

APPENDIX C

BGS Boreholes

SJ 35 NW 43

3342 5652

North of Llay

No. 108

Block A

Surface level (+86.4 m) +284 ft

Water not struck

Shell and auger 8-in (203 mm) diameter

March 1977

Overburden 8.8 m

Mineral 16.2 m +

LOG

Geological classification	Lithology	Thickness m	Depth m
Boulder Clay	Soil, dark brown and clayey Clay, red-brown to grey, stiff and stony with sand lenses. Contains subangular to rounded clasts of quartzite, sandstone, igneous material, siltstone, quartz and coal. Sand horizons between 2.8 m and 3.4 m, and between 7.4 m and 7.9 m	0.3 8.5	0.3 8.8
Glacial Sand and Gravel	a Pebbly sand Gravel: fine with some coarse, quartzite with some volcanics, limestone, quartz, siltstone, chert and sandstone Sand: medium with fine and coarse, subangular b Sand: fine with medium, well sorted, subangular with coal. Fines with depth	4.0 12.2 +	12.8 25.0

GRADING

	Mean for deposit percentages			Depth below surface (m)	percentages						
	Fines	Sand	Gravel		Fines	Sand			Gravel		
						- 1/16	+ 1/16 - 1/8	+ 1/8 - 1/4	+ 1/4 - 1/2	+ 1/2 - 3/4	+ 3/4 - 1
a	3	83	14	8.8-9.8	3	12	48	20	13	4	0
				9.8-10.8	4	9	56	23	6	2	0
				10.8-12.8	3	18	48	15	14	2	0
				Mean	3	14	50	19	11	3	0
b	7	93	0	12.8-13.8	3	59	38	0	0	0	0
				13.8-14.8	3	59	38	0	0	0	0
				14.8-15.8	5	63	32	0	0	0	0
				15.8-17.8	9	81	10	0	0	0	0
				17.8-21.0	7	83	10	0	0	0	0
				21.0-25.0	8	76	16	0	0	0	0
				Mean	7	75	18	0	0	0	0
a + b	6	90	4	Mean	6	60	26	4	3	1	0

COMPOSITION

	Depth below surface (m)	Percentages by weight in +8 mm fraction						
		Quartz	Quartzite	Sandstone	Limestone	Other sediments	Igneous	Chert, flint
a	8.8-12.8	40	64	1	11	2	14	4

APPENDIX D

Coal Authority Report



The Coal
Authority

CON29M

coal mining report

STRAIGHT MILE, LLAY, WREXHAM, LL12 0NT



Known or potential coal mining risks

Past underground coal mining	Page 3
Future underground coal mining	Page 3



Further action

No further reports from the Coal Authority are required. Further information on any next steps can be found in our Professional opinion.

For more information on our reports please visit
www2.groundstability.com



Professional opinion

According to the official mining information records held by the Coal Authority at the time of this search, evidence of, or the potential for, coal mining related features have been identified. It is unlikely that these features will impact on the stability of the enquiry boundary.

Your reference: **C4168-6416-DI**
Our reference: **51002074959001**
Date: **9 April 2019**

Client name:
**BROWNFIELD SOLUTIONS
LIMITED**

If you require any further assistance please
contact our experts on:
0345 762 6848
groundstability@coal.gov.uk



The Law
Society

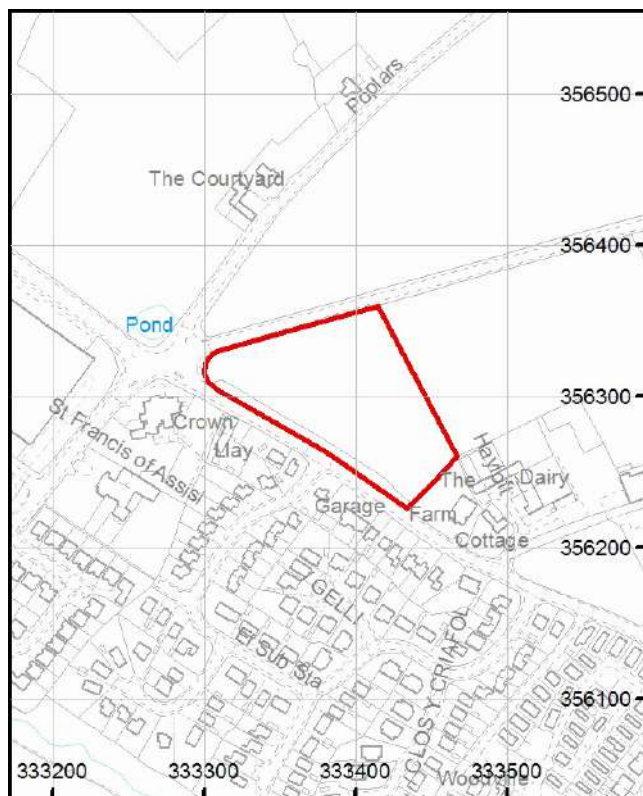
Enquiry boundary

Key

Approximate position of enquiry boundary shown



We can confirm that the location is
on the coalfield



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This report is prepared in accordance with the latest Law Society's Guidance Notes 2018, the User Guide 2018 and the Coal Authority's Terms and Conditions applicable at the time the report was produced.



Accessibility

If you would like this information in an alternative format, please contact our communications team on 0345 762 6848 or email communications@coal.gov.uk.

Detailed findings

Information provided by the Coal Authority in this report is compiled in response to the Law Society's CON29M Coal Mining enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL.

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1 Past underground coal mining

The property is in a surface area that could be affected by underground mining in 5 seams of coal at 650m to 950m depth, and last worked in 1966.

Any movement in the ground due to coal mining activity associated with these workings should have stopped by now.

2 Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

3 Future underground coal mining

The property is not in an area where the Coal Authority has received an application for, and is currently considering whether to grant a licence to remove or work coal by underground methods.

The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area likely to be affected from any planned future underground coal mining.

However, reserves of coal exist in the local area which could be worked at some time in the future.

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

4 Mine entries

There are no recorded coal mine entries known to the Coal Authority within, or within 20 metres, of the boundary of the property.

5 Coal mining geology

The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

6 Past opencast coal mining

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

7 Present opencast coal mining

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

8 Future opencast coal mining

There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

9 Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

10 Mine gas

The Coal Authority has no record of a mine gas emission requiring action.

11 Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Coal Authority, under its Emergency Surface Hazard Call Out procedures.

12 Withdrawal of support

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

13 Working facilities order

The property is not in an area where an order has been made, under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

14 Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Statutory cover



Coal mining subsidence

In the unlikely event of any coal mining related subsidence damage, the Coal Authority or the mine operator has a duty to take remedial action in respect of subsidence caused by the withdrawal of support from land or property in connection with lawful coal mining operations.

When the works are the responsibility of the Coal Authority, our dedicated public safety and subsidence team will manage the claim. The house or land owner ("the owner") is covered for these works under the terms of the Coal Mining Subsidence Act 1991 (as amended by the Coal Industry Act 1994). Please note, this Act does not apply where coal was worked or gotten by virtue of the grant of a gale in the Forest of Dean, or any other part of the Hundred of St. Briavels in the county of Gloucester.

The owner therefore shouldn't incur cost or liability from repairs caused by the withdrawal of support from land and/or property in connection with lawful coal mining operations. Usually these actions will not need to involve your insurance company or mortgage lender.



Coal mining hazards

Our public safety and subsidence team provide a 24 hour a day, 7 days a week hazard reporting service, to help protect the public from hazards caused by past coal workings, such as a mine shaft or shallow working collapse. To report any hazards please call **01623 646 333**. Further information can be found on our website: www.gov.uk/coalauthority.

Glossary



Key terms

adit - horizontal or sloped entrance to a mine

coal mining subsidence - ground movement caused by the removal of coal by underground mining

Coal Mining Subsidence Act 1991 - the Act setting out the duties of the Coal Authority to repair damage caused by coal mining subsidence

coal mining subsidence damage - damage to land, buildings or structures caused by the removal of coal by underground mining

coal seams - bed of coal of varying thickness

future opencast coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal from the surface

future underground coal mining - a licence granted, or licence application received, by the Coal Authority to excavate coal underground. Although it is unlikely, remaining coal reserves could create a possibility for future mining, which would be licensed by the Coal Authority

mine entries - collective name for shafts and adits

payments to owners of former copyhold land - historically, copyhold land gave rights to coal to the copyholder. Legislation was set up to allow others to work this coal, but they had to issue a notice and pay compensation if a copyholder came forward

shaft - vertical entry into a mine

site investigation - investigations of coal mining risks carried out with the Coal Authority's permission

stop notice - a delay to repairs because further coal mining subsidence damage may occur and it would be unwise to carry out permanent repairs

subsidence claim - a formal notice of subsidence damage to the Coal Authority since it was established on 31 October 1994

withdrawal of support - a historic notice informing landowners that the coal beneath their property was going to be worked

working facilities orders - a court order which gave permission, restricted or prevented coal mine workings

APPENDIX E

Environmental Database Report



**BROWNFIELD
SOLUTIONS LTD**
GEO-ENVIRONMENTAL ENGINEERING EXCELLENCE

Brownfield Solutions
William Smith House, Witton street,
NORTHWICH, CW9 5LP

Groundsure BRO-5933406
Reference:
Your Reference: C4168-6415-DI

Report Date 9 Apr 2019

Report Delivery Email - pdf
Method:

Enviro Insight

Address: 333402, 356301,

Dear Sir/ Madam,

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

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159 000 quoting the above Groundsure reference number.

Yours faithfully,

Managing Director
Groundsure Limited

Enc.
Groundsure Enviroinsight

Address: 333402, 356301,
Date: 9 Apr 2019
Reference: BRO-5933406
Client: Brownfield Solutions

NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 07-May-2017
Grid Reference: 333428,356297
Site Size: 1.1495ha

Report Reference: BRO-5933406
Client Reference: C4168-6415-DI

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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	0	1	12	14
1.2 Additional Information – Historical Tank Database	0	0	0	6
1.3 Additional Information – Historical Energy Features Database	0	0	4	15
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	5	0	10
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	6	18	10
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	2
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	1	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	2
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	1	5
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	27	12
2.3.2 National Incidents Recording System, List 1	0	0	1	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	1	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	0	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	0	0	1	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	24	34

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	1	0
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

Section 5: Geology	
5.1 Records of Artificial Ground and Made Ground present beneath the study site	None identified
5.2 Records of Superficial Ground and Drift Geology present beneath the study site	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	4
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	2	0	0	1	Not searched	Not searched

Section 6: Hydrogeology and Hydrology

0-500m

	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	Yes
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	2	2	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Environment Agency Zone 2 floodplains within 250m of the study site	None identified					
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	None identified					
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	Very Low					
7.4 Flood Defences within 250m of the study site	None identified					
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified					
7.6 Areas used for Flood Storage within 250m of the study site	None identified					
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Limited potential					
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	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	1	1
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	1	0	4	41
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	1
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	2	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	Very Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	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 not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining

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

Using this report

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

1. Historical Industrial Sites

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

2. Environmental Permits, Incidents and Registers

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

3. Landfills and Other Waste Sites

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

4. Current Land Uses

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

5. Geology

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

6. Hydrogeology and Hydrology

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

7. Flooding

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

8. Designated Environmentally Sensitive Sites

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

9. Natural Hazards

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

10. Mining

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

11. Contacts

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

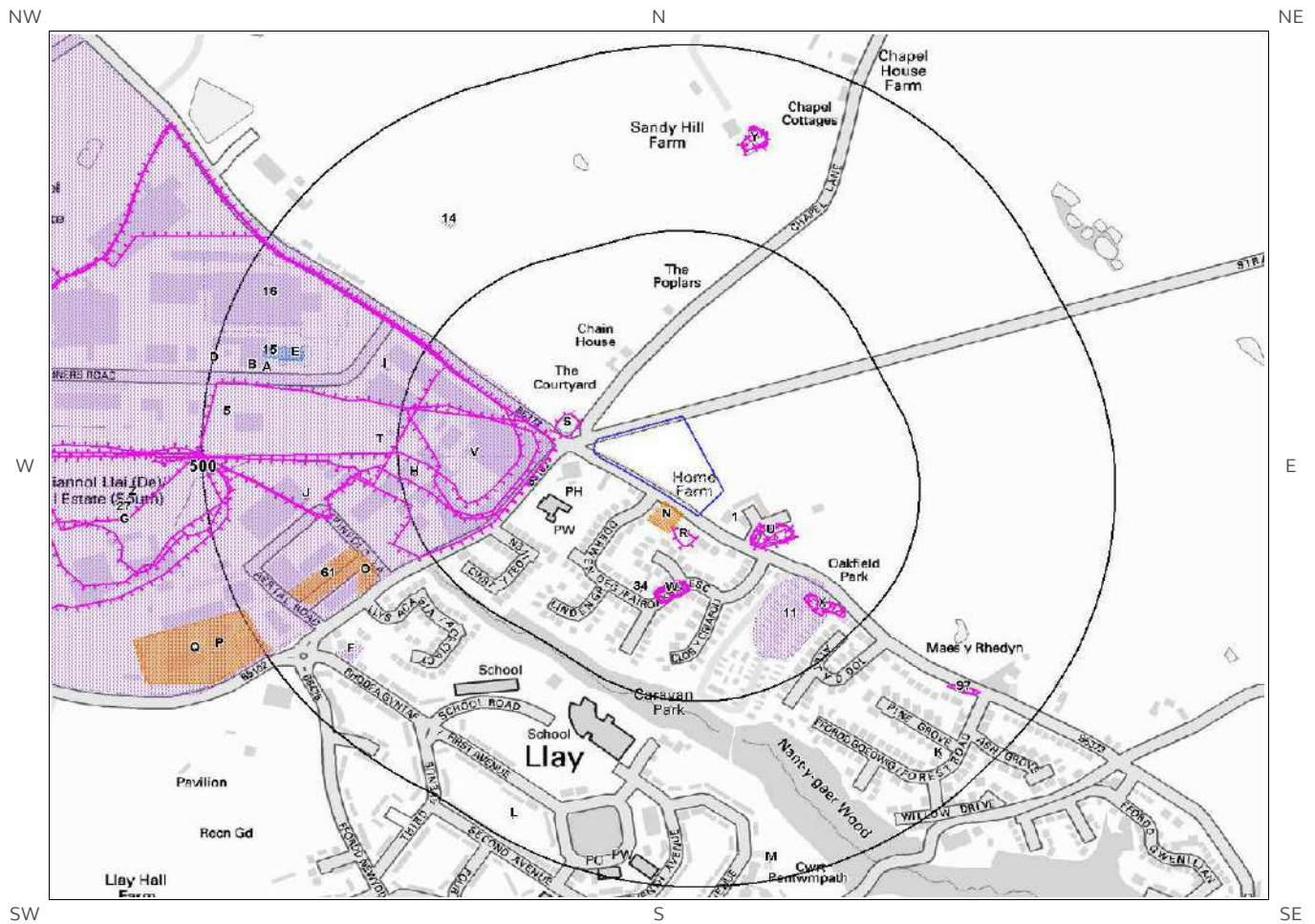
Note: Maps

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

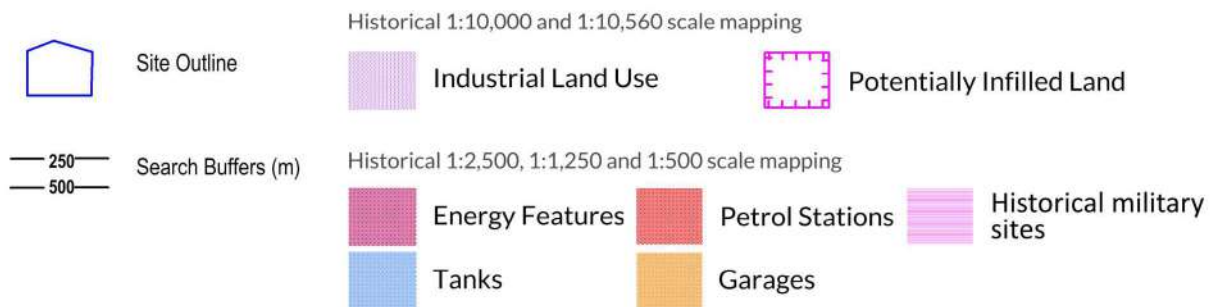
Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

