Stanlow Manufacturing Complex

Indicative location of Stanlow AGI

A5117

A5117

Former Thornton Green Landfill

Section 1

Section 2

M56

Thornton Green Sand Pit

River Gowy

Former Spring Bank Farm Landfill

A41

Government Pipelines and Storage System (GPSS) Backford South

Collinge Farm Sand Pit

Church Farm Sand Pit (now yard)

Indicative location of Rockbank BVS

Chorlton Quarry

Section 2

Section 3

Birkenhead to Chester Railway Line

M56

M53

Gowy Landfill

Whitby

Wolverham

Whitby Park

Woodland Rd

Underwood Dr

Stanney La

Kinsey Rd

Little Stanney

Stoke Grange

Wallcroft

Little Stanney La

Rake La

A5117

A5032

M56

Clover Cottage

Thomas Mount Cottages

Mount Farm

Fairfield Farmhouse

Croughton

Ashwood House Farm

Ashwood La

Chorlton Lodge Farm

The Lodge

Backford

Gordon La

Higher Inlooms

Wervin

Wervin New Hall

Wervin Rd

Lea by Backford

Backford Post Office

Collinge Farm

Caughall Manor

Foxcovert La

Ash Hey Farm

Ash Hey La

Elton

Elton Green

School La

Old Hall La

New Dairy Farm

The Bungalow

Thornton-le-Moors

Temeside House

Cross House Farm

Spring Bank

Hoblake Farm

Woodland View Farm

Wimbolds Trafford

Trafford Hall

Park Farm

Ince La

Bridge Trafford

A56

Morley Bridge House

Picton

New House Farm

Picton La

Meadow Farm

Doe Rd

Plemstall La

Bankfield Farm

Liverpool

Chester

1:1,000,000

Key:

- Newbuild Infrastructure Boundary
- Ince AGI to Stanlow AGI
- Stanlow AGI to Flint AGI
- Above Ground Installation (AGI)
- Block Valve Station (BVS)
- 250m Buffer
- Main roads / Motorways
- Railway Land
- Industrial Land
- Landfills
- Sand Pit
- Ministry of Defence (MOD) Depot
- Temporary construction compounds
- River/Stream/Beck or other waterway
- Section Dividing Line
- Ditch
- Hedgerow
- Ordinary Watercourse
- Ordinary Watercourses - Others
- Unknown

0 0.15 0.3 0.45 0.6 Kilometres

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HyNet North West

PROJECT TITLE

**HyNet North West Carbon Dioxide Pipeline DCO**

DRAWING TITLE

Figure 11.1.3: Potential Contaminant Sources - Section 2 Sheet 2 of 7

DRAWING STATUS

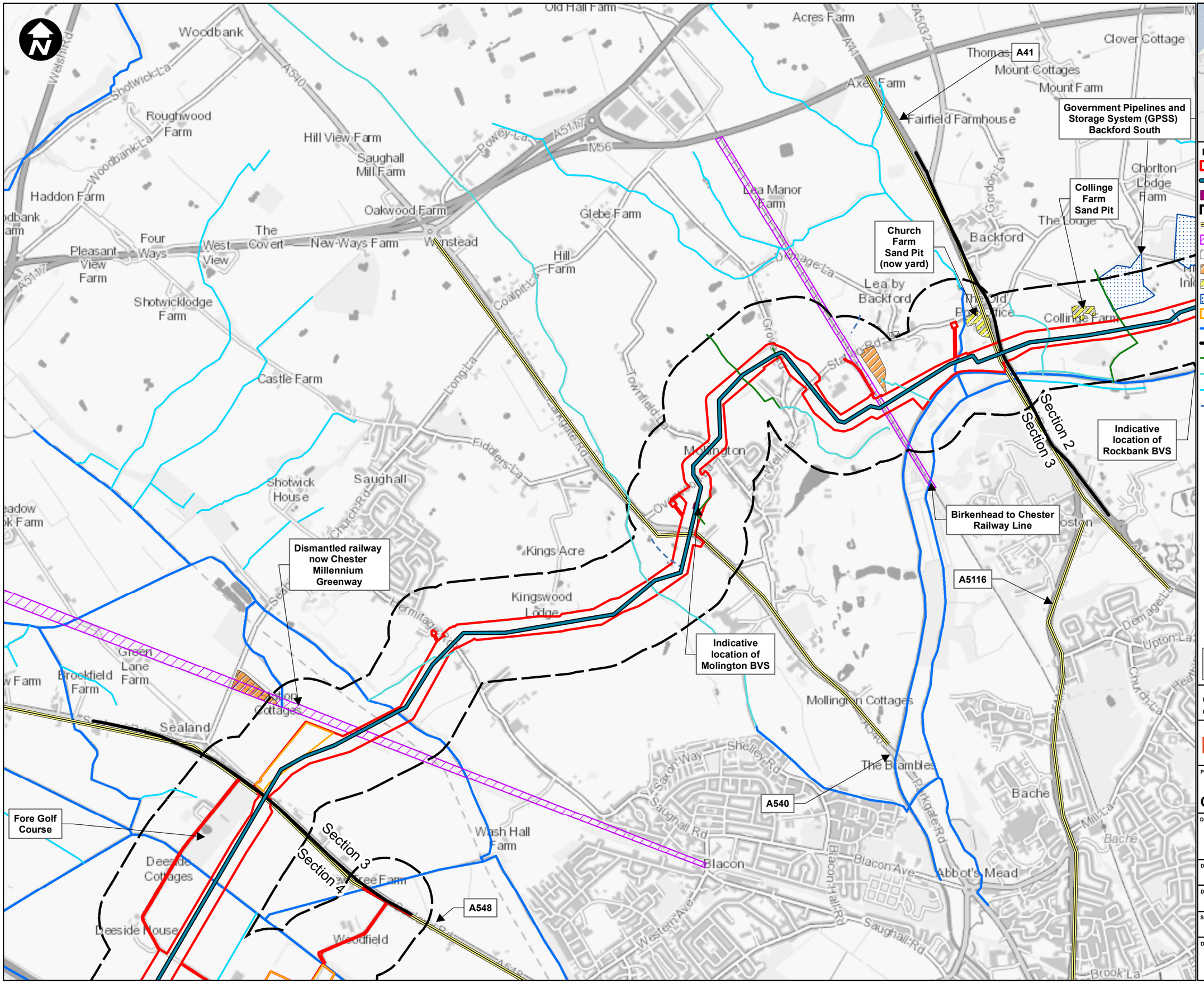
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EN070007-APP-ES-11.1.3-Sheet 2




**Key:**

- Newbuild Infrastructure Boundary
- Stanlow AGI to Flint AGI
- Block Valve Station (BVS)
- 250m Buffer
- Main roads / Motorways
- Railway Land
- Industrial Land
- Landfills
- Sand Pit
- Ministry of Defence (MOD) Depot
- Temporary construction compounds
- River/Stream/Beck or other waterway
- Section Dividing Line
- Hedgerow
- Ordinary Watercourse
- Ordinary Watercourses - Others
- Unknown

0 0.15 0.3 0.45 0.6 Kilometres

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PROJECT TITLE
**HyNet North West Carbon Dioxide Pipeline DCO**

DRAWING TITLE
Figure 11.1.3: Potential Contaminant Sources - Section 3 Sheet 3 of 7

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EN070007-APP-ES-11.1.3-Sheet 3

Dismantled railway now Chester Millennium Greenway

Former Clay Hill Colliery

A494

Former Aston Hill Colliery Railway

B5129

Industrial Business parks/ estates

Fore Golf Course

Former wireworks / corn mill

Former Brickfield

Former Mancot Colliery

Former Queensferry Road Colliery

A550

Indicative location of Aston Hill BVS

Section 5

Section 4

Section 3

A548

North Wales Coast Railway Line

Hawarden Airport

Parkgate House

Meadow Brook Farm

Old Marsh Farm Cottages

Hawarden Bridge

Dee Bank Cottages

Garden City

Old Hall Farm

Willow Farm

Brookfield Farm

Green Lane Farm

Sealand

Afon Dyfrdwy / River Dee

Y Fferi / Queensferry

Pentre

Deeside Cottages

Deeside House

Kings Acre

Kingswood Lodge

Wash Hall Farm

Woodfield

Old Farm Cottages

Hyperion House

Wood Cottages

Thornleigh Park Farm

Point Farm House

Ferry Lane Farm

Bee's Cottages

Cop House Farm

Ferry House

Mancot Royal

Big Mancot

Mancot

Newtown

Sandycroft

The Moor

Wirral View

Rake Farm

New Manor House Farm

The Manor

Kingfisher House

Top Park

Tinkersdale Cottage

Well House Farm

Penarlâg

Glynne Way

Rake La

Chester Rd

B5125

Manor La

Moor La

Ash La

Ducker's La

Station Rd

Manor Rd

Fox's Dr

Welsh Rd

Church Rd

Hermitage La

Liverpool

1:1,000,000

Key:

- Newbuild Infrastructure Boundary
- Stanlow AGI to Flint AGI
- Block Valve Station (BVS)
- 250m Buffer
- Main roads / Motorways
- Railway Land
- Industrial Land
- Landfills
- Temporary construction compounds
- River/Stream/Beck or other waterway
- Section Dividing Line
- Culvert
- Ditch
- Hedgerow
- Ordinary Watercourse
- Ordinary Watercourses - Others

0 0.15 0.3 0.45 0.6 Kilometres

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PROJECT TITLE

**HyNet North West Carbon Dioxide Pipeline DCO**

DRAWING TITLE

Figure 11.1.3: Potential Contaminant Sources - Section 4 Sheet 4 of 7

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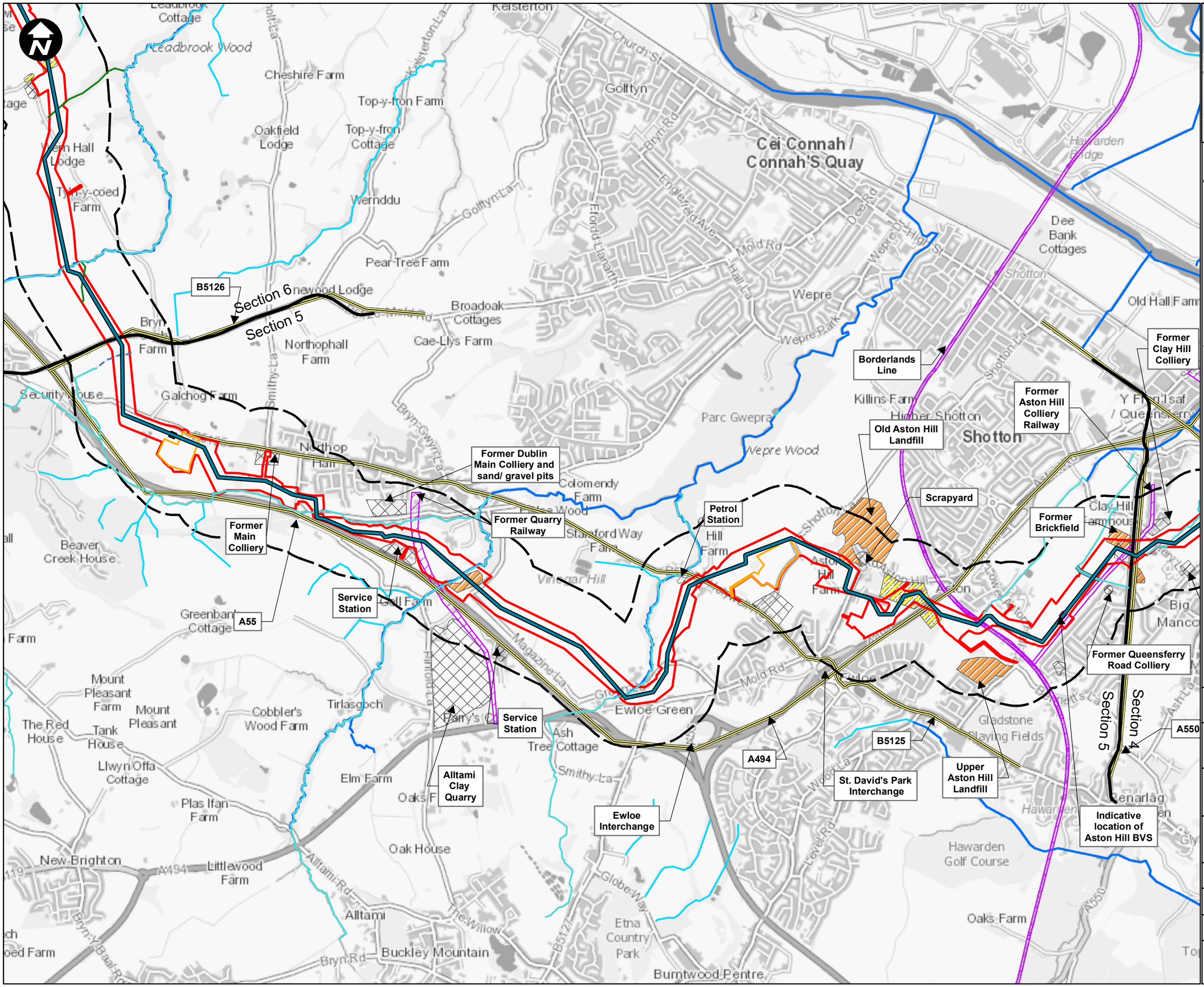
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**HyNet North West Carbon Dioxide Pipeline DCO**

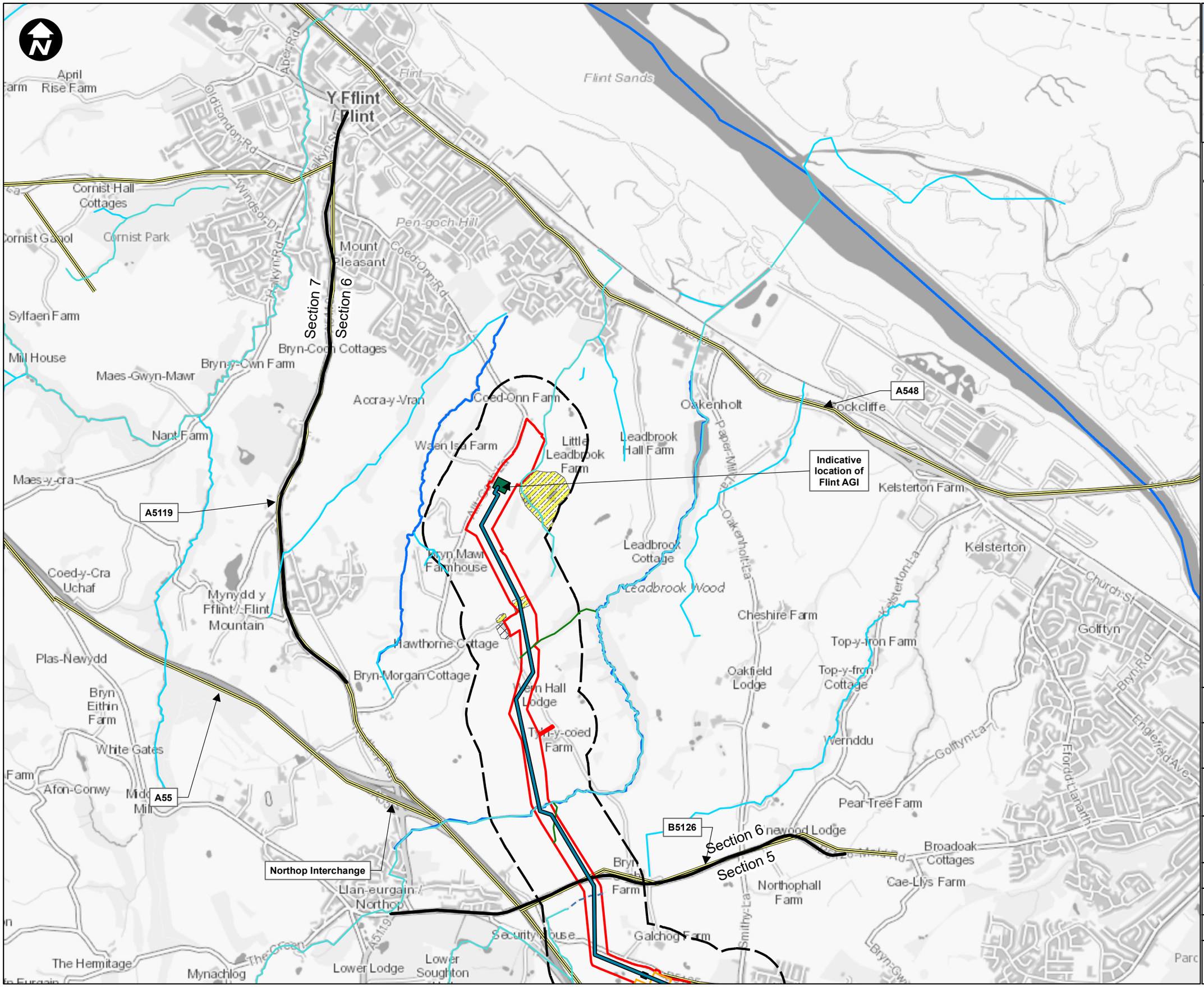
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Figure 11.1.3: Potential Contaminant Sources - Section 5 Sheet 5 of 7

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EN070007-APP-ES-11.1.3-Sheet 5




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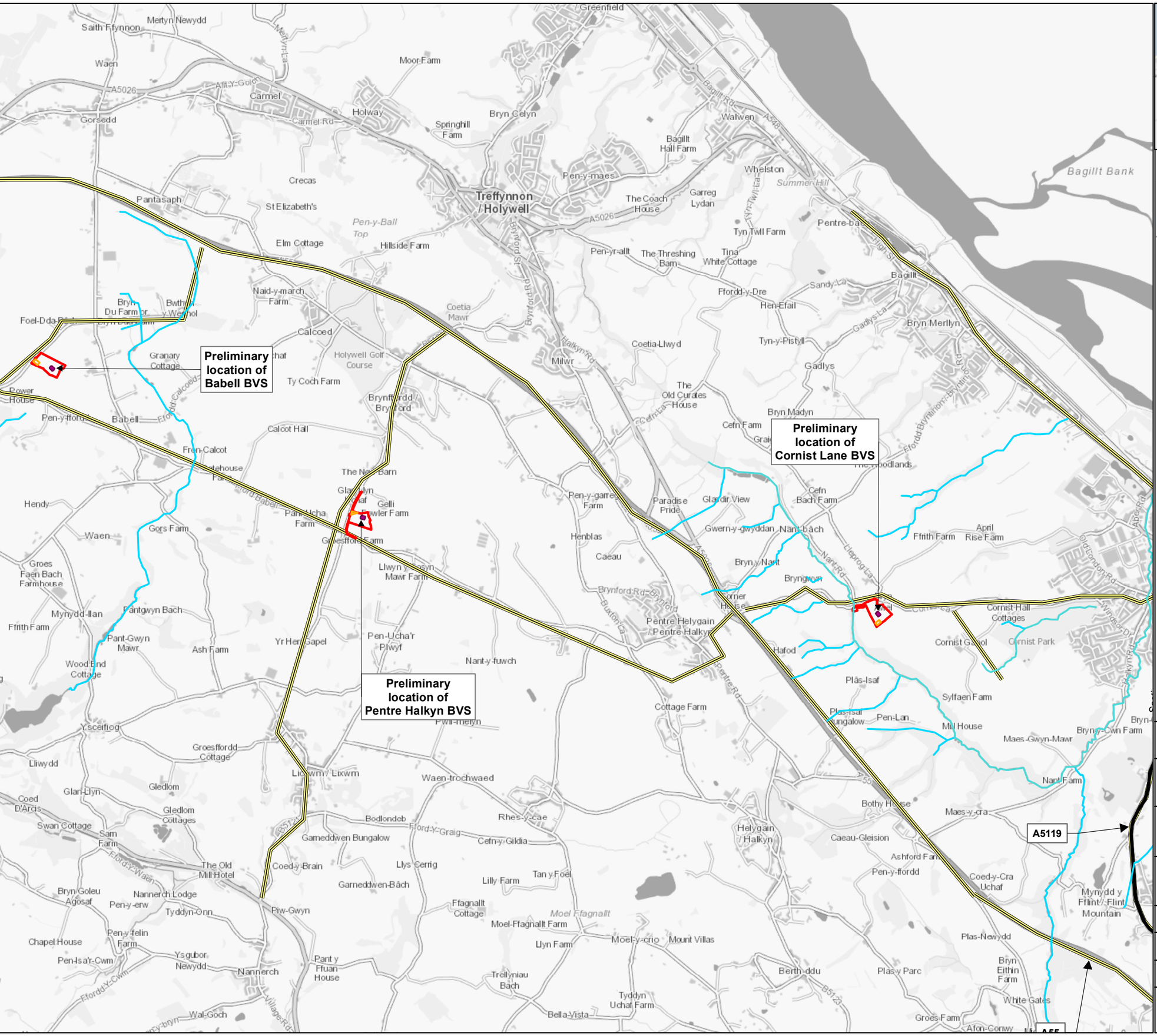
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Figure 11.1.3: Potential Contaminant Sources - Section 6 Sheet 6 of 7

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EN070007-APP-ES-11.1.3-Sheet 6




**Key:**

- Newbuild Infrastructure Boundary
- Block Valve Station (BVS)
- Main roads / Motorways
- Temporary construction compounds
- Section Dividing Line
- Ordinary Watercourse
- Ordinary Watercourses - Others

0 0.25 0.5 0.75 1 Kilometres

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HyNet North West

PROJECT TITLE

**HyNet North West Carbon Dioxide Pipeline DCO**

DRAWING TITLE

Figure 11.1.3: Potential Contaminant Sources - Section 7 Sheet 7 of 7

DRAWING STATUS

FOR INFORMATION

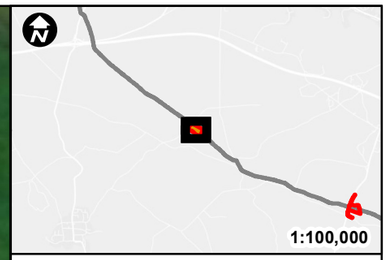
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|---|---|---|
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DRAWING NUMBER

EN070007-APP-ES-11.1.3-Sheet 7




**Key:**

- Newbuild Infrastructure Boundary
- Proposed Development Layout
- Existing Flint Connection to PoA Terminal Pipeline

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PROJECT TITLE

**HyNet Carbon Dioxide Pipeline DCO**

DRAWING TITLE

Figure 11.1.4
Block Valve Station Site Layout Plans
Sheet 1 of 3

DRAWING STATUS

FOR INFORMATION

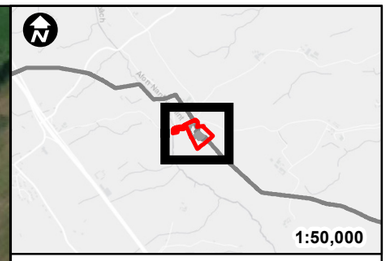
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70070865-APP-ES-11.1.4-Sheet 1




**Key:**

- Newbuild Infrastructure Boundary
- Proposed Development Layout
- Existing Flint Connection to PoA Terminal Pipeline

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HyNet North West

PROJECT TITLE

**HyNet Carbon Dioxide Pipeline DCO**

DRAWING TITLE

Figure 11.1.4
Block Valve Station Site Layout Plans
Sheet 2 of 3

DRAWING STATUS

FOR INFORMATION

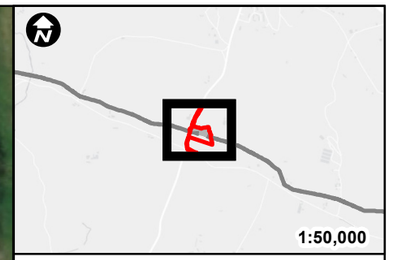
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| SCALE @ A3 SIZE | DATE | REVISION |
|---|---|---|
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DRAWING NUMBER

70070865-APP-ES-11.1.4-Sheet 2




**Key:**

- Newbuild Infrastructure Boundary
- Proposed Development Layout
- Existing Flint Connection to PoA Terminal Pipeline

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HyNet North West

PROJECT TITLE

**HyNet Carbon Dioxide Pipeline DCO**

DRAWING TITLE

Figure 11.1.4
Block Valve Station Site Layout Plans
Sheet 3 of 3

DRAWING STATUS

FOR INFORMATION

| DRAWN | CHECKED | APPROVED | AUTHORISED |
|---|---|---|---|
| NM | NC | NM | SF |

| SCALE @ A3 SIZE | DATE | REVISION |
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DRAWING NUMBER

70070865-APP-ES-11.1.4-Sheet 3

# Annex B

## GROUNDSURE REPORT

It should be noted that this annex was produced at a point in time during the development of the Basic Design of the DCO Proposed Development. Therefore, the design information presented herein may be different to the final Basic Design which is described in **Chapter 3 – Description of the DCO Proposed Development (Volume II).** However, this annex remains applicable to informing the Environmental Impact Assessment and any associated limitation or assumptions are discussed in the respective Environmental Statement Chapter and Appendix.

