Electricity Substation	1994
500CK	480	E	Electricity Substation	1980
501CK	480	E	Electricity Substation	1988
502CK	480	E	Electricity Substation	1989
503CK	481	E	Electricity Substation	1971

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: 5

ID	Distance (m)	Direction	Use	Date
504CL	376	SW	Garage	1991
505CL	376	SW	Garage	1992
506CL	376	SW	Garage	1991
507CL	379	SW	Garage	1977
508CL	388	SW	Garage	1994

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: 354

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

ID	Distance(m)	Direction	Use	Date
509D	6	NW	Unspecified Heap	1873
510CM	8	NW	Pond	1873
511CM	8	NW	Reservoir	1949
512CM	8	NW	Reservoir	1898
513D	12	NW	Unspecified Heap	1960
514D	13	NW	Unspecified Heap	1949
515CM	13	NW	Reservoir	1910
516CM	13	NW	Reservoir	1938
517D	13	NW	Unspecified Heap	1910
518D	14	NW	Unspecified Heap	1938

519D	14	NW	Unspecified Heap	1938
520F	16	NW	Unspecified Ground Workings	1994
521F	16	NW	Unspecified Ground Workings	1985
522F	16	NW	Unspecified Ground Workings	1974
523K	26	S	Unspecified Ground Workings	1910
524CN	29	SW	Pond	1873
525CN	33	SW	Pond	1960
526G	45	SE	Unspecified Heap	1938
527G	45	SE	Unspecified Heap	1938
528G	45	SE	Unspecified Heap	1949
529G	48	SE	Unspecified Heap	1960
530CO	50	W	Pond	1873
531CO	57	W	Reservoirs	1898
532CO	57	W	Reservoir	1949
533I	57	W	Unspecified Ground Workings	1938
534I	57	W	Unspecified Ground Workings	1938
535CO	60	W	Pond	1960
536CO	62	W	Reservoir	1938
537CO	63	W	Reservoir	1910
538CP	67	W	Unspecified Heap	1873
539L	85	SE	Unspecified Ground Workings	1949
540CQ	85	S	Unspecified Heap	1985
541CQ	85	S	Unspecified Heap	1974
542CQ	85	S	Unspecified Heap	1994
543L	87	SE	Unspecified Ground Workings	1960
544M	88	SW	Unspecified Heap	1938
545M	88	SW	Unspecified Heap	1938
546CQ	89	S	Unspecified Heap	1938
547CQ	89	S	Unspecified Heap	1938
548M	91	SW	Unspecified Ground Workings	1949
549CQ	91	S	Unspecified Heap	1949
550M	95	SW	Unspecified Ground Workings	1873
551N	102	N	Unspecified Old Shafts	1960
552N	103	N	Old Coal Shafts	1949
553N	104	N	Old Coal Shafts	1910
554O	105	SE	Unspecified Old Quarries	1938
555N	105	N	Old Coal Shafts	1938
556O	106	SE	Unspecified Old Quarries	1910
557P	108	W	Unspecified Ground Workings	1985

558P	108	W	Unspecified Ground Workings	1974
559P	108	W	Unspecified Ground Workings	1994
560CQ	108	S	Unspecified Heap	1960
561N	108	N	Unspecified Disused Shafts	1974
562N	108	N	Unspecified Disused Shafts	1985
563CR	109	W	Unspecified Heap	1898
564O	112	SE	Unspecified Old Quarries	1960
565Q	113	NW	Unspecified Heap	1873
566Q	113	W	Unspecified Ground Workings	1960
567I	115	W	Unspecified Ground Workings	1910
568I	116	W	Unspecified Heap	1949
569CS	117	SW	Cuttings	1873
570R	118	N	Unspecified Heap	1910
571R	118	N	Unspecified Heap	1949
572O	118	SE	Unspecified Old Quarry	1898
573O	118	SE	Unspecified Old Quarries	1949
574R	118	N	Unspecified Old Shafts	1960
575R	120	N	Unspecified Heap	1873
576R	120	N	Unspecified Heap	1938
577R	120	N	Unspecified Heap	1938
578CT	121	S	Unspecified Ground Workings	1873
579O	145	SE	Pond	1873
580R	154	N	Unspecified Old Shafts	1960
581R	155	N	Old Coal Shafts	1910
582R	156	N	Old Coal Shafts	1949
583R	156	N	Old Coal Shafts	1938
584R	161	N	Unspecified Disused Shafts	1974
585R	161	N	Unspecified Disused Shafts	1985
586S	167	S	Unspecified Pit	1974
587S	167	S	Unspecified Pit	1985
588S	167	S	Unspecified Pit	1994
589T	167	SE	Refuse Heap	1985
590T	167	SE	Refuse Heap	1974
591T	167	SE	Refuse Heap	1994
592T	170	E	Unspecified Old Quarries	1938
593T	170	SE	Unspecified Old Quarries	1910
594U	173	E	Unspecified Heap	1873
595U	173	E	Unspecified Old Quarry	1898
596U	173	E	Unspecified Old Quarries	1949
597T	174	SE	Unspecified Old Quarries	1960

598CU	176	NW	Cuttings	1873
599V	180	NW	Cuttings	1873
600W	181	NW	Cuttings	1960
601W	182	NW	Cuttings	1910
602W	183	N	Cuttings	1949
603X	183	SW	Unspecified Pit	1938
604X	183	SW	Unspecified Pit	1938
605W	183	N	Cuttings	1938
606X	185	SW	Unspecified Ground Workings	1949
607AF	185	NW	Cuttings	1873
608W	189	N	Cuttings	1974
609W	189	N	Cuttings	1985
610Y	194	NW	Opencast Workings	1974
611Y	194	NW	Opencast Workings	1985
612Z	199	S	Unspecified Heap	1910
613Z	199	S	Unspecified Ground Workings	1873
614AB	208	NW	Brick and Tile Works	1873
615AC	209	NW	Unspecified Heap	1960
616AB	211	NW	Brick and Tile Works	1898
617AC	214	NW	Unspecified Heap	1910
618AC	215	NW	Unspecified Heap	1938
619AC	215	NW	Unspecified Heap	1938
620CV	217	W	Unspecified Ground Workings	1949
621AE	219	SW	Unspecified Heap	1873
622AG	223	S	Cuttings	1938
623AE	225	SW	Unspecified Heap	1938
624AE	225	SW	Unspecified Heap	1938
625AC	225	NW	Unspecified Disused Old Shafts	1960
626AG	226	S	Cuttings	1873
627AG	226	S	Cuttings	1949
628AG	226	S	Cuttings	1898
629AG	226	S	Cuttings	1994
630AG	226	S	Cuttings	1974
631AG	226	S	Cuttings	1985
632AG	226	S	Cuttings	1960
633AG	226	S	Cuttings	1910
634AC	228	NW	Old Coal Shafts	1949
635AI	229	E	Unspecified Old Quarries	1949
636AC	229	NW	Old Coal Shafts	1938
637AC	229	NW	Old Coal Shafts	1910
638AH	229	S	Cuttings	1949
639AH	229	S	Cuttings	1898
640AH	232	S	Cuttings	1873

641AH	236	S	Cuttings	1985
642AH	236	S	Cuttings	1994
643AH	236	S	Cuttings	1974
644AH	236	S	Cuttings	1960
645AI	236	E	Unspecified Pit	1873
646AI	236	E	Unspecified Quarry	1898
647CW	239	E	Cuttings	1873
648AC	243	NW	Coal Shafts	1873
649AL	245	NW	Brick and Tile Works	1938
650AL	245	NW	Brick and Tile Works	1938
651CX	247	SW	Unspecified Ground Workings	1910
652CY	248	NW	Brick and Tile Works	1949
653AB	248	NW	Brick and Tile Works	1910
654AM	254	S	Unspecified Heaps	1938
655AM	254	S	Unspecified Heaps	1938
656AO	256	NW	Unspecified Heaps	1960
657AM	256	S	Unspecified Heaps	1960
658AM	256	S	Unspecified Ground Workings	1873
659AM	257	S	Unspecified Ground Workings	1910
660AN	259	NW	Unspecified Ground Workings	1949
661AM	260	S	Unspecified Heaps	1949
662AN	260	NW	Unspecified Heap	1938
663AN	260	NW	Unspecified Heap	1938
664AO	260	NW	Unspecified Ground Workings	1910
665AP	261	NE	Unspecified Heap	1985
666AP	261	NE	Unspecified Heap	1994
667AR	266	S	Unspecified Disused Quarry	1974
668AR	266	S	Unspecified Disused Quarry	1985
669AN	272	NW	Coal Shafts	1873
670AN	272	NW	Unspecified Disused Old Shafts	1960
671AN	274	NW	Old Coal Shafts	1949
672AN	275	NW	Old Coal Shafts	1938
673AN	275	NW	Old Coal Shafts	1910
674AV	275	SE	Cuttings	1898
675AN	280	NW	Coal Shafts	1873
676AS	281	S	Unspecified Ground Workings	1985
677AS	281	S	Unspecified Ground Workings	1974
678AS	281	S	Unspecified Ground Workings	1994
679AJ	281	W	Unspecified Heap	1994

680AJ	281	W	Unspecified Heap	1985
681AJ	281	W	Unspecified Heap	1974
682CZ	282	S	Unspecified Old Shafts	1960
683AT	285	S	Unspecified Disused Shafts	1985
684AT	285	S	Unspecified Disused Shafts	1974
685AT	285	S	Unspecified Disused Shafts	1994
686AU	285	W	Unspecified Old Shaft	1898
687AT	287	S	Unspecified Old Shafts	1938
688AT	287	S	Unspecified Old Shafts	1938
689AR	288	S	Unspecified Quarry	1898
690AV	288	SE	Cuttings	1873
691AT	289	S	Unspecified Old Shafts	1960
692AT	289	S	Old Coal Shafts	1910
693AR	290	S	Unspecified Quarry	1910
694AT	291	S	Old Coal Shaft	1949
695AR	291	S	Unspecified Quarry	1938
696AW	292	N	Unspecified Ground Workings	1938
697AW	292	N	Unspecified Ground Workings	1938
698AR	293	S	Unspecified Quarry	1960
699DA	294	S	Unspecified Quarry	1949
700AX	297	N	Old Coal Shaft	1949
701AX	297	N	Unspecified Old Shaft	1898
702DB	298	W	Unspecified Heap	1873
703AO	299	NW	Unspecified Heaps	1938
704AO	299	NW	Unspecified Heaps	1938
705AX	299	N	Unspecified Old Shaft	1960
706AX	300	N	Old Coal Shaft	1910
707AX	303	N	Old Coal Shaft	1938
708AZ	303	W	Unspecified Heap	1960
709BB	304	NE	Unspecified Heap	1949
710AO	305	NW	Unspecified Heaps	1873
711AY	305	SE	Unspecified Heaps	1938
712AY	305	SE	Unspecified Heaps	1938
713AZ	306	W	Unspecified Heap	1938
714AZ	306	W	Unspecified Heap	1938
715BA	307	NW	Unspecified Heap	1949
716AY	307	SE	Unspecified Heaps	1949
717BA	308	NW	Unspecified Heap	1974
718BA	308	NW	Unspecified Heap	1985
719BA	308	NW	Unspecified Heap	1994
720AZ	308	W	Unspecified Ground Workings	1910
721AY	309	SE	Unspecified Ground	1910