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

1. Historical Land Use



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1. Historical Industrial Sites

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

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

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 27

ID	Distance [m]	Direction	Use	Date
1	38	SE	Wind Pump	1909
2T	51	W	Refuse Heap	1949
3A	51	W	Colliery	1949
4A	51	W	Railway Sidings	1949
5	58	W	Industrial Estate	1992
6V	70	W	Unspecified Heap	1979
7B	93	W	Unspecified Mine	1968
8B	93	W	Unspecified Mine	1960
9C	93	W	Railway Sidings	1960
10C	93	W	Railway Sidings	1968
11	138	SE	Earthwork	1909
12D	215	NW	Colliery	1938
13D	215	NW	Colliery	1938
14	342	NW	Magazine	1949
15	353	W	Unspecified Factory	1979
16	353	NW	Unspecified Works	1979
17E	378	W	Unspecified Tanks	1979
18E	378	W	Unspecified Tanks	1992
19F	395	SW	Police Station	1968
20F	395	SW	Police Station	1992
21F	395	SW	Police Station	1960
22F	395	SW	Police Station	1979
23P	430	SW	Unspecified Factory	1979
24Z	466	W	Unspecified Disused Tip	1979
25G	470	W	Refuse Heap	1968
26G	470	W	Refuse Heap	1960
27	480	W	Refuse Heap	1949

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:

6

ID	Distance (m)	Direction	Use	Date
28E	388	W	Tanks	1996
29E	389	W	Tanks	1974
30E	390	W	Tanks	1990
31E	390	W	Tanks	1984
32E	390	W	Tanks	1986
33E	390	W	Tanks	1990

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:

19

ID	Distance (m)	Direction	Use	Date
34	123	SW	Electricity Substation	1990
35H	229	W	Electricity Substation	1959
36H	229	W	Electricity Substation	1984
37H	229	W	Electricity Substation	1990
38I	282	W	Electricity Substation	1984
39I	282	W	Electricity Substation	1990
40J	370	W	Electricity Substation	1984
41J	370	W	Electricity Substation	1990
42J	370	W	Electricity Substation	1986
43K	444	SE	Electricity Substation	1990
44K	444	SE	Electricity Substation	1980
45K	445	SE	Electricity Substation	1983
46L	466	SW	Electricity Substation	1983
47L	466	SW	Electricity Substation	1969
48L	468	SW	Electricity Substation	1980
49L	468	SW	Electricity Substation	1990
50M	471	S	Electricity Substation	1980
51M	471	S	Electricity Substation	1990
52M	472	S	Electricity Substation	1983

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:

15

ID	Distance (m)	Direction	Use	Date
53N	7	SW	Garage	1961
54N	7	SW	Garage	1974
55N	9	SW	Garage	1990
56N	9	SW	Garage	1959
57N	9	SW	Garage	1984
58O	320	SW	Vehicle Storage Depot	1990
59O	320	SW	Vehicle Storage Depot	1959
60O	320	SW	Vehicle Storage Depot	1984
61	328	SW	Vehicle Storage Depot	1974
62P	487	SW	Vehicle Testing Centre	1996
63Q	494	SW	Vehicle Testing Centre	1974
64Q	496	SW	Vehicle Testing Centre	1990
65Q	496	SW	Vehicle Testing Centre	1990
66Q	496	SW	Vehicle Testing Centre	1986
67Q	496	SW	Vehicle Testing Centre	1984

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

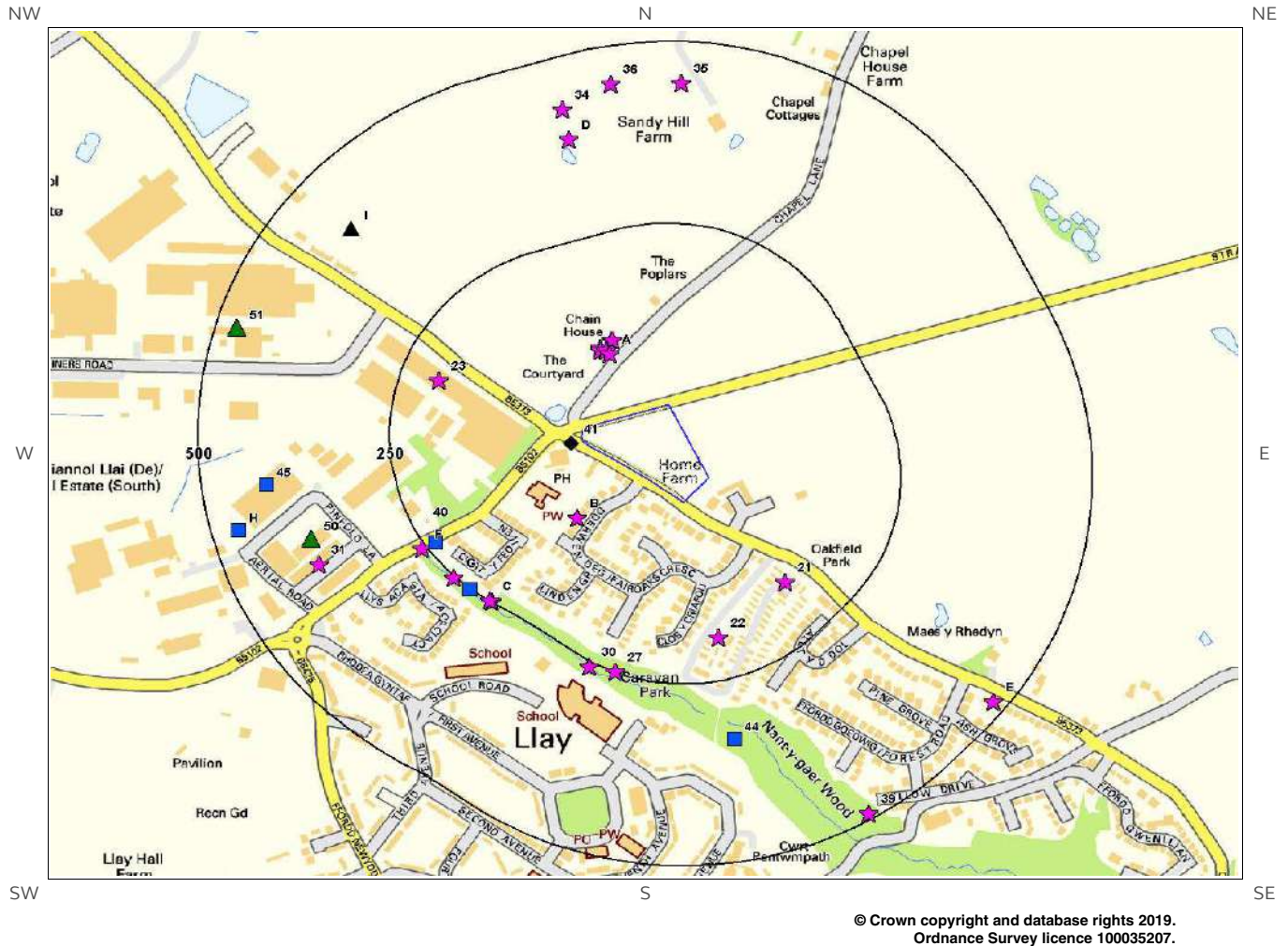
Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site:

34

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

ID	Distance(m)	Direction	Use	Date
68R	27	SW	Pond	1960
69R	27	SW	Pond	1968
70S	30	NW	Pond	1968
71S	30	NW	Pond	1979
72S	30	NW	Pond	1992
73S	30	NW	Pond	1960
74A	51	W	Colliery	1949
75T	51	W	Refuse Heap	1949
76U	64	SE	Pond	1900
77U	65	SE	Ponds	1872
78U	69	SE	Pond	1968
79U	69	SE	Pond	1960
80V	70	W	Unspecified Heap	1979
81W	90	S	Ponds	1938
82W	92	S	Ponds	1900
83W	92	S	Ponds	1872
84W	92	S	Ponds	1949
85B	93	W	Unspecified Mine	1960
86B	93	W	Unspecified Mine	1968
87X	175	SE	Ponds	1949
88X	177	SE	Ponds	1900
89X	177	SE	Ponds	1872
90D	215	NW	Colliery	1938
91D	215	NW	Colliery	1938
92Y	366	N	Ponds	1900
93Y	366	N	Pond	1979
94Y	366	N	Pond	1968
95Y	366	N	Pond	1960
96Y	367	N	Ponds	1949
97	389	SE	Pond	1872
98Z	466	W	Unspecified Disused Tip	1979
99G	470	W	Refuse Heap	1960
100G	470	W	Refuse Heap	1968
101G	480	W	Refuse Heap	1949

2. Environmental Permits, Incidents and Registers Map



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

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:

2

The following IPC Authorisations are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
52I	409	NW	333000 356600	Operator: Magellan Aerospace Corporation Ltd Address: Rackery Lane, Llay, Wrexham, Clwyd, LL12 0PB Process: Inorganic Chemical Processes	Permit Number: BD0150 Original Permit Number: IPCMINVAR Date Approved: 24-11-1998 Effective Date: 30-11-1998 Status: Revoked - Now Ippc
53I	409	NW	333000 356600	Operator: Magellan Aerospace Corporation Ltd Address: Rackery Lane, Llay, Wrexham, Clwyd, LL12 0PB Process: Inorganic Chemical Processes	Permit Number: AO6880 Original Permit Number: IPCAPP Date Approved: 21-4-1995 Effective Date: 25-4-1995 Status: Superseded By Variation

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:

1

The following List 1 Dangerous Substance Inventory Site records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
41	15	W	333287 356306	Name: Trefn Engineering Ltd, Unit 7, Llay Ind.est, Rackery Lane, L Status: Not Active Receiving Water: - Authorised Substances: Cadmium

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:

2

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

ID	Distance (m)	Direction	NGR	Details
50	380	W	332949 356172	Address: Star County Textile Services Ltd, Unit 4, Aerial Road, Llay Industrial Estate, Llay, Wrexham, LL12 0TU Process: Dry Cleaning Status: Current Permit Permit Type: Part B Enforcement: No Enforcement Notified. Date of Enforcement: No Enforcement Notified. Comment: No Enforcement Notified.
51	472	W	332852 356465	Address: Cymru Country Feeds Ltd, Miners Road, Llay, Wrexham, Llay, LL12 0PJ Process: Animal and Plant/Vegetable Processes Status: Historical Permit Permit Type: Part B Enforcement: Enforcement Notified Date of Enforcement: 14/02/2002 Comment: Animal feed compounding process

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

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

6

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

ID	Distance (m)	Direction	NGR	Details
42F	238	SW	333110 356170	Address: CHAPEL LANE OPPOSITE GARDEN CENTRE, CHAPEL LANE OPPOSITE GARDEN CENT, OPPOSITE GARDEN CENTRE LLAY , LLAY , , Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: CG0358401 Permit Version: 1 Receiving Water: AFON ALYN TRIBUTARY Status: Effective Issue date: 21/07/1994 Effective Date: 21-Jul-1994 Revocation Date: -
43G	251	SW	333155 356106	Address: PUMPING STATION ON DEVELOPMENT LAND, OFF LLAY ROAD, WREXHAM, WALES, UNITED KINGDOM, LL12 0TX Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - NOT WATER COMPANY Permit Number: CG0413901 Permit Version: 1 Receiving Water: SINGRET BROOK Status: Effective Issue date: 22/01/2004 Effective Date: 22-Jan-2004 Revocation Date: -
44	332	S	333500 355900	Address: LLAY GRESFORD ROAD, GRESFORD ROAD Effluent Type: UNSPECIFIED Permit Number: CM0065001 Permit Version: 1 Receiving Water: SINGRET BROOK Status: CONSENT EXPIRED - TIME LIMIT Issue date: 24/05/1971 Effective Date: 24-May-1971 Revocation Date: 23/02/1995
45	416	W	332890 356250	Address: LLAY IND ESTATE Effluent Type: UNSPECIFIED Permit Number: CM0060002 Permit Version: 1 Receiving Water: SINGRET BROOK Status: CONSENT EXPIRED - TIME LIMIT Issue date: 14/10/1969 Effective Date: 14-Oct-1969 Revocation Date: 06/02/1995
46H	466	W	332853 356187	Address: MARSHALLS MONO PLC LLAY WORKS, MARSHALLS MONO PLC, LLAY WORKS, LLAY INDUSTRIAL ESTATE, LLAY WREXHAM, LL12 0TL Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: CG0401501 Permit Version: 1 Receiving Water: TO GROUND Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 10/01/2003 Effective Date: 10-Jan-2003 Revocation Date: 22/06/2009
47H	466	W	332853 356187	Address: MARSHALLS MONO PLC LLAY WORKS, MARSHALLS MONO PLC, LLAY WORKS, LLAY INDUSTRIAL ESTATE, LLAY WREXHAM, LL12 0TL Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: CG0401501 Permit Version: 1 Receiving Water: TO GROUND Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 10/01/2003 Effective Date: 10-Jan-2003 Revocation Date: 22/06/2009

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

0

Database searched and no data found.