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

# DCO Pipeline, Southern Route

## Order Details

**Date:** 30/07/2021

**Your ref:** DCO Pipeline, Southern Route

**Our Ref:** GSIP-2021-10877-7381_A

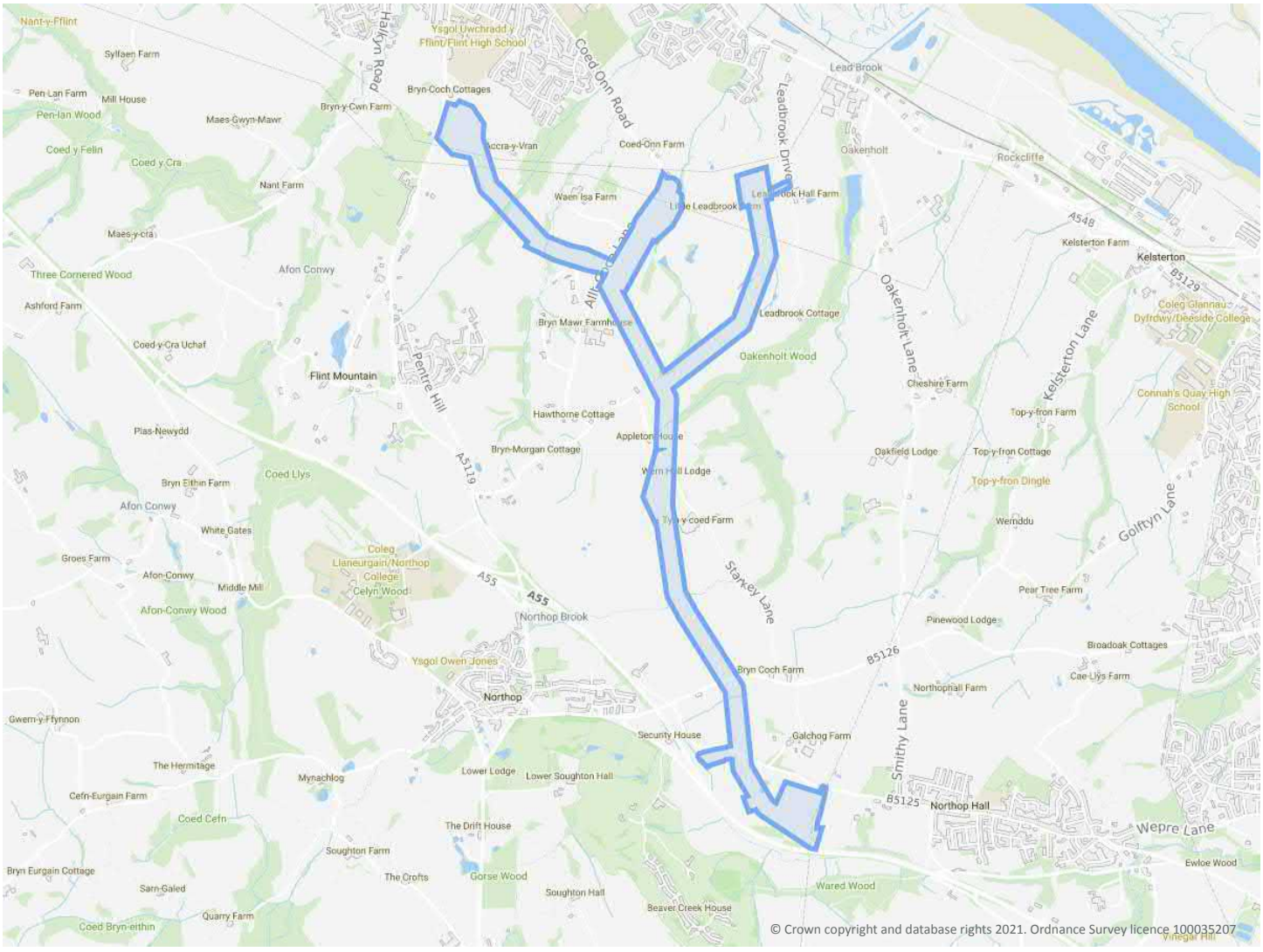
**Client:** WSP UK LIMITED

## Site Details

**Location:** 325389 369790

**Area:** 78.64 ha

**Authority:** Sir y Fflint - Flintshire County Council





**Summary of findings** p. 2

**OS MasterMap site plan** N/A: >10ha

**Aerial image** p. 8



Contact us with any questions at:

[redacted]

08444 159 000

# Summary of findings

| Page | Section | Past land use | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| 13 | 1.1 | Historical industrial land uses | 10 | 9 | 68 | 83 | - |
| 20 | 1.2 | Historical tanks | 1 | 2 | 3 | 9 | - |
| 21 | 1.3 | Historical energy features | 0 | 0 | 0 | 8 | - |
| 21 | 1.4 | Historical petrol stations | 0 | 0 | 1 | 0 | - |
| 22 | 1.5 | Historical garages | 0 | 0 | 2 | 0 | - |
| 22 | 1.6 | Historical military land | 0 | 0 | 0 | 0 | - |
| Page | Section | Past land use - un-grouped | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 23 | 2.1 | Historical industrial land uses | 12 | 11 | 89 | 106 | - |
| 31 | 2.2 | Historical tanks | 1 | 3 | 3 | 11 | - |
| 32 | 2.3 | Historical energy features | 0 | 0 | 0 | 18 | - |
| 33 | 2.4 | Historical petrol stations | 0 | 0 | 2 | 0 | - |
| 34 | 2.5 | Historical garages | 0 | 0 | 3 | 0 | - |
| Page | Section | Waste and landfill | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 35 | 3.1 | Active or recent landfill | 0 | 0 | 0 | 0 | - |
| 35 | 3.2 | Historical landfill (BGS records) | 0 | 0 | 0 | 0 | - |
| 36 | 3.3 | Historical landfill (LA/mapping records) | 0 | 0 | 0 | 0 | - |
| 36 | 3.4 | Historical landfill (EA/NRW records) | 0 | 0 | 0 | 3 | - |
| 37 | 3.5 | Historical waste sites | 0 | 0 | 0 | 0 | - |
| 37 | 3.6 | Licensed waste sites | 0 | 0 | 0 | 0 | - |
| 37 | 3.7 | Waste exemptions | 0 | 4 | 21 | 36 | - |
| Page | Section | Current industrial land use | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 43 | 4.1 | Recent industrial land uses | 2 | 3 | 20 | - | - |
| 45 | 4.2 | Current or recent petrol stations | 0 | 0 | 1 | 0 | - |
| 45 | 4.3 | Electricity cables | 0 | 0 | 0 | 0 | - |
| 45 | 4.4 | Gas pipelines | 0 | 0 | 0 | 0 | - |
| 46 | 4.5 | Sites determined as Contaminated Land | 0 | 0 | 0 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 46 | 4.6 | Control of Major Accident Hazards (COMAH) | 0 | 0 | 0 | 0 | - |
| 46 | 4.7 | Regulated explosive sites | 0 | 0 | 0 | 0 | - |
| 46 | 4.8 | Hazardous substance storage/usage | 0 | 0 | 0 | 0 | - |
| 46 | 4.9 | Historical licensed industrial activities (IPC) | 0 | 0 | 0 | 0 | - |
| 47 | 4.10 | Licensed industrial activities (Part A(1)) | 0 | 0 | 0 | 0 | - |
| **47** | **4.11** | **Licensed pollutant release (Part A(2)/B)** | 0 | 0 | 1 | 0 | - |
| 47 | 4.12 | Radioactive Substance Authorisations | 0 | 0 | 0 | 0 | - |
| **47** | **4.13** | **Licensed Discharges to controlled waters** | 0 | 1 | 11 | 10 | - |
| 51 | 4.14 | Pollutant release to surface waters (Red List) | 0 | 0 | 0 | 0 | - |
| 51 | 4.15 | Pollutant release to public sewer | 0 | 0 | 0 | 0 | - |
| 51 | 4.16 | List 1 Dangerous Substances | 0 | 0 | 0 | 0 | - |
| 51 | 4.17 | List 2 Dangerous Substances | 0 | 0 | 0 | 0 | - |
| **51** | **4.18** | **Pollution Incidents (EA/NRW)** | 0 | 0 | 3 | 15 | - |
| 54 | 4.19 | Pollution inventory substances | 0 | 0 | 0 | 0 | - |
| 54 | 4.20 | Pollution inventory waste transfers | 0 | 0 | 0 | 0 | - |
| 54 | 4.21 | Pollution inventory radioactive waste | 0 | 0 | 0 | 0 | - |

| Page | Section | Hydrogeology | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| **55** | **5.1** | **Superficial aquifer** | Identified (within 500m) | | | | |
| **59** | **5.2** | **Bedrock aquifer** | Identified (within 500m) | | | | |
| **61** | **5.3** | **Groundwater vulnerability** | Identified (within 50m) | | | | |
| 65 | 5.4 | Groundwater vulnerability- soluble rock risk | None (within 0m) | | | | |
| **65** | **5.5** | **Groundwater vulnerability- local information** | Identified (within 0m) | | | | |
| **66** | **5.6** | **Groundwater abstractions** | 0 | 0 | 0 | 0 | 4 |
| **67** | **5.7** | **Surface water abstractions** | 0 | 0 | 0 | 3 | 6 |
| 69 | 5.8 | Potable abstractions | 0 | 0 | 0 | 0 | 0 |
| 70 | 5.9 | Source Protection Zones | 0 | 0 | 0 | 0 | - |
| 70 | 5.10 | Source Protection Zones (confined aquifer) | 0 | 0 | 0 | 0 | - |

| Page | Section | Hydrology | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| **71** | **6.1** | **Water Network (OS MasterMap)** | 9 | 12 | 44 | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 77 | 6.2 | Surface water features | 1 | 11 | 48 | - | - |
| 77 | 6.3 | WFD Surface water body catchments | 2 | - | - | - | - |
| 77 | 6.4 | WFD Surface water bodies | 0 | 1 | 0 | - | - |
| 78 | 6.5 | WFD Groundwater bodies | 1 | - | - | - | - |
| Page | Section | River and coastal flooding | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 79 | 7.1 | Risk of Flooding from Rivers and Sea (RoFRaS) | High (within 50m) | | | | |
| 80 | 7.2 | Historical Flood Events | 0 | 0 | 0 | - | - |
| 80 | 7.3 | Flood Defences | 0 | 0 | 0 | - | - |
| 80 | 7.4 | Areas Benefiting from Flood Defences | 0 | 0 | 0 | - | - |
| 80 | 7.5 | Flood Storage Areas | 0 | 0 | 0 | - | - |
| 81 | 7.6 | Flood Zone 2 | Identified (within 50m) | | | | |
| 82 | 7.7 | Flood Zone 3 | Identified (within 50m) | | | | |
| Page | Section | Surface water flooding | | | | | |
| 83 | 8.1 | Surface water flooding | 1 in 30 year, Greater than 1.0m (within 50m) | | | | |
| Page | Section | Groundwater flooding | | | | | |
| 85 | 9.1 | Groundwater flooding | Moderate-High (within 50m) | | | | |
| Page | Section | Environmental designations | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 86 | 10.1 | Sites of Special Scientific Interest (SSSI) | 1 | 0 | 0 | 0 | 10 |
| 87 | 10.2 | Conserved wetland sites (Ramsar sites) | 0 | 0 | 0 | 0 | 3 |
| 90 | 10.3 | Special Areas of Conservation (SAC) | 0 | 0 | 0 | 0 | 6 |
| 92 | 10.4 | Special Protection Areas (SPA) | 0 | 0 | 0 | 0 | 2 |
| 93 | 10.5 | National Nature Reserves (NNR) | 0 | 0 | 0 | 0 | 0 |
| 93 | 10.6 | Local Nature Reserves (LNR) | 0 | 0 | 0 | 0 | 0 |
| 93 | 10.7 | Designated Ancient Woodland | 2 | 1 | 10 | 10 | 99 |
| 98 | 10.8 | Biosphere Reserves | 0 | 0 | 0 | 0 | 0 |
| 98 | 10.9 | Forest Parks | 0 | 0 | 0 | 0 | 0 |
| 98 | 10.10 | Marine Conservation Zones | 0 | 0 | 0 | 0 | 0 |
| 99 | 10.11 | Green Belt | 0 | 0 | 0 | 0 | 0 |
| 99 | 10.12 | Proposed Ramsar sites | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 99 | 10.13 | Possible Special Areas of Conservation (pSAC) | 0 | 0 | 0 | 0 | 0 |
| 99 | 10.14 | Potential Special Protection Areas (pSPA) | 0 | 0 | 0 | 0 | 0 |
| 99 | 10.15 | Nitrate Sensitive Areas | 0 | 0 | 0 | 0 | 0 |
| 100 | 10.16 | Nitrate Vulnerable Zones | 0 | 0 | 0 | 0 | 0 |
| **101** | **10.17** | **SSSI Impact Risk Zones** | 2 | - | - | - | - |
| 102 | 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 |
| 103 | 11.1 | World Heritage Sites | 0 | 0 | 0 | - | - |
| 104 | 11.2 | Area of Outstanding Natural Beauty | 0 | 0 | 0 | - | - |
| 104 | 11.3 | National Parks | 0 | 0 | 0 | - | - |
| **104** | **11.4** | **Listed Buildings** | 0 | 0 | 2 | - | - |
| 105 | 11.5 | Conservation Areas | 0 | 0 | 0 | - | - |
| **105** | **11.6** | **Scheduled Ancient Monuments** | 0 | 0 | 1 | - | - |
| **105** | **11.7** | **Registered Parks and Gardens** | 0 | 0 | 1 | - | - |
| Page | Section | Agricultural designations | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| **106** | **12.1** | **Agricultural Land Classification** | Grade 4 (within 250m) | | | | |
| 108 | 12.2 | Open Access Land | 0 | 0 | 0 | - | - |
| 108 | 12.3 | Tree Felling Licences | 0 | 0 | 0 | - | - |
| 108 | 12.4 | Environmental Stewardship Schemes | 0 | 0 | 0 | - | - |
| 109 | 12.5 | Countryside Stewardship Schemes | 0 | 0 | 0 | - | - |
| Page | Section | Habitat designations | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 110 | 13.1 | Priority Habitat Inventory | 0 | 0 | 0 | - | - |
| 110 | 13.2 | Habitat Networks | 0 | 0 | 0 | - | - |
| 110 | 13.3 | Open Mosaic Habitat | 0 | 0 | 0 | - | - |
| 110 | 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 |
| **111** | **14.1** | **10k Availability** | Identified (within 500m) | | | | |
| 112 | 14.2 | Artificial and made ground (10k) | 0 | 0 | 0 | 0 | - |
| 113 | 14.3 | Superficial geology (10k) | 0 | 0 | 0 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 113 | 14.4 | Landslip (10k) | 0 | 0 | 0 | 0 | - |
| 114 | 14.5 | Bedrock geology (10k) | 0 | 0 | 0 | 0 | - |
| 114 | 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 |
| 115 | 15.1 | 50k Availability | Identified (within 500m) | | | | |
| 116 | 15.2 | Artificial and made ground (50k) | 2 | 0 | 2 | 2 | - |
| 117 | 15.3 | Artificial ground permeability (50k) | 2 | 0 | - | - | - |
| 118 | 15.4 | Superficial geology (50k) | 7 | 7 | 9 | 12 | - |
| 120 | 15.5 | Superficial permeability (50k) | Identified (within 50m) | | | | |
| 121 | 15.6 | Landslip (50k) | 2 | 0 | 1 | 2 | - |
| 121 | 15.7 | Landslip permeability (50k) | Identified (within 50m) | | | | |
| 123 | 15.8 | Bedrock geology (50k) | 16 | 0 | 15 | 11 | - |
| 126 | 15.9 | Bedrock permeability (50k) | Identified (within 50m) | | | | |
| 127 | 15.10 | Bedrock faults and other linear features (50k) | 23 | 3 | 18 | 18 | - |
| Page | Section | Boreholes | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 130 | 16.1 | BGS Boreholes | 3 | 4 | 60 | - | - |
| Page | Section | Natural ground subsidence | | | | | |
| 134 | 17.1 | Shrink swell clays | Very low (within 50m) | | | | |
| 136 | 17.2 | Running sands | Low (within 50m) | | | | |
| 138 | 17.3 | Compressible deposits | Moderate (within 50m) | | | | |
| 140 | 17.4 | Collapsible deposits | Very low (within 50m) | | | | |
| 142 | 17.5 | Landslides | Moderate (within 50m) | | | | |
| 144 | 17.6 | Ground dissolution of soluble rocks | Negligible (within 50m) | | | | |
| Page | Section | Mining, ground workings and natural cavities | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 146 | 18.1 | Natural cavities | 0 | 0 | 0 | 3 | - |
| 147 | 18.2 | BritPits | 1 | 0 | 3 | 6 | - |
| 149 | 18.3 | Surface ground workings | 13 | 8 | 110 | - | - |
| 154 | 18.4 | Underground workings | 0 | 2 | 23 | 10 | 16 |
| 156 | 18.5 | Historical Mineral Planning Areas | 1 | 0 | 0 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **157** | **18.6** | **Non-coal mining** | 5 | 1 | 4 | 4 | 7 |
| 159 | 18.7 | Mining cavities | 0 | 0 | 0 | 0 | 0 |
| **159** | **18.8** | **JPB mining areas** | Identified (within 0m) | | | | |
| **160** | **18.9** | **Coal mining** | Identified (within 0m) | | | | |
| 160 | 18.10 | Brine areas | None (within 0m) | | | | |
| 160 | 18.11 | Gypsum areas | None (within 0m) | | | | |
| 161 | 18.12 | Tin mining | None (within 0m) | | | | |
| 161 | 18.13 | Clay mining | None (within 0m) | | | | |

| Page | Section | Radon | |
|---|---|---|---|
| **162** | **19.1** | **Radon** | Greater than 30% (within 0m) |

| Page | Section | Soil chemistry | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| **164** | **20.1** | **BGS Estimated Background Soil Chemistry** | 71 | 28 | - | - | - |
| 170 | 20.2 | BGS Estimated Urban Soil Chemistry | 0 | 0 | - | - | - |
| 170 | 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 |
|---|---|---|---|---|---|---|---|
| 171 | 21.1 | Underground railways (London) | 0 | 0 | 0 | - | - |
| 171 | 21.2 | Underground railways (Non-London) | 0 | 0 | 0 | - | - |
| 171 | 21.3 | Railway tunnels | 0 | 0 | 0 | - | - |
| 171 | 21.4 | Historical railway and tunnel features | 0 | 0 | 0 | - | - |
| 171 | 21.5 | Royal Mail tunnels | 0 | 0 | 0 | - | - |
| 172 | 21.6 | Historical railways | 0 | 0 | 0 | - | - |
| 172 | 21.7 | Railways | 0 | 0 | 0 | - | - |
| 172 | 21.8 | Crossrail 1 | 0 | 0 | 0 | 0 | - |
| 172 | 21.9 | Crossrail 2 | 0 | 0 | 0 | 0 | - |
| 172 | 21.10 | HS2 | 0 | 0 | 0 | 0 | - |

## Recent aerial photograph




Capture Date: 10/04/2020

Site Area: 78.64ha

# Recent site history - 2017 aerial photograph




Capture Date: 07/05/2017

Site Area: 78.64ha

# Recent site history - 2013 aerial photograph




Capture Date: 04/06/2013

Site Area: 78.64ha

# Recent site history - 2009 aerial photograph




Capture Date: 20/04/2009

Site Area: 78.64ha

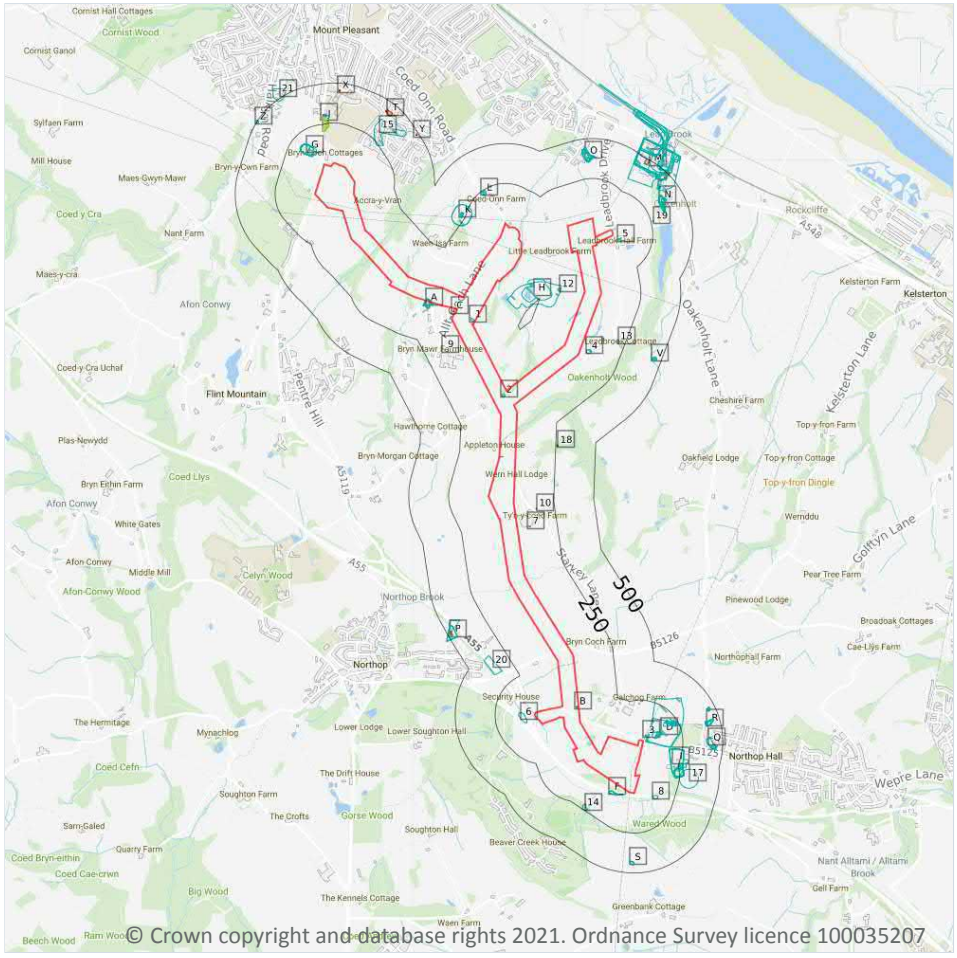
# Recent site history - 2001 aerial photograph




