

Caulmert Limited

Engineering, Environmental & Planning
Consultancy Services

Bridge Road North, Wrexham

JCP Investments Limited

Proposed Storage And Distribution Unit

Phase 1 and 2 Contaminated Land Assessment

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Document Reference: 5125-CAU-XX-XX-RP-V-0300.A0.C2

June 2023



APPROVAL RECORD

Site: Bridge Road North, Wrexham

Client: JCP Investments Limited

Project Title: Proposed Storage And Distribution Unit

Document Title: Phase 1 and 2 Contaminated Land Assessment

Document Ref: 5125-CAU-XX-XX-RP-V-0300.A0.C2

Report Status: Final

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Approved	Sean O'Brien Principal Environmental Scientist	Date	13/09/2022

Revision Log			
Revision	Description of Change	Approved	Effective Date
C1	Initial Release	SO	13/09/2022
C2	Site layout amendment	SO	31/05/2023

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Phase 1 and 2 Contaminated Land Assessment**TABLE OF CONTENTS**

1.0	INTRODUCTION	1
1.1	Details of Commission	1
1.2	Objectives of the Report	1
1.3	Limitations of this Study	1
1.4	Sources of Information	2
2.0	SITE LOCATION AND DESCRIPTION	3
2.1	Site Setting	3
2.2	Proposed Development	3
2.3	Site History	4
2.4	Site Walkover Survey	5
3.0	ENVIRONMENTAL INFORMATION.....	8
3.1	Environmental Setting	8
3.2	Unexploded Ordinance	13
4.0	PRELIMINARY RISK ASSESSMENT.....	15
4.1	Introduction	15
4.2	Conceptual Site Model.....	15
5.0	PHASE 1 CONCLUSIONS.....	17
5.1	Summary	17
5.2	Recommendations for Further Investigation- Phase 2.....	17
6.0	PHASE 2 INVESTIGATION	18
6.2	Ground Investigation – Sampling Strategy	18
6.3	Chemical Analysis Strategy	19
7.0	GROUND INVESTIGATION.....	20
7.1	Preliminaries	20
7.2	Limitations	20
7.3	Field Observations	20
7.4	Chemical Analysis Data	22
8.0	REVISED CONCEPTUAL MODEL AND QUALITATIVE RISK ASSESSMENT.....	27
8.1	Conceptual Model.....	27
8.2	Risks to Human Health.....	28
8.3	Risks to Controlled Waters	28
8.4	Risks to Construction Workers.....	28
9.0	CONCLUSIONS AND RECOMMENDATIONS.....	30

DRAWINGS

2002.P.001 - SITE LOCATION PLAN

2002.P.003(A) - PROPOSED SITE PLAN

APPENDICES

Appendix 1 Groundsure Reports

Appendix 2 Site Investigation Photographic Log

Appendix 3 Trial Pit Logs

Appendix 4 Lab Report Certificate

1.0 INTRODUCTION

1.1 Details of Commission

- 1.1.1 Caulmert Limited (Caulmert) have been appointed by JCP Investments Limited (the Client) to undertake a Phase 1 Geo-Environmental Site Assessment and Phase 2 Assessment in relation to the proposed development of a storage and distribution unit and associated works at Bridge Road North, Wrexham Industrial Estate.
- 1.1.2 The Client proposes the development of one freestanding storage and distribution unit (Class B8) on land at Bridge Road North, Wrexham Industrial Estate, Wrexham. The site location and proposed layout are shown on the drawings included.

1.2 Objectives of the Report

- 1.2.1 The objective of this report is to provide a preliminary assessment of the potential risks posed by the ground conditions at the site to the proposed development. The report represents a combined Phase 1 (desk Study) and Phase 2 (site investigation) in line with current planning requirements.
- 1.2.2 The report follows the scope and principles presented in Development of Land Affected by Contamination, by the Welsh Government and NRW for the assessment of contaminated land. The following guidance and legislation apply to this document:
- Part IIA of the Environment Protection Act, 1990;
 - Contaminated Land (Wales) (Amendment) Regulations 2012 and
 - Contaminated Land Statutory Guidance (Welsh Government, April 2012);
 - Land contamination risk management (LCRM) EA 2021
 - Environment Agency- Groundwater protection formerly Groundwater Protection: Principles and practise -GP3,
 - BS 5930: 2015: "Code of practice for site investigations";
 - BS 10175: 2011 +A1:2013 "Investigation of Potentially Contaminated Sites- Code of Practice";

1.3 Limitations of this Study

- 1.3.1 The report is solely for the use of the Client and should not be relied upon by third parties without prior written consent from Caulmert. Information used within this report has been gathered from data sets compiled by third party organisations and purchased on behalf of the client. The validity and accuracy of this third-party information is outside the control of Caulmert.
- 1.3.2 Interpretation and recommendations contained within this report should not be assumed valid for adjacent areas of land or for alternative land uses and are based upon the proposed requirements of the development provided to Caulmert at the time of compiling this report.

1.4 Sources of Information

1.4.1 A number of sources of information were used to support this report, these include:

- A site-specific environmental and geological report provided by Groundsure (Appendix 1);
- The British Geological Survey (BGS) online borehole database; and
- Publicly available information hosted by GOV.UK on DEFRA and Environment Agency pages.

2.0 SITE LOCATION AND DESCRIPTION

2.1 Site Setting

- 2.1.1 The site is set within the Wrexham Industrial Estate and is bounded by industrial/warehouse units occupied by Demon Tweeks Ltd, Isringhausen Ltd and Coolpoint Ltd. to the North, East and South West respectively, and by Bridge Road North to the south.
- 2.1.2 The surrounding area comprises of buildings, offices of similar use with some residential properties to the south-western part of the Wrexham Industrial Estate. Wrexham Town Centre is located approximately 5.7km to the west of Wrexham Industrial Estate and is served by two main railway stations; Wrexham Central and Wrexham General. There are direct routes to a number of surrounding cities/towns including Chester and Liverpool to the north, Crewe and Stoke-on-Trent to the east and Shrewsbury to the south. Wrexham Industrial Estate benefits from direct access to the A543 (Wrexham Road).
- 2.1.3 The location of the site is shown in Figure 1 below.



Figure 2: Site Location of Bridge Road North proposed development

2.2 Proposed Development

- 2.2.1 The proposed development involves the erection of a storage and distribution unit (Use Class B8) including the construction of car parking and servicing areas and associated landscaping.

- 2.2.2 The wider Wrexham industrial Estate has been developed on the former Cordite works (munitions factory). There is a generic requirement to undertake a contaminated land assessment for any new development on a non-greenfield site. This was therefore carried out for the proposed development at Bridge Road North, with the addition of an unexploded ordinance survey and explosives testing.

2.3 Site History

- 2.3.1 In compiling the risk assessment, the most recent environmental data provided by Groundsure was reviewed. A summary of the historical uses on and off-site, including potentially contaminative past uses is presented in Table 2.1 and Table 2.2 below.

Table 2.1: On-site History

Potentially Contaminative Past Uses		
Current Land Use Coolpoint Ltd is situated adjacent to the designated site boundary. The site itself comprises a grassed area with a number of trees to the north of Coolpoint.		
Surrounding Area Area situated within Wrexham Industrial Park, 2.5miles from the centre of Wrexham. Current estate covers 550 hectares of land with over 300 businesses. North: Industrial units including Demon Tweaks Ltd and UberKids (c.20m). East: Isringhausen Ltd industrial unit(c.30m), hedge row (eastern boundary line) under which a power cable was detected (not live). South: Bridge Road North (directly adjacent), Proserve Industrial Ltd industrial unit (c.40m) West: Cable Services Group industrial unit (c.15m) and Ash Road South (c.115m)		
Site History Description	Map Date	
	From	To
Site is shown within an open agricultural pastureland area with a road running through the site, north to south	1872	1938
Wrexham Royal Ordnance Factory construction started in 1939, with operations ceasing in 1945. Not shown on contemporary OS maps.	-	-
Wrexham Industrial Estate established. Development of road network (now Bridge Road North) built around the site area. Munitions buildings and factory works present surrounding the site area. Unidentified bunds present in the north west corner. North to south road seen since 1872 now removed. Minor access road across the north east corner of the site	1961	1982

Road which intersected the NE area removed, as well as all bunds and stores associated with the Munitions Factory.	1988	1989
Development of the current warehouse adjacent to the site (presently Coolpoint).	1989	2003
Cable Services Group warehouse built to the west of CoolPoint warehouse.	2021	Present

Table 2.2: Off-site history

Potentially Contaminative Past Uses	
Originally the site of a World War II munitions factory. Site covered approximately 550 hectares and the largest industrial estate in Wales. The ROF Wrexham factory produced cordite, as explosive propellant for shells. The complex was spread over a large area to minimise damage from aerial attack.	
After the war, the need for Cordite ceased and in 1945 the production facilities at Wrexham closed. Many of the building were left in place, abandoned and agriculture took over fields surrounding the area.	
1951- Ministry of Works built large water abstraction and treatment plant at Sesswick on the River Dee which was amalgamated into the Wrexham Water Company.	
All cordite produced on site was transported along Military Usage Railway. Locomotives with diesel engines were used instead of steam trains as they were less likely to ignite any stray cordite.	
UXO Ordnance Risk Assessment	
Potential unexploded ordnance (UXO) risk has been identified at the site by SafeLine Global Limited as part of the Groundsure Report as follows.	
Indicative British/Allied UXO Risk	MEDIUM
Indicative German UXO Risk	NEGLECTIBLE
Manufacture of Explosives and Explosive Ordnance. Wrexham facility ROF, WWII located 1km from site boundary	

2.4 Site Walkover Survey

- 2.4.1 A site walkover survey was undertaken and completed by Caulmert on 9th May 2022. A summary of observations made during the visit is presented in Table 2.3 below and photographs are included in Appendix 2.

Table 2.3: Summary of Observations from the Site Walkover Survey.

Observations	Comments
Buildings and Structures	None on site. Adjacent to site – Single story Coolpoint warehouse. Large warehouse with hard standing courtyard to the front.
Topography	- The site is level.
Site Access	- Access to Site shared with the adjacent Coolpoint warehouse from Bridge Road North. Paved driveway along the eastern side of the Coolpoint warehouse leads to the northern portion of the site.
Site Surface	- Grassland makes up the majority of the site area. The only exception is a small, paved turning area to the east of the Coolpoint warehouse. This is part of the main paved driveway and loading area associated with the warehouse.
Services	- No gas meters were identified on site or in its immediate vicinity. - No overhead services were visible at the site. - Buried services were visible within the site boundary and included drainage with manhole covers. - No electrical buried services were identified on the service plans, however, the CAT Scan detected inactive electrical cables along the eastern boundary line, as well as in the north eastern corner of the site. An unidentified services from the western boundary to the centre of the site were also detected by CAT Scan. A large, uncovered, concrete, cylindrical drainage inspection point was located in the centre of the site. A solid metal manhole was located in the south eastern segment of the site, from which services were indicated to run in an eastern direction across the site from this point. Services were also detected in between the paved turning area and the eastern boundary of the site.
Vegetation	- The majority of the site comprises mixed grasses and reeds. The northern and north eastern boundary contains a row of trees. There is one relatively large tree located in the north eastern corner of the site. There is another small area of trees in the south eastern portion of the site, dividing the area adjacent to the Coolpoint Warehouse and remainder/majority of the site. -There was no evidence of any vegetation distress. Or invasive species.
Surface Water Features	- Runoff from the paved hard standing is collected in a subsurface ACO drain that travels in a south easterly direction. This drain considered to be associated with the adjacent warehouse. No natural surface water bodies are present on the site. A large concrete drainage pipe located in the centre of the site may be associated with a former surface water management scheme to drain the area.
Potential Contaminative	- An above ground, bunded fuel storage tank was identified on eastern side of the Coolpoint warehouse, adjacent to the site boundary of the proposed development. This was located on the paved hard standing.

Observations	Comments
Sources (on site)	- No separate ventilation pipes were identified. -A large concrete below ground tank is possibly present between the warehouse and the paved turning area. This had one manhole cover and no ventilation pipes.
Potential Contaminative Sources (off site)	- Coolpoint refrigeration servicing warehouse is located adjacent to the site's boundary. No outdoor storage or handling areas were identified in relation to the refrigeration servicing operations.

3.0 ENVIRONMENTAL INFORMATION

3.1 Environmental Setting

3.1.1 The data in Table 3.1 below was compiled from the Groundsure Report (Appendix 1), together with observations made during the site walkover survey.

Table 3.1: Summary of Environmental Information

Reference	Description
Geology	
Artificial Geology	- There is a record of made ground, artificial disturbed ground and landscaped ground shown on the site according to the Groundsure data
Superficial Deposits	On site; 1- Till, Devensian – Diamicton 149 m West; - Alluvium – Clay (unlithified Deposits) The potential for landslide ground stability is recorded as <i>low</i> , with none recorded within 500m of the site. Superficial permeability flow type is mixed ranging from high to low.
Solid Geology & Faults	On site; - Salop Formation – sedimentary rock cycle, coal measure type. Cisuralian Epoch – Westphalian D Sub-age. - Salop Formation – mudstone. Cisuralian Epoch – Westphalian D Sub-age. 402 m SE; - Kinnerton Sandstone Formation – early Triassic Epoch. - There are no records of geological faults within 500 m of the site.
Radon Data	- The site is within a radon affected area of less than 1 % - No radon protective measures are required according to the Groundsure data.
Ground Workings	
Historical Surface Ground / Underground workings	-There is one record of a surface ground working identified by Groundsure as an 'unspecified heap' from the 1992 mapping, located 6 m NW of the site. A further 16 surface ground workings are recorded between 50 to 250m of the site - There are no records of historical underground workings on the site or within 1000 m of the site.
Current Ground Workings	- There are no records of current, onsite surface or underground ground workings.
Mining, Extraction & Natural Cavities	
Historical and Coal mining	- The Site is located within a historical coal mining area, as defined by the Coal Authority. It is however not within an area of coal mine abandonment and there are no recorded mine entries within 1000m of the site. The Coal mining risk is considered to be low.
Non-Coal Mining	- There are no non-coal mining areas located within 1,000m of the site.
Railways & Tunnels	
Historical Railway & Tunnel Features	- There are no Railway infrastructure and projects identified within the site boundary. - Historic Railway Sidings were located in proximity to the site at:

Reference	Description
	49 m W (1982); 55m SE (1964); 79m E (1959) ; and 81m SE (1949). - There are no underground railways, tunnels, historical, railways, cross-rails or HS2 lines onsite or within 1000m of the site.
Active Railways	- There are no active railway sites within the site boundary - There are no active railway sites within 1000m of the site boundary.
Estimated Background Soil Chemistry	
Soil Chemistry	- There are 2 records of estimated soil chemistry within 50m of the site as follows: On Site (2 entries with the same results, below) Sample Type: Sediment Arsenic (As) : 15 mg/kg Cadmium (Cd) : 1.8 mg/kg Chromium (Cr): 60 – 90 mg/kg Nickel (Ni) : 15 – 30 mg/kg Lead (Pb): 100 mg/kg Bioaccessible Lead (Pb): 60 mg/kg
Environmental Permits, Incidents and Registers	
Industrial Sites Holding Licences and/or Authorisations	- There are 2 records of historic IPC authorisations within 500 m of the site. - There are 45 recorded Part A(1) and IPPC Authorised Activities within 500 m of the site. - There are 7 records of licensed pollutant releases (Part A(2)/B) within 500m o the site - There are 4 records of radioactive substance authorisations within 500m of the site. All of which were revoked/cancelled in 2015. - There are no red list discharge consents (potentially harmful discharges to the public sewer) within 500 m of site; - There are no records of list 1 dangerous substances inventory sites within 500 m of site; - There are 2 records of list 2 dangerous substances inventory sites within 500 m of site. One of which is active - Welsh Development Agency located 180m SW of the site, with authorised substances biphenyl - There are 18 records of licensed discharge consents to controlled waters within 500m of the site, the closest located: 26m W Effluent Type: Unspecified Receiving Water: Redwither Brook
Dangerous or Hazardous Sites	- There are no records of COMAH & NIHHS sites within 500m of the site. - There are no records of regulated explosive sites or sites granted consents for hazardous substance storage/usage
Environment Agency Recorded Pollution Incidents	- There are 52 records of pollution incidents recorded within 500m of the site boundary. None are on site. A full list of NRW incidents are in Table 4.18 of the Groundsure report, the 3 nearest incidents are as follows: 75m E Incident Date: 08/05/2013 Incident Identification: 1110907 Pollutant: Atmospheric Pollutants and effects

Reference	Description
	Pollutant description: Smoke Land Impact: Category 4 (No impact) Air impact: Category 4 (No impact) 119m NW Incident Date: 04/10/2003 Incident Identification: 194336 Pollutant: Inorganic Chemicals/Products Pollutant description: Acids Water Impact: Category 4 (No impact) Land Impact: Category 4 (No impact) Air impact: Category 4 (No impact) 125m W Incident Date: 08/12/2015 Incident Identification: 1393353 Pollutant: Multiple Pollutants Pollutant description: 2 pollutants including suspended solids Land impact: Category 4 (No impact) Air Impact: Category 4 (No impact) - There is 1 record of national incidents recording system Category 1 within 500 m of site. The details of which follows: 433m S Incident Date: 19/07/2006 Incident Identification: 418682 Pollutant: Contaminated Water Pollutant description: Firefighting Run-off Water impact: Category 1 (Major) Land impact: Category 2 (Significant) Air Impact: Category 2 (Significant)
Sites Determined as Contaminated Land under Part 2A EPA 1990	- None identified within 500 m of the site.
Landfill and Other Waste Sites	
Landfill sites	-There are 2 records of active or recent landfill sites within 500m, both located 112m E of the site and registered to the Welsh Assembly Government (EPR References WDA001 and WDA002) - There are 4 records of historic landfill sites within 500m of the site. All of which are registered to British Celanese Limited between 1953 and 1983
Other Waste Sites	-There are 6 records of historical waste sites within 500m of the site boundary. These include: Waste Incineration Plant, Waste Transfer Station, Asbestos Waste Transfer Station, Waste Recovery Centre, Tyre Recycling Centre -There are 87 records of licensed waste sites within 500m of the site boundary, the closest of which is 186m E. Records include the following: Other Landfill taking special waste, physical treatment facility, clinical waste transfer station, Household, commercial and industrial waste transfer station, chemical treatment facility, metal recycling sites (vehicle dismantler), material recycling

Reference	Description
	treatment facility, biological treatment facility and special waste transfer station. -There are 14 records of waste exemptions within 500m of the site, the closest of which is 168m NE. There are 7 records of treating waste exemptions, 5 of storing of waste exemptions and 2 records of storing wate exemptions.
Current Land Uses	
Current Industrial Data	- There are 26 recorded potentially contaminated industrial sites within 250 m of the site. None of these are on site, the closest is located 16m W of the site boundary. Records include the following: Industrial products Consumer products Construction services Infrastructure and facilities Health support services Transport storage and delivery Repair and servicing - There are no recorded open, closed, under development or obsolete petrol stations within 500m of the site boundary. - There are no recorded open, high voltage underground electricity transmission cables within 500m of the site boundary. - There are no recorded high pressure underground gas transmission pipelines within 500m of the site boundary.
Hydrogeology and Hydrology	
Aquifer Within Superficial Deposits	- The site is within a Secondary Undifferentiated aquifer designation. "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 due to the variable characteristics of the rock type." - 143m W of the site is a Secondary A aquifer designation. "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."
Aquifer Within Bedrock Deposits	- There are 2 records for aquifers within the bedrock deposits located on site: Both are designated 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." - There is 1 record 419m SE of the site: Designated Principal aquifer "Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers."
Groundwater Vulnerability	- Both superficial deposits and bedrock aquifers on site are classified as low groundwater vulnerability. "Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability."
Groundwater / Surface Water & Potable Abstractions Licences	- There are 11 records of groundwater abstraction licences within 2000 m of the site. - There is 1 record of a surface water abstraction licences within 2000 m of the site – 695m NW Status: Historical

Reference	Description
	Licence No. 24/67/7/0178 Details: Non-Evaporative Cooling Point: Tributary of Red wither brook - There are 0 records for potable water abstraction licences located within 2000 m of the site.
Source Protection Zones	- The site is not located within a source protection zone. There are 2 records of source protection zones within 500m of the site, zone 3 located 328m SE and zone 2 located 346m SE. - The site is not located within a source protection zone within a confined aquifer.
Detailed River Networks and Surface Water Features	- There are records of 13 detailed water networks and drainage located within 250 m of the site. - There are records of 6 surface water features within 250 m of the site.
WFD Surface water/ groundwater bodies	-There are 2 records of WFD surface water body catchments on site, as follows: Type: River WB catchment Water Body Catchment: Clywedog – Dee to Gwenfro Water body ID: GB111067052110 Operational catchment: Clywedog – Dee Management catchment: Dee Type: River WB catchment Water Body Catchment: Dee – Chester Weir to Ceiriog Water body ID: GB111067057080 Operational catchment: Dee Lower Chester Weir to Ceiriog Management catchment: Dee -There is 1 record of WFD groundwater bodies on site: Name: Dee Permo-Triassic Sandstone Water body ID: GB41101G202400 Overall rating: poor Chemical rating: poor Quantitative: Good Year: 2019
Flooding	
Flood Risk	- There are no records of Risk of Flooding from Rivers and Sea within 50m of the site. - There are no records of Historical Flood Events within 250m within the site boundary. - There are no areas benefiting from flood defences within 250m of the site. - There are no areas benefiting from flood storage within 250m of site. - The site is not within a Flood Zone 2 of Flood Zone 3 area. - The highest risk of surface water flooding on site is 1 in 100 year, 0.1m – 0.3m - Regional mapping data indicates that the site lies within a British Geological Survey (BGS) a low groundwater flooding susceptibility area.
Designated Environmentally Sensitive Sites	
Environmental Designations	- There are no records of the following designations within 2000m of the site boundary: Sites of Special Scientific Interest (SSSI)

Reference	Description
	Ramsar Sites Special Areas of Conservation (SAC) Special Protection Areas (SPA) National Nature Reserves (NNR) Local Nature Reserves (LNR) Biosphere Reserves Forest Parks Marine Conservation Zones Green Belt - There are 11 Designated Ancient Woodland records located within 2000m of the site boundary, of which the nearest is 456m W and is an 'Restored Ancient Woodland Site.' - There are no records of Nitrate Sensitive Areas or Nitrate Vulnerable Zones within 2000m of the site boundary. - There are no proposed Ramsar sites, Possible Special Areas of Conservation (pSAC) or Potential Special Protection Areas (pSPA) located within 2000m of the site boundary.
Habitat Designations	-There are no records of the following designations within 250m of the site boundary: Priority Habitat Inventory Habitat Networks Open Mosaic Habitat Limestone Pavement Orders
Agricultural Designations	-There are no records of the following designations within 250m of the site boundary: Agricultural Land Classification Open Access Land Tree Felling Licences Environmental Stewardship Schemes Countryside Stewardship Schemes
Visual and Cultural Designations	
Visual and Cultural Designations	-There are no records of the following designations within 250m of the site boundary: World Heritage Sites Areas of Outstanding Natural National Parks Listed Buildings Conservation Areas Scheduled Ancient Monuments Registered Parks and Gardens

3.2 Unexploded Ordnance

- 3.2.1 The site sits within previously developed land on the former Cordite works (munitions factory). Therefore, a Groundsure Preliminary Unexploded Ordnance Risk Assessment report was acquired for the site (Appendix 1).

- 3.2.2 The Groundsure Preliminary Unexploded Ordnance Risk Assessment report identified 'medium' risk levels for Indicative British/Allied UXO Risk.

'there are potential sources of British/Allied UXO recorded in Dynasafe BACTEC's historical database in proximity to the site. It is recommended that further research is undertaken to determine more about these potential sources and how they may have affected the site. Given the proximity of these sources, the risk on site from UXO is considered to be Medium.'

- 3.2.3 The Groundsure Preliminary Unexploded Ordnance Risk Assessment report identified 'negligible' from German unexploded bombs at this site.

'Historical records indicate a negligible level of bombing density from WWII.'

- 3.2.4 Search results indicated the following potential sources of explosive ordnance recorded in Table 3.2 below. It is identified in Table 3.3 that the proposed development lies within the vicinity of a facility used to produce explosives and/or fill ordnance with explosive and chemical constituents.

Table 3.2: Potential Sources of explosive ordnance recorded within 10km

Source	Number within 10km
Military Airfield Sites	1
Bombing Decoy Sites	2
Press Articles regarding UXO Finds	1
WWII Defence Related Positions & Pillboxes	17
Historic Army Camps	5
Army Explosive Ordnance Clearance Tasks/Recces	2
Sites Related to the Manufacture of Explosives and Explosive Ordnance	2
SafeLane Global Desk-top Threat Assessment	1
Abandoned Bombs	None Recorded
Prisoner of War Camps	None Recorded
Military Training Areas and Firing Ranges	None Recorded
Heavy Anti-Aircraft Batteries	None Recorded
Pipe Mined WWII Airfields	None Recorded
WWII Pipe Mined Locations	None Recorded
SafeLane Global Unexploded Ordnance Finds	None Recorded
SafeLane Global On-Site Support Services	None Recorded

Table 3.3: Sites related to the Manufacture of Explosives and Explosive

Facility Name	Approximate Distance (km) from site
Wrexham, ROF, WWII	1.0

4.0 PRELIMINARY RISK ASSESSMENT

4.1 Introduction

- 4.1.1 This section assesses the potential risks posed by contamination within the proposed development area with respect to human health, the natural environment and the built environment. The risk assessment is a preliminary qualitative source-pathway-receptor of the type recommended in current guidelines.
- 4.1.2 This is a preliminary risk assessment based on the desk study, site walkover and proposed development. The objective of the risk assessment is to demonstrate whether or not there is a potential pollutant linkage existing at the site which may present an unacceptable risk to human health and controlled water.
- 4.1.3 For there to be a potential risk from contamination, a complete source-pathway-receptor pollutant linkage must exist, or potentially exist, during and after development of the site. Each aspect of the pollutant linkage is described below:
- 4.1.4 Source (contaminant): A substance that is in or under the land that has the potential to cause harm to the receptor.
- 4.1.5 Pathway: The route(s) or means via which a receptor can be exposed to, or affected by, a contaminant.
- 4.1.6 Receptor: The factor (person, built environment or ecosystems) that might adversely be affected by the source.
- 4.1.7 Risk can be defined as the combination of the consequence or a harmful effect and the probability of its occurrence. The existence of a pollutant linkage is heavily dependent on-site use, as well as environmental conditions

4.2 Conceptual Site Model

- 4.2.1 The conceptual site model (CSM) constitutes a preliminary or interim risk assessment which determines only the likelihood of a linkage being present. The CSM is described below and displayed in Figure 2, Section 7.5.

Sources

- 4.2.2 Based on the desk study presented above, it is considered that the presence of the large historical cordite munitions factory (which ceased in 1945) may have resulted in potential sources of contamination. It is therefore considered that ground investigation is recommended, including for the trial pitting and laboratory analysis comprising of a basic suite of metals and a further testing for residual explosives analytical suite to address the past historic land use.

Receptors

- 4.2.3 Surrounding site includes Wrexham Industrial estate road networks. The groundwater receptors include a Secondary Undifferentiated aquifer within the superficial deposit and a Secondary A aquifer within the bedrock. These are classified as low vulnerability.
- 4.2.4 There are no surface water receptors on site and the nearest surface water abstraction point was identified as a historical abstraction 1087 m to the north, at a tributary of Redwither Brook.

Pathways

- 4.2.5 Potential pollutant linkage that could exist at the site includes migration through permeable landscaped ground.
- 4.2.6 The assessment assumes that the site will be used for commercial/industrial use only. The potential pollution linkages on the site are summarised in Table 4.1 below.

Table 4.1: Summary of Potential Pollutant Linkages

Potential Source	Pathway	Potential Receptor	Comments
landscaped ground	Ground gas	Site users	Ground gas regime unknown. Due to the presence of landscaped ground there is potential for gas to be present.
Historical site use – WWII Munitions Development	Ground	Site users, building & infrastructure	

5.0 PHASE 1 CONCLUSIONS

5.1 Summary

- 5.1.1 This Phase 1 desk study report has indicated that the overall site has a significant industrial legacy with historical uses as a munitions factory which was then developed into Wrexham Industrial Estate. It is assumed that unless proven otherwise, the pathways and source of contamination from previous site use and activities may still exist.
- 5.1.2 The contaminants of concern include those linked to munitions factory including heavy metals, potentially asbestos and explosive contaminants.
- 5.1.3 The desk study indicated that the site is located in a negligible to medium risk area of potential explosive ordnance, with several facilities within 10km screening distance and Wrexham ROF within 1 km of the site boundary.
- 5.1.4 In conclusion, the preliminary risk assessment has demonstrated that there are potential pollution linkages present at the site which may pose a risk to future site uses. Recommendations for a Phase 2 investigation will reduce the uncertainty by characterising the source term(s) present within the site area.

5.2 Recommendations for Further Investigation- Phase 2

- 5.2.1 A Phase 2 intrusive ground investigation was required to determine soil geochemistry on site and confirm whether the pollutant linkages identified in the desk study are valid on site.

6.0 PHASE 2 INVESTIGATION

6.1.1 This Phase 2 site investigation was designed to target the areas of potential sources of contamination identified in the Phase I Report, Site Walkover and historic map review.

6.2 Ground Investigation – Sampling Strategy

Sampling Strategy

6.2.1 The ground conditions were investigated by means of trial pitting which allowed for the detailed examination of the arisings for lithological description and any visual and olfactory evidence of contamination. The exploratory pits also permitted the collection of soil samples for laboratory analysis. The exploratory locations are shown on Figure 3 below.



Figure 3: Trial Pit Locations

6.2.2 Fifteen Trial Pits (TP 1 – 15) were distributed across the entire site, allowing for even spatial coverage of the site. Samples were collected at a shallow depth where there was evidence of made ground, or a variation in the natural ground. Trial pits were terminated on encountering stiff natural clay deposits considered to represent a barrier to any vertical migration of contamination.

6.2.3 Trial pits 1 and 3 targeted the area of potential runoff from the concrete pad should there have been any historic spills associated with the above ground tank.

6.2.4 Trial Pits 8, 11 and 12 located near the central manhole to determine if any contamination associated with this.

6.2.5 Trial pit 13 was situated in the location of historic bunding associated with the Munitions Works.

6.3 Chemical Analysis Strategy

6.3.1 The analytical suite for the soils (Table 7.2 below) were selected based upon the past land uses and the findings of the Phase I report and focused upon the different made ground encountered.

6.3.2 The chemical analysis aimed to identify any past or concurrent contamination of the soil with respect to the proposed development of the site. A general contaminated land screening suite comprising pH TPH, SOM and CLEA metals was undertaken. In addition, a specific residual explosive suite was included to reflect the legacy of the site.

6.3.3 No groundwater was encountered during the ground works.

6.3.4 Samples of the soil were collected in appropriate containers supplied by the UKAS accredited laboratory. All samples were placed within a cool box and dispatched within 24 hours of collection.

6.3.5 The samples were analysed in accordance with the procedures set out in the Environment Agency's Monitoring Certification Scheme (MCERTS), where MCERTS methods are applicable. The testing laboratory used to complete the soils and water analyses was SOCOTEC, who also supplied the cool boxes and the appropriate sampling containers.

7.0 GROUND INVESTIGATION

7.1 Preliminaries

- 7.1.1 The site investigation was undertaken on the 9th May 2022. Weather was partly cloudy, with no rain for the duration of the works. The average temperature was 14°C, and there was a wind from the SW at a speed of approximately 12 mph.
- 7.1.2 Thomas Plant Hire provided a JCB excavator, driver, banksman and health and safety representative who performed scans for electrical services.
- 7.1.3 All works were undertaken under the supervision of a Caulmert Engineer who was also responsible for exploratory locations, logging of the trial pits and collection of samples for laboratory testing.

7.2 Limitations

- 7.2.1 It should be noted that the trial pits represent discrete locations of investigation, and whilst every effort has been made to characterise the area fully, the exploratory pits and the laboratory testing results reflect the soil quality only in those specific locations.
- 7.2.2 The trial pits were excavated to intercept the top of the natural geology (clay) where possible, and the depths to the base of the excavations is summarised in Table 7.1. Depths are shown in metres below ground level. The trial pits were not excavated deeper than the level of the superficial deposits as this would have the potential to form a new pathway to underlying strata. The maximum depth of excavation was 1m. Detailed trial pit logs are included in Appendix 3.

7.3 Field Observations

Site Walkover

- 7.3.1 A fuel storage tank was located adjacent to the existing Coolpoint Ltd. warehouse on the concrete block paved hardstanding adjacent to the site. The tank was bunded. There was no staining on the outside of the bund. There was no water or other fluid within the bund itself.
- 7.3.2 Well established trees separate the majority of the site (trial pits 4 – 15) from the smaller grassy area (trial pits 1 – 3) adjacent to Bridge Road North and the paved hard standing entrance to Coolpoint Ltd.
- 7.3.3 A circular drainage culvert, placed vertically, was located in the centre of the site. There was evidence that a wooden fence was previously located between this drain and the western boundary.
- 7.3.4 The majority of the northern portion of the site comprises scrub vegetation, however, one large tree is present in the north eastern corner. Services were detected in the vicinity of this with the CAT scanner, as shown on Figure 3.

- 7.3.5 A photographic record of the investigation is presented in Appendix 2. The field observations of the excavations are summarised below.

Table 7.1: Summary of Trial Pit Excavations

Trial Pit Number	Depth Excavated (mBGL)	Comments
TP1	0.5	No odour, Made ground (brick rubble) above underlying clay Terminated in stiff natural clay deposits.
TP2	0.5	No odour, Made ground (fine red sand and coble stones) above underlying clay Terminated in stiff natural clay deposits.
TP3	0.5	No odour, Made ground (fragments of limestone) above underlying clay Terminated in stiff natural clay deposits.
TP4	0.4	Natural ground. Red stiff clay, underlain by grey clay with red sand, above underlying red stiff clay.
TP5	0.4	Natural ground. Sandy grey clay above underlying stiff brown clay with grey clay and red clay sand.
TP6	0.4	Natural ground. Sandy grey clay above underlying stiff brown clay with grey clay and red clay sand.
TP7	0.4	Natural ground. Stiff orange-brown clay above underlying stiff brown clay.
TP8	0.5	Stiff brown clay with some fragments of made ground (red brick).
TP9	0.5	Stiff brown clay with some fragments of made ground (red brick).
TP10	0.5	Stiff brown clay with some fragments of made ground (red brick).
TP11	0.5	Stiff brown clay with some fragments of made ground (red brick).
TP12	0.4	Natural ground. Stiff orange-brown clay above underlying stiff brown and grey clay.
TP13	0.5	Stiff brown clay underlain by sandy made ground (brick rubble, black shale rock fragments). Terminated in underlying clay
TP14	0.5	Natural ground. Stiff orange-brown clay above underlying stiff brown clay.
TP15	0.5	Natural ground. Stiff orange-brown clay above underlying stiff brown clay.

Made Ground

- 7.3.6 Made ground was encountered in the majority of the exploratory pits and typically comprised a thin (10 cm) superficial layer of light brown gravel of crushed brick, concrete and fragments of red clay brick with no odour or visible contamination. A slightly silty orange sand, with no odour, was found in several locations.
- 7.3.7 The made ground in TP13 was the deepest area of these deposits identified in all the trial pits at a thickness of 0.5 m. There was no evidence of any organic matter which would have the potential to generate gas. The maximum depth of the made ground was 0.5 mBGL and underlain by clay deposits.
- 7.3.8 Full ground conditions are detailed in the trial pit logs presented in Appendix 3.

Natural Superficial Deposits

- 7.3.9 The superficial deposits comprised predominantly soft to firm clay deposits. This was identified in all locations. The deposits appeared to become stiffer with depth. The clay was described as dry, orange, stiff clay with no odour.

Bedrock

- 7.3.10 Excavations were terminated in the superficial deposits due to the presence of the stiff underlying clay layer. The Phase 1 investigation identifies the underlying bedrock as Salop Formation. The British Geological Society description for this formation states:
- 7.3.11 Red and red-brown mudstone, and red-brown (mostly sublitharenite) sandstone containing beds of pebbly sandstone and conglomerate itself containing Carboniferous limestone and chert clasts, and thin 'Spirobis' limestone beds and caliche in the lower part of the unit.
- 7.3.12 The thickness can range between 200m to 360m in Shropshire¹. All trial pits terminated in the superficial deposits.

Groundwater

- 7.3.13 No groundwater was encountered in any of the trial pits during the investigation. Due to impermeable nature of the deposits encountered groundwater is not anticipated near surface.

7.4 Chemical Analysis Data

- 7.4.1 The soil samples were collected from the made ground encountered and the natural ground. Chemical analysis was carried out on one of the natural ground samples (TP4) and six of the made ground samples (TP2, TP3, TP8, TP11, TP13 and TP14). These locations were selected for chemical analysis due to their strategic positioning, as detailed in the Sampling Strategy (Section 6.2)
- 7.4.2 The laboratory testing results and test certificates are presented in Appendix 4. A summary of the results is presented below in Table 7.2. and 7.3 below.