Workings				
722AY	312	SE	Unspecified Heaps	1960
723AY	312	SE	Unspecified Heaps	1974
724AY	312	SE	Unspecified Heaps	1994
725AY	312	SE	Unspecified Heaps	1985
726AY	312	SE	Unspecified Heap	1873
727AM	313	S	Unspecified Old Shafts	1938
728AM	313	S	Unspecified Old Shafts	1938
729AM	313	S	Unspecified Disused Shafts	1985
730AM	313	S	Unspecified Disused Shafts	1994
731AM	313	S	Unspecified Disused Shafts	1974
732AM	315	S	Unspecified Old Shafts	1960
733AM	316	S	Old Coal Shafts	1910
734AM	316	S	Old Coal Shafts	1949
735DC	316	NW	Unspecified Ground Workings	1949
736DD	319	S	Unspecified Old Shaft	1898
737DE	320	N	Old Coal Shafts	1949
738DF	321	NW	Pond	1994
739AY	321	SE	Unspecified Heap	1898
740BD	322	NE	Old Coal Shaft	1910
741BD	324	NE	Old Coal Shaft	1949
742BD	324	NE	Unspecified Old Shaft	1960
743BD	326	NE	Old Coal Shaft	1938
744DG	348	SW	Unspecified Heap	1873
745DH	350	N	Disused Brick Works	1938
746BE	353	N	Unspecified Ground Workings	1949
747BE	353	N	Unspecified Pit	1960
748BO	355	N	Unspecified Ground Workings	1910
749DI	359	N	Unspecified Ground Workings	1873
750DJ	368	NE	Unspecified Heap	1873
751BG	371	N	Unspecified Heap	1938
752BG	371	N	Unspecified Heap	1938
753DK	371	N	Unspecified Ground Workings	1910
754BG	373	N	Unspecified Heap	1949
755BG	374	N	Unspecified Heap	1985
756BG	374	N	Unspecified Heap	1994
757BG	374	N	Unspecified Heap	1974
758BG	374	N	Unspecified Heap	1960
759DL	376	NW	Pond	1873
760DL	376	NW	Reservoir	1898

761DL	376	NW	Pond	1960
762BG	378	N	Unspecified Heap	1873
763DL	378	NW	Reservoir	1949
764DL	379	NW	Reservoir	1910
765BJ	380	NW	Unspecified Heap	1949
766DL	380	NW	Reservoir	1938
767BJ	381	NW	Unspecified Heap	1960
768BJ	382	NW	Unspecified Heap	1910
769BJ	385	NW	Unspecified Heap	1938
770BJ	385	NW	Unspecified Heap	1938
771BK	386	SW	Unspecified Heap	1873
772BK	386	SW	Unspecified Heap	1938
773BK	386	SW	Unspecified Heap	1938
774DM	387	SE	Grave Yard	1873
775BK	388	SW	Unspecified Heap	1910
776BK	393	SW	Unspecified Heap	1985
777BK	393	SW	Unspecified Heap	1994
778BK	393	SW	Unspecified Heap	1960
779BK	393	SW	Unspecified Heap	1974
780BM	393	W	Unspecified Heap	1898
781BM	393	W	Unspecified Heap	1949
782BM	393	W	Unspecified Heap	1873
783BN	394	S	Unspecified Heap	1949
784DN	396	S	Unspecified Ground Workings	1898
785BO	398	N	Old Coal Shafts	1949
786BO	400	N	Old Coal Shafts	1910
787BO	400	N	Unspecified Old Shafts	1960
788DN	400	S	Unspecified Heap	1873
789DO	401	S	Unspecified Heap	1949
790BO	402	N	Old Coal Shafts	1938
791BM	402	W	Unspecified Heap	1960
792BM	402	W	Unspecified Heap	1938
793BM	402	W	Unspecified Heap	1938
794BM	404	W	Unspecified Heap	1910
795AO	413	NW	Unspecified Shaft	1960
796AO	415	NW	Clay Shafts	1949
797AO	416	NW	Clay Shaft	1910
798DP	416	NW	Pond	1873
799AO	417	NW	Clay Shaft	1938
800AO	417	NW	Unspecified Heap	1910
801DP	422	NW	Pond	1960
802BR	423	N	Unspecified Ground Workings	1949
803BR	424	N	Unspecified Ground Workings	1960
804DQ	426	W	Pond	1960

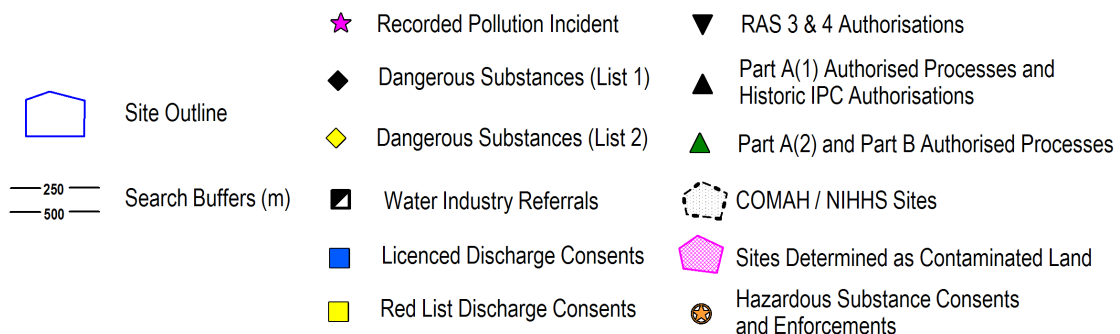
805DQ	426	W	Pond	1949
806BS	426	W	Unspecified Heap	1873
807BS	426	W	Unspecified Ground Workings	1898
808DQ	428	W	Pond	1938
809BS	430	W	Unspecified Ground Workings	1974
810BS	430	W	Unspecified Ground Workings	1985
811BS	430	W	Unspecified Ground Workings	1960
812BS	432	W	Unspecified Ground Workings	1949
813BU	432	W	Unspecified Heap	1938
814BU	432	W	Unspecified Heap	1938
815BU	434	W	Unspecified Ground Workings	1910
816DR	442	SW	Unspecified Old Shaft	1898
817BX	461	W	Unspecified Heap	1873
818BN	461	S	Cuttings	1898
819BY	463	S	Unspecified Heap	1873
820BX	466	W	Unspecified Heap	1960
821BX	466	W	Unspecified Heap	1938
822BX	466	W	Unspecified Heap	1938
823BX	467	W	Unspecified Heap	1949
824	468	S	Unspecified Heap	1873
825BX	469	W	Unspecified Heap	1910
826DS	469	NW	Unspecified Ground Workings	1949
827BZ	470	NW	Unspecified Heaps	1938
828BZ	470	NW	Unspecified Heaps	1938
829CE	470	NW	Unspecified Heap	1960
830DT	470	NW	Unspecified Ground Workings	1910
831BR	473	N	Unspecified Old Shaft	1898
832CA	473	NW	Unspecified Shaft	1960
833CC	475	N	Old Coal Shafts	1949
834CA	476	NW	Unspecified Shaft	1949
835CB	476	SW	Unspecified Ground Workings	1938
836CB	476	SW	Unspecified Ground Workings	1938
837CA	477	NW	Unspecified Shaft	1910
838CC	477	N	Old Coal Shafts	1910
839CC	477	N	Unspecified Old Shafts	1960
840CD	479	SW	Unspecified Ground Workings	1938
841CD	479	SW	Unspecified Ground Workings	1938
842CC	480	N	Old Coal Shafts	1938

843CE	480	NW	Unspecified Ground Workings	1949
844CD	482	SW	Unspecified Ground Workings	1910
845BX	483	W	Unspecified Heap	1974
846BX	483	W	Unspecified Heap	1985
847BX	483	W	Unspecified Heap	1994
848DU	486	SW	Unspecified Heap	1873
849CD	488	SW	Unspecified Pit	1960
850CF	490	W	Unspecified Ground Workings	1994
851CD	490	SW	Unspecified Pit	1949
852DV	491	NW	Unspecified Heaps	1873
853	492	W	Unspecified Pit	1949
854CF	492	W	Unspecified Pit	1938
855CF	492	W	Unspecified Pit	1938
856DW	493	NW	Unspecified Pit	1873
857CB	495	SW	Unspecified Ground Workings	1910
858BY	495	S	Unspecified Ground Workings	1960
859CB	495	SW	Unspecified Ground Workings	1960
860CB	495	SW	Unspecified Ground Workings	1949
861CI	496	SW	Unspecified Shaft	1898
862CB	498	SW	Unspecified Quarry and Ground Workings	1873

2. Environmental Permits, Incidents and Registers Map



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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:

1

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

ID	Distance (m)	Direction	NGR	Details
5	475	E	328700 343300	Address: WREXHAM ACREFAIR PLAS MADOC LEISURE, WREXHAM ACREFAIR PLAS MADOC LEIS, ACREFAIR PLAS MADOC LEISURE CTR., PLAS MADOC LEISURE CTR.SWIMM.P Receiving Water: UN-NAMED TRIB. OF DEE Status: CONSENT EXPIRED - TIME LIMIT Issue date: 13/04/1977 Effective Date: 13-Apr-1977 Revocation Date: 11/07/1991 Effluent Type: UNSPECIFIED Permit Number: CM0082801 Permit Version: -9999

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:

1

The following COMAH & NIHHS Authorisation records provided by the Health and Safety Executive are represented as polygons or buffered points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	Company	Address	Operational Status	Tier
6	454	SW	Flexsys Rubber Chemicals Ltd	Flexsys Rubber Chemicals Ltd, Ruabon Works, Cefm Mawr, Wrexham, LL14 3SL	Historical COMAH Site	-

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:

4

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

ID	Distance (m)	Direction	NGR	Details
1	345	SW	327911.0 342892.0	Incident Date: 19-Aug-2003 Incident Identification: 183334.0 Pollutant: Organic Chemicals/Products Pollutant Description: Solvents Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
2	394	E	328602.0 343382.0	Incident Date: 28-Jun-2014 Incident Identification: 1250436.0 Pollutant: Sewage Materials Pollutant Description: Crude Sewage Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
3A	439	SE	328631.0 343090.0	Incident Date: 10-May-2016 Incident Identification: 1602345.0 Pollutant: - Pollutant Description: - Water Impact: Category 4 (No Impact) Land Impact: No Details Air Impact: No Details
4A	439	SE	328631.0 343090.0	Incident Date: 10-May-2016 Incident Identification: 1602345.0 Pollutant: Sewage Material Pollutant Description: Grey Water Water Impact: Category 4 (No Impact) Land Impact: No Details Air Impact: No Details

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

0

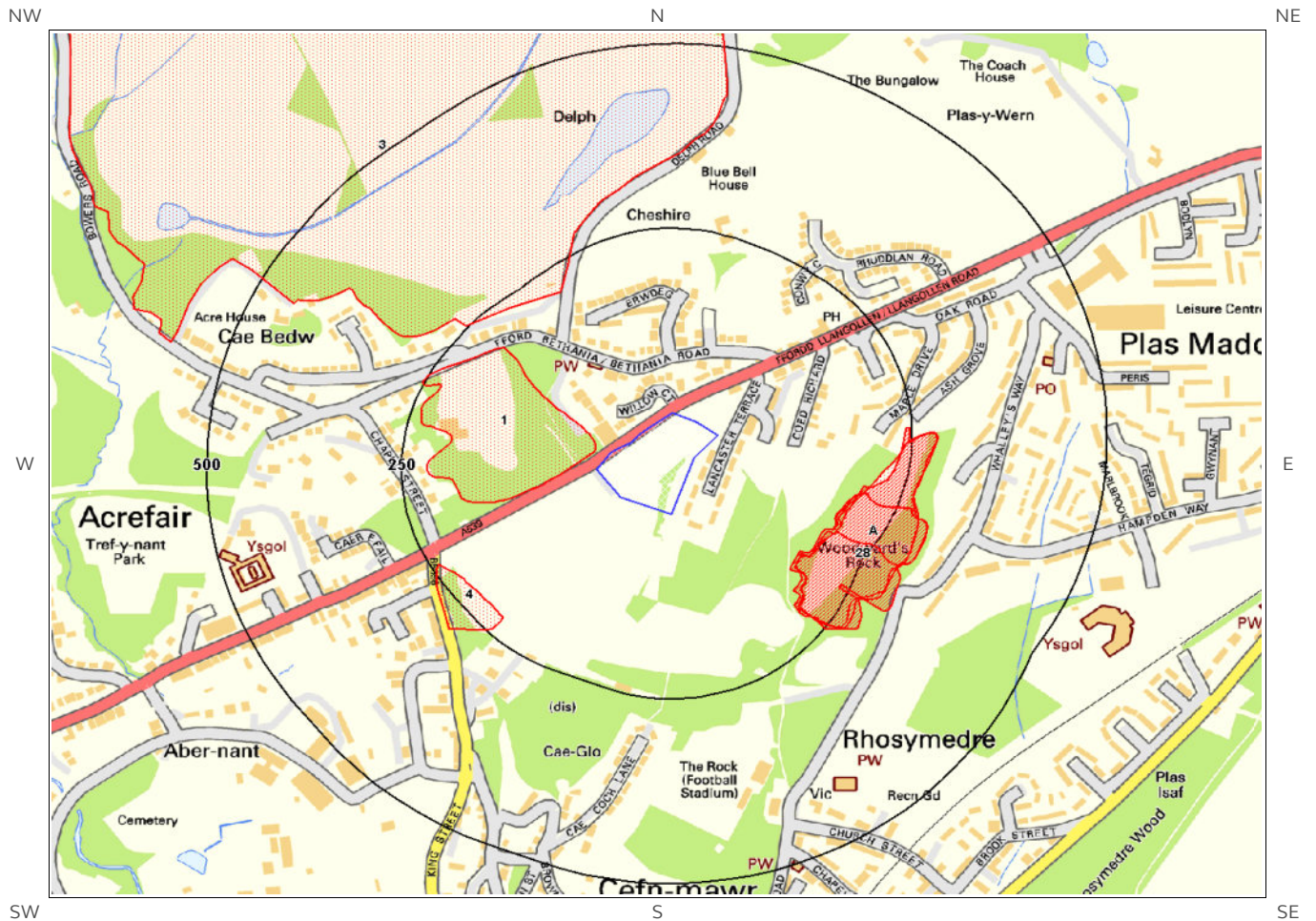
Database searched and no data found.

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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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:

9

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

ID	Distance (m)	Direction	NGR	Details
1	17	NW		Site Address: Air Products Social Club Waste Licence: - Site Reference: - Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Air Products United Kingdom Limited First Recorded: 31-Dec-1950 Last Recorded: 31-Dec-1960
2A	175	SE		Site Address: Woodward's Rock Waste Licence: Yes Site Reference: - Waste Type: Inert, Industrial, Commercial, Household, Special, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Wrexham Royal District Council First Recorded: 01-Jan-1968 Last Recorded: 31-Dec-1978
3	216	NW		Site Address: The Delph Waste Licence: Yes Site Reference: WMBC L/32 Waste Type: Inert, Industrial, Household, Special Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 05-Aug-1981 Licence Surrendered: 31-Dec-1986 Licence Holder Address: - Operator: - Licence Holder: Northern Strip Mining First Recorded: 30-Nov-1981 Last Recorded: 31-Dec-1986
4	222	SW		Site Address: Air Products Waste Licence: Yes Site Reference: WMBC L/8, WMBC L/58 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 01-Sep-1977 Licence Surrendered: 30-Apr-1993 Licence Holder Address: - Operator: - Licence Holder: Air Products UK Limited First Recorded: 01-Sep-1977 Last Recorded: 31-Dec-1991
Not	560	S		Site Address: Rhosmedre Quarry Licence Issue: 31-Dec-1977

ID	Distance (m)	Direction	NGR	Details	
shown				Waste Licence: Yes Site Reference: L17 Waste Type: Industrial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Surrendered: 30-Apr-1994 Licence Holder Address: - Operator: - Licence Holder: Monsanto Plc First Recorded: - Last Recorded: -
Not shown	839	S		Site Address: Druids United FC Waste Licence: Yes Site Reference: WMBC L/42 Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 28-Jul-1983 Licence Surrendered: 31-Oct-1983 Licence Holder Address: - Operator: - Licence Holder: Druids United Football Club First Recorded: 01-Mar-1983 Last Recorded: 31-Oct-1983
Not shown	903	SW		Site Address: Edwards Brickyard Waste Licence: Yes Site Reference: - Waste Type: Inert, Industrial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: J C Edward First Recorded: 31-Dec-1987 Last Recorded: 31-Dec-1995
Not shown	1087	NW		Site Address: Monsanto Chemical Dump Waste Licence: - Site Reference: - Waste Type: Industrial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: 01-Jul-1974 Last Recorded: 31-Jul-1974
Not shown	1140	SW		Site Address: Cestria Waste Licence: - Site Reference: - Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: 31-Dec-1990 Last Recorded: 31-Dec-1994

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:

10

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

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
28	169	SE	328408 343092	Refuse Tip	1967 mapping	Polygon
29A	174	SE	328417 343136	Refuse Tip	1971 mapping	Polygon

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
30A	187	SE	328436 343135	Refuse Tip	1961 mapping	Polygon
Not shown	587	S	328092 342547	Refuse Tips	1960 mapping	Polygon
Not shown	587	S	328092 342547	Refuse Tips	1960 mapping	Polygon
Not shown	599	S	328143 342542	Refuse Tips	1960 mapping	Polygon
Not shown	599	S	328143 342542	Refuse Tips	1960 mapping	Polygon
Not shown	610	S	328125 342535	Refuse Tips	1960 mapping	Polygon
Not shown	610	S	328125 342535	Refuse Tips	1960 mapping	Polygon
Not shown	800	NW	327533 343897	Refuse Tip	1960 mapping	Polygon

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:

18

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

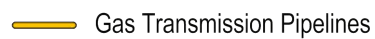
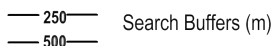
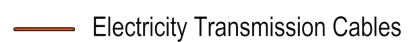
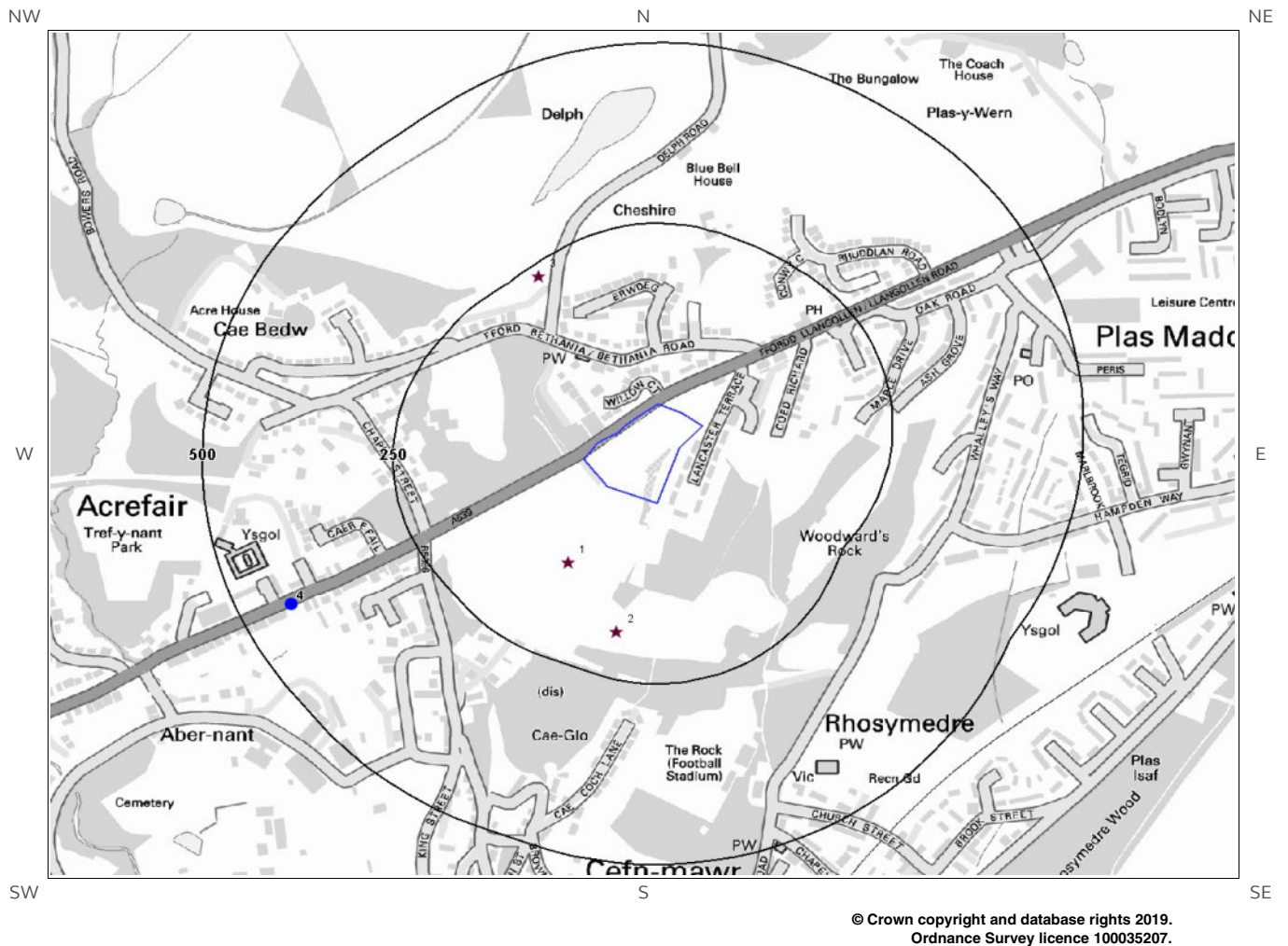
ID	Distance (m)	Direction	NGR	Details
Not shown	881	E	329107 343288	Site Address: Land/ Premises At, Acrefair, Plas Madoc, Wrexham, Clwyd, LL14 3ES Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAS025 EPR reference: EA/EPR/NP3095EW/A001 Operator: Waste Recycling Ltd Waste Management licence No: 100081 Annual Tonnage: 24999.0 Issue Date: 23/10/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Plas Madoc Household Waste Recycling Centre Correspondence Address: -
Not shown	881	E	329107 343288	Site Address: Acrefair, Plas Madoc, Wrexham, Clwyd, LL14 3ES Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAS025 EPR reference: - Operator: Waste Recycling Limited Issue Date: 23/10/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Plas Madoc Household Waste