Capture Date: 28/07/2001

Site Area: 78.64ha

# 1 Past land use




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## 1.1 Historical industrial land uses

| Records within 500m | 170 |
|---|---|

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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| **1** | **On site** | **Unspecified Pit** | **1871** | **839243** |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| **2** | **On site** | **Sand Pit** | **1914 - 1948** | **870545** |
| **A** | **On site** | **Sand Pit** | **1871** | **797393** |
| **A** | **On site** | **Unspecified Ground Workings** | **1909** | **799545** |
| **A** | **On site** | **Unspecified Pit** | **1959** | **867140** |
| **A** | **On site** | **Unspecified Pit** | **1948** | **874626** |
| **A** | **On site** | **Unspecified Pit** | **1938** | **895332** |
| **B** | **On site** | **Unspecified Tank** | **1948** | **848239** |
| **B** | **On site** | **Unspecified Tank** | **1914** | **850694** |
| **B** | **On site** | **Unspecified Tank** | **1960** | **862792** |
| A | 6m S | Old Lime Kiln | 1909 - 1948 | 903166 |
| A | 6m S | Unspecified Tank | 1871 | 824072 |
| A | 10m S | Old Lime Kiln | 1959 | 950102 |
| D | 15m E | Colliery | 1869 | 798233 |
| E | 21m E | Disused Colliery | 1898 | 822314 |
| 3 | 32m NE | Lime Kiln | 1869 | 842743 |
| F | 36m SW | Unspecified Pit | 1960 | 839175 |
| 4 | 41m E | Sand Pit | 1871 | 797390 |
| 5 | 44m SE | Unspecified Tank | 1869 | 824073 |
| F | 51m SW | Unspecified Ground Workings | 1970 | 799544 |
| 6 | 59m SW | Unspecified Heap | 1991 | 803587 |
| D | 68m NE | Unspecified Heap | 1869 | 914965 |
| G | 87m NW | Unspecified Heap | 1969 - 1992 | 933609 |
| D | 87m E | Unspecified Shaft | 1869 | 813707 |
| D | 88m NE | Unspecified Heap | 1910 - 1938 | 887399 |
| D | 89m E | Unspecified Heap | 1948 | 900245 |
| D | 90m E | Unspecified Pit | 1960 | 839176 |
| G | 91m NW | Unspecified Heap | 1909 | 900482 |
| G | 93m NW | Unspecified Heap | 1959 | 950751 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| G | 93m NW | Unspecified Heap | 1938 - 1948 | 967921 |
| D | 93m E | Unspecified Heap | 1970 | 923120 |
| D | 95m E | Old Coal Shaft | 1938 | 926927 |
| D | 96m E | Unspecified Old Shaft | 1970 | 903416 |
| D | 96m E | Unspecified Old Shaft | 1960 | 925103 |
| D | 96m E | Old Coal Shaft | 1948 | 988776 |
| D | 98m E | Old Coal Shaft | 1910 | 849783 |
| G | 106m NW | Unspecified Heap | 1871 | 932485 |
| H | 110m SE | Unspecified Ground Workings | 1969 - 1981 | 989010 |
| 8 | 115m E | Unspecified Heap | 1970 | 803588 |
| H | 124m SE | Old Sand Pit | 1953 | 834207 |
| G | 136m NW | Unspecified Heap | 1898 | 988755 |
| 11 | 142m SE | Sand Pit | 1871 | 797392 |
| 12 | 146m W | Sand Pit | 1871 | 797391 |
| E | 161m NE | Unspecified Heap | 1869 | 937178 |
| I | 171m E | Colliery | 1948 | 904263 |
| I | 171m E | Colliery | 1898 - 1910 | 927848 |
| I | 173m E | Colliery | 1938 | 908735 |
| E | 182m NE | Unspecified Old Shafts | 1898 | 793174 |
| E | 183m NE | Unspecified Heap | 1938 | 904714 |
| E | 187m NE | Unspecified Shafts | 1869 | 809173 |
| E | 190m NE | Old Coal Shafts | 1938 - 1948 | 865915 |
| E | 191m NE | Unspecified Old Shafts | 1960 | 868847 |
| E | 191m NE | Unspecified Old Shafts | 1970 | 891045 |
| E | 191m NE | Old Coal Shafts | 1910 | 900028 |
| E | 191m NE | Unspecified Disused Shafts | 1981 - 1987 | 966208 |
| E | 195m NE | Unspecified Old Shafts | 1898 | 793173 |
| E | 195m NE | Unspecified Disused Shafts | 1991 | 854228 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| 13 | 200m E | Old Lime Kiln | 1869 | 821885 |
| E | 201m NE | Unspecified Shafts | 1869 | 809172 |
| E | 203m NE | Unspecified Heap | 1910 - 1948 | 850434 |
| J | 204m N | Filling Station | 1981 | 810493 |
| J | 206m N | Garage | 1992 | 844096 |
| E | 208m NE | Unspecified Heap | 1970 - 1987 | 905587 |
| E | 208m NE | Unspecified Heap | 1898 | 927463 |
| E | 209m NE | Unspecified Heap | 1991 | 948322 |
| E | 209m NE | Old Coal Shafts | 1938 - 1948 | 848084 |
| E | 210m NE | Unspecified Old Shafts | 1970 | 920069 |
| E | 211m NE | Old Coal Shafts | 1910 | 921886 |
| E | 211m NE | Unspecified Disused Shafts | 1981 - 1987 | 866230 |
| E | 211m NE | Unspecified Old Shafts | 1960 | 918138 |
| E | 213m NE | Unspecified Heap | 1960 | 859195 |
| K | 214m W | Filter Bed | 1953 | 845084 |
| L | 214m NW | Unspecified Pit | 1969 - 1981 | 952266 |
| 14 | 214m SW | Unspecified Pit | 1871 | 839174 |
| E | 215m NE | Unspecified Disused Shafts | 1991 | 835401 |
| I | 216m E | Unspecified Disused Mine | 1960 | 810915 |
| I | 216m E | Unspecified Ground Workings | 1970 | 967188 |
| I | 216m E | Unspecified Ground Workings | 1910 | 917742 |
| K | 217m W | Filter Bed | 1948 | 980255 |
| I | 217m E | Unspecified Heap | 1938 | 918071 |
| L | 218m NW | Unspecified Heap | 1871 | 803518 |
| E | 219m NE | Chimney | 1869 | 835665 |
| I | 219m E | Unspecified Ground Workings | 1948 | 893610 |
| I | 238m E | Unspecified Heap | 1898 | 856493 |
| 15 | 240m NE | Unspecified Depot | 1969 | 818237 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| 16 | 245m N | Lime Kiln | 1871 | 842742 |
| I | 245m E | Unspecified Tank | 1987 | 824094 |
| I | 250m E | Unspecified Disused Shaft | 1970 | 812921 |
| 17 | 251m E | Magazine | 1948 | 827271 |
| 19 | 260m E | Unspecified Tank | 1869 | 824074 |
| K | 266m W | Unspecified Works | 1969 - 1981 | 853089 |
| K | 267m W | Filter Bed | 1938 | 953177 |
| K | 268m W | Filter Bed | 1909 | 869939 |
| 20 | 331m SW | Cuttings | 1991 | 795491 |
| M | 335m NE | Unspecified Mill | 1898 | 851905 |
| N | 337m NE | Unspecified Heap | 1913 | 867243 |
| N | 342m NE | Unspecified Heap | 1953 | 976289 |
| N | 342m NE | Unspecified Ground Workings | 1938 | 901072 |
| N | 343m NE | Unspecified Heap | 1909 | 881466 |
| N | 345m E | Unspecified Heap | 1898 | 845761 |
| N | 345m E | Unspecified Heap | 1938 | 918690 |
| N | 348m NE | Unspecified Heap | 1898 | 873881 |
| O | 351m N | Unspecified Old Quarry | 1909 - 1938 | 946359 |
| O | 353m N | Unspecified Old Quarry | 1898 | 982936 |
| O | 353m N | Unspecified Old Quarry | 1938 | 915595 |
| O | 356m N | Unspecified Quarry | 1871 | 816584 |
| O | 356m N | Unspecified Old Quarry | 1953 | 870905 |
| O | 357m N | Unspecified Old Quarry | 1898 | 978644 |
| O | 357m N | Unspecified Old Quarry | 1948 | 991130 |
| M | 385m NE | Paper Mill | 1938 - 1953 | 977757 |
| P | 390m SW | Unspecified Works | 1971 | 830103 |
| Q | 397m E | Unspecified Heap | 1869 | 974348 |
| R | 407m E | Unspecified Heap | 1938 | 911100 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| R | 408m E | Unspecified Heap | 1910 | 983167 |
| R | 408m E | Unspecified Heap | 1960 | 908010 |
| R | 408m E | Unspecified Heap | 1970 - 1987 | 950963 |
| R | 411m E | Old Coal Shaft | 1948 | 867599 |
| R | 411m E | Unspecified Old Shaft | 1898 | 931688 |
| R | 413m E | Old Coal Shaft | 1938 | 951225 |
| R | 413m E | Unspecified Old Shaft | 1960 | 966997 |
| R | 413m E | Unspecified Old Shaft | 1970 | 986341 |
| R | 415m E | Old Coal Shaft | 1910 | 882454 |
| R | 415m E | Unspecified Heap | 1948 | 897135 |
| R | 415m E | Unspecified Heap | 1898 | 941796 |
| R | 416m E | Unspecified Disused Shaft | 1981 - 1987 | 982781 |
| Q | 418m E | Unspecified Old Shaft | 1898 | 927894 |
| Q | 418m E | Old Coal Shaft | 1948 | 943523 |
| Q | 421m E | Unspecified Old Shaft | 1960 | 954704 |
| Q | 423m E | Old Coal Shaft | 1938 | 864298 |
| Q | 423m E | Old Coal Shaft | 1910 | 962976 |
| M | 426m NE | Unspecified Mill | 1981 | 955439 |
| S | 426m S | Unspecified Heap | 1910 | 965565 |
| Q | 427m E | Unspecified Heap | 1898 | 923815 |
| M | 427m NE | Railway Sidings | 1898 | 849862 |
| S | 427m S | Unspecified Heap | 1938 - 1948 | 940217 |
| M | 427m NE | Unspecified Mill | 1913 - 1938 | 919608 |
| M | 429m NE | Unspecified Mill | 1969 | 864632 |
| M | 429m NE | Railway Sidings | 1953 - 1969 | 915578 |
| S | 429m S | Unspecified Heap | 1960 | 933546 |
| Q | 429m E | Unspecified Heap | 1938 | 913282 |
| M | 429m NE | Unspecified Old Mill | 1909 | 809862 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| U | 431m NE | Gasometer | 1913 | 874828 |
| Q | 431m E | Unspecified Heap | 1910 | 937871 |
| M | 432m NE | Railway Sidings | 1938 | 965788 |
| M | 433m NE | Railway Sidings | 1913 | 984779 |
| U | 433m NE | Gasometer | 1909 | 946750 |
| U | 434m NE | Gasometer | 1938 | 901383 |
| M | 434m NE | Railway Sidings | 1938 | 906171 |
| U | 435m NE | Unspecified Tank | 1898 | 845028 |
| U | 435m NE | Unspecified Tank | 1938 | 867996 |
| M | 436m NE | Railway Sidings | 1909 | 870683 |
| V | 445m E | Sand Pit | 1869 | 797388 |
| P | 447m SW | Sewage Works | 1989 | 811815 |
| W | 447m NE | Unspecified Heap | 1960 | 958716 |
| P | 448m SW | Unspecified Tanks | 1989 | 814986 |
| W | 448m NE | Unspecified Heap | 1938 | 904274 |
| W | 448m NE | Unspecified Heap | 1910 | 883085 |
| W | 449m NE | Unspecified Heap | 1948 | 957881 |
| V | 449m E | Unspecified Old Quarry | 1938 - 1953 | 850833 |
| V | 449m E | Unspecified Old Quarry | 1913 | 937408 |
| M | 463m NE | Flour Mill | 1869 | 822620 |
| P | 470m SW | Unspecified Tank | 1971 | 824071 |
| P | 471m SW | Sewage Filterbed | 1898 | 830965 |
| P | 471m SW | Sewage Tank | 1948 | 850232 |
| P | 473m SW | Sewage Tank | 1914 | 891472 |
| 21 | 483m NW | Unspecified Depot | 1981 - 1992 | 890123 |
| Z | 487m NW | Sand Pits | 1948 | 872607 |
| Z | 489m NW | Sand Pits | 1909 - 1938 | 958100 |
| Z | 495m NW | Disused Sand Pits | 1959 | 810759 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| 22 | 498m NW | Lime Kiln | 1871 | 842723 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.2 Historical tanks

| **Records within 500m** | **15** |
|---|---|

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| **B** | **On site** | **Unspecified Tank** | **1912** | **111818** |
| C | 10m NW | Unspecified Tank | 1965 | 123420 |
| C | 11m NW | Unspecified Tank | 1991 | 147036 |
| 7 | 75m E | Unspecified Tank | 1965 | 111812 |
| 9 | 125m SW | Unspecified Tank | 1965 | 111897 |
| 10 | 133m E | Unspecified Tank | 1870 | 111813 |
| 18 | 255m E | Unspecified Tank | 1899 | 111796 |
| U | 432m NE | Gasometer | 1899 - 1912 | 123125 |
| U | 465m NE | Unspecified Tank | 1986 | 111916 |
| U | 467m NE | Tanks | 1993 | 104551 |
| P | 470m SW | Unspecified Tank | 1965 - 1992 | 135731 |
| U | 470m NE | Unspecified Tank | 1986 | 111913 |
| P | 474m SW | Sewage Tank | 1912 | 108765 |
| U | 490m NE | Tanks | 1986 | 104552 |
| U | 496m NE | Tanks | 1993 | 104553 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.3 Historical energy features

| Records within 500m | 8 |
|---|---|

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| T | 427m NE | Electricity Substation | 1978 | 60823 |
| T | 431m NE | Electricity Substation | 1988 - 1996 | 74299 |
| U | 432m NE | Gasometer | 1899 - 1912 | 80021 |
| X | 449m N | Electricity Substation | 1974 - 1997 | 65722 |
| X | 449m N | Electricity Substation | 1989 | 69546 |
| M | 464m NE | Electricity Substation | 1986 - 1993 | 75652 |
| Y | 483m NE | Electricity Substation | 1988 | 66675 |
| Y | 485m NE | Electricity Substation | 1978 | 78937 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.4 Historical petrol stations

| Records within 500m | 1 |
|---|---|

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| J | 204m N | Filling Station | 1978 - 1988 | 1655 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.5 Historical garages

| Records within 500m | 2 |
|---|---|

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| J | 205m N | Garage | 1991 | 21122 |
| J | 206m N | Garage | 1994 - 1996 | 25436 |

*This data is sourced from Ordnance Survey / Groundsure.*

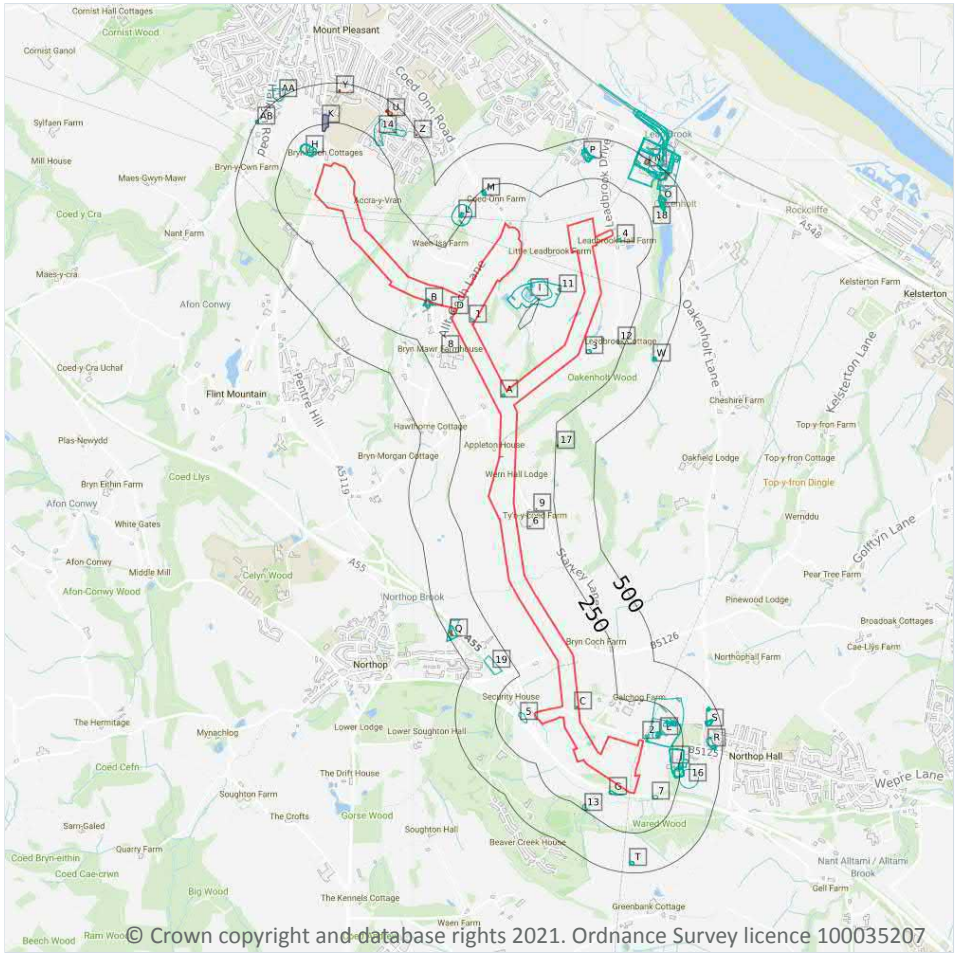
## 1.6 Historical military land

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

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.

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

# 2 Past land use - un-grouped




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## 2.1 Historical industrial land uses