Table 7.2: Soil Explosives Suite Analysis Results

Analyte	Units	TP2 A	TP13 A	TP14 A
2,4,6-Trinitrophenol (Picric Acid)	mg/kg	<0.1	<0.1	<0.1
2,4,6-Trinitrotoluene (TNT)	mg/kg	<0.5	<0.5	<0.5
2,4-Dinitrotoluene	mg/kg	<1.0	<1.0	<1.0
2,6-Dinitrotoluene	mg/kg	<1.0	<1.0	<1.0
Cyclo-1,3,5-Trimethylene-2,4,6-Trinitram	mg/kg	<1.0	<1.0	<1.0
Cyclotetramethylenetetranitramine (HMX)	mg/kg	<1.0	<1.0	<1.0

¹ The BGS Lexicon of Named Rock Units: <https://webapps.bgs.ac.uk/lexicon/lexicon.cfm?pub=SAL>

Analyte	Units	TP2 A	TP13 A	TP14 A
Ethylene Glycol Dinitrate (EGDN)	mg/kg	<0.1	<0.1	<0.1
Hexanitrostilbene (HNS)	mg/kg	<0.5	<0.5	<0.5
Nitrocellulose (NC)	mg/kg	<5000	<5000	<5000
Nitrocellulose (NC) Low	mg/kg	<1000	<1000	<1000
Nitroglycerine (NG)	mg/kg	<0.1	0.2	<0.1
Pentaerythritol Tetranitrate (PETN)	mg/kg	<5.0	<5.0	<5.0
Picrite	mg/kg	<0.10	<0.10	<0.10
Trinitro-2,4,6-Phenylmethylnitramine	mg/kg	<1.0	<1.0	<1.0

Table 7.3: Soil Chemical Analysis Results

Analyte	Units	TP2 B	TP3 A	TP3 B	TP4 A	TP4 B	TP8 A	TP8 B	TP11 A	TP11 B	TP13 B	TP14 B	S4UL
Ammoniacal Nitrogen (Exchangeable) as N	mg/kg	<0.59	<0.59	<0.61	<0.58	<0.57	0.9	<0.6	<0.61	<0.61	<0.64	<0.61	-
Benzene	µg/kg	<12	<12	<12	<12	<11	<12	<12	<12	<12	<13	<12	27
Ethylbenzene	µg/kg	<12	<12	<12	<12	<11	<12	<12	<12	<12	<13	<12	5700
m/p-Xylene	µg/kg	<24	<24	<25	<23	<23	<24	<24	<25	<24	<26	<24	5900
o-Xylene	µg/kg	<12	<12	<12	<12	<11	<12	<12	<12	<12	<13	<12	6600
Toluene	µg/kg	<12	<12	<12	<12	<11	<12	<12	<12	<12	<13	<12	56000
Description of Solid Material	-	CLAY	SILT	CLAY	CLAY	CLAY	CLAY	CLAY	CLAY	CLAY	CLAY	CLAY	-
Total Moisture at 35°C	%	15.4	15.8	18.6	14.3	11.9	17.8	15.9	18.6	17.4	21.7	17.8	-
>C6-C7 Aliphatic	mg/kg	<0.236	<0.238	<0.246	<0.233	<0.227	<0.243	<0.238	<0.246	<0.242	<0.255	<0.243	7800
>C7-C8 Aliphatic	mg/kg	<0.236	<0.238	<0.246	<0.233	<0.227	<0.243	<0.238	<0.246	<0.242	<0.255	<0.243	
>C7-C8 Aromatic	mg/kg	<0.012	<0.012	<0.012	<0.012	<0.011	<0.012	<0.012	<0.012	<0.012	<0.013	<0.012	56000
>C8-C10 Aliphatic	mg/kg	<0.236	<0.238	<0.246	<0.233	<0.227	<0.243	<0.238	<0.246	<0.242	<0.255	<0.243	2000
>C8-C10 Aromatic	mg/kg	<0.048	<0.048	<0.049	<0.047	<0.045	<0.049	<0.048	<0.049	<0.048	<0.052	<0.049	3500
C5-C6 Aliphatic	mg/kg	<0.236	<0.238	<0.246	<0.233	<0.227	<0.243	<0.238	<0.246	<0.242	<0.255	<0.243	3200
C5-C7 Aromatic	mg/kg	<0.012	<0.012	<0.012	<0.012	<0.011	<0.012	<0.012	<0.012	<0.012	<0.013	<0.012	26000
Total GRO	mg/kg	<0.236	<0.238	<0.246	<0.233	<0.227	<0.243	<0.238	<0.246	<0.242	<0.255	<0.243	-
Acid Soluble Sulphate as SO4	mg/kg	411	1520	239	372	561	437	289	269	307	124	139	-
Arsenic as As	mg/kg	10.2	10.9	8.4	7.1	8.2	8.5	11.3	11.2	9.7	15.2	10.8	640
Cadmium as Cd	mg/kg	0.3	0.3	<0.2	<0.2	0.2	0.4	0.3	0.3	0.3	0.2	<0.2	190
Copper as Cu	mg/kg	24	28.7	21.1	17.4	19.4	19.6	24.2	25	23.5	17.2	22.2	68000
Lead as Pb	mg/kg	33.4	55.6	17.6	17.8	15.9	37.9	32.1	16	14.4	31.8	19.3	2200
Mercury as Hg	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1100
Nickel as Ni	mg/kg	39.6	27.7	39.5	27.3	33	28.9	37.8	42.6	38.8	47.2	48.2	980
Selenium as Se	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	12000
Total Chromium as Cr	mg/kg	34	22.5	34.4	23.6	27.5	22.1	29.8	43.5	38.4	49	45	8600
Vanadium as V	mg/kg	35.5	28.4	36	25.1	28.9	24.6	30.1	46.2	39.9	53.7	46.5	9000
Zinc as Zn	mg/kg	104.8	70.8	54.5	54.5	60.5	103.1	83	68.2	65.1	82	70	730000
Chromium (VI) as Cr	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	33
Acenaphthene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	0.31	<0.10	<0.10	<0.10	<0.10	<0.10	84000
Acenaphthylene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	83000
Anthracene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	2.11	<0.10	<0.10	<0.10	<0.10	<0.10	520000
Benzo[a]anthracene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	9.46	<0.10	<0.10	<0.10	<0.10	<0.10	170
Benzo[a]pyrene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	9.69	<0.10	<0.10	<0.10	<0.10	<0.10	35
Benzo[b]fluoranthene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	10.7	<0.10	<0.10	<0.10	<0.10	<0.10	44

Analyte	Units	TP2 B	TP3 A	TP3 B	TP4 A	TP4 B	TP8 A	TP8 B	TP11 A	TP11 B	TP13 B	TP14 B	S4UL
Benzo[g,h,i]perylene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	4.24	<0.10	<0.10	<0.10	<0.10	<0.10	3900
Benzo[k]fluoranthene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	3.95	<0.10	<0.10	<0.10	<0.10	<0.10	1200
Chrysene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	8.41	<0.10	<0.10	<0.10	<0.10	<0.10	350
Dibenzo[a,h]anthracene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	1.12	<0.10	<0.10	<0.10	<0.10	<0.10	3.5
Fluoranthene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	15	<0.10	<0.10	<0.10	<0.10	<0.10	23000
Fluorene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	0.19	<0.10	<0.10	<0.10	<0.10	<0.10	63000
Indeno[1,2,3-cd]pyrene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	5.65	<0.10	<0.10	<0.10	<0.10	<0.10	500
Naphthalene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	0.33	<0.10	<0.10	<0.10	<0.10	<0.10	190
Phenanthrene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	4.58	<0.10	<0.10	<0.10	<0.10	<0.10	22000
Pyrene	mg/kg	<0.09	<0.10	<0.10	<0.09	<0.09	13.5	<0.10	<0.10	<0.10	<0.10	<0.10	54000
Total PAH 16	mg/kg	<1.51	<1.52	<1.57	<1.49	<1.45	89.3	<1.52	<1.57	<1.55	<1.63	<1.56	-
pH (2.5:1 extraction)	pH units	8.7	8.1	8	9.1	8.8	8.6	8.7	9	8.9	8.7	8.4	-
Asbestos Identification	-	NAIIS	NAIIS	NAIIS	NAIIS	NAIIS	NAIIS	NAIIS	NAIIS	NAIIS	NAIIS	NAIIS	-
>C10-C12 (Aliphatic)	mg/kg	<4.73	<4.75	<4.91	<4.67	<4.54	<4.87	<4.76	<4.91	<4.84	<5.11	<4.87	9700
>C12-C16 (Aliphatic)	mg/kg	<4.73	<4.75	<4.91	<4.67	<4.54	<4.87	<4.76	<4.91	<4.84	<5.11	<4.87	59000
>C16-C21 (Aliphatic)	mg/kg	<4.73	<4.75	<4.91	<4.67	<4.54	20.7	<4.76	<4.91	<4.84	<5.11	<4.87	1600000
>C21-C35 (Aliphatic)	mg/kg	<11.8	<11.9	<12.3	<11.7	<11.4	58.2	<11.9	<12.3	<12.1	<12.8	<12.2	
Total TPH (Aliphatic)	mg/kg	<23.6	<23.8	<24.6	<23.3	<22.7	92.4	<23.8	<24.6	<24.2	<25.5	<24.3	-
>C10-C12 (Aromatic)	mg/kg	<4.73	<4.75	<4.91	<4.67	<4.54	<4.87	<4.76	<4.91	<4.84	<5.11	<4.87	16000
>C12-C16 (Aromatic)	mg/kg	<4.73	<4.75	<4.91	<4.67	<4.54	<4.87	<4.76	<4.91	<4.84	<5.11	<4.87	36000
>C16-C21 (Aromatic)	mg/kg	5.49	<4.75	<4.91	<4.67	<4.54	105	<4.76	<4.91	<4.84	<5.11	<4.87	280000
>C21-C35 (Aromatic)	mg/kg	<11.8	<11.9	<12.3	<11.7	<11.4	495	15.5	<12.3	13.7	<12.8	<12.2	28000
Total TPH (Aromatic)	mg/kg	<23.6	<23.8	<24.6	<23.3	<22.7	682	25.3	<24.6	<24.2	<25.5	<24.3	-
Soil Organic Matter	% m/m	0.65	2.62	0.78	0.47	0.51	1.35	0.75	0.53	0.48	0.56	0.52	-

- 7.4.3 As part of the detailed explosive suite, a trace concentration (0.2 mg/Kg) of nitroglycerine (NG) was detected at TP13A only. This is significantly below the indicated guidance level of 10,000 mg/Kg^{2,3,4,5}. No other parameters were detected.
- 7.4.4 All metals detected are below the LQM/CIEH Suitable for Use Levels (S4ULs) for commercial land use. It is noted sulphate concentration is elevated within TP3A (shallow sample) in comparison to other locations.
- 7.4.5 The screening criteria for organic contaminants above are based on an organic matter percentage (SOM 1 %), representing the most stringent scenario for comparison.
- 7.4.6 Low, trace concentrations of petroleum hydrocarbons were detected in TP8A alone. Aliphatic Petroleum Hydrocarbons were detected at in the range of >C16-C21 at 20.7 mg/kg and >C21-C35 at 58.2 mg/kg and Aromatic Petroleum Hydrocarbons in the range >C16-C21 at 105 mg/kg and >C21-C35 at 495 mg/kg. These concentrations are significantly below the threshold values presented above. The TPHs detected were also below their respective LQM threshold limits.
- 7.4.7 There is no risk to groundwater due to the low mobility of the parameters detected (long carbon chains) and the presence of the natural clay in the superficial deposits.
- 7.4.8 All sixteen of the polycyclic aromatic hydrocarbons were also detected at TP8A alone. These concentrations were also significantly below the threshold limits.
- 7.4.9 None of the detected parameters noted above at TP8A were found in the deeper sample TP8B, which was taken from the underlying clay.
- 7.4.10 Asbestos was not identified in any of the screening of the soil samples.

² Guidance based on values given by Royal Ordnance & H.M Explosives Inspectorate

³ Management Guidance for the Safe Decommissioning of Explosives Sites, CBI, Explosives Industry Group , July 2003

⁴ Chemical Works- explosives, propellants and pyrotechnics manufacturing works. Department of the Environment, 1995

⁵ Development of Land Affected by Contamination: A guide for Developers. Welsh Land Contamination Working Group & NRW 2017.

8.0 REVISED CONCEPTUAL MODEL AND QUALITATIVE RISK ASSESSMENT

8.1 Conceptual Model

- 8.1.1 The conceptual site model (CSM) presented below is based on the site data and the development proposal.

Source

- 8.1.2 There is no significant (>1m) thickness of made ground present at the site which could potential generation a source of ground gas and therefore the risks to the development from ground gas area considered to be negligible.

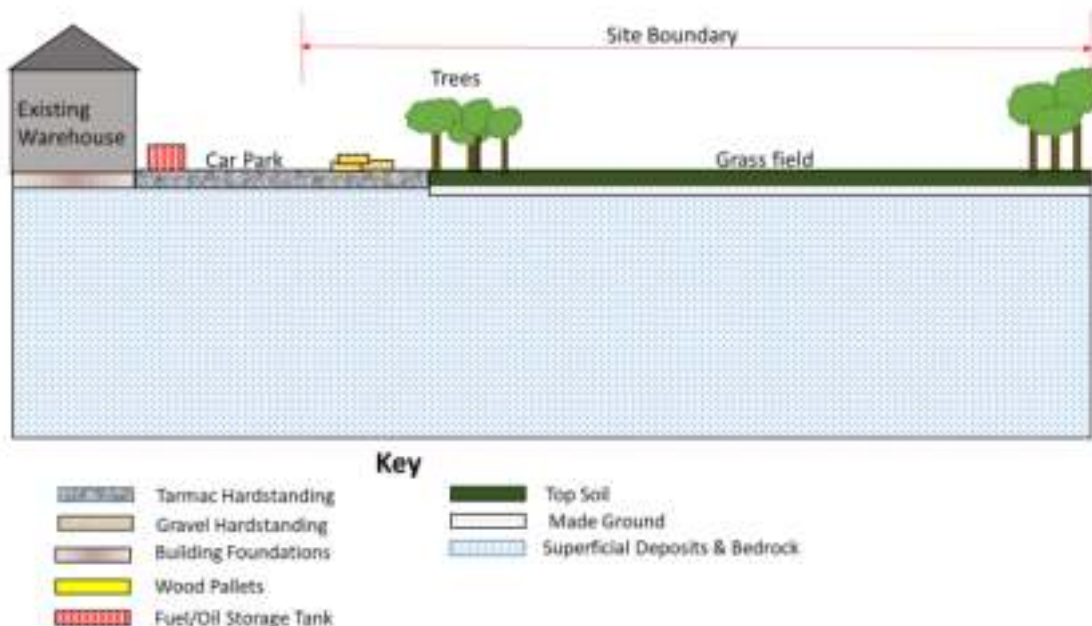
Pathways

- 8.1.3 The presence of a stiff natural clay beneath the shallow made ground (typically /<0.3m) would indicate that there is no potential for the vertical migration of contamination at the site. Pathways are limited to the inhalation and ingestion of potentially contaminated dust. The proposed development includes the construction of a building and hardstanding which would minimise the potential generation of dust from the soil layers.

Receptors

- 8.1.4 Receptors considered are future site operatives, construction workers and controlled waters comprising groundwater and steams within the area.

Figure 1: Conceptual Site Model



8.2 Risks to Human Health

- 8.2.1 Based on the assessment of these concentrations against generic screening values for commercial land use, the measured concentrations are all below this value and would indicate that the risks posed to human health are acceptable.
- 8.2.2 Future risks posed to site users are mitigated by the construction of the building and areas of hardstanding which conceptually would form a barrier between the site users and the underlying soils.
- 8.2.3 The thickness of the made ground is minimal, however, trace amounts of nitro-glycerine (0.2 mg/Kg) have been detected. The indicated potential explosive and human health risks for a medium sensitivity (e.g. industrial / commercial) land use threshold of 1% (or 10,000 mg/Kg) is adopted for potentially explosive substances^{6,7,8,9}.
- 8.2.4 The concentrations detected at TP13a are, therefore not considered to represent a risk to human health.

8.3 Risks to Controlled Waters

- 8.3.1 The presence of clay deposits immediately below the thin made ground is considered to represent a barrier to vertical migration of any contamination present at the site. Therefore, there is no pathway present at the site and in adopting the risk assessment methodology, this would indicate negligible risk to underlying groundwater.
- 8.3.2 The potential risk to surface water from the detected PAHs and TPH detected at TP8 is considered to be very low. This assessment is based on the chemical profile of the TPH present and that it predominantly comprises long carbon chain length compounds which, by their nature, tend to have very low solubility potential. Combined with the limited spatial extent and vertical thickness, these compounds are not considered to be mobile or represent a risk to the water environment.
- 8.3.3 The risks posed by this material are further reduced in areas where the surface will be covered by the construction of a building as infiltration will be negligible and therefore the potential for mobilisation via surface water will be negligible.

8.4 Risks to Construction Workers

- 8.4.1 The risk posed by the concentrations detected to ground workers during the development of the site is considered to be low. Good hygiene rules and minimisation of dust during construction works would further minimise this risk.

⁶ Guidance based on values given by Royal Ordnance & H.M Explosives Inspectorate

⁷ Management Guidance for the Safe Decommissioning of Explosives Sites, CBI, Explosives Industry Group, July 2003

⁸ Chemical Works- explosives, propellants and pyrotechnics manufacturing works. Department of the Environment, 1995

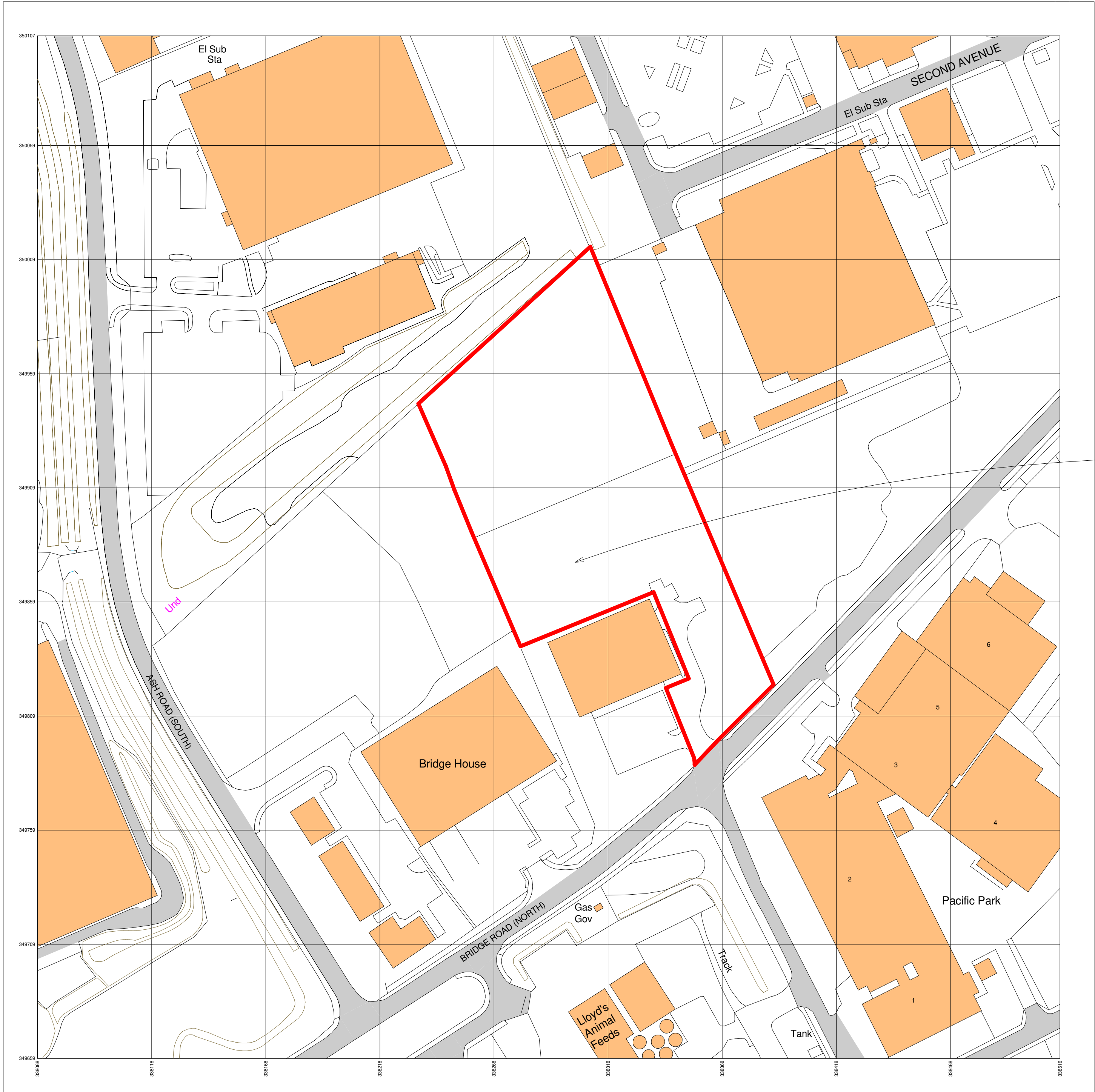
⁹ Development of Land Affected by Contamination: A guide for Developers. Welsh Land Contamination Working Group & NRW 2017.

- 8.4.2 The trace amounts of residual explosive materials identified indicate that any superficial (within the top 0.5m) excavation should take into the account the potential of residual explosive materials within the made ground. The available guidance indicates that there is no risk to human health from the trace concentrations detected as part of the ground investigations.

9.0 CONCLUSIONS AND RECOMMENDATIONS

- 9.1.1 This report summarises the finding of the Phase I and Phase II investigation at Bridge Road North, Wrexham, with respect to the risks posed to the proposed development.
- 9.1.2 The Phase 1 identified that the site was part of the large Cordite works and bunds surrounding potential munitions stores were present within the Site footprint. There was, therefore, potential for contamination to be present associated with historic land use and any made ground associated with its redevelopment.
- 9.1.3 The Phase II site investigation adopted a combined targeted and non targeted approach. It confirmed the absence of any significant deposits of made ground and did not identify any traditional contamination which would present a risk to future site users or controlled waters.
- 9.1.4 The ground investigation encountered an isolated occurrence of TPH and PAH contaminations in the shallow sample from TP8. The presence of this material was limited in both vertical and spatial extent and was not detected in the deep sample within the same trial pit. The proposed development is considered to mitigate against the risks by forming a barrier between the underlying soil and future site users. This material is not considered to pose a significant risk to construction workers via inhalation and ingestion of contaminated dust due to the concentrations present.
- 9.1.5 Nitroglycerine was detected in a low concentration of 0.2 mg/kg at TP13A as part of the explosives suite which is marginally above the detection limit of 0.1 mg/kg. The thickness of the made ground was limited (0.4m) and the risk from residual explosive materials is considered low.

DRAWINGS



SITE AREA = 1.52Ha



1 Site Location Plan
1 : 1250

1. This drawing has been produced for the client for the project on the site shown. It was prepared for a purpose agreed with the client and will have a commensurate degree of accuracy.
2. This drawing is not intended for use by any other person or for any other purpose without express permissions.
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5. Report to the Architect any discrepancies or information requiring updated.
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7. Under CDM (2015) Pace Architecture Ltd assumes the role of 'Designer', unless otherwise appointed in writing by the client.
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THE ABOVE TO BE DESIGNED BY SPECIALISTS IN ACCORDANCE WITH BRITISH STANDARDS BELOW:

- BS 9999 (2017)** - Fire safety in the design, management and use of buildings – Code of practice
BS 6564 (2017) - Sanitary installations. Code of practice for the design of sanitary facilities
BS 5266 (2016) - Emergency Lighting - Code of practice for the emergency lighting of premises
BS 5499 (2014) - Guidance for the selection and use of safety signs and fire safety notices

		
PURPOSE OF ISSUE Project Status		
PACE ARCHITECTURE www.pace-architecture.co.uk		
PROJECT BRIDGE ROAD NORTH		
ADDRESS Bridge Road North, Wrexham, LL13 9PS		
TITLE SITE LOCATION PLAN		
CLIENT JCP Investments		
DRAWN BY nc	CHECKED BY HJ	DATE 17.06.22
SCALE (@ A1) 1 : 1250		PROJECT NUMBER
DRAWING NUMBER 2002.P.001		REV

DRAFT
AS DATED

1

PROPOSED SITE PLAN

1 : 500

ECOLOGICAL MITIGATION

Gross Site Area	15,105m2
Area of Mitigation (shown green)	4,696m2 (31% of application area)
Developed Area	10,410m2 (69% of application area)
Building Footprint	5,210m2
Hardstanding	5,200m2

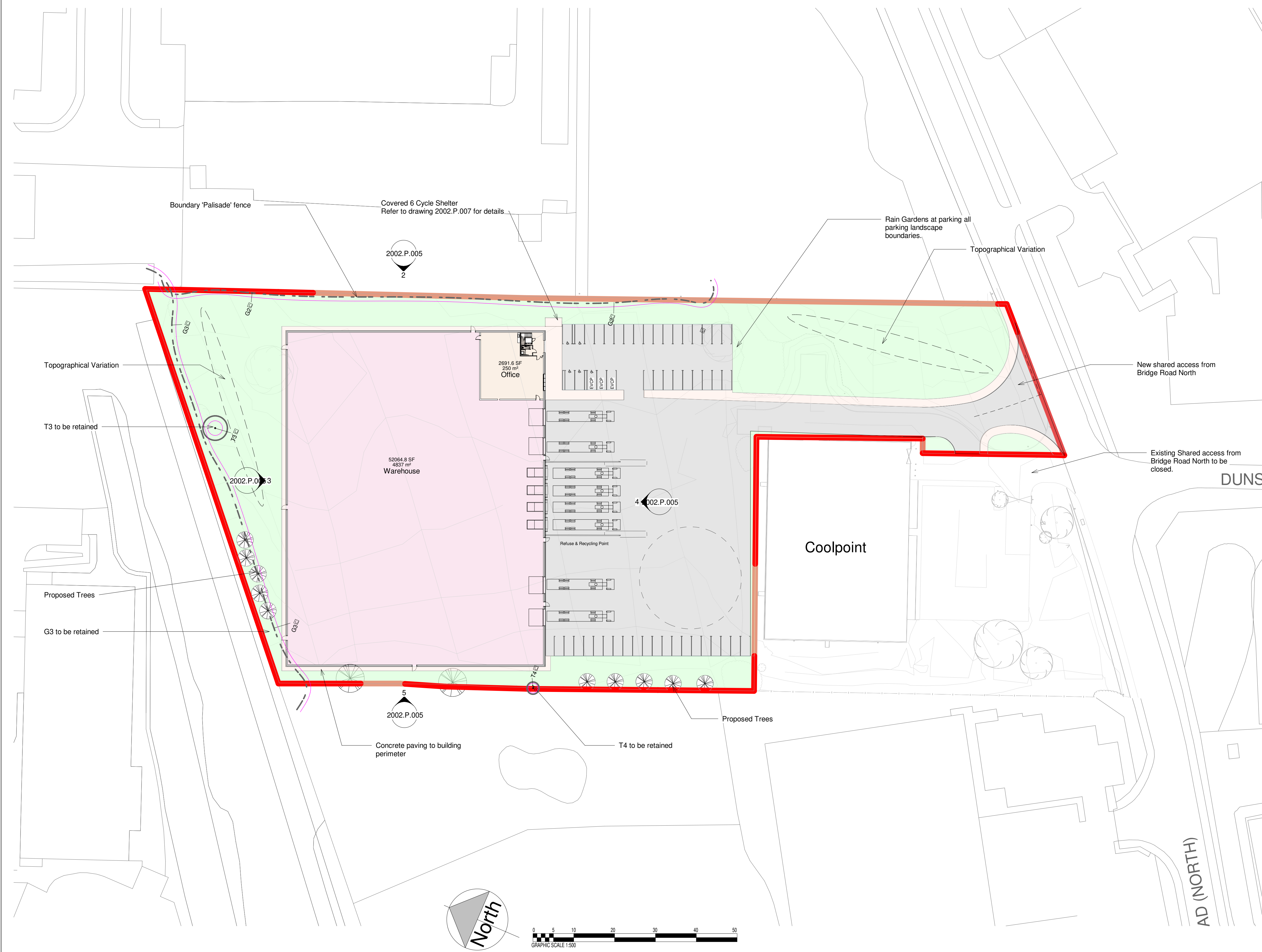
PARKING PROVISION

UNIT 1	
Gross Internal Area	5,087m2
Parking Provisions	
Car Parking Bays	51 Total spaces (average 1/100m2)
Disabled Bays	5 spaces (10% of Provision)
Cycles	6 sheltered spaces

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CONSTRUCTION N.W. LTD

PURPOSE OF ISSUE
Project Status

PACE | ARCHITECTURE

www.pace-architecture.co.uk

PROJECT
NEW INDUSTRIAL UNIT

ADDRESS
Bridge Road North, Wrexham, LL13 9PS

TITLE
PROPOSED SITE PLAN

CLIENT
JCP Investments Ltd

DRAWN BY
nc

CHECKED BY
HJ

DATE
27.04.23

SCALE (@ A1)
1 : 500

PROJECT NUMBER
2002

DRAWING NUMBER
2002.P.003(A)

REV

APPENDIX 1

Groundsure Report

COOLPOINT LTD, COOLPOINT LTD, BRIDGE ROAD NORTH, WREXHAM INDUSTRIAL ESTATE, WREXHAM, LL13 9PS

Order Details

Date: 28/03/2022
Your ref: pO16968
Our Ref: HMD-8628687
Client: Sean O'Brien

Site Details

Location: 338333 349899
Area: 1.56 ha
Authority: [Wreccsam - Wrexham County Borough Council](#)



Summary of findings

p. 2 **Aerial image**

p. 8

OS MasterMap site plan

p.13 groundsure.com/insightuserguide

Summary of findings

Page	Section	Past land use	On site	0-50m	50-250m	250-500m	500-2000m
14	1.1	<u>Historical industrial land uses</u>	7	8	12	38	-
17	1.2	<u>Historical tanks</u>	0	1	14	23	-
19	1.3	<u>Historical energy features</u>	0	0	10	28	-
20	1.4	Historical petrol stations	0	0	0	0	-
21	1.5	Historical garages	0	0	0	0	-
21	1.6	<u>Historical military land</u>	1	0	0	0	-
Page	Section	Past land use - un-grouped	On site	0-50m	50-250m	250-500m	500-2000m
22	2.1	<u>Historical industrial land uses</u>	7	10	18	51	-
26	2.2	<u>Historical tanks</u>	0	3	39	57	-
29	2.3	<u>Historical energy features</u>	0	0	24	63	-
33	2.4	Historical petrol stations	0	0	0	0	-
33	2.5	Historical garages	0	0	0	0	-
Page	Section	Waste and landfill	On site	0-50m	50-250m	250-500m	500-2000m
34	3.1	<u>Active or recent landfill</u>	0	0	2	0	-
35	3.2	Historical landfill (BGS records)	0	0	0	0	-
35	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
35	3.4	<u>Historical landfill (EA/NRW records)</u>	0	0	3	1	-
36	3.5	<u>Historical waste sites</u>	0	0	1	5	-
38	3.6	<u>Licensed waste sites</u>	0	0	53	34	-
61	3.7	<u>Waste exemptions</u>	0	0	2	12	-
Page	Section	Current industrial land use	On site	0-50m	50-250m	250-500m	500-2000m
64	4.1	<u>Recent industrial land uses</u>	0	1	25	-	-
66	4.2	Current or recent petrol stations	0	0	0	0	-
66	4.3	Electricity cables	0	0	0	0	-
67	4.4	Gas pipelines	0	0	0	0	-
67	4.5	Sites determined as Contaminated Land	0	0	0	0	-



67	4.6	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
67	4.7	Regulated explosive sites	0	0	0	0	-
67	4.8	Hazardous substance storage/usage	0	0	0	0	-
68	4.9	<u>Historical licensed industrial activities (IPC)</u>	0	0	2	0	-
68	4.10	<u>Licensed industrial activities (Part A(1))</u>	0	0	43	2	-
76	4.11	<u>Licensed pollutant release (Part A(2)/B)</u>	0	0	3	4	-
77	4.12	<u>Radioactive Substance Authorisations</u>	0	0	4	0	-
78	4.13	<u>Licensed Discharges to controlled waters</u>	0	1	12	5	-
81	4.14	Pollutant release to surface waters (Red List)	0	0	0	0	-
81	4.15	Pollutant release to public sewer	0	0	0	0	-
81	4.16	List 1 Dangerous Substances	0	0	0	0	-
81	4.17	<u>List 2 Dangerous Substances</u>	0	0	1	1	-
82	4.18	<u>Pollution Incidents (EA/NRW)</u>	0	0	13	39	-
87	4.19	Pollution inventory substances	0	0	0	0	-
87	4.20	Pollution inventory waste transfers	0	0	0	0	-
88	4.21	Pollution inventory radioactive waste	0	0	0	0	-
Page	Section	Hydrogeology	On site	0-50m	50-250m	250-500m	500-2000m
89	5.1	<u>Superficial aquifer</u>	Identified (within 500m)				
91	5.2	<u>Bedrock aquifer</u>	Identified (within 500m)				
93	5.3	<u>Groundwater vulnerability</u>	Identified (within 50m)				
94	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
94	5.5	Groundwater vulnerability- local information	None (within 0m)				
95	5.6	<u>Groundwater abstractions</u>	0	0	0	0	11
98	5.7	<u>Surface water abstractions</u>	0	0	0	0	1
98	5.8	Potable abstractions	0	0	0	0	0
99	5.9	<u>Source Protection Zones</u>	0	0	0	2	-
99	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-
Page	Section	Hydrology	On site	0-50m	50-250m	250-500m	500-2000m
100	6.1	<u>Water Network (OS MasterMap)</u>	0	0	13	-	-



102	6.2	<u>Surface water features</u>	0	0	6	-	-
102	6.3	<u>WFD Surface water body catchments</u>	2	-	-	-	-
102	6.4	<u>WFD Surface water bodies</u>	0	0	0	-	-
103	6.5	<u>WFD Groundwater bodies</u>	1	-	-	-	-
Page	Section	River and coastal flooding	On site	0-50m	50-250m	250-500m	500-2000m
104	7.1	Risk of flooding from rivers and the sea	None (within 50m)				
104	7.2	Historical Flood Events	0	0	0	-	-
104	7.3	Flood Defences	0	0	0	-	-
105	7.4	Areas Benefiting from Flood Defences	0	0	0	-	-
105	7.5	Flood Storage Areas	0	0	0	-	-
106	7.6	Flood Zone 2	None (within 50m)				
106	7.7	Flood Zone 3	None (within 50m)				
Page	Section	Surface water flooding					
107	8.1	<u>Surface water flooding</u>	1 in 30 year, 0.3m - 1.0m (within 50m)				
Page	Section	Groundwater flooding					
109	9.1	<u>Groundwater flooding</u>	Low (within 50m)				
Page	Section	Environmental designations	On site	0-50m	50-250m	250-500m	500-2000m
110	10.1	Sites of Special Scientific Interest (SSSI)	0	0	0	0	0
111	10.2	Conserved wetland sites (Ramsar sites)	0	0	0	0	0
111	10.3	Special Areas of Conservation (SAC)	0	0	0	0	0
111	10.4	Special Protection Areas (SPA)	0	0	0	0	0
111	10.5	National Nature Reserves (NNR)	0	0	0	0	0
112	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
112	10.7	<u>Designated Ancient Woodland</u>	0	0	0	2	9
113	10.8	Biosphere Reserves	0	0	0	0	0
113	10.9	Forest Parks	0	0	0	0	0
113	10.10	Marine Conservation Zones	0	0	0	0	0
113	10.11	Green Belt	0	0	0	0	0
113	10.12	Proposed Ramsar sites	0	0	0	0	0



114	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
114	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
114	10.15	Nitrate Sensitive Areas	0	0	0	0	0
114	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
115	10.17	<u>SSSI Impact Risk Zones</u>	1	-	-	-	-
116	10.18	SSSI Units	0	0	0	0	0
Page	Section	Visual and cultural designations	On site	0-50m	50-250m	250-500m	500-2000m
117	11.1	World Heritage Sites	0	0	0	-	-
117	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
117	11.3	National Parks	0	0	0	-	-
117	11.4	Listed Buildings	0	0	0	-	-
118	11.5	Conservation Areas	0	0	0	-	-
118	11.6	Scheduled Ancient Monuments	0	0	0	-	-
118	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	Agricultural designations	On site	0-50m	50-250m	250-500m	500-2000m
119	12.1	Agricultural Land Classification	None (within 250m)				
119	12.2	Open Access Land	0	0	0	-	-
119	12.3	Tree Felling Licences	0	0	0	-	-
119	12.4	Environmental Stewardship Schemes	0	0	0	-	-
120	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
121	13.1	Priority Habitat Inventory	0	0	0	-	-
121	13.2	Habitat Networks	0	0	0	-	-
121	13.3	Open Mosaic Habitat	0	0	0	-	-
121	13.4	Limestone Pavement Orders	0	0	0	-	-
Page	Section	Geology 1:10,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
122	14.1	<u>10k Availability</u>	Identified (within 500m)				
123	14.2	<u>Artificial and made ground (10k)</u>	3	1	0	0	-
125	14.3	<u>Superficial geology (10k)</u>	2	0	1	0	-

126	14.4	Landslip (10k)	0	0	0	0	-
<u>127</u>	<u>14.5</u>	<u>Bedrock geology (10k)</u>	2	0	0	1	-
128	14.6	Bedrock faults and other linear features (10k)	0	0	0	0	-
Page	Section	Geology 1:50,000 scale	On site	0-50m	50-250m	250-500m	500-2000m
<u>129</u>	<u>15.1</u>	<u>50k Availability</u>	Identified (within 500m)				
<u>130</u>	<u>15.2</u>	<u>Artificial and made ground (50k)</u>	2	0	0	0	-
<u>131</u>	<u>15.3</u>	<u>Artificial ground permeability (50k)</u>	3	1	-	-	-
<u>132</u>	<u>15.4</u>	<u>Superficial geology (50k)</u>	1	0	2	0	-
<u>133</u>	<u>15.5</u>	<u>Superficial permeability (50k)</u>	Identified (within 50m)				
133	15.6	Landslip (50k)	0	0	0	0	-
133	15.7	Landslip permeability (50k)	None (within 50m)				
<u>134</u>	<u>15.8</u>	<u>Bedrock geology (50k)</u>	1	0	1	1	-
<u>135</u>	<u>15.9</u>	<u>Bedrock permeability (50k)</u>	Identified (within 50m)				
135	15.10	Bedrock faults and other linear features (50k)	0	0	0	0	-
Page	Section	Boreholes	On site	0-50m	50-250m	250-500m	500-2000m
<u>136</u>	<u>16.1</u>	<u>BGS Boreholes</u>	0	0	27	-	-
Page	Section	Natural ground subsidence					
<u>138</u>	<u>17.1</u>	<u>Shrink swell clays</u>	Very low (within 50m)				
<u>139</u>	<u>17.2</u>	<u>Running sands</u>	Very low (within 50m)				
<u>141</u>	<u>17.3</u>	<u>Compressible deposits</u>	Very low (within 50m)				
<u>143</u>	<u>17.4</u>	<u>Collapsible deposits</u>	Very low (within 50m)				
<u>144</u>	<u>17.5</u>	<u>Landslides</u>	Very low (within 50m)				
<u>145</u>	<u>17.6</u>	<u>Ground dissolution of soluble rocks</u>	Negligible (within 50m)				
Page	Section	Mining, ground workings and natural cavities	On site	0-50m	50-250m	250-500m	500-2000m
147	18.1	Natural cavities	0	0	0	0	-
148	18.2	BritPits	0	0	0	0	-
<u>148</u>	<u>18.3</u>	<u>Surface ground workings</u>	0	5	24	-	-
149	18.4	Underground workings	0	0	0	0	0
149	18.5	Historical Mineral Planning Areas	0	0	0	0	-

150	18.6	Non-coal mining	0	0	0	0	0
150	18.7	Mining cavities	0	0	0	0	0
150	18.8	JPB mining areas	None (within 0m)				
150	18.9	<u>Coal mining</u>	Identified (within 0m)				
151	18.10	Brine areas	None (within 0m)				
151	18.11	Gypsum areas	None (within 0m)				
151	18.12	Tin mining	None (within 0m)				
151	18.13	Clay mining	None (within 0m)				
Page	Section	Radon					
152	19.1	<u>Radon</u>	Less than 1% (within 0m)				
Page	Section	Soil chemistry	On site	0-50m	50-250m	250-500m	500-2000m
153	20.1	<u>BGS Estimated Background Soil Chemistry</u>	2	0	-	-	-
153	20.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
153	20.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects	On site	0-50m	50-250m	250-500m	500-2000m
154	21.1	Underground railways (London)	0	0	0	-	-
154	21.2	Underground railways (Non-London)	0	0	0	-	-
155	21.3	Railway tunnels	0	0	0	-	-
155	21.4	<u>Historical railway and tunnel features</u>	0	1	3	-	-
155	21.5	Royal Mail tunnels	0	0	0	-	-
156	21.6	Historical railways	0	0	0	-	-
156	21.7	Railways	0	0	0	-	-
156	21.8	Crossrail 1	0	0	0	0	-
156	21.9	Crossrail 2	0	0	0	0	-
156	21.10	HS2	0	0	0	0	-

Recent aerial photograph



Aerial photography supplied by Getmapping PLC. © Copyright Getmapping PLC 2022. All Rights Reserved.

Capture Date: 10/04/2020

Site Area: 1.56ha



Recent site history - 2017 aerial photograph



Capture Date: 07/05/2017

Site Area: 1.56ha



Recent site history - 2009 aerial photograph



Capture Date: 01/06/2009

Site Area: 1.56ha



Recent site history - 2003 aerial photograph



Capture Date: 04/08/2003

Site Area: 1.56ha



Recent site history - 2000 aerial photograph



Capture Date: 04/09/2000

Site Area: 1.56ha



OS MasterMap site plan



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Site Area: 1.56ha



1 Past land use



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features
- Historical military land

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1.1 Historical industrial land uses

Records within 500m

65

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 1:10,560 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
2	On site	Unspecified Works	1977	829794



ID	Location	Land use	Dates present	Group ID
3	On site	Industrial Estate	1982	844626
4	On site	Unspecified Commercial/Industrial	1977	938680
A	On site	Unspecified Disused Works	1964	813337
A	On site	Industrial Estate	1992	844663
B	On site	Unspecified Commercial/Industrial	1964	883869
C	On site	Unspecified Depot	1977	818116
D	5m N	Unspecified Commercial/Industrial	1982 - 1992	931204
D	5m N	Unspecified Works	1960 - 1968	946209
E	6m NW	Unspecified Heap	1992	802658
5	18m SE	Industrial Estate	1964	844693
C	18m SE	Unspecified Works	1964	829796
A	27m S	Unspecified Commercial/Industrial	1992	796432
C	28m SE	Unspecified Commercial/Industrial	1992	796433
A	32m S	Unspecified Works	1977	829798
6	55m SE	Railway Sidings	1964	924662
F	81m SE	Railway Sidings	1949	880775
7	102m NW	Unspecified Heap	1960 - 1982	972758
H	102m NE	Unspecified Tank	1992	823838
C	124m E	Unspecified Heap	1964	802656
8	141m NW	Unspecified Heap	1960 - 1982	951205
L	156m W	Unspecified Pit	1960 - 1982	847521
M	161m W	Unspecified Heap	1977	802662
M	186m W	Unspecified Ground Workings	1964	799056
B	198m W	Unspecified Heap	1992	802663
O	210m E	Unspecified Commercial/Industrial	1977	796434
Q	220m SE	Unspecified Works	1977	829797
S	256m E	Railway Sidings	1960 - 1968	935833
O	263m E	Unspecified Works	1964	829795



ID	Location	Land use	Dates present	Group ID
10	270m SW	Unspecified Commercial/Industrial	1992	872439
U	274m E	Unspecified Tank	1964 - 1977	937567
11	286m NW	Unspecified Heap	1960 - 1982	871860
T	289m E	Railway Sidings	1964	939160
12	304m S	Unspecified Commercial/Industrial	1964	981597
13	305m E	Railway Building	1960 - 1968	876615
V	305m S	Unspecified Works	1992	855339
14	326m NW	Unspecified Heap	1960 - 1982	946768
W	326m SW	Unspecified Tank	1992	823836
X	330m S	Unspecified Tank	1992	823837
Y	333m SW	Unspecified Tanks	1949	814863
T	333m E	Unspecified Heap	1992	935861
T	333m E	Unspecified Heap	1977	989616
16	333m NW	Unspecified Pit	1982	838783
T	336m E	Unspecified Heap	1964	974778
17	339m S	Unspecified Works	1977	957786
18	357m W	Unspecified Ground Workings	1977	799055
19	370m E	Unspecified Pit	1964	838780
22	406m SW	Unspecified Works	1977	954267
23	419m W	Unspecified Ground Workings	1977	799057
24	432m NW	Unspecified Heap	1960 - 1982	967127
25	438m W	Unspecified Heap	1964	802661
AA	439m W	Unspecified Workshop	1977	880838
AA	439m W	Unspecified Workshop	1992	910726
26	440m NW	Unspecified Commercial/Industrial	1949	796408
AB	448m E	Unspecified Depot	1977	818114
AB	448m E	Unspecified Tanks	1992	865357
AB	448m E	Unspecified Tanks	1977	895127



ID	Location	Land use	Dates present	Group ID
AC	470m SW	Unspecified Commercial/Industrial	1992	890838
AD	485m E	Unspecified Depot	1977	818115
AD	485m E	Unspecified Commercial/Industrial	1992	926210
29	485m NW	Unspecified Heap	1960 - 1982	900352
AF	489m W	Unspecified Tank	1977	823835
AC	494m SW	Unspecified Commercial/Industrial	1964 - 1977	978415
31	499m NE	Railway Buildings	1960 - 1968	984437
AE	499m NE	Unspecified Tanks	1992	814865

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m

38

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
E	15m W	Unspecified Tank	1959 - 1982	127284
G	81m SE	Unspecified Tank	1982 - 1991	147079
G	82m SE	Unspecified Tank	1971	125440
H	98m NE	Unspecified Tank	1989 - 1994	139355
G	118m SE	Unspecified Tank	1971	110696
J	127m S	Tanks	1988 - 1991	123787
J	129m S	Tanks	1994	146105
K	130m S	Unspecified Tank	1971 - 1988	124306
K	136m S	Unspecified Tank	1989 - 1994	126184
N	205m E	Unspecified Tank	1959 - 1988	126212



ID	Location	Land use	Dates present	Group ID
N	220m E	Unspecified Tank	1982 - 1988	144192
N	222m E	Tanks	1959 - 1971	143693
N	226m E	Unspecified Tank	1982 - 1988	124221
R	228m E	Unspecified Tank	1989	124814
R	235m E	Unspecified Tank	1960 - 1987	144778
U	272m E	Unspecified Tank	1982 - 1990	141669
U	273m E	Unspecified Tank	1959 - 1971	133122
W	327m SW	Unspecified Tank	1982 - 1994	146128
X	331m S	Unspecified Tank	1991 - 1994	122354
X	331m S	Unspecified Tank	1988 - 1990	122735
15	332m SE	Tanks	1959	104978
Y	333m SW	Unspecified Tank	1982	143982
Y	339m SW	Unspecified Tank	1959 - 1971	147860
Y	346m SW	Unspecified Tank	1982	133045
Y	352m SW	Unspecified Tank	1959 - 1971	125928
F	358m NE	Unspecified Tank	1989	110679
F	366m NE	Unspecified Tank	1982 - 1990	132935
AB	450m E	Tanks	1982 - 1990	134855
27	450m SE	Unspecified Tank	1989 - 1990	130225
AB	451m E	Tanks	1994	127182
AB	452m E	Tanks	1991	122504
AB	456m E	Unspecified Tank	1982 - 1990	138127
AB	458m E	Tanks	1991	144603
AE	487m NE	Tanks	1989 - 1991	126350
AE	495m NE	Tanks	1989 - 1990	123270
AE	496m NE	Tanks	1993 - 1995	137761
AF	497m W	Unspecified Tank	1976 - 1991	136008
AF	498m W	Unspecified Tank	1993 - 1994	122268

This data is sourced from Ordnance Survey / Groundsure.