ID	Distance (m)	Direction	NGR	Details	
				Waste Management licence No: 100081 Annual Tonnage: 0.0	Recycling Centre Correspondence Address: Bold Business Centre, Bold Lane, Sutton, St Helens, Merseyside, WA9 4TX
Not shown	984	E	329205 343361	Site Address: Plas Madoc Household Waste Recycling Centre, Wynnstay Industrial Estate, Acrefair, Wrexham, Wrexham, LL14 1TP Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: NP3095EW EPR reference: - Operator: F C C Recycling (U K) Limited Waste Management licence No: 0 Annual Tonnage: 24999.0	Issue Date: 23/10/2007 Effective Date: 23/10/2007 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	984	E	329205 343361	Site Address: Plas Madoc H W R C, Wynnstay Industrial Estate, Acrefair, Wrexham, Clwyd, LL14 1TP Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAS025 EPR reference: EA/EPR/NP3095EW/V002 Operator: F C C Recycling (U K) Limited Waste Management licence No: 100081 Annual Tonnage: 24999.0	Issue Date: 23/10/2007 Effective Date: - Modified: 22/11/2012 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Plas Madoc Household Waste Recycling Centre Correspondence Address: -
Not shown	984	E	329205 343361	Site Address: Plas Madoc Household Waste Recycling Centre, Wynnstay Industrial Estate, Acrefair, Wrexham, Clwyd, LL14 1TP Type: Household Waste Amenity Site Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: NP3095EW EPR reference: - Operator: - Waste Management licence No: 100081 Annual Tonnage: 24999.0	Issue Date: 23/10/2007 Effective Date: 23/10/2007 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	984	E	329205 343361	Site Address: Plas Madoc Household Waste Recycling Centre, Wynnstay Industrial Estate, , Acrefair, Wrexham, Clwyd, LL14 1TP Type: Household Waste Amenity Site Size: - Environmental Permitting Regulations (Waste) Licence Number: NP3095EW EPR reference: - Operator: F C C Recycling (U K) Limited Waste Management licence No: 100081 Annual Tonnage: 24999.0	Issue Date: 23/10/2007 Effective Date: 23/10/2007 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	984	E	329205 343361	Site Address: Plas Madoc Household Waste Recycling Centre, Wynnstay Industrial Estate, , Acrefair, Wrexham, Clwyd, LL14 1TP Type: Household Waste Amenity Site Size: - Environmental Permitting Regulations (Waste) Licence Number: NP3095EW EPR reference: - Operator: F C C Recycling (U K) Limited Waste Management licence No: 100081 Annual Tonnage: 24999.0	Issue Date: 23/10/2007 Effective Date: 23/10/2007 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	984	E	329205 343361	Site Address: Plas Madoc Household Waste Recycling Centre, Wynnstay Industrial Estate, , Acrefair, Wrexham, Clwyd, LL14 1TP Type: Household Waste Amenity Site Size: - Environmental Permitting Regulations (Waste) Licence Number: NP3095EW EPR reference: - Operator: F C C Recycling (U K) Limited Waste Management licence No: 100081 Annual Tonnage: 24999.0	Issue Date: 23/10/2007 Effective Date: 23/10/2007 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	984	E	329205 343361	Site Address: Plas Madoc Household Waste Recycling Centre, Wynnstay	Issue Date: 23/10/2007 Effective Date: 23/10/2007

ID	Distance (m)	Direction	NGR	Details
				Industrial Estate, Clwyd, Wrexham, Wrexham, LL14 1TP Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: NP3095EW EPR reference: - Operator: F C C Recycling (U K) Limited Waste Management licence No: 100081 Annual Tonnage: 24999.0 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	984	E	329206 343357	Site Address: Off Plas Bennion Road, Wynnstey Bank Ruabon, Wrexham, Clwyd, LL14 3ES Type: Household Waste Amenity Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 3CW010 EPR reference: EA/EPR/MP3394FY/V004 Operator: 3 C Waste Ltd Waste Management licence No: 37039 Annual Tonnage: 0.0 Issue Date: 01/10/1993 Effective Date: 13/11/2001 Modified: 28/02/2007 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Wynnstey Banks Civic Amenity Site Correspondence Address: -
Not shown	984	E	329206 343357	Site Address: Off Plas Bennion Road, Wynnstey Bank Ruabon, Wrexham, Clwyd, LL14 1TP Type: Special Waste Transfer Station Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 3CW010 EPR reference: - Operator: 3 C Waste Ltd Waste Management licence No: 37039 Annual Tonnage: 0.0 Issue Date: 01/10/1993 Effective Date: 13/11/2001 Modified: 10/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Wynnstey Banks Civic Amenity Site Correspondence Address: Chris Giffiths, Barton House, Darland Lane, Lavister, Wrexham, LL12 0EL
Not shown	984	E	329206 343357	Site Address: Wynnstey Banks Civic Amenity Site, Wynnstey Bank Ruabon, Wrexham, Wrexham, LL14 3ES Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: MP3394FY EPR reference: - Operator: 3 C Waste Ltd Waste Management licence No: 0 Annual Tonnage: 0.0 Issue Date: 01/10/1993 Effective Date: 01/10/1993 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: - Correspondence Address: -
Not shown	984	E	329206 343357	Site Address: Wynnstey Banks Civic Amenity Site, Wynnstey Bank Ruabon, Wrexham, Clwyd, LL14 3ES Type: Household Waste Amenity Site Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: MP3394FY EPR reference: - Operator: - Waste Management licence No: 37039 Annual Tonnage: 0.0 Issue Date: 01/10/1993 Effective Date: 01/10/1993 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: - Correspondence Address: -
Not shown	984	E	329206 343357	Site Address: Off Plas Bennion Road, Wynnstey Bank Ruabon, Wrexham, Clwyd, LL14 1TP Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: 3CW010 EPR reference: - Operator: 3 C Waste Ltd Waste Management licence No: 37039 Issue Date: 01/10/1993 Effective Date: 13/11/2001 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Wynnstey Banks Civic Amenity Site Correspondence Address: Barton House, Darland Lane, Lavister, Wrexham, LL12

ID	Distance (m)	Direction	NGR	Details	
				Annual Tonnage: 0.0	OEL
Not shown	984	E	329206 343357	Site Address: Wynnstays Banks Civic Amenity Site, Wynnstays Bank Ruabon, , , Wrexham, Clwyd, LL14 3ES Type: Household Waste Amenity Site Size: - Environmental Permitting Regulations (Waste) Licence Number: MP3394FY EPR reference: - Operator: 3 C Waste Ltd Waste Management licence No: 37039 Annual Tonnage: 0.0	Issue Date: 01/10/1993 Effective Date: 01/10/1993 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: - Correspondence Address: -
Not shown	984	E	329206 343357	Site Address: Wynnstays Banks Civic Amenity Site, Wynnstays Bank Ruabon, Clwyd, Wrexham, Wrexham, LL14 3ES Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: MP3394FY EPR reference: - Operator: 3 C Waste Ltd Waste Management licence No: 37039 Annual Tonnage: 0.0	Issue Date: 01/10/1993 Effective Date: 01/10/1993 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: - Correspondence Address: -
Not shown	984	E	329206 343357	Site Address: Wynnstays Banks Civic Amenity Site, Wynnstays Bank Ruabon, , , Wrexham, Clwyd, LL14 3ES Type: Household Waste Amenity Site Size: - Environmental Permitting Regulations (Waste) Licence Number: MP3394FY EPR reference: - Operator: 3 C Waste Ltd Waste Management licence No: 37039 Annual Tonnage: 0.0	Issue Date: 01/10/1993 Effective Date: 01/10/1993 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: - Correspondence Address: -
Not shown	985	E	329206 343362	Site Address: Plas Madoc H W R C, Wynnstays Industrial Estate, Acrefair, Wrexham, Clwyd, LL14 1TP Type: Household Waste Amenity Site Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: WAS025 EPR reference: NP3095EW/V002 Operator: F C C Recycling (U K) Limited Waste Management licence No: 100081 Annual Tonnage: 0.0	Issue Date: 23/10/2007 Effective Date: - Modified: 22/11/2012 Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Modified Site Name: Plas Madoc Household Waste Recycling Centre Correspondence Address: -
Not shown	985	E	329207 343358	Site Address: Off Plas Bennion Road, Wynnstays Bank Ruabon, Wrexham, Clwyd, LL14 3ES Type: Household Waste Amenity Site Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: 3CW010 EPR reference: MP3394FY/V004 Operator: 3 C Waste Ltd Waste Management licence No: 37039 Annual Tonnage: 0.0	Issue Date: 01/10/1993 Effective Date: 13/11/2001 Modified: 28/02/2007 Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Revoked Site Name: Wynnstays Banks Civic Amenity Site Correspondence Address: -