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

0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

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

0

Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

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

39

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

ID	Distance (m)	Direction	NGR	Details
1A	89	N	333336.0 356430.0	Incident Date: 16-Dec-2001 Incident Identification: 48422.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
2A	89	N	333336.0 356430.0	Incident Date: 16-Dec-2001 Incident Identification: 48422.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
3B	95	SW	333294.0 356204.0	Incident Date: 11-May-2001 Incident Identification: 5234.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Sulphide Odour Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
4B	95	SW	333294.0 356204.0	Incident Date: 11-May-2001 Incident Identification: 5234.0 Pollutant: Atmospheric Pollutants and Effects Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

ID	Distance (m)	Direction	NGR	Details	
				Effects	
				Pollutant Description: Sulphide Odour	
5A	95	N	333331.0 356435.0	Incident Date: 15-Dec-2001 Incident Identification: 48308.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
6A	97	N	333324.0 356435.0	Incident Date: 01-Mar-2002 Incident Identification: 61231.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
7A	97	N	333324.0 356435.0	Incident Date: 01-Mar-2002 Incident Identification: 61231.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
8A	97	N	333324.0 356435.0	Incident Date: 10-Aug-2001 Incident Identification: 23432.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
9A	97	N	333324.0 356435.0	Incident Date: 04-Apr-2002 Incident Identification: 68864.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
10A	97	N	333324.0 356435.0	Incident Date: 25-Dec-2001 Incident Identification: 49539.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
11A	100	N	333324.0 356438.0	Incident Date: 15-Dec-2001 Incident Identification: 48307.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
12A	106	N	333340.0 356449.0	Incident Date: 16-Dec-2001 Incident Identification: 48423.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
13A	106	N	333340.0 356449.0	Incident Date: 16-Dec-2001 Incident Identification: 48423.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
14A	106	N	333339.0 356449.0	Incident Date: 09-May-2001 Incident Identification: 4903.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Sulphide Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
15A	106	N	333339.0 356449.0	Incident Date: 26-Jul-2001 Incident Identification: 19467.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
16A	106	N	333339.0 356449.0	Incident Date: 06-Jul-2001 Incident Identification: 14519.0 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

ID	Distance (m)	Direction	NGR	Details	
17A	106	N	333339.0 356449.0	Incident Date: 31-Aug-2001 Incident Identification: 28237.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
18A	106	N	333339.0 356449.0	Incident Date: 06-Jul-2001 Incident Identification: 14519.0 Pollutant: Other Pollutant Pollutant Description: Other	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
19A	106	N	333339.0 356449.0	Incident Date: 06-Aug-2001 Incident Identification: 22099.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
20A	106	N	333339.0 356449.0	Incident Date: 13-Dec-2001 Incident Identification: 47986.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
21	171	SE	333565.0 356116.0	Incident Date: 20-Nov-2013 Incident Identification: 1177422.0 Pollutant: Inert Materials and Wastes Pollutant Description: Construction and Demolition Materials and Wastes	Water Impact: Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
22	191	S	333478.0 356040.0	Incident Date: 21-Aug-2015 Incident Identification: 1367023.0 Pollutant: Contaminated Water Pollutant Description: Other Contaminated Water	Water Impact: Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
23	201	W	333113.0 356394.0	Incident Date: 22-Dec-2014 Incident Identification: 1302359.0 Pollutant: Specific Waste Materials Pollutant Description: Metal Wastes	Water Impact: Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
24C	249	SW	333180.0 356091.0	Incident Date: 30-Apr-2001 Incident Identification: 3861.0 Pollutant: Sewage Materials Pollutant Description: Storm Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
25C	250	SW	333182.0 356089.0	Incident Date: 27-Dec-2001 Incident Identification: 49674.0 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
26C	250	SW	333182.0 356089.0	Incident Date: 27-Dec-2001 Incident Identification: 49674.0 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
27	250	S	333344.0 355992.0	Incident Date: 06-Feb-2005 Incident Identification: 291717.0 Pollutant: Oils and Fuel Pollutant Description: Cutting Oils	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
28G	253	SW	333133.0 356122.0	Incident Date: 14-Apr-2003 Incident Identification: 150789.0 Pollutant: Organic Chemicals/Products Pollutant Description: Other Organic Chemical or Product	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
29F	257	SW	333092.0 356162.0	Incident Date: 03-Feb-2005 Incident Identification: 291092.0 Pollutant: Oils and Fuel Pollutant Description: Cutting Oils	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
30	257	SW	333310.0 356000.0	Incident Date: 20-May-2002 Incident Identification: 80015.0 Pollutant: Sewage Materials	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

ID	Distance (m)	Direction	NGR	Details	
Pollutant Description: Crude Sewage					
31	385	SW	332957.0 356140.0	Incident Date: 21-Sep-2015 Incident Identification: 1374653.0 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
32D	387	N	333283.0 356725.0	Incident Date: 04-Sep-2001 Incident Identification: 28772.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
33D	387	N	333283.0 356725.0	Incident Date: 04-Sep-2001 Incident Identification: 28772.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Landfill Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
34	429	N	333275.0 356767.0	Incident Date: 23-Apr-2001 Incident Identification: 3187.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Sulphide Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
35	443	N	333429.0 356803.0	Incident Date: 11-Jul-2013 Incident Identification: 1132006.0 Pollutant: Pollutant Not Identified Pollutant Description: Not Identified	Water Impact: Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
36	448	N	333338.0 356802.0	Incident Date: 23-Apr-2001 Incident Identification: 3189.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Sulphide Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
37E	481	SE	333836.0 355951.0	Incident Date: 19-May-2001 Incident Identification: 5973.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
38E	481	SE	333836.0 355951.0	Incident Date: 19-May-2001 Incident Identification: 5973.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
39	491	SE	333674.0 355798.0	Incident Date: 05-Oct-2013 Incident Identification: 1165151.0 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

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

1

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

ID	Distance(m)	Direction	NGR	Details
40	230	SW	Incident Date: 01-Sep-1999 Incident Identification: 4813.0 Catchments Name: SINGRET BROOK Water Description: RIVER STRETCH (FRESHWATER) Water Course: SINGRET BROOK Incident Substantiated: Yes	Priority Description: Immediate (2 Hours) Waste Description: Not Available Water Impact: Significant Impact Land Impact: No Impact Air Impact: No Impact Action Taken: Not Available

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

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

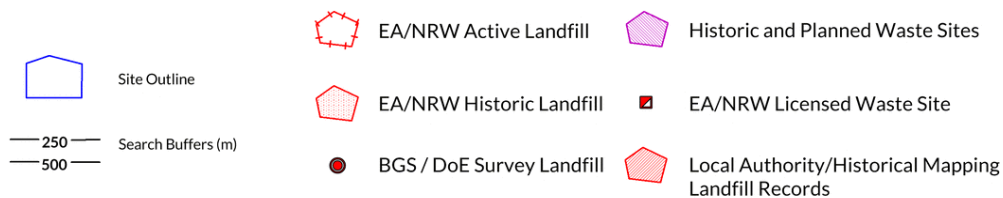
0

Database searched and no data found.

3. Landfill and Other Waste Sites Map



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3. Landfill and Other Waste Sites

3.1 Landfill Sites

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

1

The following Environment Agency/Natural Resources Wales landfill records are represented as polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details
1	376	N	332747 356798	Address: Astbury Landfill, Dark Lane, Burton, Wrexham, Clwyd, LL12 0AE Landfill Reference: 37116.0 Environmental Permitting Regulations (Waste) Reference: CAI002 Landfill Type: A4 : Household, Commercial & Industrial Waste Landfill Operator: W R G Environmental Ltd Status: Modified IPPC Reference: EPR Reference:

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

5

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
Not shown	633	N		Site Address: Astbury Quarry, Dark Lane, Llay, Wrexham Waste Licence: Yes Site Reference: WMBC L/13, NOW-510-L, 6955/0062 Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 31-Dec-1983 Licence Surrendered: 31-Dec-1987 Licence Holder Address: - Operator: - Licence Holder: Shanks First Recorded: 31-Dec-1983 Last Recorded: 31-Dec-1987
3	636	SE		Site Address: Singret Quarry, Gresford Road, Llay, Wrexham Waste Licence: Yes Site Reference: WMBC L63, NOW-514-L Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: WW1/L/BOD001 Licence Issue: 31-Dec-1983 Licence Surrendered: 18-Dec-2003 Licence Holder Address: - Operator: Bodfari (quarries) Licence Holder: Tarmac First Recorded: 31-Dec-1976 Last Recorded: 30-Jun-1998
Not shown	747	NW		Site Address: Astbury Quarry, Dark Lane, Llay, Wrexham Waste Licence: Yes Licence Issue: 31-Dec-1983 Licence Surrendered: 31-Dec-1987 Licence Holder Address: -

ID	Distance (m)	Direction	NGR	Details
				Site Reference: WMBC L/13, NOW-510-L, 6955/0062 Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: - Operator: - Licence Holder: Shanks First Recorded: 31-Dec-1983 Last Recorded: 31-Dec-1987
Not shown	1165	E		Site Address: Ballswood Quarry, Rossett, Wrexham, Clwyd Waste Licence: Yes Site Reference: WMBC L/47 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 19-Jul-1977 Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: RMC Limited First Recorded: 31-Dec-1977 Last Recorded: 31-Dec-1985
Not shown	1296	E		Site Address: Ballswood Quarry, Rossett, Wrexham, Clwyd Waste Licence: Yes Site Reference: WMBC L/47 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: - Licence Issue: 19-Jul-1977 Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: RMC Limited First Recorded: 31-Dec-1977 Last Recorded: 31-Dec-1985

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:

1

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
Not shown	700	NW	332985 356978	Refuse Tip	1996 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:

58

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
7A	728	NW	332743 356790	Site Address: Dark Lane, Burton, Rossett, Wrexham, LL12 0AE Type: Household, Commercial & Industrial Waste Landfill Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CAI002 EPR reference: - Operator: Caird Environmental Ltd Waste Management licence No: 37116 Annual Tonnage: 0.0 Issue Date: 17/08/1994 Effective Date: - Modified: 29/01/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Astbury Landfill (rossett) Correspondence Address: Wrg Waste Services Ltd, Ground Floor West, 900, Pavilion Drive, Northampton Business Park, Northampton, NN4 7RG
8A	730	NW	332748 356799	Site Address: Astbury Landfill, Dark Lane, Burton, Wrexham, Clwyd, LL12 0AE Type: Household, Commercial & Industrial Waste Landfill Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: CAI002 EPR reference: FP3894FP/V008 Operator: W R G Environmental Ltd Waste Management licence No: 37116 Annual Tonnage: 0.0 Issue Date: 17/08/1994 Effective Date: - Modified: 03/03/2014 Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Modified Site Name: Astbury Landfill (rossett) Correspondence Address: -
9A	730	NW	332747 356798	Site Address: Astbury Landfill, Dark Lane, Burton, Wrexham, Clwyd, LL12 0AE Type: Household, Commercial & Industrial Waste Landfill Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CAI002 EPR reference: - Operator: Wrg Environmental Ltd Waste Management licence No: 37116 Annual Tonnage: 0.0 Issue Date: 17/08/1994 Effective Date: - Modified: 01/10/2007 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Astbury Landfill (rossett) Correspondence Address: Wrg Waste Services Ltd, Ground Floor West, 900, Pavilion Drive, Northampton Business Park, Northampton, Northants, NN4 7RG
10A	730	NW	332747 356798	Site Address: Astbury Landfill (rossett), Burton, Wrexham, Clwyd, LL12 0AE Type: Household, Commercial & Industrial Waste Landfill Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: FP3894FP EPR reference: - Operator: - Waste Management licence No: 37116 Annual Tonnage: 0.0 Issue Date: 17/08/1994 Effective Date: 17/08/1994 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
11A	730	NW	332747 356798	Site Address: Astbury Landfill (rossett), Burton, Wrexham, Wrexham, LL12 0AE Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: FP3894FP EPR reference: - Operator: W R G Environmental Ltd Waste Management licence No: 0 Annual Tonnage: 0.0 Issue Date: 17/08/1994 Effective Date: 17/08/1994 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details	
12A	730	NW	332747 356798	Site Address: Astbury Landfill, Dark Lane, Burton, Wrexham, Clwyd, LL12 0AE Type: Household, Commercial & Industrial Waste Landfill Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CAI002 EPR reference: EA/EPR/FP3894FP/V008 Operator: W R G Environmental Ltd Waste Management licence No: 37116 Annual Tonnage: 0.0	Issue Date: 17/08/1994 Effective Date: - Modified: 03/03/2014 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Astbury Landfill (rossett) Correspondence Address: -
13A	730	NW	332747 356798	Site Address: Astbury Landfill (rossett), Burton, , Wrexham, Clwyd, LL12 0AE Type: Household, Commercial & Industrial Waste Landfill Size: - Environmental Permitting Regulations (Waste) Licence Number: FP3894FP EPR reference: - Operator: W R G Environmental Ltd Waste Management licence No: 37116 Annual Tonnage: 0.0	Issue Date: 17/08/1994 Effective Date: 17/08/1994 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
14A	730	NW	332747 356798	Site Address: Astbury Landfill (rossett), Burton, Clwyd, Wrexham, Wrexham, LL12 0AE Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: FP3894FP EPR reference: - Operator: W R G Environmental Ltd Waste Management licence No: 37116 Annual Tonnage: 0.0	Issue Date: 17/08/1994 Effective Date: 17/08/1994 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
15A	734	NW	332741 356798	Site Address: Dark Lane, Burton, Rossett, Wrexham, LL12 0AE Type: Co-Disposal Landfill Site Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CAI002 EPR reference: - Operator: Caird Environmental Ltd Waste Management licence No: 37116 Annual Tonnage: 0.0	Issue Date: 17/08/1994 Effective Date: - Modified: 09/07/2002 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Astbury Quarry Correspondence Address: Deerplay, Bacup Road, Cliviger, Burnley, Lancashire, BB11 3RL
16A	734	NW	332741 356798	Site Address: Dark Lane, Burton, Rossett, Wrexham, LL12 0AE Type: Household, Commercial & Industrial Waste Landfill Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CAI002 EPR reference: - Operator: Caird Environmental Ltd Waste Management licence No: 37116 Annual Tonnage: 0.0	Issue Date: 17/08/1994 Effective Date: - Modified: 29/01/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Astbury Landfill (rossett) Correspondence Address: Astbury Landfill (rossett), Dark Lane, Burton, Rossett, Wrexham, LL12 0AE
Not shown	892	W	332413 356414	Site Address: W H Chaloner & Son Ltd, Miners Road, Llay Industrial Estate, Wrexham, Clwyd, LL12 0PJ Type: Metal Recycling Site (mixed MRS's) Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: CHA002 EPR reference: ZP3594FN/V008 Operator: W H Chaloner & Son Limited Waste Management licence No: 37135 Annual Tonnage: 0.0	Issue Date: 20/07/1995 Effective Date: - Modified: 23/10/2012 Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Modified Site Name: W H Chaloner & Son Ltd Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details
Not shown	893	W	332412 356413	Site Address: W H Chaloner & Son Ltd, Miners Road, Llay Industrial Estate, Wrexham, Clwyd, LL12 0PJ Type: Metal Recycling Site (mixed MRS's) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHA002 EPR reference: EA/EPR/ZP3594FN/V008 Operator: W H Chaloner & Son Limited Waste Management licence No: 37135 Annual Tonnage: 24999.0 Issue Date: 20/07/1995 Effective Date: - Modified: 23/10/2012 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: W H Chaloner & Son Ltd Correspondence Address: -
Not shown	893	W	332412 356413	Site Address: W H Chaloner & Son Ltd, Llay Industrial Estate, Wrexham, Clwyd, LL12 0PJ Type: Metal Recycling Site (mixed MRS's) Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: ZP3594FN EPR reference: - Operator: - Waste Management licence No: 37135 Annual Tonnage: 24999.0 Issue Date: 20/07/1995 Effective Date: 20/07/1995 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	893	W	332412 356413	Site Address: Miners Road, Llay Industrial Estate, Llay, Wrexham, LL12 0PJ Type: Metal Recycling Site (mixed MRS's) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CHA002 EPR reference: - Operator: Chaloner W H & Son Ltd Waste Management licence No: 37135 Annual Tonnage: 0.0 Issue Date: 20/07/1995 Effective Date: - Modified: 29/11/2002 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: W H Chaloner & Sons Ltd Correspondence Address: Park House, Pulford, Chester, Cheshire, CH4 9DG
Not shown	893	W	332412 356413	Site Address: W H Chaloner & Son Ltd, Llay Industrial Estate, Wrexham, Wrexham, LL12 0PJ Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: ZP3594FN EPR reference: - Operator: W H Chaloner & Son Limited Waste Management licence No: 0 Annual Tonnage: 24999.0 Issue Date: 20/07/1995 Effective Date: 20/07/1995 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	893	W	332412 356413	Site Address: W H Chaloner & Son Ltd, Llay Industrial Estate, , , Wrexham, Clwyd, LL12 0PJ Type: Metal Recycling Site (mixed MRS's) Size: - Environmental Permitting Regulations (Waste) Licence Number: ZP3594FN EPR reference: - Operator: W H Chaloner & Son Limited Waste Management licence No: 37135 Annual Tonnage: 24999.0 Issue Date: 20/07/1995 Effective Date: 20/07/1995 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	893	W	332412 356413	Site Address: W H Chaloner & Son Ltd, Llay Industrial Estate, Clwyd, Wrexham, Wrexham, LL12 0PJ Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: ZP3594FN EPR reference: - Operator: W H Chaloner & Son Limited Waste Management licence No: 37135 Annual Tonnage: 24999.0 Issue Date: 20/07/1995 Effective Date: 20/07/1995 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details	
Not shown	964	N	333200 357300	Site Address: Astbury Landfill Site, Dark Lane, Rossett, Wrexham, Clwyd, LL12 0AE Type: Landfill Gas Engine (<3 mW) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WRG014 EPR reference: - Operator: W R G Environmental Ltd Waste Management licence No: 220007 Annual Tonnage: 0.0	Issue Date: 13/12/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Rossett Landfill Gas Utilisation Plant Correspondence Address: -
Not shown	964	N	333200 357300	Site Address: Astbury Landfill Site, Dark Lane, Rossett, Wrexham, Clwyd, LL12 0AE Type: Landfill Gas Engine (<3 mW) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WRG014 EPR reference: - Operator: Wrg Environmental Ltd Waste Management licence No: 220007 Annual Tonnage: 0.0	Issue Date: 13/12/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Rossett Landfill Gas Utilisation Plant Correspondence Address: -
Not shown	964	N	333200 357300	Site Address: Rossett Landfill Gas Utilisation Plant, Astbury Landfill Site, Dark Lane, Rossett, Wrexham, LL12 0AE Type: Landfill Gas Engine (<3 mW) Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: AB3096FL EPR reference: - Operator: - Waste Management licence No: 220007 Annual Tonnage: 0.0	Issue Date: 13/12/2006 Effective Date: 13/12/2006 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	964	N	333200 357300	Site Address: Rossett Landfill Gas Utilisation Plant, Astbury Landfill Site, Dark Lane, Rossett, Wrexham, LL12 0AE Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: AB3096FL EPR reference: - Operator: W R G Environmental Ltd Waste Management licence No: 0 Annual Tonnage: 0.0	Issue Date: 13/12/2006 Effective Date: 13/12/2006 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	964	N	333200 357300	Site Address: Rossett Landfill Gas Utilisation Plant, Astbury Landfill Site, Dark Lane, , Rossett, Wrexham, LL12 0AE Type: Landfill Gas Engine (<3 mW) Size: - Environmental Permitting Regulations (Waste) Licence Number: AB3096FL EPR reference: - Operator: W R G Environmental Ltd Waste Management licence No: 220007 Annual Tonnage: 0.0	Issue Date: 13/12/2006 Effective Date: 13/12/2006 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	964	N	333200 357300	Site Address: Rossett Landfill Gas Utilisation Plant, Astbury Landfill Site, Dark Lane, Wrexham, Rossett, Wrexham, LL12 0AE Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: AB3096FL EPR reference: - Operator: W R G Environmental Ltd Waste Management licence No: 220007 Annual Tonnage: 0.0	Issue Date: 13/12/2006 Effective Date: 13/12/2006 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details	
Not shown	968	N	333205 357305	Site Address: Astbury Landfill Site, Dark Lane, Rossett, Wrexham, Clwyd, LL12 0AE Type: Landfill Gas Engine (<3 mW) Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: WRG014 EPR reference: - Operator: W R G Environmental Ltd Waste Management licence No: 220007 Annual Tonnage: 0.0	Issue Date: 13/12/2006 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Issued Site Name: Rossett Landfill Gas Utilisation Plant Correspondence Address: -
Not shown	1043	E	334509 356207	Site Address: Gresford Road, Llay, Wrexham, Clwyd, LL12 0NU Type: Landfill taking other wastes Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BOD001 EPR reference: EA/EPR/LP3594FP/S002 Operator: Bodfari (quarries) Limited Waste Management licence No: 37032 Annual Tonnage: 150000.0	Issue Date: 25/05/1992 Effective Date: - Modified: - Surrendered Date: 18/12/2003 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Singret Quarry Correspondence Address: -
Not shown	1043	E	334509 356207	Site Address: Gresford Road, Llay, Wrexham, LL12 0NU Type: Landfill taking other wastes Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BOD001 EPR reference: - Operator: Bodfari (quarries) Limited Waste Management licence No: 37032 Annual Tonnage: 0.0	Issue Date: 25/05/1992 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure Site Name: Singret Quarry Correspondence Address: Tunstead House, P O Box 25, Buxton, Derbyshire, SK17 8TG
Not shown	1044	E	334510 356208	Site Address: Gresford Road, Llay, Wrexham, Clwyd, LL12 0NU Type: Landfill taking other wastes Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BOD001 EPR reference: LP3594FP/S002 Operator: Bodfari (quarries) Limited Waste Management licence No: 37032 Annual Tonnage: 150000.0	Issue Date: 25/05/1992 Effective Date: - Modified: - Surrendered Date: 2.00312e+016 Expiry Date: 0 Cancelled Date: 0 Status: Surrendered Site Name: Singret Quarry Correspondence Address: -
Not shown	1136	W	332164 356297	Site Address: Wrexham Construction Services, Miners Road, Llay Industrial Estate, Wrexham, Clwyd, LL12 0PJ Type: Physical Treatment Facility Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WRE001 EPR reference: RP3994FN/A001 Operator: Wrexham Borough Council Waste Management licence No: 37235 Annual Tonnage: 60692.0	Issue Date: 09/05/2002 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Issued Site Name: Miner's Road Depot Correspondence Address: -
Not shown	1137	W	332163 356296	Site Address: Wrexham Construction Services, Miners Road, Llay Industrial Estate, Wrexham, Clwyd, LL12 0PJ Type: Physical Treatment Facility Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WRE001 EPR reference: EA/EPR/RP3994FN/A001 Operator: Wrexham County Borough Council Waste Management licence No: 37235 Annual Tonnage: 60692.0	Issue Date: 5/9/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Miner's Road Depot Correspondence Address: Ruthin Road Depot, Ruthin Road, Wrexham, Clwyd, LL13 7TU
Not	1137	W	332163	Site Address: Miner's Road Depot, Llay	Issue Date: 09/05/2002

ID	Distance (m)	Direction	NGR	Details	
shown			356296	Industrial Estate, Wrexham, Wrexham, LL12 0PJ Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: RP3994FN EPR reference: - Operator: Wrexham Borough Council Waste Management licence No: 0 Annual Tonnage: 0.0	Effective Date: 09/05/2002 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1137	W	332163 356296	Site Address: Miner's Road Depot, Llay Industrial Estate, Wrexham, Clwyd, LL12 0PJ Type: Physical Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: RP3994FN EPR reference: - Operator: - Waste Management licence No: 37235 Annual Tonnage: 0.0	Issue Date: 09/05/2002 Effective Date: 09/05/2002 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1137	W	332163 356296	Site Address: Miner's Road Depot, Llay Industrial Estate, , Wrexham, Clwyd, LL12 0PJ Type: Physical Treatment Facility Size: - Environmental Permitting Regulations (Waste) Licence Number: RP3994FN EPR reference: - Operator: Wrexham Borough Council Waste Management licence No: 37235 Annual Tonnage: 0.0	Issue Date: 09/05/2002 Effective Date: 09/05/2002 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1137	W	332163 356296	Site Address: Miner's Road Depot, Llay Industrial Estate, Clwyd, Wrexham, Wrexham, LL12 0PJ Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: RP3994FN EPR reference: - Operator: Wrexham Borough Council Waste Management licence No: 37235 Annual Tonnage: 0.0	Issue Date: 09/05/2002 Effective Date: 09/05/2002 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1150	W	332153 356242	Site Address: Unit 2, Miners Road, Llay Industrial Park, Llay, Wrexham, LL12 0PJ Type: Inert & excavation Waste TS + treatment Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ROA010 EPR reference: NB3293HV/A001 Operator: Roadway Civil Engineering & Surfacing Ltd Waste Management licence No: 900110 Annual Tonnage: 75000.0	Issue Date: 12/12/2014 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Issued Site Name: Llay Depot Correspondence Address: -
Not shown	1151	W	332152 356241	Site Address: Llay Depot, Llay Industrial Park, Llay, Wrexham, LL12 0PJ Type: Inert & excavation Waste TS + treatment Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: NB3293HV EPR reference: - Operator: - Waste Management licence No: 900110 Annual Tonnage: 75000.0	Issue Date: 12/12/2014 Effective Date: 12/12/2014 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -

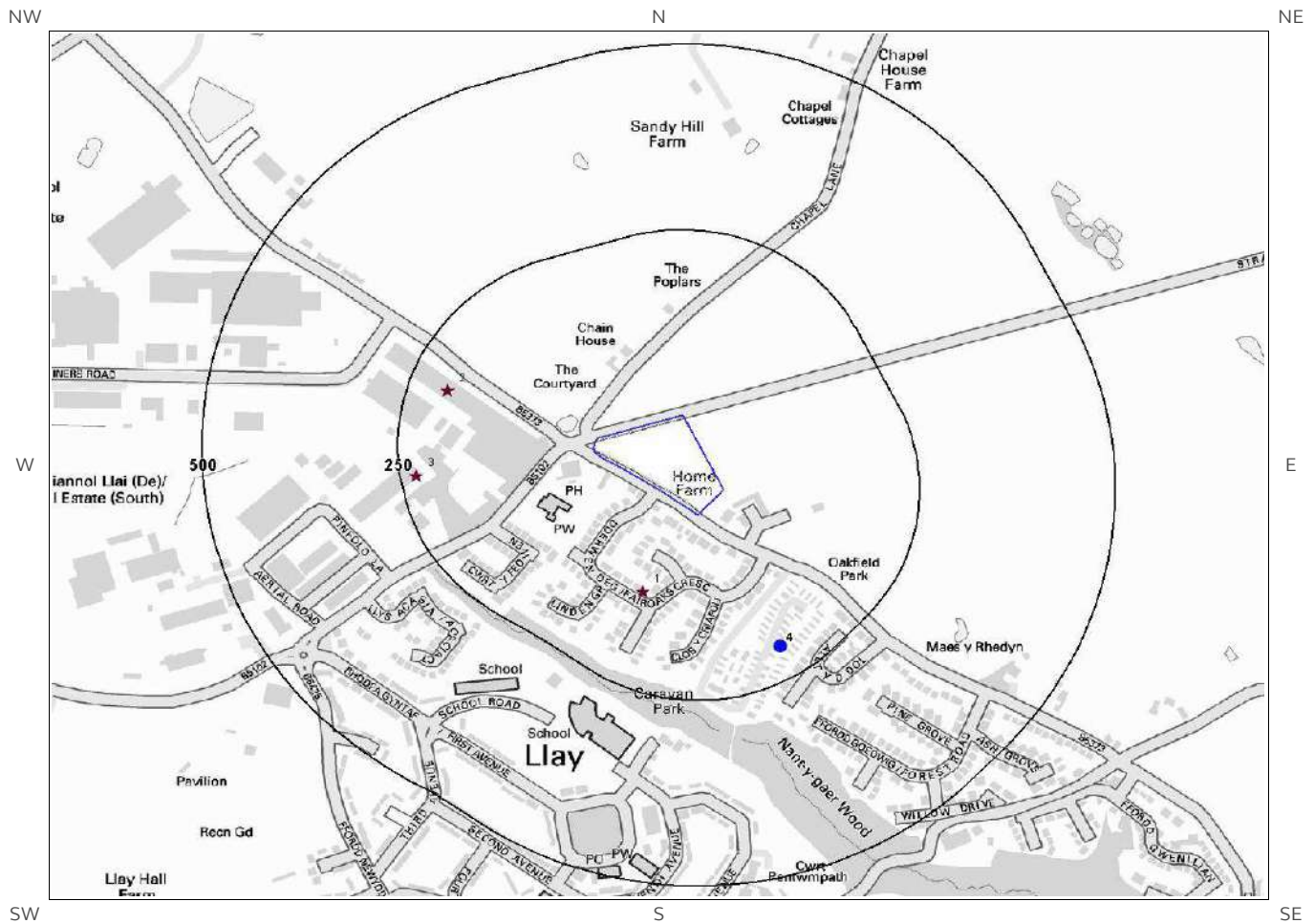
ID	Distance (m)	Direction	NGR	Details
Not shown	1151	W	332152 356241	Site Address: Unit 2, Miners Road, Llay Industrial Park, Llay, Wrexham, LL12 0PJ Type: Inert & excavation Waste TS + treatment Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ROA010 EPR reference: EA/EPR/NB3293HV/A001 Operator: Roadway Civil Engineering & Surfacing Ltd Waste Management licence No: 900110 Annual Tonnage: 75000.0 Issue Date: 12/12/2014 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Llay Depot Correspondence Address: -
Not shown	1151	W	332152 356241	Site Address: Llay Depot, Llay Industrial Park, Llay, Wrexham, LL12 0PJ Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: NB3293HV EPR reference: - Operator: Roadway Civil Engineering & Surfacing Ltd Waste Management licence No: 0 Annual Tonnage: 75000.0 Issue Date: 12/12/2014 Effective Date: 12/12/2014 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1151	W	332152 356241	Site Address: Llay Depot, Llay Industrial Park, , Llay, Wrexham, LL12 0PJ Type: Inert & excavation Waste TS + treatment Size: - Environmental Permitting Regulations (Waste) Licence Number: NB3293HV EPR reference: - Operator: Roadway Civil Engineering & Surfacing Ltd Waste Management licence No: 900110 Annual Tonnage: 75000.0 Issue Date: 12/12/2014 Effective Date: 12/12/2014 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1151	W	332152 356241	Site Address: Llay Depot, Llay Industrial Park, Wrexham, Llay, Wrexham, LL12 0PJ Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: NB3293HV EPR reference: - Operator: Roadway Civil Engineering & Surfacing Ltd Waste Management licence No: 900110 Annual Tonnage: 75000.0 Issue Date: 12/12/2014 Effective Date: 12/12/2014 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1153	E	334620 356235	Site Address: Ballswood Quarry, Gergin Lane, Llay, Nr Wrexham, LL12 0NU Type: Physical Treatment Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: DPW005 EPR reference: EA/EPR/JB3237WU/A001 Operator: D P Williams Holdings Limited Waste Management licence No: 104698 Annual Tonnage: 74999.0 Issue Date: 08/01/2013 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Ballswood Quarry Correspondence Address: -
Not shown	1153	E	334620 356235	Site Address: Inertia Recycling Limited, Ballswood Quarry, Gergin Lane, Nr Wrexham, LL12 0NU Type: Physical Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: JB3237WU EPR reference: - Operator: Inertia Recycling Limited Waste Management licence No: 104698 Issue Date: 05/11/2015 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: Ballswood Quarry Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details	
Annual Tonnage: 74999.0					
Not shown	1153	E	334620 356235	Site Address: Ballswood Quarry, Gergin Lane, Llay, Nr Wrexham, Wrexham, LL12 ONU Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: JB3237WU EPR reference: - Operator: Inertia Recycling Limited Waste Management licence No: 0 Annual Tonnage: 74999.0	Issue Date: 05/11/2015 Effective Date: 05/11/2015 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1153	E	334620 356235	Site Address: Ballswood Quarry, Gergin Lane, Llay, , Nr Wrexham, , LL12 ONU Type: Physical Treatment Facility Size: - Environmental Permitting Regulations (Waste) Licence Number: JB3237WU EPR reference: - Operator: Inertia Recycling Limited Waste Management licence No: 104698 Annual Tonnage: 74999.0	Issue Date: 05/11/2015 Effective Date: 05/11/2015 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1153	E	334620 356235	Site Address: Ballswood Quarry, Gergin Lane, Llay, Nr Wrexham, LL12 ONU Type: Physical Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: JB3237WU EPR reference: - Operator: - Waste Management licence No: 104698 Annual Tonnage: 74999.0	Issue Date: 05/11/2015 Effective Date: 05/11/2015 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1153	E	334620 356235	Site Address: Ballswood Quarry, Gergin Lane, Llay, Nr Wrexham, Wrexham, LL12 ONU Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: JB3237WU EPR reference: - Operator: Inertia Recycling Limited Waste Management licence No: 104698 Annual Tonnage: 74999.0	Issue Date: 05/11/2015 Effective Date: 05/11/2015 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1154	E	334621 356236	Site Address: Ballswood Quarry, Gergin Lane, Llay, Nr Wrexham, LL12 ONU Type: Physical Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: DPW005 EPR reference: JB3237WU/A001 Operator: D P Williams Holdings Limited Waste Management licence No: 104698 Annual Tonnage: 0.0	Issue Date: 08/01/2013 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Issued Site Name: Ballswood Quarry Correspondence Address: -
Not shown	1159	W	332141 356302	Site Address: Miners Road, Llay Industrial Estate, Llay, Wrexham Type: Physical Treatment Facility Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WRE001 EPR reference: - Operator: Wrexham County Borough Council Waste Management licence No: 37235 Annual Tonnage: 0.0	Issue Date: 09/05/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Wrexham Construction Services / Llay Correspondence Address: Ruthin Road Depot, Ruthin Road, Wrexham, Wrexham, LL13 7TU