1.3 Historical energy features

Records within 500m

38

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use map on **page 14**

ID	Location	Land use	Dates present	Group ID
I	118m E	Electricity Substation	1989 - 1990	83682
I	127m E	Electricity Substation	1993 - 1995	77112
I	127m E	Electricity Substation	1990	60158
I	130m E	Electricity Substation	1991	60378
9	163m NW	Electricity Substation	1994 - 1995	66927
A	187m S	Electricity Substation	1988 - 1994	76174
P	219m SE	Electricity Substation	1991	83408
P	224m SE	Electricity Substation	1982 - 1990	65375
P	225m SE	Electricity Substation	1971 - 1994	69723
L	245m NW	Electricity Substation	1994 - 1995	77328
T	263m E	Electricity Substation	1982 - 1990	73437
T	264m E	Electricity Substation	1971 - 1994	80529
T	264m E	Electricity Substation	1991	64281
T	311m E	Electricity Substation	1982 - 1991	67106
T	311m E	Electricity Substation	1994	71214
T	312m E	Electricity Substation	1971	66130
Q	318m SE	Electricity Substation	1990 - 1994	70350
V	318m S	Electricity Substation	1991 - 1994	74613
V	319m S	Electricity Substation	1982 - 1990	74223
Q	319m SE	Electricity Substation	1991	64940
Z	346m SW	Electricity Substation	1991	70295



ID	Location	Land use	Dates present	Group ID
Z	349m SW	Electricity Substation	1989	69496
Z	349m SW	Electricity Substation	1990	70549
Z	349m SW	Electricity Substation	1994	79594
Z	353m SW	Electricity Substation	1988	77483
Z	353m SW	Electricity Substation	1982	82314
F	362m E	Electricity Substation	1994 - 1995	78384
20	374m NW	Electricity Substation	1994 - 1999	65247
21	400m N	Electricity Substation	1974 - 1995	68827
28	469m S	Electricity Substation	1982 - 1994	83924
S	474m NE	Electricity Substation	1989	78303
S	480m NE	Electricity Substation	1990	67055
S	480m NE	Electricity Substation	1990	74971
S	480m NE	Electricity Substation	1989	76207
S	481m NE	Electricity Substation	1982 - 1987	66128
30	488m N	Electricity Substation	1991 - 1995	84681
AG	497m W	Electricity Substation	1994	79821
AG	497m W	Electricity Substation	1993	83489

This data is sourced from Ordnance Survey / Groundsure.

1.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.



1.5 Historical garages

Records within 500m

0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale, intelligently grouped into contiguous features. To prevent misrepresentation of the size of historical features at any given time, features are only grouped if they have similar geometries within immediately preceding or succeeding map editions. See section 2 for a breakdown of grouping if required. Grouped and the original ungrouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

1.6 Historical military land

Records within 500m

1

Areas of military land digitised from multiple sources including the National Archives, local records, MOD records and verified other sources, intelligently grouped into contiguous features.

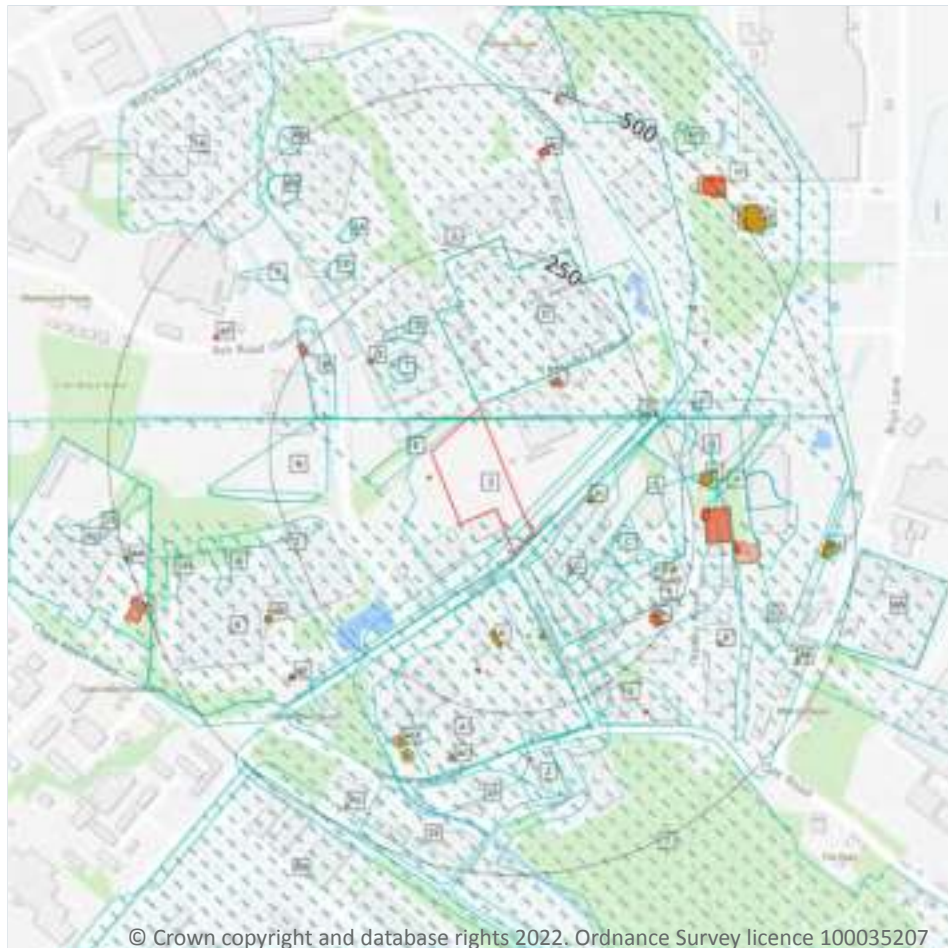
Features are displayed on the Past land use map on **page 14**

ID	Location	Site Name	Date of Operation	Activities
1	On site	ROF Wrexham	c.1938 - 1988	c. WW2: Produced cordite;; post WW2: Cordite production ceased in 1945 and the area was used as an industrial estate by the Welsh Development Agency to boost the local economy; Explosives Factory

This data is sourced from Ordnance Survey / Groundsure / other sources.



2 Past land use - un-grouped



- Site Outline
- Search buffers in metres (m)
- Historical industrial land uses
- Historical tanks
- Historical energy features

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2.1 Historical industrial land uses

Records within 500m

86

Potentially contaminative land use features digitised from historical Ordnance Survey mapping at 1:10,000 and 10,560 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 22**

ID	Location	Land Use	Date	Group ID
1	On site	Unspecified Commercial/Industrial	1977	938680
2	On site	Industrial Estate	1982	844626
3	On site	Unspecified Works	1977	829794

ID	Location	Land Use	Date	Group ID
A	On site	Industrial Estate	1992	844663
A	On site	Unspecified Disused Works	1964	813337
B	On site	Unspecified Commercial/Industrial	1964	883869
C	On site	Unspecified Depot	1977	818116
D	5m N	Unspecified Commercial/Industrial	1992	931204
D	5m N	Unspecified Commercial/Industrial	1982	931204
D	5m N	Unspecified Works	1960	946209
D	5m N	Unspecified Works	1968	946209
E	6m NW	Unspecified Heap	1992	802658
4	18m SE	Industrial Estate	1964	844693
C	18m SE	Unspecified Works	1964	829796
A	27m S	Unspecified Commercial/Industrial	1992	796432
C	28m SE	Unspecified Commercial/Industrial	1992	796433
A	32m S	Unspecified Works	1977	829798
5	55m SE	Railway Sidings	1964	924662
F	81m SE	Railway Sidings	1949	880775
H	102m NE	Unspecified Tank	1992	823838
I	102m NW	Unspecified Heap	1982	972758
I	102m NW	Unspecified Heap	1960	972758
I	102m NW	Unspecified Heap	1968	972758
C	124m E	Unspecified Heap	1964	802656
L	141m NW	Unspecified Heap	1982	951205
L	141m NW	Unspecified Heap	1960	951205
L	141m NW	Unspecified Heap	1968	951205
M	156m W	Unspecified Pit	1982	847521
M	156m W	Unspecified Pit	1960	847521
M	156m W	Unspecified Pit	1968	847521
N	161m W	Unspecified Heap	1977	802662



ID	Location	Land Use	Date	Group ID
N	186m W	Unspecified Ground Workings	1964	799056
B	198m W	Unspecified Heap	1992	802663
Q	210m E	Unspecified Commercial/Industrial	1977	796434
S	220m SE	Unspecified Works	1977	829797
U	256m E	Railway Sidings	1960	935833
U	256m E	Railway Sidings	1968	935833
Q	263m E	Unspecified Works	1964	829795
6	270m SW	Unspecified Commercial/Industrial	1992	872439
W	274m E	Unspecified Tank	1977	937567
W	274m E	Unspecified Tank	1964	937567
X	286m NW	Unspecified Heap	1982	871860
X	286m NW	Unspecified Heap	1960	871860
X	286m NW	Unspecified Heap	1968	871860
V	289m E	Railway Sidings	1964	939160
7	304m S	Unspecified Commercial/Industrial	1964	981597
Y	305m E	Railway Building	1960	876615
Y	305m E	Railway Building	1968	876615
Z	305m S	Unspecified Works	1992	855339
AA	326m NW	Unspecified Heap	1982	946768
AA	326m NW	Unspecified Heap	1960	946768
AA	326m NW	Unspecified Heap	1968	946768
AB	326m SW	Unspecified Tank	1992	823836
AC	330m S	Unspecified Tank	1992	823837
AD	333m SW	Unspecified Tanks	1949	814863
V	333m E	Unspecified Heap	1977	989616
V	333m E	Unspecified Heap	1992	935861
9	333m NW	Unspecified Pit	1982	838783
V	336m E	Unspecified Heap	1964	974778

ID	Location	Land Use	Date	Group ID
10	339m S	Unspecified Works	1977	957786
11	357m W	Unspecified Ground Workings	1977	799055
12	370m E	Unspecified Pit	1964	838780
13	406m SW	Unspecified Works	1977	954267
14	419m W	Unspecified Ground Workings	1977	799057
AH	432m NW	Unspecified Heap	1982	967127
AH	432m NW	Unspecified Heap	1960	967127
AH	432m NW	Unspecified Heap	1968	967127
15	438m W	Unspecified Heap	1964	802661
AI	439m W	Unspecified Workshop	1977	880838
AI	439m W	Unspecified Workshop	1992	910726
16	440m NW	Unspecified Commercial/Industrial	1949	796408
AJ	448m E	Unspecified Tanks	1977	895127
AJ	448m E	Unspecified Depot	1977	818114
AJ	448m E	Unspecified Tanks	1992	865357
AM	470m SW	Unspecified Commercial/Industrial	1992	890838
AN	485m E	Unspecified Depot	1977	818115
AN	485m E	Unspecified Commercial/Industrial	1992	926210
AO	485m NW	Unspecified Heap	1982	900352
AO	485m NW	Unspecified Heap	1960	900352
AO	485m NW	Unspecified Heap	1968	900352
AR	489m W	Unspecified Tank	1977	823835
AM	494m SW	Unspecified Commercial/Industrial	1977	978415
AM	494m SW	Unspecified Commercial/Industrial	1964	978415
AT	499m NE	Railway Buildings	1960	984437
AT	499m NE	Railway Buildings	1968	984437
AP	499m NE	Unspecified Tanks	1992	814865

This data is sourced from Ordnance Survey / Groundsure.



2.2 Historical tanks

Records within 500m

99

Tank features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 22**

ID	Location	Land Use	Date	Group ID
E	15m W	Unspecified Tank	1959	127284
E	15m W	Unspecified Tank	1971	127284
E	15m W	Unspecified Tank	1982	127284
G	81m SE	Unspecified Tank	1982	147079
G	81m SE	Unspecified Tank	1988	147079
G	81m SE	Unspecified Tank	1989	147079
G	81m SE	Unspecified Tank	1990	147079
G	82m SE	Unspecified Tank	1991	147079
G	82m SE	Unspecified Tank	1971	125440
H	98m NE	Unspecified Tank	1989	139355
H	98m NE	Unspecified Tank	1990	139355
H	101m NE	Unspecified Tank	1991	139355
H	101m NE	Unspecified Tank	1994	139355
G	118m SE	Unspecified Tank	1971	110696
K	127m S	Tanks	1991	123787
K	128m S	Tanks	1988	123787
K	128m S	Tanks	1989	123787
K	128m S	Tanks	1990	123787
K	129m S	Tanks	1994	146105
K	130m S	Unspecified Tank	1971	124306
K	130m S	Unspecified Tank	1982	124306
K	130m S	Unspecified Tank	1988	124306
K	136m S	Unspecified Tank	1989	126184



ID	Location	Land Use	Date	Group ID
K	136m S	Unspecified Tank	1990	126184
K	136m S	Unspecified Tank	1991	126184
K	137m S	Unspecified Tank	1994	126184
P	205m E	Unspecified Tank	1982	126212
P	205m E	Unspecified Tank	1988	126212
P	206m E	Unspecified Tank	1959	126212
P	206m E	Unspecified Tank	1971	126212
P	220m E	Unspecified Tank	1982	144192
P	220m E	Unspecified Tank	1988	144192
P	222m E	Tanks	1959	143693
P	222m E	Tanks	1971	143693
P	226m E	Unspecified Tank	1982	124221
P	226m E	Unspecified Tank	1988	124221
T	228m E	Unspecified Tank	1989	124814
T	228m E	Unspecified Tank	1989	124814
T	235m E	Unspecified Tank	1982	144778
T	235m E	Unspecified Tank	1987	144778
T	236m E	Unspecified Tank	1960	144778
T	236m E	Unspecified Tank	1974	144778
W	272m E	Unspecified Tank	1982	141669
W	272m E	Unspecified Tank	1988	141669
W	272m E	Unspecified Tank	1989	141669
W	272m E	Unspecified Tank	1990	141669
W	273m E	Unspecified Tank	1959	133122
W	273m E	Unspecified Tank	1971	133122
AB	327m SW	Unspecified Tank	1983	146128
AB	327m SW	Unspecified Tank	1993	146128
AB	327m SW	Unspecified Tank	1994	146128

ID	Location	Land Use	Date	Group ID
AB	328m SW	Unspecified Tank	1982	146128
AB	328m SW	Unspecified Tank	1986	146128
AB	328m SW	Unspecified Tank	1991	146128
AC	331m S	Unspecified Tank	1994	122354
AC	331m S	Unspecified Tank	1988	122735
AC	331m S	Unspecified Tank	1989	122735
AC	331m S	Unspecified Tank	1990	122735
AC	331m S	Unspecified Tank	1991	122354
8	332m SE	Tanks	1959	104978
AD	333m SW	Unspecified Tank	1982	143982
AD	339m SW	Unspecified Tank	1959	147860
AD	339m SW	Unspecified Tank	1971	147860
AD	346m SW	Unspecified Tank	1982	133045
AD	352m SW	Unspecified Tank	1959	125928
AD	352m SW	Unspecified Tank	1971	125928
F	358m NE	Unspecified Tank	1989	110679
F	366m NE	Unspecified Tank	1982	132935
F	366m NE	Unspecified Tank	1987	132935
F	366m NE	Unspecified Tank	1989	132935
F	366m NE	Unspecified Tank	1990	132935
AJ	450m E	Tanks	1982	134855
AJ	450m E	Tanks	1988	134855
AJ	450m E	Tanks	1989	134855
AJ	450m E	Tanks	1990	134855
AK	450m SE	Unspecified Tank	1989	130225
AK	450m SE	Unspecified Tank	1990	130225
AJ	451m E	Tanks	1994	127182
AJ	452m E	Tanks	1991	122504

ID	Location	Land Use	Date	Group ID
AJ	456m E	Unspecified Tank	1982	138127
AJ	456m E	Unspecified Tank	1988	138127
AJ	456m E	Unspecified Tank	1989	138127
AJ	456m E	Unspecified Tank	1990	138127
AJ	458m E	Tanks	1991	144603
AP	487m NE	Tanks	1989	126350
AP	495m NE	Tanks	1989	123270
AP	495m NE	Tanks	1990	123270
AP	495m NE	Tanks	1990	123270
AP	496m NE	Tanks	1991	126350
AP	496m NE	Tanks	1993	137761
AP	496m NE	Tanks	1995	137761
AP	496m NE	Tanks	1994	137761
AR	497m W	Unspecified Tank	1976	136008
AR	497m W	Unspecified Tank	1983	136008
AR	498m W	Unspecified Tank	1993	122268
AR	498m W	Unspecified Tank	1994	122268
AR	498m W	Unspecified Tank	1982	136008
AR	498m W	Unspecified Tank	1986	136008
AR	498m W	Unspecified Tank	1991	136008

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m

87

Energy features digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 22**



ID	Location	Land Use	Date	Group ID
J	118m E	Electricity Substation	1989	83682
J	118m E	Electricity Substation	1989	83682
J	118m E	Electricity Substation	1990	83682
J	127m E	Electricity Substation	1993	77112
J	127m E	Electricity Substation	1995	77112
J	127m E	Electricity Substation	1994	77112
J	127m E	Electricity Substation	1990	60158
J	130m E	Electricity Substation	1991	60378
O	163m NW	Electricity Substation	1995	66927
O	163m NW	Electricity Substation	1994	66927
A	187m S	Electricity Substation	1988	76174
A	187m S	Electricity Substation	1989	76174
A	187m S	Electricity Substation	1990	76174
A	188m S	Electricity Substation	1991	76174
A	188m S	Electricity Substation	1994	76174
R	219m SE	Electricity Substation	1991	83408
R	224m SE	Electricity Substation	1982	65375
R	224m SE	Electricity Substation	1988	65375
R	224m SE	Electricity Substation	1989	65375
R	224m SE	Electricity Substation	1990	65375
R	225m SE	Electricity Substation	1971	69723
R	226m SE	Electricity Substation	1994	69723
M	245m NW	Electricity Substation	1995	77328
M	245m NW	Electricity Substation	1994	77328
V	263m E	Electricity Substation	1982	73437
V	263m E	Electricity Substation	1988	73437
V	263m E	Electricity Substation	1989	73437
V	263m E	Electricity Substation	1990	73437

ID	Location	Land Use	Date	Group ID
V	264m E	Electricity Substation	1994	80529
V	264m E	Electricity Substation	1991	64281
V	265m E	Electricity Substation	1971	80529
V	311m E	Electricity Substation	1982	67106
V	311m E	Electricity Substation	1988	67106
V	311m E	Electricity Substation	1989	67106
V	311m E	Electricity Substation	1990	67106
V	311m E	Electricity Substation	1994	71214
V	312m E	Electricity Substation	1971	66130
V	312m E	Electricity Substation	1991	67106
S	318m SE	Electricity Substation	1994	70350
Z	318m S	Electricity Substation	1994	74613
S	318m SE	Electricity Substation	1990	70350
Z	319m S	Electricity Substation	1982	74223
Z	319m S	Electricity Substation	1988	74223
Z	319m S	Electricity Substation	1989	74223
Z	319m S	Electricity Substation	1990	74223
S	319m SE	Electricity Substation	1991	64940
Z	320m S	Electricity Substation	1991	74613
AE	346m SW	Electricity Substation	1991	70295
AE	349m SW	Electricity Substation	1994	79594
AE	349m SW	Electricity Substation	1989	69496
AE	349m SW	Electricity Substation	1990	70549
AE	353m SW	Electricity Substation	1982	82314
AE	353m SW	Electricity Substation	1988	77483
F	362m E	Electricity Substation	1995	78384
F	362m E	Electricity Substation	1994	78384
AF	374m NW	Electricity Substation	1994	65247

ID	Location	Land Use	Date	Group ID
AF	374m NW	Electricity Substation	1999	65247
AF	374m NW	Electricity Substation	1995	65247
AF	374m NW	Electricity Substation	1995	65247
AG	400m N	Electricity Substation	1991	68827
AG	400m N	Electricity Substation	1974	68827
AG	401m N	Electricity Substation	1982	68827
AG	401m N	Electricity Substation	1987	68827
AG	401m N	Electricity Substation	1989	68827
AG	401m N	Electricity Substation	1989	68827
AG	401m N	Electricity Substation	1990	68827
AG	402m N	Electricity Substation	1993	68827
AG	402m N	Electricity Substation	1995	68827
AG	402m N	Electricity Substation	1994	68827
AL	469m S	Electricity Substation	1994	83924
AL	469m SW	Electricity Substation	1982	83924
AL	469m SW	Electricity Substation	1988	83924
AL	469m SW	Electricity Substation	1989	83924
AL	469m SW	Electricity Substation	1990	83924
AL	469m SW	Electricity Substation	1991	83924
U	474m NE	Electricity Substation	1989	78303
U	480m NE	Electricity Substation	1989	76207
U	480m NE	Electricity Substation	1990	74971
U	480m NE	Electricity Substation	1990	67055
U	481m NE	Electricity Substation	1982	66128
U	481m NE	Electricity Substation	1987	66128
AQ	488m N	Electricity Substation	1993	84681
AQ	488m N	Electricity Substation	1995	84681
AQ	488m N	Electricity Substation	1994	84681

ID	Location	Land Use	Date	Group ID
AQ	489m N	Electricity Substation	1991	84681
AS	497m W	Electricity Substation	1993	83489
AS	497m W	Electricity Substation	1994	79821

This data is sourced from Ordnance Survey / Groundsure.

2.4 Historical petrol stations

Records within 500m

0

Petrol stations digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.

2.5 Historical garages

Records within 500m

0

Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

This data is sourced from Ordnance Survey / Groundsure.



3 Waste and landfill



- Site Outline
- Search buffers in metres (m)
- Active or recent landfill
- Historical landfill (EA/NRW)
- Historical waste sites
- Licensed waste sites
- Waste exemptions

3.1 Active or recent landfill

Records within 500m

2

Active or recently closed landfill sites under Environment Agency/Natural Resources Wales regulation. Features are displayed on the Waste and landfill map on **page 34**

ID	Location	Details	
A	112m E	Operator: Welsh Assembly Government Site Address: Marlborough Road, Wrexham Ind Est, Wrexham, Clwyd, LL13 9RJ	WML Number: 37009 EPR Reference: WDA001 Landfill type: A2 : Other Landfill Site taking Special Waste Status: Closure IPPC Reference: - EPR Number: EAEP\EA\EPR\BP3394FH/A001

ID	Location	Details	
A	112m E	Operator: Welsh Assembly Government Site Address: Marlborough Road, Wrexham Ind Est, Wrexham, Clwyd, LL13 9RJ	WML Number: 37011 EPR Reference: WDA002 Landfill type: A2 : Other Landfill Site taking Special Waste Status: Closure IPPC Reference: - EPR Number: EAEPR\EA/EPR/BP3994FJ/A001

This data is sourced from the Environment Agency and Natural Resources Wales.

3.2 Historical landfill (BGS records)

Records within 500m	0
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Landfill sites identified on a survey carried out on behalf of the DoE in 1973. These sites may have been closed or operational at this time.

This data is sourced from the British Geological Survey.

3.3 Historical landfill (LA/mapping records)

Records within 500m	0
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Landfill sites identified from Local Authority records and high detail historical mapping.

This data is sourced from the Ordnance Survey/Groundsure and Local Authority records.

3.4 Historical landfill (EA/NRW records)

Records within 500m	4
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Known historical (closed) landfill sites (e.g. sites where there is no PPC permit or waste management licence currently in force). This includes sites that existed before the waste licensing regime and sites that have been licensed in the past but where a licence has been revoked, ceased to exist or surrendered and a certificate of completion has been issued.

Features are displayed on the Waste and landfill map on **page 34**

ID	Location	Details		
C	173m W	Site Address: British Celanese Licence Holder Address: -	Waste Licence: Yes Site Reference: LB/2.3 Waste Type: Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: British Celanese Limited First Recorded 31/12/1953 Last Recorded: 31/12/1983

ID	Location	Details		
C	174m W	Site Address: British Celanese Licence Holder Address: -	Waste Licence: Yes Site Reference: LB/2.3 Waste Type: Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: British Celanese Limited First Recorded 31/12/1953 Last Recorded: 31/12/1983
C	210m W	Site Address: British Celanese Licence Holder Address: -	Waste Licence: Yes Site Reference: LB/2.3 Waste Type: Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: British Celanese Limited First Recorded 31/12/1953 Last Recorded: 31/12/1983
1	272m W	Site Address: British Celanese Licence Holder Address: -	Waste Licence: Yes Site Reference: LB/2.3 Waste Type: Industrial, Liquid sludge Environmental Permitting Regulations (Waste) Reference: - Licence Issue: - Licence Surrender: -	Operator: - Licence Holder: British Celanese Limited First Recorded 31/12/1953 Last Recorded: 31/12/1983

This data is sourced from the Environment Agency and Natural Resources Wales.

3.5 Historical waste sites

Records within 500m

6

Waste site records derived from Local Authority planning records and high detail historical mapping. Features are displayed on the Waste and landfill map on **page 34**



ID	Location	Address	Further Details	Date
A	174m SE	Site Address: Marlboough Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9RJ	Type of Site: Waste Incineration Plant (Extension) Planning application reference: 20600 Description: Scheme comprises clinical waste incineration plant extension following demolition of existing offices and erection of a 3 storey block of offices adjoining the incineration plant building. Construction - steel cladding walls; metal cladding roof; roller shutter industrial doors; passenger lifts; steel frame, portal frame frame; pitched roof. Scheme comprises clinical waste incineration plant extension following demolition of existing offices and erection of a 3 storey block of offices adjoining the incineration plant building. An application (ref: 20600) for Detailed Planning permission was submitted to Wrexham B.C. on 4th August 1992. Data source: Historic Planning Application Data Type: Point	01/06/1996
D	266m S	Site Address: Redwither Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9RD	Type of Site: Waste Transfer Station Planning application reference: CB3184 Description: Construction of a waste transfer station with associated access and car parking. Data source: Historic Planning Application Data Type: Point	01/07/1999
D	266m S	Site Address: Redwither Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9RD	Type of Site: Asbestos Waste Transfer Station Planning application reference: P/00/0555 Description: Provision of a waste transfer station. Data source: Historic Planning Application Data Type: Point	-



ID	Location	Address	Further Details	Date
2	322m N	Site Address: Redwither Business Park, WREXHAM, Clwyd, LL13 9XR	Type of Site: Waste Recovery Centre Planning application reference: N/A Description: Scheme comprises construction of a waste recovery centre which will include a 50,000 tonne incinerator. Electricity will be produced and fed into the national grid. An application (ref: -) for Detailed Planning permission was submitted to Wrexham B.C. on 11th September 2001. Plans are currently under objection from local residents and Cheshire's planning offices are preparing an environmental impact report. This goes before the Development Regulatory Committee on December 11th 2001. Start on site is subject to planning approval. Data source: Historic Planning Application Data Type: Point	16/06/2003
E	333m S	Site Address: Unit 2, Redwither Road, Wrexham Industrial Estate, WREXHAM, Clwyd, LL13 9RD	Type of Site: Tyre Recycling Centre (Conversion) - Planning application reference: P/2004/0617 Description: Scheme comprises conversion to tyre recycling centre. An application (ref: P/2004/0617) for Detailed Planning permission was submitted to Wrexham B.C. on 28th May 2004. Data source: Historic Planning Application Data Type: Point	
E	376m S	Site Address: Wrexham Recycling Centre, Redwither Road, Alan's Skip, Hire (Wales) Ltd, Wrexham, WREXHAM, Clwyd, LL13 9RD	Type of Site: Waste Transfer Station - Planning application reference: P/2007/1098 Description: Scheme comprises waste sorting, segregation recycling, reprocessing and product storage/waste transfer and landscaping. Construction - planting site works. An application (ref: P/2007/1098) for detailed planning permission was submitted to Wrexham B.C. Data source: Historic Planning Application Data Type: Point	

This data is sourced from Ordnance Survey/Groundsure and Local Authority records.

3.6 Licensed waste sites

Records within 500m

87

Active or recently closed waste sites under Environment Agency/Natural Resources Wales regulation.

Features are displayed on the Waste and landfill map on **page 34**



ID	Location	Details		
A	186m E	Site Name: W D A - Formerly Erie Electronic 2 Site Address: Marlborough Road, Wrexham Ind Est, Wrexham, LL13 9RJ Correspondence Address: Unit 7, St Asaph Business Park, Fford Richard Davies, St Asaph, Denbighshire, LL17 0LJ	Type of Site: Other Landfill Site taking Special Waste Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WDA002 EPR reference: - Operator: W D A Waste Management licence No: 37011 Annual Tonnage: 0	Issue Date: 02/03/1987 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure
A	193m E	Site Name: W D A - Formerly Erie Electronic 1 Site Address: Marlborough Road, Wrexham Ind Est, Wrexham, LL13 9RJ Correspondence Address: Unit 7, St Asaph Business Park, Fford Richard Davies, St Asaph, Denbighshire, LL17 0LJ	Type of Site: Other Landfill Site taking Special Waste Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WDA001 EPR reference: - Operator: W D A Waste Management licence No: 37009 Annual Tonnage: 0	Issue Date: 02/03/1997 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure
A	193m E	Site Name: W D A - Formerly Erie Electronic 2 Site Address: Marlborough Road, Wrexham Ind Est, Wrexham, LL13 9RJ Correspondence Address: Unit 7, St Asaph Business Park, Fford Richard Davies, St Asaph, Denbighshire, LL17 0LJ	Type of Site: Other Landfill Site taking Special Waste Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WDA002 EPR reference: - Operator: W D A Waste Management licence No: 37011 Annual Tonnage: 0	Issue Date: 02/03/1987 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure
A	193m E	Site Name: W D A - Formerly Erie Electronic 1 Site Address: Marlborough Road, Wrexham Ind Est, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Other Landfill Site taking Special Waste Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WDA001 EPR reference: EA/EPR/BP3394FH/A001 Operator: Welsh Assembly Government Waste Management licence No: 37009 Annual Tonnage: 300000	Issue Date: 02/03/1997 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure



ID	Location	Details		
A	193m E	Site Name: W D A - Formerly Erie Electronic 2 Site Address: Marlborough Road, Wrexham Ind Est, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Other Landfill Site taking Special Waste Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WDA002 EPR reference: EA/EPR/BP3994FJ/A001 Operator: Welsh Assembly Government Waste Management licence No: 37011 Annual Tonnage: 300000	Issue Date: 02/03/1987 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure
A	193m E	Site Name: - Site Address: W D A - Formerly Erie Electronic 1, Marlborough Road, Wrexham, Wrexham, LL13 9RJ Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: BP3394FH EPR reference: - Operator: Welsh Assembly Government Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 02/03/1997 Effective Date: 02/03/1997 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
A	193m E	Site Name: - Site Address: W D A - Formerly Erie Electronic 2, Wrexham Ind Est, Wrexham, Wrexham, LL13 9RJ Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: BP3994FJ EPR reference: - Operator: Welsh Assembly Government Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 02/03/1987 Effective Date: 02/03/1987 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
A	193m E	Site Name: - Site Address: W D A - Formerly Erie Electronic 1, Marlborough Road, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Other Landfill Site taking Special Waste Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: BP3394FH EPR reference: - Operator: - Waste Management licence No: 37009 Annual Tonnage: 0	Issue Date: 02/03/1997 Effective Date: 02/03/1997 Modified: - Surrendered Date: - Expiry Date: 25/01/2002 Cancelled Date: - Status: Effective



ID	Location	Details		
A	193m E	Site Name: - Site Address: W D A - Formerly Erie Electronic 2, Wrexham Ind Est, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Other Landfill Site taking Special Waste Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: BP3994FJ EPR reference: - Operator: - Waste Management licence No: 37011 Annual Tonnage: 0	Issue Date: 02/03/1987 Effective Date: 02/03/1987 Modified: - Surrendered Date: - Expiry Date: 25/01/2002 Cancelled Date: - Status: Effective
A	193m E	Site Name: - Site Address: W D A - Formerly Erie Electronic 1, Marlborough Road, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Other Landfill Site taking Special Waste Size: - Environmental Permitting Regulations (Waste) Licence Number: BP3394FH EPR reference: - Operator: Welsh Assembly Government Waste Management licence No: 37009 Annual Tonnage: 0	Issue Date: 02/03/1997 Effective Date: 02/03/1997 Modified: - Surrendered Date: - Expiry Date: 25/01/2002 Cancelled Date: - Status: Effective
A	193m E	Site Name: - Site Address: W D A - Formerly Erie Electronic 2, Wrexham Ind Est, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Other Landfill Site taking Special Waste Size: - Environmental Permitting Regulations (Waste) Licence Number: BP3994FJ EPR reference: - Operator: Welsh Assembly Government Waste Management licence No: 37011 Annual Tonnage: 0	Issue Date: 02/03/1987 Effective Date: 02/03/1987 Modified: - Surrendered Date: - Expiry Date: 25/01/2002 Cancelled Date: - Status: Effective
A	193m E	Site Name: - Site Address: W D A - Formerly Erie Electronic 1, Marlborough Road, Clwyd, Wrexham, Wrexham, LL13 9RJ Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: BP3394FH EPR reference: - Operator: Welsh Assembly Government Waste Management licence No: 37009 Annual Tonnage: 0	Issue Date: 02/03/1997 Effective Date: 02/03/1997 Modified: - Surrendered Date: - Expiry Date: 25/01/2002 Cancelled Date: - Status: Effective



ID	Location	Details		
A	193m E	Site Name: - Site Address: W D A - Formerly Erie Electronic 2, Wrexham Ind Est, Clwyd, Wrexham, Wrexham, LL13 9RJ Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: BP3994FJ EPR reference: - Operator: Welsh Assembly Government Waste Management licence No: 37011 Annual Tonnage: 0	Issue Date: 02/03/1987 Effective Date: 02/03/1987 Modified: - Surrendered Date: - Expiry Date: 25/01/2002 Cancelled Date: - Status: Effective
A	193m E	Site Name: - Site Address: W D A - Formerly Erie Electronic 1, Marlborough Road, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Other Landfill Site taking Special Waste Size: - Environmental Permitting Regulations (Waste) Licence Number: BP3394FH EPR reference: - Operator: Welsh Assembly Government Waste Management licence No: 37009 Annual Tonnage: -	Issue Date: 02/03/1997 Effective Date: 02/03/1997 Modified: - Surrendered Date: - Expiry Date: 25/01/2002 Cancelled Date: - Status: Effective
A	193m E	Site Name: - Site Address: W D A - Formerly Erie Electronic 2, Wrexham Ind Est, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Other Landfill Site taking Special Waste Size: - Environmental Permitting Regulations (Waste) Licence Number: BP3994FJ EPR reference: - Operator: Welsh Assembly Government Waste Management licence No: 37011 Annual Tonnage: -	Issue Date: 02/03/1987 Effective Date: 02/03/1987 Modified: - Surrendered Date: - Expiry Date: 25/01/2002 Cancelled Date: - Status: Effective
A	194m E	Site Name: W D A - Formerly Erie Electronic 1 Site Address: Marlborough Road, Wrexham Ind Est, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Other Landfill Site taking Special Waste Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WDA001 EPR reference: BP3394FH/A001 Operator: Welsh Assembly Government Waste Management licence No: 37009 Annual Tonnage: 300000	Issue Date: 02/03/1997 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Closure



ID	Location	Details		
A	194m E	Site Name: W D A - Formerly Erie Electronic 2 Site Address: Marlborough Road, Wrexham Ind Est, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Other Landfill Site taking Special Waste Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WDA002 EPR reference: BP3994FJ/A001 Operator: Welsh Assembly Government Waste Management licence No: 37011 Annual Tonnage: 300000	Issue Date: 02/03/1987 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Closure
A	194m E	Site Name: W D A - Formerly Erie Electronic 1 Site Address: Marlborough Road, Wrexham Ind Est, Wrexham, LL13 9RJ Correspondence Address: Unit 7, St Asaph Business Park, Fford Richard Davies, St Asaph, Denbighshire, LL17 0LJ	Type of Site: Other Landfill Site taking Special Waste Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WDA001 EPR reference: - Operator: W D A Waste Management licence No: 37009 Annual Tonnage: 0	Issue Date: 02/03/1997 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure
A	201m E	Site Name: - Site Address: Wrexham Clinical Waste Treatment And Transfer Station, Wrexham Industrial Estate, Wrexham, Wrexham, LL13 9RJ Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: RP3237SZ EPR reference: - Operator: Sita U K Ltd Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 06/03/2001 Effective Date: 06/03/2001 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired
A	201m E	Site Name: - Site Address: Wrexham Clinical Waste Treatment And Transfer Station, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Physical Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: RP3237SZ EPR reference: - Operator: - Waste Management licence No: 37223 Annual Tonnage: 0	Issue Date: 06/03/2001 Effective Date: 06/03/2001 Modified: - Surrendered Date: - Expiry Date: 09/02/2004 Cancelled Date: - Status: Expired



ID	Location	Details		
A	201m E	Site Name: - Site Address: Wrexham Clinical Waste Treatment And Transfer Station, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Physical Treatment Facility Size: - Environmental Permitting Regulations (Waste) Licence Number: RP3237SZ EPR reference: - Operator: Sita U K Ltd Waste Management licence No: 37223 Annual Tonnage: 0	Issue Date: 06/03/2001 Effective Date: 06/03/2001 Modified: - Surrendered Date: - Expiry Date: 09/02/2004 Cancelled Date: - Status: Expired
A	201m E	Site Name: - Site Address: Wrexham Clinical Waste Treatment And Transfer Station, Wrexham Industrial Estate, Clwyd, Wrexham, Wrexham, LL13 9RJ Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: RP3237SZ EPR reference: - Operator: Sita U K Ltd Waste Management licence No: 37223 Annual Tonnage: 0	Issue Date: 06/03/2001 Effective Date: 06/03/2001 Modified: - Surrendered Date: - Expiry Date: 09/02/2004 Cancelled Date: - Status: Expired
A	201m E	Site Name: - Site Address: Wrexham Clinical Waste Treatment And Transfer Station, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Physical Treatment Facility Size: - Environmental Permitting Regulations (Waste) Licence Number: RP3237SZ EPR reference: - Operator: Sita U K Ltd Waste Management licence No: 37223 Annual Tonnage: 0	Issue Date: 06/03/2001 Effective Date: 06/03/2001 Modified: - Surrendered Date: - Expiry Date: 09/02/2004 Cancelled Date: - Status: Expired
A	212m SE	Site Name: Wrexham Clinical Waste Treatment And Transfer Station Site Address: Land / Premises At, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Physical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: STE003 EPR reference: EA/EPR/AB3033RL/V005 Operator: Sita Uk Ltd Waste Management licence No: 37223 Annual Tonnage: 16999	Issue Date: 06/03/2001 Effective Date: 10/02/2004 Modified: 27/10/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified

ID	Location	Details		
A	212m SE	Site Name: Wrexham Clinical Waste Treatment Plant And Transfer Station Site Address: Wrexham Clinical Waste Treatment Plant And Transfer Station, Marlborough Road, Wrexham Industrial Estate, Wrexham, LL13 9RJ Correspondence Address: Wrexham Clinical Waste Treatment Plant And Transfer Station, Marlborough Road, Wrexham Industrial Estate, Wrexham, LL13 9RJ	Type of Site: Physical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: STE004 EPR reference: - Operator: Sterile Technologies (newcastle) Limited Waste Management licence No: 37305 Annual Tonnage: 0	Issue Date: 23/06/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
A	212m SE	Site Name: Clinical Waste Treatment (H D S) & Transfer Site Site Address: Marlborough Road, Wrexham Industrial Estate, Wrexham, LL13 9RJ Correspondence Address: Marlborough Road, Wrexham Ind Est, Wrexham, LL13 9RJ	Type of Site: Physical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: STE003 EPR reference: - Operator: Sterile Technologies (Newcastle) Ltd Waste Management licence No: 37223 Annual Tonnage: 16999	Issue Date: 06/03/2001 Effective Date: 10/02/2004 Modified: 10/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred
A	212m SE	Site Name: - Site Address: Wrexham Clinical Waste Treatment And Transfer Station, Land / Premises At, Marlborough Road, Wrexham Industrial Estate, Wrexham, Wrexham, LL13 9RJ Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: AB3033RL EPR reference: - Operator: Sita U K Ltd Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 06/03/2001 Effective Date: 06/03/2001 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
A	212m SE	Site Name: Clinical Waste Transfer Site Site Address: Land / Premises At, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Physical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: STE003 EPR reference: EA/EPR/AP3094FL/T004 Operator: Polkacrest Wales Ltd Waste Management licence No: 37223 Annual Tonnage: 16999	Issue Date: 06/03/2001 Effective Date: 10/02/2004 Modified: 10/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred

ID	Location	Details		
A	212m SE	Site Name: - Site Address: Wrexham Clinical Waste Treatment Plant & Transfer Station, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Physical Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: PP3892FX EPR reference: - Operator: - Waste Management licence No: 37305 Annual Tonnage: 0	Issue Date: 23/06/2006 Effective Date: 23/06/2006 Modified: - Surrendered Date: - Expiry Date: 23/06/2006 Cancelled Date: - Status: Expired
A	212m SE	Site Name: - Site Address: Wrexham Clinical Waste Treatment Plant & Transfer Station, Wrexham Industrial Estate, Wrexham, Wrexham, LL13 9RJ Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: PP3892FX EPR reference: - Operator: Sterile Technologies (Newcastle) Ltd Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 23/06/2006 Effective Date: 23/06/2006 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired
A	212m SE	Site Name: Wrexham Clinical Waste Treatment And Transfer Station Site Address: Land / Premises At, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Physical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: STE003 EPR reference: AB3033RL/V005 Operator: Sita U K Ltd Waste Management licence No: 37223 Annual Tonnage: 16999	Issue Date: 06/03/2001 Effective Date: 10/02/2004 Modified: 27/10/2011 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
A	212m SE	Site Name: Wrexham Clinical Waste Treatment Plant & Transfer Station Site Address: Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Physical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: STE004 EPR reference: EA/EPR/PP3892FX/A001 Operator: Sterile Technologies (Newcastle) Ltd Waste Management licence No: 37305 Annual Tonnage: 0	Issue Date: 23/06/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC



ID	Location	Details		
A	212m SE	Site Name: - Site Address: Wrexham Clinical Waste Treatment And Transfer Station, Land / Premises At, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Clinical Waste Transfer Station Size: - Environmental Permitting Regulations (Waste) Licence Number: AB3033RL EPR reference: - Operator: Sita U K Ltd Waste Management licence No: 37223 Annual Tonnage: 0	Issue Date: 06/03/2001 Effective Date: 06/03/2001 Modified: - Surrendered Date: - Expiry Date: 15/03/2017 Cancelled Date: - Status: Expired
A	212m SE	Site Name: - Site Address: Wrexham Clinical Waste Treatment Plant & Transfer Station, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Physical Treatment Facility Size: - Environmental Permitting Regulations (Waste) Licence Number: PP3892FX EPR reference: - Operator: Sterile Technologies (Newcastle) Ltd Waste Management licence No: 37305 Annual Tonnage: 0	Issue Date: 23/06/2006 Effective Date: 23/06/2006 Modified: - Surrendered Date: - Expiry Date: 23/06/2006 Cancelled Date: - Status: Expired
A	212m SE	Site Name: - Site Address: Wrexham Clinical Waste Treatment And Transfer Station, Land / Premises At, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Clinical Waste Transfer Station Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: AB3033RL EPR reference: - Operator: - Waste Management licence No: 37223 Annual Tonnage: 0	Issue Date: 06/03/2001 Effective Date: 06/03/2001 Modified: - Surrendered Date: - Expiry Date: 15/03/2017 Cancelled Date: - Status: Expired
A	212m SE	Site Name: - Site Address: Wrexham Clinical Waste Treatment Plant & Transfer Station, Wrexham Industrial Estate, Clwyd, Wrexham, Wrexham, LL13 9RJ Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: PP3892FX EPR reference: - Operator: Sterile Technologies (Newcastle) Ltd Waste Management licence No: 37305 Annual Tonnage: 0	Issue Date: 23/06/2006 Effective Date: 23/06/2006 Modified: - Surrendered Date: - Expiry Date: 23/06/2006 Cancelled Date: - Status: Expired



ID	Location	Details		
A	212m SE	Site Name: - Site Address: Wrexham Clinical Waste Treatment And Transfer Station, Land / Premises At, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Clinical Waste Transfer Station Size: - Environmental Permitting Regulations (Waste) Licence Number: AB3033RL EPR reference: - Operator: Sita U K Ltd Waste Management licence No: 37223 Annual Tonnage: 0	Issue Date: 06/03/2001 Effective Date: 06/03/2001 Modified: - Surrendered Date: - Expiry Date: 15/03/2017 Cancelled Date: - Status: Expired
A	212m SE	Site Name: - Site Address: Wrexham Clinical Waste Treatment Plant & Transfer Station, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Physical Treatment Facility Size: - Environmental Permitting Regulations (Waste) Licence Number: PP3892FX EPR reference: - Operator: Sterile Technologies (Newcastle) Ltd Waste Management licence No: 37305 Annual Tonnage: 0	Issue Date: 23/06/2006 Effective Date: 23/06/2006 Modified: - Surrendered Date: - Expiry Date: 23/06/2006 Cancelled Date: - Status: Expired
A	212m SE	Site Name: - Site Address: Wrexham Clinical Waste Treatment And Transfer Station, Land / Premises At, Marlborough Road, Clwyd, Wrexham, Wrexham, LL13 9RJ Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: AB3033RL EPR reference: - Operator: Sita U K Ltd Waste Management licence No: 37223 Annual Tonnage: 0	Issue Date: 06/03/2001 Effective Date: 06/03/2001 Modified: - Surrendered Date: - Expiry Date: 15/03/2017 Cancelled Date: - Status: Expired
A	212m SE	Site Name: Wrexham Clinical Waste Treatment And Transfer Station Site Address: Land / Premises At, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Clinical Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: STE003 EPR reference: AB3033RL/V005 Operator: Sita U K Ltd Waste Management licence No: 37223 Annual Tonnage: 16999	Issue Date: 06/03/2001 Effective Date: 10/02/2004 Modified: 27/10/2011 Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Modified



ID	Location	Details		
A	212m SE	Site Name: Wrexham Clinical Waste Treatment Plant & Transfer Station Site Address: Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Physical Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: STE004 EPR reference: PP3892FX/A001 Operator: Sterile Technologies (Newcastle) Ltd Waste Management licence No: 37305 Annual Tonnage: 0	Issue Date: 23/06/2006 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: To PPC
A	213m SE	Site Name: Marlborough Road Clinical Waste Site Address: Trinco Ltd, Marlborough Road, Wrexham Industrial Estate, Wrexham, LL13 9RJ Correspondence Address: Marlborough Road, Wrexham Industrial Estate, Wrexham, LL13 9RJ	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TRI002 EPR reference: - Operator: Sterile Technology(newcastle) Limited Waste Management licence No: 37043 Annual Tonnage: 0	Issue Date: 12/10/1992 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: IPPC
A	213m SE	Site Name: Marlborough Road Clinical Waste Site Address: Marlborough Road, Wrexham Industrial Estate, Wrexham, LL13 9RJ Correspondence Address: Marlborough Road, Wrexham Industrial Estate, Wrexham, LL13 9RJ	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TRI002 EPR reference: - Operator: Sterile Technology (Newcastle) Ltd Waste Management licence No: 37043 Annual Tonnage: 7739	Issue Date: 12/10/1992 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: IPPC



ID	Location	Details		
A	213m SE	Site Name: - Site Address: Marlborough Road Clinical Waste, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: MP3894FG EPR reference: - Operator: - Waste Management licence No: 37043 Annual Tonnage: 0	Issue Date: 12/10/1992 Effective Date: 12/10/1992 Modified: - Surrendered Date: - Expiry Date: 09/02/2004 Cancelled Date: - Status: Expired
A	213m SE	Site Name: - Site Address: Marlborough Road Clinical Waste, Wrexham Industrial Estate, Wrexham, Wrexham, LL13 9RJ Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: MP3894FG EPR reference: - Operator: Sterile Technologies (Newcastle) Ltd Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 12/10/1992 Effective Date: 12/10/1992 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired
A	213m SE	Site Name: - Site Address: Marlborough Road Clinical Waste, Wrexham Industrial Estate, Clwyd, Wrexham, Wrexham, LL13 9RJ Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: MP3894FG EPR reference: - Operator: Sterile Technologies (Newcastle) Ltd Waste Management licence No: 37043 Annual Tonnage: 0	Issue Date: 12/10/1992 Effective Date: 12/10/1992 Modified: - Surrendered Date: - Expiry Date: 09/02/2004 Cancelled Date: - Status: Expired
A	213m SE	Site Name: - Site Address: Marlborough Road Clinical Waste, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: - Environmental Permitting Regulations (Waste) Licence Number: MP3894FG EPR reference: - Operator: Sterile Technologies (Newcastle) Ltd Waste Management licence No: 37043 Annual Tonnage: 0	Issue Date: 12/10/1992 Effective Date: 12/10/1992 Modified: - Surrendered Date: - Expiry Date: 09/02/2004 Cancelled Date: - Status: Expired



ID	Location	Details		
A	213m SE	Site Name: - Site Address: Marlborough Road Clinical Waste, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: - Environmental Permitting Regulations (Waste) Licence Number: MP3894FG EPR reference: - Operator: Sterile Technologies (Newcastle) Ltd Waste Management licence No: 37043 Annual Tonnage: 0	Issue Date: 12/10/1992 Effective Date: 12/10/1992 Modified: - Surrendered Date: - Expiry Date: 09/02/2004 Cancelled Date: - Status: Expired
A	214m SE	Site Name: Marlborough Road Clinical Waste Site Address: Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TRI002 EPR reference: MP3894FG/A001 Operator: Sterile Technologies (Newcastle) Ltd Waste Management licence No: 37043 Annual Tonnage: 7739	Issue Date: 12/10/1992 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: To PPC
A	214m SE	Site Name: Marlborough Road Clinical Waste Site Address: Marlborough Road, Wrexham Industrial Estate, Wrexham, LL13 7YP Correspondence Address: Ambassador Place, 3, Stockport Road, Altrincham, Cheshire, WA15 8DB	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TRI002 EPR reference: - Operator: Trinco Ltd Waste Management licence No: 37043 Annual Tonnage: 0	Issue Date: 12/10/1992 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: IPPC

ID	Location	Details		
A	214m SE	Site Name: Marlborough Road Clinical Waste Site Address: Marlborough Road, Wrexham Industrial Estate, Wrexham, LL13 7YP Correspondence Address: Ambassador Place, 3, Stockport Road, Altrincham, Cheshire, WA15 8DB	Type of Site: Household, Commercial & Industrial Waste T Stn Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: TRI002 EPR reference: - Operator: Trinco Ltd Waste Management licence No: 37043 Annual Tonnage: 0	Issue Date: 12/10/1992 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: IPPC
A	218m SE	Site Name: Clinical Waste Treatment (hds) And Transfer Site Site Address: Eurocare Environmental Services Ltd, Marlborough Road, Wrexham Industrial Estate, Wrexham, LL13 9RJ Correspondence Address: Mailing Suite 1, St Peters Wharf, Newcastle-upon-tyne, NE6 1TZ	Type of Site: Physical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: EUR001 EPR reference: - Operator: Eurocare Environmental Services Ltd Waste Management licence No: 37223 Annual Tonnage: 16999	Issue Date: 06/03/2001 Effective Date: - Modified: 10/06/2002 Surrendered Date: - Expiry Date: 12/12/2001 Cancelled Date: - Status: Modified
A	218m SE	Site Name: Clinical Waste Treatment (hds) And Transfer Site Site Address: Eurocare Environmental Services Ltd, Marlborough Road, Wrexham Industrial Estate, Wrexham, LL13 9RJ Correspondence Address: Lindfield House, 1st Floor, Stuart Road, Gravesend, Kent, DA11 0BZ	Type of Site: Physical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: STE003 EPR reference: - Operator: Sterile Technologies (newcastle) Limited Waste Management licence No: 37223 Annual Tonnage: 16999	Issue Date: 06/03/2001 Effective Date: 10/02/2004 Modified: 10/12/2003 Surrendered Date: - Expiry Date: 12/12/2001 Cancelled Date: - Status: Transferred
E	332m S	Site Name: Bluestone Chemicals Ltd Site Address: Bluestone Chemicals, Redwith Rd, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Chemical Treatment Facility Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BLU003 EPR reference: TP3594FK/A001 Operator: Bluestone Chemicals Ltd Waste Management licence No: 37094 Annual Tonnage: 931	Issue Date: 17/01/1994 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Expired



ID	Location	Details		
E	333m S	Site Name: Bluestone Chemicals Ltd Site Address: Bluestone Chemicals, Redwither Rd, Wrexham Industrial Estate, Wrexham, LL13 9RD Correspondence Address: Bluestone Chemicals, Redwither Rd, Wrexham Industrial Estate, Wrexham, LL13 9RD	Type of Site: Chemical Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: BLU003 EPR reference: - Operator: Bluestone Chemicals Ltd Waste Management licence No: 37094 Annual Tonnage: 0	Issue Date: 17/01/1994 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired
E	333m S	Site Name: - Site Address: Bluestone Chemicals Ltd, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Chemical Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: TP3594FK EPR reference: - Operator: - Waste Management licence No: 37094 Annual Tonnage: 0	Issue Date: 17/01/1994 Effective Date: 17/01/1994 Modified: - Surrendered Date: - Expiry Date: 13/09/1999 Cancelled Date: - Status: Expired
E	333m S	Site Name: - Site Address: Bluestone Chemicals Ltd, Wrexham Industrial Estate, Wrexham, Wrexham, LL13 9RD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: TP3594FK EPR reference: - Operator: Bluestone Chemicals Ltd Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 17/01/1994 Effective Date: 17/01/1994 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired
E	333m S	Site Name: - Site Address: Bluestone Chemicals Ltd, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Chemical Treatment Facility Size: - Environmental Permitting Regulations (Waste) Licence Number: TP3594FK EPR reference: - Operator: Bluestone Chemicals Ltd Waste Management licence No: 37094 Annual Tonnage: 0	Issue Date: 17/01/1994 Effective Date: 17/01/1994 Modified: - Surrendered Date: - Expiry Date: 13/09/1999 Cancelled Date: - Status: Expired

ID	Location	Details		
E	333m S	Site Name: - Site Address: Bluestone Chemicals Ltd, Wrexham Industrial Estate, Clwyd, Wrexham, Wrexham, LL13 9RD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: TP3594FK EPR reference: - Operator: Bluestone Chemicals Ltd Waste Management licence No: 37094 Annual Tonnage: 0	Issue Date: 17/01/1994 Effective Date: 17/01/1994 Modified: - Surrendered Date: - Expiry Date: 13/09/1999 Cancelled Date: - Status: Expired
E	333m S	Site Name: - Site Address: Bluestone Chemicals Ltd, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Chemical Treatment Facility Size: - Environmental Permitting Regulations (Waste) Licence Number: TP3594FK EPR reference: - Operator: Bluestone Chemicals Ltd Waste Management licence No: 37094 Annual Tonnage: 0	Issue Date: 17/01/1994 Effective Date: 17/01/1994 Modified: - Surrendered Date: - Expiry Date: 13/09/1999 Cancelled Date: - Status: Expired
F	363m S	Site Name: Entrec Ltd Site Address: Entrec Ltd, Redwither Road, Wrexham Industrial Estate, Wrexham, LL13 9RD Correspondence Address: -	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ENT002 EPR reference: YP3994FY/V003 Operator: Entrec Ltd Waste Management licence No: 37267 Annual Tonnage: 25000	Issue Date: 08/09/2004 Effective Date: - Modified: 07/05/2014 Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Modified
F	364m S	Site Name: Entrec Redwither Road Site Address: Land / Premises At, Redwither Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Material Recycling Treatment Facility Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ENT002 EPR reference: EA/EPR/YP3994FY/A001 Operator: Entrec Ltd Waste Management licence No: 37267 Annual Tonnage: 25000	Issue Date: 08/09/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued



ID	Location	Details		
F	364m S	Site Name: - Site Address: Entrec Ltd, Wrexham Industrial Estate, Wrexham, Wrexham, LL13 9RD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: YP3994FY EPR reference: - Operator: Entrec Ltd Waste Management licence No: 0 Annual Tonnage: 25000	Issue Date: 10/09/2004 Effective Date: 10/09/2004 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
F	364m S	Site Name: - Site Address: - Correspondence Address: -	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: YP3994FY EPR reference: - Operator: - Waste Management licence No: 37267 Annual Tonnage: 25000	Issue Date: 10/09/2004 Effective Date: 10/09/2004 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
F	364m S	Site Name: Entrec Ltd Site Address: Entrec Ltd, Entrec Ltd, Wrexham Industrial Estate, Wrexham, LL13 9RD Correspondence Address: -	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: YP3994FY EPR reference: - Operator: Entrec Ltd Waste Management licence No: 37267 Annual Tonnage: 25000	Issue Date: 10/09/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
F	364m S	Site Name: - Site Address: Entrec Ltd, Wrexham Industrial Estate, Wrexham, LL13 9RD Correspondence Address: -	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: - Environmental Permitting Regulations (Waste) Licence Number: YP3994FY EPR reference: - Operator: Entrec Ltd Waste Management licence No: 37267 Annual Tonnage: 25000	Issue Date: 10/09/2004 Effective Date: 10/09/2004 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective



ID	Location	Details		
F	364m S	Site Name: - Site Address: Entrec Ltd, Wrexham Industrial Estate, Wrexham, Wrexham, LL13 9RD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: YP3994FY EPR reference: - Operator: Entrec Ltd Waste Management licence No: 37267 Annual Tonnage: 25000	Issue Date: 10/09/2004 Effective Date: 10/09/2004 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
F	364m S	Site Name: - Site Address: Entrec Ltd, Wrexham Industrial Estate, Wrexham, LL13 9RD Correspondence Address: -	Type of Site: Metal Recycling Site (Vehicle Dismantler) Size: - Environmental Permitting Regulations (Waste) Licence Number: YP3994FY EPR reference: - Operator: ENTREC LTD Waste Management licence No: 37267 Annual Tonnage: -	Issue Date: 02/12/2020 Effective Date: 02/12/2020 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
G	371m E	Site Name: Phase 2 Wrexham Recycling Park Site Address: Wrexham Recycling Park, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT Correspondence Address: -	Type of Site: Biological Treatment Facility Size: >= 25000 tonnes 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: WAS150 EPR reference: EA/EPR/BB3436RA/A001 Operator: Waste Recycling Limited Waste Management licence No: 103238 Annual Tonnage: 70000	Issue Date: 18/04/2012 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
G	371m E	Site Name: - Site Address: Phase 2 Wrexham Recycling Park, Wrexham Industrial Estate, Wrexham, Wrexham, LL13 9UT Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: BB3436RA EPR reference: - Operator: Waste Recycling Limited Waste Management licence No: 0 Annual Tonnage: 70000	Issue Date: 18/04/2012 Effective Date: 18/04/2012 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective



ID	Location	Details		
G	371m E	Site Name: - Site Address: Phase 2 Wrexham Recycling Park, Wrexham Recycling Park, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT Correspondence Address: -	Type of Site: Biological Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: BB3436RA EPR reference: - Operator: - Waste Management licence No: 103238 Annual Tonnage: 70000	Issue Date: 18/04/2012 Effective Date: 18/04/2012 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
G	372m E	Site Name: Phase 2 Wrexham Recycling Park Site Address: Wrexham Recycling Park, Bryn Lane, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UT Correspondence Address: -	Type of Site: Biological Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: WAS150 EPR reference: BB3436RA/A001 Operator: Waste Recycling Limited Waste Management licence No: 103238 Annual Tonnage: 0	Issue Date: 18/04/2012 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Issued
E	400m S	Site Name: - Site Address: A S H Wrexham Recycling Centre, Wrexham Industrial Estate, Wrexham, Wrexham, LL13 9RD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: WP3094FB EPR reference: - Operator: Alan's Skip Hire (Wales) Ltd Waste Management licence No: 0 Annual Tonnage: 24999	Issue Date: 09/03/2000 Effective Date: 09/03/2000 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
E	400m S	Site Name: - Site Address: A S H Wrexham Recycling Centre, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: WP3094FB EPR reference: - Operator: - Waste Management licence No: 37211 Annual Tonnage: 24999	Issue Date: 09/03/2000 Effective Date: 09/03/2000 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective



ID	Location	Details		
F	405m S	Site Name: A S H Wrexham Recycling Centre Site Address: Site One, Redwither Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: ALA002 EPR reference: WP3094FB/V Operator: Alan's Skip Hire (Wales) Ltd Waste Management licence No: 37211 Annual Tonnage: 0	Issue Date: 09/03/2000 Effective Date: 01/06/2005 Modified: 15/04/2015 Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Modified
F	406m S	Site Name: A S H Wrexham Recycling Centre Site Address: Site One, Redwither Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ALA002 EPR reference: EA/EPR/WP3094FB/V002 Operator: Alan's Skip Hire (Wales) Ltd Waste Management licence No: 37211 Annual Tonnage: 24999	Issue Date: 09/03/2000 Effective Date: 01/06/2005 Modified: 22/03/2013 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
F	406m S	Site Name: Wrexham Recycling Centre Site Address: Site 1, Redwither Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ALA002 EPR reference: WP3094FB/T003 Operator: Alan's Skip Hire (Wales) Ltd. Waste Management licence No: 37211 Annual Tonnage: 54196	Issue Date: 09/03/2000 Effective Date: 01/06/2005 Modified: 10/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred

ID	Location	Details		
F	412m S	Site Name: Wrexham Recycling Centre Site Address: Site 1, Redwither Road, Wrexham Industrial Estate, Wrexham, LL13 9RD Correspondence Address: Site 1, Redwither Road, Wrexham Industrial Estate, Wrexham, LL13 9RD	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: AMR001 EPR reference: - Operator: Alfa Environmental Management Ltd Waste Management licence No: 37211 Annual Tonnage: 0	Issue Date: 09/03/2000 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued
F	412m S	Site Name: Wrexham Recycling Centre Site Address: Site 1, Redwither Road, Wrexham Industrial Estate, Wrexham, LL13 9RD Correspondence Address: Site 1, Redwither Road, Wrexham Industrial Estate, Wrexham, LL13 9RD	Type of Site: Household, Commercial & Industrial Waste T Stn Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: AMR001 EPR reference: - Operator: Alpha Environmental Management Ltd Waste Management licence No: 37211 Annual Tonnage: 0	Issue Date: 09/03/2000 Effective Date: - Modified: 10/12/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
H	416m SW	Site Name: Redwither Road Transfer Station Site Address: Unit 1, Redwither Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: REY001 EPR reference: AP3394FT/V003 Operator: North Western Insulation Ltd Waste Management licence No: 37221 Annual Tonnage: 4999	Issue Date: 19/02/2001 Effective Date: - Modified: 17/03/2006 Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Expired



ID	Location	Details		
H	417m SW	Site Name: Redwither Road Transfer Station Site Address: Unit 1, Redwither Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: REY001 EPR reference: AP3394FT/V003 Operator: Reynolds Services North Western Insulation Ltd Waste Management licence No: 37221 Annual Tonnage: 4999	Issue Date: 19/02/2001 Effective Date: - Modified: 17/03/2006 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified
H	417m SW	Site Name: - Site Address: Redwither Road Transfer Station, Unit 1, Wrexham Industrial Estate, Wrexham, Wrexham, LL13 9RD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: AP3394FT EPR reference: - Operator: North Western Insulation Ltd Waste Management licence No: 0 Annual Tonnage: 0	Issue Date: 19/02/2001 Effective Date: 19/02/2001 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired
H	417m SW	Site Name: - Site Address: Redwither Road Transfer Station, Unit 1, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: - Environmental Permitting Regulations (Waste) Licence Number: AP3394FT EPR reference: - Operator: North Western Insulation Ltd Waste Management licence No: 37221 Annual Tonnage: 0	Issue Date: 19/02/2001 Effective Date: 19/02/2001 Modified: - Surrendered Date: - Expiry Date: 01/05/2012 Cancelled Date: - Status: Expired
H	417m SW	Site Name: - Site Address: Redwither Road Transfer Station, Unit 1, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: AP3394FT EPR reference: - Operator: - Waste Management licence No: 37221 Annual Tonnage: 0	Issue Date: 19/02/2001 Effective Date: 19/02/2001 Modified: - Surrendered Date: - Expiry Date: 01/05/2012 Cancelled Date: - Status: Expired



ID	Location	Details		
H	417m SW	Site Name: - Site Address: Redwither Road Transfer Station, Unit 1, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Household, Commercial & Industrial Waste T Stn Size: - Environmental Permitting Regulations (Waste) Licence Number: AP3394FT EPR reference: - Operator: North Western Insulation Ltd Waste Management licence No: 37221 Annual Tonnage: 0	Issue Date: 19/02/2001 Effective Date: 19/02/2001 Modified: - Surrendered Date: - Expiry Date: 01/05/2012 Cancelled Date: - Status: Expired
H	417m SW	Site Name: - Site Address: Redwither Road Transfer Station, Unit 1, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RD Correspondence Address: -	Type of Site: Special Waste Transfer Station Size: - Environmental Permitting Regulations (Waste) Licence Number: AP3394FT EPR reference: - Operator: North Western Insulation Ltd Waste Management licence No: 37221 Annual Tonnage: 0	Issue Date: 19/02/2001 Effective Date: 19/02/2001 Modified: - Surrendered Date: - Expiry Date: 01/05/2012 Cancelled Date: - Status: Expired
H	417m SW	Site Name: - Site Address: Redwither Road Transfer Station, Unit 1, Wrexham Industrial Estate, Clwyd, Wrexham, Wrexham, LL13 9RD Correspondence Address: -	Type of Site: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: AP3394FT EPR reference: - Operator: North Western Insulation Ltd Waste Management licence No: 37221 Annual Tonnage: 0	Issue Date: 19/02/2001 Effective Date: 19/02/2001 Modified: - Surrendered Date: - Expiry Date: 01/05/2012 Cancelled Date: - Status: Expired

This data is sourced from the Environment Agency and Natural Resources Wales.

3.7 Waste exemptions

Records within 500m

14

Activities involving the storage, treatment, use or disposal of waste that are exempt from needing a permit. Exemptions have specific limits and conditions that must be adhered to.

Features are displayed on the Waste and landfill map on **page 34**



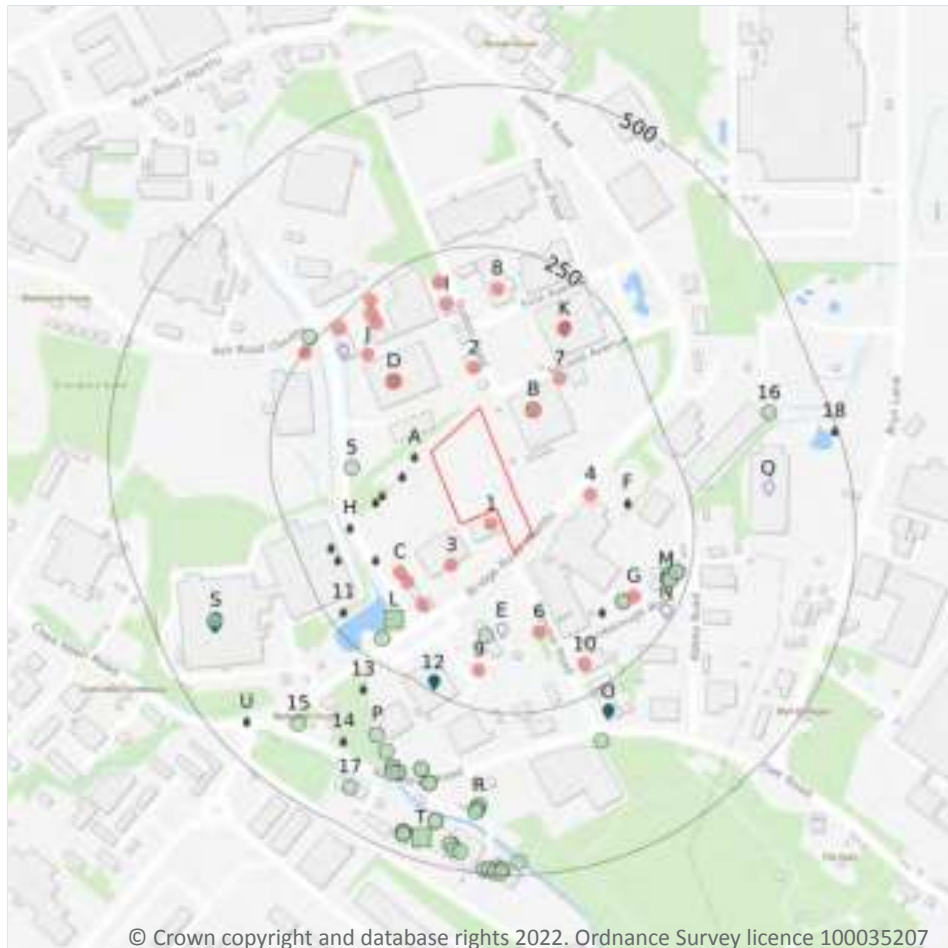
ID	Location	Site	Reference	Category	Sub-Category	Description
B	168m NE	Portal Construction N.W. Ltd, Pacific Park, Bridge Road Wrexham Industrial Estate, Wrexham, LL13 9PN, LL13 9PN	NRW-WME067316	Treating waste exemption	Not on a farm	Screening and blending of waste
B	168m NE	Portal Construction N.W. Ltd, Pacific Park, Bridge Road Wrexham Industrial Estate, Wrexham, LL13 9PN, LL13 9PN	NRW-WME067316	Using waste exemption	Not on a farm	Use of waste in construction
D	290m S	Alan's Skip Hire (Wales) Ltd, Alan's Skip Hire (Wales) Ltd, Redwither Road, Wrexham Industrial Estate, Wrexham, Wrexham County Borough Council, LL139RD	NRW-WME007992	Storing waste exemption	Not on a farm	Storage of waste in secure containers
D	290m S	Alan's Skip Hire (Wales) Ltd, Alan's Skip Hire (Wales) Ltd, Redwither Road, Wrexham Industrial Estate, Wrexham, Wrexham County Borough Council, LL139RD	NRW-WME007992	Storing waste exemption	Not on a farm	Storage of waste in a secure place
D	290m S	Alan's Skip Hire (Wales) Ltd, Alan's Skip Hire (Wales) Ltd, Redwither Road, Wrexham Industrial Estate, Wrexham, Wrexham County Borough Council, LL139RD	NRW-WME007992	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)
D	290m S	Alan's Skip Hire (Wales) Ltd, Alan's Skip Hire (Wales) Ltd, Redwither Road, Wrexham Industrial Estate, Wrexham, Wrexham County Borough Council, LL139RD	NRW-WME007992	Treating waste exemption	Not on a farm	Screening and blending of waste
D	290m S	Alan's Skip Hire (Wales) Ltd, Alan's Skip Hire (Wales) Ltd, Redwither Road, Wrexham Industrial Estate, Wrexham, Wrexham County Borough Council, LL139RD	NRW-WME007992	Treating waste exemption	Not on a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising

ID	Location	Site	Reference	Category	Sub-Category	Description
D	290m S	Alan's Skip Hire (Wales) Ltd, Alan's Skip Hire (Wales) Ltd, Redwither Road, Wrexham Industrial Estate, Wrexham, Wrexham County Borough Council, LL139RD	NRW-WME007992	Treating waste exemption	Not on a farm	Mechanical treatment of end-of-life tyres
D	290m S	Alan's Skip Hire (Wales) Ltd, Alan's Skip Hire (Wales) Ltd, Redwither Road, Wrexham Industrial Estate, Wrexham, Wrexham County Borough Council, LL139RD	NRW-WME007992	Treating waste exemption	Not on a farm	Recovery of scrap metal
D	290m S	Alan's Skip Hire (Wales) Ltd, Alan's Skip Hire (Wales) Ltd, Redwither Road, Wrexham Industrial Estate, Wrexham, Wrexham County Borough Council, LL139RD	NRW-WME007992	Using waste exemption	Not on a farm	Burning of waste as a fuel in a small appliance
3	381m SE	wrexham county bourough council, Wrexham County Borough Council, Abbey Road, Ystad Ddiwydiannol Wrecsam, Wrecsam, LL139PW	NRW-WME022217	Storing waste exemption	Not on a farm	Storage of waste in a secure place
4	411m NE	108 Abbey Road, Wrexham Industrial Estate, Wrexham, Wrecsam, LL13 9RF	NRW-WME002295	Storing waste exemption	Waste Exemption - Non-Agricultural	Storage of waste in a secure place
5	451m E	3C Waste Ltd, Bryn Lane civic amenity site, Bryn lane, Wrexham industrial estate, Wrexham, LL13 9UT	NRW-WME059160	Storing waste exemption	Not on a farm	Storage of waste in a secure place
6	472m NW	BK Nolte Contracts Limited, B K House, Ash Road South, Ystad Ddiwydiannol Wrecsam, Wrecsam, LL139UG	NRW-WME008197	Treating waste exemption	Not on a farm	Preparatory treatments (baling, sorting, shredding etc)

This data is sourced from the Environment Agency and Natural Resources Wales.



4 Current industrial land use



- Site Outline
- Search buffers in metres (m)
- Recent industrial land uses
- Historical licensed industrial activities
- Part A(1) industrial activities
- Licensed pollutant release (Part A(2)/B)
- Radioactive Substance Authorisations
- Licensed Discharges to controlled waters
- List 2 Dangerous Substances
- Pollution Incidents (EA/NRW)

4.1 Recent industrial land uses

Records within 250m

26

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 64**

ID	Location	Company	Address	Activity	Category
1	16m W	Coolpoint	Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9PS	Cooling and Refrigeration	Industrial Products
2	62m N	Paul Bristow Associates Ltd	Unit D6, Dutton Road, Redwither Business Park, Wrexham, Clwyd, LL13 9UL	Textiles, Fabrics, Silk and Machinery	Industrial Products

ID	Location	Company	Address	Activity	Category
3	65m S	Cable Services Enterprises Ltd	Bridge House, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9PS	Cable, Wire and Fibre Optics	Industrial Products
B	76m E	Esteban UK Ltd	Second Avenue, Redwither Business Park, Wrexham, Clwyd, LL13 9XQ	Furniture	Consumer Products
4	107m NE	Tank	Clwyd, LL13	Tanks (Generic)	Industrial Features
C	120m SW	Conran	Unit 1, Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG	Construction Completion Services	Construction Services
D	120m NW	Demon Tweeks	Unit 75, Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG	Vehicle Components	Industrial Products
D	120m NW	Tweeks Cycles	Unit 75, Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG	Vehicle Components	Industrial Products
C	122m SW	Aquatec	Unit 2, Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG	Paints, Varnishes and Lacquers	Industrial Products
6	129m S	Tank	Clwyd, LL13	Tanks (Generic)	Industrial Features
7	132m E	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
C	138m SW	Rawson E V Power	Unit 4 The Bridge Business Centre, Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG	Electrical Production and Manipulation Equipment	Industrial Products
I	168m N	Dockweiler UK Ltd	Unit D2, Dutton Road, Redwither Business Park, Wrexham, Clwyd, LL13 9UL	Seals, Tapes, Taps and Valves	Industrial Products
J	178m NW	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
K	179m NE	Redwither Tower	Redwither Business Park, Wrexham, Clwyd, LL13 9XT	Business Parks and Industrial Estates	Industrial Features
K	179m NE	Smart Print & Labelling Ltd	3k2 Redwither Tower, Redwither Business Park, Wrexham, Clwyd, LL13 9XT	Office and Shop Equipment	Industrial Products
G	183m SE	Tradebe Healthcare	Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ	Medical Waste Disposal Services	Health Support Services
8	187m N	McCarthy Haulage	Building 4, First Avenue, Redwither Business Park, Wrexham, Clwyd, LL13 9XP	Container and Storage	Transport, Storage and Delivery



ID	Location	Company	Address	Activity	Category
9	190m S	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
I	204m N	Industrial Encoders Direct Ltd	Unit D1, Dutton Road, Redwither Business Park, Wrexham, Clwyd, LL13 9UL	Measurement and Inspection Equipment	Industrial Products
J	204m NW	Advanced Vehicle Servicing	Unit 5, Ash Road South, Wrexham, Clwyd, LL13 9UG	Vehicle Repair, Testing and Servicing	Repair and Servicing
10	206m SE	Water Clean Ltd	Unit 1 Marlborough Business Centre, Marlborough Road, Wrexham, Clwyd, LL13 9RJ	Air and Water Filtration	Industrial Products
J	221m NW	Rawson Digital	Unit 4, Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG	Printing Related Machinery	Industrial Products
J	236m NW	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities
J	238m NW	Visive	Unit 9, Ash Road South, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9UG	Lampshades and Lighting	Consumer Products
J	249m NW	Electricity Sub Station	Clwyd, LL13	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 Current or recent petrol stations

Records within 500m

0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.3 Electricity cables

Records within 500m

0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.



4.4 Gas pipelines

Records within 500m

0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.5 Sites determined as Contaminated Land

Records within 500m

0

Contaminated Land Register of sites designated under Part 2a of the Environmental Protection Act 1990.

This data is sourced from Local Authority records.

4.6 Control of Major Accident Hazards (COMAH)

Records within 500m

0

Control of Major Accident Hazards (COMAH) sites. This data includes upper and lower tier sites, and includes a historical archive of COMAH sites and Notification of Installations Handling Hazardous Substances (NIHHS) records.

This data is sourced from the Health and Safety Executive.

4.7 Regulated explosive sites

Records within 500m

0

Sites registered and licensed by the Health and Safety Executive under the Manufacture and Storage of Explosives Regulations 2005 (MSER). The last update to this data was in April 2011.

This data is sourced from the Health and Safety Executive.

4.8 Hazardous substance storage/usage

Records within 500m

0

Consents granted for a site to hold certain quantities of hazardous substances at or above defined limits in accordance with the Planning (Hazardous Substances) Regulations 2015.

This data is sourced from Local Authority records.

4.9 Historical licensed industrial activities (IPC)

Records within 500m

2

Integrated Pollution Control (IPC) records of substance releases to air, land and water. This data represents a historical archive as the IPC regime has been superseded.

Features are displayed on the Current industrial land use map on **page 64**

ID	Location	Details	
M	217m E	Operator: Sterile Technologies (newcastle) Ltd Address: Wrexham Plant, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Process: Incineration Permit Number: BI1595	Original Permit Number: IPCAPP Date Approved: 19-9-2000 Effective Date: 20-9-2000 Status: Superseded By Variation
M	217m E	Operator: Sterile Technologies (newcastle) Ltd Address: Wrexham Plant, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ Process: Incineration Permit Number: BM2349	Original Permit Number: IPCMINVAR Date Approved: 19-5-2004 Effective Date: 19-5-2004 Status: Revoked - Now Ippc

This data is sourced from the Environment Agency and Natural Resources Wales.

4.10 Licensed industrial activities (Part A(1))

Records within 500m

45

Records of Part A(1) installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 64**

ID	Location	Details	
E	122m S	Operator: LLOYDS ANIMAL FEEDS (WESTERN) LTD Installation Name: WREXHAM MILL Process: TREATMENT AND PROCESSING, OTHER THAN EXCLUSIVELY PACKAGING, OF THE FOLLOWING RAW MATERIALS, WHETHER PREVIOUSLY PROCESSED OR UNPROCESSED, INTENDED FOR THE PRODUCTION OF FOOD OR FEED (WHERE THE WEIGHT OF THE FINISHED PRODUCT EXCLUDES PACKAGING)—ONLY VEGETABLE RAW MATERIALS WITH A FINISHED PRODUCT PRODUCTION CAPACITY GREATER THAN 300 TONNES PER DAY OR 600 TONNES PER DAY WHERE THE INSTALLATION OPERATES FOR A PERIOD OF NO MORE THAN 90 CONSECUTIVE DAYS IN ANY YEAR Permit Number: AB3492ZQ Original Permit Number: -	EPR Reference: - Issue Date: 09/05/2019 Effective Date: 09/05/2019 Last date noted as effective: 01/01/2022 Status: EFFECTIVE

ID	Location	Details	
E	122m S	Operator: LLOYDS ANIMAL FEEDS (WESTERN) LTD Installation Name: WREXHAM MILL Process: - Permit Number: AB3492ZQ Original Permit Number: -	EPR Reference: - Issue Date: 17/05/2017 Effective Date: 17/05/2017 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
J	204m NW	Operator: OSCAR MAYER LIMITED Installation Name: WREXHAM CONVENIENCE FOODS EPR/WP3534GX Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC ANIMAL RAW MATERIALS (NOT MILK) FOR FOOD >75T/D Permit Number: PP3538VJ Original Permit Number: WP3534GX	EPR Reference: - Issue Date: 25/06/2014 Effective Date: 25/06/2014 Last date noted as effective: 17/11/2015 Status: EFFECTIVE
J	204m NW	Operator: OSCAR MAYER LIMITED Installation Name: WREXHAM CONVENIENCE FOODS EPR/WP3534GX Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO- CHEMICAL TREATMENT Permit Number: PP3538VJ Original Permit Number: WP3534GX	EPR Reference: - Issue Date: 25/06/2014 Effective Date: 25/06/2014 Last date noted as effective: 17/11/2015 Status: EFFECTIVE
J	204m NW	Operator: OSCAR MAYER LIMITED Installation Name: ROWAN FOODS Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC ANIMAL RAW MATERIALS (NOT MILK) FOR FOOD >75T/D Permit Number: WP3131ZF Original Permit Number: WP3534GX	EPR Reference: - Issue Date: 26/03/2013 Effective Date: 26/03/2013 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
J	204m NW	Operator: OSCAR MAYER LIMITED Installation Name: ROWAN FOODS Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO- CHEMICAL TREATMENT Permit Number: WP3131ZF Original Permit Number: WP3534GX	EPR Reference: - Issue Date: 26/03/2013 Effective Date: 26/03/2013 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
J	204m NW	Operator: OSCAR MAYER LIMITED Installation Name: ROWAN FOODS EA/EPR/WP3534GX/A001 Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC ANIMAL RAW MATERIALS (NOT MILK) FOR FOOD >75T/D Permit Number: WP3534GX Original Permit Number: WP3534GX	EPR Reference: - Issue Date: 10/09/2009 Effective Date: 10/09/2009 Last date noted as effective: 17/11/2015 Status: SUPERCEDED



ID	Location	Details	
J	204m NW	Operator: OSCAR MAYER LIMITED Installation Name: ROWAN FOODS EA/EPR/WP3534GX/A001 Process: OTHER WASTE DISPOSAL; NON-HAZARDOUS WASTE >50T/D BY PHYSICO-CHEMICAL TREATMENT Permit Number: WP3534GX Original Permit Number: WP3534GX	EPR Reference: - Issue Date: 10/09/2009 Effective Date: 10/09/2009 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
J	204m NW	Operator: OSCAR MAYER LIMITED Installation Name: ROWAN FOODS Process: CREATED BY IED - DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: WP3131ZF Original Permit Number: WP3534GX	EPR Reference: - Issue Date: 26/03/2013 Effective Date: 26/03/2013 Last date noted as effective: 01/07/2013 Status: EFFECTIVE
J	206m NW	Operator: OSCAR MAYER LIMITED Installation Name: WREXHAM CONVENIENCE FOODS Process: TREATMENT AND PROCESSING, OTHER THAN EXCLUSIVELY PACKAGING, OF THE FOLLOWING RAW MATERIALS, WHETHER PREVIOUSLY PROCESSED OR UNPROCESSED, INTENDED FOR THE PRODUCTION OF FOOD OR FEED (WHERE THE WEIGHT OF THE FINISHED PRODUCT EXCLUDES PACKAGING)—ONLY ANIMAL RAW MATERIALS (OTHER THAN MILK ONLY) WITH A FINISHED PRODUCT PRODUCTION CAPACITY GREATER THAN 75 TONNES PER DAY Permit Number: WP3534GX Original Permit Number: -	EPR Reference: - Issue Date: 15/11/2019 Effective Date: 15/11/2019 Last date noted as effective: 01/01/2022 Status: EFFECTIVE
J	206m NW	Operator: OSCAR MAYER LIMITED Installation Name: ROWAN FOODS LIMITED Process: TREATMENT AND PROCESSING, OTHER THAN EXCLUSIVELY PACKAGING, OF THE FOLLOWING RAW... Permit Number: WP3534GX Original Permit Number: -	EPR Reference: - Issue Date: 03/03/2016 Effective Date: 03/03/2016 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
J	206m NW	Operator: OSCAR MAYER LIMITED Installation Name: ROWAN FOODS LIMITED Process: TREATMENT AND PROCESSING, OTHER THAN EXCLUSIVELY PACKAGING, OF THE FOLLOWING RAW... Permit Number: WP3534GX Original Permit Number: -	EPR Reference: - Issue Date: 03/03/2016 Effective Date: 03/03/2016 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
J	206m NW	Operator: OSCAR MAYER LIMITED Installation Name: ROWAN FOODS LIMITED Process: - Permit Number: WP3534GX Original Permit Number: -	EPR Reference: - Issue Date: 03/03/2016 Effective Date: 03/03/2016 Last date noted as effective: 01/04/2017 Status: ISSUED