4. Current Land Use Map



4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: 3

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	117	SW	Works	328050 343074	Clwyd, LL14	Unspecified Works Or Factories	Industrial Features
2	185	S	Works	328113 342978	Clwyd, LL14	Unspecified Works Or Factories	Industrial Features
3	235	NW	Gas Valve Compound	328012 343470	Clwyd, LL14	Gas Features	Infrastructure and Facilities

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site: 1

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

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
4	433	SW	327688 343015	UK	A439, Acrefair, Wrexham, Wrexham, LL14 3RS	Not Applicable	Obsolete

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
TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON

5.3 Bedrock and Solid Geology

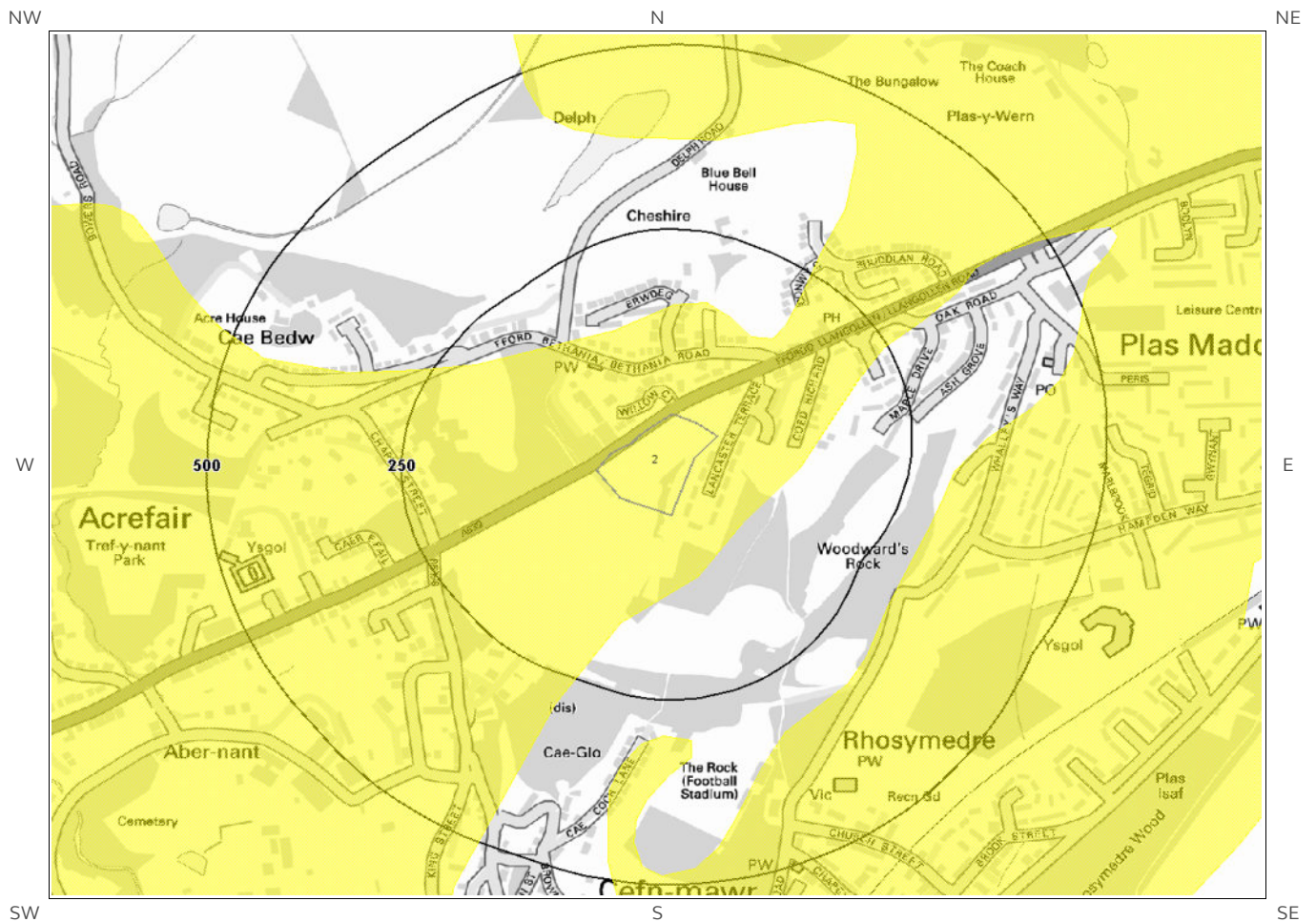
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
PLMC-MDSS	PENNINE LOWER COAL MEASURES FORMATION AND PENNINE MIDDLE COAL MEASURES FORMATION (UNDIFFERENTIATED)	MUDSTONE, SILTSTONE AND SANDSTONE
PLMC-MDSS	PENNINE LOWER COAL MEASURES FORMATION AND PENNINE MIDDLE COAL MEASURES FORMATION (UNDIFFERENTIATED)	MUDSTONE, SILTSTONE AND SANDSTONE

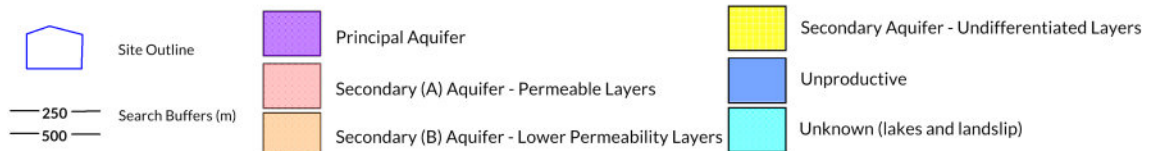
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

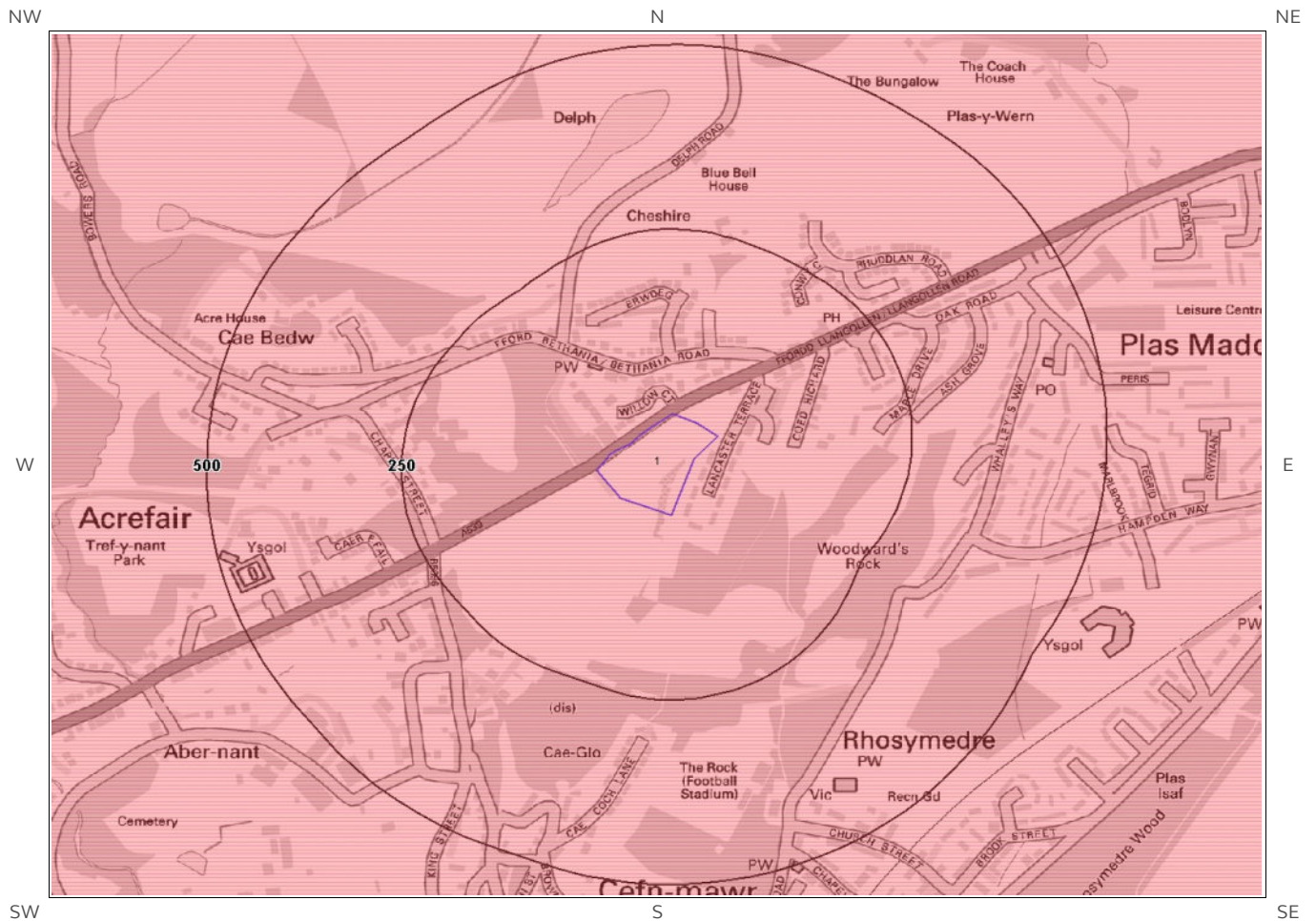
6a. Aquifer Within Superficial Geology



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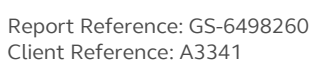
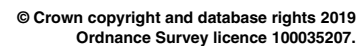