| Records within 500m | 218 |
|---|---|

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 23**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| **1** | **On site** | **Unspecified Pit** | **1871** | **839243** |
| **A** | **On site** | **Sand Pit** | **1948** | **870545** |
| **A** | **On site** | **Sand Pit** | **1914** | **870545** |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| **B** | **On site** | **Sand Pit** | **1871** | **797393** |
| **B** | **On site** | **Unspecified Ground Workings** | **1909** | **799545** |
| **B** | **On site** | **Unspecified Pit** | **1959** | **867140** |
| **B** | **On site** | **Unspecified Pit** | **1948** | **874626** |
| **B** | **On site** | **Unspecified Pit** | **1938** | **895332** |
| **B** | **On site** | **Unspecified Pit** | **1938** | **895332** |
| **C** | **On site** | **Unspecified Tank** | **1948** | **848239** |
| **C** | **On site** | **Unspecified Tank** | **1960** | **862792** |
| **C** | **On site** | **Unspecified Tank** | **1914** | **850694** |
| B | 6m S | Old Lime Kiln | 1909 | 903166 |
| B | 6m S | Unspecified Tank | 1871 | 824072 |
| B | 7m S | Old Lime Kiln | 1948 | 903166 |
| B | 8m S | Old Lime Kiln | 1938 | 903166 |
| B | 10m S | Old Lime Kiln | 1959 | 950102 |
| E | 15m E | Colliery | 1869 | 798233 |
| F | 21m E | Disused Colliery | 1898 | 822314 |
| 2 | 32m NE | Lime Kiln | 1869 | 842743 |
| G | 36m SW | Unspecified Pit | 1960 | 839175 |
| 3 | 41m E | Sand Pit | 1871 | 797390 |
| 4 | 44m SE | Unspecified Tank | 1869 | 824073 |
| G | 51m SW | Unspecified Ground Workings | 1970 | 799544 |
| 5 | 59m SW | Unspecified Heap | 1991 | 803587 |
| E | 68m NE | Unspecified Heap | 1869 | 914965 |
| H | 87m NW | Unspecified Heap | 1992 | 933609 |
| H | 87m NW | Unspecified Heap | 1969 | 933609 |
| H | 87m NW | Unspecified Heap | 1981 | 933609 |
| E | 87m E | Unspecified Shaft | 1869 | 813707 |
| E | 88m NE | Unspecified Heap | 1938 | 887399 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| E | 88m NE | Unspecified Heap | 1938 | 887399 |
| E | 89m E | Unspecified Heap | 1948 | 900245 |
| E | 89m E | Unspecified Heap | 1910 | 887399 |
| E | 90m E | Unspecified Pit | 1960 | 839176 |
| H | 91m NW | Unspecified Heap | 1909 | 900482 |
| H | 93m NW | Unspecified Heap | 1959 | 950751 |
| H | 93m NW | Unspecified Heap | 1938 | 967921 |
| H | 93m NW | Unspecified Heap | 1938 | 967921 |
| E | 93m E | Unspecified Heap | 1970 | 923120 |
| H | 94m NW | Unspecified Heap | 1948 | 967921 |
| E | 95m E | Old Coal Shaft | 1938 | 926927 |
| E | 96m E | Unspecified Old Shaft | 1960 | 925103 |
| E | 96m E | Unspecified Old Shaft | 1970 | 903416 |
| E | 96m E | Old Coal Shaft | 1948 | 988776 |
| E | 98m E | Old Coal Shaft | 1910 | 849783 |
| H | 106m NW | Unspecified Heap | 1871 | 932485 |
| I | 110m SE | Unspecified Ground Workings | 1981 | 989010 |
| I | 110m SE | Unspecified Ground Workings | 1969 | 989010 |
| 7 | 115m E | Unspecified Heap | 1970 | 803588 |
| I | 124m SE | Old Sand Pit | 1953 | 834207 |
| H | 136m NW | Unspecified Heap | 1898 | 988755 |
| 10 | 142m SE | Sand Pit | 1871 | 797392 |
| 11 | 146m W | Sand Pit | 1871 | 797391 |
| F | 161m NE | Unspecified Heap | 1869 | 937178 |
| J | 171m E | Colliery | 1948 | 904263 |
| J | 171m E | Colliery | 1898 | 927848 |
| J | 173m E | Colliery | 1938 | 908735 |
| J | 173m E | Colliery | 1938 | 908735 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| J | 175m E | Colliery | 1910 | 927848 |
| F | 182m NE | Unspecified Old Shafts | 1898 | 793174 |
| F | 183m NE | Unspecified Heap | 1938 | 904714 |
| F | 183m NE | Unspecified Heap | 1938 | 904714 |
| F | 187m NE | Unspecified Shafts | 1869 | 809173 |
| F | 190m NE | Old Coal Shafts | 1938 | 865915 |
| F | 190m NE | Old Coal Shafts | 1948 | 865915 |
| F | 191m NE | Old Coal Shafts | 1910 | 900028 |
| F | 191m NE | Unspecified Old Shafts | 1960 | 868847 |
| F | 191m NE | Unspecified Old Shafts | 1970 | 891045 |
| F | 191m NE | Unspecified Disused Shafts | 1987 | 966208 |
| F | 191m NE | Unspecified Disused Shafts | 1981 | 966208 |
| F | 195m NE | Unspecified Old Shafts | 1898 | 793173 |
| F | 195m NE | Unspecified Disused Shafts | 1991 | 854228 |
| 12 | 200m E | Old Lime Kiln | 1869 | 821885 |
| F | 201m NE | Unspecified Shafts | 1869 | 809172 |
| F | 203m NE | Unspecified Heap | 1938 | 850434 |
| F | 203m NE | Unspecified Heap | 1938 | 850434 |
| K | 204m N | Filling Station | 1981 | 810493 |
| F | 204m NE | Unspecified Heap | 1910 | 850434 |
| F | 204m NE | Unspecified Heap | 1948 | 850434 |
| K | 206m N | Garage | 1992 | 844096 |
| F | 208m NE | Unspecified Heap | 1970 | 905587 |
| F | 208m NE | Unspecified Heap | 1898 | 927463 |
| F | 208m NE | Unspecified Heap | 1987 | 905587 |
| F | 208m NE | Unspecified Heap | 1981 | 905587 |
| F | 209m NE | Unspecified Heap | 1991 | 948322 |
| F | 209m NE | Old Coal Shafts | 1938 | 848084 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| F | 210m NE | Old Coal Shafts | 1948 | 848084 |
| F | 210m NE | Unspecified Old Shafts | 1970 | 920069 |
| F | 211m NE | Old Coal Shafts | 1910 | 921886 |
| F | 211m NE | Unspecified Disused Shafts | 1987 | 866230 |
| F | 211m NE | Unspecified Disused Shafts | 1981 | 866230 |
| F | 211m NE | Unspecified Old Shafts | 1960 | 918138 |
| F | 213m NE | Unspecified Heap | 1960 | 859195 |
| L | 214m W | Filter Bed | 1953 | 845084 |
| M | 214m NW | Unspecified Pit | 1981 | 952266 |
| M | 214m NW | Unspecified Pit | 1969 | 952266 |
| 13 | 214m SW | Unspecified Pit | 1871 | 839174 |
| F | 215m NE | Unspecified Disused Shafts | 1991 | 835401 |
| J | 216m E | Unspecified Disused Mine | 1960 | 810915 |
| J | 216m E | Unspecified Ground Workings | 1970 | 967188 |
| J | 216m E | Unspecified Ground Workings | 1910 | 917742 |
| L | 217m W | Filter Bed | 1948 | 980255 |
| J | 217m E | Unspecified Heap | 1938 | 918071 |
| J | 217m E | Unspecified Heap | 1938 | 918071 |
| M | 218m NW | Unspecified Heap | 1871 | 803518 |
| F | 219m NE | Chimney | 1869 | 835665 |
| J | 219m E | Unspecified Ground Workings | 1948 | 893610 |
| J | 238m E | Unspecified Heap | 1898 | 856493 |
| 14 | 240m NE | Unspecified Depot | 1969 | 818237 |
| 15 | 245m N | Lime Kiln | 1871 | 842742 |
| J | 245m E | Unspecified Tank | 1987 | 824094 |
| J | 250m E | Unspecified Disused Shaft | 1970 | 812921 |
| 16 | 251m E | Magazine | 1948 | 827271 |
| 18 | 260m E | Unspecified Tank | 1869 | 824074 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| L | 266m W | Unspecified Works | 1981 | 853089 |
| L | 266m W | Unspecified Works | 1969 | 853089 |
| L | 267m W | Filter Bed | 1938 | 953177 |
| L | 267m W | Filter Bed | 1938 | 953177 |
| L | 268m W | Filter Bed | 1909 | 869939 |
| 19 | 331m SW | Cuttings | 1991 | 795491 |
| N | 335m NE | Unspecified Mill | 1898 | 851905 |
| O | 337m NE | Unspecified Heap | 1913 | 867243 |
| O | 337m NE | Unspecified Heap | 1913 | 867243 |
| N | 338m NE | Unspecified Mill | 1898 | 851905 |
| O | 342m NE | Unspecified Heap | 1953 | 976289 |
| O | 342m NE | Unspecified Ground Workings | 1938 | 901072 |
| O | 342m NE | Unspecified Ground Workings | 1938 | 901072 |
| O | 343m NE | Unspecified Heap | 1909 | 881466 |
| O | 345m E | Unspecified Heap | 1938 | 918690 |
| O | 345m E | Unspecified Heap | 1898 | 845761 |
| O | 348m NE | Unspecified Heap | 1898 | 873881 |
| P | 351m N | Unspecified Old Quarry | 1909 | 946359 |
| P | 353m N | Unspecified Old Quarry | 1898 | 982936 |
| P | 353m N | Unspecified Old Quarry | 1938 | 915595 |
| P | 354m N | Unspecified Old Quarry | 1909 | 946359 |
| P | 356m N | Unspecified Quarry | 1871 | 816584 |
| P | 356m N | Unspecified Old Quarry | 1953 | 870905 |
| P | 356m N | Unspecified Old Quarry | 1938 | 946359 |
| P | 357m N | Unspecified Old Quarry | 1948 | 991130 |
| P | 357m N | Unspecified Old Quarry | 1898 | 978644 |
| N | 385m NE | Paper Mill | 1938 | 977757 |
| Q | 390m SW | Unspecified Works | 1971 | 830103 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| R | 397m E | Unspecified Heap | 1869 | 974348 |
| S | 407m E | Unspecified Heap | 1938 | 911100 |
| S | 407m E | Unspecified Heap | 1938 | 911100 |
| S | 408m E | Unspecified Heap | 1910 | 983167 |
| S | 408m E | Unspecified Heap | 1960 | 908010 |
| S | 408m E | Unspecified Heap | 1970 | 950963 |
| S | 409m E | Unspecified Heap | 1987 | 950963 |
| S | 409m E | Unspecified Heap | 1981 | 950963 |
| S | 411m E | Old Coal Shaft | 1948 | 867599 |
| S | 411m E | Unspecified Old Shaft | 1898 | 931688 |
| S | 413m E | Old Coal Shaft | 1938 | 951225 |
| S | 413m E | Unspecified Old Shaft | 1960 | 966997 |
| S | 413m E | Unspecified Old Shaft | 1970 | 986341 |
| S | 415m E | Old Coal Shaft | 1910 | 882454 |
| S | 415m E | Unspecified Heap | 1948 | 897135 |
| S | 415m E | Unspecified Heap | 1898 | 941796 |
| S | 416m E | Unspecified Disused Shaft | 1987 | 982781 |
| S | 416m E | Unspecified Disused Shaft | 1981 | 982781 |
| R | 418m E | Old Coal Shaft | 1948 | 943523 |
| R | 418m E | Unspecified Old Shaft | 1898 | 927894 |
| R | 421m E | Unspecified Old Shaft | 1960 | 954704 |
| R | 423m E | Old Coal Shaft | 1938 | 864298 |
| R | 423m E | Old Coal Shaft | 1910 | 962976 |
| N | 426m NE | Unspecified Mill | 1981 | 955439 |
| T | 426m S | Unspecified Heap | 1910 | 965565 |
| R | 427m E | Unspecified Heap | 1898 | 923815 |
| N | 427m NE | Railway Sidings | 1898 | 849862 |
| T | 427m S | Unspecified Heap | 1938 | 940217 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| T | 427m S | Unspecified Heap | 1938 | 940217 |
| N | 427m NE | Unspecified Mill | 1913 | 919608 |
| T | 428m S | Unspecified Heap | 1948 | 940217 |
| N | 429m NE | Railway Sidings | 1969 | 915578 |
| N | 429m NE | Unspecified Mill | 1969 | 864632 |
| N | 429m NE | Railway Sidings | 1953 | 915578 |
| N | 429m NE | Paper Mill | 1953 | 977757 |
| T | 429m S | Unspecified Heap | 1960 | 933546 |
| N | 429m NE | Unspecified Mill | 1938 | 919608 |
| R | 429m E | Unspecified Heap | 1938 | 913282 |
| R | 429m E | Unspecified Heap | 1938 | 913282 |
| N | 429m NE | Unspecified Old Mill | 1909 | 809862 |
| V | 431m NE | Gasometer | 1913 | 874828 |
| R | 431m E | Unspecified Heap | 1910 | 937871 |
| N | 432m NE | Railway Sidings | 1938 | 965788 |
| N | 432m NE | Railway Sidings | 1898 | 849862 |
| N | 433m NE | Railway Sidings | 1913 | 984779 |
| V | 433m NE | Gasometer | 1909 | 946750 |
| V | 434m NE | Gasometer | 1938 | 901383 |
| N | 434m NE | Railway Sidings | 1938 | 906171 |
| V | 435m NE | Unspecified Tank | 1938 | 867996 |
| V | 435m NE | Unspecified Tank | 1898 | 845028 |
| N | 436m NE | Railway Sidings | 1909 | 870683 |
| W | 445m E | Sand Pit | 1869 | 797388 |
| Q | 447m SW | Sewage Works | 1989 | 811815 |
| X | 447m NE | Unspecified Heap | 1960 | 958716 |
| Q | 448m SW | Unspecified Tanks | 1989 | 814986 |
| X | 448m NE | Unspecified Heap | 1938 | 904274 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| X | 448m NE | Unspecified Heap | 1938 | 904274 |
| X | 448m NE | Unspecified Heap | 1910 | 883085 |
| X | 449m NE | Unspecified Heap | 1948 | 957881 |
| W | 449m E | Unspecified Old Quarry | 1938 | 850833 |
| W | 449m E | Unspecified Old Quarry | 1913 | 937408 |
| W | 454m E | Unspecified Old Quarry | 1953 | 850833 |
| N | 463m NE | Flour Mill | 1869 | 822620 |
| Q | 470m SW | Unspecified Tank | 1971 | 824071 |
| Q | 471m SW | Sewage Tank | 1948 | 850232 |
| Q | 471m SW | Sewage Filterbed | 1898 | 830965 |
| Q | 473m SW | Sewage Tank | 1914 | 891472 |
| Q | 473m SW | Sewage Tank | 1914 | 891472 |
| AA | 483m NW | Unspecified Depot | 1992 | 890123 |
| AA | 483m NW | Unspecified Depot | 1981 | 890123 |
| AB | 487m NW | Sand Pits | 1948 | 872607 |
| AB | 489m NW | Sand Pits | 1909 | 958100 |
| AB | 492m NW | Sand Pits | 1938 | 958100 |
| AB | 495m NW | Disused Sand Pits | 1959 | 810759 |
| 20 | 498m NW | Lime Kiln | 1871 | 842723 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.2 Historical tanks

| **Records within 500m** | **18** |
|---|---|

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 23**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| **C** | **On site** | **Unspecified Tank** | **1912** | **111818** |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| D | 10m NW | Unspecified Tank | 1965 | 123420 |
| D | 10m NW | Unspecified Tank | 1965 | 123420 |
| D | 11m NW | Unspecified Tank | 1991 | 147036 |
| 6 | 75m E | Unspecified Tank | 1965 | 111812 |
| 8 | 125m SW | Unspecified Tank | 1965 | 111897 |
| 9 | 133m E | Unspecified Tank | 1870 | 111813 |
| 17 | 255m E | Unspecified Tank | 1899 | 111796 |
| V | 432m NE | Gasometer | 1899 | 123125 |
| V | 432m NE | Gasometer | 1912 | 123125 |
| V | 465m NE | Unspecified Tank | 1986 | 111916 |
| V | 467m NE | Tanks | 1993 | 104551 |
| Q | 470m SW | Unspecified Tank | 1965 | 135731 |
| V | 470m NE | Unspecified Tank | 1986 | 111913 |
| Q | 471m SW | Unspecified Tank | 1992 | 135731 |
| Q | 474m SW | Sewage Tank | 1912 | 108765 |
| V | 490m NE | Tanks | 1986 | 104552 |
| V | 496m NE | Tanks | 1993 | 104553 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.3 Historical energy features

**Records within 500m** **18**

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 23**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| U | 427m NE | Electricity Substation | 1978 | 60823 |
| U | 431m NE | Electricity Substation | 1988 | 74299 |
| U | 431m NE | Electricity Substation | 1991 | 74299 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| V | 432m NE | Gasometer | 1899 | 80021 |
| V | 432m NE | Gasometer | 1912 | 80021 |
| U | 434m NE | Electricity Substation | 1994 | 74299 |
| U | 434m NE | Electricity Substation | 1996 | 74299 |
| Y | 449m N | Electricity Substation | 1974 | 65722 |
| Y | 449m N | Electricity Substation | 1989 | 69546 |
| Y | 449m N | Electricity Substation | 1988 | 65722 |
| Y | 449m N | Electricity Substation | 1988 | 65722 |
| Y | 449m N | Electricity Substation | 1990 | 65722 |
| Y | 449m N | Electricity Substation | 1995 | 65722 |
| Y | 449m N | Electricity Substation | 1997 | 65722 |
| N | 464m NE | Electricity Substation | 1986 | 75652 |
| N | 466m NE | Electricity Substation | 1993 | 75652 |
| Z | 483m NE | Electricity Substation | 1988 | 66675 |
| Z | 485m NE | Electricity Substation | 1978 | 78937 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.4 Historical petrol stations

**Records within 500m** **2**

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'.

Features are displayed on the Past land use - un-grouped map on **page 23**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| K | 204m N | Filling Station | 1978 | 1655 |
| K | 205m N | Filling Station | 1988 | 1655 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.5 Historical garages

| Records within 500m | 3 |
|---|---|

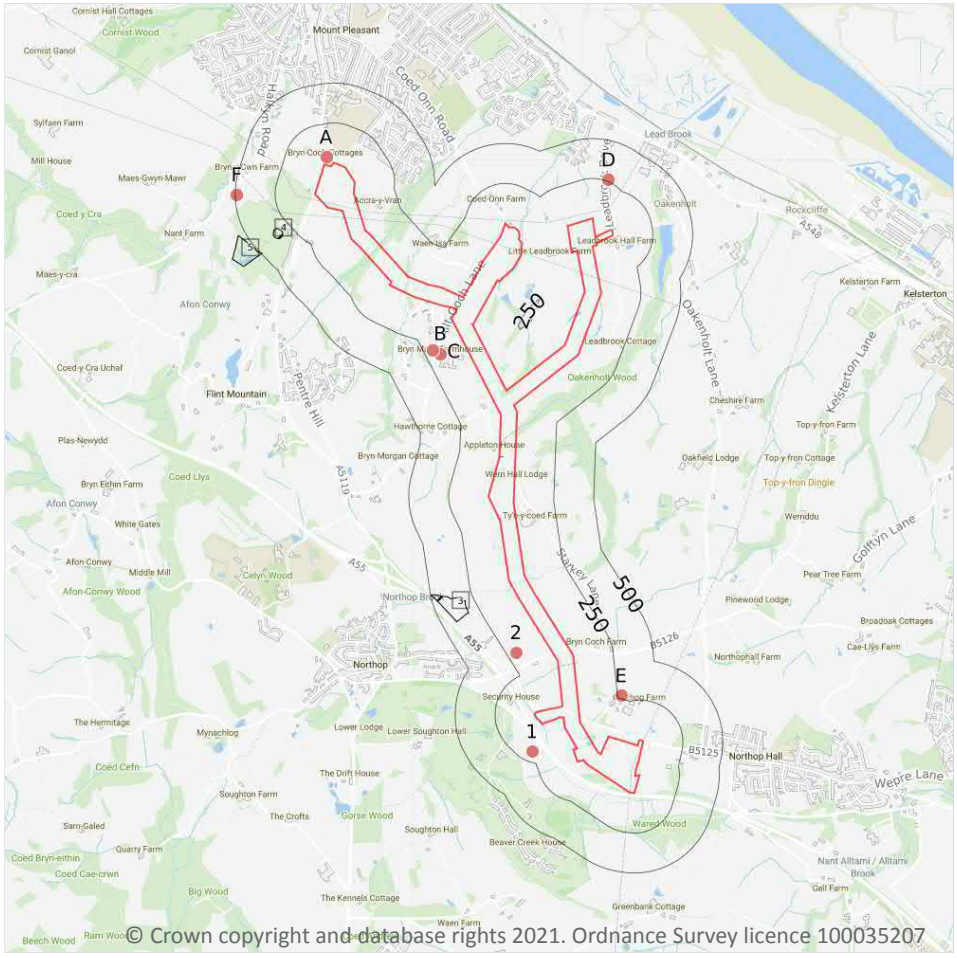
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 23**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| K | 205m N | Garage | 1991 | 21122 |
| K | 206m N | Garage | 1994 | 25436 |
| K | 206m N | Garage | 1996 | 25436 |

*This data is sourced from Ordnance Survey / Groundsure.*

# 3 Waste and landfill




## 3.1 Active or recent landfill

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

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

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

## 3.2 Historical landfill (BGS records)

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

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 |
|---|---|

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 | 3 |
|---|---|

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 35**

| ID | Location | Details | | |
|---|---|---|---|---|
| 3 | 302m SW | Site Address: Northop Bypass A55 - Tip No.1<br>Licence Holder Address: - | Waste Licence: Yes<br>Site Reference: PF/WD2/88<br>Waste Type: Inert<br>Environmental Permitting Regulations (Waste) Reference: -<br>Licence Issue: 03/06/1988<br>Licence Surrender: 31/07/1989 | Operator: -<br>Licence Holder: C A Blackwell (Contractors) Limited<br>First Recorded 31/12/1988<br>Last Recorded: 31/07/1989 |
| 4 | 310m SW | Site Address: Plas-Y-Mynydd Farm<br>Licence Holder Address: - | Waste Licence: Yes<br>Site Reference: B/W/8/21, CP/EQ/WD/21<br>Waste Type: Inert, Industrial, Commercial<br>Environmental Permitting Regulations (Waste) Reference: -<br>Licence Issue: 24/07/1984<br>Licence Surrender: 31/03/1990 | Operator: -<br>Licence Holder: Tarran<br>First Recorded 24/07/1984<br>Last Recorded: 31/03/1990 |
| 5 | 496m SW | Site Address: Land off A5119 Near Flint Mountain<br>Licence Holder Address: - | Waste Licence: Yes<br>Site Reference: -<br>Waste Type: -<br>Environmental Permitting Regulations (Waste) Reference: -<br>Licence Issue: -<br>Licence Surrender: - | Operator: -<br>Licence Holder: Tasseland Limited<br>First Recorded 31/12/1988<br>Last Recorded: 31/12/1989 |

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

## 3.5 Historical waste sites

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

Waste site records derived from Local Authority planning records and high detail historical mapping.

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

## 3.6 Licensed waste sites

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

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

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

## 3.7 Waste exemptions

| Records within 500m | 61 |
|---|---|

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 35**

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| A | 42m N | United Utilities PLC, Carreg Y Llech Farm, Land at Plas, Flintshire, CH65QQ | NRW-WME032224 | Storing waste exemption | Not on a farm | Storage of sludge |
| A | 42m N | United Utilities PLC, Carreg Y Llech Farm, Land and Plas, Flintshire, CH65QQ | NRW-WME032226 | Storing waste exemption | Not on a farm | Storage of sludge |
| A | 42m N | United Utilities PLC, Carreg y Llech Farm, Land at Plas, Flintshire, CH65QQ | NRW-WME032227 | Storing waste exemption | Not on a farm | Storage of sludge |
| A | 42m N | United Utilities PLC, Carreg y Llech Farm, Land at Plas, Flintshire, CH65QQ | NRW-WME032228 | Storing waste exemption | Not on a farm | Storage of sludge |
| B | 166m SW | BRYN MAWR FARM, ALLT GOCH LANE, NORTHOP, MOLD, CH7 6DL | WEX071662 | Disposing of waste exemption | On a farm | Deposit of waste from dredging of inland waters |
| B | 166m SW | BRYN MAWR FARM, ALLT GOCH LANE, NORTHOP, MOLD, CH7 6DL | WEX071662 | Disposing of waste exemption | On a farm | Burning waste in the open |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| B | 166m SW | BRYN MAWR FARM, ALLT GOCH LANE, NORTHOP, MOLD, CH7 6DL | WEX071662 | Storing waste exemption | On a farm | Storage of waste in secure containers |
| B | 166m SW | BRYN MAWR FARM, ALLT GOCH LANE, NORTHOP, MOLD, CH7 6DL | WEX071662 | Storing waste exemption | On a farm | Storage of waste in a secure place |
| B | 166m SW | BRYN MAWR FARM, ALLT GOCH LANE, NORTHOP, MOLD, CH7 6DL | WEX071662 | Treating waste exemption | On a farm | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |
| B | 166m SW | BRYN MAWR FARM, ALLT GOCH LANE, NORTHOP, MOLD, CH7 6DL | WEX071662 | Treating waste exemption | On a farm | Recovery of scrap metal |
| B | 166m SW | BRYN MAWR FARM, ALLT GOCH LANE, NORTHOP, MOLD, CH7 6DL | WEX071662 | Using waste exemption | On a farm | Use of waste in construction |
| B | 166m SW | BRYN MAWR FARM, ALLT GOCH LANE, NORTHOP, MOLD, CH7 6DL | WEX071662 | Using waste exemption | On a farm | Spreading waste on agricultural land to confer benefit |
| 1 | 189m S | United Utilities PLC, Lingley Green Avenue, Lingley Mere Business Park, Great Sankey, Warrington, WA5 3LP | NRW-WME053222 | Storing waste exemption | Not on a farm | Storage of sludge |
| C | 196m SW | United Utilities PLC, Bryn Mawr Farm, Allt Goch Lane, Northop, Mold, Flintshire, CH76DL | NRW-WME032184 | Storing waste exemption | Not on a farm | Storage of sludge |
| C | 196m SW | DCWW, Bryn Mawr Farm, Allt Goch Lane, Northop, Mold, Flintshire, CH76DL | NRW-WME032775 | Storing waste exemption | Not on a farm | Storage of sludge |
| C | 196m SW | DCWW, Bryn Mawr Farm, Allt Goch Lane, Northop, Mold, Flintshire, CH76DL | NRW-WME032776 | Storing waste exemption | Not on a farm | Storage of sludge |
| C | 196m SW | DCWW, Bryn Mawr Farm, Allt Goch Lane, Northop, Mold, Flintshire, CH76DL | NRW-WME033990 | Storing waste exemption | Not on a farm | Storage of sludge |
| C | 196m SW | DCWW, Bryn Mawr Farm, Allt Goch Lane, Northop, Mold, Flintshire, CH76DL | NRW-WME034337 | Storing waste exemption | Not on a farm | Storage of sludge |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| C | 196m SW | DCWW, Bryn Mawr Farm, Allt Goch Lane, Northop, Mold, Flintshire, CH76DL | NRW-WME034338 | Storing waste exemption | Not on a farm | Storage of sludge |
| C | 196m SW | DCWW, Bryn Mawr Farm, Allt Goch Lane, Northop, Mold, Flintshire, CH76DL | NRW-WME034339 | Storing waste exemption | Not on a farm | Storage of sludge |
| C | 197m SW | United Utilities PLC, Bryn Mawr Farm, Allt Goch Lane, Llaneurgain, Yr Wyddgrug, CH76DL | NRW-WME005071 | Storing waste exemption | On a farm | Storage of sludge |
| C | 197m SW | United Utilities Water PLC, Bryn Mawr Farm, Starkey Lane, Northop, Mold, Flintshire, CH76DL | NRW-WME026938 | Storing waste exemption | Not on a farm | Storage of sludge |
| C | 197m SW | United Utilities Water PLC, Bryn Mawr Farm, Allt Goch Lane, Northop, Mold, Flintshire, CH76DL | NRW-WME026939 | Storing waste exemption | Not on a farm | Storage of sludge |
| C | 197m SW | United Utilities Water PLC, Bryn Mawr Farm, Allt Goch Lane, Northop, Mold, Flintshire, CH76DL | NRW-WME026940 | Storing waste exemption | Not on a farm | Storage of sludge |
| 2 | 199m SW | United Utilities, Bryn Mawr Farm, Allt Goch Lane, Northop, Mold, Flintshire, CH7 6DL | NRW-WME055152 | Storing waste exemption | Not on a farm | Storage of sludge |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Using waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Spreading waste on agricultural land to confer benefit |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Using waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Use of waste for a specified purpose |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Using waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Spreading of plant matter to confer benefit |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Using waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Incorporation of ash into soil |