ID	Location	Details	
J	206m NW	Operator: OSCAR MAYER LIMITED Installation Name: WREXHAM CONVENIENCE FOODS Process: DISPOSAL OF NON-HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 50 TONNES PER DAY (OR 100 TONNES PER DAY IF THE ONLY WASTE TREATMENT ACTIVITY IS ANAEROBIC DIGESTION) INVOLVING ONE OR MORE OF THE FOLLOWING ACTIVITIES, AND EXCLUDING ACTIVITIES COVERED BY COUNCIL DIRECTIVE 91/271/EEC CONCERNING URBAN WASTE-WATER TREATMENT(4)—PHYSICO-CHEMICAL TREATMENT Permit Number: WP3534GX Original Permit Number: -	EPR Reference: - Issue Date: 15/11/2019 Effective Date: 15/11/2019 Last date noted as effective: 01/01/2022 Status: EFFECTIVE
M	234m E	Operator: SITA UK LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT PLANT AND TRANSFER STATION Process: ASSOCIATED PROCESS Permit Number: UP3137FB Original Permit Number: UP3137FB	EPR Reference: - Issue Date: 04/11/2011 Effective Date: 04/11/2011 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
M	234m E	Operator: SITA UK LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT PLANT AND TRANSFER STATION Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: UP3137FB Original Permit Number: UP3137FB	EPR Reference: - Issue Date: 04/11/2011 Effective Date: 04/11/2011 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
M	234m E	Operator: POLKACREST LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT FACILITY (HDU & TS) Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: WP3636ZG Original Permit Number: WP3636ZG	EPR Reference: - Issue Date: 04/03/2013 Effective Date: 04/03/2013 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
M	234m E	Operator: POLKACREST WALES LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT PLANT AND TRANSFER STATION Process: ASSOCIATED PROCESS Permit Number: RP3035FV Original Permit Number: RP3237SZ	EPR Reference: - Issue Date: 27/10/2011 Effective Date: 27/10/2011 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
M	234m E	Operator: POLKACREST WALES LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT PLANT AND TRANSFER STATION Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: RP3035FV Original Permit Number: RP3237SZ	EPR Reference: - Issue Date: 27/10/2011 Effective Date: 27/10/2011 Last date noted as effective: 17/11/2015 Status: SUPERCEDED



ID	Location	Details	
M	234m E	Operator: POLKACREST WALES LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT PLANT AND TRANSFER STATION Process: ASSOCIATED PROCESS Permit Number: RP3237SZ Original Permit Number: RP3237SZ	EPR Reference: - Issue Date: 23/06/2006 Effective Date: 23/06/2006 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
M	234m E	Operator: POLKACREST WALES LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT PLANT AND TRANSFER STATION Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D Permit Number: RP3237SZ Original Permit Number: RP3237SZ	EPR Reference: - Issue Date: 23/06/2006 Effective Date: 23/06/2006 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
M	234m E	Operator: SITA HEALTHCARE LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT FACILITY (HDU & TS) Process: ASSOCIATED PROCESS Permit Number: PP3230NV Original Permit Number: WP3636ZG	EPR Reference: - Issue Date: 25/03/2013 Effective Date: 25/03/2013 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
M	234m E	Operator: SITA HEALTHCARE LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT FACILITY (HDU & TS) Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: PP3230NV Original Permit Number: WP3636ZG	EPR Reference: - Issue Date: 25/03/2013 Effective Date: 25/03/2013 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
M	234m E	Operator: SITA HEALTHCARE LIMITED Installation Name: WREXHAM CLINICAL WASTE (HDU & TS) EPR/WP3636ZG Process: ASSOCIATED PROCESS Permit Number: UP3133AC Original Permit Number: WP3636ZG	EPR Reference: - Issue Date: 05/06/2015 Effective Date: 14/01/2015 Last date noted as effective: 17/11/2015 Status: EFFECTIVE
M	234m E	Operator: SITA HEALTHCARE LIMITED Installation Name: WREXHAM CLINICAL WASTE (HDU & TS) EPR/WP3636ZG Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: UP3133AC Original Permit Number: WP3636ZG	EPR Reference: - Issue Date: 05/06/2015 Effective Date: 14/01/2015 Last date noted as effective: 17/11/2015 Status: EFFECTIVE

ID	Location	Details	
M	234m E	Operator: STERILE TECHNOLOGIES (NEWCASTLE) LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT PLANT AND TRANSFER STATION Process: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Permit Number: RP3237SZ Original Permit Number: RP3237SZ	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 04/04/2006 Status: DETERMINATION
M	234m E	Operator: TRADEBE HEALTHCARE NATIONAL LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT FACILITY (HDU & TS) Process: - Permit Number: WP3636ZG Original Permit Number: UP3133AC	EPR Reference: - Issue Date: 14/01/2015 Effective Date: 14/01/2015 Last date noted as effective: 01/12/2016 Status: EFFECTIVE
M	234m E	Operator: STERILE TECHNOLOGIES (NEWCASTLE) LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT PLANT AND TRANSFER STATION Process: WASTE LANDFILLING; >10 T/D WITH CAPACITY >25,000T EXCLUDING INERT WASTE Permit Number: RP3237SZ Original Permit Number: RP3237SZ	EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 04/04/2006 Status: DETERMINATION
M	234m E	Operator: SITA HEALTHCARE LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT FACILITY (HDU & TS) Process: CREATED BY IED - DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING PHYSICO-CHEMICAL TREATMENT Permit Number: PP3230NV Original Permit Number: WP3636ZG	EPR Reference: - Issue Date: 25/03/2013 Effective Date: 25/03/2013 Last date noted as effective: 01/07/2013 Status: EFFECTIVE
M	234m E	Operator: TRADEBE HEALTHCARE NATIONAL LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT FACILITY (HDU & TS) Process: - Permit Number: WP3636ZG Original Permit Number: UP3133AC	EPR Reference: - Issue Date: 28/06/2021 Effective Date: 28/06/2021 Last date noted as effective: 01/01/2022 Status: EFFECTIVE
M	234m E	Operator: TRADEBE HEALTHCARE NATIONAL LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT FACILITY (HDU & TS) Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING ONE OR MORE OF THE FOLLOWING ACTIVITIES - PHYSICO-CHEMICAL TREATMENT Permit Number: WP3636ZG Original Permit Number: UP3133AC	EPR Reference: - Issue Date: 28/06/2021 Effective Date: 28/06/2021 Last date noted as effective: 01/01/2022 Status: EFFECTIVE



ID	Location	Details	
M	234m E	Operator: TRADEBE HEALTHCARE NATIONAL LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT FACILITY (HDU & TS) Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER ... Permit Number: WP3636ZG Original Permit Number: UP3133AC	EPR Reference: - Issue Date: 14/01/2015 Effective Date: 14/01/2015 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
M	234m E	Operator: TRADEBE HEALTHCARE NATIONAL LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT FACILITY (HDU & TS) Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER ... Permit Number: WP3636ZG Original Permit Number: UP3133AC	EPR Reference: - Issue Date: 14/01/2015 Effective Date: 14/01/2015 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
N	238m SE	Operator: POLKACREST LIMITED Installation Name: WREXHAM CLINICAL WASTE INCINERATOR Process: INCINERATION OF HAZARDOUS WASTE Permit Number: VP3739XC Original Permit Number: AP3538SM	EPR Reference: - Issue Date: 21/01/2008 Effective Date: 21/01/2008 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
N	238m SE	Operator: POLKACREST LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT FACILITY (INCINERATOR) Process: INCINERATION OF HAZARDOUS WASTE Permit Number: WP3836ZF Original Permit Number: WP3836ZF	EPR Reference: - Issue Date: 04/03/2013 Effective Date: 04/03/2013 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
N	238m SE	Operator: POLKACREST WALES LIMITED Installation Name: WREXHAM CLINICAL WASTE INCINERATOR Process: INCINERATION OF HAZARDOUS WASTE Permit Number: AP3538SM Original Permit Number: AP3538SM	EPR Reference: - Issue Date: 14/12/2005 Effective Date: 14/12/2005 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
N	238m SE	Operator: SITA UK LIMITED Installation Name: WREXHAM CLINICAL WASTE INCINERATOR Process: INCINERATION OF HAZARDOUS WASTE Permit Number: MP3239FQ Original Permit Number: MP3239FQ	EPR Reference: - Issue Date: 12/05/2011 Effective Date: 12/05/2011 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
N	238m SE	Operator: SITA UK LIMITED Installation Name: WREXHAM CLINICAL WASTE INCINERATOR Process: INCINERATION OF HAZARDOUS WASTE Permit Number: MP3635FQ Original Permit Number: MP3239FQ	EPR Reference: - Issue Date: 20/10/2011 Effective Date: 20/10/2011 Last date noted as effective: 17/11/2015 Status: SUPERCEDED

ID	Location	Details	
N	238m SE	Operator: SITA HEALTHCARE LIMITED Installation Name: WREXHAM CLINICAL WASTE (INCINERATOR) EPR/WP3836ZF Process: INCINERATION OF HAZARDOUS WASTE Permit Number: QP3933NZ Original Permit Number: WP3836ZF	EPR Reference: - Issue Date: 22/04/2013 Effective Date: 22/04/2013 Last date noted as effective: 17/11/2015 Status: EFFECTIVE
N	238m SE	Operator: TRADEBE HEALTHCARE NATIONAL LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT FACILITY (INCINERATOR) Process: - Permit Number: WP3836ZF Original Permit Number: QP3933NZ	EPR Reference: - Issue Date: 14/01/2015 Effective Date: 14/01/2015 Last date noted as effective: 01/12/2016 Status: EFFECTIVE
N	238m SE	Operator: ATTERO SERVICES LTD Installation Name: WREXHAM CLINICAL WASTE INCINERATOR Process: INCINERATION OF HAZARDOUS WASTE Permit Number: GP3335MA Original Permit Number: AP3538SM	EPR Reference: - Issue Date: 15/12/2006 Effective Date: 15/12/2006 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
N	238m SE	Operator: TRADEBE HEALTHCARE NATIONAL LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT FACILITY (INCINERATOR) Process: THE INCINERATION OF HAZARDOUS WASTE IN A WASTE INCINERATION PLANT OR WASTE CO-INCINERATION PLANT WITH A CAPACITY EXCEEDING 10 TONNES PER DAY Permit Number: WP3836ZF Original Permit Number: QP3933NZ	EPR Reference: - Issue Date: 28/06/2017 Effective Date: 26/06/2017 Last date noted as effective: 01/01/2022 Status: EFFECTIVE
N	238m SE	Operator: TRADEBE HEALTHCARE NATIONAL LIMITED Installation Name: WREXHAM CLINICAL WASTE TREATMENT FACILITY (INCINERATOR) Process: THE INCINERATION OF HAZARDOUS WASTE IN AN INCINERATION OR CO- INCINERATION PLANT... Permit Number: WP3836ZF Original Permit Number: QP3933NZ	EPR Reference: - Issue Date: 28/06/2017 Effective Date: 26/06/2017 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
Q	371m E	Operator: WASTE RECYCLING LIMITED Installation Name: PHASE 2 WREXHAM RECYCLING PARK Process: RECOVERY OR A MIX OF RECOVERY AND DISPOSAL OR NON-HAZARDOUS WASTE WITH A CAPACIT... Permit Number: BB3436RA Original Permit Number: 103238	EPR Reference: - Issue Date: 10/12/2015 Effective Date: 10/12/2015 Last date noted as effective: 01/04/2018 Status: EFFECTIVE

ID	Location	Details	
Q	371m E	Operator: WASTE RECYCLING LIMITED Installation Name: PHASE 2 WREXHAM RECYCLING PARK Process: RECOVERY OR A MIX OF RECOVERY AND DISPOSAL OF NON-HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 75 TONNES PER DAY (OR 100 TONNES PER DAY IF THE ONLY WASTE TREATMENT ACTIVITY IS ANAEROBIC DIGESTION) INVOLVING ONE OR MORE OF THE FOLLOWING ACTIVITIES, AND EXCLUDING ACTIVITIES COVERED BY COUNCIL DIRECTIVE 91/271/EEC—BIOLOGICAL TREATMENT Permit Number: BB3436RA Original Permit Number: 103238	EPR Reference: - Issue Date: 16/06/2021 Effective Date: 16/06/2021 Last date noted as effective: 01/01/2022 Status: EFFECTIVE

This data is sourced from the Environment Agency and Natural Resources Wales.

4.11 Licensed pollutant release (Part A(2)/B)

Records within 500m	7
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Records of Part A(2) and Part B installations regulated under the Environmental Permitting (England and Wales) Regulations 2016 for the release of substances to the environment.

Features are displayed on the Current industrial land use map on **page 64**

ID	Location	Address	Details	
K	178m NE	K D Products Ltd, Redwither Tower, Redwither Industrial Estate, Wrexham, LL13 9UE	Process: Timber Manufacture Status: Historical Permit Permit Type: Part B	Enforcement: Enforcement Notified Date of enforcement: 18/06/2007 Comment: Manufacture of timber and wood based products.
M	222m E	Polkacrest Wales Limited, Polkacrest Limited, Sterile Technologies (Newcastle) Ltd, Wrexham Clinical Waste Treatment Plant and Transfer Station, Marlborough Road, Wrexham Industrial Estate, Wrexham, LL13 9RJ	Process: Other waste disposal ; Combustion & Incineration Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.
12	237m SW	Tritech Precision Products Ltd, Bridge Road North, Wrexham Industrial Estate, Wrexham, LL13 9PS	Process: Other Metal Processes Status: Current Permit Permit Type: Part B	Enforcement: Enforcement Notified Date of enforcement: 12/03/2007 Comment: Not given

ID	Location	Address	Details	
O	287m SE	R.C. Motors Wrexham Ltd, Redwither Road Garage, Wrexham Industrial Estate, LL13 9RD	Process: Waste Oil Burner 0.4 MW Status: New Legislation Applies Permit Type: Part B	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.
S	407m W	Ball Packaging Europe, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9PS	Process: Surface Cleaning Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.
S	410m SW	Ball Packaging Europe, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9PS	Process: Surface Cleaning Status: Historical Permit Permit Type: Part A2	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.
S	413m W	Ardagh Metal Beverage, Bridge Road, Wrexham Industrial Estate, Wrexham, LL13 9PS	Process: Coating Processes Status: Current Permit Permit Type: Part A2	Enforcement: No Enforcement Notified. Date of enforcement: No Enforcement Notified. Comment: No Enforcement Notified.

This data is sourced from Local Authority records.

4.12 Radioactive Substance Authorisations

Records within 500m

4

Records of the storage, use, accumulation and disposal of radioactive substances regulated under the Radioactive Substances Act 1993.

Features are displayed on the Current industrial land use map on **page 64**

ID	Location	Address	Details	
M	217m E	Trinco Ltd, Wrexham Plant, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ	Operator: Trinco Ltd Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: AW7886 Date of approval: 24/06/1997	Effective from: 24/07/1997 Last date of update: 01/01/2015 Status: Revoked/cancelled



ID	Location	Address	Details	
M	217m E	Onyx Clinical Ltd, Wrexham Plant, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ	Operator: Onyx Clinical Ltd Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BG6251 Date of approval: 15/12/1999	Effective from: 17/12/1999 Last date of update: 01/01/2015 Status: Revoked/cancelled
M	217m E	Eurocare Environmental Services Ltd (dissolved), Wrexham Plant, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ	Operator: Eurocare Environmental Services Ltd (dissolved) Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BI3024 Date of approval: 21/06/2000	Effective from: 19/07/2000 Last date of update: 01/01/2015 Status: Superseded By Variation
M	217m E	Eurocare Environmental Services Ltd (dissolved), Wrexham Plant, Marlborough Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9RJ	Operator: Eurocare Environmental Services Ltd (dissolved) Type: Disposal Of Radioactive Waste (was Rsa60 Section 6). Permission number: BI3024 Date of approval: 25/11/2003	Effective from: 25/11/2003 Last date of update: 01/01/2015 Status: Revoked/cancelled

This data is sourced from the Environment Agency and Natural Resources Wales.

4.13 Licensed Discharges to controlled waters

Records within 500m

18

Discharges of treated or untreated effluent to controlled waters under the Water Resources Act 1991.

Features are displayed on the Current industrial land use map on **page 64**

ID	Location	Address	Details	
A	26m W	WREXHAM IND.EST.DIS.8.	Effluent Type: UNSPECIFIED Permit Number: CM0093607 Permit Version: 1 Receiving Water: REDWITHER BROOK	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 25/08/1982 Effective Date: 25/08/1982 Revocation Date: 28/04/1993
A	56m W	WREXHAM IND. ESTATE - DISCHARG	Effluent Type: MISCELLANEOUS DISCHARGES - SURFACE WATER Permit Number: CM0093606 Permit Version: 1 Receiving Water: REDWITHER BROOK	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 25/08/1982 Effective Date: 25/08/1982 Revocation Date: 28/04/1993
A	95m W	WREXHAM IND.EST.DIS.6	Effluent Type: UNSPECIFIED Permit Number: CM0093605 Permit Version: 1 Receiving Water: REDWITHER BROOK	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 25/08/1982 Effective Date: 25/08/1982 Revocation Date: 28/04/1993



ID	Location	Address	Details	
A	108m W	WREXHAM IND. ESTATE - DISCHARG	Effluent Type: UNSPECIFIED Permit Number: CM0093604 Permit Version: 1 Receiving Water: REDWITHER BROOK	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 25/08/1982 Effective Date: 25/08/1982 Revocation Date: 28/04/1993
C	142m SW	PCB CONTAINMENT CELL MARLBOROUGH RO, Marlborough Road, Wrexham Industrial Estate, Wrexham	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0149901 Permit Version: 3 Receiving Water: REDWITHER BROOK	Status: Effective Issue date: 23/08/2005 Effective Date: 24/08/2005 Revocation Date: -
F	154m E	STP SERVING UNIT 6 PACIFIC PARK, Bridge Road, Wrexham Industrial Estate, Wrexham, Clwyd, LL13 9PN	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: MP3320GG Permit Version: 1 Receiving Water: Groundwater via drainage mound	Status: Effective Issue date: 02/12/2011 Effective Date: 02/12/2011 Revocation Date: -
F	154m E	STP SERVING UNIT 6 PACIFIC PARK, BRIDGE ROAD, WREXHAM INDUSTRIAL ESTATE, WREXHAM, CLWYD, LL13 9PN	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRMP3320GG Permit Version: 1 Receiving Water: GROUNDWATER VIA DRAINAGE MOUND	Status: NEW ISSUED UNDER EPR 2010 Issue date: 02/12/2011 Effective Date: 02/12/2011 Revocation Date: -
F	154m E	STP SERVING UNIT 6 PACIFIC PARK, BRIDGE ROAD, WREXHAM INDUSTRIAL ESTATE, WREXHAM, CLWYD, LL13 9PN	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRMP3320GG Permit Version: 1 Receiving Water: GROUNDWATER VIA DRAINAGE MOUND	Status: NEW ISSUED UNDER EPR 2010 Issue date: 02/12/2011 Effective Date: 02/12/2011 Revocation Date: -
G	160m SE	MARCHWIEL ABBEY RD 33KV SUB-STATION, MARCHWIEL ABBEY RD 33KV SUB-STAT, ABBEY RD 33KV SUB-STATION, 33KV SUB-STATION	Effluent Type: - Permit Number: CM0015701 Permit Version: 1 Receiving Water: UN-NAMED TRIB.OF REDWITHER BRO	Status: Effective Issue date: 16/04/1963 Effective Date: 16/04/1963 Revocation Date: -
H	160m W	WREXHAM IND. ESTATE - DISCHARG	Effluent Type: UNSPECIFIED Permit Number: CM0093603 Permit Version: 1 Receiving Water: REDWITHER BROOK	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 25/08/1982 Effective Date: 25/08/1982 Revocation Date: 28/04/1993



ID	Location	Address	Details	
H	198m W	WREXHAM IND. ESTATE - DISCHARG	Effluent Type: UNSPECIFIED Permit Number: CM0093601 Permit Version: 1 Receiving Water: REDWITHER BROOK	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 25/08/1982 Effective Date: 25/08/1982 Revocation Date: 28/04/1993
H	199m W	WREXHAM IND. EST. DIS. 2	Effluent Type: UNSPECIFIED Permit Number: CM0093602 Permit Version: 1 Receiving Water: REDWITHER BROOK	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 25/08/1982 Effective Date: 25/08/1982 Revocation Date: 28/04/1993
11	226m SW	PCB CONTAINMENT CELL MARLBOROUGH RO, MARLBOROUGH ROAD, WREXHAM INDUSTRIAL ESTATE, WREXHAM	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0149901 Permit Version: 1 Receiving Water: REDWITHER BROOK	Status: REVOKED - UNSPECIFIED Issue date: 13/01/1987 Effective Date: 13/01/1987 Revocation Date: 27/03/1995
13	297m SW	WREXHAM IND ESTATE BRITISH CELANESE, WREXHAM IND ESTATE BRITISH CELAN, BRITISH CELANESE SITE	Effluent Type: UNSPECIFIED Permit Number: CM0001801 Permit Version: 1 Receiving Water: TRIB. OF REDWITHER BROOK	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 31/01/1966 Effective Date: 31/01/1966 Revocation Date: 26/02/1993
14	381m SW	WREXHAM IND ESTATE CONREN LTD, CONREN LTD	Effluent Type: UNSPECIFIED Permit Number: CM0086201 Permit Version: 1 Receiving Water: TRIB. OF REDWITHER BROOK	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 04/10/1979 Effective Date: 04/10/1979 Revocation Date: 26/04/1995
U	450m SW	CONTINENTAL CAN CO LTD	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0085401 Permit Version: 1 Receiving Water: REDWITHER BROOK	Status: REVOKED - UNSPECIFIED Issue date: 30/04/1979 Effective Date: 30/04/1979 Revocation Date: 08/03/1994
U	450m SW	CONTINENTAL CAN CO LTD	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0085401 Permit Version: 2 Receiving Water: REDWITHER BROOK	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV Issue date: 09/03/1994 Effective Date: 09/03/1994 Revocation Date: 21/01/2004
18	493m E	CPL PETROLEUM BRYN LANE WREXHAM, CPL PETROLEUM, Bryn Lane, WREXHAM IND ESTATE, Wrexham, LL13 9UT	Effluent Type: TRADE DISCHARGES - SITE DRAINAGE Permit Number: CG0382501 Permit Version: 1 Receiving Water: IS Y COED BROOK	Status: Effective Issue date: 01/07/1999 Effective Date: 01/07/1999 Revocation Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.



4.14 Pollutant release to surface waters (Red List)

Records within 500m

0

Discharges of specified substances under the Environmental Protection (Prescribed Processes and Substances) Regulations 1991.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.15 Pollutant release to public sewer

Records within 500m

0

Discharges of Special Category Effluents to the public sewer.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.16 List 1 Dangerous Substances

Records within 500m

0

Discharges of substances identified on List I of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

This data is sourced from the Environment Agency and Natural Resources Wales.

4.17 List 2 Dangerous Substances

Records within 500m

2

Discharges of substances identified on List II of European Directive E 2006/11/EC, and regulated under the Environmental Damage (Prevention and Remediation) Regulations 2015.

Features are displayed on the Current industrial land use map on **page 64**

ID	Location	Name	Status	Receiving Water	Authorised Substances
L	180m SW	Welsh Development Agency Pcb Cell 283	Active	-	Biphenyl
T	465m S	Bluestone Chemicals Ltd, Redwither Road, Wrexham Ind Est	Not Active	-	Chromium, Copper

This data is sourced from the Environment Agency and Natural Resources Wales.



4.18 Pollution Incidents (EA/NRW)

Records within 500m

52

Records of substantiated pollution incidents. Since 2006 this data has only included category 1 (major) and 2 (significant) pollution incidents.

Features are displayed on the Current industrial land use map on **page 64**

ID	Location	Details	
B	75m E	Incident Date: 08/05/2013 Incident Identification: 1110907 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
D	119m NW	Incident Date: 04/10/2003 Incident Identification: 194336 Pollutant: Inorganic Chemicals/Products Pollutant Description: Acids	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
5	125m W	Incident Date: 08/12/2015 Incident Identification: 1393353 Pollutant: Multiple Pollutants Pollutant Description: 2 Pollutants Including Suspended Solids	Water Impact: - Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
E	135m S	Incident Date: 16/02/2016 Incident Identification: 1411660 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
G	173m SE	Incident Date: 14/06/2016 Incident Identification: 1603273 Pollutant: - Pollutant Description: -	Water Impact: No Details Land Impact: No Details Air Impact: Category 4 (No Impact)
G	173m SE	Incident Date: 14/06/2016 Incident Identification: 1603273 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: No Details Land Impact: No Details Air Impact: Category 4 (No Impact)
L	214m SW	Incident Date: 02/01/2008 Incident Identification: 553362 Pollutant: Sewage Materials Pollutant Description: Process Effluent	Water Impact: Category 2 (Significant) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
M	219m E	Incident Date: 29/02/2016 Incident Identification: 1415189 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)



ID	Location	Details	
M	220m E	Incident Date: 04/08/2016 Incident Identification: 1604414 Pollutant: - Pollutant Description: -	Water Impact: No Details Land Impact: No Details Air Impact: Category 4 (No Impact)
M	220m E	Incident Date: 04/08/2016 Incident Identification: 1604414 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: No Details Land Impact: No Details Air Impact: Category 4 (No Impact)
M	222m E	Incident Date: 27/03/2015 Incident Identification: 1323952 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
M	222m E	Incident Date: 02/05/2013 Incident Identification: 1108584 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
M	229m E	Incident Date: 26/08/2015 Incident Identification: 1368254 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
J	258m NW	Incident Date: 19/10/2015 Incident Identification: 1381826 Pollutant: Organic Chemicals/Products Pollutant Description: Paints and Varnishes	Water Impact: - Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
O	322m SE	Incident Date: 14/07/2002 Incident Identification: 91450 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
P	350m S	Incident Date: 26/06/2009 Incident Identification: 691429 Pollutant: Contaminated Water Pollutant Description: Vegetable Washings	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
P	364m SW	Incident Date: 04/08/2016 Incident Identification: 1604395 Pollutant: - Pollutant Description: -	Water Impact: Category 3 (Minor) Land Impact: No Details Air Impact: No Details
P	364m SW	Incident Date: 04/08/2016 Incident Identification: 1604395 Pollutant: Oils and Fuels Pollutant Description: Unidentified Oil	Water Impact: Category 3 (Minor) Land Impact: No Details Air Impact: No Details



ID	Location	Details	
P	365m SW	Incident Date: 20/02/2015 Incident Identification: 1315409 Pollutant: Inert Materials and Wastes Pollutant Description: Other Inert Material or Waste	Water Impact: - Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
P	380m S	Incident Date: 03/08/2016 Incident Identification: 1604640 Pollutant: - Pollutant Description: -	Water Impact: Category 3 (Minor) Land Impact: No Details Air Impact: No Details
P	380m S	Incident Date: 03/08/2016 Incident Identification: 1604640 Pollutant: Oils and Fuels Pollutant Description: Unidentified Oil	Water Impact: Category 3 (Minor) Land Impact: No Details Air Impact: No Details
P	381m SW	Incident Date: 23/01/2017 Incident Identification: 1700388 Pollutant: - Pollutant Description: -	Water Impact: Category 3 (Minor) Land Impact: Other Air Impact: Other
P	381m SW	Incident Date: 23/01/2017 Incident Identification: 1700388 Pollutant: Pollutant Not Identified Pollutant Description: Pollutant Not Identified	Water Impact: Category 3 (Minor) Land Impact: Other Air Impact: Other
P	384m SW	Incident Date: 22/11/2016 Incident Identification: 1606987 Pollutant: - Pollutant Description: -	Water Impact: Category 3 (Minor) Land Impact: No Details Air Impact: No Details
P	384m SW	Incident Date: 22/11/2016 Incident Identification: 1606987 Pollutant: Oils and Fuels Pollutant Description: Unidentified Oil	Water Impact: Category 3 (Minor) Land Impact: No Details Air Impact: No Details
P	389m SW	Incident Date: 20/04/2002 Incident Identification: 73352 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
R	396m S	Incident Date: 26/09/2014 Incident Identification: 1281386 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
15	398m SW	Incident Date: 15/05/2013 Incident Identification: 1113038 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

ID	Location	Details	
R	401m S	Incident Date: 05/05/2016 Incident Identification: 1602189 Pollutant: - Pollutant Description: -	Water Impact: No Details Land Impact: No Details Air Impact: Category 3 (Minor)
R	401m S	Incident Date: 05/05/2016 Incident Identification: 1602189 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: No Details Land Impact: No Details Air Impact: Category 3 (Minor)
R	406m S	Incident Date: 22/04/2014 Incident Identification: 1229280 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
S	408m W	Incident Date: 15/07/2001 Incident Identification: 16543 Pollutant: Inorganic Chemicals/Products Pollutant Description: Acids	Water Impact: Category 2 (Significant) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
16	410m NE	Incident Date: 13/09/2013 Incident Identification: 1158986 Pollutant: Oils and Fuel Pollutant Description: Mixed/Waste Oils	Water Impact: - Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
T	433m S	Incident Date: 19/07/2006 Incident Identification: 418682 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: Category 1 (Major) Land Impact: Category 2 (Significant) Air Impact: Category 2 (Significant)
T	433m S	Incident Date: 19/07/2006 Incident Identification: 418682 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: Category 1 (Major) Land Impact: Category 2 (Significant) Air Impact: Category 2 (Significant)
17	441m SW	Incident Date: 17/07/2003 Incident Identification: 174571 Pollutant: Sewage Materials Pollutant Description: Crude Sewage	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
T	462m S	Incident Date: 03/12/2014 Incident Identification: 1298971 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
T	463m S	Incident Date: 25/03/2015 Incident Identification: 1323247 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)

ID	Location	Details	
T	464m S	Incident Date: 29/09/2014 Incident Identification: 1282155 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
T	465m S	Incident Date: 19/05/2014 Incident Identification: 1236658 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
T	465m S	Incident Date: 22/09/2014 Incident Identification: 1279895 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
T	465m S	Incident Date: 16/09/2014 Incident Identification: 1278265 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
T	469m S	Incident Date: 04/06/2015 Incident Identification: 1342283 Pollutant: Inert Materials and Wastes Pollutant Description: Other Inert Material or Waste	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
T	469m S	Incident Date: 17/04/2015 Incident Identification: 1329614 Pollutant: Specific Waste Materials Pollutant Description: Other Specific Waste Material	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
T	471m S	Incident Date: 23/10/2014 Incident Identification: 1288936 Pollutant: Multiple Pollutants Pollutant Description: 2 Pollutants Including Other Odour	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
T	479m S	Incident Date: 19/12/2013 Incident Identification: 1184723 Pollutant: Specific Waste Materials Pollutant Description: Commercial Waste	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
T	490m S	Incident Date: 25/05/2007 Incident Identification: 497621 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: Category 2 (Significant) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
T	491m S	Incident Date: 23/05/2020 Incident Identification: 2003572 Pollutant: Contaminated Water Pollutant Description: Firefighting Run	Water Impact: Category 2 (Significant) Land Impact: No Details Air Impact: Category 2 (Significant)

ID	Location	Details	
T	493m S	Incident Date: 06/06/2014 Incident Identification: 1242731 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
T	493m S	Incident Date: 01/08/2013 Incident Identification: 1142191 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
T	496m S	Incident Date: 04/09/2014 Incident Identification: 1274310 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
T	496m S	Incident Date: 08/12/2014 Incident Identification: 1299978 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Steam	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

This data is sourced from the Environment Agency and Natural Resources Wales.

4.19 Pollution inventory substances

Records within 500m	0
----------------------------	----------

The pollution inventory (substances) includes reporting on annual emissions of certain regulated substances to air, controlled waters and land. A reporting threshold for each substance is also included. Where emissions fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.20 Pollution inventory waste transfers

Records within 500m	0
----------------------------	----------

The pollution inventory (waste transfers) includes reporting on annual transfers and recovery/disposal of controlled wastes from a site. A reporting threshold for each waste type is also included. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.

4.21 Pollution inventory radioactive waste

Records within 500m

0

The pollution inventory (radioactive wastes) includes reporting on annual releases of radioactive substances from a site, including the means of release. Where releases fall below the reporting threshold, no value will be given. The data is given for the most recent complete year available.

This data is sourced from the Environment Agency and the Scottish Environment Protection Agency.



5 Hydrogeology - Superficial aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive
 - Unknown

5.1 Superficial aquifer

Records within 500m

3

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 89**

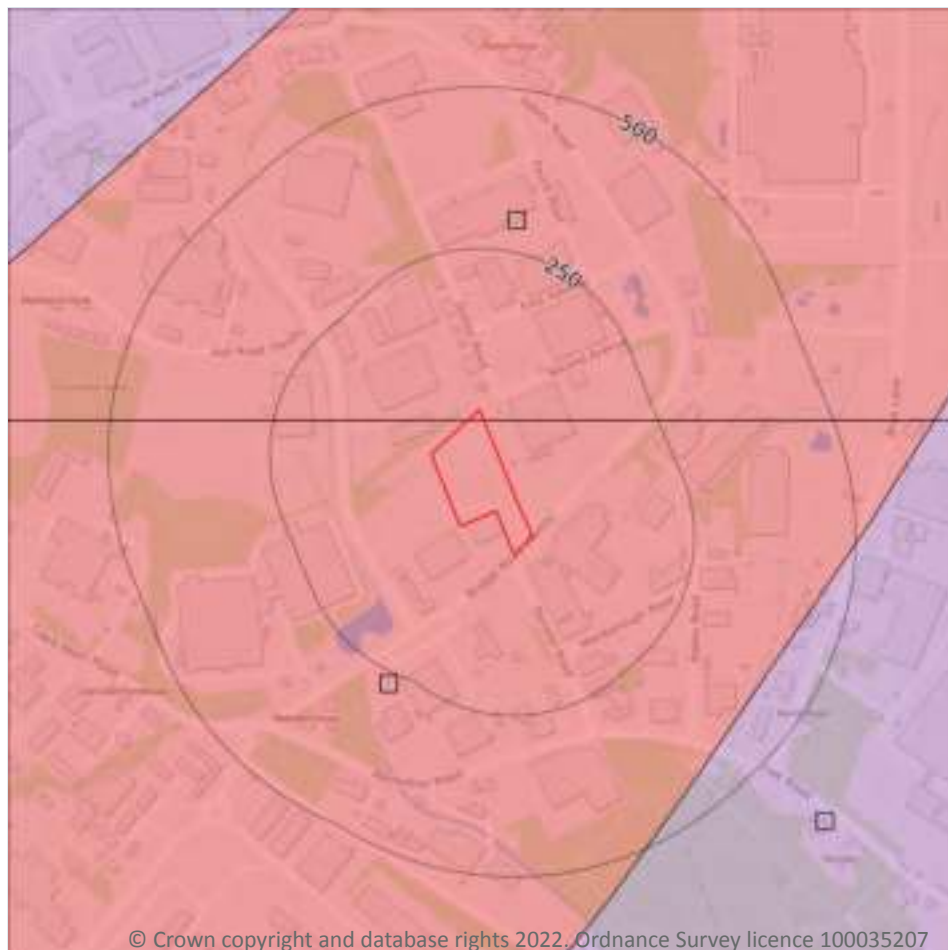
ID	Location	Designation	Description
1	On site	Secondary Undifferentiated	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	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

ID	Location	Designation	Description
3	143m W	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

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Bedrock aquifer



- Site Outline
- Search buffers in metres (m)
- Principal
 - Secondary A
 - Secondary B
 - Secondary Undifferentiated
 - Unproductive

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5.2 Bedrock aquifer

Records within 500m

3

Aquifer status of groundwater held within bedrock geology.

Features are displayed on the Bedrock aquifer map on **page 91**

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

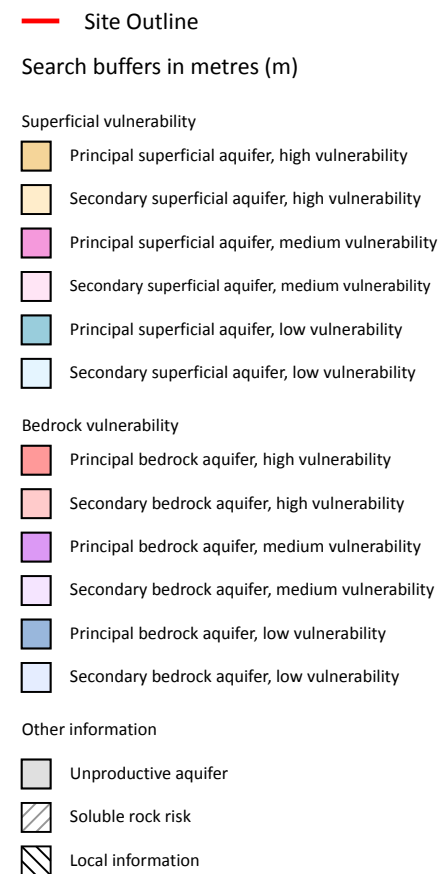


ID	Location	Designation	Description
3	419m SE	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.



Groundwater vulnerability



5.3 Groundwater vulnerability

Records within 50m

2

An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows:

- High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
- Medium - Intermediate between high and low vulnerability.
- Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Features are displayed on the Groundwater vulnerability map on **page 93**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: Low Infiltration value: <40% Dilution value: 300- 550mm/year	Vulnerability: Low Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

5.4 Groundwater vulnerability- soluble rock risk

Records on site	0
------------------------	----------

This dataset identifies areas where solution features that enable rapid movement of a pollutant may be present within a 1km grid square.

This data is sourced from the British Geological Survey and the Environment Agency.

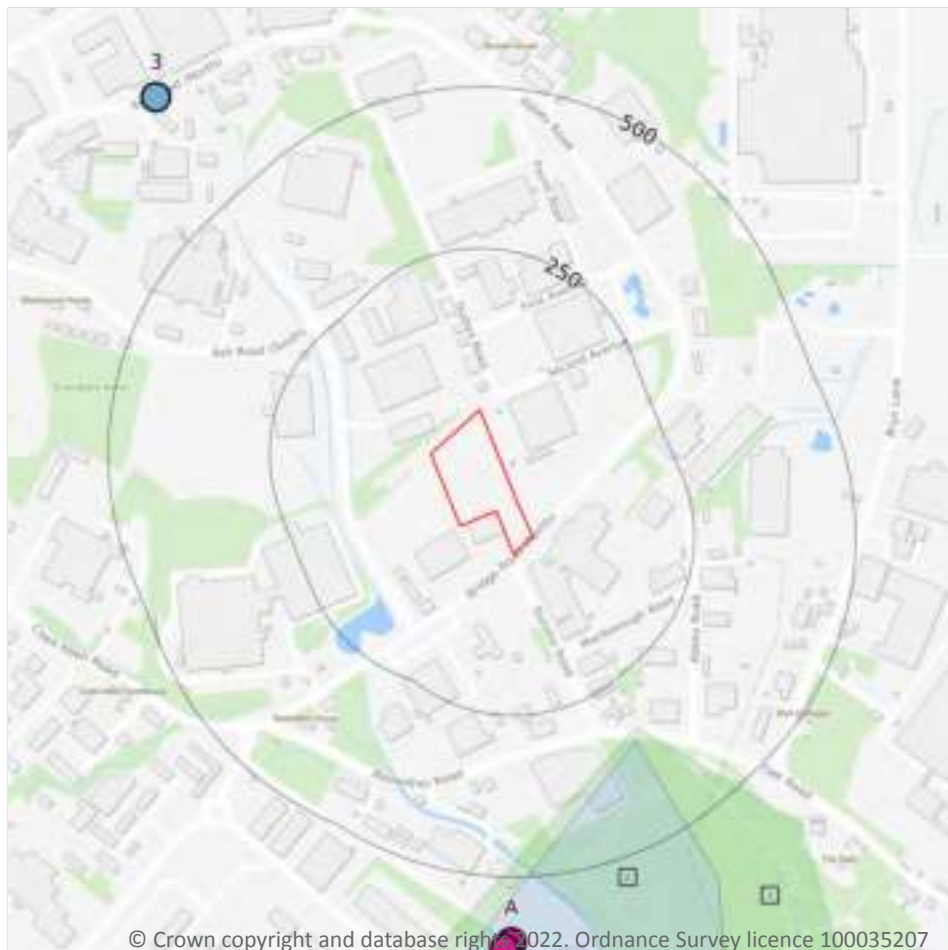
5.5 Groundwater vulnerability- local information

Records on site	0
------------------------	----------

This dataset identifies areas where additional local information affecting vulnerability is held by the Environment Agency. Further information can be obtained by contacting the Environment Agency local Area groundwater team through the Environment Agency National Customer Call Centre on 03798 506 506 or by email on enquiries@environment-agency.gov.uk.

This data is sourced from the British Geological Survey and the Environment Agency.