6b. Aquifer Within Bedrock Geology and Abstraction Licences

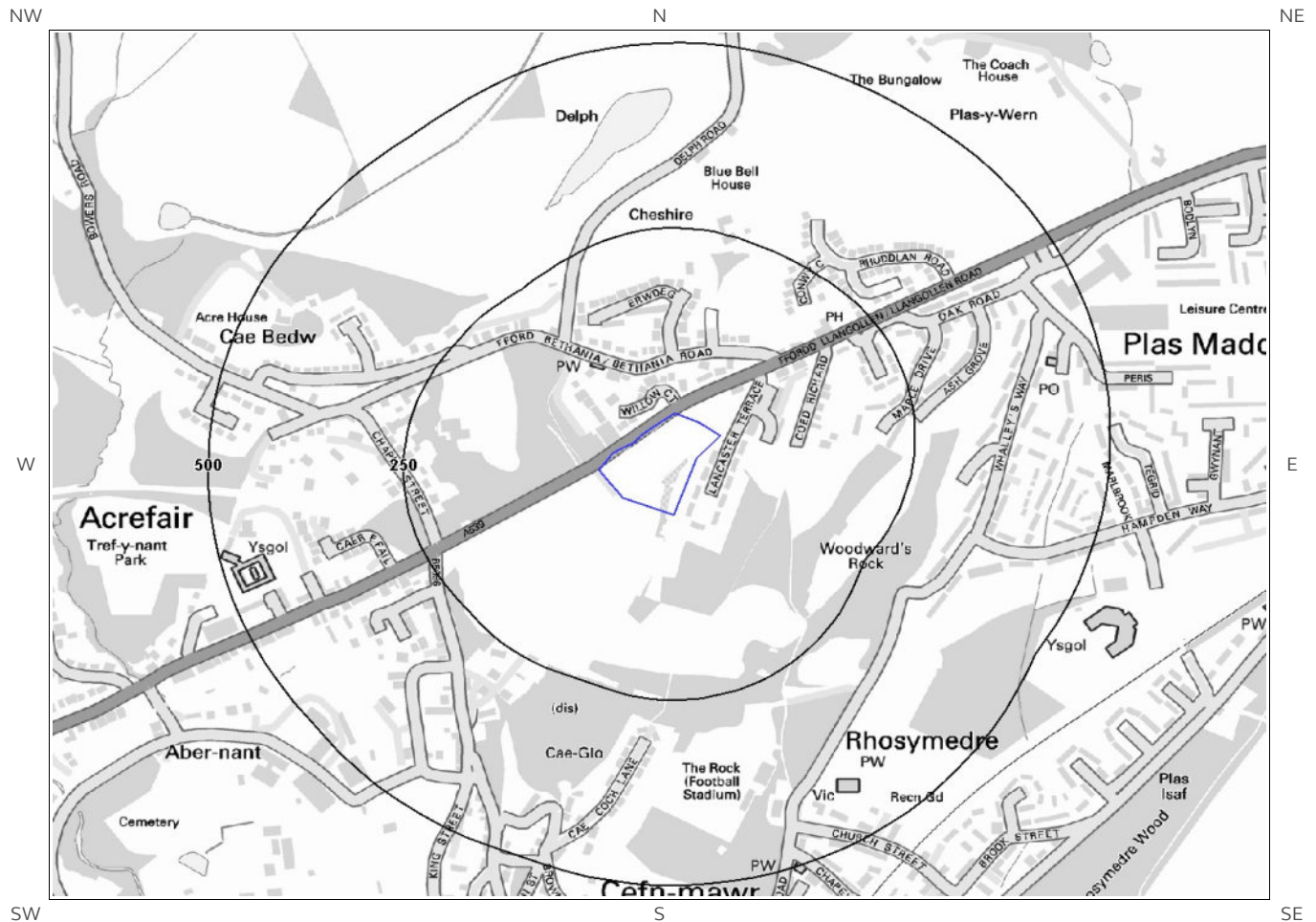


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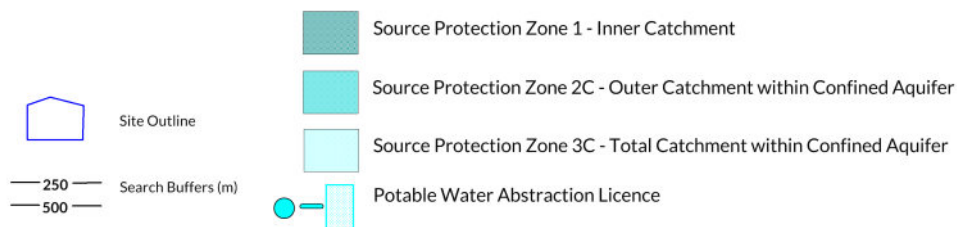


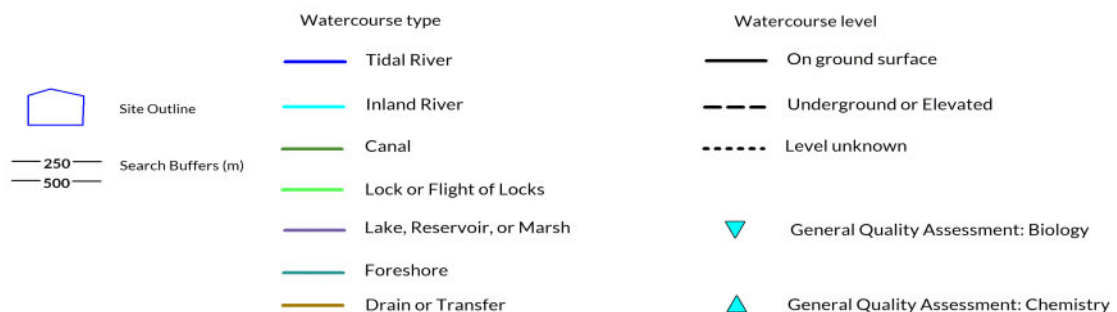


6d. Hydrogeology – Source Protection Zones within confined aquifer



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6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property 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
2	0	On Site	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	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	1509	N	328100 344800	Status: Historical Licence No: 24/67/5/0046 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: 35 FT DEEP, 8FT DIA. WELL Data Type: Point Name: Lloyd Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 12/10/1973 Expiry Date: - Issue No: 100 Version Start Date: 12/10/1973 Version End Date:
Not shown	1707	NW	326830 344390	Status: Historical Licence No: 24/67/5/0009 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: WELL Data Type: Point Name: Philips Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 09/08/1966 Expiry Date: - Issue No: 100 Version Start Date: 09/08/1966 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

Identified

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

ID	Distance (m)	Direction	NGR	Details
Not shown	1501	SW	327200 341980	Status: Historical Licence No: 24/67/5/0017 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: EAW Surface Water Point: RIVER DEE AT PONTCYSYLLTE Data Type: Point Name: Solutia UK Limited Annual Volume (m³): 2,727,600 Max Daily Volume (m³): 7,728 Application No: - Original Start Date: 26/06/1967 Expiry Date: - Issue No: 102 Version Start Date: 21/12/2009 Version End Date:
Not shown	1529	SW	327217 341932	Status: Historical Licence No: 24/67/5/0057 Details: Transfer Between Sources (Pre Water Act 2003) Direct Source: EAW Surface Water Point: RIVER DEE AT PONTCYSYLLTE Data Type: Point Name: United Utilities Water Limited Annual Volume (m³): 18,302,196 Max Daily Volume (m³): - Application No: - Original Start Date: 27/06/1978 Expiry Date: - Issue No: 104 Version Start Date: 12/11/2014 Version End Date:
Not shown	1599	SW	327080 341950	Status: Historical Licence No: 24/67/5/0057 Details: Potable Water Supply - Storage Direct Source: EAW Surface Water Point: RIVER DEE AT PONTCYSYLLTE Data Type: Point Name: United Utilities Water Limited Annual Volume (m³): 18,302,196 Max Daily Volume (m³): - Application No: - Original Start Date: 27/06/1978 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2006 Version End Date:
Not	1599	SW	327080	Status: Historical Annual Volume (m³): 18,302,196

ID	Distance (m)	Direction	NGR	Details
shown			341950	Licence No: 24/67/5/0057 Details: Transfer between Sources (Pre Water Act 2003) Direct Source: EAW Surface Water Point: RIVER DEE AT PONTCYSYLLTE Data Type: Point Name: United Utilities Water Limited Max Daily Volume (m³): - Application No: - Original Start Date: 27/06/1978 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2002 Version End Date:
Not shown	1767	W	326320 343450	Status: Historical Licence No: 24/67/5/0002 Details: Potable Water Supply - Direct Direct Source: EAW Surface Water Point: TREFNANT BROOK Data Type: Point Name: Dee Valley Water Plc Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 05/07/1966 Expiry Date: - Issue No: 100 Version Start Date: 05/07/1966 Version End Date:

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site Identified

The following Potable Water Abstraction Licences records are represented as points, lines and regions on the SPZ and Potable Water Abstraction Licences Map (6c):

ID	Distance (m)	Direction	NGR	Details
Not shown	1599	SW	327080 341950	Status: Historical Licence No: 24/67/5/0057 Details: Potable Water Supply - Storage Direct Source: EAW Surface Water Point: RIVER DEE AT PONTCYSYLLTE Data Type: Point Name: United Utilities Water Limited Annual Volume (m³): 18,302,200 Max Daily Volume (m³): 50,006 Original Application No: - Original Start Date: 27/06/1978 Expiry Date: - Issue No: 101 Version Start Date: Version End Date:
Not shown	1767	W	326320 343450	Status: Historical Licence No: 24/67/5/0002 Details: Potable Water Supply - Direct Direct Source: EAW Surface Water Point: TREFNANT BROOK Data Type: Point Name: Dee Valley Water Plc Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 05/07/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site None identified

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site None identified

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

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

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

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
226	N	Minor Aquifer/Intermediate Leaching Potential	I1	Soils which can possibly transmit a wide range of pollutants.