ID	Distance (m)	Direction	NGR	Details
Not shown	1265	W	332036 356287	Site Address: 12, Miners Road, Llay Industrial Estate, Wrexham, Clwyd, LL12 0PJ Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: DAR003 EPR reference: RP3894FC/A001 Operator: Darby David Alan Waste Management licence No: 37239 Annual Tonnage: 9460.0 Issue Date: 04/09/2003 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Expired Site Name: P P S Skip Hire Correspondence Address: -
Not shown	1266	W	332035 356286	Site Address: P P S Skip Hire, Llay Industrial Estate, Wrexham, Wrexham, LL12 0PJ Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: RP3894FC EPR reference: - Operator: David Alan Darby Waste Management licence No: 0 Annual Tonnage: 0.0 Issue Date: 04/09/2003 Effective Date: 04/09/2003 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired Site Name: - Correspondence Address: -
Not shown	1266	W	332035 356286	Site Address: P P S Skip Hire, Llay Industrial Estate, Wrexham, Clwyd, LL12 0PJ Type: Household, Commercial & Industrial Waste T Stn Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: RP3894FC EPR reference: - Operator: - Waste Management licence No: 37239 Annual Tonnage: 0.0 Issue Date: 04/09/2003 Effective Date: 04/09/2003 Modified: - Surrendered Date: - Expiry Date: 08/05/2009 Cancelled Date: - Status: Expired Site Name: - Correspondence Address: -
Not shown	1266	W	332035 356286	Site Address: P P S Skip Hire, Llay Industrial Estate, , , Wrexham, Clwyd, LL12 0PJ Type: Household, Commercial & Industrial Waste T Stn Size: - Environmental Permitting Regulations (Waste) Licence Number: RP3894FC EPR reference: - Operator: David Alan Darby Waste Management licence No: 37239 Annual Tonnage: 0.0 Issue Date: 04/09/2003 Effective Date: 04/09/2003 Modified: - Surrendered Date: - Expiry Date: 08/05/2009 Cancelled Date: - Status: Expired Site Name: - Correspondence Address: -
Not shown	1266	W	332035 356286	Site Address: P P S Skip Hire, Llay Industrial Estate, Clwyd, Wrexham, Wrexham, LL12 0PJ Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: RP3894FC EPR reference: - Operator: David Alan Darby Waste Management licence No: 37239 Annual Tonnage: 0.0 Issue Date: 04/09/2003 Effective Date: 04/09/2003 Modified: - Surrendered Date: - Expiry Date: 08/05/2009 Cancelled Date: - Status: Expired Site Name: - Correspondence Address: -
Not shown	1399	S	333205 354845	Site Address: Alyn Waters Country Park, Llay, Wrexham, Clwyd, LL12 0PW Type: Use of waste in construction <100,000 tps Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: FOR097 EPR reference: QP3695VB/A001 Issue Date: 06/01/2011 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Issued Site Name: Foregolf Golf Course & Driving

ID	Distance (m)	Direction	NGR	Details	
Not shown	1400	S	333204 354844	Operator: Fore Golf Discount (Wrexham) Ltd Waste Management licence No: 102195 Annual Tonnage: 99999.0	Range Correspondence Address: -
				Site Address: Alyn Waters Country Park, Llay, Wrexham, Clwyd, LL12 0PW Type: Use of waste in construction <100,000 tps Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: FOR097 EPR reference: EA/EPR/QP3695VB/A001 Operator: Fore Golf Discount (Wrexham) Ltd Waste Management licence No: 102195 Annual Tonnage: 99999.0	Issue Date: 06/01/2011 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Foregolf Golf Course & Driving Range Correspondence Address: -
Not shown	1404	S	333219 354838	Site Address: Foregolf Golf Course & Driving Range, Llay, Wrexham, Wrexham, LL12 0PW Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: QP3695VB EPR reference: - Operator: Fore Golf Discount (Wrexham) Ltd Waste Management licence No: 0 Annual Tonnage: 99999.0	Issue Date: 06/01/2011 Effective Date: 06/01/2011 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
				Site Address: Foregolf Golf Course & Driving Range, Llay, Wrexham, Clwyd, LL12 0PW Type: Use of waste in construction <100,000 tps Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: QP3695VB EPR reference: - Operator: - Waste Management licence No: 102195 Annual Tonnage: 99999.0	Issue Date: 06/01/2011 Effective Date: 06/01/2011 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1404	S	333219 354838	Site Address: Foregolf Golf Course & Driving Range, Llay, , , Wrexham, Clwyd, LL12 0PW Type: Use of waste in construction <100,000 tps Size: - Environmental Permitting Regulations (Waste) Licence Number: QP3695VB EPR reference: - Operator: Fore Golf Discount (Wrexham) Ltd Waste Management licence No: 102195 Annual Tonnage: 99999.0	Issue Date: 06/01/2011 Effective Date: 06/01/2011 Modified: - Surrendered Date: 06/09/2017 Expiry Date: - Cancelled Date: - Status: Surrender Site Name: - Correspondence Address: -
				Site Address: Foregolf Golf Course & Driving Range, Llay, Clwyd, Wrexham, Wrexham, LL12 0PW Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: QP3695VB EPR reference: - Operator: Fore Golf Discount (Wrexham) Ltd Waste Management licence No: 102195 Annual Tonnage: 99999.0	Issue Date: 06/01/2011 Effective Date: 06/01/2011 Modified: - Surrendered Date: 06/09/2017 Expiry Date: - Cancelled Date: - Status: Surrender Site Name: - Correspondence Address: -

4. Current Land Use Map



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4. Current Land Uses

4.1 Current Industrial Data

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

3

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	124	SW	Electricity Sub Station	333363 356123	Clwyd, LL12	Electrical Features	Infrastructure and Facilities
2	201	W	Magellan Aerospace	333113 356394	Rackery Lane, Llay, Wrexham, Clwyd, LL12 OPB	Aeroplanes	Industrial Products
3	230	W	Electricity Sub Station	333073 356279	Clwyd, LL12	Electrical 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	206	SE	333539 356049	OBSOLETE	B5373, Llay, Wrexham, Wrexham, LL12 ONW	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

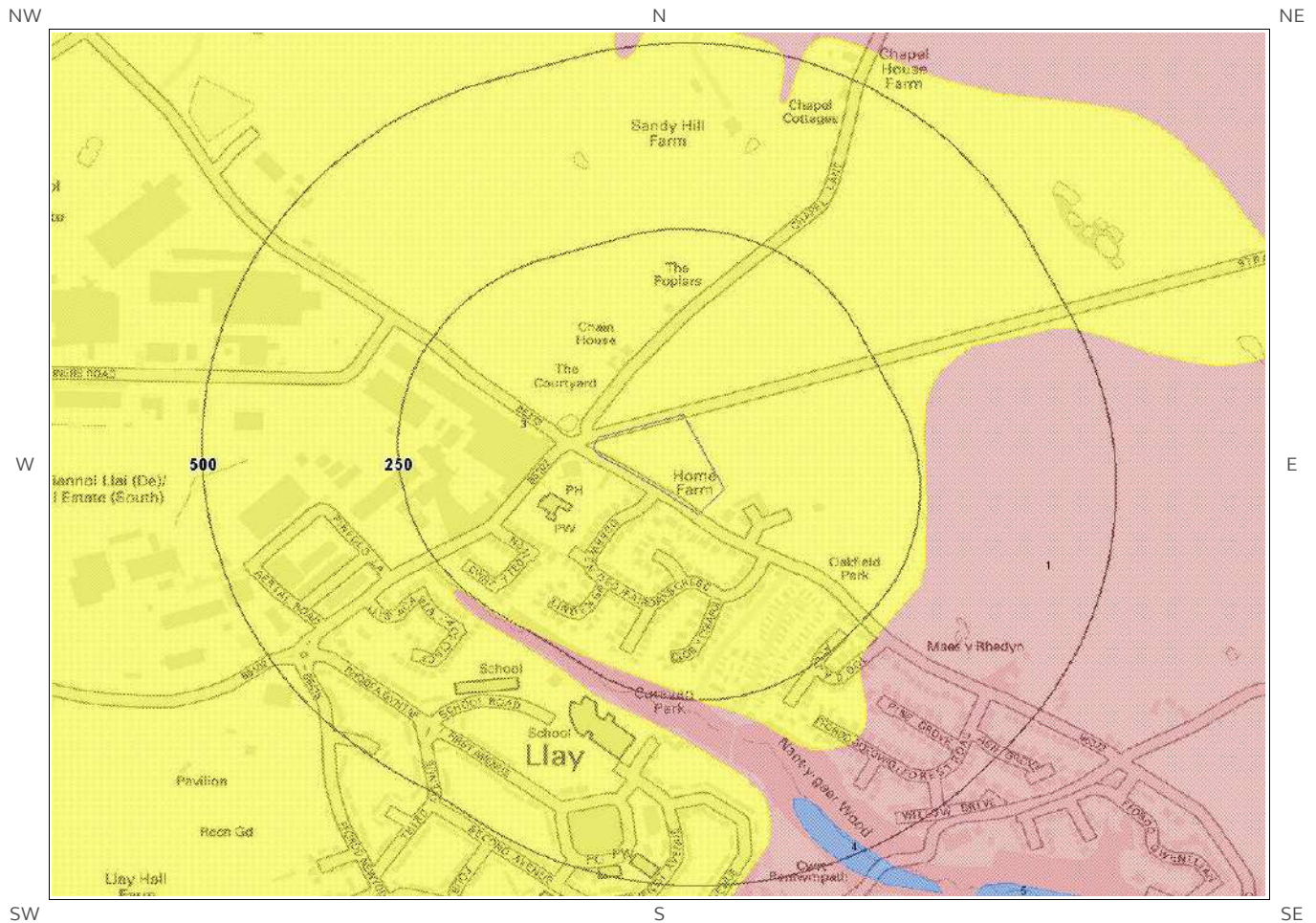
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
SAL-MDSC	SALOP FORMATION	MUDSTONE, SANDSTONE AND CONGLOMERATE

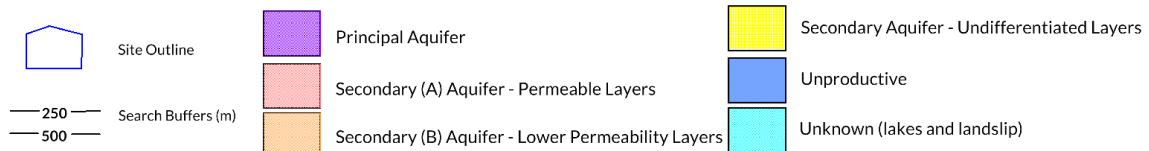
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