Abstractions and Source Protection Zones



- Site Outline
- Search buffers in metres (m)
- Source Protection Zone 1
Inner catchment
- Source Protection Zone 2
Outer catchment
- Source Protection Zone 3
Total catchment
- Source Protection Zone 4
Zone of Special Interest
- Source Protection Zone 1c
Inner catchment - confined aquifer
- Source Protection Zone 2c
Outer catchment - confined aquifer
- Source Protection Zone 3c
Total catchment - confined aquifer
- Drinking water abstraction licences
Polygon features
- Drinking water abstraction licences
Linear features
- Groundwater abstraction licence (point)
- Groundwater abstraction licence (area)
- Groundwater abstraction licence (linear)
- Surface Water Abstractions (point)
- Surface Water Abstractions (area)
- Surface Water Abstractions (linear)

5.6 Groundwater abstractions

Records within 2000m

11

Licensed groundwater abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, between two points (line data) or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 95**

ID	Location	Details	
A	602m S	Status: Historical Licence No: 24/67/7/0213 Details: Process water Direct Source: EAW Groundwater Point: 144 M DEEP, 200MM DIA BH AW2 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338360 Northing: 349190	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/09/1998 Expiry Date: 10/09/2001 Issue No: 100 Version Start Date: 10/09/1998 Version End Date: -
A	602m S	Status: Historical Licence No: 24/67/7/0222 Details: Process Water Direct Source: EAW Groundwater Point: 144 M DEEP, 200MM DIA BH AW2 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338360 Northing: 349190	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 10/09/2001 Expiry Date: 31/03/2012 Issue No: 1 Version Start Date: 10/09/2001 Version End Date: -
A	612m S	Status: Historical Licence No: WA/067/0007/006 Details: Process Water Direct Source: EAW Groundwater Point: SPECTRUM BUSINESS PARK BOREHOLE AW2 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338350 Northing: 349180	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 01/04/2012 Expiry Date: 31/03/2022 Issue No: 1 Version Start Date: 01/04/2012 Version End Date: -
-	713m S	Status: Historical Licence No: 24/67/7/0213 Details: Process water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA., OB1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338240 Northing: 349090	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/09/1998 Expiry Date: 10/09/2001 Issue No: 100 Version Start Date: 10/09/1998 Version End Date: -
-	713m S	Status: Historical Licence No: 24/67/7/0222 Details: Process Water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA., OB1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338240 Northing: 349090	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 10/09/2001 Expiry Date: 31/03/2012 Issue No: 1 Version Start Date: 10/09/2001 Version End Date: -



ID	Location	Details	
-	713m S	Status: Historical Licence No: WA/067/0007/006 Details: Process Water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA., OB1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338240 Northing: 349090	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 01/04/2012 Expiry Date: 31/03/2022 Issue No: 1 Version Start Date: 01/04/2012 Version End Date: -
-	869m S	Status: Historical Licence No: 24/67/7/0213 Details: Process water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA. BOREHOLE AW1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338190 Northing: 348940	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 10/09/1998 Expiry Date: 10/09/2001 Issue No: 100 Version Start Date: 10/09/1998 Version End Date: -
-	869m S	Status: Historical Licence No: 24/67/7/0222 Details: Process Water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA. BOREHOLE AW1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338190 Northing: 348940	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 10/09/2001 Expiry Date: 31/03/2012 Issue No: 1 Version Start Date: 10/09/2001 Version End Date: -
-	869m S	Status: Historical Licence No: WA/067/0007/006 Details: Process Water Direct Source: EAW Groundwater Point: 144M DEEP, 150MM DIA. BOREHOLE AW1 Data Type: Point Name: Calypso Soft Drinks Ltd Easting: 338190 Northing: 348940	Annual Volume (m ³): 131400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: 01/04/2012 Expiry Date: 31/03/2022 Issue No: 1 Version Start Date: 01/04/2012 Version End Date: -
-	869m S	Status: Active Licence No: WA/067/0007/006 Details: Process Water - Medium Direct Source: Underground strata Point: - Data Type: Point Name: - Easting: 338190 Northing: 348940	Annual Volume (m ³): 131,400 Max Daily Volume (m ³): 600 Original Application No: - Original Start Date: Oct 2 2016 12:00AM Expiry Date: Mar 30 2027 12:00AM Issue No: - Version Start Date: - Version End Date: -



ID	Location	Details	
-	1258m N	Status: Historical Licence No: 24/67/9/0130 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: WELL Data Type: Point Name: Taylor Easting: 337980 Northing: 351230	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 14/06/1968 Expiry Date: - Issue No: 100 Version Start Date: 14/06/1968 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.7 Surface water abstractions

Records within 2000m	1
-----------------------------	----------

Licensed surface water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

Features are displayed on the Abstractions and Source Protection Zones map on **page 95**

ID	Location	Details	
3	695m NW	Status: Historical Licence No: 24/67/7/0178 Details: Non-Evaporative Cooling Direct Source: EAW Surface Water Point: TRIBUTARY OF REDWITHER BROOK Data Type: Point Name: Caparo Wire Ltd Easting: 337810 Northing: 350500	Annual Volume (m ³): 9955.74 Max Daily Volume (m ³): 27.276 Original Application No: - Original Start Date: 12/05/1972 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2007 Version End Date: -

This data is sourced from the Environment Agency and Natural Resources Wales.

5.8 Potable abstractions

Records within 2000m	0
-----------------------------	----------

Licensed potable water abstractions for sites extracting more than 20 cubic metres of water a day and includes active and historical records. The data may be for a single abstraction point, a stretch of watercourse or a larger area.

This data is sourced from the Environment Agency and Natural Resources Wales.

5.9 Source Protection Zones

Records within 500m**2**

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination. Features are displayed on the Abstractions and Source Protection Zones map on **page 95**

ID	Location	Type	Description
1	328m SE	3	Total catchment
2	346m SE	2	Outer catchment

This data is sourced from the Environment Agency and Natural Resources Wales.

5.10 Source Protection Zones (confined aquifer)

Records within 500m**0**

Source Protection Zones in the confined aquifer define the sensitivity around a deep groundwater abstraction to contamination. A confined aquifer would normally be protected from contamination by overlying geology and is only considered a sensitive resource if deep excavation/drilling is taking place.

This data is sourced from the Environment Agency and Natural Resources Wales.



6 Hydrology



- Site Outline
- Search buffers in metres (m)
- Water Network (OS MasterMap)
- Surface water features (wider than 5m)
- Surface water features (narrower than 5m)
- ⋯ WFD River, canal and surface water transfer water bodies
- WFD Lake water bodies
- WFD Transitional and coastal water bodies
- WFD Surface water body catchments boundaries
- WFD Groundwater body boundaries

6.1 Water Network (OS MasterMap)

Records within 250m

13

Detailed water network of Great Britain showing the flow and precise central course of every river, stream, lake and canal.

Features are displayed on the Hydrology map on **page 100**

ID	Location	Type of water feature	Ground level	Permanence	Name
A	123m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

ID	Location	Type of water feature	Ground level	Permanence	Name
A	124m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
A	125m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
B	135m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
5	155m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	164m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	165m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	165m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	166m W	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
C	166m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
A	181m W	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	192m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
C	192m SW	Lake, loch or reservoir.	On ground surface	Watercourse contains water year round (in normal circumstances)	-

This data is sourced from the Ordnance Survey.



6.2 Surface water features

Records within 250m

6

Covering rivers, streams and lakes (some overlap with OS MasterMap Water Network data in previous section) but additionally covers smaller features such as ponds. Rivers and streams narrower than 5m are represented as a single line. Lakes, ponds and rivers or streams wider than 5m are represented as polygons.

Features are displayed on the Hydrology map on **page 100**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site

2

The Water Framework Directive is an EU-led framework for the protection of inland surface waters, estuaries, coastal waters and groundwater through river basin-level management planning. In terms of surface water, these basins are broken down into smaller units known as management, operational and water body catchments.

Features are displayed on the Hydrology map on **page 100**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
2	On site	River WB catchment	Clywedog - Dee to Gwenfro	GB111067052110	Clywedog - Dee	Dee
3	On site	River WB catchment	Dee - Chester Weir to Ceiriog	GB111067057080	Dee Lower Chester Weir to Ceiriog	Dee

This data is sourced from the Environment Agency and Natural Resources Wales.

6.4 WFD Surface water bodies

Records identified

2

Surface water bodies under the Directive may be rivers, lakes, estuary or coastal. To achieve the purpose of the Directive, environmental objectives have been set and are reported on for each water body. The progress towards delivery of the objectives is then reported on by the relevant competent authorities at the end of each six-year cycle. The river water body directly associated with the catchment listed in the previous section is detailed below, along with any lake, canal, coastal or artificial water body within 250m of the site.

Features are displayed on the Hydrology map on **page 100**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
-	758m S	River	Clywedog - Dee to Gwenfro	GB111067052110	Moderate	Fail	Moderate	2016
-	3263m S	River	Dee - Chester Weir to Ceiriog	GB111067057080	Moderate	Fail	Moderate	2016

This data is sourced from the Environment Agency and Natural Resources Wales.

6.5 WFD Groundwater bodies

Records on site **1**

Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place.

Features are displayed on the Hydrology map on **page 100**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
1	On site	Dee Permo-Triassic Sandstone	GB41101G202400	Poor	Poor	Good	2019

This data is sourced from the Environment Agency and Natural Resources Wales.

7 River and coastal flooding

7.1 Risk of flooding from rivers and the sea

Records within 50m

0

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m within the Risk of Flooding from Rivers and Sea (RoFRaS)/Flood Risk Assessment Wales (FRAW) models. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition. The risk categories for RoFRaS for rivers and the sea and FRAW for rivers are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 100 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 100 chance) or High (greater than or equal to 1 in 30 chance). The risk categories for FRAW for the sea are; Very low (less than 1 in 1000 chance in any given year), Low (less than 1 in 200 but greater than or equal to 1 in 1000 chance), Medium (less than 1 in 30 but greater than or equal to 1 in 200 chance) or High (greater than or equal to 1 in 30 chance).

This data is sourced from the Environment Agency and Natural Resources Wales.

7.2 Historical Flood Events

Records within 250m

0

Records of historic flooding from rivers, the sea, groundwater and surface water. Records began in 1946 when predecessor bodies started collecting detailed information about flooding incidents, although limited details may be included on flooding incidents prior to this date. Takes into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding, and includes flood extents that may have been affected by overtopping, breaches or blockages.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.3 Flood Defences

Records within 250m

0

Records of flood defences owned, managed or inspected by the Environment Agency and Natural Resources Wales. Flood defences can be structures, buildings or parts of buildings. Typically these are earth banks, stone and concrete walls, or sheet-piling that is used to prevent or control the extent of flooding.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.4 Areas Benefiting from Flood Defences

Records within 250m

0

Areas that would benefit from the presence of flood defences in a 1 in 100 (1%) chance of flooding each year from rivers or 1 in 200 (0.5%) chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.5 Flood Storage Areas

Records within 250m

0

Areas that act as a balancing reservoir, storage basin or balancing pond to attenuate an incoming flood peak to a flow level that can be accepted by the downstream channel or to delay the timing of a flood peak so that its volume is discharged over a longer period.

This data is sourced from the Environment Agency and Natural Resources Wales.

River and coastal flooding - Flood Zones

7.6 Flood Zone 2

Records within 50m

0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land between Flood Zone 3 (see next section) and the extent of the flooding from rivers or the sea with a 1 in 1000 (0.1%) chance of flooding each year.

This data is sourced from the Environment Agency and Natural Resources Wales.

7.7 Flood Zone 3

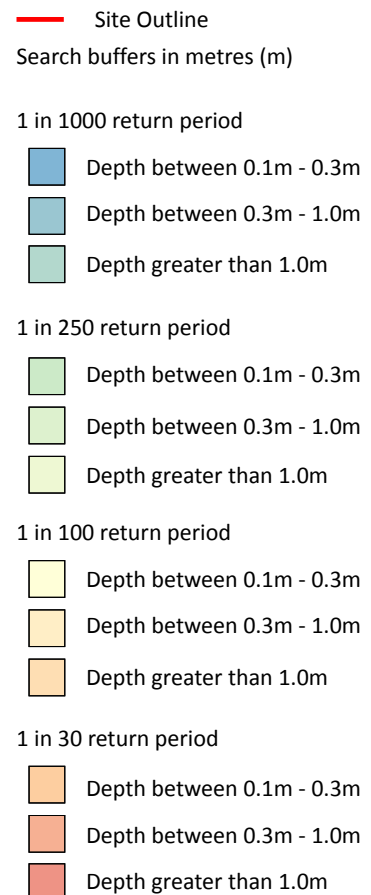
Records within 50m

0

Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

This data is sourced from the Environment Agency and Natural Resources Wales.

8 Surface water flooding



8.1 Surface water flooding

Highest risk on site

1 in 100 year, 0.1m - 0.3m

Highest risk within 50m

1 in 30 year, 0.3m - 1.0m

Ambiental Risk Analytics surface water (pluvial) FloodMap identifies areas likely to flood as a result of extreme rainfall events, i.e. land naturally vulnerable to surface water ponding or flooding. This data set was produced by simulating 1 in 30 year, 1 in 100 year, 1 in 250 year and 1 in 1,000 year rainfall events. Modern urban drainage systems are typically built to cope with rainfall events between 1 in 20 and 1 in 30 years, though some older ones may flood in a 1 in 5 year rainfall event.

Features are displayed on the Surface water flooding map on **page 107**

The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

The table below shows the maximum flood depths for a range of return periods for the site.

Return period	Maximum modelled depth
1 in 1000 year	Between 0.1m and 0.3m
1 in 250 year	Between 0.1m and 0.3m
1 in 100 year	Between 0.1m and 0.3m
1 in 30 year	Negligible

This data is sourced from Ambiantal Risk Analytics.



9 Groundwater flooding



— Site Outline
Search buffers in metres (m)

- High
- Moderate - High
- Moderate
- Low
- Negligible

9.1 Groundwater flooding

Highest risk on site

Low

Highest risk within 50m

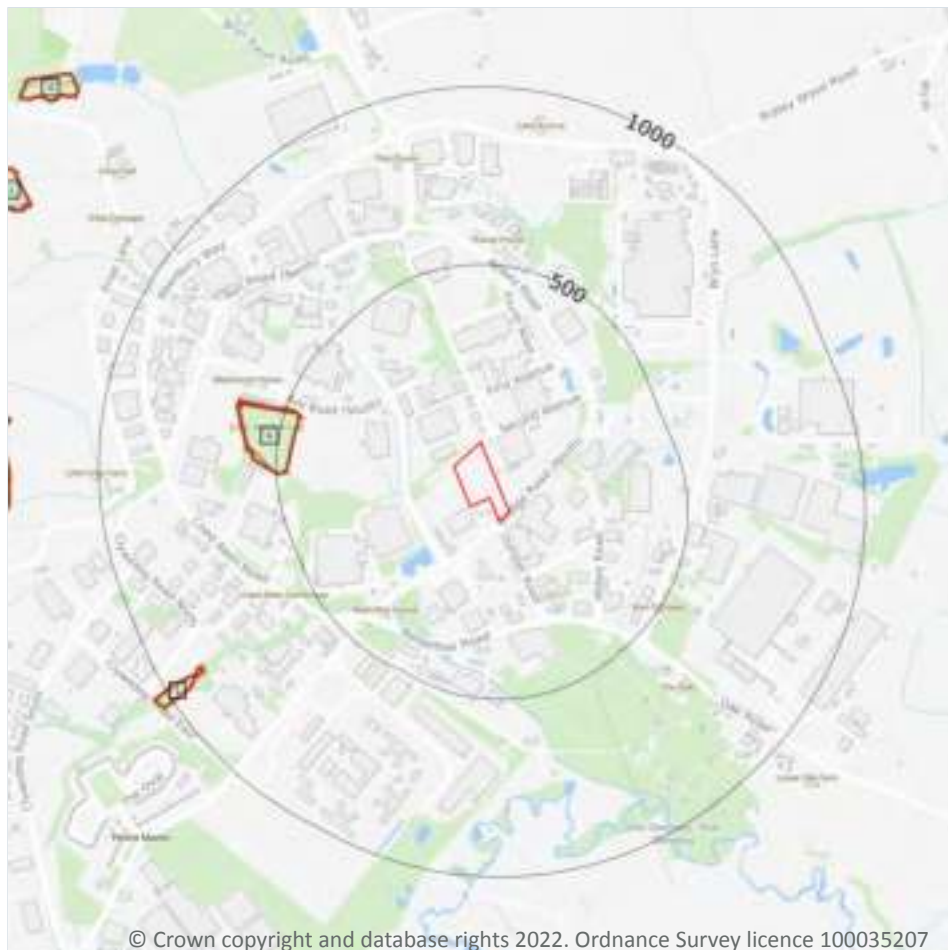
Low

Groundwater flooding is caused by unusually high groundwater levels. It occurs when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, possibly lasting for weeks or months, and as a result it can cause significant damage to property. This risk assessment is based on a 1 in 100 year return period and a 5m Digital Terrain Model (DTM).

Features are displayed on the Groundwater flooding map on **page 109**

This data is sourced from Ambiantal Risk Analytics.

10 Environmental designations



- Site Outline
- Search buffers in metres (m)
- ▨ Designated Ancient Woodland

10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m

0

Sites providing statutory protection for the best examples of UK flora, fauna, or geological or physiographical features. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs were re-notified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and (in Scotland) by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.2 Conserved wetland sites (Ramsar sites)

Records within 2000m**0**

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. They cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation in general and for the well-being of human communities. These sites cover a broad definition of wetland; marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, and even some marine areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.3 Special Areas of Conservation (SAC)

Records within 2000m**0**

Areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.4 Special Protection Areas (SPA)

Records within 2000m**0**

Sites classified by the UK Government under the EC Birds Directive, SPAs are areas of the most important habitat for rare (listed on Annex I to the Directive) and migratory birds within the European Union.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.5 National Nature Reserves (NNR)

Records within 2000m**0**

Sites containing examples of some of the most important natural and semi-natural terrestrial and coastal ecosystems in Great Britain. They are managed to conserve their habitats, provide special opportunities for scientific study or to provide public recreation compatible with natural heritage interests.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.6 Local Nature Reserves (LNR)

Records within 2000m

0

Sites managed for nature conservation, and to provide opportunities for research and education, or simply enjoying and having contact with nature. They are declared by local authorities under the National Parks and Access to the Countryside Act 1949 after consultation with the relevant statutory nature conservation agency.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.7 Designated Ancient Woodland

Records within 2000m

11

Ancient woodlands are classified as areas which have been wooded continuously since at least 1600 AD. This includes semi-natural woodland and plantations on ancient woodland sites. 'Wooded continuously' does not mean there is or has previously been continuous tree cover across the whole site, and not all trees within the woodland have to be old.

Features are displayed on the Environmental designations map on **page 110**

ID	Location	Name	Woodland Type
A	456m W	Unknown	Restored Ancient Woodland Site
A	463m W	Unknown	Restored Ancient Woodland Site
1	880m SW	Unknown	Ancient Semi Natural Woodland
2	1251m W	Unknown	Ancient Semi Natural Woodland
3	1400m NW	Unknown	Ancient Semi Natural Woodland
4	1489m NW	Unknown	Restored Ancient Woodland Site
-	1721m SE	Unknown	Ancient Semi Natural Woodland
-	1728m SE	Unknown	Ancient Semi Natural Woodland
-	1764m S	Unknown	Ancient Semi Natural Woodland
-	1870m W	Unknown	Ancient Semi Natural Woodland
-	1908m S	Unknown	Ancient Semi Natural Woodland

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.8 Biosphere Reserves

Records within 2000m

0

Biosphere Reserves are internationally recognised by UNESCO as sites of excellence to balance conservation and socioeconomic development between nature and people. They are recognised under the Man and the Biosphere (MAB) Programme with the aim of promoting sustainable development founded on the work of the local community.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.9 Forest Parks

Records within 2000m

0

These are areas managed by the Forestry Commission designated on the basis of recreational, conservation or scenic interest.

This data is sourced from the Forestry Commission.

10.10 Marine Conservation Zones

Records within 2000m

0

A type of marine nature reserve in UK waters established under the Marine and Coastal Access Act (2009). They are designated with the aim to protect nationally important, rare or threatened habitats and species.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

10.11 Green Belt

Records within 2000m

0

Areas designated to prevent urban sprawl by keeping land permanently open.

This data is sourced from the Ministry of Housing, Communities and Local Government.

10.12 Proposed Ramsar sites

Records within 2000m

0

Ramsar sites are areas listed as a Wetland of International Importance under the Convention on Wetlands of International Importance especially as Waterfowl Habitat (the Ramsar Convention) 1971. The sites here supplied have a status of 'Proposed' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.13 Possible Special Areas of Conservation (pSAC)

Records within 2000m**0**

Special Areas of Conservation are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the EC Habitats Directive. Those sites supplied here are those with a status of 'Possible' having been identified for potential adoption under the framework.

This data is sourced from Natural England and Natural Resources Wales.

10.14 Potential Special Protection Areas (pSPA)

Records within 2000m**0**

Special Protection Areas (SPAs) are areas designated (or 'classified') under the European Union Wild Birds Directive for the protection of nationally and internationally important populations of wild birds. Those sites supplied here are those with a status of 'Potential' having been identified for potential adoption under the framework.

This data is sourced from Natural England.

10.15 Nitrate Sensitive Areas

Records within 2000m**0**

Areas where nitrate concentrations in drinking water sources exceeded or was at risk of exceeding the limit of 50 mg/l set by the 1980 EC Drinking Water Directive. Voluntary agricultural measures as a means of reducing the levels of nitrate were introduced by DEFRA as MAFF, with payments being made to farmers who complied. The scheme was started as a pilot in 1990 in ten areas, later implemented within 32 areas. The scheme was closed to further new entrants in 1998, although existing agreements continued for their full term. All Nitrate Sensitive Areas fell within the areas designated as Nitrate Vulnerable Zones (NVZs) in 1996 under the EC Nitrate Directive (91/676/EEC).

This data is sourced from Natural England.

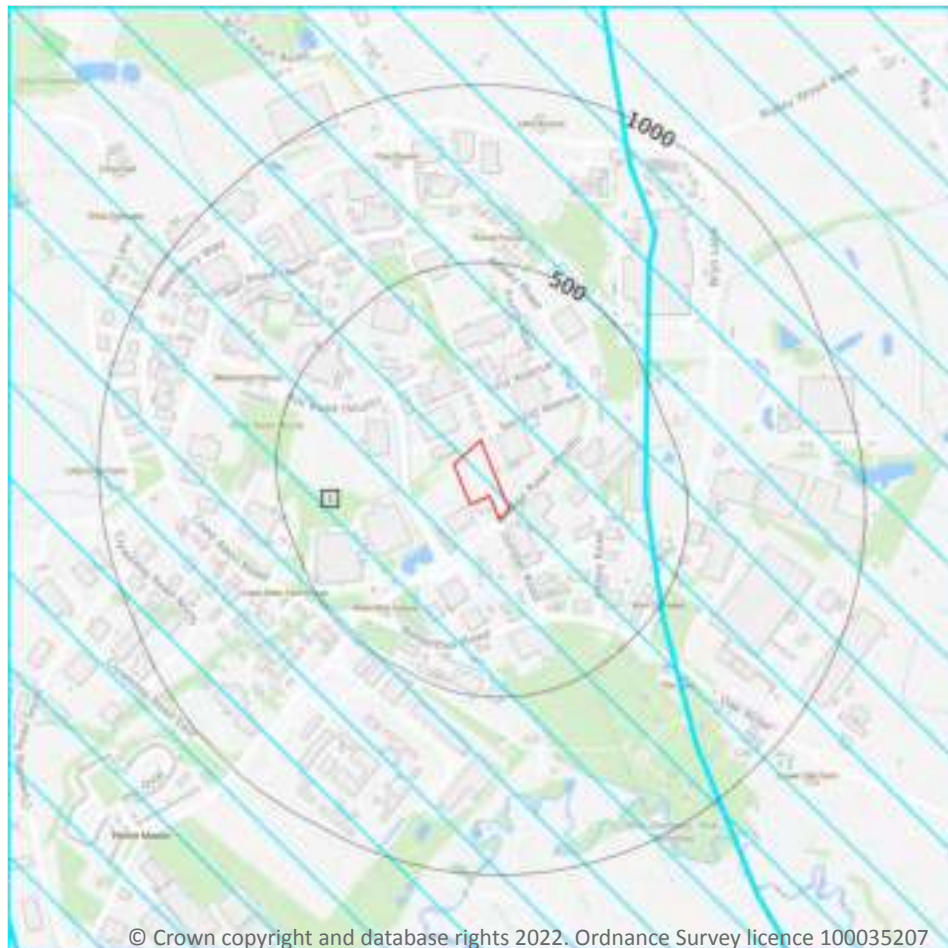
10.16 Nitrate Vulnerable Zones

Records within 2000m**0**

Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

This data is sourced from Natural England and Natural Resources Wales.

SSSI Impact Zones and Units



- Site Outline
- Search buffers in metres (m)
- SSSI Impact Risk Zones
- SSSI Units
- Not recorded
- Favourable
- Unfavourable - Recovering
- Unfavourable - No change
- Unfavourable - Declining
- Partially destroyed
- Destroyed

10.17 SSSI Impact Risk Zones

Records on site

1

Developed to allow rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts.

Features are displayed on the SSSI Impact Zones and Units map on **page 115**

ID	Location	Type of developments requiring consultation
1	On site	Infrastructure - Airports, helipads and other aviation proposals. Air pollution - Any industrial/agricultural development that could cause air pollution (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 3500t). Combustion - General combustion processes >50mw energy input. incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0
-----------------------------	----------

Divisions of SSSIs used to record management and condition details. Units are the smallest areas for which Natural England gives a condition assessment, however, the size of units varies greatly depending on the types of management and the conservation interest.

This data is sourced from Natural England and Natural Resources Wales.

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m

0

Sites designated for their globally important cultural or natural interest requiring appropriate management and protection measures. World Heritage Sites are designated to meet the UK's commitments under the World Heritage Convention.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.2 Area of Outstanding Natural Beauty

Records within 250m

0

Areas of Outstanding Natural Beauty (AONB) are conservation areas, chosen because they represent 18% of the finest countryside. Each AONB has been designated for special attention because of the quality of their flora, fauna, historical and cultural associations, and/or scenic views. The National Parks and Access to the Countryside Act of 1949 created AONBs and the Countryside and Rights of Way Act, 2000 added further regulation and protection. There are likely to be restrictions to some developments within these areas.

This data is sourced from Natural England, Natural Resources Wales and Scottish Natural Heritage.

11.3 National Parks

Records within 250m

0

In England and Wales, the purpose of National Parks is to conserve and enhance landscapes within the countryside whilst promoting public enjoyment of them and having regard for the social and economic well-being of those living within them. In Scotland National Parks have the additional purpose of promoting the sustainable use of the natural resources of the area and the sustainable social and economic development of its communities. The National Parks and Access to the Countryside Act 1949 established the National Park designation in England and Wales, and The National Parks (Scotland) Act 2000 in Scotland.

This data is sourced from Natural England, Natural Resources Wales and the Scottish Government.

11.4 Listed Buildings

Records within 250m

0

Buildings listed for their special architectural or historical interest. Building control in the form of 'listed building consent' is required in order to make any changes to that building which might affect its special interest. Listed buildings are graded to indicate their relative importance, however building controls apply to all buildings equally, irrespective of their grade, and apply to the interior and exterior of the building in its entirety, together with any curtilage structures.



This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.5 Conservation Areas

Records within 250m

0

Local planning authorities are obliged to designate as conservation areas any parts of their own area that are of special architectural or historic interest, the character and appearance of which it is desirable to preserve or enhance. Designation of a conservation area gives broader protection than the listing of individual buildings. All the features within the area, listed or otherwise, are recognised as part of its character. Conservation area designation is the means of recognising the importance of all factors and of ensuring that planning decisions address the quality of the landscape in its broadest sense.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.6 Scheduled Ancient Monuments

Records within 250m

0

A scheduled monument is an historic building or site that is included in the Schedule of Monuments kept by the Secretary of State for Digital, Culture, Media and Sport. The regime is set out in the Ancient Monuments and Archaeological Areas Act 1979. The Schedule of Monuments has c.20,000 entries and includes sites such as Roman remains, burial mounds, castles, bridges, earthworks, the remains of deserted villages and industrial sites. Monuments are not graded, but all are, by definition, considered to be of national importance.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.

11.7 Registered Parks and Gardens

Records within 250m

0

Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the impact of any proposed development on the special character of the landscape.

This data is sourced from Historic England, Cadw and Historic Environment Scotland.



12 Agricultural designations

12.1 Agricultural Land Classification

Records within 250m

0

Classification of the quality of agricultural land taking into consideration multiple factors including climate, physical geography and soil properties. It should be noted that the categories for the grading of agricultural land are not consistent across England, Wales and Scotland.

This data is sourced from Natural Resources Wales.

12.2 Open Access Land

Records within 250m

0

The Countryside and Rights of Way Act 2000 (CROW Act) gives a public right of access to land without having to use paths. Access land includes mountains, moors, heaths and downs that are privately owned. It also includes common land registered with the local council and some land around the England Coast Path. Generally permitted activities on access land are walking, running, watching wildlife and climbing.

This data is sourced from Natural England and Natural Resources Wales.

12.3 Tree Felling Licences

Records within 250m

0

Felling Licence Application (FLA) areas approved by Forestry Commission England. Anyone wishing to fell trees must ensure that a licence or permission under a grant scheme has been issued by the Forestry Commission before any felling is carried out or that one of the exceptions apply.

This data is sourced from the Forestry Commission.

12.4 Environmental Stewardship Schemes

Records within 250m

0

Environmental Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. The schemes identified may be historical schemes that have now expired, or may still be active.

This data is sourced from Natural England.

12.5 Countryside Stewardship Schemes

Records within 250m

0

Countryside Stewardship covers a range of schemes that provide financial incentives to farmers, foresters and land managers to look after and improve the environment. Main objectives are to improve the farmed environment for wildlife and to reduce diffuse water pollution.

This data is sourced from Natural England.



13 Habitat designations

13.1 Priority Habitat Inventory

Records within 250m

0

Habitats of principal importance as named under Natural Environment and Rural Communities Act (2006) Section 41.

This data is sourced from Natural England.

13.2 Habitat Networks

Records within 250m

0

Habitat networks for 18 priority habitat networks (based primarily, but not exclusively, on the priority habitat inventory) and areas suitable for the expansion of networks through restoration and habitat creation.

This data is sourced from Natural England.

13.3 Open Mosaic Habitat

Records within 250m

0

Sites verified as Open Mosaic Habitat. Mosaic habitats are brownfield sites that are identified under the UK Biodiversity Action Plan as a priority habitat due to the habitat variation within a single site, supporting an array of invertebrates.

This data is sourced from Natural England.

13.4 Limestone Pavement Orders

Records within 250m

0

Limestone pavements are outcrops of limestone where the surface has been worn away by natural means over millennia. These rocks have the appearance of paving blocks, hence their name. Not only do they have geological interest, they also provide valuable habitats for wildlife. These habitats are threatened due to their removal for use in gardens and water features. Many limestone pavements have been designated as SSSIs which affords them some protection. In addition, Section 34 of the Wildlife and Countryside Act 1981 gave them additional protection via the creation of Limestone Pavement Orders, which made it a criminal offence to remove any part of the outcrop. The associated Limestone Pavement Priority Habitat is part of the UK Biodiversity Action Plan priority habitat in England.

This data is sourced from Natural England.



14 Geology 1:10,000 scale - Availability



- Site Outline
- Search buffers in metres (m)
- Full coverage
 - Partial coverage
 - No coverage

14.1 10k Availability

Records within 500m

2

An indication on the coverage of 1:10,000 scale geology data for the site, the most detailed dataset provided by the British Geological Survey. Either 'Full', 'Partial' or 'No coverage' for each geological theme.

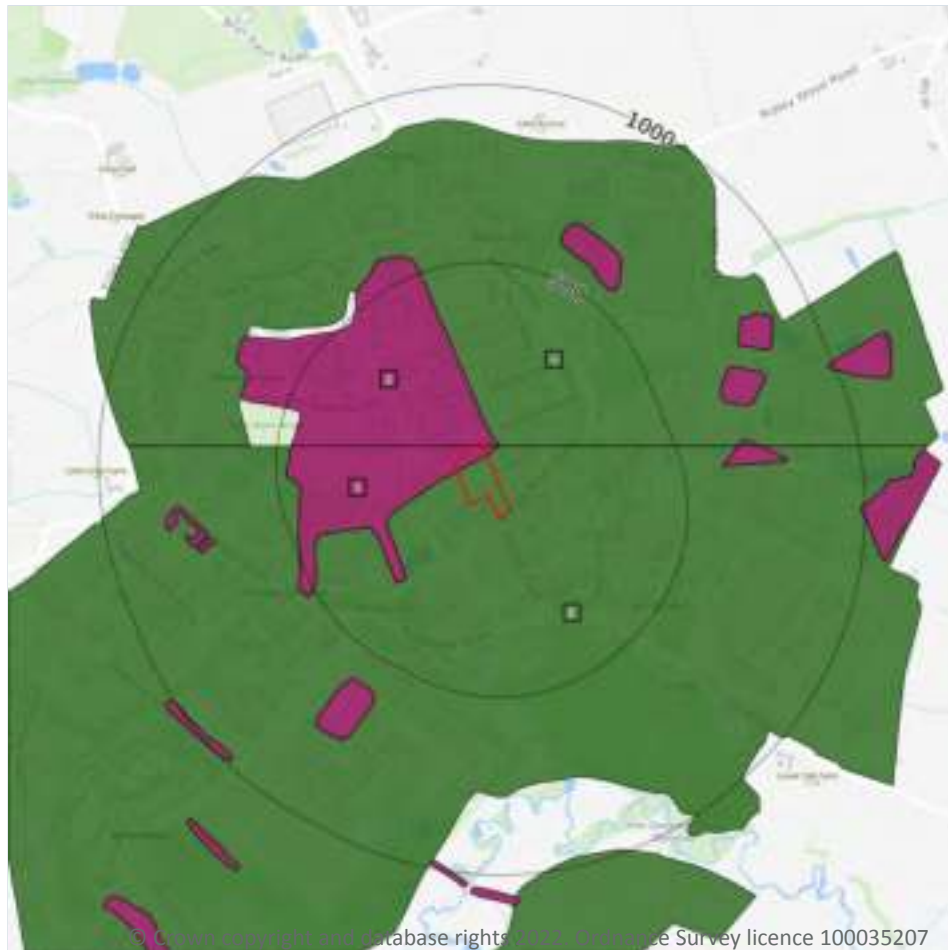
Features are displayed on the Geology 1:10,000 scale - Availability map on **page 122**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	No coverage	SJ35SE
2	On site	Full	Full	Full	No coverage	SJ34NE

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Artificial and made ground



- Site Outline
- Search buffers in metres (m)
- Reclaimed ground
 - Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

14.2 Artificial and made ground (10k)

Records within 500m

4

Details of made, worked, infilled, disturbed and landscaped ground at 1:10,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:10,000 scale - Artificial and made ground map on **page 123**

ID	Location	LEX Code	Description	Rock description
1	On site	MGR-ARTDP	Made Ground (Undivided)	Artificial Deposit
2	On site	MGR-UNKNOWN	Made Ground (Undivided)	Unknown/unclassified Entry
3	On site	LSGR-UNKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry
4	33m NE	LSGR-UNKNOWN	Landscaped Ground (Undivided)	Unknown/unclassified Entry

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Superficial



Site Outline
Search buffers in metres (m)

Landslip (10k)
Superficial geology (10k)
Please see table for more details.

14.3 Superficial geology (10k)

Records within 500m

3

Superficial geological deposits at 1:10,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:10,000 scale - Superficial map on **page 125**

ID	Location	LEX Code	Description	Rock description
1	On site	TILL-DMTN	Till - Diamicton	Diamicton
2	On site	TILL-DMTN	Till - Diamicton	Diamicton
3	149m W	ALV-C	Alluvium - Clay (unlithified Deposits Coding Scheme)	Clay

This data is sourced from the British Geological Survey.



14.4 Landslip (10k)

Records within 500m

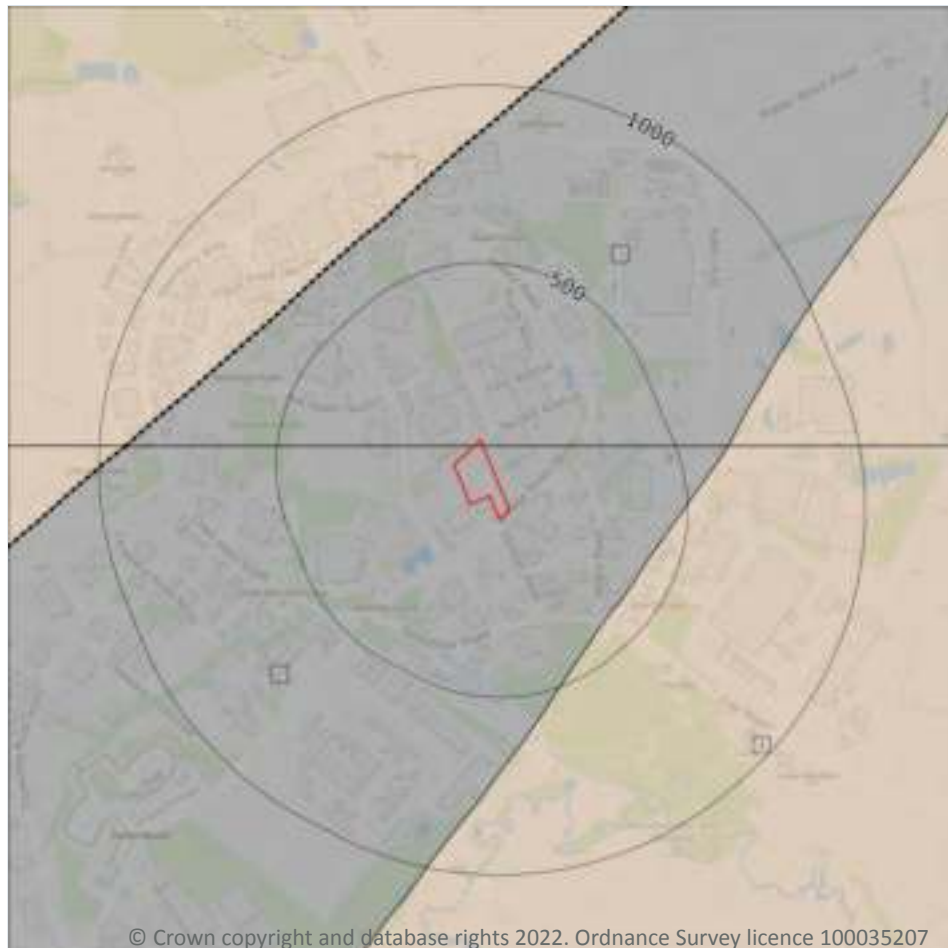
0

Mass movement deposits on BGS geological maps at 1:10,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.



Geology 1:10,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m

3

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on **page 127**

ID	Location	LEX Code	Description	Rock age
1	On site	SAL-CYCCM	Salop Formation - Sedimentary Rock Cycles, Coal Measure Type	Cisuralian Epoch - Westphalian D Sub-age
2	On site	SAL-MDST	Salop Formation - Mudstone	Cisuralian Epoch - Westphalian D Sub-age
3	402m SE	KNSF-SDST	Kinnerton Sandstone Formation - Sandstone	Early Triassic Epoch



This data is sourced from the British Geological Survey.

14.6 Bedrock faults and other linear features (10k)

Records within 500m

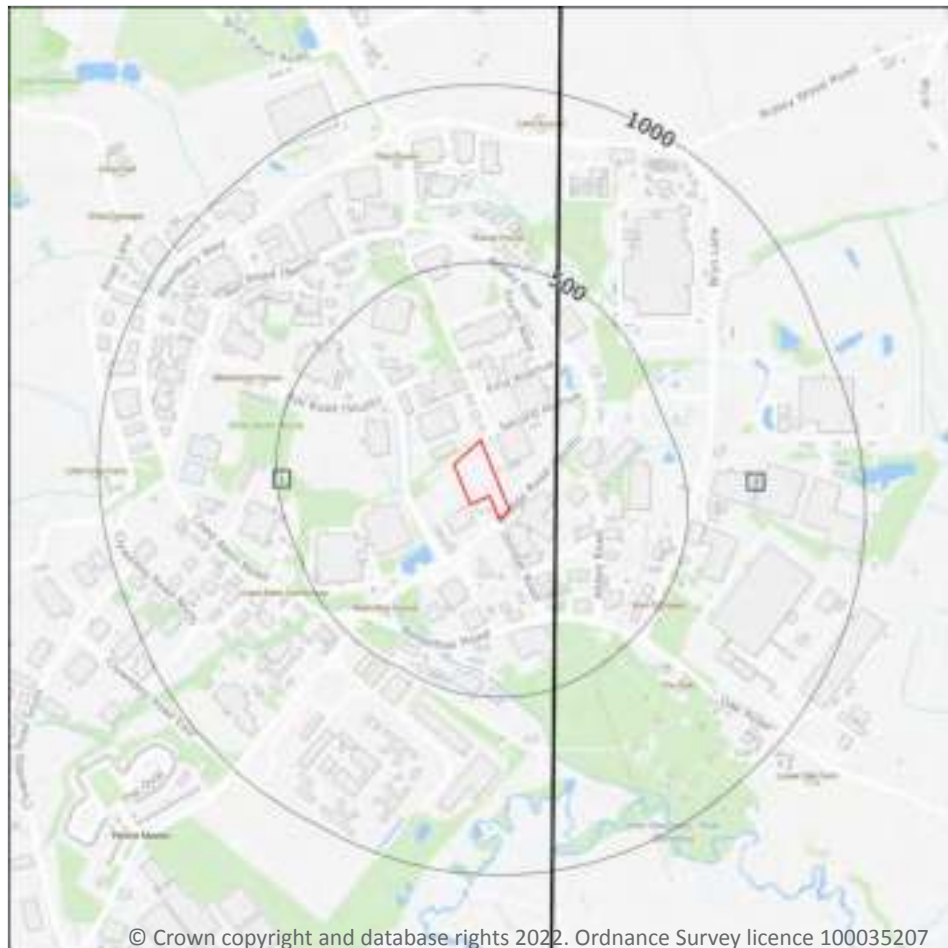
0

Linear features at the ground or bedrock surface at 1:10,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.



15 Geology 1:50,000 scale - Availability



— Site Outline

Search buffers in metres (m)

☐ Geological map tile

15.1 50k Availability

Records within 500m

2

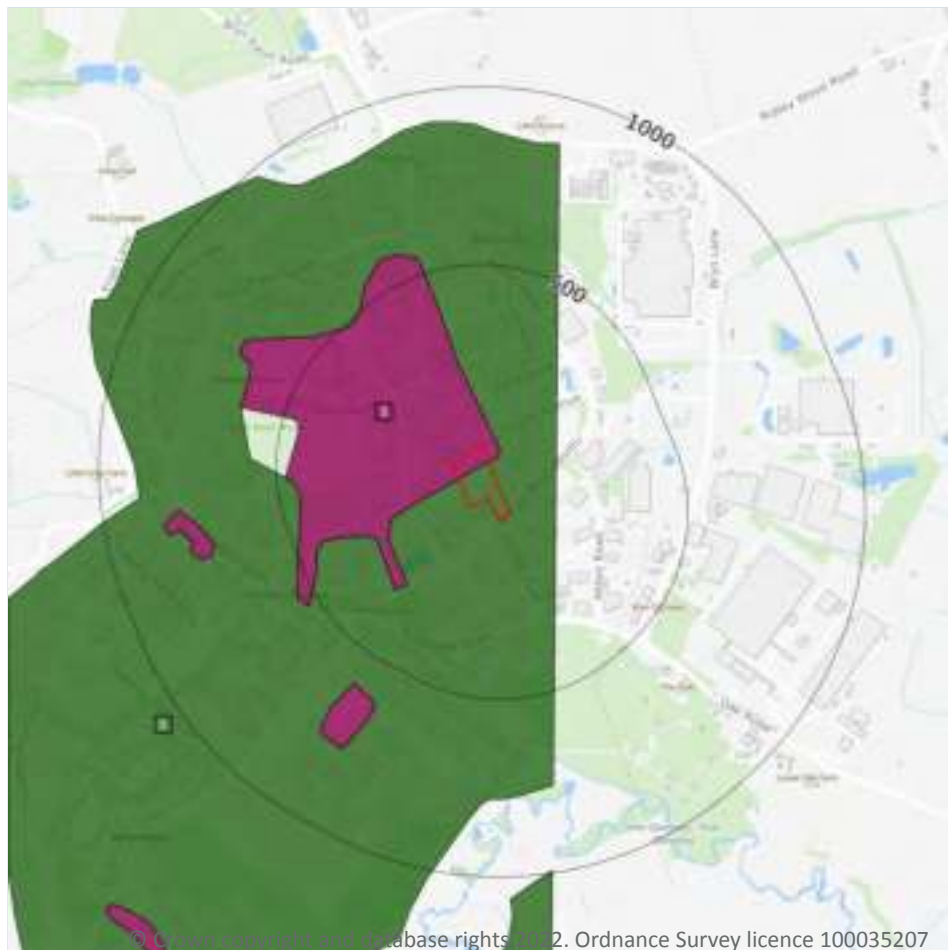
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme. Where 50k data is not available, this area has been filled in with 625k scale data.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 129**

ID	Location	Artificial	Superficial	Bedrock	Mass movement	Sheet No.
1	On site	Full	Full	Full	Full	EW121_wrexham_v4
2	129m E	No coverage	Full	Full	Full	EW122_nantwich_v4

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Artificial and made ground



- Site Outline
- Search buffers in metres (m)
- Made ground
 - Worked ground
 - Infilled ground
 - Disturbed ground
 - Landscaped ground

15.2 Artificial and made ground (50k)

Records within 500m

2

Details of made, worked, infilled, disturbed and landscaped ground at 1:50,000 scale. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions and instability.