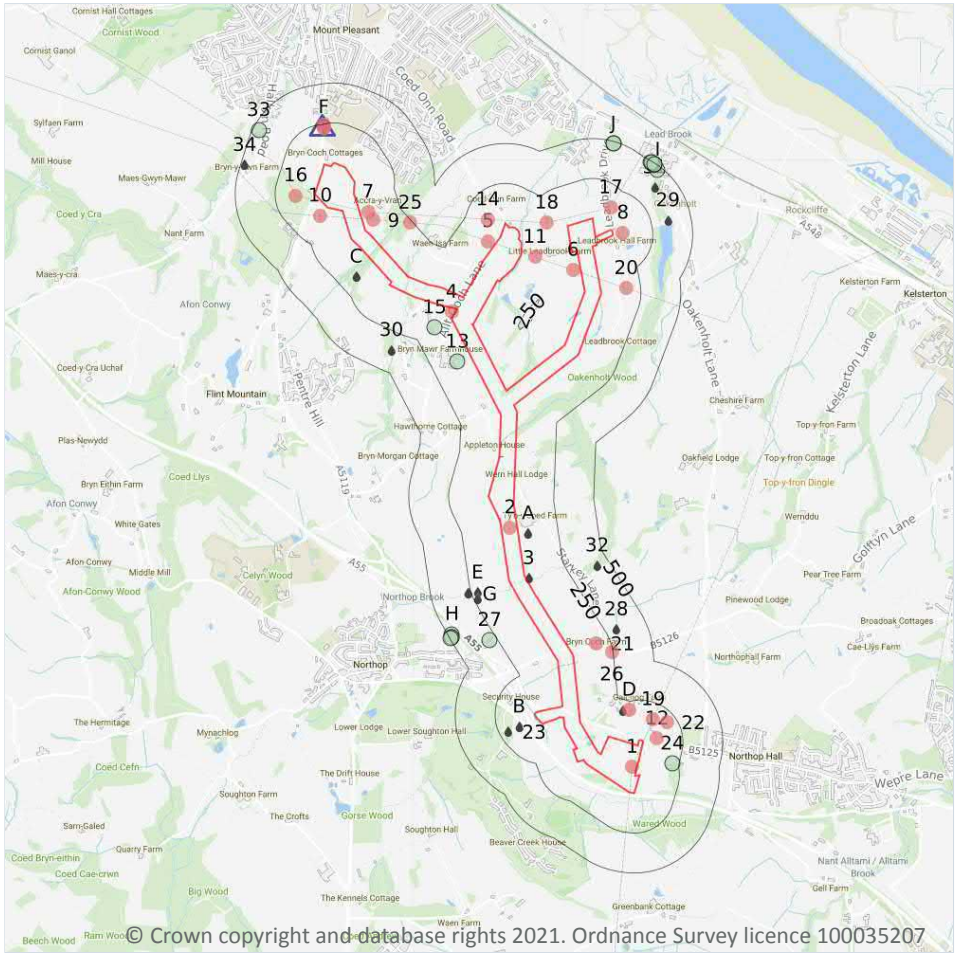
| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Using waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Burning of waste as a fuel in a small appliance |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Using waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Use of waste derived biodiesel as fuel |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Using waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Use of mulch |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Using waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Use of waste in construction |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Mechanical treatment of end-of-life tyres |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Preparatory treatments (baling, sorting, shredding etc) |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Aerobic composting and associated prior treatment |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Disposing of waste exemption | On a farm | Deposit of agricultural waste consisting of plant tissue under a Plant Health notice |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Disposing of waste exemption | On a farm | Disposal by incineration |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Treating waste exemption | On a farm | Treatment of sheep dip for disposal |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Disposing of waste exemption | On a farm | Deposit of waste from dredging of inland waters |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Storing waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Storage of waste in secure containers |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Storing waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Storage of waste in a secure place |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Using waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Use of waste to manufacture finished goods |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Screening and blending of waste |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Treating waste exemption | On a farm | Cleaning, washing, spraying or coating relevant waste |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Disposing of waste exemption | On a farm | Burning waste in the open |
| D | 257m NE | Leadbrook Hall Farm Leadbrook Drive Flint Flintshire CH65ST | NRW-WME026035 | Storing waste exemption | Not on a farm | Storage of sludge |
| E | 263m N | Galchog Farm, Chester Road, Mold, Flintshire, CH7 6AZ | NRW-WME001189 | Using waste exemption | Waste Exemption - Agricultural | Use of waste in construction |
| E | 263m N | Galchog Farm, Chester Road, Mold, Flintshire, CH7 6AZ | NRW-WME001189 | Using waste exemption | Waste Exemption - Agricultural | Burning of waste as a fuel in a small appliance |
| E | 263m N | Galchog Farm, Chester Road, Mold, Flintshire, CH7 6AZ | NRW-WME001189 | Using waste exemption | Waste Exemption - Agricultural | Incorporation of ash into soil |
| E | 263m N | Galchog Farm, Chester Road, Mold, Flintshire, CH7 6AZ | NRW-WME001189 | Treating waste exemption | Waste Exemption - Agricultural | Preparatory treatments (baling, sorting, shredding etc) |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| E | 263m N | Galchog Farm, Chester Road, Mold, Flintshire, CH7 6AZ | NRW-WME001189 | Treating waste exemption | Waste Exemption - Agricultural | Screening and blending of waste |
| E | 263m N | Galchog Farm, Chester Road, Mold, Flintshire, CH7 6AZ | NRW-WME001189 | Treating waste exemption | Waste Exemption - Agricultural | Recovery of scrap metal |
| E | 263m N | Galchog Farm, Chester Road, Mold, Flintshire, CH7 6AZ | NRW-WME001189 | Disposing of waste exemption | Waste Exemption - Agricultural | Deposit of waste from dredging of inland waters |
| E | 263m N | Galchog Farm, Chester Road, Mold, Flintshire, CH7 6AZ | NRW-WME001189 | Disposing of waste exemption | Waste Exemption - Agricultural | Disposal by incineration |
| E | 263m N | Galchog Farm, Chester Road, Mold, Flintshire, CH7 6AZ | NRW-WME001189 | Disposing of waste exemption | Waste Exemption - Agricultural | Burning waste in the open |
| E | 263m N | Galchog Farm, Chester Road, Mold, Flintshire, CH7 6AZ | NRW-WME001189 | Storing waste exemption | Waste Exemption - Agricultural | Storage of waste in secure containers |
| E | 263m N | Galchog Farm, Chester Road, Mold, Flintshire, CH7 6AZ | NRW-WME001189 | Storing waste exemption | Waste Exemption - Agricultural | Storage of waste in a secure place |
| F | 492m W | - | WEX232160 | Storing waste exemption | On a farm | Storage of sludge |
| F | 492m W | - | WEX167686 | Storing waste exemption | On a farm | Storage of sludge |

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

# 4 Current industrial land use




## 4.1 Recent industrial land uses

| Records within 250m | 25 |
|---|---|

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 43**

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| **1** | **On site** | **Pylon** | **Clwyd, CH7** | **Electrical Features** | **Infrastructure and Facilities** |
| **2** | **On site** | **Wind Turbine** | **Clwyd, CH7** | **Energy Production** | **Industrial Features** |
| 4 | 20m NW | Tank | Clwyd, CH7 | Tanks (Generic) | Industrial Features |

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| 5 | 47m NW | Pylon | Clwyd, CH6 | Electrical Features | Infrastructure and Facilities |
| 6 | 48m W | Pylon | Clwyd, CH6 | Electrical Features | Infrastructure and Facilities |
| 7 | 50m E | Pylon | Clwyd, CH6 | Electrical Features | Infrastructure and Facilities |
| 8 | 64m E | Slurry Bed | Clwyd, CH6 | Waste Storage, Processing and Disposal | Infrastructure and Facilities |
| 9 | 67m E | Pylon | Clwyd, CH6 | Electrical Features | Infrastructure and Facilities |
| 10 | 69m SW | Pylon | Clwyd, CH6 | Electrical Features | Infrastructure and Facilities |
| 11 | 89m E | Pylon | Clwyd, CH6 | Electrical Features | Infrastructure and Facilities |
| 12 | 90m E | Mast (Telecommunication) | Clwyd, CH7 | Telecommunications Features | Infrastructure and Facilities |
| 14 | 112m W | Pylon | Clwyd, CH6 | Electrical Features | Infrastructure and Facilities |
| 16 | 122m W | Pylon | Clwyd, CH6 | Electrical Features | Infrastructure and Facilities |
| 17 | 133m NE | Pylon | Clwyd, CH6 | Electrical Features | Infrastructure and Facilities |
| 18 | 133m W | Pylon | Clwyd, CH6 | Electrical Features | Infrastructure and Facilities |
| 19 | 150m NE | Pylon | Clwyd, CH7 | Electrical Features | Infrastructure and Facilities |
| 20 | 159m E | Pylon | Clwyd, CH6 | Electrical Features | Infrastructure and Facilities |
| 21 | 164m NE | Arrow Van Hire | Bryn Coch Farm, Connah's Quay Road, Northop, Mold, Clwyd, CH7 6BT | Vehicle Hire and Rental | Hire Services |
| 22 | 192m NE | Shaft (Disused) | Clwyd, CH7 | Unspecified Quarries Or Mines | Extractive Industries |
| D | 198m N | P G Smith Farrier | Highfield Livery Yard, Chester Road, Northop, Mold, Clwyd, CH7 6AZ | Metalworkers Including Blacksmiths | Construction Services |

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| F | 231m N | Flint Filling Station | Northop Road, Flint, Clwyd, CH6 5QG | Vehicle Cleaning Services | Personal, Consumer and Other Services |
| F | 231m N | Gulf | Northop Road, Flint Mountain, Flint, Clwyd, CH6 5QG | Petrol and Fuel Stations | Road and Rail |
| 25 | 237m NE | Pylon | Clwyd, CH7 | Electrical Features | Infrastructure and Facilities |
| 26 | 242m E | Brooks Haulage Ltd | Pontenion Farm, Connah's Quay Road, Northop, Mold, Clwyd, CH7 6BT | Distribution and Haulage | Transport, Storage and Delivery |
| F | 245m N | Flint Service Station | Northop Road, Flint Mountain, Flint, Clwyd, CH6 5QG | Secondhand Vehicles | Motoring |

*This data is sourced from Ordnance Survey.*

## 4.2 Current or recent petrol stations

| **Records within 500m** | **1** |
|---|---|

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 43**

| ID | Location | Company | Address | LPG | Status |
|---|---|---|---|---|---|
| F | 247m N | GULF | Northop Road, Flint, Flintshire, CH6 5QG | No | Open |

*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 | 0 |
|---|---|

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.

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

## 4.10 Licensed industrial activities (Part A(1))

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

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

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

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

| Records within 500m | 1 |
|---|---|

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 43**

| ID | Location | Address | Details | |
|---|---|---|---|---|
| F | 230m N | Flint Filling Station, Northop Road, Flint Mountain, Flint, Flintshire, CH6 5QG | Process: Unloading of Petrol into Storage at Service Stations<br>Status: Current Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |

*This data is sourced from Local Authority records.*

## 4.12 Radioactive Substance Authorisations

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

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

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

## 4.13 Licensed Discharges to controlled waters

| Records within 500m | 22 |
|---|---|

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 43**

| ID | Location | Address | Details | |
|---|---|---|---|---|
| 3 | 14m NE | BRITISH COAL OPENCAST SITE NORTHOP, BRITISH COAL OPENCAST SITE NORTH, NORTHOP CLWYD, CLWYD | Effluent Type: UNSPECIFIED<br>Permit Number: CM0177703<br>Permit Version: 1<br>Receiving Water: TOP-Y-FRON DINGLE | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 07/12/1988<br>Effective Date: 07/12/1988<br>Revocation Date: 11/07/1991 |
| A | 62m E | SEPTIC & INFILT. @ TYN-Y-COED, TYN-Y-COED, NORTHOP, MOLD, FLINTSHIRE, CH7 6DG | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: EPRSP3029GB<br>Permit Version: 1<br>Receiving Water: INFILTRATION FIELD | Status: NEW ISSUED UNDER EPR 2010<br>Issue date: 12/04/2012<br>Effective Date: 12/04/2012<br>Revocation Date: - |
| A | 62m E | SEPTIC & INFILT. @ TYN-Y-COED, TYN-Y-COED, NORTHOP, MOLD, FLINTSHIRE, CH7 6DG | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: EPRSP3029GB<br>Permit Version: 1<br>Receiving Water: INFILTRATION FIELD | Status: NEW ISSUED UNDER EPR 2010<br>Issue date: 12/04/2012<br>Effective Date: 12/04/2012<br>Revocation Date: - |
| A | 62m E | SEPTIC & INFILT. @ TYN-Y-COED, TYN-Y-COED, Northop, MOLD, Flintshire, CH7 6DG | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: SP3029GB<br>Permit Version: 1<br>Receiving Water: groundwater via infiltration system | Status: Effective<br>Issue date: 12/04/2012<br>Effective Date: 12/04/2012<br>Revocation Date: - |
| B | 122m SW | NORTHOP COUNTRY PARK DEVELOPMENT, RHOS-Y-CHELLIS, NORTHOP, FLINTSHIRE, CH7 6WA | Effluent Type: UNSPECIFIED<br>Permit Number: CG0344701<br>Permit Version: 1<br>Receiving Water: TO LAND | Status: REVOKED - UNSPECIFIED<br>Issue date: 23/11/1993<br>Effective Date: 23/11/1993<br>Revocation Date: 15/03/1994 |
| B | 122m SW | NORTHOP COUNTRY PARK DEVELOPMENT, RHOS-Y-CHELLIS, NORTHOP, FLINTSHIRE, CH7 6WA | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: CG0344701<br>Permit Version: 2<br>Receiving Water: TO LAND | Status: LAPSED UNDER SCHEDULE 23 ENVIRONMENT ACT 1995<br>Issue date: 16/03/1994<br>Effective Date: 16/03/1994<br>Revocation Date: 31/10/1996 |
| C | 141m SW | THE HEDGEROWS Y WAEN FLINT MOUNTAIN, THE HEDGEROWS, Y WAEN, FLINT MOUNTAIN, CH6 5QR | Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - NOT WATER COMPANY<br>Permit Number: CG0378901<br>Permit Version: 2<br>Receiving Water: PENTRE FFWRNDAN VIA SWS | Status: Effective<br>Issue date: 12/02/2019<br>Effective Date: 28/02/2019<br>Revocation Date: - |

| ID | Location | Address | Details | |
|---|---|---|---|---|
| C | 141m SW | THE HEDGEROWS Y WAEN FLINT MOUNTAIN, THE HEDGEROWS, Y WAEN, FLINT MOUNTAIN | Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - NOT WATER COMPANY<br>Permit Number: CG0378901<br>Permit Version: 1<br>Receiving Water: PENTRE FFWRNDAN VIA SWS | Status: Effective<br>Issue date: 11/12/1998<br>Effective Date: 11/12/1998<br>Revocation Date: - |
| D | 180m N | NORTHOP HALL HIGHFIELD LIVERY | Effluent Type: UNSPECIFIED<br>Permit Number: CM0148701<br>Permit Version: 1<br>Receiving Water: TO LAND | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 20/08/1986<br>Effective Date: 20/08/1986<br>Revocation Date: 18/09/1992 |
| 23 | 198m SW | NORTHOP COUNTRY PARK NORTHOP FLINT, NORTHOP COUNTRY PARK NORTHOP FL, NORTHOP FLINT, FLINT | Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - NOT WATER COMPANY<br>Permit Number: CG0363301<br>Permit Version: 1<br>Receiving Water: Unnamed Watercourse | Status: Effective<br>Issue date: 21/08/1995<br>Effective Date: 21/08/1995<br>Revocation Date: - |
| E | 212m W | NORTHOP STW | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY<br>Permit Number: CM0038001<br>Permit Version: 1<br>Receiving Water: NORTHOP BROOK | Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88)<br>Issue date: 26/05/1981<br>Effective Date: 26/05/1981<br>Revocation Date: 30/12/2005 |
| E | 228m SW | BRITISH COAL OPENCAST SITE PONT EIN, BRITISH COAL OPENCAST SITE PONT, PONT EINION NORTHOP, NORTHOP | Effluent Type: UNSPECIFIED<br>Permit Number: CM0177701<br>Permit Version: 1<br>Receiving Water: LAND | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 07/12/1988<br>Effective Date: 07/12/1988<br>Revocation Date: 23/12/1992 |
| G | 268m W | NORTHOP WASTEWATER TREATMENT WORKS, ABER CRESCENT, Northop, Flintshire, CH7 6BS | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY<br>Permit Number: CM0038001<br>Permit Version: 3<br>Receiving Water: Northop Brook | Status: Effective<br>Issue date: 26/06/2009<br>Effective Date: 01/01/2010<br>Revocation Date: - |
| G | 268m W | NORTHOP WASTEWATER TREATMENT WORKS, ABER CRESCENT, NORTHOP, FLINTSHIRE, CH7 6BS | Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY<br>Permit Number: CG0429901<br>Permit Version: 1<br>Receiving Water: NORTHOP BROOK | Status: Effective<br>Issue date: 14/01/2005<br>Effective Date: 31/12/2005<br>Revocation Date: - |

| ID | Location | Address | Details | |
|---|---|---|---|---|
| G | 268m W | NORTHOP WWTW TRANSFER PUMPING STN, ABER CRESCENT, NORTHOP, Flintshire | Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY<br>Permit Number: CG0433701<br>Permit Version: 1<br>Receiving Water: Northop Brook | Status: Effective<br>Issue date: 27/05/2005<br>Effective Date: 31/12/2005<br>Revocation Date: - |
| 28 | 315m NE | BROOKS HAULAGE SITE, PONT EINION FARM, CONNAHS QUAY ROAD, NORTHOP, Flintshire, CH7 6BT | Effluent Type: TRADE DISCHARGES - UNSPECIFIED<br>Permit Number: CG0432101<br>Permit Version: 2<br>Receiving Water: TRIB OF KELSTERTON BROOK | Status: Effective<br>Issue date: 02/03/2006<br>Effective Date: 02/03/2006<br>Revocation Date: - |
| 29 | 355m E | Oakenholt Mill, Chester Rd, Flint, CH6 5PU | Effluent Type: TRADE DISCHARGES - UNSPECIFIED<br>Permit Number: BB3696ZC<br>Permit Version: 1<br>Receiving Water: Lead Brook | Status: Effective<br>Issue date: 27/05/2020<br>Effective Date: 27/05/2020<br>Revocation Date: - |
| 30 | 363m SW | BRYN Y GOG LON Y GOG NORTHOP, BRYN Y GOG, LON Y GOG, NORTHOP, FLINTSHIRE, CH7 6DN | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: CG0393501<br>Permit Version: 1<br>Receiving Water: TRIB OF PANDY BROOK | Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY<br>Issue date: 01/08/2001<br>Effective Date: 01/08/2001<br>Revocation Date: - |
| 31 | 380m NE | LEADBROOK HALL SITE ADJ TO LEADBROO, LEADBROOK HALL SITE ADJ TO LEADB, ADJ TO LEADBROOK HALL OAKENHOLT, OAKENHOLT FLINT , FLINT | Effluent Type: UNSPECIFIED<br>Permit Number: CG0366601<br>Permit Version: 1<br>Receiving Water: LEAD BROOK | Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV<br>Issue date: 07/03/1996<br>Effective Date: 07/03/1996<br>Revocation Date: 13/10/1998 |
| 32 | 425m NE | BRITISH COAL OPENCAST SITE NORTHO, BRITISH COAL OPENCAST SITE NOR, NORTHOP | Effluent Type: UNSPECIFIED<br>Permit Number: CM0177704<br>Permit Version: 1<br>Receiving Water: TOP-Y-FRON DINGLE | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 07/12/1988<br>Effective Date: 07/12/1988<br>Revocation Date: 11/07/1991 |
| H | 475m SW | Northop Wastewater Treatment Works Settled Storm, Off N Wales Expy, Northop, Mold, CH7 6HN | Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY<br>Permit Number: CG0429901<br>Permit Version: 2<br>Receiving Water: Northop Brook | Status: Effective<br>Issue date: 22/06/2020<br>Effective Date: 22/06/2020<br>Revocation Date: - |
| 34 | 476m W | DEVELOPMENT SOUTH OLD LONDO | Effluent Type: UNSPECIFIED<br>Permit Number: CM0067401<br>Permit Version: 1<br>Receiving Water: SWINCHIARD BROOK | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 15/10/1971<br>Effective Date: 15/10/1971<br>Revocation Date: 26/02/1993 |

*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 | 0 |
|---|---|

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.