6a. Aquifer Within Superficial Geology



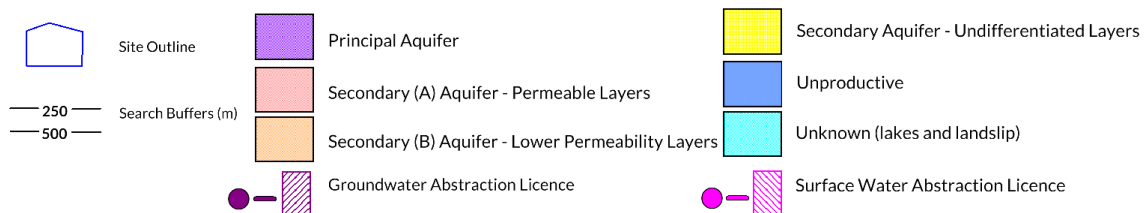
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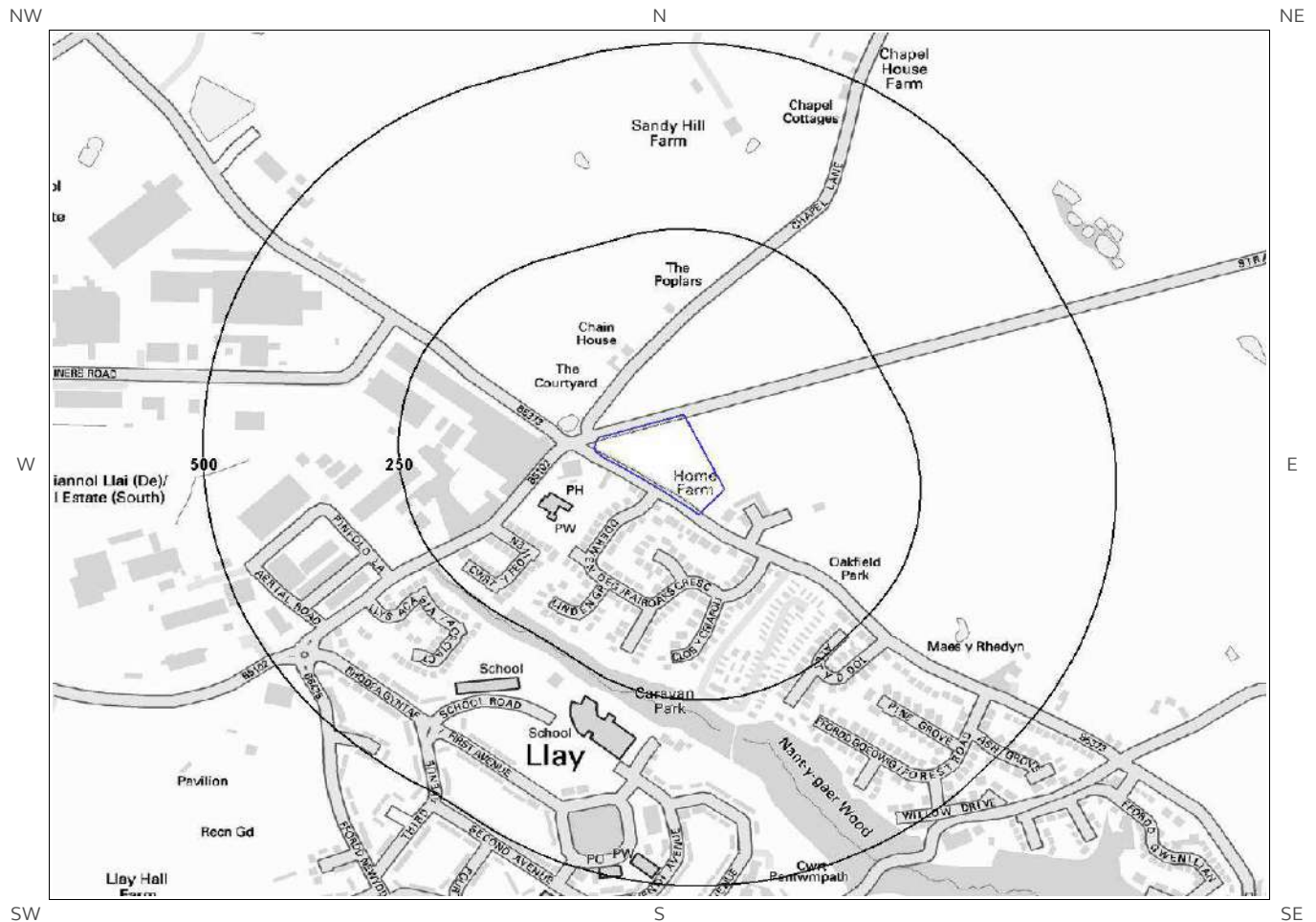
6b. Aquifer Within Bedrock Geology and Abstraction Licences



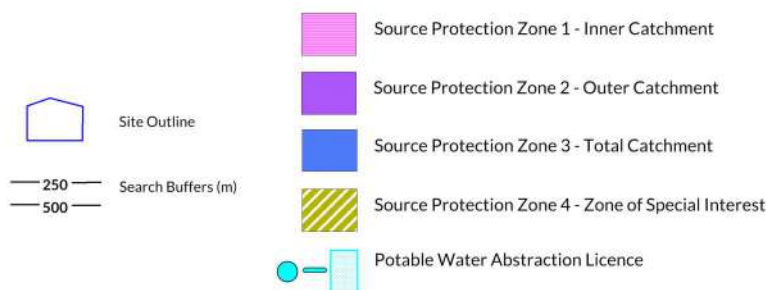
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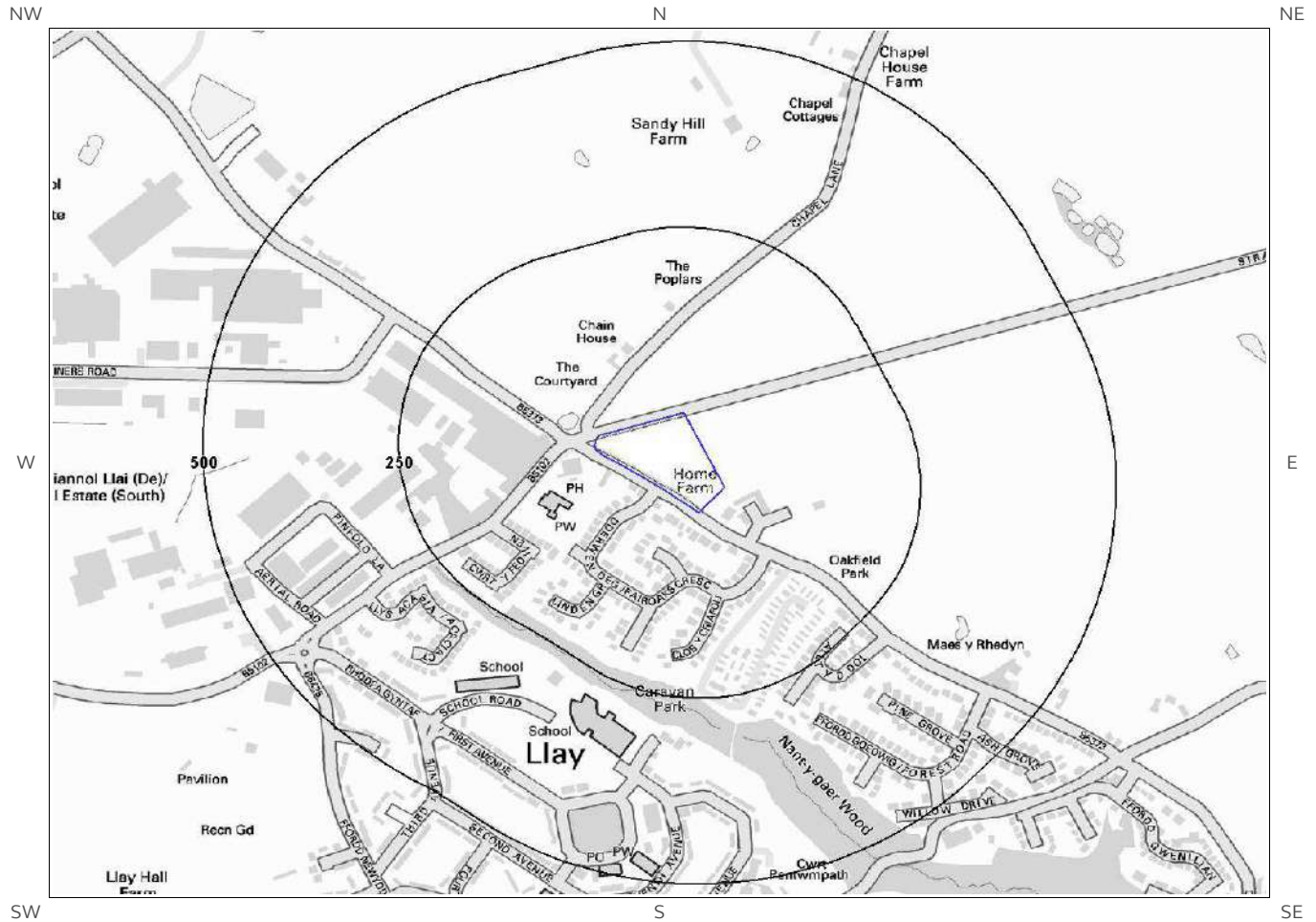
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



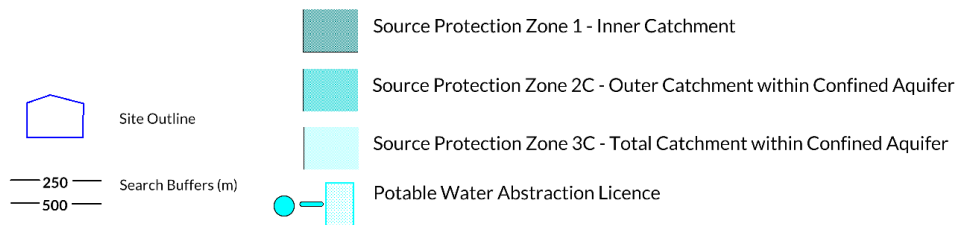
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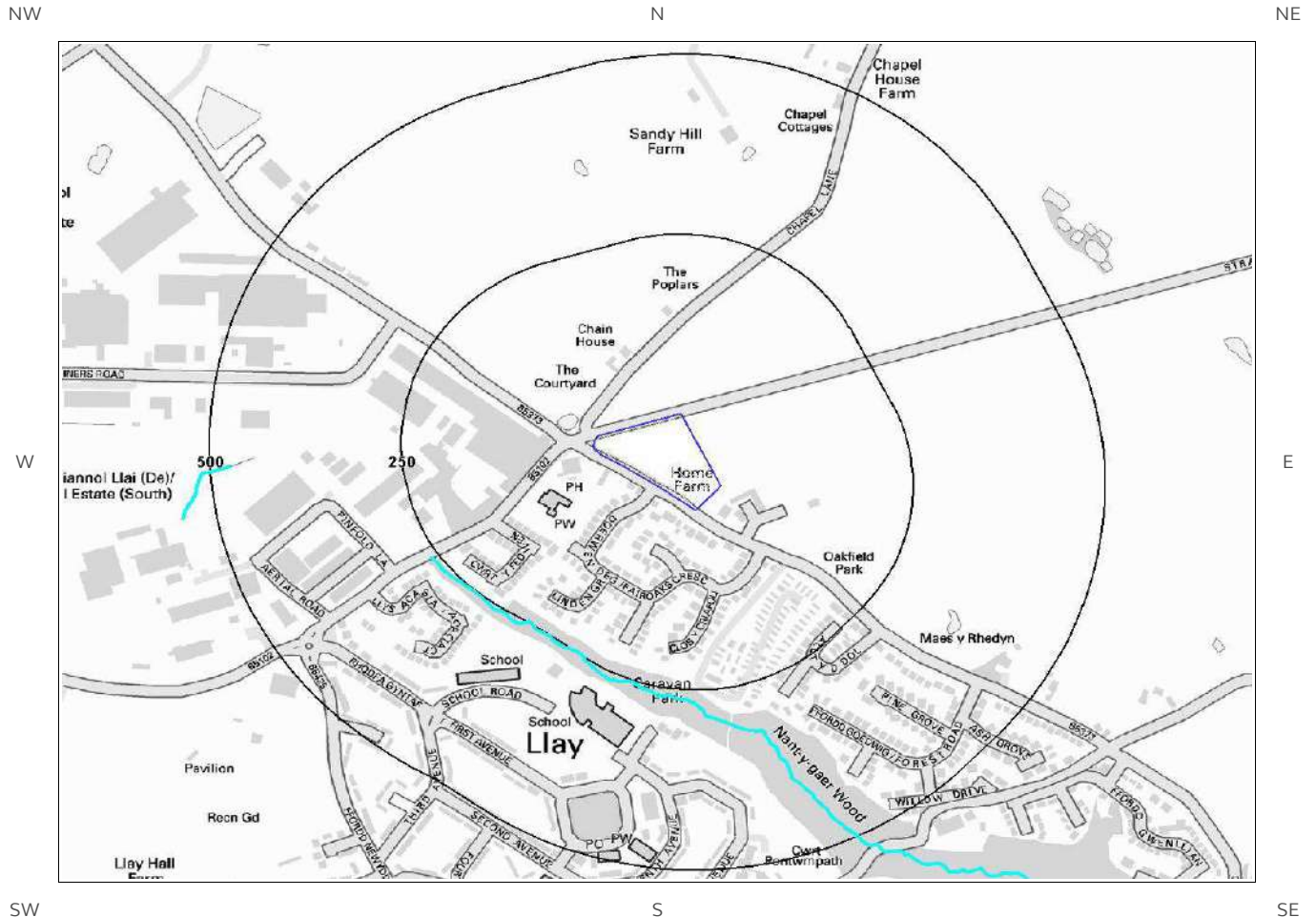
6d. Hydrogeology – Source Protection Zones within confined aquifer



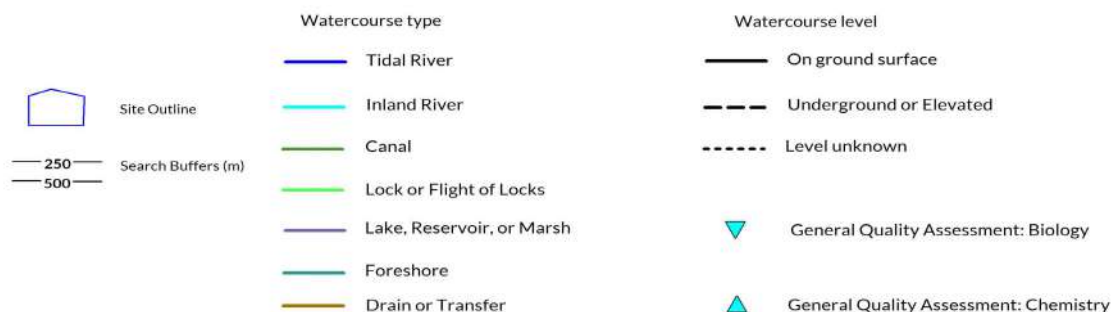
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6e. Hydrology – Watercourse Network and River Quality



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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
3	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
1	230	S	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	401	S	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

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
2	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

6.3 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	1489	NE	334500 357380	Status: Historical Licence No: 24/67/9/0146 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: BOREHOLE Data Type: Point Name: Lister Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 07/10/1974 Expiry Date: - Issue No: 100 Version Start Date: 07/10/1974 Version End Date:
Not shown	1753	NE	334520 357720	Status: Historical Licence No: 24/67/9/0065 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: BOREHOLE Data Type: Point Name: Walton Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: 25/10/1966 Expiry Date: - Issue No: 100 Version Start Date: 25/10/1966 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	1329	SE	334480 355400	Status: Historical Licence No: 24/67/8/0052 Details: Mineral Washing Direct Source: EAW Surface Water Point: RIVER ALYN Data Type: Point Name: Tarmac Limited Annual Volume (m³): 166929 Max Daily Volume (m³): 545.52 Application No: - Original Start Date: 14/06/1968 Expiry Date: - Issue No: 102 Version Start Date: 01/01/2008 Version End Date:
Not shown	1499	E	334961 356380	Status: Historical Licence No: WA/067/0008/007 Details: Mineral Washing Direct Source: EAW Surface Water Point: LAGOON AT BALLSWOOD QUARRY Data Type: Point Name: DP Williams Holdings Ltd Annual Volume (m³): 3800 Max Daily Volume (m³): 138 Application No: - Original Start Date: 26/06/2015 Expiry Date: 31/03/2017 Issue No: 1 Version Start Date: 26/06/2015 Version End Date:
Not shown	1539	E	335000 356400	Status: Historical Licence No: 24/67/8/0108 Details: Mineral Washing Direct Source: EAW Surface Water Point: LAGOON AT BALLSWOOD QUARRY WREXHAM Data Type: Point Name: DP Williams Holdings Ltd Annual Volume (m³): 3800 Max Daily Volume (m³): 138 Application No: - Original Start Date: 30/06/2006 Expiry Date: 31/03/2015 Issue No: 2 Version Start Date: 03/10/2012 Version End Date:
Not	1845	E	335530	Status: Historical Annual Volume (m³): 6164.38

ID	Distance (m)	Direction	NGR	Details
shown			356760	Licence No: 24/67/8/0086 Details: Spray Irrigation - Direct Direct Source: EAW Surface Water Point: RIVER ALYN Data Type: Line Name: H E Jones And Son Max Daily Volume (m³): 272.76 Application No: - Original Start Date: 16/06/1980 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2007 Version End Date:

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

None identified

Database searched and no data found.