6.9 River Quality

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

6.9.1 Biological Quality:

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
Not shown	845	SW	327600 342500	River Name: Tref-y-nant Brook Reach: Conf.r.dee T.isa-disch.within Culvert End/Start of Stretch: Start of Stretch NGR	B	D	D	D	A
Not shown	845	SW	327600 342500	River Name: Tref-y-nant Brook Reach: Disch.within Culvert-trib.nr.hafod Fm. End/Start of Stretch: End of Stretch NGR	A	A	A	A	A

6.9.2 Chemical Quality:

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
Not shown	845	SW	327600 342500	River Name: Trefynant Brook Reach: Disch.within Culvert-trib.nr.hafod Fm. End/Start of Stretch: End of Stretch NGR	A	A	A	A	-
Not shown	845	SW	327600 342500	River Name: Trefynant Brook Reach: Conf.r.dee T.isa-disch.within Culvert End/Start of Stretch: Start of Stretch NGR	B	B	A	A	-
Not shown	854	SW	327300 342850	River Name: Trefynant Brook Reach: Disch.within Culvert-trib.nr.hafod Fm. End/Start of Stretch: Sample Point NGR	A	A	A	A	-
Not shown	1332	SW	327050 342360	River Name: Shropshire Union C Reach: St Martin's Moor - Llantysilio End/Start of Stretch: Sample Point NGR	A	A	A	A	-
Not shown	1467	SE	328730 341800	River Name: Dee Reach: Conf.bradley Bk.-conf.trefynant Bk. End/Start of Stretch: Sample Point NGR	A	A	A	A	-
Not shown	1467	SE	328730 341800	River Name: Dee Reach: Conf.cyflymen Bk.- Conf.eglwyseg End/Start of Stretch: Sample Point NGR	A	A	A	A	-
Not shown	1467	SE	328730 341800	River Name: Dee Reach: Conf.trefynant Bk.- Conf. Cyflymen Bk. End/Start of Stretch: Sample Point NGR	A	A	A	A	-
Not shown	1467	SE	328730 341800	River Name: Dee Reach: Conf.eglwyseg - Conf. Afon Morwynion End/Start of Stretch: Sample Point NGR	A	A	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	432 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee 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	432 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee 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	441 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	441 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
3	451 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee 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	451 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	460 NW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
Not shown	460 NW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
5	465 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	465 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
7	465 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee 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 E	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): Not Provided
Not shown	465 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee 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 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	470 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee 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	470 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
9	478 NW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	478 NW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
10	480 NW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.2
22	480 NW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.2
11	492 NW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	492 NW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
12	494 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee 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	494 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
13	495 NW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.4
Not shown	495 NW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Dee Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.4

6.11 Surface Water Features

Surface water features within 250m of the study site

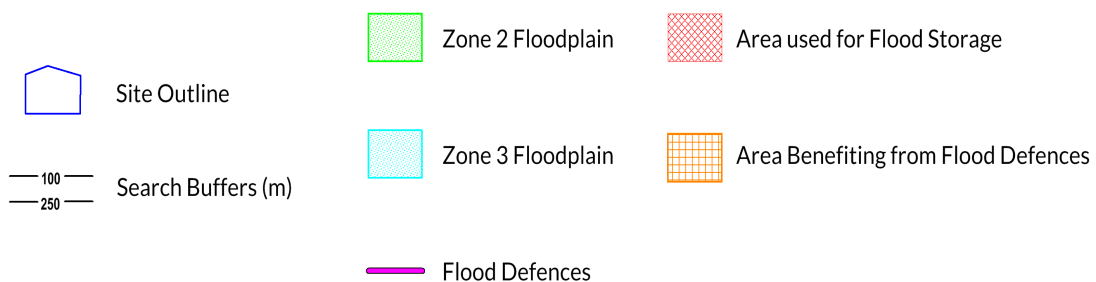
None identified

Database searched and no data found.

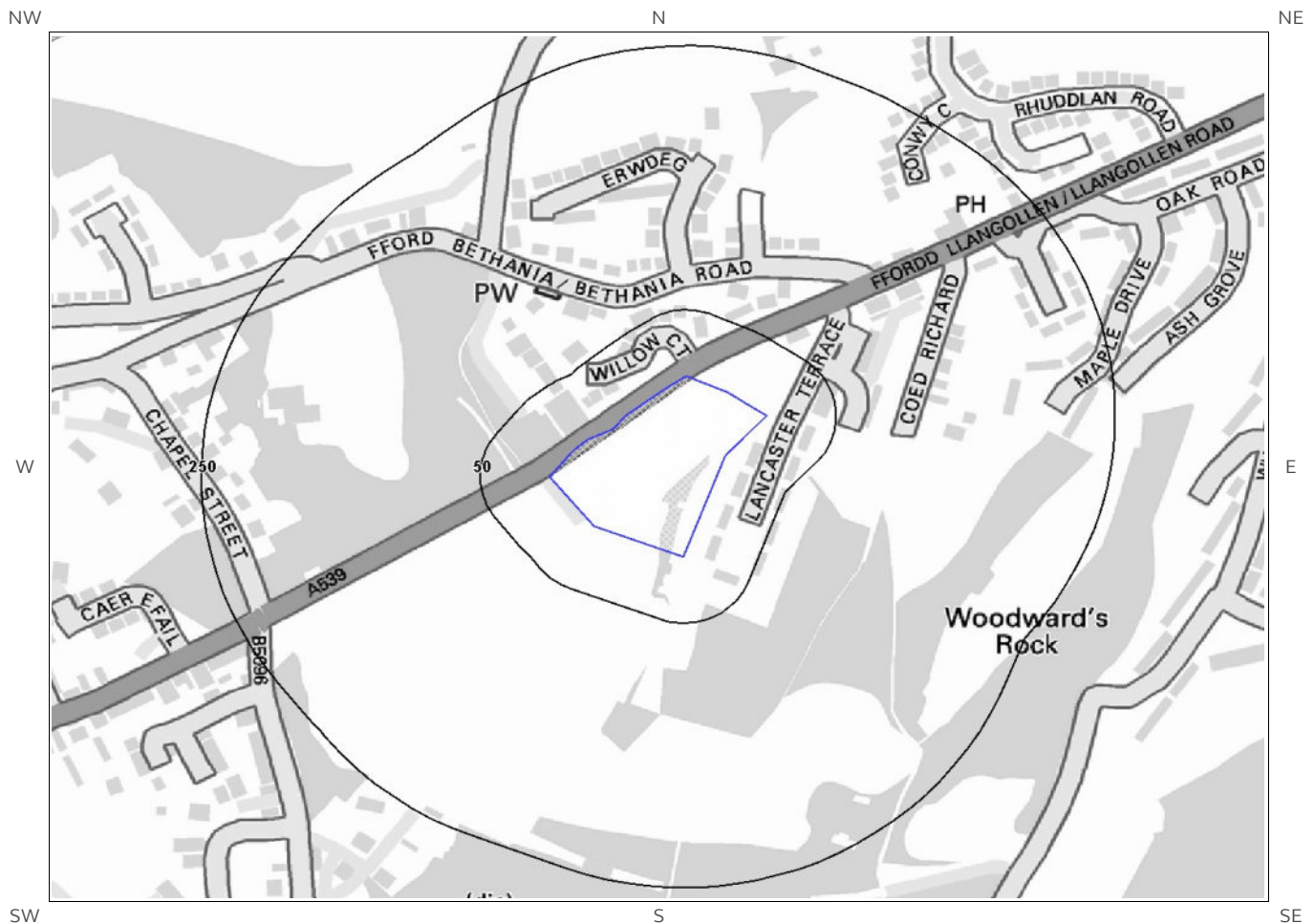
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



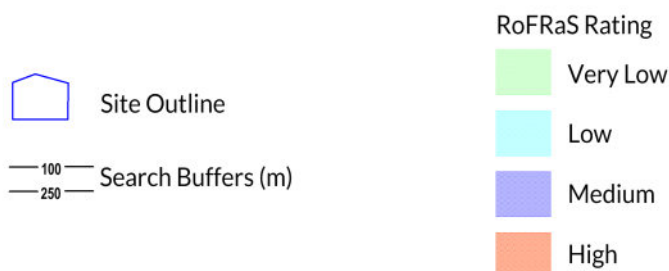
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7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

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

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

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

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

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

Database searched and no data found.

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

Highest risk of flooding onsite Very Low

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

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

7.4 Flood Defences

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

7.5 Areas benefiting from Flood Defences

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

7.6 Areas benefiting from Flood Storage

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

None identified

7.7 Groundwater Flooding Susceptibility Areas

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

Identified

Clearwater Flooding or Superficial Deposits Flooding

Superficial Deposits 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

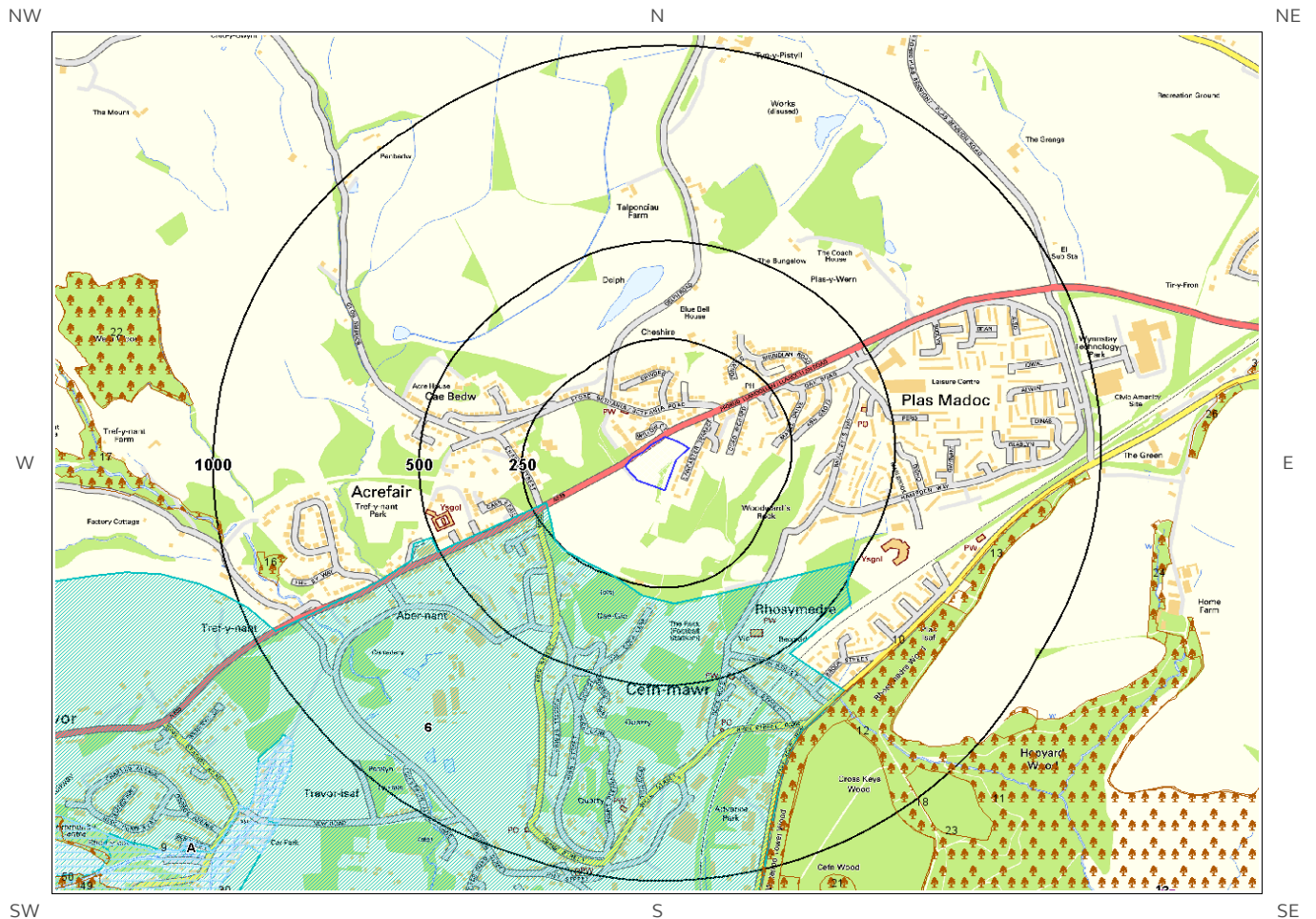
British Geological Survey confidence rating in this result