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

## 4.18 Pollution Incidents (EA/NRW)

| Records within 500m | 18 |
|---|---|

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 43**

| ID | Location | Details | |
|---|---|---|---|
| 13 | 91m SW | Incident Date: 27/05/2015<br>Incident Identification: 1340409<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 15 | 118m SW | Incident Date: 17/08/2003<br>Incident Identification: 182862<br>Pollutant: Oils and Fuel<br>Pollutant Description: Gas and Fuel Oils | Water Impact: Category 3 (Minor)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| 24 | 209m E | Incident Date: 11/11/2014<br>Incident Identification: 1293682<br>Pollutant: Specific Waste Materials<br>Pollutant Description: Other Specific Waste Material | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 27 | 293m SW | Incident Date: 27/12/2002<br>Incident Identification: 127798<br>Pollutant: Sewage Materials<br>Pollutant Description: Other Sewage Material | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 33 | 464m NW | Incident Date: 13/02/2003<br>Incident Identification: 136752<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Soils and Clay | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| I | 476m NE | Incident Date: 20/05/2013<br>Incident Identification: 1114226<br>Pollutant: Other Pollutant<br>Pollutant Description: Noise | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| H | 478m SW | Incident Date: 09/07/2014<br>Incident Identification: 1254348<br>Pollutant: Sewage Materials<br>Pollutant Description: Grey Water | Water Impact: -<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| I | 484m NE | Incident Date: 23/07/2003<br>Incident Identification: 175994<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| H | 485m SW | Incident Date: 05/11/2016<br>Incident Identification: 1606801<br>Pollutant: -<br>Pollutant Description: - | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: No Details |
| H | 485m SW | Incident Date: 05/11/2016<br>Incident Identification: 1606801<br>Pollutant: Sewage Material<br>Pollutant Description: Crude Sewage | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: No Details |

| ID | Location | Details | |
|---|---|---|---|
| J | 485m N | Incident Date: 04/06/2016<br>Incident Identification: 1602952<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: No Details<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |
| J | 485m N | Incident Date: 04/06/2016<br>Incident Identification: 1602952<br>Pollutant: -<br>Pollutant Description: - | Water Impact: No Details<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |
| I | 490m NE | Incident Date: 06/08/2003<br>Incident Identification: 179708<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| I | 491m NE | Incident Date: 05/08/2003<br>Incident Identification: 179402<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| I | 492m NE | Incident Date: 06/08/2003<br>Incident Identification: 179697<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| I | 493m NE | Incident Date: 28/07/2003<br>Incident Identification: 177321<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| I | 494m NE | Incident Date: 05/08/2003<br>Incident Identification: 179410<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| H | 496m SW | Incident Date: 14/06/2013<br>Incident Identification: 1122355<br>Pollutant: Sewage Materials<br>Pollutant Description: Storm Sewage | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>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.*

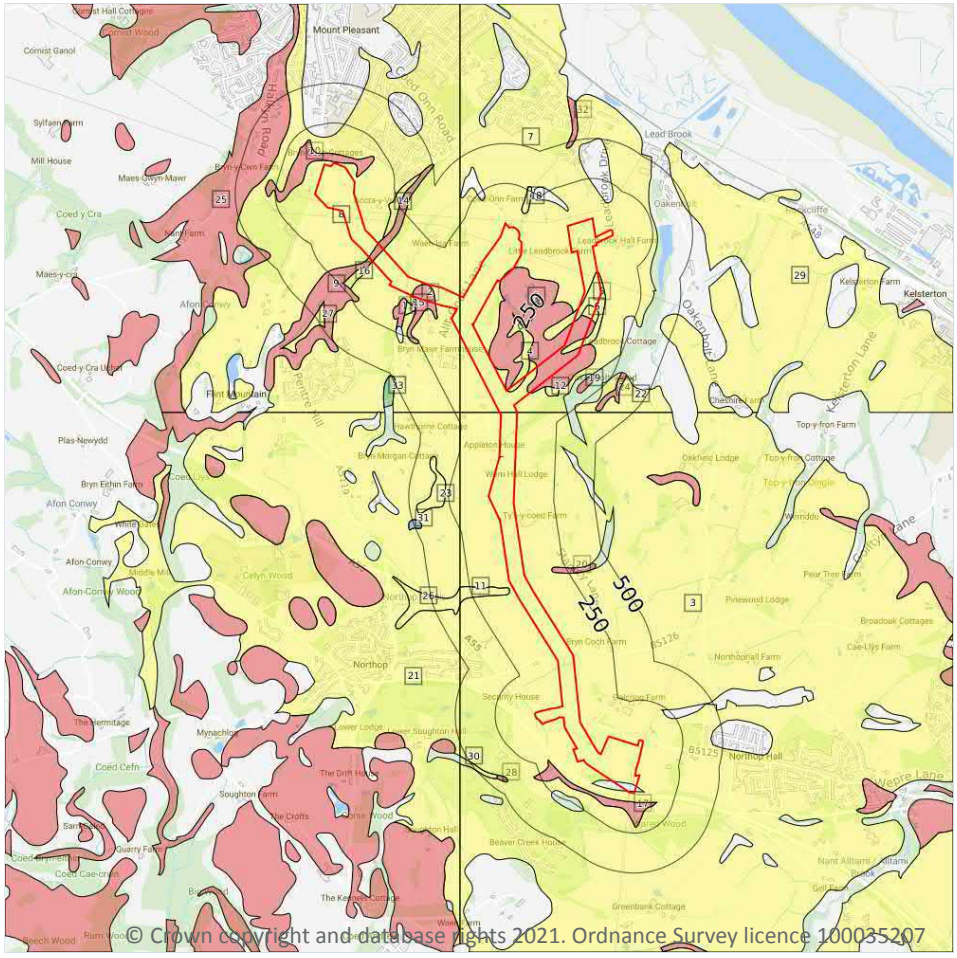
## 4.21 Pollution inventory radioactive waste

| 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 | 33 |
|---|---|

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 55**

| 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 |

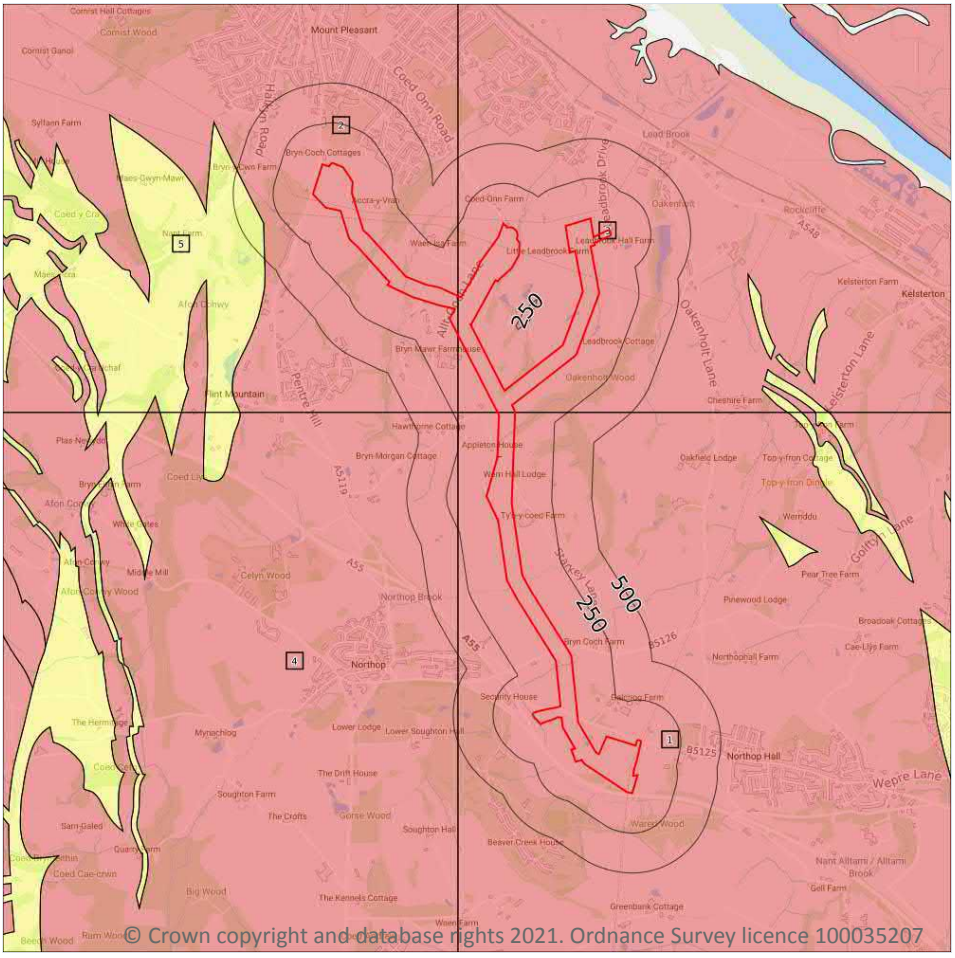
| ID | Location | Designation | Description |
|---|---|---|---|
| **3** | **On site** | **Secondary Undifferentiated** | **Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type** |
| **4** | **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** |
| **5** | **On site** | **Secondary Undifferentiated** | **Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type** |
| **6** | **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** |
| **7** | **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** |
| **8** | **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** |
| **9** | **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** |
| 10 | 6m N | Secondary A | Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers |
| 11 | 25m SW | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |
| 12 | 31m SE | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |
| 13 | 34m SW | 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 |
| 14 | 40m NE | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |
| 15 | 42m SW | 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 |
|---|---|---|---|
| 16 | 44m SW | 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 |
| 17 | 55m S | Secondary A | Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers |
| 18 | 106m NE | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |
| 19 | 148m SE | 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 |
| 20 | 165m NE | Secondary A | Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers |
| 21 | 179m W | 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 |
| 22 | 232m SE | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |
| 23 | 273m W | 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 |
| 24 | 295m SE | 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 |
| 25 | 295m 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 |
| 26 | 311m W | 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 |
| 27 | 397m SW | 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 |
| 28 | 407m SW | 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 |
|---|---|---|---|
| 29 | 416m E | 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 |
| 30 | 426m SW | 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 |
| 31 | 455m SW | Unproductive | These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow |
| 32 | 466m N | Secondary A | Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers |
| 33 | 489m SW | Unknown | Unknown |

*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

## 5.2 Bedrock aquifer

| Records within 500m | 5 |
|---|---|

Aquifer status of groundwater held within bedrock geology.

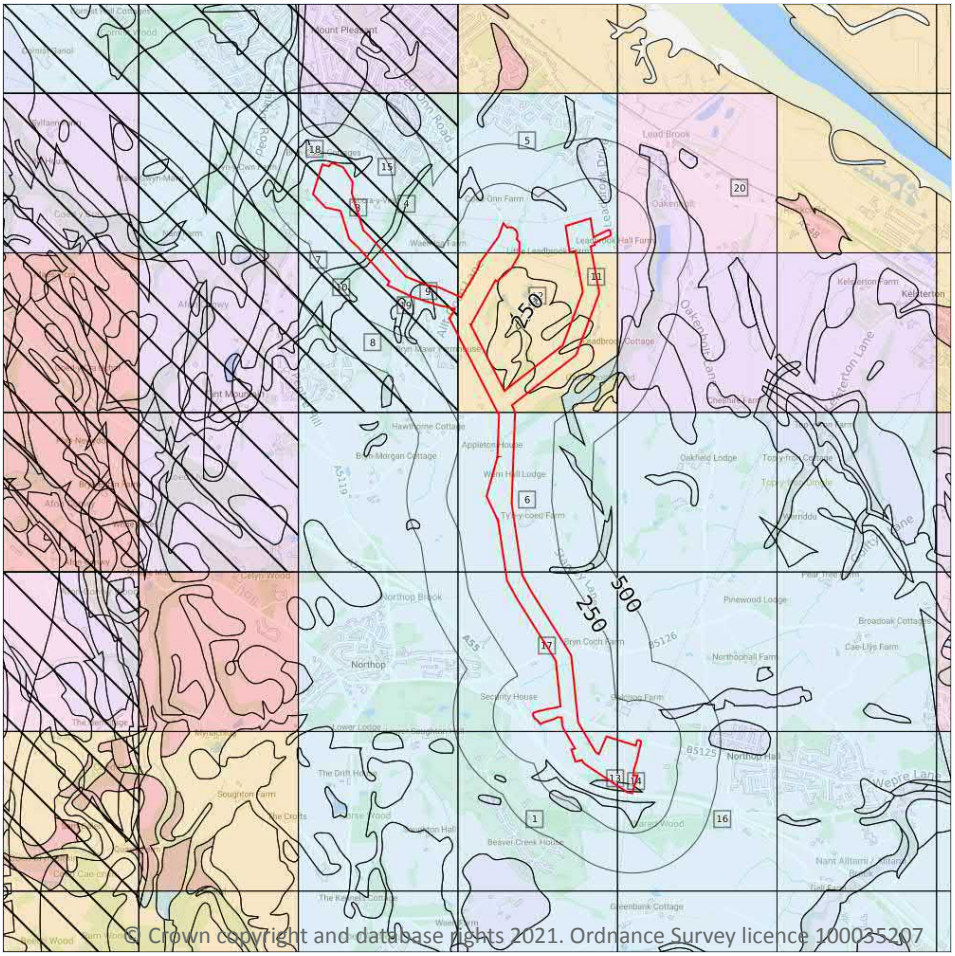
Features are displayed on the Bedrock aquifer map on **page 59**

| 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** | **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** |
| 4 | 179m 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 |
| 5 | 358m SW | 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 |

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

# Groundwater vulnerability




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Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

## 5.3 Groundwater vulnerability

| Records within 50m | 18 |
|---|---|

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 61**

| 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: 3-10m Patchiness value: >90% Recharge potential: Low | Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures |
| 3 | 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: Medium | Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures |
| 4 | 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: Medium | Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures |
| 5 | 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: 3-10m Patchiness value: >90% Recharge potential: Low | Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures |
| 6 | 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 |
| 7 | 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 |

| ID | Location | Summary | Soil / surface | Superficial geology | Bedrock geology |
|---|---|---|---|---|---|
| 8 | On site | Summary Classification: Secondary superficial aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: Low<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 9 | On site | Summary Classification: Secondary superficial aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: Low<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 10 | On site | Summary Classification: Secondary superficial aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: Low<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 11 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 12 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 13 | On site | Summary Classification: Secondary bedrock aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: -<br>Aquifer type: -<br>Thickness: 3-10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |

| ID | Location | Summary | Soil / surface | Superficial geology | Bedrock geology |
|---|---|---|---|---|---|
| **14** | **On site** | **Summary Classification: Secondary bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer** | **Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year** | **Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: >90% Recharge potential: Low** | **Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures** |
| **16** | **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: 3-10m Patchiness value: >90% Recharge potential: Low** | **Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures** |
| **17** | **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** |
| 18 | 5m N | 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: Medium | Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures |
| 19 | 33m SW | 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 |
| 20 | 41m E | Summary Classification: Secondary superficial aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: Low Infiltration value: >70% Dilution value: 300-550mm/year | Vulnerability: Medium Aquifer type: Secondary Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data | Vulnerability: Medium 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

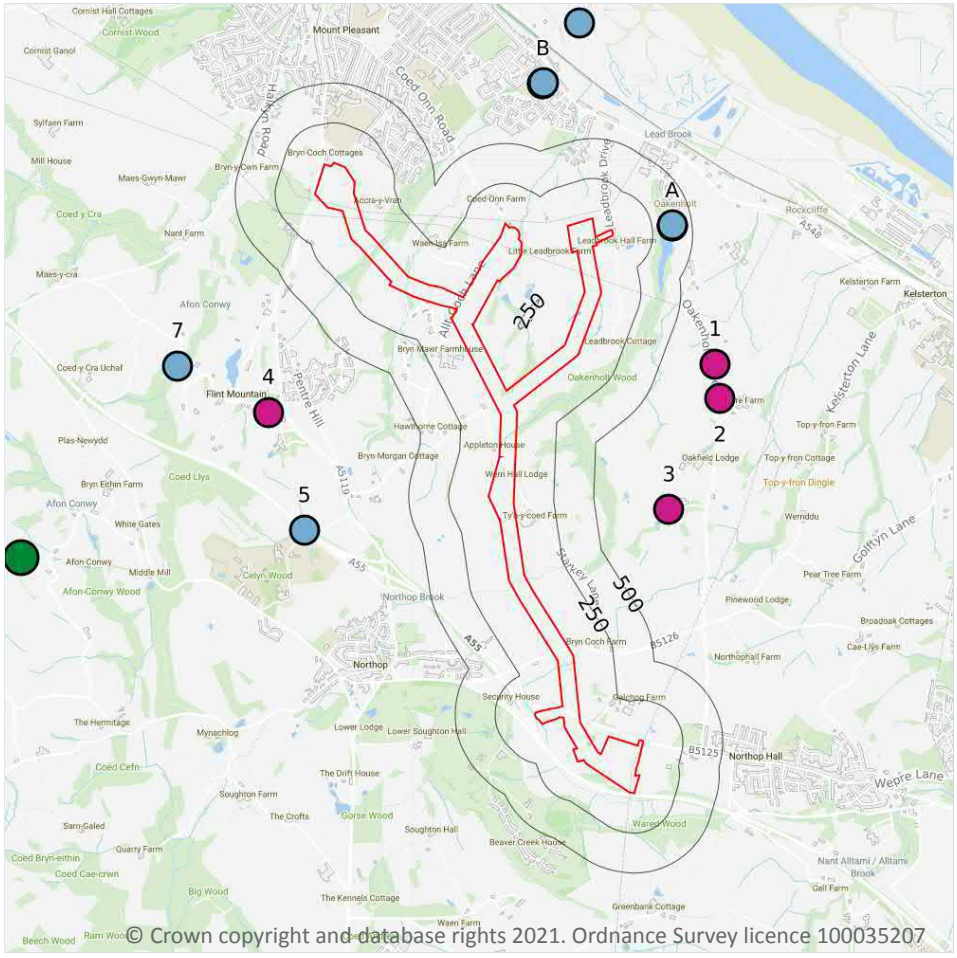
| Records on site | 2 |
|---|---|

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.

| ID | Summary | Additional information |
|---|---|---|
| **2** | **Rapid flow pathways** | **Halkyn (High Level) Drainage Tunnel** |
| **15** | **Rapid flow pathways** | **Halkyn (High Level) Drainage Tunnel** |

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

# Abstractions and Source Protection Zones




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- 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
- 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 | 4 |
|---|---|

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 66**

| ID | Location | Details | |
|---|---|---|---|
| 1 | 825m E | Status: Historical<br>Licence No: 24/67/10/0030<br>Details: General Farming & Domestic<br>Direct Source: EAW Groundwater<br>Point: WELL A<br>Data Type: Point<br>Name: Dodd<br>Easting: 326600<br>Northing: 370301 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 25/10/1966<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 04/02/2004<br>Version End Date: - |
| 2 | 927m E | Status: Historical<br>Licence No: 24/67/10/0030<br>Details: General Farming & Domestic<br>Direct Source: EAW Groundwater<br>Point: WELL B<br>Data Type: Point<br>Name: Dodd<br>Easting: 326630<br>Northing: 370090 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 25/10/1966<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 04/02/2004<br>Version End Date: - |
| 3 | 956m E | Status: Historical<br>Licence No: 24/67/10/0014<br>Details: General Farming & Domestic<br>Direct Source: EAW Groundwater<br>Point: WELL<br>Data Type: Point<br>Name: Charlton<br>Easting: 326310<br>Northing: 369390 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 09/08/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 09/08/1966<br>Version End Date: - |
| 4 | 1100m SW | Status: Historical<br>Licence No: 18/54/01/0507<br>Details: General Farming & Domestic<br>Direct Source: Groundwater Midlands Region<br>Point: SEVERN BANKS - BOREHOLE/WELL<br>Data Type: Point<br>Name: LLOYD<br>Easting: 323800<br>Northing: 370000 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 05/10/1970<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 05/10/1970<br>Version End Date: - |

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

## 5.7 Surface water abstractions

| **Records within 2000m** | **9** |
|---|---|

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 66**

| ID | Location | Details | |
|---|---|---|---|
| A | 375m E | Status: Historical<br>Licence No: 24/67/10/0079<br>Details: Process Water<br>Direct Source: EAW Surface Water<br>Point: RESERVOIR<br>Data Type: Point<br>Name: SCA Hygiene Products UK Ltd<br>Easting: 326330<br>Northing: 371170 | Annual Volume ($m^3$): 626212<br>Max Daily Volume ($m^3$): 6727.6<br>Original Application No: -<br>Original Start Date: 14/06/1968<br>Expiry Date: -<br>Issue No: 102<br>Version Start Date: 01/04/2011<br>Version End Date: - |
| A | 375m E | Status: Historical<br>Licence No: 24/67/10/0079<br>Details: Process Water - Medium<br>Direct Source: -<br>Point: -<br>Data Type: Point<br>Name: -<br>Easting: 326330<br>Northing: 371170 | Annual Volume ($m^3$): 626212<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: Apr 1 2011 12:00AM<br>Expiry Date: -<br>Issue No: -<br>Version Start Date: -<br>Version End Date: - |
| A | 380m E | Status: Active<br>Licence No: 24/67/10/0079<br>Details: Process Water - Medium<br>Direct Source: Okenholt Reservoir<br>Point: -<br>Data Type: Point<br>Name: -<br>Easting: 326334<br>Northing: 371176 | Annual Volume ($m^3$): 626,211.50<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: Jan 31 2018 12:00AM<br>Expiry Date: -<br>Issue No: -<br>Version Start Date: -<br>Version End Date: - |
| B | 898m N | Status: Historical<br>Licence No: 24/67/10/0080<br>Details: Process Water<br>Direct Source: EAW Surface Water<br>Point: STREAM<br>Data Type: Point<br>Name: SCA Hygiene Products UK Ltd<br>Easting: 325520<br>Northing: 372060 | Annual Volume ($m^3$): 123879<br>Max Daily Volume ($m^3$): 518.244<br>Original Application No: -<br>Original Start Date: 14/06/1968<br>Expiry Date: -<br>Issue No: 101<br>Version Start Date: 01/04/2003<br>Version End Date: - |
| B | 898m N | Status: Historical<br>Licence No: 24/67/10/0080<br>Details: Process Water - Medium<br>Direct Source: -<br>Point: -<br>Data Type: Point<br>Name: Mike King<br>Easting: 325520<br>Northing: 372060 | Annual Volume ($m^3$): 123879<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: Apr 1 2003 12:00AM<br>Expiry Date: -<br>Issue No: -<br>Version Start Date: -<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| B | 901m N | Status: Active<br>Licence No: 24/67/10/0080<br>Details: Process Water - Medium<br>Direct Source: Pandy Brook at Pentre Ffwrndan<br>Point: -<br>Data Type: Point<br>Name: -<br>Easting: 325525<br>Northing: 372065 | Annual Volume ($m^3$): 123,878.50<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: Jan 31 2018 12:00AM<br>Expiry Date: -<br>Issue No: -<br>Version Start Date: -<br>Version End Date: - |
| 5 | 1174m W | Status: Historical<br>Licence No: 24/67/10/0092<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: RESERVOIR<br>Data Type: Point<br>Name: Welsh College Of Horticulture<br>Easting: 324025<br>Northing: 369260 | Annual Volume ($m^3$): 2154.8<br>Max Daily Volume ($m^3$): 181.8<br>Original Application No: -<br>Original Start Date: 08/06/1973<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 01/04/2007<br>Version End Date: - |
| 6 | 1226m N | Status: Active<br>Licence No: 24/67/10/0099<br>Details: Unknown (Impounding) -<br>Direct Source: -<br>Point: -<br>Data Type: Point<br>Name: -<br>Easting: 325750<br>Northing: 372440 | Annual Volume ($m^3$): 0<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: Mar 5 1979 12:00AM<br>Expiry Date: -<br>Issue No: -<br>Version Start Date: -<br>Version End Date: - |
| 7 | 1350m SW | Status: Historical<br>Licence No: 24/67/10/0089<br>Details: General Farming & Domestic<br>Direct Source: EAW Surface Water<br>Point: SPRING<br>Data Type: Point<br>Name: Atkinson<br>Easting: 323230<br>Northing: 370290 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 13/03/1970<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 25/07/1973<br>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 | 0 |
|---|---|

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

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

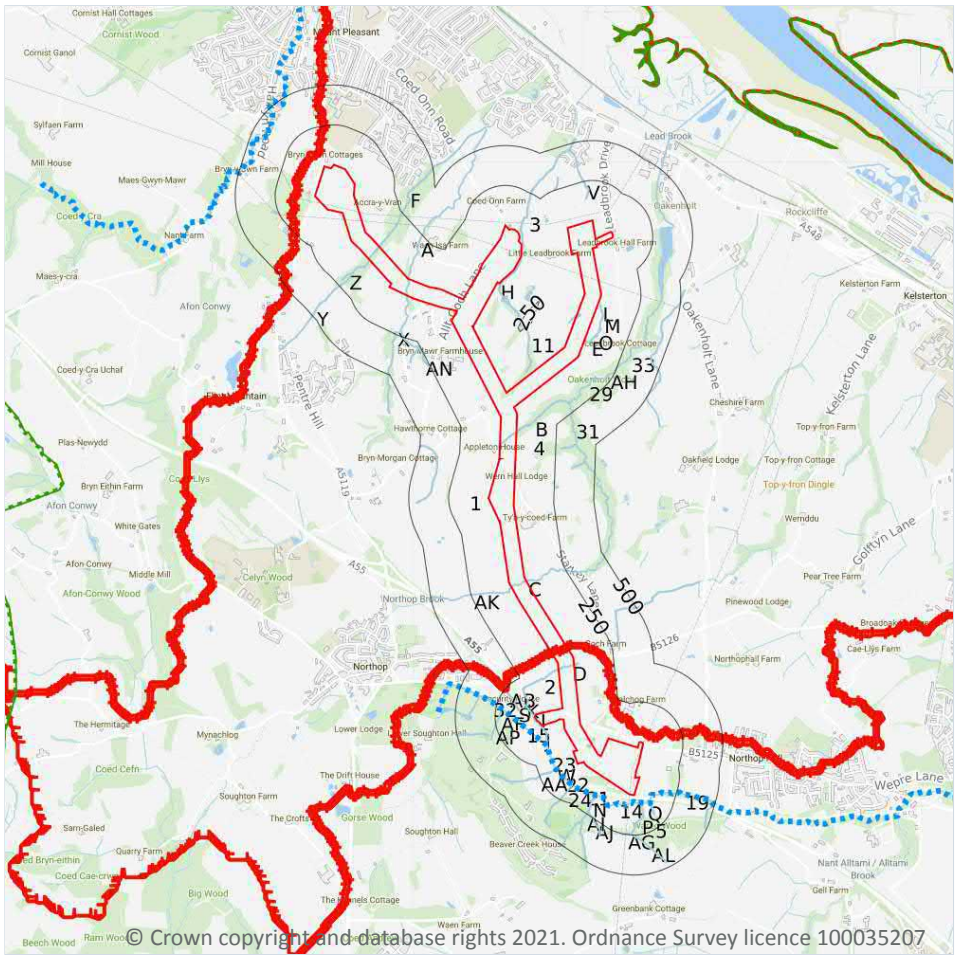
## 5.10 Source Protection Zones (confined aquifer)

| 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




## 6.1 Water Network (OS MasterMap)

| Records within 250m | 65 |
|---|---|

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 71**

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| **2** | **On site** | **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 |
|---|---|---|---|---|---|
| **3** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **A** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **B** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **C** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **Northop Brook** |
| **D** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **D** | **On site** | **Inland river not influenced by normal tidal action.** | **Underground** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **E** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **F** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| H | 3m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| H | 3m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| I | 4m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| J | 6m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| K | 9m 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 |
|---|---|---|---|---|---|
| L | 15m E | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| D | 19m E | Lake, loch or reservoir. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 11 | 26m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| L | 29m E | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| M | 32m E | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 14 | 40m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| H | 44m SE | Marsh. An area that is predominantly waterlogged by freshwater. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| O | 54m E | Lake, loch or reservoir. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| O | 63m E | Lake, loch or reservoir. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| O | 64m E | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| P | 66m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| Q | 66m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 15 | 76m SW | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| H | 80m SE | Lake, loch or reservoir. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 19 | 101m E | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| Q | 101m E | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| S | 101m W | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| Q | 110m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| Q | 111m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 21 | 118m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| N | 118m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 22 | 121m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 23 | 123m S | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| 24 | 136m S | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| V | 138m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| W | 139m 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 |
|---|---|---|---|---|---|
| W | 139m W | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| Y | 143m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| Z | 143m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| S | 155m NW | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| 29 | 161m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Lead Brook |
| W | 162m W | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| K | 163m NW | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| AA | 167m W | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AB | 179m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 31 | 196m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Lead Brook |
| 32 | 209m W | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AF | 209m W | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| X | 214m SW | 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 |
|---|---|---|---|---|---|
| X | 214m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AH | 219m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Lead Brook |
| AH | 221m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Lead Brook |
| 33 | 228m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Lead Brook |
| AI | 229m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AJ | 229m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AG | 240m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AK | 241m W | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Northop Brook |
| AL | 241m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AN | 243m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AK | 245m W | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Northop Brook |
| AP | 247m W | Inland river not influenced by normal tidal action. | 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 | 60 |
|---|---|