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

None identified

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

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

None identified

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

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

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

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
0	On Site	Minor Aquifer/Low Leaching Potential	L	Soils in which pollutants are unlikely to penetrate the soil layer because either water movement is largely horizontal, or they have the ability to attenuate diffuse pollutants.
346	SE	Minor Aquifer/High Leaching Potential	H2	Deep, permeable, coarse textured soils which readily transmit a wide range of pollutants because of their rapid drainage and low attenuation potential.

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	1281	SE	334200 355200	River Name: Alyn / Alun Reach: Rosset Weir - Gresford Lodge End/Start of Stretch: Start of Stretch NGR	C	C	C	C	C
Not shown	1281	SE	334200 355200	River Name: Alyn / Alun Reach: Gresford - Conf. Cegidog End/Start of Stretch: End of Stretch NGR	B	B	B	B	B

Chemical quality data is based on the General Quality Assessment Headline Indicators scheme (GQAHl). 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	1281	SE	334200 355200	River Name: Alyn Reach: Gresford - Conf. Cegidog End/Start of Stretch: End of Stretch NGR	A	A	B	B	-
Not shown	1281	SE	334200 355200	River Name: Alyn Reach: Rosset Weir - Gresford Lodge End/Start of Stretch: Start of Stretch NGR	A	B	B	B	-

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	248 SW	-	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
5	248 SW	-	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	473 W	-	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	473 W	-	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

6.11 Surface Water Features

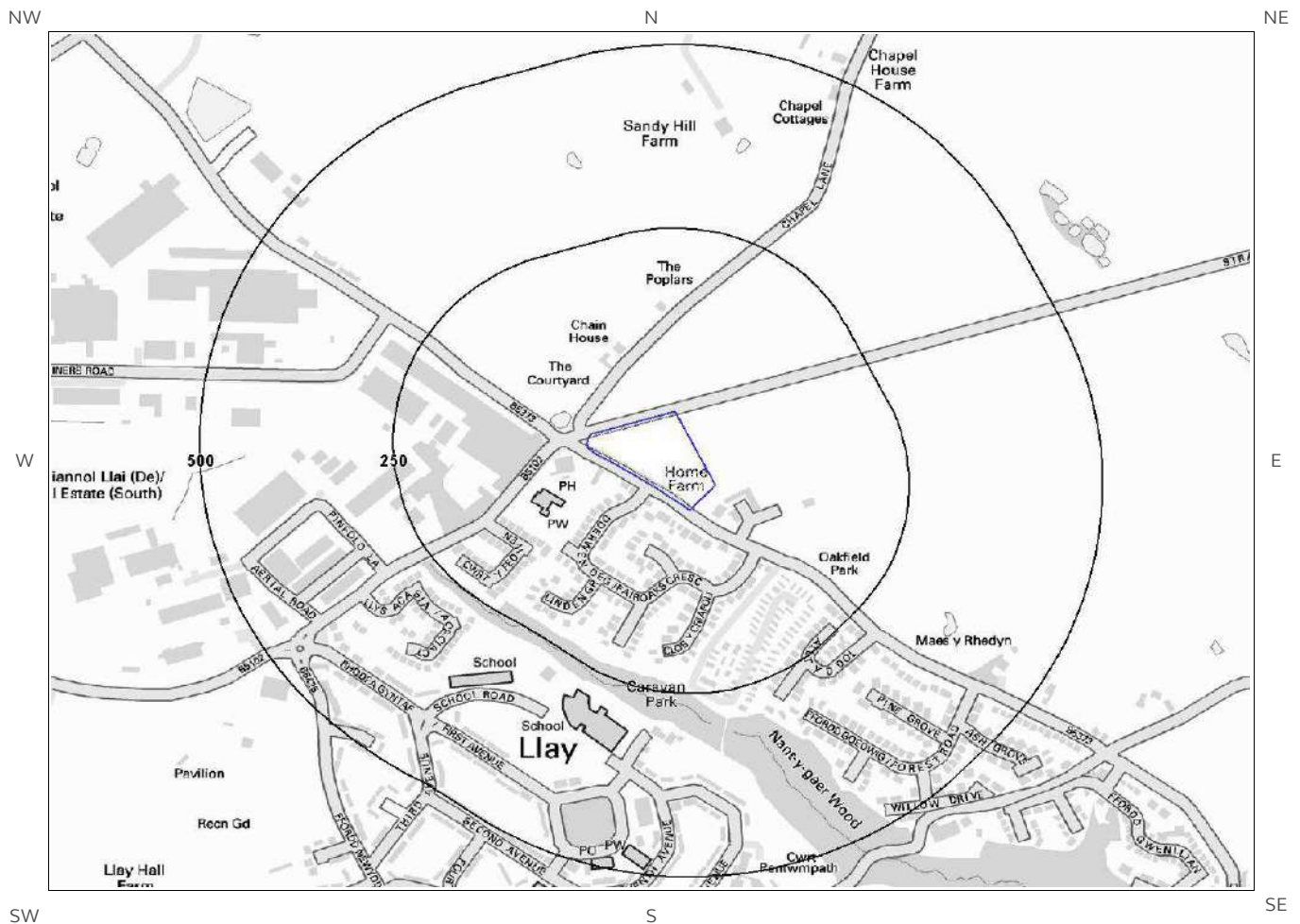
Surface water features within 250m of the study site

Identified

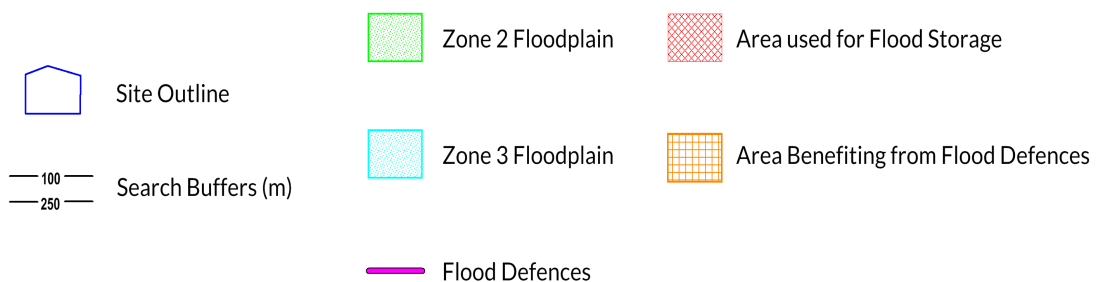
The following surface water records are not represented on mapping:

Distance (m)	Direction
248	SW

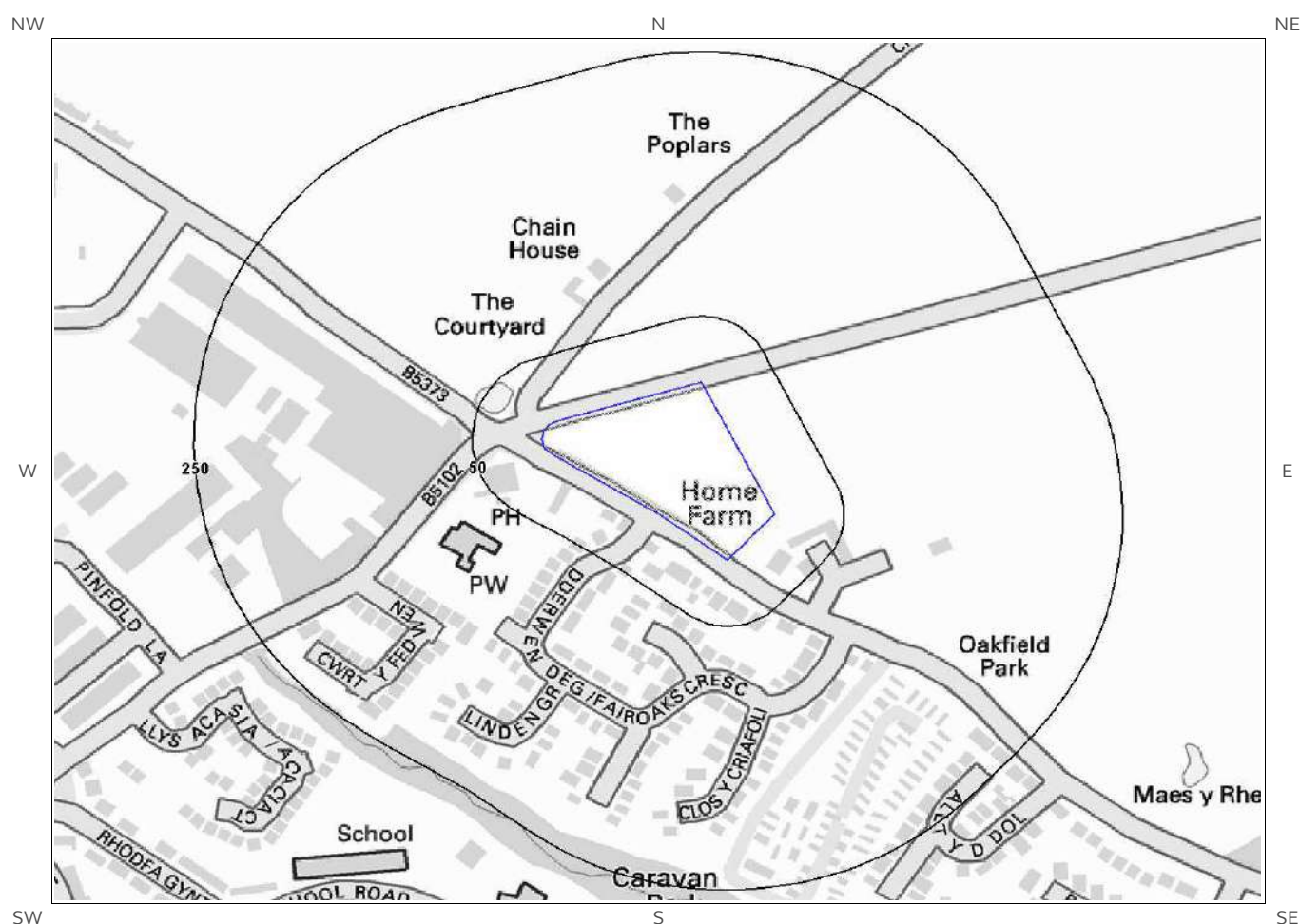
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



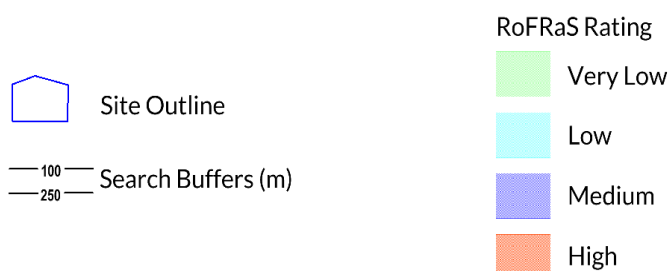
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7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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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