High

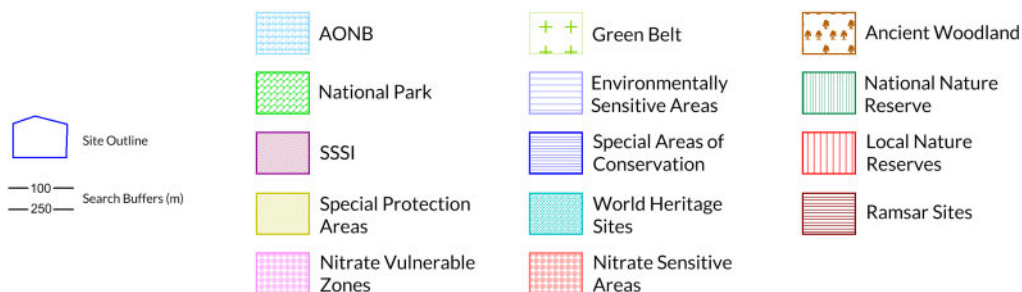
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

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
3	1411	SE	Afon Dyfrdwy (River Dee)	Natural Resources Wales
Not shown	1459	SW	Afon Dyfrdwy (River Dee)	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:

2

The following Special Area of Conservation (SAC) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SAC Name	Data Source
1	1411	SE	River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid (Wales)	Natural England
Not shown	1620	SE	River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid (Wales)	Natural England

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:

79

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
10	675	SE	Unknown	Restored Ancient Woodland Site
11	677	SE	Unknown	Restored Ancient Woodland Site
12	728	SE	Unknown	Restored Ancient Woodland Site
13	741	SE	Unknown	Ancient Semi Natural Woodland
14	763	SE	Unknown	Ancient Semi Natural Woodland
15	780	E	Unknown	Ancient Semi Natural Woodland
16	854	W	Unknown	Restored Ancient Woodland Site
17	991	W	Unknown	Restored Ancient Woodland Site
18	1019	SE	Unknown	Plantation on Ancient Woodland Site
19	1046	SE	Unknown	Plantation on Ancient Woodland Site
20	1061	W	Unknown	Restored Ancient Woodland Site
21	1063	S	Unknown	Plantation on Ancient Woodland Site
22	1082	W	Unknown	Restored Ancient Woodland Site
23	1111	SE	Unknown	Plantation on Ancient Woodland Site
24	1139	E	Unknown	Ancient Semi Natural Woodland
Not shown	1199	SW	Unknown	Restored Ancient Woodland Site
26	1213	E	Unknown	Ancient Semi Natural Woodland
Not shown	1237	SW	Unknown	Restored Ancient Woodland Site
Not shown	1270	S	Unknown	Plantation on Ancient Woodland Site
29	1284	E	Unknown	Restored Ancient Woodland Site
30	1307	SW	Unknown	Restored Ancient Woodland Site
Not shown	1318	S	Unknown	Restored Ancient Woodland Site
32	1369	E	Unknown	Ancient Semi Natural Woodland
33	1422	SW	Unknown	Restored Ancient Woodland Site
Not shown	1463	SE	Unknown	Ancient Semi Natural Woodland
Not shown	1466	SW	Unknown	Restored Ancient Woodland Site
Not shown	1480	W	Unknown	Restored Ancient Woodland Site
Not shown	1482	SW	Unknown	Ancient Semi Natural Woodland
Not shown	1485	SW	Unknown	Ancient Semi Natural Woodland

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
Not shown	1507	SE	Unknown	Ancient Woodland Site of Unknown Category
Not shown	1510	SE	Unknown	Restored Ancient Woodland Site
Not shown	1536	E	Unknown	Ancient Semi Natural Woodland
Not shown	1556	S	Unknown	Restored Ancient Woodland Site
Not shown	1566	NE	Unknown	Ancient Semi Natural Woodland
Not shown	1582	S	Unknown	Restored Ancient Woodland Site
Not shown	1593	SW	Unknown	Ancient Semi Natural Woodland
Not shown	1602	W	Unknown	Restored Ancient Woodland Site
47	1603	SW	Unknown	Ancient Semi Natural Woodland
Not shown	1633	SE	Unknown	Restored Ancient Woodland Site
49	1633	SW	Unknown	Restored Ancient Woodland Site
50	1655	SW	Unknown	Ancient Semi Natural Woodland
Not shown	1679	SW	Unknown	Ancient Semi Natural Woodland
Not shown	1712	W	Unknown	Restored Ancient Woodland Site
Not shown	1733	S	Unknown	Restored Ancient Woodland Site
Not shown	1749	S	Unknown	Ancient Woodland Site of Unknown Category
Not shown	1752	W	Unknown	Restored Ancient Woodland Site
Not shown	1755	E	Unknown	Ancient Semi Natural Woodland
Not shown	1778	W	Unknown	Plantation on Ancient Woodland Site
Not shown	1794	W	Unknown	Plantation on Ancient Woodland Site
Not shown	1799	SW	Unknown	Restored Ancient Woodland Site
Not shown	1814	SE	Unknown	Plantation on Ancient Woodland Site
Not shown	1826	SE	Unknown	Plantation on Ancient Woodland Site
Not shown	1842	SE	Unknown	Plantation on Ancient Woodland Site
Not shown	1848	SE	Unknown	Restored Ancient Woodland Site
Not shown	1849	W	Unknown	Plantation on Ancient Woodland Site
Not shown	1853	SE	Unknown	Ancient Semi Natural Woodland
Not	1864	E	Unknown	Ancient Woodland Site of

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
shown				Unknown Category
Not shown	1872	SE	Unknown	Restored Ancient Woodland Site
Not shown	1873	SE	Unknown	Plantation on Ancient Woodland Site
Not shown	1877	SW	Unknown	Ancient Semi Natural Woodland
Not shown	1883	W	Unknown	Plantation on Ancient Woodland Site
Not shown	1894	E	Unknown	Restored Ancient Woodland Site
Not shown	1908	N	Unknown	Ancient Semi Natural Woodland
Not shown	1917	SE	Unknown	Plantation on Ancient Woodland Site
Not shown	1921	SE	Unknown	Restored Ancient Woodland Site
Not shown	1924	E	Unknown	Plantation on Ancient Woodland Site
Not shown	1935	W	Unknown	Restored Ancient Woodland Site
Not shown	1940	N	Unknown	Ancient Semi Natural Woodland
Not shown	1943	SE	Unknown	Plantation on Ancient Woodland Site
Not shown	1953	E	Unknown	Restored Ancient Woodland Site
Not shown	1953	S	Unknown	Restored Ancient Woodland Site
Not shown	1955	E	Unknown	Restored Ancient Woodland Site
Not shown	1960	S	Unknown	Ancient Semi Natural Woodland
Not shown	1961	W	Unknown	Restored Ancient Woodland Site
Not shown	1963	W	Unknown	Plantation on Ancient Woodland Site
Not shown	1985	W	Unknown	Restored Ancient Woodland Site
Not shown	1985	E	Unknown	Plantation on Ancient Woodland Site
Not shown	1985	SE	Unknown	Restored Ancient Woodland Site
Not shown	1998	NE	Unknown	Ancient Semi Natural Woodland

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

0

Database searched and no data found.

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

4

The following World Heritage Site records provided by English Heritage and Cadw are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	World Heritage Site Name	Data Source
5	212	SW	Pontcysyllte Aqueduct and Canal Buffer Zone	Historic England
6	212	SW	Pontcysyllte Aqueduct and Canal Essential Setting	CADW
7A	1067	SW	Pontcysyllte Aqueduct and Canal	Historic England
8A	1067	SW	Pontcysyllte Aqueduct and Canal	CADW

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:

1

The following Area of Outstanding Natural Beauty (AONB) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	AONB/NSA Name	Data Source
9	1067	SW	BRYNIAU CLWYD A DYFFRYN DYFRDWY/CLWYDIAN RANGE AND DEE VALLEY	Natural Resources Wales

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:

0

Database searched and no data found.

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

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

9.1.1 Shrink Swell

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

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

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

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site Moderate

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

Hazard
Significant potential for slope instability with relatively small changes in ground conditions. Avoid large amounts of water entering the ground through pipe leakage or soak-aways. Do not undercut or place large amounts of material on slopes without technical advice. For new build consider the potential and consequences of ground movement during excavations, or consequence of changes to loading or drainage. For existing property probable increase in insurance risk is likely due to potential natural slope instability after changes to ground conditions such as a very long, excessively wet winter.

9.1.3 Soluble Rocks

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

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

Hazard
Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

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

9.1.4 Compressible Ground

Maximum Compressible Ground* hazard rating identified on the study site

Negligible

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

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

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site

Very Low

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

Hazard
Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

9.1.6 Running Sand

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

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 3 and 5% 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

Identified

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

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

10.2 Non-Coal Mining

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

Identified

The following non-coal mining information is provided by the BGS:

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Not available	Iron Ore (Bedded)	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered

Past underground mine workings may occur. The rock types present in these areas are such that small mineral veins may be present on which it is possible that small scale mining has been undertaken and/or it is possible that limited underground extraction of other materials may have occurred. All such occurrences are likely to be of minor localised extent and infrequent. It should be noted, however, that there is always the possibility of the existence of other sub-surface excavations, such as wells, cess pits, follies, air raid shelters/bunkers and other military structures etc. that could affect surface ground stability but which are outside the scope of this dataset. However, if in a coalfield area you should still consider a Coal Authority mining search for the area of interest.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site
Guidance: No Guidance Required.

None identified

Contact Details

Groundsure Helpline
Telephone: 08444 159 000
info@groundsure.com

British Geological Survey Enquiries

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

Web: www.bgs.ac.uk

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

Natural Resources Wales

Ty Cambria
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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

The Coal Authority

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

Ordnance Survey

Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505

Local Authority

Authority: Wrexham - Wrexham County Borough Council
Phone: 01978 292 000
Web: <http://www.wrexham.gov.uk/>
Address: 16 Lord Street, Wrexham, Wrexham, LL11 1LG



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Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
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Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England/Natural Resources Wales who retain the Copyright and Intellectual Property Rights for the data.

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