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 71**

*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 71**

| ID | Location | Type | Water body catchment | Water body ID | Operational catchment | Management catchment |
|---|---|---|---|---|---|---|
| **4** | **On site** | **Coastal catchment** | **Not part of a river WB catchment** | **166** | **Dee Estuary** | **Dee** |
| **5** | **On site** | **River WB catchment** | **Wepre Brook** | **GB111067056880** | **Dee Estuary** | **Dee** |

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

## 6.4 WFD Surface water bodies

| Records identified | 1 |
|---|---|

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 71**

| ID | Location | Type | Name | Water body ID | Overall rating | Chemical rating | Ecological rating | Year |
|---|---|---|---|---|---|---|---|---|
| 13 | 40m S | River | Wepre Brook | GB111067056880 | Moderate | Good | Moderate | 2016 |

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

## 6.5 WFD Groundwater bodies

| **Records on site** | **1** |
|---|---|

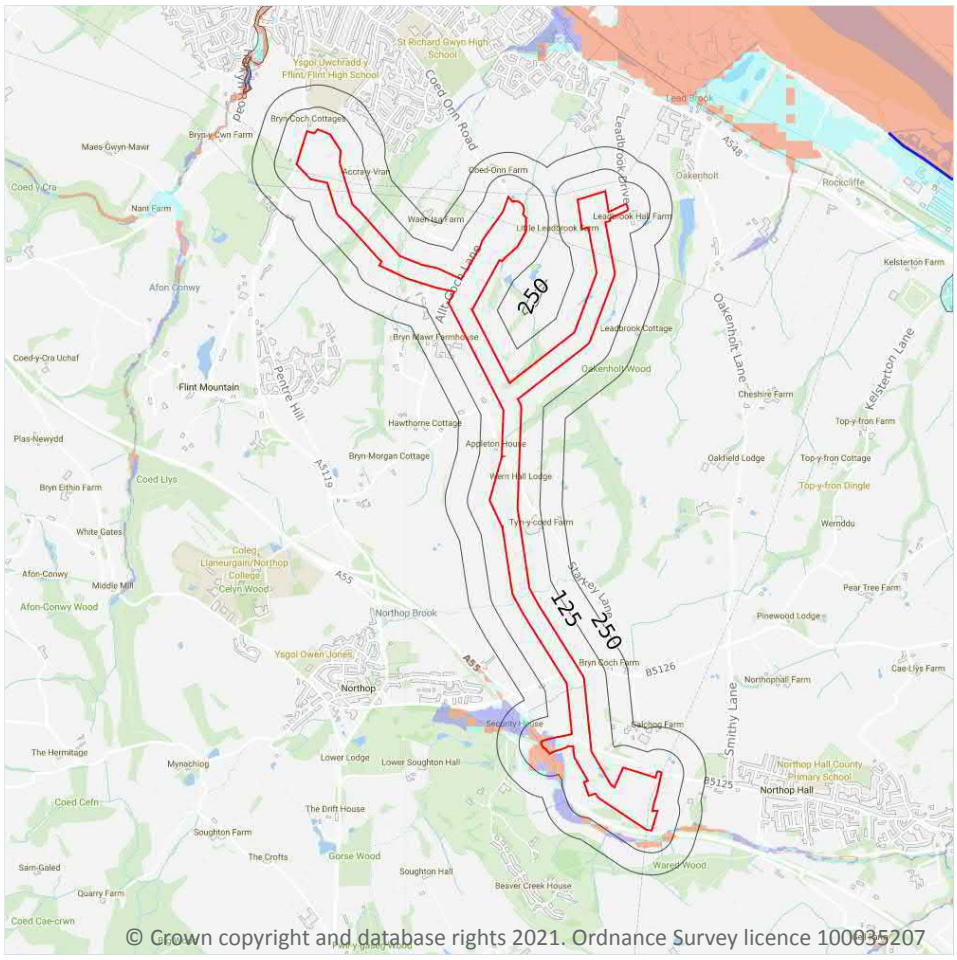
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place.

Features are displayed on the Hydrology map on **page 71**

| ID | Location | Name | Water body ID | Overall rating | Chemical rating | Quantitative | Year |
|---|---|---|---|---|---|---|---|
| **1** | **On site** | **Dee Carboniferous Coal Measures** | **GB41102G204800** | **Poor** | **Poor** | **Good** | **2016** |

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

# 7 River and coastal flooding




Site Outline

Search buffers in metres (m)

Environment Agency river and coastal flooding:

- High
- Medium
- Low
- Very Low

- Historical Flood Events
- Areas Used for Flood Storage
- Areas Benefiting from Flood Defences

- Flood Defences

## 7.1 Risk of Flooding from Rivers and Sea (RoFRaS)

| **Records within 50m** | **9** |
|---|---|

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; 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).

Features are displayed on the River and coastal flooding map on **page 79**

| Distance | RoFRaS flood risk |
|---|---|
| **On site** | **High** |
| 0 - 50m | High |

*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.*

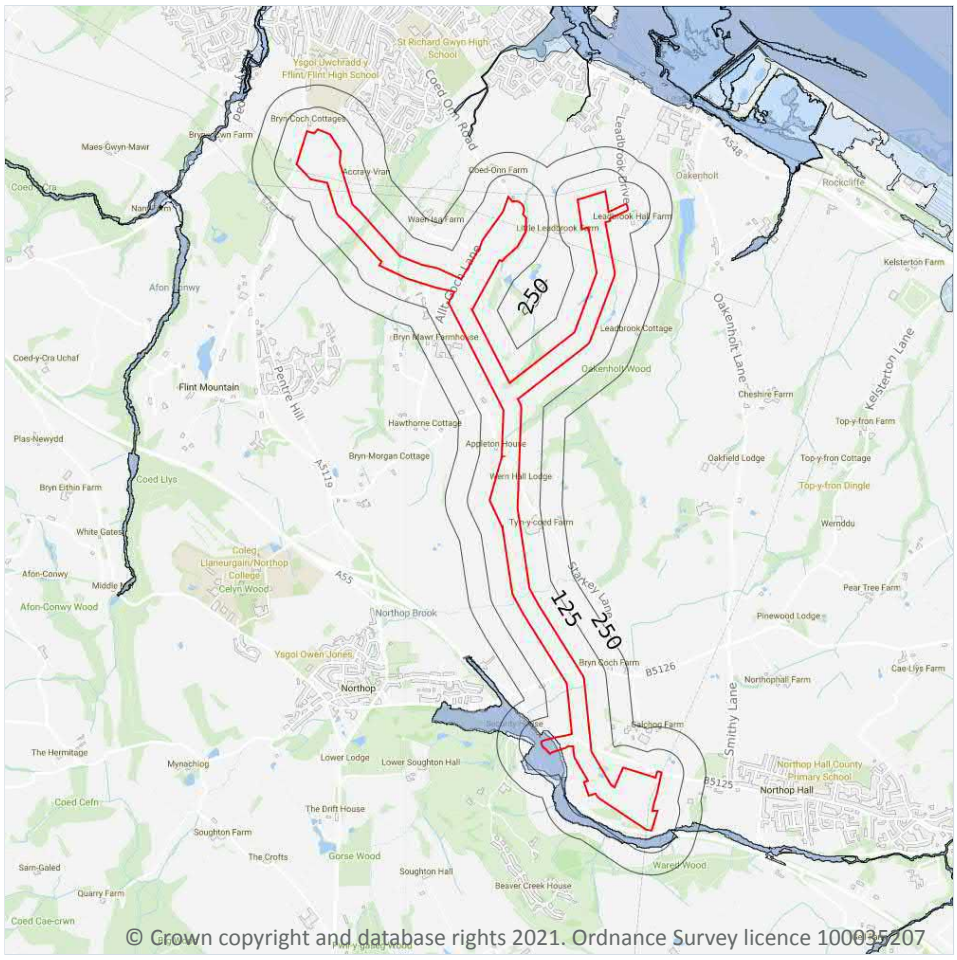
## 7.5 Flood Storage Areas

| 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




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## 7.6 Flood Zone 2

| Records within 50m | 1 |
|---|---|

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.

Features are displayed on the River and coastal flooding map on **page 79**

| Location | Type |
|---|---|
| **On site** | **Zone 2 - (Fluvial /Tidal Models)** |

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

## 7.7 Flood Zone 3

| Records within 50m | 1 |
|---|---|

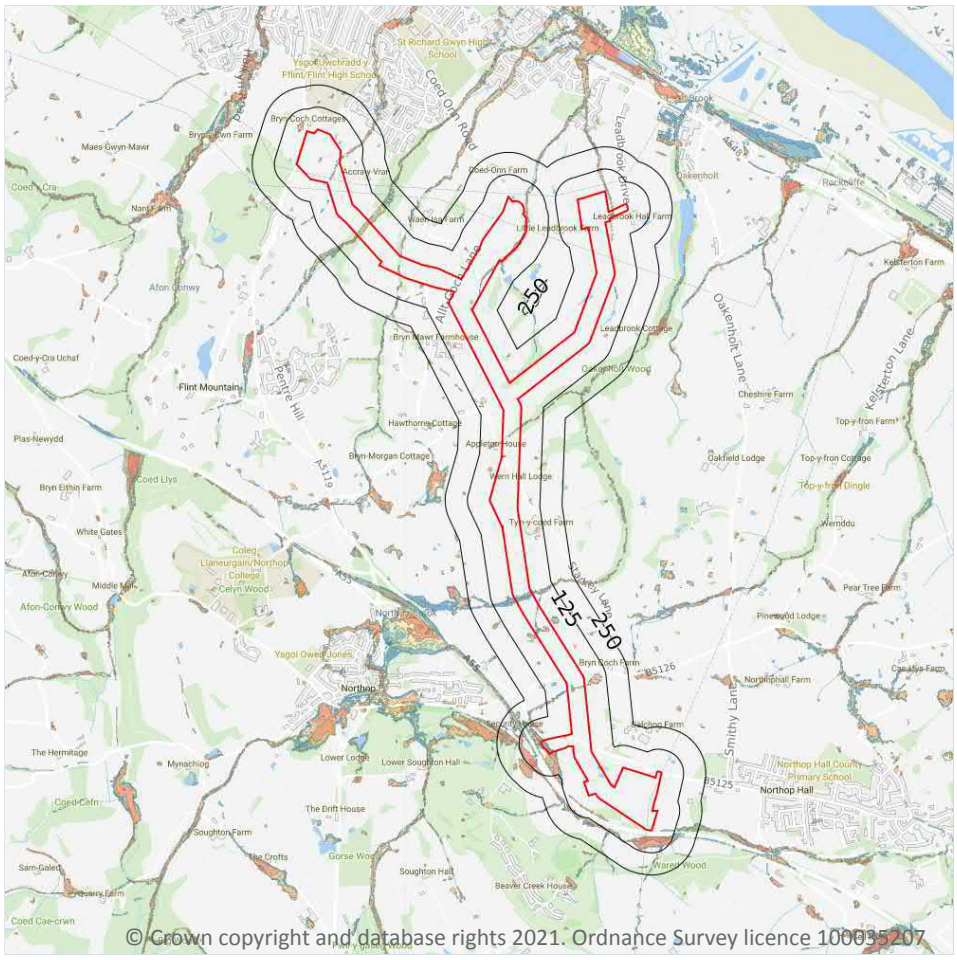
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 79**

| Location | Type |
|---|---|
| **On site** | **Zone 3 - (Fluvial Models)** |

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

# 8 Surface water flooding




Site Outline

Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

## 8.1 Surface water flooding

| | |
|---|---|
| **Highest risk on site** | **1 in 30 year, 0.3m - 1.0m** |
| **Highest risk within 50m** | **1 in 30 year, Greater than 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 83**

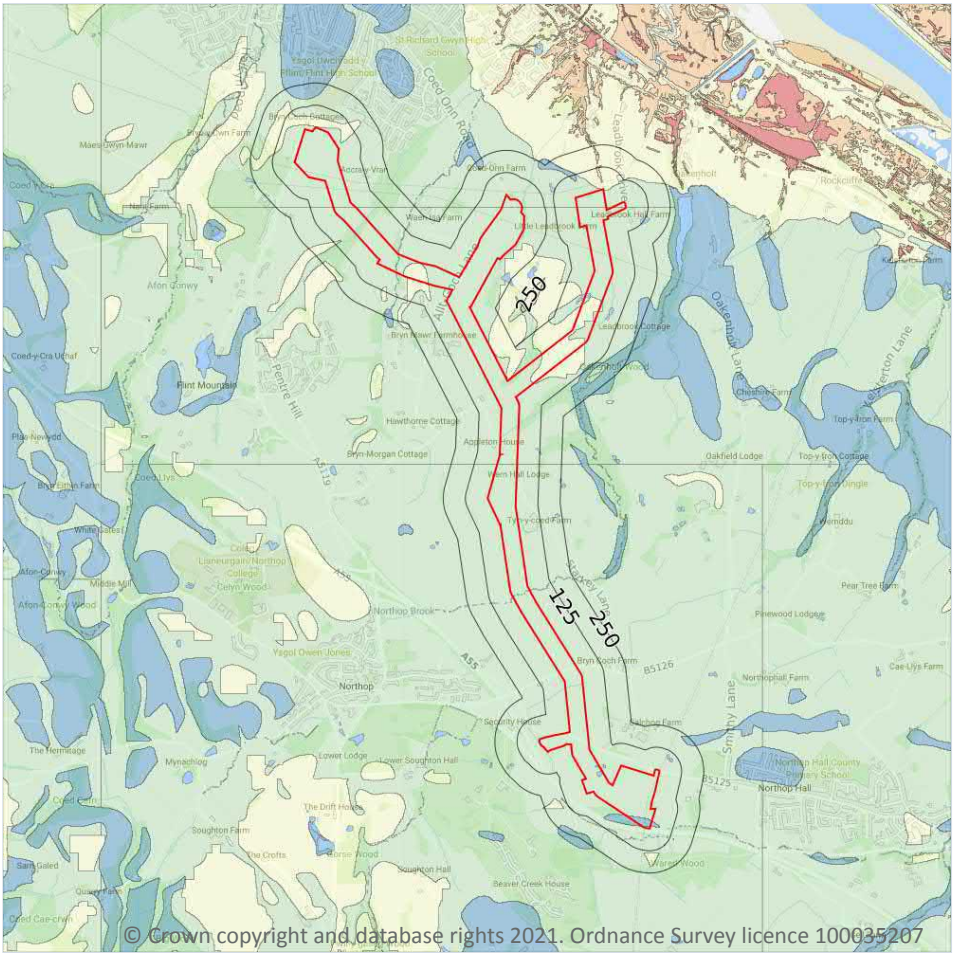
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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 | Greater than 1.0m |
| 1 in 250 year | Between 0.3m and 1.0m |
| 1 in 100 year | Between 0.3m and 1.0m |
| 1 in 30 year | Between 0.3m and 1.0m |

*This data is sourced from Ambiental Risk Analytics.*

# 9 Groundwater flooding




Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

## 9.1 Groundwater flooding

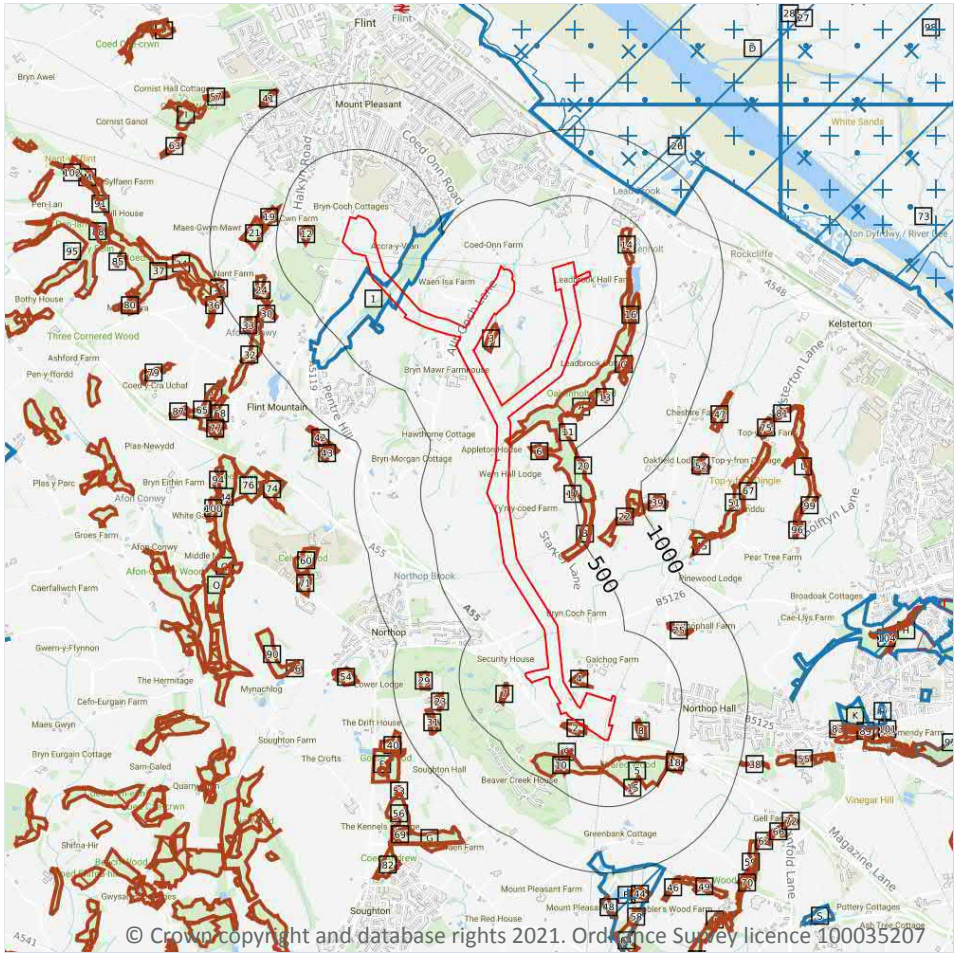
| | |
|---|---|
| **Highest risk on site** | **Moderate** |
| **Highest risk within 50m** | **Moderate-High** |

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 85**

*This data is sourced from Ambiental Risk Analytics.*

# 10 Environmental designations


Flint
Mount Pleasant
Flint Mountain
Northop
Northop Hall
Soughton
Kelsterton
Coed Onn Road
Halkyn Road
Stark Lane
Pentre Tip
Coed-Onn Farm
Leadbrook Hall Farm
Bryn Mawr Farmhouse
Waen Isa Farm
Pear Tree Farm
Broadoak Cottages
Greenbank Cottage
Mount Pleasant Farm
The Red House
Vinegar Hill
Magazine Lane
Puttery Cottages
Northop Brook
Security House
Galchog Farm
Bryn Coch Farm
Soughton Hall
Beaver Creek House
Innewood Lodge
Top-y-fron Cottage
Oakfield Lodge
Cheshire Farm
Rockcliffe
White Sands
Afon Dyfrdwy / River Dee
Leadbrook
Bryn Awel
Cornist Hall Cottages
Cornist Ganol
Coed Onn Crown
Bryn-Coch Cottages
Maes-Gwyn-Mawr
Ascray-Wen
Bryn Morgan Cottage
Hawthorne Cottage
Appletonhouse
Wern Hall Lodge
Tyrrey-coed Farm
Oakfield Farm
Top-y-fron Farm
Top-y-fron Bungalow
Ty'n-y-coed
Bryn Coch Farm
Galchog Farm
Security House
Northop Hall
Broadoak Cottages
Cae Llys Farm
Pear Tree Farm
Innewood Lodge
Magazine Lane
Puttery Cottages
Ash Tree Cottage
Vinegar Hill
Greenbank Cottage
Mount Pleasant Farm
The Red House
Soughton
Soughton Hall
Beaver Creek House
The Drift House
The Crofts
Soughton Farm
Bryn Eurgain Cottage
Sam-Saled
Maes Gwyn
Cefn-Eurgain Farm
The Hermitage
Mynachlog
Gwern-y-Flynnon
Caerfallwch Farm
Groes Farm
Afon Conwy
Middle
Bryn Eithin Farm
Plas-Newydd
Plas y Parc
Ashford Farm
Pen-y-ffordd
Three Cornered Wood
Bothy House
Pen-Lan
Cyffaen Farm
Maes-Gwyn-Mawr
Cwm Farm
Nant Farm
Afon Dyfrdwy
Coed-y-Cra Uchaf
Coed-y-Cra
Shifna-Hir
Gwysaney Hall
Gwysaney Farm
Quarry
Ty'n-y-Cwm
Coed-Onn
Coed-Onn Farm
Waen Isa Farm
Bryn Mawr Farmhouse
Leadbrook Hall Farm
Leadbrook
Hawthorne Cottage
Appletonhouse
Wern Hall Lodge
Bryn Morgan Cottage
Tyrrey-coed Farm
Oakfield Farm
Top-y-fron Farm
Top-y-fron Bungalow
Ty'n-y-coed
Cheshire Farm
Rockcliffe
Kelsterton
Afon Dyfrdwy / River Dee
White Sands
Leadbrook
Northop Brook
Bryn Coch Farm
Galchog Farm
Security House
Northop Hall
Broadoak Cottages
Cae Llys Farm
Pear Tree Farm
Innewood Lodge
Top-y-fron Cottage
Oakfield Lodge
Cheshire Farm
Rockcliffe
White Sands
Afon Dyfrdwy / River Dee
Leadbrook
Bryn Awel
Cornist Hall Cottages
Cornist Ganol
Coed Onn Crown
Bryn-Coch Cottages
Maes-Gwyn-Mawr
Ascray-Wen
Bryn Morgan Cottage
Hawthorne Cottage
Appletonhouse
Wern Hall Lodge
Tyrrey-coed Farm
Oakfield Farm
Top-y-fron Farm
Top-y-fron Bungalow
Ty'n-y-coed
Bryn Coch Farm
Galchog Farm
Security House
Northop Hall
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Cae Llys Farm
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Ash Tree Cottage
Vinegar Hill
Greenbank Cottage
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The Red House
Soughton
Soughton Hall
Beaver Creek House
The Drift House
The Crofts
Soughton Farm
Bryn Eurgain Cottage
Sam-Saled
Maes Gwyn
Cefn-Eurgain Farm
The Hermitage
Mynachlog
Gwern-y-Flynnon
Caerfallwch Farm
Groes Farm
Afon Conwy
Middle
Bryn Eithin Farm
Plas-Newydd
Plas y Parc
Ashford Farm
Pen-y-ffordd
Three Cornered Wood
Bothy House
Pen-Lan
Cyffaen Farm
Maes-Gwyn-Mawr
Cwm Farm
Nant Farm
Afon Dyfrdwy
Coed-y-Cra Uchaf
Coed-y-Cra
Shifna-Hir
Gwysaney Hall
Gwysaney Farm
Quarry
Ty'n-y-Cwm
Coed-Onn
Coed-Onn Farm
Waen Isa Farm
Bryn Mawr Farmhouse
Leadbrook Hall Farm
Leadbrook
Hawthorne Cottage
Appletonhouse
Wern Hall Lodge
Bryn Morgan Cottage

| ID | Location | Name | Data source |
|---|---|---|---|
| 26 | 702m NE | Dee Estuary / Aber Afon Dyfrdwy | Natural Resources Wales |
| E | 851m S | Maes Y Grug | Natural Resources Wales |
| 50 | 1186m N | Dee Estuary / Aber Afon Dyfrdwy | Natural Resources Wales |
| H | 1324m E | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| 73 | 1499m E | Dee Estuary / Aber Afon Dyfrdwy | Natural Resources Wales |
| K | 1678m E | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| N | 1906m E | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| 98 | 1915m NE | Dee Estuary / Aber Afon Dyfrdwy | Natural Resources Wales |
| R | 1991m E | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| S | 1996m SE | Buckley Claypits And Commons | Natural Resources Wales |

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

## 10.2 Conserved wetland sites (Ramsar sites)

| **Records within 2000m** | **3** |
|---|---|

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.