Limited potential

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

7.8 Groundwater Flooding Confidence Areas

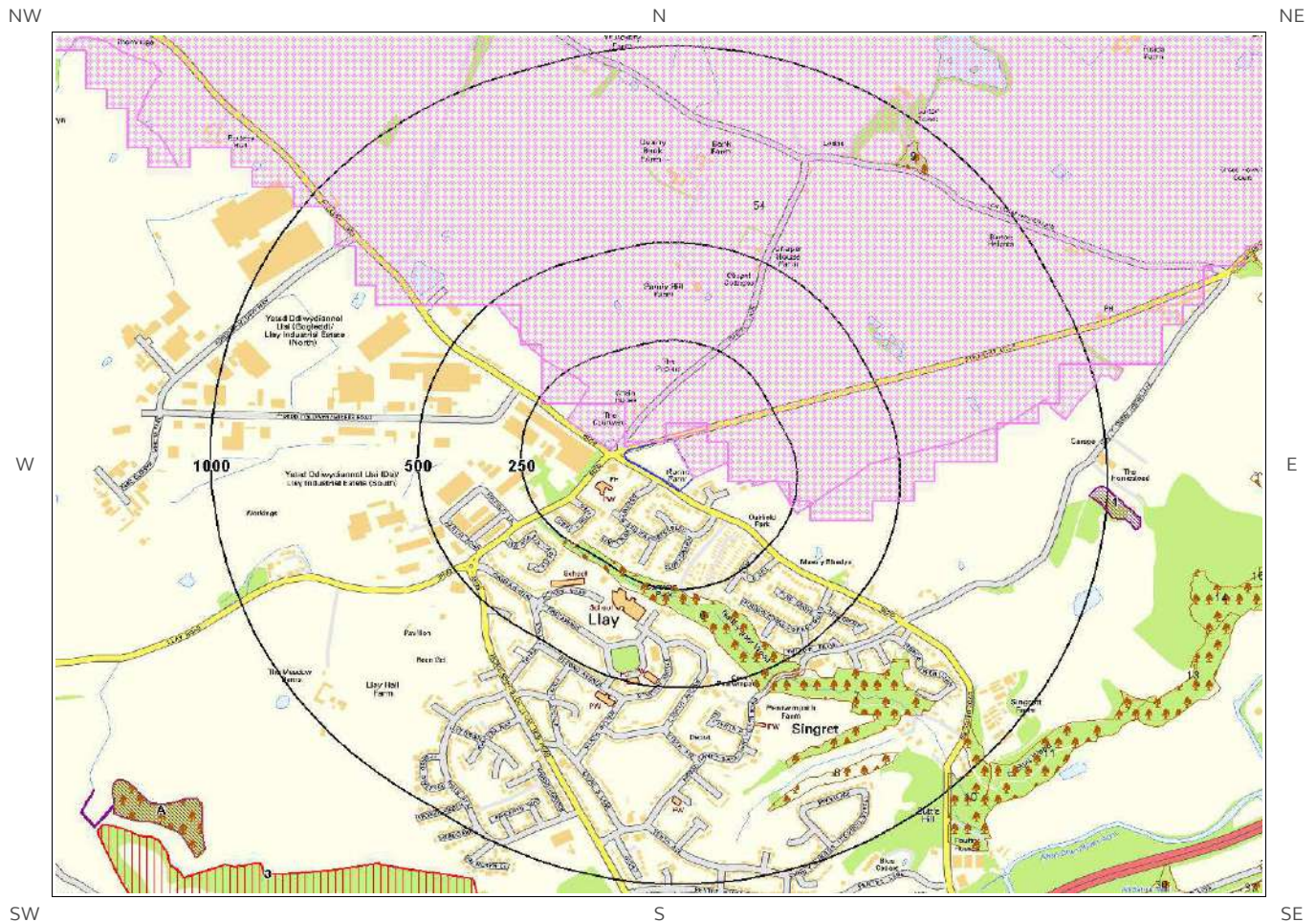
British Geological Survey confidence rating in this result

High

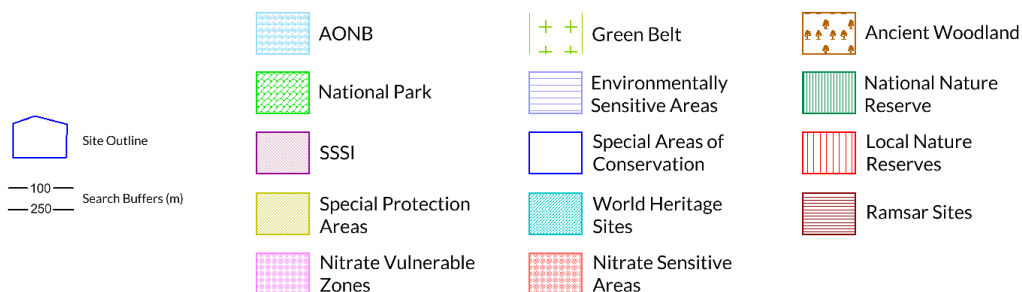
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

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
1	957	E	CHWAREL SINGRET	Natural Resources Wales
2A	1350	SW	LLAY BOG	Natural Resources Wales

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

46

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
6	232	SW	UNKNOWN	Ancient and Semi-Natural Woodland
7	529	SE	UNKNOWN	Ancient and Semi-Natural Woodland
8	792	SE	UNKNOWN	Ancient and Semi-Natural Woodland
9	880	NE	UNKNOWN	Ancient and Semi-Natural Woodland
10	908	SE	UNKNOWN	Restored Ancient Woodland Site
11	1019	SE	UNKNOWN	Restored Ancient Woodland Site
12	1163	SE	UNKNOWN	Restored Ancient Woodland Site
13	1222	SE	UNKNOWN	Ancient and Semi-Natural Woodland
14	1229	E	UNKNOWN	Restored Ancient Woodland Site
Not shown	1250	S	UNKNOWN	Restored Ancient Woodland Site
16	1345	E	UNKNOWN	Ancient and Semi-Natural Woodland
17	1346	E	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1347	S	UNKNOWN	Ancient and Semi-Natural Woodland
19A	1350	SW	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1370	S	UNKNOWN	Restored Ancient Woodland Site
Not shown	1376	S	UNKNOWN	Restored Ancient Woodland Site
Not shown	1386	N	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1394	SE	UNKNOWN	Restored Ancient Woodland Site
24	1395	E	UNKNOWN	Ancient and Semi-Natural Woodland
25	1402	E	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1418	SE	UNKNOWN	Restored Ancient Woodland Site
Not shown	1444	SE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1446	NE	UNKNOWN	Restored Ancient Woodland Site
Not shown	1450	S	UNKNOWN	Ancient and Semi-Natural Woodland
30	1458	SE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1466	SE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1485	SE	UNKNOWN	Restored Ancient Woodland Site

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
Not shown	1486	E	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1590	E	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1600	SE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1642	SW	UNKNOWN	Ancient and Semi-Natural Woodland
37	1659	SE	UNKNOWN	Ancient and Semi-Natural Woodland
38	1692	SE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1694	S	UNKNOWN	Restored Ancient Woodland Site
Not shown	1765	SE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1788	S	UNKNOWN	Restored Ancient Woodland Site
Not shown	1823	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1860	W	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1866	W	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1880	E	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1897	SE	UNKNOWN	Ancient Replanted Woodland
Not shown	1963	W	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1965	NW	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1965	E	UNKNOWN	Restored Ancient Woodland Site
Not shown	1968	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1999	S	UNKNOWN	Ancient and Semi-Natural Woodland

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

1

The following Local Nature Reserve (LNR) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	LNR Name	Data Source
3	1106	SW	ALYN WATERS	Natural Resources Wales

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

2

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

ID	Distance (m)	Direction	NVZ Name	Data Source
4	0	On Site	New	NRW
5	0	On Site	Existing	DEFRA

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

Database searched and no data found.

0

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

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

9.1.1 Shrink Swell

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

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

Hazard
Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

9.1.3 Soluble Rocks

Maximum Soluble Rocks* hazard rating identified on the study site 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 not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

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

9.2.2 Radon Protection

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

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

Identified

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

Distance (m)	Direction	Details
0	On Site	The study site is located within the specified search distance of an identified mining area. Further details concerning this can be obtained from the Coal Authority Helpline on 0845 762 6848.

10.2 Non-Coal Mining

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

None identified

Database searched and no data found.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site

None identified

Guidance: No Guidance Required.

Contact Details

Brownfield Solutions LTD

Telephone: 01606 334844
info@brownfield-solutions.co.uk
Brownfield Solutions Limited - Head Office
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Fax: 0115 936 3276.
Email:

Web: www.bgs.ac.uk

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



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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

Gemapping PLC
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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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<https://www.groundsure.com/terms-and-conditions-feb11-2019>

APPENDIX F

UXO Screening Map

REGIONAL UNEXPLODED BOMB RISK

ISLE OF ANGLESEY

DENSITY OF BOMBS PER BOROUGH			
Borough	High explosive	Anti-personnel	Incendiary
Holyhead	24	0	0
Rhyl	2	0	0
Prestatyn	3	0	0
Flint	53	0	0
Porthmadog	0	0	0

OTHER WWII TARGETS

- military
- transport
- utilities
- industry
- docks
- other

BOMB TONNAGE

- >1000
- >500
- >100
- > 0
- unverified

BOMB RISK

- high
- moderate
- low



The information in this regional UXB risk map is derived from a number of sources and should be read in conjunction with the "Users' Guide" (printed overleaf). Zetica cannot guarantee the accuracy or completeness of the information or data.

This map covers regions of coast with beaches, estuaries and alike. Further consideration of the bomb risk is required in these areas. The often inaccessible nature and changing ground conditions (e.g. movement of silt that may contain ordnance) means that historical bombing records for these areas are often poor or inaccurate and further assessment of the bomb risk may be required as part of a site specific study.

A FOUR-STEP PROCESS



Risk assessment and method statement from a qualified explosive ordnance clearance (EOC) operative.



Surface geophysical survey to allow shallow groundwork.



MAGCONE detects UXBs and obstructions on piling layout to the no-risk depth.



Detected UXBs can be dealt with by our EOC engineers and a Clearance Certificate issued for the site.



For more details on this and related services, telephone: +44 (0) 1993 886682 or visit our website: www.zetica.com

BOMB MAP USERS' GUIDE

Sources of information and explanation of bomb risk

Why?

Unexploded bombs (UXB) still present a risk to construction projects long after the end of the Second World War (WWII). UXBs often entered the ground unnoticed at high velocity and penetrated to a depth of several metres. Here they remain – vulnerable to disturbances from construction work. Beyond the depth of shallow excavation work, the greatest risk is to piling, drilling and probing crews. A piling rig could repeatedly hit a UXBs with considerable force before the crew realises an obstruction has been impacted. It could then be up to 72 hours before the detonator activates.

Who?

The responsibility for avoiding UXB risk usually lies with construction companies or house builders particularly those who are redeveloping urban sites. In addition, project engineering or environmental consultants are expected to advise their clients of a site's history. Other interested parties include those organisations whose employees are physically at most risk from intrusive works, normally piling companies, drillers or probing operators.

How?

UXB risk should be assessed for every site, but especially those in known heavily bombed areas or those situated near war-time strategic installations that were priority targets for enemy aircraft, for example, airfields. Zetica's regional bomb risk map is therefore a first point of reference from which the relative, potential abundance of UXBs can be judged. Consultants then advise their clients that an ordnance-risk desk study is required, which they may obtain from external sources. Construction companies or house builders who assess their own risk could choose to come direct to Zetica.

When?

Do not wait for the piling or drilling company to be on site before thinking about UXB risk – it will inevitably cause delays and higher costs. Request the regional bomb risk map from Zetica as soon as a site is being considered, and then use it to help you or your clients to decide if an ordnance-risk desk study is required.

Where?

Maps can be obtained for any county in England, Scotland, Wales or Northern Ireland – or for any London borough. They can help determine the areas that were most heavily bombed – but no part of the country should be considered 100% safe from UXB risk. Even remote rural areas can have a high risk if, for example, they were locations for decoy airfields or beacons that were lit to fool enemy pilots into thinking they had located a burning city that had been successfully hit by others in the raid.

How to use this regional map

This map is designed to give you an indication of the potential risk from UXBs in your area. If you are conducting work that involves excavation, piling or other disturbance of the ground, then you should use the map to identify the category of risk for your site.

The risk boundaries are a guide, compiled from data based on the political areas for which records are held; being just outside a high-risk area does not mean there is no UXB risk. You should use the map to assist in your decision of whether to investigate the UXB risk further.

Information on the regional risk remaining from UXBs in the UK

Zetica has built the largest UXB database of its kind in the UK. It includes a unique digital library of bomb census data, and maps showing key strategic points and bombing densities from the First and Second World Wars. The main sources of information include records from central government (Public Records Office), the Ministry of Defence, and the German Luftwaffe.

Using information from this database, Zetica has published maps of UXB risk on a regional, county and borough scale. The maps indicate relative degrees of UXB risk based on available records for bombing densities and known targeted areas for regions within the UK. The risk is broken down into individual boroughs, towns or cities. The data are based on the historical boroughs and are then overlaid onto the modern map. It is important to note that more-detailed research may be required for individual sites, particularly where proximity to a potential WWII target means the local risk may be higher.

High risk

Areas designated as high risk are those that show a high density of bombing hits (50+ bombs per 1000 acres) and abundant potential WWII targets. In high-risk regions, further action to mitigate UXB risk is considered essential.

Moderate risk

Moderate-risk regions are those that show a bomb density of between 11 and 50 bombs per 1000 acres and that may contain potential WWII targets. Action to mitigate the risk is considered essential, albeit more likely that a reduced scope of work is required compared with that needed for high-risk regions.

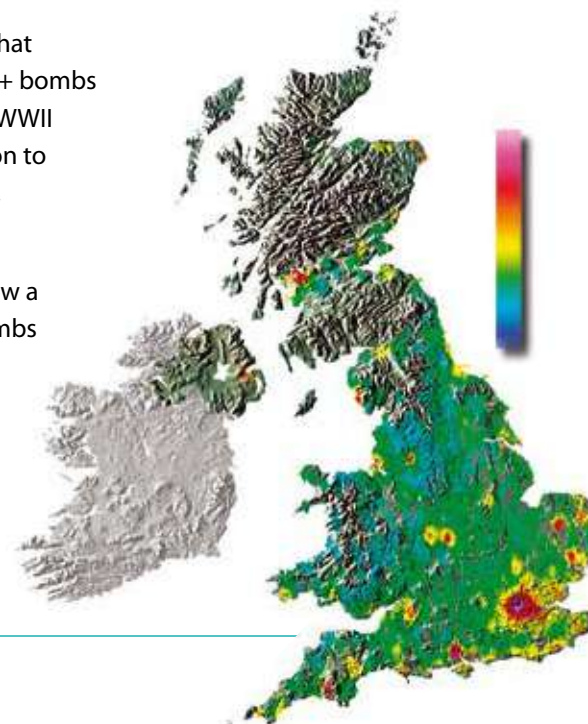
Low risk

Low-risk regions are those with a bombing density of up to 10 bombs per 1000 acres. These areas are considered to have a significant but low UXB risk. In general, further action to mitigate the risk is considered prudent, although not essential. Care is required when assessing the risk for specific sites where the risk may be higher because of local wartime activity.

Other WWII targets

Other regions with the risk of UXBs are key strategic points as defined by the government during WWII as representing potential enemy targets. Where these exist outside areas mapped as high, moderate or low risk, a site-specific assessment of the UXB risk may be required.

Relative UXB risk across UK



What to do if...

...you have a site that has a potential UXB risk

In the absence of current legislation requiring you to address the risk from UXBs, your responsibilities under health and safety legislation and regulations such as construction design and management require that you address all identified risks. The first stage is to request further advice from a professional adviser such as Zetica, or to gain more site-specific information by commissioning an ordnance-risk desk study. Then a strategy to deal with the risk can be established that is tailored to your proposed work.

...you find a suspect item or require advice

If during site works you find a suspect (ordnance-related) item, it is very important that you do not touch or move it (even if it has already been moved by an excavator). If it is clearly ordnance related, then dial 999 and ask for the police. Ensure that the area around the item is kept as clear as possible without placing yourself at risk. If you are unsure and do not wish to cause undue alarm, or you just require some advice, then you can call Zetica. We have experienced qualified UXB specialists on hand who can offer support and advice during any site works.

More-detailed procedures should be established in advance if you are in an area where the risk of finding a UXB is shown to be significant (moderate to high).

Site-specific desktop studies

Zetica is able to provide high-quality, site-specific UXB risk information for any residential, industrial or commercial property in the UK. These desktop studies provide details of the bombing density within an area and for the site itself, in order to indicate the risks of UXBs still being present. A risk assessment is provided to facilitate informed decision making on whether any further risk mitigation measures are required.



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