Features are displayed on the Geology 1:50,000 scale - Artificial and made ground map on **page 130**

ID	Location	LEX Code	Description	Rock description
1	On site	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
2	On site	LSGR-ARTGR	LANDSCAPED GROUND (UNDIVIDED)	ARTIFICIALLY MODIFIED GROUND

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

Records within 50m**4**

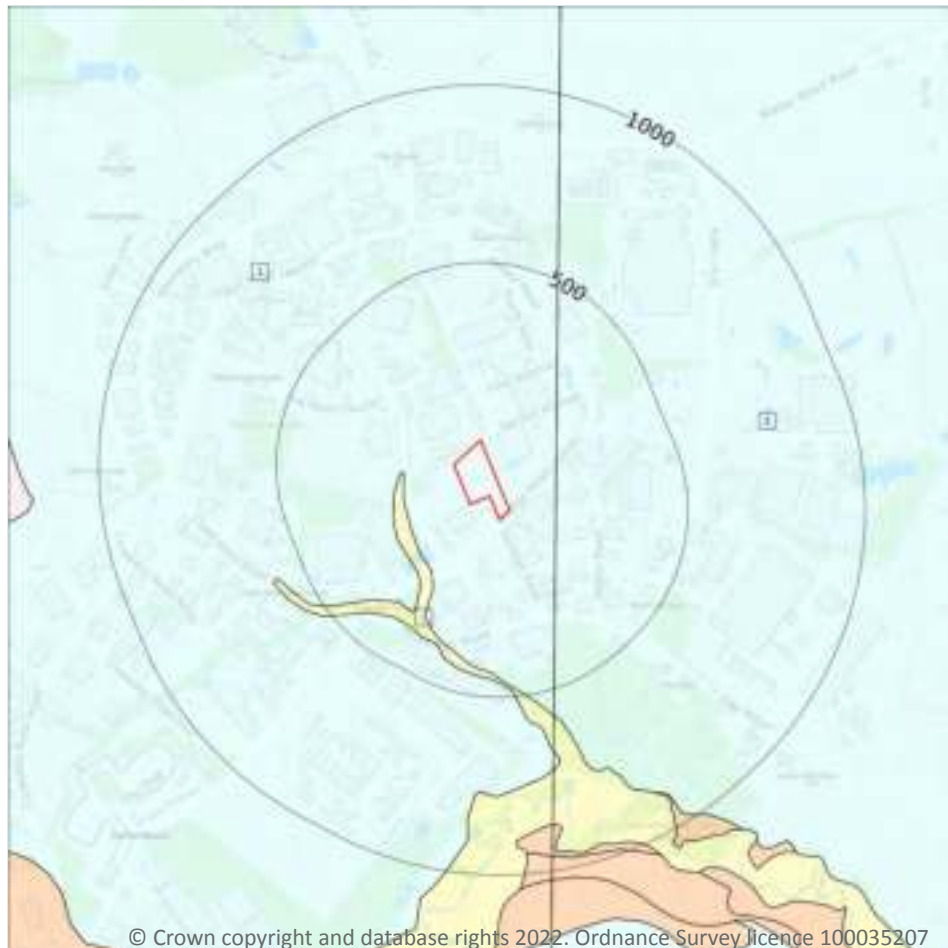
A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any artificial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	Very High	Low
On site	Mixed	Very High	Low
On site	Mixed	Very High	Low
40m NW	Mixed	Very High	Low

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Superficial



- Site Outline
- Search buffers in metres (m)
- Landslip (50k)
- Superficial geology (50k)
Please see table for more details.

15.4 Superficial geology (50k)

Records within 500m

3

Superficial geological deposits at 1:50,000 scale. Also known as 'drift', these are the youngest geological deposits, formed during the Quaternary. They rest on older deposits or rocks referred to as bedrock.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 132**

ID	Location	LEX Code	Description	Rock description
1	On site	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON
2	129m E	TILLD-DMTN	TILL, DEVANSIAN	DIAMICTON
3	143m W	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m

2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any superficial deposits (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Mixed	High	Low
On site	Mixed	High	Low

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m

0

Mass movement deposits on BGS geological maps at 1:50,000 scale. Primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground.

This data is sourced from the British Geological Survey.

15.7 Landslip permeability (50k)

Records within 50m

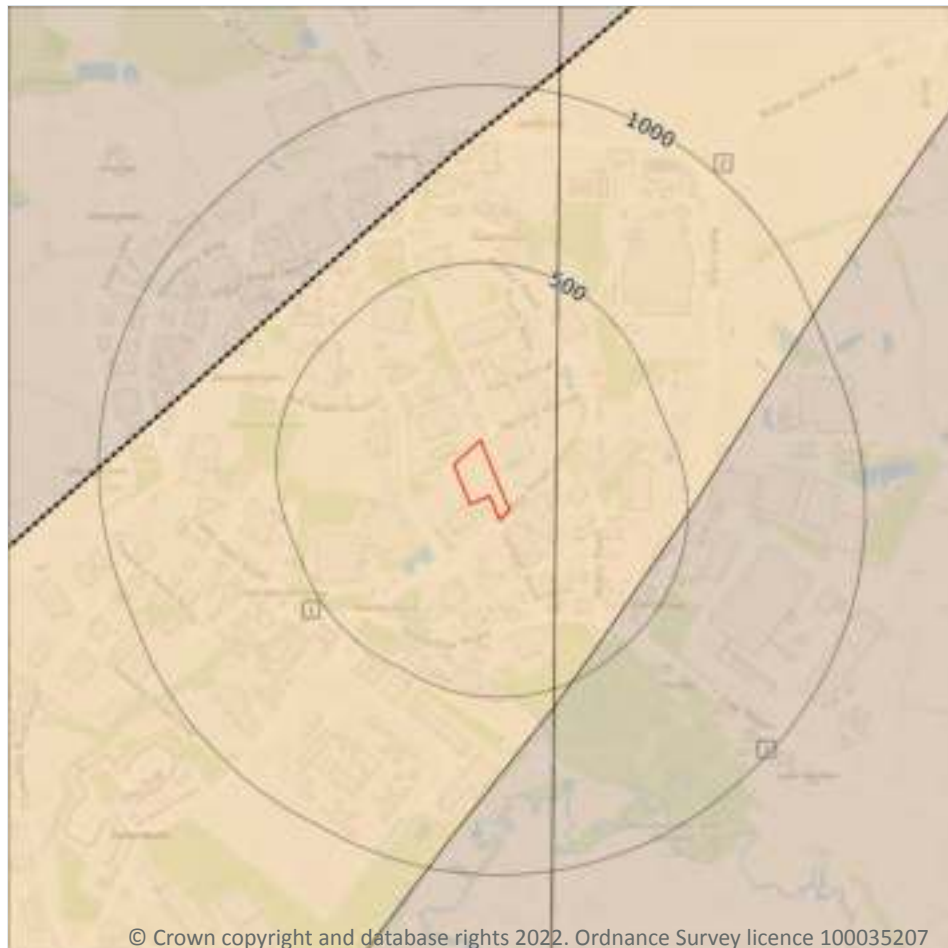
0

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any landslip deposits (the zone between the land surface and the water table).

This data is sourced from the British Geological Survey.



Geology 1:50,000 scale - Bedrock



— Site Outline

Search buffers in metres (m)

.... Bedrock faults and other linear features (50k)

Bedrock geology (50k)
Please see table for more details.

15.8 Bedrock geology (50k)

Records within 500m

3

Bedrock geology at 1:50,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 134**

ID	Location	LEX Code	Description	Rock age
1	On site	SAL-MDSC	SALOP FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE	WESTPHALIAN
2	129m E	SAL-MDSC	SALOP FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE	WESTPHALIAN
3	419m SE	KNSF-SDST	KINNERTON SANDSTONE FORMATION - SANDSTONE	-

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m

2

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of bedrock (the zone between the land surface and the water table).

Location	Flow type	Maximum permeability	Minimum permeability
On site	Fracture	Moderate	Low
On site	Fracture	Moderate	Low

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m

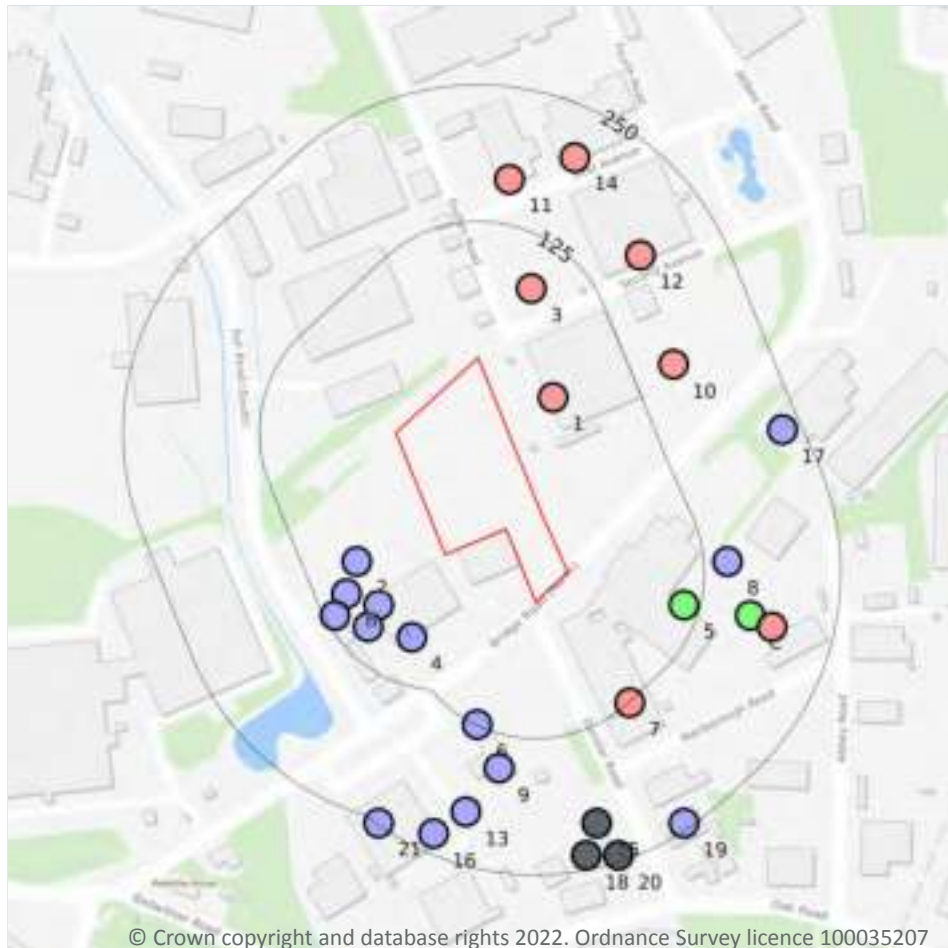
0

Linear features at the ground or bedrock surface at 1:50,000 scale of six main types; rock, fault, fold axis, mineral vein, alteration area or landform. Features are either observed or inferred, and relate primarily to bedrock.

This data is sourced from the British Geological Survey.



16 Boreholes



— Site Outline
Search buffers in metres (m)

- Confidential
- 0 - 10m
- 10 - 30m
- 30m+
- Unknown

16.1 BGS Boreholes

Records within 250m

27

The Single Onshore Boreholes Index (SOBI); an index of over one million records of boreholes, shafts and wells from all forms of drilling and site investigation work held by the British Geological Survey. Covering onshore and nearshore boreholes dating back to at least 1790 and ranging from one to several thousand metres deep.

Features are displayed on the Boreholes map on **page 136**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	50m E	338380 349980	BRITISH CELEROSE W44A	30.48	N	153108
A	76m SW	338220 349790	IND EST. BRIDGE ROAD. 6	6.0	N	153311
2	77m W	338200 349830	IND EST. BRIDGE ROAD. 5	6.0	N	153310



ID	Location	Grid reference	Name	Length	Confidential	Web link
3	80m NE	338360 350080	BRITISH CELANESE W36A	30.48	N	154628
4	82m S	338250 349760	BRIDGE ROAD WREXHAM 1	6.0	N	153306
A	97m SW	338210 349770	IND EST. BRIDGE ROAD. 2	6.5	N	153307
B	98m W	338190 349800	IND EST. BRIDGE ROAD. 4	6.0	N	153309
5	111m E	338500 349790	WREXHAM IND ESTATE, CHEM. DISPOSAL. 4	14.5	N	153289
B	116m SW	338180 349780	IND EST. BRIDGE ROAD. 3	6.5	N	153308
6	125m SW	338310 349680	IND EST. BRITISH TISSUES. 6	4.0	N	153304
7	126m SE	338450 349700	WREXHAM IND ESTATE, CHEM. DISPOSAL. 2A	47.0	N	153291
8	147m E	338540 349830	WREXHAM IND ESTATE, CHEM. DISPOSAL. 1	10.0	N	153286
9	156m S	338330 349640	IND EST. BRITISH TISSUES. 7	4.0	N	153305
10	163m E	338490 350010	BRITISH CELANESE W48A	30.48	N	154631
11	166m N	338340 350180	BRITISH CELANESE W4A	30.48	N	154622
C	171m E	338560 349780	WREXHAM IND ESTATE, CHEM. DISPOSAL. 3	14.5	N	153288
12	176m NE	338460 350110	BRITISH CELANESE W40A	30.48	N	154629
C	193m E	338580 349770	WREXHAM IND ESTATE, CHEM. DISPOSAL. 3A	37.0	N	153292
13	203m S	338300 349600	IND EST. BRITISH TISSUES. 5	4.0	N	153303
14	204m NE	338400 350200	BRITISH CELANESE 10A	30.63	N	154623
15	210m S	338420 349590	REDWITHER INDUSTRIAL COMPLEX DUNSTER ROAD 3	-	Y	N/A
16	232m SW	338270 349580	IND EST. BRITISH TISSUES. 4	4.0	N	153302
17	233m NE	338590 349950	BRIDGE ROAD WREXHAM 6	6.45	N	153372
18	237m S	338410 349560	REDWITHER INDUSTRIAL COMPLEX DUNSTER ROAD 4	-	Y	N/A
19	244m SE	338500 349590	IND EST. BRITISH TISSUES. 4A	6.5	N	153315
20	245m S	338440 349560	REDWITHER INDUSTRIAL COMPLEX DUNSTER ROAD 2	-	Y	N/A
21	248m SW	338220 349590	IND EST. BRITISH TISSUES. 5A	6.0	N	153316

This data is sourced from the British Geological Survey.



17 Natural ground subsidence - Shrink swell clays



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.1 Shrink swell clays

Records within 50m

1

The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and local drainage).

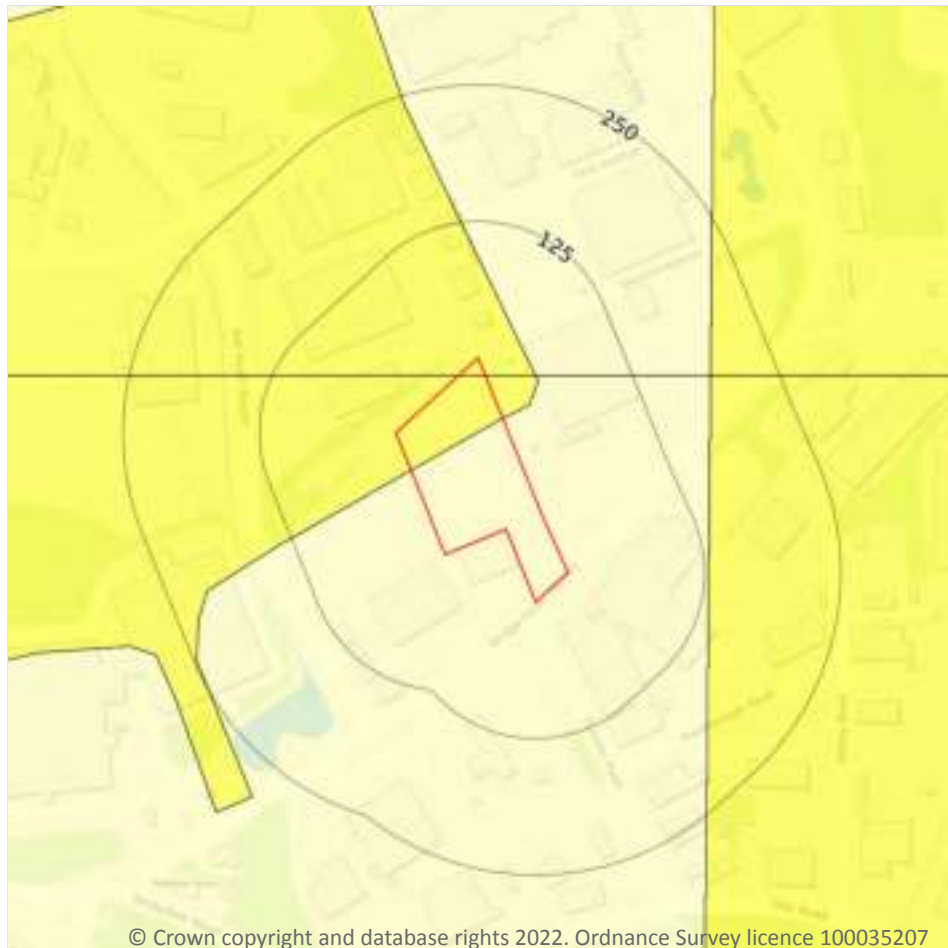
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 138**

Location	Hazard rating	Details
On site	Very low	Ground conditions predominantly low plasticity.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Running sands



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.2 Running sands

Records within 50m

3

The potential hazard presented by rocks that can contain loosely-packed sandy layers that can become fluidised by water flowing through them. Such sands can 'run', removing support from overlying buildings and causing potential damage.

Features are displayed on the Natural ground subsidence - Running sands map on **page 139**

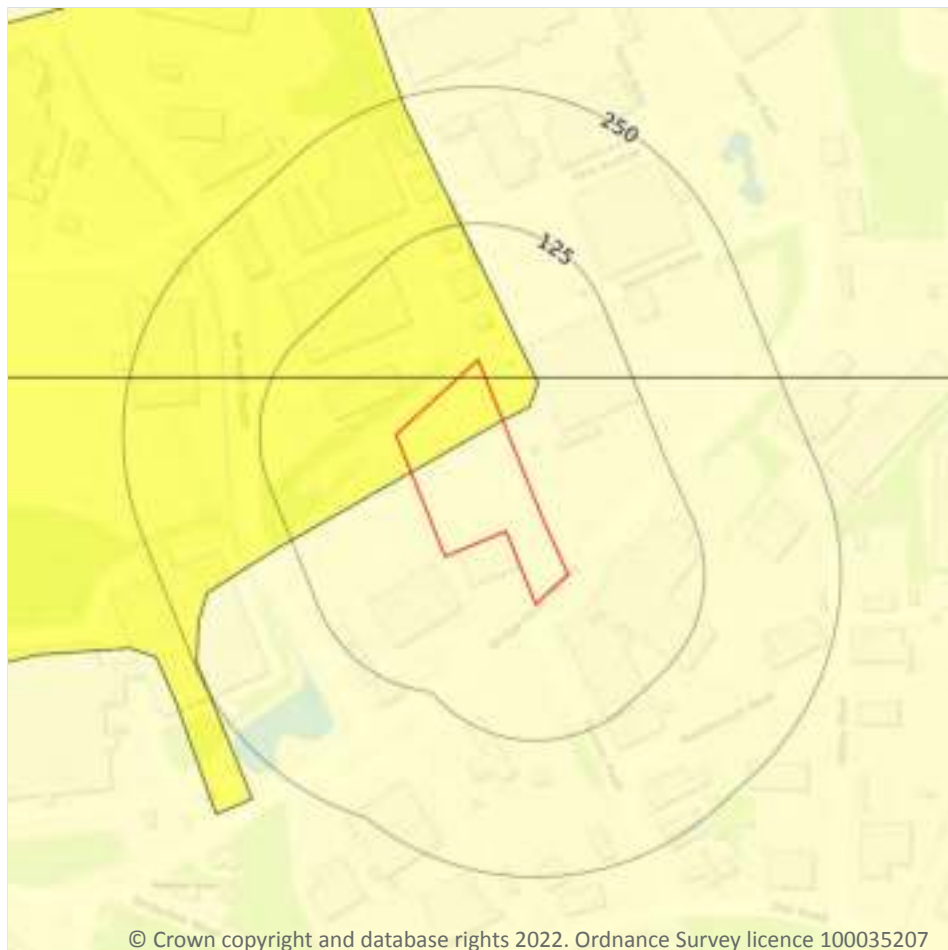
Location	Hazard rating	Details
On site	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

Location	Hazard rating	Details
On site	Very low	Running sand conditions are unlikely. No identified constraints on land use due to running conditions unless water table rises rapidly.
40m NE	Negligible	Running sand conditions are not thought to occur whatever the position of the water table. No identified constraints on lands use due to running conditions.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Compressible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.3 Compressible deposits

Records within 50m

3

The potential hazard presented by types of ground that may contain layers of very soft materials like clay or peat and may compress if loaded by overlying structures, or if the groundwater level changes, potentially resulting in depression of the ground and disturbance of foundations.

Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 141**

Location	Hazard rating	Details
On site	Negligible	Compressible strata are not thought to occur.
On site	Very low	Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses.



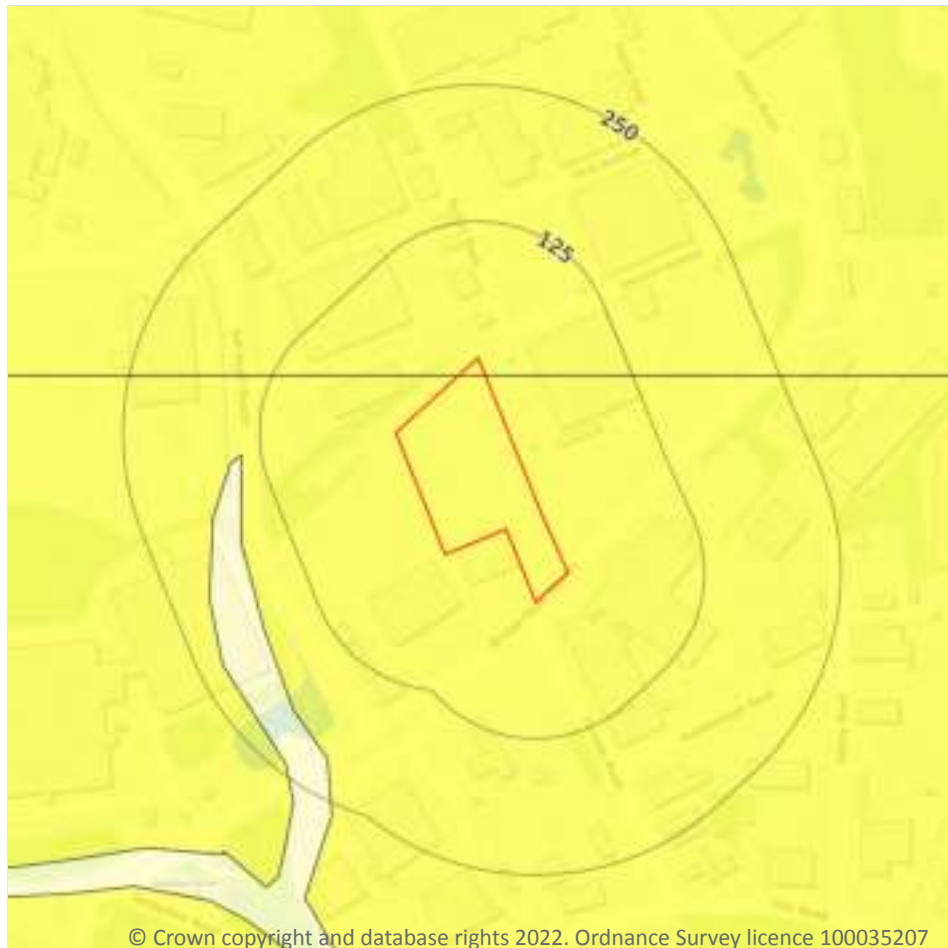
Location	Hazard rating	Details
----------	---------------	---------

40m NE	Negligible	Compressible strata are not thought to occur.
--------	------------	---

This data is sourced from the British Geological Survey.



Natural ground subsidence - Collapsible deposits



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☒ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.4 Collapsible deposits

Records within 50m

1

The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 143**

Location	Hazard rating	Details
On site	Very low	Deposits with potential to collapse when loaded and saturated are unlikely to be present.

This data is sourced from the British Geological Survey.



Natural ground subsidence - Ground dissolution of soluble rocks



- Site Outline
- Search buffers in metres (m)
- ☐ No data
 - ☐ Negligible
 - ☐ Very low
 - ☐ Low
 - ☐ Moderate
 - ☐ High

17.6 Ground dissolution of soluble rocks

Records within 50m

1

The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 145**

Location	Hazard rating	Details
On site	Negligible	Soluble rocks are either not thought to be present within the ground, or not prone to dissolution. Dissolution features are unlikely to be present.

This data is sourced from the British Geological Survey.



18 Mining, ground workings and natural cavities



- Site Outline
- Search buffers in metres (m)
- Natural cavities (Area)
- Natural cavities (Point)
- BritPits
- Surface ground workings
- Underground workings
- Historical Mineral Planning Areas
- Mining Cavities
- Non Coal Mining
- Sporadic underground mining of restricted extent possible
- Localised small scale underground mining possible
- Small scale mining possible
- Underground mining known or likely within or in close proximity
- Underground mining known within or in very close proximity

18.1 Natural cavities

Records within 500m

0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.

18.2 BritPits

Records within 500m

0

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

This data is sourced from the British Geological Survey.

18.3 Surface ground workings

Records within 250m

29

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

Features are displayed on the Mining, ground workings and natural cavities map on **page 147**

ID	Location	Land Use	Year of mapping	Mapping scale
1	6m NW	Unspecified Heap	1992	1:10000
A	34m E	Ponds	1872	1:10560
A	36m E	Ponds	1938	1:10560
A	38m E	Ponds	1949	1:10560
A	38m E	Ponds	1898	1:10560
B	92m SW	Ponds	1977	1:10000
B	92m SW	Ponds	1964	1:10560
C	102m NW	Unspecified Heap	1982	1:10000
C	102m NW	Unspecified Heap	1960	1:10560
C	102m NW	Unspecified Heap	1968	1:10560
D	118m SE	Ponds	1898	1:10560
D	120m SE	Ponds	1872	1:10560
D	120m SE	Pond	1909	1:10560
D	121m SE	Pond	1938	1:10560
2	124m E	Unspecified Heap	1964	1:10560
E	131m E	Pond	1872	1:10560
E	136m E	Pond	1898	1:10560



ID	Location	Land Use	Year of mapping	Mapping scale
F	141m NW	Unspecified Heap	1982	1:10000
F	141m NW	Unspecified Heap	1960	1:10560
F	141m NW	Unspecified Heap	1968	1:10560
G	156m W	Unspecified Pit	1982	1:10000
G	156m W	Unspecified Pit	1960	1:10560
G	156m W	Unspecified Pit	1968	1:10560
H	161m W	Unspecified Heap	1977	1:10000
3	166m SW	Pond	1992	1:10000
H	186m W	Unspecified Ground Workings	1964	1:10560
4	198m W	Unspecified Heap	1992	1:10000
I	231m SW	Ponds	1977	1:10000
I	231m SW	Ponds	1964	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground workings

Records within 1000m

0

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

This is data is sourced from Ordnance Survey/Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m

0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.



18.6 Non-coal mining

Records within 1000m

0

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

This data is sourced from the British Geological Survey.

18.7 Mining cavities

Records within 1000m

0

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

This data is sourced from Stantec UK Ltd.

18.8 JPB mining areas

Records on site

0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.

18.9 Coal mining

Records on site

1

Areas which could be affected by past, current or future coal mining.

Location	Details
On site	The site is located within a coal mining area as defined by the Coal Authority. A Consultants Coal Mining Report is recommended to further assess coal mining issues at the site. This can be ordered directly through Groundsure or your preferred search provider.

This data is sourced from the Coal Authority.



18.10 Brine areas

Records on site	0
-----------------	---

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.11 Gypsum areas

Records on site	0
-----------------	---

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.12 Tin mining

Records on site	0
-----------------	---

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

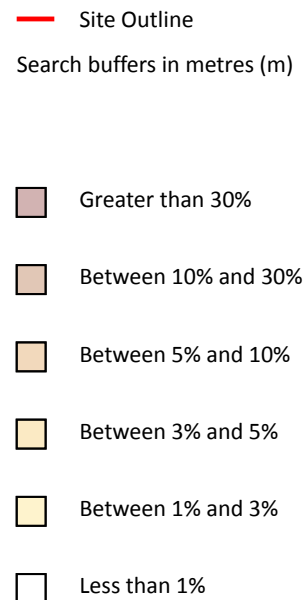
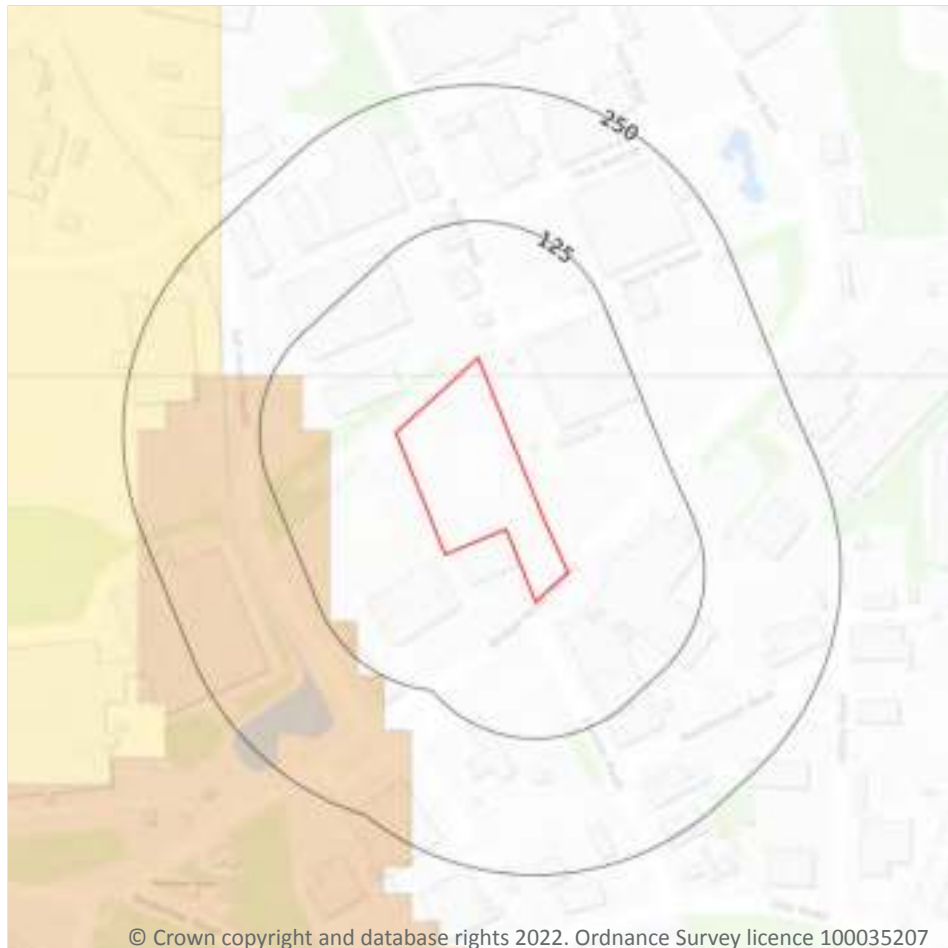
18.13 Clay mining

Records on site	0
-----------------	---

Generalised areas that may be affected by kaolin and ball clay extraction.

This data is sourced from the Kaolin and Ball Clay Association (UK).

19 Radon



19.1 Radon

Records on site

1

Estimated percentage of dwellings exceeding the Radon Action Level. This data is the highest resolution radon dataset available for the UK and is produced to a 75m level of accuracy to allow for geological data accuracy and a 'residential property' buffer. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain. The data was derived from both geological assessments and long term measurements of radon in more than 479,000 households.

Features are displayed on the Radon map on **page 152**

Location	Estimated properties affected	Radon Protection Measures required
On site	Less than 1%	None**

This data is sourced from the British Geological Survey and Public Health England.



20 Soil chemistry

20.1 BGS Estimated Background Soil Chemistry

Records within 50m

2

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
On site	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

20.2 BGS Estimated Urban Soil Chemistry

Records within 50m

0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

20.3 BGS Measured Urban Soil Chemistry

Records within 50m

0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



21 Railway infrastructure and projects



- Site Outline
- Search buffers in metres (m)
- C1 Crossrail 1 Stations
- Crossrail 1 Route
- Crossrail 1 Worksites
- C2 Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

21.1 Underground railways (London)

Records within 250m

0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

21.2 Underground railways (Non-London)

Records within 250m

0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

21.3 Railway tunnels

Records within 250m

0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

21.4 Historical railway and tunnel features

Records within 250m

4

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on **page 154**

Location	Land Use	Year of mapping	Mapping scale
49m W	Railway Sidings	1982	2500
55m SE	Railway Sidings	1964	10560
79m E	Railway Sidings	1959	2500
81m SE	Railway Sidings	1949	10560

This data is sourced from Ordnance Survey/Groundsure.

21.5 Royal Mail tunnels

Records within 250m

0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.



21.6 Historical railways

Records within 250m

0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

21.7 Railways

Records within 250m

0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

21.8 Crossrail 1

Records within 500m

0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

21.9 Crossrail 2

Records within 500m

0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

21.10 HS2

Records within 500m

0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 Ltd.



Data providers

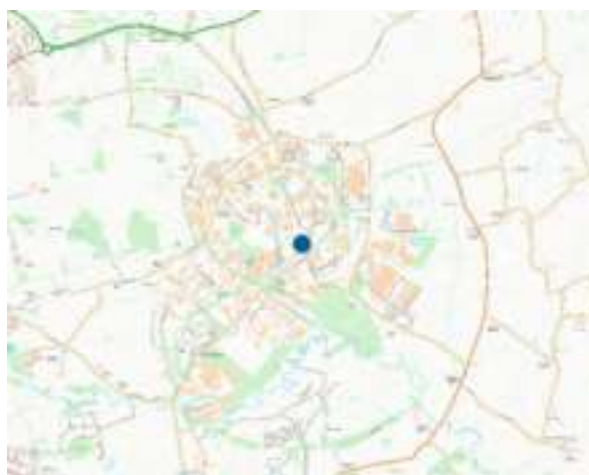
Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see <https://www.groundsure.com/sources-reference>.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: <https://www.groundsure.com/terms-and-conditions-jan-2020/>.



Preliminary Unexploded Ordnance Risk Assessment



Project: COOLPOINT LTD, COOLPOINT LTD, BRIDGE ROAD NORTH,
WREXHAM INDUSTRIAL ESTATE, WREXHAM, LL13 9PS

Groundsure Ref: HMD-8628686

Report prepared by SafeLane Global and FIND Mapping Limited

Report reference: 504942

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Preliminary Unexploded Ordnance Threat Assessment

For:

COOLPOINT LTD, COOLPOINT LTD, BRIDGE ROAD NORTH, WREXHAM INDUSTRIAL ESTATE, WREXHAM, LL13 9PS

Contents	Page
1 Executive Summary	02
2 Introduction	03
3 Methodology	05
4 Search Results	06
5 Risk of UXO Based on WWII German Bombing Density	08
6 Conclusions	09

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1 Has a potential unexploded ordnance (UXO) risk been identified at the site in question?

YES

Indicative British / Allied UXO Risk

MEDIUM

Indicative German UXO Risk

NEGLIGIBLE

2 Does the site in question require further research to clarify the unexploded ordnance (UXO) risk to future ground works?

YES

3 SafeLane Global's recommendation:

A Stage 2 Detailed Unexploded Ordnance Desktop Threat Assessment of the site is carried out.

To request a quotation please call SafeLane Global on 01634 471 340

If you order the recommended Stage 2 Detailed Desktop Threat Assessment, you will be refunded the fee for this BombRisk Preliminary Threat Assessment.

About SafeLane Global Limited

Operational for over 30 years for 10,000+ clients, SafeLane Global supports the UK construction industry with its BombRisk service. This assesses the risk of encountering items of unexploded ordnance (UXO) during intrusive works.

SafeLane Global's specialist advice provides essential information for risk assessments, improving safety and enhancing reputations, helping contractors avoid costly delays.

SafeLane Global holds the following accreditations:

- **Occupational Health & Safety Management Systems (OHAS 18001:2007)**
- **Environmental Management Systems (ISO 14001:2004)**
- **Quality Management Systems (ISO 9001:2008).**

The risk of encountering UXO on most sites in the UK is low. However, where a site is at increased risk it is necessary to take measures to mitigate that risk. The factors affecting UXO risk assessment are based upon the history and previous usage of a site and its surroundings.

In 2009, the Construction Industry Research and Information Association (CIRIA) established a set of guidelines to assist industry professionals; SafeLane Global was a significant contributor to the guide, under former company name Dynasafe BACTEC.

CIRIA recommends a four-stage risk management process:

- **Preliminary risk assessment**
- **Detailed risk assessment**
- **Risk mitigation**
- **Implementation**

The preliminary risk assessment enables a non-UXO specialist to place a site in context and to identify whether a more detailed assessment is necessary. The assessment is based upon data obtained from desktop reviews of the site's history and its proximity to potential indicators of UXO contamination.

There are two principal groups of onshore UXO in the UK:

- **British / Allied army, air force and navy activities - domestic military activity**
- **Enemy bombing during WWI and WWII - aerial bombing and naval bombardment**

These two groups comprise many potential UXO risk contributing sources within the UK, the most significant of which are listed below. Georeferenced databases containing this information are used

by BombRisk.com to identify areas of potentially elevated UXO risk.

- **Historic army, navy and air-force facilities**
- **Explosives / ammunition factories**
- **Munitions storage depots**
- **Historic military training areas and firing ranges**
- **British army explosive ordnance clearance tasks / recces**
- **WWII heavy anti-aircraft batteries**
- **WWII anti-invasion defensive fortifications**
- **Miscellaneous WWII pipe mined locations**
- **WWII prisoner of war camps**
- **WWII German bombing density statistics**
- **WWII bombing decoy sites**
- **Press articles regarding UXO finds**
- **Locations of SafeLane Global UXO finds**
- **Locations of SafeLane Global desktop threat assessments**
- **Locations of SafeLane Global on-site support services**

About FIND Mapping Limited

Established in 2006, FIND Mapping Limited is a pioneering web mapping and spatial data technology company offering online mapping and consultancy services. FIND technology powers the generation of this report.

www.findmaps.co.uk provides detailed mapping and a wealth of data sets to hundreds of the UK's top property, environmental and design/build companies.

FIND's consultancy services provide bespoke internet mapping solutions to a range of businesses enabling them to manage their spatial data more effectively.

While working closely with a wide range of reputable data providers including Ordnance Survey and the Environment Agency, FIND works independently of these organisations. A similar arm's-length relationship is maintained in terms of software and hardware providers. This enables the team at FIND to offer truly independent advice.

SafeLane Global Limited and FIND have compiled a geo-referenced database of potential sources of UXO risk within the UK. From this information a range of risk zones have been defined.

The weighting of these zones is based upon the influence of all relevant factors. A WWII-era RAF airfield, for example, has a far greater zone of influence than a single WWII-era anti-aircraft battery, as it would have covered a larger area, housed a much greater quantity / variety of munitions, seen more domestic troop training activities and would have been a more likely target for enemy bombers.

An online Preliminary Automated UXO Threat Assessment will determine an indicative level of UXO risk relating to a site. Note that these risk levels could be subject to change following the completion of any Detailed Desktop Threat Assessment for the same site.

The assessment will list all factors contributing to this weighting and will also give appropriate recommendations for further action, if considered necessary.

SafeLane Global Limited's UXO Source Database

Within 10km of the site the following potential sources of explosive ordnance have been recorded:

Source	Number within 10km
Military Airfield Sites	1
Bombing Decoy Sites	2
Press Articles Regarding UXO Finds	1
WWII Defence Related Positions & Pillboxes	17
Historic Army Camps	5
Army Explosive Ordnance Clearance Tasks/Recces	2
Sites Related to the Manufacture of Explosives and Explosive Ordnance	1
SafeLane Global Desk-top Threat Assessments	2
Abandoned Bombs	None recorded
Prisoner of War Camps	None recorded
Military Training Areas and Firing Ranges	None recorded
Heavy Anti-Aircraft Batteries	None recorded
Pipe Mined WWII Airfields	None recorded
Miscellaneous WWII Pipe Mined Locations	None recorded
SafeLane Global Unexploded Ordnance Finds	None recorded
SafeLane Global On-Site Support Services	None recorded

Of these sources, the following are deemed the most significant:

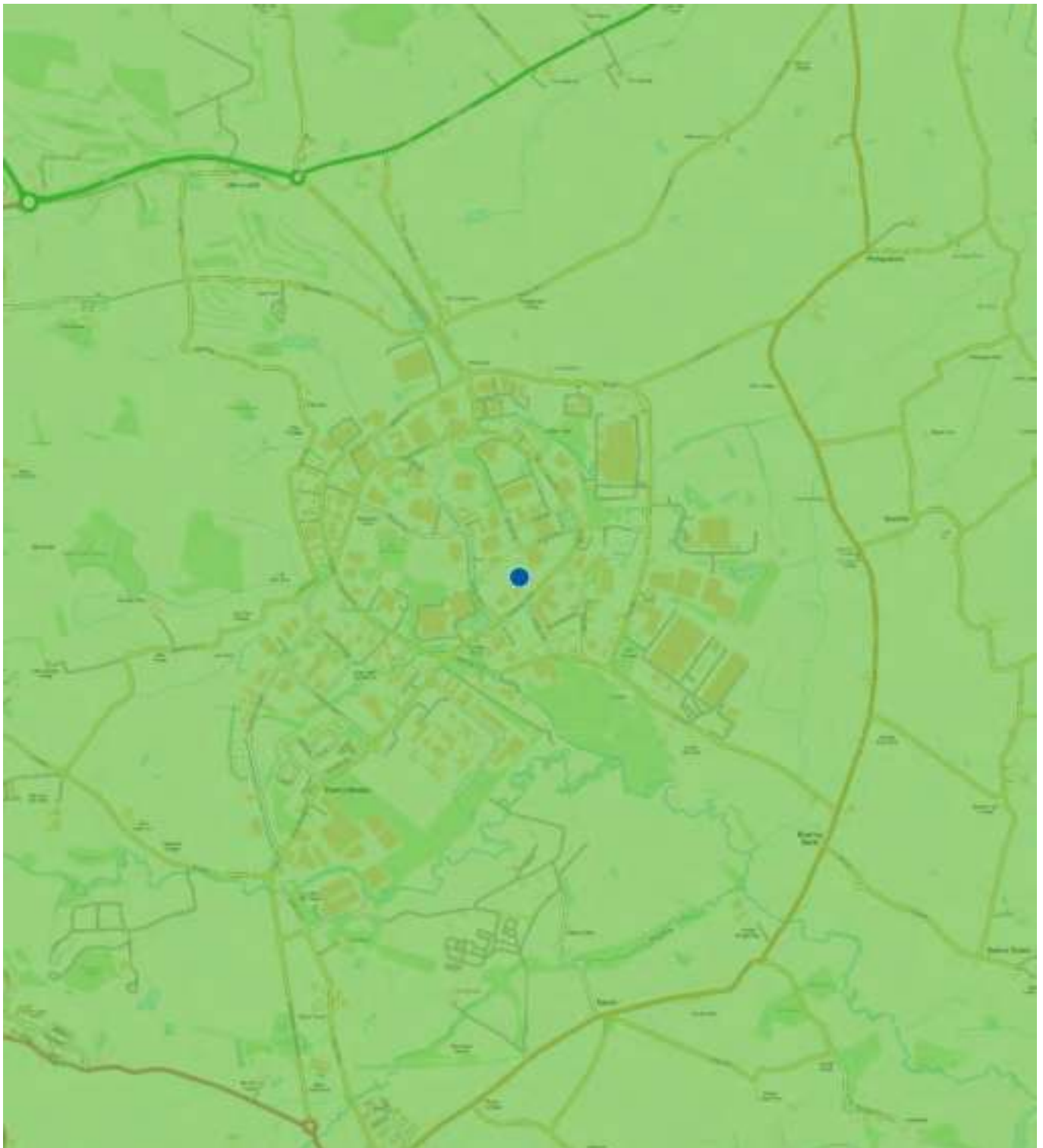
Sites Related to the Manufacture of Explosives and Explosive Ordnance

Facility Name	Approximate distance (km) from site
Wrexham, ROF, WWII	1

During both WWI and WWII many factories were established (or existing sites converted) to produce explosives and/or fill ordnance with explosive and chemical constituents. These ranged from small engineering works to large national filling factories (WWI) and royal ordnance factories (WWII). The site of the proposed works lies in the vicinity of one of these facilities.

For a factory producing casings, for example, the associated risk is negligible. However, on sites handling or producing explosive and chemical weapons the risk of soil contamination can be high. Disposal areas (often on site boundaries) can pose considerable risk. The history of the facility should

be more fully researched.

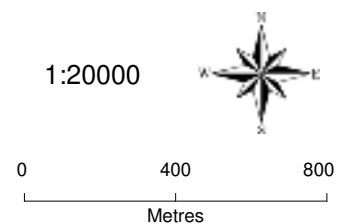
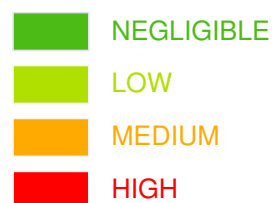


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Risk Levels and Recommendation

Indicative British / Allied UXO Risk

MEDIUM

There are potential sources of British / Allied UXO recorded in SafeLane Global's historical database in proximity to the site. It is recommended that further research is undertaken to determine more about these potential sources and how they may have affected the site. Given the proximity of these sources, the risk on site from UXO is considered to be Medium.

Indicative German UXO Risk

NEGLIGIBLE

Historical records indicate a negligible level of bombing density from WWII. If there is empirical evidence of unexploded bomb risk (i.e. anecdotal evidence) then please contact SafeLane Global for further advice.

This preliminary assessment has identified a negligible risk from German unexploded bombs at this site.

Conclusion

This preliminary assessment has resulted in an overall Medium risk from UXO. SafeLane Global would recommend that a Detailed UXO Threat Assessment Desk Top Study is undertaken for this site. Detailed assessments are conducted offline by SafeLane Global's researchers and use information such as historical mapping, WWII-era aerial photography, written air-raid precaution records and where necessary local archive research to fully qualify the risk on site. Land use, changes to building layout during WWII and post war redevelopment will also have an impact on any remaining level of risk from UXO. It is often possible to zone sites into different risk categories. The lead time for a detailed assessment will vary between 3-10 working days dependent upon the complexity of the site and the additional site specific information required.

For a quotation, or more information, please contact SafeLane Global's research team on 01634 471 340, or at research@safelaneglobal.com

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APPENDIX 2

Site Investigation Photo Log

PHOTOGRAPHIC LOG

Photo No.	Comments
1	Site setting, looking N from entrance
2	Site setting, looking N, behind Coolpoint
3	Site setting, looking S from Coolpoint
4	Site setting, looking S from behind Coolpoint
5	Bunded fuel tank, adjacent to site boundary
6	Circular drainage access point, middle of site
7	TP1 made ground above stiff clay
8	TP7 – natural ground ; stiff brown clay
9	TP8A – stiff brown clay with small red clay brick fragments
10	TP13 – made ground

Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



APPENDIX 3

Trial Pit Logs

		Project: Bridge Road North, Wrexham.	Trial Pit: TP1
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.2	TOPSOIL. Medium dense, dark brown, slightly clayey sand.	
0.2	0.4	MADE GROUND. Loose, brown, slightly silty, gravelly, sand. Gravels fine to medium, angular to sub-angular fragments of clay brick and concrete.	TP1A
0.4	0.5	CLAY. Firm, brown sandy clay	TP1B
		<u>End of trial pit 0.5 m</u> <i>Terminated in natural ground</i>	
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 x 0.5 m Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP2
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.1	TOPSOIL. Medium dense, dark brown, slightly clayey sand.	
0.1	0.4	MADE GROUND. Stiff brown clay. Loose slightly silty, gravelly, sand. Gravels fine to medium, angular to sub-angular fragments of clay brick and concrete	TP2A
0.4	0.5	CLAY. Firm, brown sandy clay	TP2B
		<u>End of trial pit 0.5 m</u> <i>Terminated in natural ground</i>	
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth)– 1.0 x 1.0 x 0.5 m Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP3
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.1	TOPSOIL. Medium dense, dark brown, slightly clayey sand.	TP3A
0.1	0.5	CLAY. Firm, orange sandy clay. Gravels fine, sub-angular fragments of limestone	TP3B
		<u>End of trial pit 0.5 m</u> <i>Terminated in natural ground</i>	
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 m x 0.5 m Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP4
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.2	TOPSOIL. Medium dense, dark brown, slightly clayey sand.	TP4A TP4B
0.2	0.3	TOPSOIL. Medium dense, light brown, slightly clayey sand and firm, grey CLAY.	
0.3	0.4	CLAY. Firm, orange-brown clay	
<u>End of trial pit 0.4 m</u> <i>Terminated in natural ground</i>			
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 x 0.4 Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP5
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.1	TOPSOIL. Medium dense, dark brown, slightly clayey sand.	
0.1	0.4	TOPSOIL. Medium dense, light brown, slightly clayey sand and CLAY loose, grey, sandy clay.	TP5A
0.4	0.5	CLAY. Firm, orange-brown, slightly sandy clay	TP5B
		<u>End of trial pit 0.5 m</u> <i>Terminated in natural ground</i>	
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 x 0.5 Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP6
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.1	TOPSOIL. Medium dense, dark brown, slightly clayey sand.	
0.1	0.4	TOPSOIL. Medium dense, light brown, slightly clayey sand and CLAY loose, grey, sandy clay.	TP6A
0.4	0.5	CLAY. Firm, orange-brown, slightly sandy clay	TP6B
		<u>End of trial pit 0.5 m</u> <i>Terminated in natural ground</i>	
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 x 0.5 Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP7
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.2	CLAY. Firm, orange-brown, slightly sandy clay.	TP7A
0.2	0.5	CLAY. Firm, orange sandy clay with firm, grey sandy CLAY	TP7B
		<u>End of trial pit 0.5 m</u> <i>Terminated in natural ground</i>	
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 x 0.5 Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –1-2cm black gravel no odour or olfactory evidence of contamination			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP8
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.4	CLAY. Firm, brown sandy clay. With MADE GROUND gravels fine, sub-angular fragments of red clay brick	TP8A
0.4	0.5	CLAY. Stiff, orange clay	TP8B
		<u>End of trial pit 0.5 m</u> <i>Terminated in natural ground</i>	
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 x 0.5 Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP9
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.4	CLAY. Firm, brown sandy clay. With MADE GROUND gravels fine, sub-angular fragments of red clay brick	TP9A
0.4	0.5	CLAY. Stiff, orange clay	TP9B
		<u>End of trial pit 0.5 m</u> <i>Terminated in natural ground</i>	
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 x 0.5 Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP10
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.4	CLAY. Firm, brown sandy clay. With MADE GROUND gravels fine, sub-angular fragments of red clay brick	TP10A
0.4	0.5	CLAY. Stiff, orange clay	TP10B
		<u>End of trial pit 0.5 m</u> <i>Terminated in natural ground</i>	
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 x 0.5 Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP11
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.4	CLAY. Firm, brown sandy clay. With MADE GROUND gravels fine, sub-angular fragments of red clay brick	TP10A
0.4	0.5	CLAY. Stiff, orange clay	TP10B
		<u>End of trial pit 0.5 m</u> <i>Terminated in natural ground</i>	
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 x 0.5 Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP12
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.2	CLAY. Firm, orange-brown, slightly sandy clay.	TP12A
0.2	0.4	CLAY. Firm, orange sandy clay with firm, grey sandy CLAY	TP12B
		<u>End of trial pit 0.4 m</u> <i>Terminated in natural ground</i>	
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 x 0.4 Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP13
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.3	CLAY. Loose, brown, sandy clay.	
0.3	0.4	MADE GROUND. Stiff brown clay. Loose slightly silty, gravelly, sand. Gravels fine to medium, angular to sub-angular fragments of clay brick and limestone	TP13A
0.4	0.5	CLAY. Stiff, orange sandy clay	TP13B
<u>End of trial pit 0.5 m</u> <i>Terminated in natural ground</i>			
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 x 0.5 Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP14
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.2	CLAY. Firm, orange-brown, slightly sandy clay.	TP14A
0.2	0.4	CLAY. Firm, yellowish-brown sandy clay with firm, grey sandy CLAY	TP14B
		<u>End of trial pit 0.4 m</u> <i>Terminated in natural ground</i>	
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 x 0.4 Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

		Project: Bridge Road North, Wrexham.	Trial Pit: TP15
Excavation date: 09.05.22	Logged by: SOB	Client: JCP	Project ID: 5125
Strata:			Sheet 1 of 1
Depth (m)		Description	Samples
From	To		
0	0.2	CLAY. Firm, orange-brown, slightly sandy clay.	TP14A
0.2	0.4	CLAY. Firm, yellowish-brown sandy clay with firm, grey sandy CLAY	TP14B
		<u>End of trial pit 0.4 m</u> <i>Terminated in natural ground</i>	
Excavated by - 9 ton tracked excavator. Plan Dimensions of Pit (length x width x depth) – 1.0 x 1.0 x 0.4 Groundwater – none Stability – Stable, sides remained vertical when excavated. Contamination –none			

APPENDIX 4

Lab Report Certificate



Environmental
Chemistry

Certificate of Analysis

Client: Caulmert Limited

Project: 22051393

Quote: BEC220324969 V1.1

Project Ref: 5125

Site: Bridge Road North, Wrexham Industrial Est

Contact: Sean O'Brien

Address: Intec
Ffordd Y Parc
Parc Menai
Bangor
LL57 4FG

E-Mail: SeanO'Brien@caulmert.com

Phone: 07585 975337

No. Samples Received: 11

Date Received: 19/05/2022

Analysis Date: 10/06/2022

Date Issued: 10/06/2022

Report Type: Final Version 01

This report supercedes any versions previously issued by the laboratory

Account Manager
Anna Jasjulevica

Authorised by the Operations Manager
Becky Batham



Client: Caulmurt Limited
Project Name: 5125
Project No: 22051393
Date Issued: 10/06/2022

Samples Analysed

<u>Sample Reference</u>	<u>Text ID</u>	<u>Sample Date</u>	<u>Sample Type</u>
TP2 B	22051393-001	09/05/2022 00:00:00	SOLID
TP3 A	22051393-002	09/05/2022 00:00:00	SOLID
TP3 B	22051393-003	09/05/2022 00:00:00	SOLID
TP4 A	22051393-004	09/05/2022 00:00:00	SOLID
TP4 B	22051393-005	09/05/2022 00:00:00	SOLID
TP8 A	22051393-006	09/05/2022 00:00:00	SOLID
TP8 B	22051393-007	09/05/2022 00:00:00	SOLID
TP11 A	22051393-008	09/05/2022 00:00:00	SOLID
TP11 B	22051393-009	09/05/2022 00:00:00	SOLID
TP13 B	22051393-010	09/05/2022 00:00:00	SOLID
TP14 B	22051393-011	09/05/2022 00:00:00	SOLID



Analysis Results

Client: Caulmert Limited
Project Name: Bridge Road North, Wrexham Industrial Est
Project No: 22051393
Date Issued: 10/06/2022



Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004	005	006	007
					Customer ID	TP2 B	TP3 A	TP3 B	TP4 A	TP4 B	TP8 A	TP8 B
					Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
					Sampling Date	09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022
Ammoniacal Nitrogen (Exchangeable) as N	AMMAR	0.5	mg/kg^	UM		<0.59	<0.59	<0.61	<0.58	<0.57	0.90	<0.6
>C6-C7 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.236	<0.238	<0.246	<0.233	<0.227	<0.243	<0.238
>C7-C8 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.236	<0.238	<0.246	<0.233	<0.227	<0.243	<0.238
>C7-C8 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg^	UM		<0.012	<0.012	<0.012	<0.012	<0.011	<0.012	<0.012
>C8-C10 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.236	<0.238	<0.246	<0.233	<0.227	<0.243	<0.238
>C8-C10 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.04	mg/kg^	UM		<0.048	<0.048	<0.049	<0.047	<0.045	<0.049	<0.048
C5-C6 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.236	<0.238	<0.246	<0.233	<0.227	<0.243	<0.238
C5-C7 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg^	UM		<0.012	<0.012	<0.012	<0.012	<0.011	<0.012	<0.012
Total GRO C5-C10 HS_1D_Total	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.236	<0.238	<0.246	<0.233	<0.227	<0.243	<0.238
pH (2.5:1 extraction)	PHSOIL	1	pH units	UM		8.7	8.1	8.0	9.1	8.8	8.6	8.7
Chromium (VI) as Cr	KONENS	0.1	mg/kg^	N		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Soil Organic Matter	WSLM59	0.04	% m/m^	U		0.65	2.62	0.78	0.47	0.51	1.35	0.75
Arsenic as As	ICPMSS	0.3	mg/kg^	UM		10.2	10.9	8.4	7.1	8.2	8.5	11.3
Cadmium as Cd	ICPMSS	0.2	mg/kg^	UM		0.3	0.3	<0.2	<0.2	0.2	0.4	0.3
Copper as Cu	ICPMSS	1.6	mg/kg^	UM		24.0	28.7	21.1	17.4	19.4	19.6	24.2
Lead as Pb	ICPMSS	0.7	mg/kg^	UM		33.4	55.6	17.6	17.8	15.9	37.9	32.1
Mercury as Hg	ICPMSS	0.5	mg/kg^	UM		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nickel as Ni	ICPMSS	2	mg/kg^	UM		39.6	27.7	39.5	27.3	33.0	28.9	37.8
Selenium as Se	ICPMSS	0.5	mg/kg^	UM		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5



Analysis Results

Client: Caulmert Limited
Project Name: Bridge Road North, Wrexham Industrial Est
Project No: 22051393
Date Issued: 10/06/2022



Analysis	Method Code	MDL	Units	Accred.	Sample ID	008	009	010	011
					Customer ID	TP11 A	TP11 B	TP13 B	TP14 B
					Sample Type	SOLID	SOLID	SOLID	SOLID
					Sampling Date	09/05/2022	09/05/2022	09/05/2022	09/05/2022
Ammoniacal Nitrogen (Exchangeable) as N	AMMAR	0.5	mg/kg^	UM		<0.61	<0.61	<0.64	<0.61
>C6-C7 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.246	<0.242	<0.255	<0.243
>C7-C8 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.246	<0.242	<0.255	<0.243
>C7-C8 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg^	UM		<0.012	<0.012	<0.013	<0.012
>C8-C10 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.246	<0.242	<0.255	<0.243
>C8-C10 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.04	mg/kg^	UM		<0.049	<0.048	<0.052	<0.049
C5-C6 Aliphatic HS_1D_AL	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.246	<0.242	<0.255	<0.243
C5-C7 Aromatic HS_1D_AR	GROHSA/BTEXHSA	0.01	mg/kg^	UM		<0.012	<0.012	<0.013	<0.012
Total GRO C5-C10 HS_1D_Total	GROHSA/BTEXHSA	0.2	mg/kg^	UM		<0.246	<0.242	<0.255	<0.243
pH (2.5:1 extraction)	PHSOIL	1	pH units	UM		9.0	8.9	8.7	8.4
Chromium (VI) as Cr	KONENS	0.1	mg/kg^	N		<0.1	<0.1	<0.1	<0.1
Soil Organic Matter	WSLM59	0.04	% m/m^	U		0.53	0.48	0.56	0.52
Arsenic as As	ICPMSS	0.3	mg/kg^	UM		11.2	9.7	15.2	10.8
Cadmium as Cd	ICPMSS	0.2	mg/kg^	UM		0.3	0.3	0.2	<0.2
Copper as Cu	ICPMSS	1.6	mg/kg^	UM		25.0	23.5	17.2	22.2
Lead as Pb	ICPMSS	0.7	mg/kg^	UM		16.0	14.4	31.8	19.3
Mercury as Hg	ICPMSS	0.5	mg/kg^	UM		<0.5	<0.5	<0.5	<0.5
Nickel as Ni	ICPMSS	2	mg/kg^	UM		42.6	38.8	47.2	48.2
Selenium as Se	ICPMSS	0.5	mg/kg^	UM		<0.5	<0.5	<0.5	<0.5



Analysis Results

Client: Caulmert Limited
Project Name: Bridge Road North, Wrexham Industrial Est
Project No: 22051393
Date Issued: 10/06/2022



Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004	005	006	007
					Customer ID	TP2 B	TP3 A	TP3 B	TP4 A	TP4 B	TP8 A	TP8 B
					Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
					Sampling Date	09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022
Total Chromium as Cr	ICPMSS	1.2	mg/kg^	UM		34.0	22.5	34.4	23.6	27.5	22.1	29.8
Vanadium as V	ICPMSS	0.6	mg/kg^	N		35.5	28.4	36.0	25.1	28.9	24.6	30.1
Zinc as Zn	ICPMSS	16	mg/kg^	UM		104.8	70.8	54.5	54.5	60.5	103.1	83.0
Acid Soluble Sulphate as SO4	ICPACIDS	20	mg/kg^	UM		411	1520	239	372	561	437	289
Benzene HS_ID_AR	BTEXHSA	10	µg/kg^	UM		<12	<12	<12	<12	<11	<12	<12
Ethylbenzene HS_ID_AR	BTEXHSA	10	µg/kg^	UM		<12	<12	<12	<12	<11	<12	<12
m/p-Xylene HS_ID_AR	BTEXHSA	20	µg/kg^	UM		<24	<24	<25	<23	<23	<24	<24
o-Xylene HS_ID_AR	BTEXHSA	10	µg/kg^	UM		<12	<12	<12	<12	<11	<12	<12
Toluene HS_ID_AR	BTEXHSA	10	µg/kg^	UM		<12	<12	<12	<12	<11	<12	<12
Acenaphthene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	0.31	<0.10
Acenaphthylene	PAHMSUS	0.08	mg/kg^	U		<0.09	<0.10	<0.10	<0.09	<0.09	0.10	<0.10
Anthracene	PAHMSUS	0.08	mg/kg^	U		<0.09	<0.10	<0.10	<0.09	<0.09	2.11	<0.10
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	9.46	<0.10
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	9.69	<0.10
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	10.7	<0.10
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	4.24	<0.10
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	3.95	<0.10
Chrysene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	8.41	<0.10
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	1.12	<0.10



Analysis Results

Client: Caulmert Limited
Project Name: Bridge Road North, Wrexham Industrial Est
Project No: 22051393
Date Issued: 10/06/2022



Analysis	Method Code	MDL	Units	Accred.	Sample ID	008	009	010	011
					Customer ID	TP11 A	TP11 B	TP13 B	TP14 B
					Sample Type	SOLID	SOLID	SOLID	SOLID
					Sampling Date	09/05/2022	09/05/2022	09/05/2022	09/05/2022
Total Chromium as Cr	ICPMSS	1.2	mg/kg^	UM		43.5	38.4	49.0	45.0
Vanadium as V	ICPMSS	0.6	mg/kg^	N		46.2	39.9	53.7	46.5
Zinc as Zn	ICPMSS	16	mg/kg^	UM		68.2	65.1	82.0	70.0
Acid Soluble Sulphate as SO4	ICPACIDS	20	mg/kg^	UM		269	307	124	139
Benzene HS_ID_AR	BTEXHSA	10	µg/kg^	UM		<12	<12	<13	<12
Ethylbenzene HS_ID_AR	BTEXHSA	10	µg/kg^	UM		<12	<12	<13	<12
m/p-Xylene HS_ID_AR	BTEXHSA	20	µg/kg^	UM		<25	<24	<26	<24
o-Xylene HS_ID_AR	BTEXHSA	10	µg/kg^	UM		<12	<12	<13	<12
Toluene HS_ID_AR	BTEXHSA	10	µg/kg^	UM		<12	<12	<13	<12
Acenaphthene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10
Acenaphthylene	PAHMSUS	0.08	mg/kg^	U		<0.10	<0.10	<0.10	<0.10
Anthracene	PAHMSUS	0.08	mg/kg^	U		<0.10	<0.10	<0.10	<0.10
Benzo[a]anthracene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10
Benzo[a]pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10
Benzo[b]fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10
Benzo[g,h,i]perylene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10
Benzo[k]fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10
Chrysene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10
Dibenzo[a,h]anthracene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10



Analysis Results

Client: Caulmert Limited
Project Name: Bridge Road North, Wrexham Industrial Est
Project No: 22051393
Date Issued: 10/06/2022



Analysis	Method Code	MDL	Units	Accred.	Sample ID	001	002	003	004	005	006	007
					Customer ID	TP2 B	TP3 A	TP3 B	TP4 A	TP4 B	TP8 A	TP8 B
					Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
					Sampling Date	09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022
Fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	15.0	<0.10
Fluorene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	0.19	<0.10
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	5.65	<0.10
Naphthalene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	0.33	<0.10
Phenanthrene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	4.58	<0.10
Pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.09	<0.10	<0.10	<0.09	<0.09	13.5	<0.10
Total PAH 16	PAHMSUS	1.28	mg/kg^	U		<1.51	<1.52	<1.57	<1.49	<1.45	89.3	<1.52
>C10-C12 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U		<4.73	<4.75	<4.91	<4.67	<4.54	<4.87	<4.76
>C12-C16 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U		<4.73	<4.75	<4.91	<4.67	<4.54	<4.87	<4.76
>C16-C21 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U		<4.73	<4.75	<4.91	<4.67	<4.54	20.7	<4.76
>C21-C35 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	10	mg/kg^	U		<11.8	<11.9	<12.3	<11.7	<11.4	58.2	<11.9
Total TPH >C8-C40 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	20	mg/kg^	U		<23.6	<23.8	<24.6	<23.3	<22.7	92.4	<23.8
>C10-C12 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U		<4.73	<4.75	<4.91	<4.67	<4.54	<4.87	<4.76
>C12-C16 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U		<4.73	<4.75	<4.91	<4.67	<4.54	<4.87	<4.76
>C16-C21 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U		5.49	<4.75	<4.91	<4.67	<4.54	105	<4.76
>C21-C35 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	10	mg/kg^	U		<11.8	<11.9	<12.3	<11.7	<11.4	495	15.5
Total TPH >C8-C40 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	20	mg/kg^	U		<23.6	<23.8	<24.6	<23.3	<22.7	682	25.3
Total Moisture at 35°C	CLANDPREP	0.1	%	N		15.4	15.8	18.6	14.3	11.9	17.8	15.9
Description of Solid Material	CLANDPREP		-	N		CLAY	SILT	CLAY	CLAY	CLAY	CLAY	CLAY



Analysis Results

Client: Caulmert Limited
Project Name: Bridge Road North, Wrexham Industrial Est
Project No: 22051393
Date Issued: 10/06/2022



Analysis	Method Code	MDL	Units	Accred.	Sample ID	008	009	010	011
					Customer ID	TP11 A	TP11 B	TP13 B	TP14 B
					Sample Type	SOLID	SOLID	SOLID	SOLID
					Sampling Date	09/05/2022	09/05/2022	09/05/2022	09/05/2022
Fluoranthene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10
Fluorene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10
Indeno[1,2,3-cd]pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10
Naphthalene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10
Phenanthrene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10
Pyrene	PAHMSUS	0.08	mg/kg^	UM		<0.10	<0.10	<0.10	<0.10
Total PAH 16	PAHMSUS	1.28	mg/kg^	U		<1.57	<1.55	<1.63	<1.56
>C10-C12 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U		<4.91	<4.84	<5.11	<4.87
>C12-C16 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U		<4.91	<4.84	<5.11	<4.87
>C16-C21 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	4	mg/kg^	U		<4.91	<4.84	<5.11	<4.87
>C21-C35 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	10	mg/kg^	U		<12.3	<12.1	<12.8	<12.2
Total TPH >C8-C40 (Aliphatic) EH_CU_1D_AL	TPHFIDUS (Aliphatic)	20	mg/kg^	U		<24.6	<24.2	<25.5	<24.3
>C10-C12 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U		<4.91	<4.84	<5.11	<4.87
>C12-C16 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U		<4.91	<4.84	<5.11	<4.87
>C16-C21 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	4	mg/kg^	U		<4.91	<4.84	<5.11	<4.87
>C21-C35 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	10	mg/kg^	U		<12.3	13.7	<12.8	<12.2
Total TPH >C8-C40 (Aromatic) EH_CU_1D_AR	TPHFIDUS (Aromatic)	20	mg/kg^	U		<24.6	<24.2	<25.5	<24.3
Total Moisture at 35°C	CLANDPREP	0.1	%	N		18.6	17.4	21.7	17.8
Description of Solid Material	CLANDPREP		-	N		CLAY	CLAY	CLAY	CLAY



Analysis Results

Client: Caulmert Limited
 Project Name: Bridge Road North, Wrexham Industrial Est
 Project No: 22051393
 Date Issued: 10/06/2022



					Sample ID	001	002	003	004	005	006	007
					Customer ID	TP2 B	TP3 A	TP3 B	TP4 A	TP4 B	TP8 A	TP8 B
					Sample Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
					Sampling Date	09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022	09/05/2022
Analysis	Method Code	MDL	Units	Accred.								
Asbestos Identification	SUB002		-	N		NAIIS	NAIIS	NAIIS	NAIIS	NAIIS	NAIIS	NAIIS



Analysis Results

Client: Caulmert Limited
 Project Name: Bridge Road North, Wrexham Industrial Est
 Project No: 22051393
 Date Issued: 10/06/2022



					Sample ID	008	009	010	011
					Customer ID	TP11 A	TP11 B	TP13 B	TP14 B
					Sample Type	SOLID	SOLID	SOLID	SOLID
					Sampling Date	09/05/2022	09/05/2022	09/05/2022	09/05/2022
Analysis	Method Code	MDL	Units	Accred.					
Asbestos Identification	SUB002		-	N		NAIIS	NAIIS	NAIIS	NAIIS

[illegible]



Client: Caulmurt Limited
 Project Name: Bridge Road North, Wrexham Industrial Est
 Project No: 22051393
 Date Issued: 10/06/2022

Deviating Sample Report

Sample Reference	Text ID	Reported Name	Incorrect Container	Incorrect Label	Headspace	Incorrect/No Preservative	No Sampling Date	Holding Time
TP2 B	22051393-001	PHSOIL						✓
TP2 B	22051393-001	GROHSA/BTEXHSA						✓
TP2 B	22051393-001	BTEXHSA						✓
TP3 A	22051393-002	PHSOIL						✓
TP3 A	22051393-002	GROHSA/BTEXHSA						✓
TP3 A	22051393-002	BTEXHSA						✓
TP3 B	22051393-003	PHSOIL						✓
TP3 B	22051393-003	GROHSA/BTEXHSA						✓
TP3 B	22051393-003	PAHMSUS						✓
TP3 B	22051393-003	BTEXHSA						✓
TP4 A	22051393-004	PHSOIL						✓
TP4 A	22051393-004	GROHSA/BTEXHSA						✓
TP4 A	22051393-004	BTEXHSA						✓
TP4 B	22051393-005	PHSOIL						✓
TP4 B	22051393-005	GROHSA/BTEXHSA						✓
TP4 B	22051393-005	PAHMSUS						✓
TP4 B	22051393-005	BTEXHSA						✓
TP8 A	22051393-006	PHSOIL						✓
TP8 A	22051393-006	GROHSA/BTEXHSA						✓
TP8 A	22051393-006	BTEXHSA						✓
TP8 B	22051393-007	PHSOIL						✓
TP8 B	22051393-007	GROHSA/BTEXHSA						✓
TP8 B	22051393-007	BTEXHSA						✓
TP11 A	22051393-008	PHSOIL						✓
TP11 A	22051393-008	GROHSA/BTEXHSA						✓
TP11 A	22051393-008	BTEXHSA						✓
TP11 B	22051393-009	PHSOIL						✓
TP11 B	22051393-009	GROHSA/BTEXHSA						✓



Client: Caulmurt Limited
 Project Name: Bridge Road North, Wrexham Industrial Est
 Project No: 22051393
 Date Issued: 10/06/2022

TP11 B	22051393-009	BTEXHSA						✓
TP13 B	22051393-010	PHSOIL						✓
TP13 B	22051393-010	GROHSA/BTEXHSA						✓
TP13 B	22051393-010	BTEXHSA						✓
TP14 B	22051393-011	PHSOIL						✓
TP14 B	22051393-011	GROHSA/BTEXHSA						✓
TP14 B	22051393-011	BTEXHSA						✓

Analysis Method

Analysis

AMMAR
 BTEXHSA
 CLANDPREP
 GROHSA/BTEXHSA
 ICPACIDS
 ICPMSS
 KONENS
 PAHMSUS
 PHSOIL
 SUB002
 SUB020
 TPHFIDUS (Aliphatic)
 TPHFIDUS (Aromatic)
 WSLM59

Analysis Type

INORGANIC
 ORGANIC
 PHYS
 ORGANIC
 METALS
 METALS
 INORGANIC
 ORGANIC
 INORGANIC
 SUBCON
 SUBCON
 ORGANIC
 ORGANIC
 INORGANIC

Analysis Method

As Received
 As Received
 As Received
 As Received
 Air Dried & Ground
 Air Dried & Ground
 Air Dried & Ground
 As Received
 As Received

 As Received
 As Received
 Air Dried & Ground



Client: Caulmurt Limited
Project Name: Bridge Road North, Wrexham Industrial Est
Project No: 22051393
Date Issued: 10/06/2022

Result Report Notes

Letters alongside results signify that the result has associated report notes.
The report notes are as follows:

<u>Letter</u>	<u>Note</u>
A	Due to the matrix of the sample the laboratory has had to deviate from our standard protocols to be able to process the sample and provide a result. Where applicable the accreditation has been removed and this should be taken into consideration when utilising the data.
B	The QC associated with this result has not wholly met the QMS requirements, the accreditation has therefore been removed. However, the Laboratory has confidence in the performance of the method as a whole and that the integrity of the data has not been significantly compromised.
C	Due to matrix interference the internal standard and/or surrogate has not met the QMS requirements. This should be taken into consideration when utilising the data.
D	A non-standard volume or mass has been used for this test which has resulted in a raised detection limit.
E	Due to recoveries beyond our calibration range and following the maximum size of dilution allowed, the result cannot be quantified and as such the result will appear as a greater than symbol (>) with the accreditation removed. This data should be used for indicative purposes only.
F	Based on the sample history, appearance and smell a dilution was applied prior to testing. Unfortunately, the result is either above (>) or below (<) our calibration range. Results above our calibration range have accreditation removed. The data should be used for indicative purposes only.
G	The day 5 oxygen reading was below the capability of the instrument to detect, and therefore the calculated BOD has been reported unaccredited for guidance purposes only.

HWOL Acronym Key

<u>Acronym</u>	<u>Description</u>
HS	Headspace Analysis
EH	Extractable Hydrocarbons - i.e everything extracted by the solvent(s)
CU	Clean up - e.g. by florisil, silica gel
1D	GC - Single coil gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics only
AR	Aromatics only
+	Operator to indicate cumulative e.g. EH_CU+HS_1D_Total



Client: Caulmert Limited
Project Name: Bridge Road North, Wrexham Industrial Est
Project No: 22051393
Date Issued: 10/06/2022

Additional Information

This report refers to samples as received, and SOCOTEC UK Ltd takes no responsibility for accuracy or competence of sampling by others.

Results within this report relate only to the samples tested.

In the accreditation column of analysis report the codes are as follows:

U = UKAS accredited analysis
M = MCERT accredited analysis
N = Unaccredited analysis

Any units marked with ^ signify results are reported on a dry weight basis of 35° c.

All Air Dried and Ground Samples (ADG) are oven dried at less than 35° c.

This report shall not be reproduced except in full and with approval from the laboratory.

Opinions and interpretations given are outside the scope of our UKAS accreditation.

Any samples marked with * are not covered by our scope of UKAS accreditation. If applicable, further report notes have been added.

Any solid samples where the Major Constituents are not one of the following (Sand, Silt, Clay, Made Ground) are not one of our accredited matrix types.

Any samples marked with ‡ have had MCERTS accreditation removed for this result

Any samples marked with a tick in the deviant table is deviant for the specific reason.

Any samples reported as IS, NA, ND mean the following:

IS = Insufficient Sample to complete analysis
NA = Sample is not amenable for the required analysis
ND = Results cannot be determined

Our deviating sample report does not include deviancy information for Subcontracted analysis. Please see the report from the Subcontracted lab for information regarding any deviancies for this analysis.

End of Certificate of Analysis

Certificate of Analysis

Report No.: 22-20078-1

Issue No.: 1

Date of Issue 18/07/2022

Customer Details: SOCOTEC UK - Environmental Chemistry, P O Box 100, Bretby Business Park, Burton-on-Trent, DE15 0XD

Customer Contact: Louise Smith

Customer Order No.: B171569BEC

Customer Reference: 22051400

Quotation Reference: 220413/03

Description: 3 soil samples

Date Received: 23/05/2022

Date Started: 30/05/2022

Date Completed: 18/07/2022

Test Methods: Details available on request (refer to SOP code against relevant result/s)

Notes: None



Approved By: Matthew Hickson, Laboratory Manager

This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service.

This certificate shall not be reproduced except in full without the prior written approval of the laboratory.

Observations and interpretations are outside of the scope of UKAS accreditation.

Results reported herein relate only to the items supplied to the laboratory for testing.

Results on an Interim Report are not dry-weight corrected.

Where the laboratory is not responsible for the sampling, results apply to the sample(s) as they were received.

The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.



1663



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Results Summary

Report No.: 22-20078-1

Customer Reference: 22051400

Customer Order No: B171569BEC

Customer Sample No	22051400-001	22051400-002	22051400-003
Customer Sample ID	TP2 A	TP13 A	TP14 A
RPS Sample No	491459	491460	491461
Sample Type	SOIL	SOIL	SOIL
Sampling Date	09/05/2022	09/05/2022	09/05/2022

Determinand	CAS No	Codes	SOP	Units	RL			
weight of total dried material		N	in house	g		148	126	182
weight of removed material		N	in house	g		13.9	26.3	40.6
description of removed material		N	in house	n/a		Hardened clay	Hardened clay, shoots	Hardened clay, shoots
soil type		N	in house	n/a		1	1	1
2,4,6-trinitrophenol (picric acid)	88-89-1	M	375	mg/kg AD	0.1	< 0.1	< 0.1	< 0.1
2,4-dinitrotoluene	121-14-2	M	375	mg/kg AD	1	< 1.0	< 1.0	< 1.0
2,6-dinitrotoluene	606-20-2	M	375	mg/kg AD	1	< 1.0	< 1.0	< 1.0
ethylene glycol dinitrate (EGDN)	628-96-2	M	374	mg/kg AD	0.1	< 0.1	< 0.1	< 0.1
cyclotetramethylenetetranitramine (HMX)	2691-41-0	M	375	mg/kg AD	1	< 1.0	< 1.0	< 1.0
hexanitrostilbene (HNS)	20062-22-0	N	375	mg/kg AD	0.5	< 0.5	< 0.5	< 0.5
nitrocellulose (NC)	9004-70-0	U	376	mg/kg	5000	< 5000	< 5000	< 5000
nitrocellulose (NC)	9004-70-0	N	377	mg/kg	1000	< 1000	< 1000	< 1000
nitroglycerine (NG)	55-63-0	M	374	mg/kg AD	0.1	< 0.1	0.2	< 0.1
pentaerythritol tetranitrate (PETN)	78-11-5	M	375	mg/kg AD	5	< 5.0	< 5.0	< 5.0
picrite	556-88-7	M	375	mg/kg AD	0.1	< 0.10	< 0.10	< 0.10
cyclo-1,3,5-trimethylene-2,4,6-trinitramine (RDX)	121-82-4	M	375	mg/kg AD	1	< 1.0	< 1.0	< 1.0
2,4,6-trinitrotoluene (TNT)	118-96-7	M	375	mg/kg AD	0.5	< 0.5	< 0.5	< 0.5
trinitro-2,4,6-phenylmethylnitramine (tetryl)	479-45-8	M	375	mg/kg AD	1	< 1.0	< 1.0	< 1.0

Deviating Samples

Report No.: 22-20078-1

Customer Reference: 22051400

Customer Order No: B171569BEC

Our policy on Deviating Samples has been implemented in accordance with UKAS Policy on Deviating Samples (TPS63).

RPS is not responsible for the integrity of samples as received, unless RPS personnel performed the sampling. Samples submitted may be declared to be deviating.

Where applicable the analysis method remains UKAS accredited, however results reported for a deviating sample may be compromised.

Where no sampling date was supplied, samples have been declared to be deviating. If the date can be supplied, results may be reissued if assessed not deviating.

Where the sample container used was unsuitable or broken, the sample is flagged as deviating and re-sampling/re-submission may be required.

RPS No.	Customer No.	Customer ID	Date Sampled	Containers Received	Deviating	Reason for Deviation
491459	22051400-001		09/05/2022	500ml plastic container	Yes	Temperature of samples exceeded in transit/storage
491460	22051400-002		09/05/2022	500ml plastic container	Yes	Temperature of samples exceeded in transit/storage
491461	22051400-003		09/05/2022	500ml plastic container	Yes	Temperature of samples exceeded in transit/storage

Report No.: 22-20078-1

Key Code	Description
U	UKAS Accredited Test - UKAS accreditation is only implied if the report carries the UKAS logo
F	UKAS Flexible Scope Test
M	MCERTS Accredited Test - MCERTS accreditation is only implied if the report carries the MCERTS logo
N	Not Accredited Test
O	Marine Management Organisation (MMO) Validated
S	Subcontracted to approved laboratory
US	Subcontracted to approved laboratory UKAS Accredited for the test
MS	Subcontracted to approved laboratory MCERTS/UKAS Accredited for the test
SI	Subcontracted to internal RPS Group laboratory
USI	Subcontracted to internal RPS Group laboratory UKAS Accredited for the test
MSI	Subcontracted to internal RPS Group laboratory MCERTS/UKAS Accredited for the test
I/S (in results)	Insufficient Sample
U/S (in results)	Unsuitable Sample
S/C (in results)	See Comments
ND (in results)	Not Detected
AD (in units)	Results are expressed on an air-dried basis at 30 °C
DW (in units)	Results are expressed on a dry weight basis at 105 °C

Sample Type	Sample Retention and Disposal Period
Foodstuff	1 month (if frozen) from the issue date of this report
Waters	2 weeks from the issue date of this report
Other Liquids	1 month from the issue date of this report
Solids / Soils	1 month from the issue date of this report
Sediments	1 month from the issue date of this report

Note: Sample retention may be subject to agreement with the customer for particular projects

Where the dry solids value of a sample is low (<50%), reporting limits are automatically raised for all determinants analysed on an as-received basis.

Soil Typing	Description
Type 1	Clay - Brown
Type 2	Clay - Grey/Black
Type 3	Sand
Type 4	Top Soil (Standard)
Type 5	Top Soil (High Peat)
Type 6	Made Ground (>50% Clay)
Type 7	Made Ground (>50% Sand)
Type 8	Made Ground (>50% Top Soil)
Type X	Other (outside of MCERTS scope)

Certificate Notes	Description
Note 1	This test report shall not be reproduced except in full, without written approval of the Laboratory.
Note 2	Unless otherwise stated, results are not corrected for analytical recoveries.
Note 3	All samples were received in good condition unless otherwise stated. Results provided by the Laboratory are based on samples submitted by clients. Once submitted, samples requiring analysis are stored at 5 ± 3°C. The Laboratory cannot be held responsible for the storage, condition or preservation of samples prior to arrival.
Note 4	Samples were taken by the customer and, unless otherwise stated, sampling locations were not supplied.
Note 5	Soil descriptions are given in order to provide a log of sample matrices submitted and are not intended as full geological descriptions.
Note 6	Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Note for results expressed on an air-dried basis: Results for soil samples are reported based on the dry weight of soil which has been air-dried in open, shallow trays at temperatures below 30 °C and subsequently ground and sieved to pass through a nominal 710 µm aperture sieve. Prior to any grinding, any material which is retained on a sieve of mesh size 4.75mm is discarded. In most cases, analysis is carried out directly on these prepared soils.

Note: Where the following information is included in this certificate, it has usually been supplied by the customer: Customer Sample ID, Sample Location, Sample Depth, Sampling Date and Sampling Time. The laboratory shall not be responsible for any information that is supplied by the customer that may affect the validity of results.

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