Features are displayed on the Environmental designations map on **page 86**

| ID | Location | Site | Details |
|---|---|---|---|
| D | 702m NE | Name: The Dee Estuary (Wales)<br>Site status: -<br>Data source: Natural Resources Wales | Overview: The Dee is a large funnel-shaped sheltered estuary and is one of the top ten estuaries in the UK for wintering and passage waterfowl populations. The estuary supports internationally important numbers of waterfowl and waders. The estuary is an accreting system and the extent of saltmarsh continues to expand as the estuary seeks to achieve a new equilibrium situation following large-scale historical land-claim at the head of the estuary which commenced in the 1730s. Nevertheless, the estuary still supports extensive areas of intertidal sand and mudflats as well as saltmarsh. Where land-claim has not occurred, the saltmarshes grade into transitional brackish and freshwater swamp vegetation, on the upper shore. The site includes the three sandstone islands of Hilbre with their important cliff vegetation and maritime heathland/grassland, the sand dune system between the Point of Ayr and Prestatyn in Wales and Red Rocks in England, various Welsh coastal fields historically reclaimed from the estuary but used by the Dee Estuary wintering waterfowl populations, freshwater lagoons and reedbeds at Shotton supporting the largest common tern breeding colony in Wales and freshwater lagoons at Inner Marsh Farm used by waterfowl throughout the year but particularly in winter. The two shorelines of the estuary show a marked contrast between the industrialised usage of the coastal belt in Wales and residential and recreational usage in England.<br>Ramsar criteria: Ramsar criterion 1 Extensive intertidal mud and sand flats (20 km by 9 km) with large expanses of saltmarsh towards the head of the estuary. Habitats Directive Annex I features present on the pSAC include: H1130 Estuaries H1140 Mudflats and sandflats not covered by seawater at low tide H1210 Annual vegetation of drift lines H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts H1310 Salicornia and other annuals colonising mud and sand H1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) H2110 Embryonic shifting dunes H2120 Shifting dunes along the shoreline with Ammophila arenaria (“white dunes”) H2130 Fixed dunes with herbaceous vegetation (“grey dunes”) H2190 Humid dune slacks Criterion 2, it supports breeding colonies of the vulnerable Natterjack Toad, Epidalea calamita |

| ID | Location | Site | Details |
|---|---|---|---|
| 27 | 709m NE | Name: The Dee Estuary<br>Site status: Listed<br>Data source: Natural England | Overview: The Dee is a large funnel-shaped sheltered estuary and is one of the top ten estuaries in the UK for wintering and passage waterfowl populations. The estuary supports internationally important numbers of waterfowl and waders. The estuary is an accreting system and the extent of saltmarsh continues to expand as the estuary seeks to achieve a new equilibrium situation following large-scale historical land-claim at the head of the estuary which commenced in the 1730s. Nevertheless, the estuary still supports extensive areas of intertidal sand and mudflats as well as saltmarsh. Where land-claim has not occurred, the saltmarshes grade into transitional brackish and freshwater swamp vegetation, on the upper shore. The site includes the three sandstone islands of Hilbre with their important cliff vegetation and maritime heathland/grassland, the sand dune system between the Point of Ayr and Prestatyn in Wales and Red Rocks in England, various Welsh coastal fields historically reclaimed from the estuary but used by the Dee Estuary wintering waterfowl populations, freshwater lagoons and reedbeds at Shotton supporting the largest common tern breeding colony in Wales and freshwater lagoons at Inner Marsh Farm used by waterfowl throughout the year but particularly in winter. The two shorelines of the estuary show a marked contrast between the industrialised usage of the coastal belt in Wales and residential and recreational usage in England.<br>Ramsar criteria: Ramsar criterion 1 Extensive intertidal mud and sand flats (20 km by 9 km) with large expanses of saltmarsh towards the head of the estuary. Habitats Directive Annex I features present on the pSAC include: H1130 Estuaries H1140 Mudflats and sandflats not covered by seawater at low tide H1210 Annual vegetation of drift lines H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts H1310 Salicornia and other annuals colonising mud and sand H1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) H2110 Embryonic shifting dunes H2120 Shifting dunes along the shoreline with Ammophila arenaria (“white dunes”) H2130 Fixed dunes with herbaceous vegetation (“grey dunes”) H2190 Humid dune slacks Criterion 2, it supports breeding colonies of the vulnerable Natterjack Toad, Epidalea calamita |

| ID | Location | Site | Details |
|---|---|---|---|
| - | 1772m N | Name: The Dee Estuary<br>Site status: Listed<br>Data source: Natural England | Overview: The Dee is a large funnel-shaped sheltered estuary and is one of the top ten estuaries in the UK for wintering and passage waterfowl populations. The estuary supports internationally important numbers of waterfowl and waders. The estuary is an accreting system and the extent of saltmarsh continues to expand as the estuary seeks to achieve a new equilibrium situation following large-scale historical land-claim at the head of the estuary which commenced in the 1730s. Nevertheless, the estuary still supports extensive areas of intertidal sand and mudflats as well as saltmarsh. Where land-claim has not occurred, the saltmarshes grade into transitional brackish and freshwater swamp vegetation, on the upper shore. The site includes the three sandstone islands of Hilbre with their important cliff vegetation and maritime heathland/grassland, the sand dune system between the Point of Ayr and Prestatyn in Wales and Red Rocks in England, various Welsh coastal fields historically reclaimed from the estuary but used by the Dee Estuary wintering waterfowl populations, freshwater lagoons and reedbeds at Shotton supporting the largest common tern breeding colony in Wales and freshwater lagoons at Inner Marsh Farm used by waterfowl throughout the year but particularly in winter. The two shorelines of the estuary show a marked contrast between the industrialised usage of the coastal belt in Wales and residential and recreational usage in England.<br>Ramsar criteria: Ramsar criterion 1 Extensive intertidal mud and sand flats (20 km by 9 km) with large expanses of saltmarsh towards the head of the estuary. Habitats Directive Annex I features present on the pSAC include: H1130 Estuaries H1140 Mudflats and sandflats not covered by seawater at low tide H1210 Annual vegetation of drift lines H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts H1310 Salicornia and other annuals colonising mud and sand H1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) H2110 Embryonic shifting dunes H2120 Shifting dunes along the shoreline with Ammophila arenaria (“white dunes”) H2130 Fixed dunes with herbaceous vegetation (“grey dunes”) H2190 Humid dune slacks Criterion 2, it supports breeding colonies of the vulnerable Natterjack Toad, Epidalea calamita |

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

## 10.3 Special Areas of Conservation (SAC)

| **Records within 2000m** | **6** |
|---|---|

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.

Features are displayed on the Environmental designations map on **page 86**

| ID | Location | Name | Features of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| D | 702m NE | Dee Estuary / Aber Dyfrdwy (Wales) | Estuaries; Intertidal mudflats and sandflats; Lagoons; Annual vegetation of drift lines; Vegetated sea cliffs; Glasswort and other annuals colonising mud and sand; Cord-grass swards; Atlantic salt meadows; Shifting dunes; Shifting dunes with marram; Dune grassland; Humid dune slacks; Dry heaths; Sea lamprey; River lamprey; Twaite shad; Otter; Grey seal; Petalwort. | Shingle, Sea cliffs, Islets; Salt marshes, Salt pastures, Salt steppes; Humid grassland, Mesophile grassland; Improved grassland; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Bogs, Marshes, Water fringed vegetation, Fens; Broad-leaved deciduous woodland; Coastal sand dunes, Sand beaches, Machair; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites) | Natural Resources Wales |
| E | 851m S | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| H | 1618m E | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| K | 1678m E | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |

| ID | Location | Name | Features of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| R | 1991m E | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| S | 1996m SE | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |

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

## 10.4 Special Protection Areas (SPA)

**Records within 2000m** **2**

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.

Features are displayed on the Environmental designations map on **page 86**

| ID | Location | Name | Species of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| D | 702m NE | The Dee Estuary (Wales) | Common shelduck; Eurasian teal; Northern pintail; Eurasian oystercatcher; Grey plover; Red knot; Bar-tailed godwit; Eurasian curlew; Common redshank; Common redshank; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin | Broad-leaved deciduous woodland; Shingle, Sea cliffs, Islets; Coastal sand dunes, Sand beaches, Machair; Mixed woodland; Dry grassland, Steppes; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste plac | |

| ID | Location | Name | Species of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| 28 | 710m NE | The Dee Estuary | Common shelduck; Eurasian teal; Northern pintail; Eurasian oystercatcher; Grey plover; Red knot; Bar-tailed godwit; Eurasian curlew; Common redshank; Common redshank; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin | Broad-leaved deciduous woodland; Shingle, Sea cliffs, Islets; Coastal sand dunes, Sand beaches, Machair; Mixed woodland; Dry grassland, Steppes; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste plac | Natural England |

*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 | 122 |
|---|---|

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 86**

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| **2** | **On site** | **Unknown** | **Restored Ancient Woodland Site** |
| **A** | **On site** | **Unknown** | **Restored Ancient Woodland Site** |

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| 3 | 38m SE | Unknown | Ancient Semi Natural Woodland |
| 4 | 50m N | Unknown | Restored Ancient Woodland Site |
| 5 | 151m SE | Unknown | Restored Ancient Woodland Site |
| 6 | 151m E | Unknown | Restored Ancient Woodland Site |
| 7 | 154m SW | Unknown | Restored Ancient Woodland Site |
| 8 | 180m E | Unknown | Ancient Semi Natural Woodland |
| 9 | 202m SW | Unknown | Ancient Semi Natural Woodland |
| 10 | 214m S | Unknown | Restored Ancient Woodland Site |
| 11 | 236m SE | Unknown | Ancient Semi Natural Woodland |
| A | 243m SE | Unknown | Ancient Semi Natural Woodland |
| 12 | 244m W | Unknown | Ancient Semi Natural Woodland |
| 13 | 293m SE | Unknown | Restored Ancient Woodland Site |
| 14 | 296m E | Unknown | Restored Ancient Woodland Site |
| B | 314m NE | Unknown | Ancient Semi Natural Woodland |
| B | 317m NE | Unknown | Ancient Semi Natural Woodland |
| 15 | 358m SE | Unknown | Restored Ancient Woodland Site |
| 16 | 363m SE | Unknown | Restored Ancient Woodland Site |
| C | 380m E | Unknown | Restored Ancient Woodland Site |
| C | 413m E | Unknown | Ancient Semi Natural Woodland |
| 17 | 456m E | Unknown | Restored Ancient Woodland Site |
| 18 | 463m E | Unknown | Plantation on Ancient Woodland Site |
| 19 | 527m W | Unknown | Ancient Semi Natural Woodland |
| 20 | 530m E | Unknown | Restored Ancient Woodland Site |
| 21 | 581m W | Unknown | Restored Ancient Woodland Site |
| 22 | 623m NE | Unknown | Restored Ancient Woodland Site |
| 23 | 644m W | Unknown | Restored Ancient Woodland Site |
| 24 | 644m SW | Unknown | Ancient Semi Natural Woodland |
| 25 | 654m NE | Unknown | Ancient Semi Natural Woodland |

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| 29 | 733m W | Unknown | Ancient Semi Natural Woodland |
| 30 | 739m SW | Unknown | Restored Ancient Woodland Site |
| 31 | 752m SW | Unknown | Ancient Semi Natural Woodland |
| 32 | 848m SW | Unknown | Restored Ancient Woodland Site |
| 33 | 903m SW | Unknown | Ancient Semi Natural Woodland |
| 34 | 953m W | Unknown | Ancient Semi Natural Woodland |
| 35 | 971m W | Unknown | Ancient Semi Natural Woodland |
| 36 | 974m SW | Unknown | Ancient Semi Natural Woodland |
| 37 | 994m SW | Unknown | Ancient Semi Natural Woodland |
| 38 | 1010m E | Unknown | Restored Ancient Woodland Site |
| 39 | 1026m E | Unknown | Restored Ancient Woodland Site |
| 40 | 1044m SW | Unknown | Ancient Semi Natural Woodland |
| 41 | 1055m NW | Unknown | Ancient Semi Natural Woodland |
| 42 | 1071m SW | Unknown | Restored Ancient Woodland Site |
| 43 | 1114m SW | Unknown | Restored Ancient Woodland Site |
| F | 1115m SW | Unknown | Restored Ancient Woodland Site |
| F | 1132m SW | Unknown | Plantation on Ancient Woodland Site |
| 44 | 1141m S | Unknown | Restored Ancient Woodland Site |
| 45 | 1149m NE | Unknown | Restored Ancient Woodland Site |
| 46 | 1157m SE | Unknown | Restored Ancient Woodland Site |
| G | 1172m SW | Unknown | Plantation on Ancient Woodland Site |
| 47 | 1172m E | Unknown | Restored Ancient Woodland Site |
| 48 | 1175m S | Unknown | Ancient Semi Natural Woodland |
| 49 | 1183m SE | Unknown | Ancient Semi Natural Woodland |
| 51 | 1188m NE | Unknown | Restored Ancient Woodland Site |
| G | 1213m SW | Unknown | Plantation on Ancient Woodland Site |
| 52 | 1216m SE | Unknown | Ancient Semi Natural Woodland |
| 53 | 1262m SW | Unknown | Ancient Semi Natural Woodland |

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| 54 | 1262m W | Unknown | Ancient Semi Natural Woodland |
| 55 | 1268m E | Unknown | Restored Ancient Woodland Site |
| 56 | 1292m SW | Unknown | Restored Ancient Woodland Site |
| 57 | 1296m NW | Unknown | Ancient Semi Natural Woodland |
| 58 | 1299m S | Unknown | Restored Ancient Woodland Site |
| G | 1310m SW | Unknown | Restored Ancient Woodland Site |
| 59 | 1319m SE | Unknown | Ancient Semi Natural Woodland |
| 60 | 1338m W | Unknown | Restored Ancient Woodland Site |
| 61 | 1351m SW | Unknown | Ancient Semi Natural Woodland |
| I | 1355m NW | Unknown | Ancient Semi Natural Woodland |
| 62 | 1355m SE | Unknown | Restored Ancient Woodland Site |
| 63 | 1376m NW | Unknown | Ancient Semi Natural Woodland |
| 64 | 1385m S | Unknown | Restored Ancient Woodland Site |
| 65 | 1391m SW | Unknown | Ancient Semi Natural Woodland |
| 66 | 1404m SE | Unknown | Ancient Semi Natural Woodland |
| 67 | 1405m NE | Unknown | Restored Ancient Woodland Site |
| I | 1413m NW | Unknown | Ancient Semi Natural Woodland |
| 68 | 1419m SW | Unknown | Ancient Semi Natural Woodland |
| 69 | 1423m SW | Unknown | Ancient Semi Natural Woodland |
| 70 | 1429m SE | Unknown | Restored Ancient Woodland Site |
| 71 | 1460m W | Unknown | Restored Ancient Woodland Site |
| 72 | 1474m SE | Unknown | Ancient Semi Natural Woodland |
| 74 | 1521m W | Unknown | Restored Ancient Woodland Site |
| J | 1543m SE | Unknown | Ancient Semi Natural Woodland |
| 75 | 1544m E | Unknown | Restored Ancient Woodland Site |
| 76 | 1555m SW | Unknown | Plantation on Ancient Woodland Site |
| 77 | 1566m SW | Unknown | Ancient Semi Natural Woodland |
| 78 | 1578m SE | Unknown | Restored Ancient Woodland Site |

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| 79 | 1584m SW | Unknown | Ancient Semi Natural Woodland |
| 80 | 1593m W | Unknown | Ancient Semi Natural Woodland |
| 81 | 1612m E | Unknown | Restored Ancient Woodland Site |
| J | 1613m SE | Unknown | Restored Ancient Woodland Site |
| 82 | 1614m SW | Unknown | Ancient Semi Natural Woodland |
| 83 | 1645m E | Unknown | Restored Ancient Woodland Site |
| 84 | 1673m SW | Unknown | Plantation on Ancient Woodland Site |
| 85 | 1673m W | Unknown | Ancient Semi Natural Woodland |
| K | 1685m E | Unknown | Ancient Semi Natural Woodland |
| 86 | 1696m W | Unknown | Ancient Semi Natural Woodland |
| 87 | 1708m SW | Unknown | Ancient Semi Natural Woodland |
| L | 1725m E | Unknown | Ancient Semi Natural Woodland |
| 88 | 1727m W | Unknown | Ancient Semi Natural Woodland |
| 89 | 1735m E | Unknown | Restored Ancient Woodland Site |
| 90 | 1740m W | Unknown | Ancient Semi Natural Woodland |
| 91 | 1745m W | Unknown | Ancient Semi Natural Woodland |
| K | 1746m E | Unknown | Ancient Semi Natural Woodland |
| - | 1760m SE | Unknown | Ancient Semi Natural Woodland |
| 94 | 1777m SW | Unknown | Restored Ancient Woodland Site |
| 95 | 1796m W | Unknown | Ancient Semi Natural Woodland |
| L | 1802m E | Unknown | Ancient Semi Natural Woodland |
| M | 1805m W | Unknown | Ancient Semi Natural Woodland |
| 96 | 1805m NE | Unknown | Restored Ancient Woodland Site |
| M | 1866m W | Unknown | Restored Ancient Woodland Site |
| 97 | 1906m E | Unknown | Ancient Semi Natural Woodland |
| 99 | 1921m NE | Unknown | Ancient Semi Natural Woodland |
| O | 1922m W | Unknown | Plantation on Ancient Woodland Site |
| P | 1930m NW | Unknown | Restored Ancient Woodland Site |

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| 100 | 1949m SW | Unknown | Ancient Semi Natural Woodland |
| 101 | 1949m E | Unknown | Restored Ancient Woodland Site |
| 102 | 1954m W | Unknown | Ancient Semi Natural Woodland |
| - | 1963m S | Unknown | Restored Ancient Woodland Site |
| Q | 1963m W | Unknown | Restored Ancient Woodland Site |
| Q | 1964m W | Unknown | Restored Ancient Woodland Site |
| 104 | 1976m E | Unknown | Restored Ancient Woodland Site |
| P | 1989m NW | Unknown | Restored Ancient Woodland Site |

*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.*

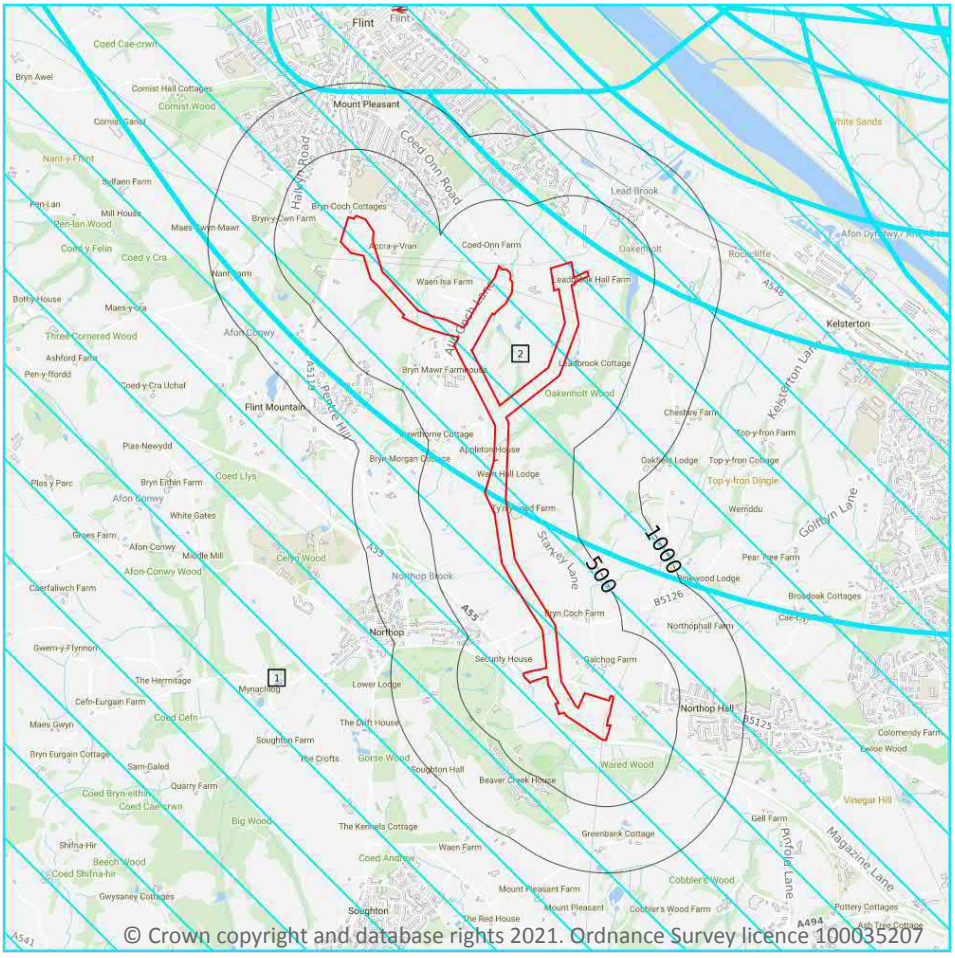
## 10.16 Nitrate Vulnerable Zones

| 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 | 2 |
|---|---|

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 101**

| ID | Location | Type of developments requiring consultation |
|---|---|---|
| 1 | On site | **Infrastructure - Airports, helipads and other aviation proposals.<br>Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons > 4000m².<br>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** |

| ID | Location | Type of developments requiring consultation |
|---|---|---|
| **2** | **On site** | **Infrastructure - Airports, helipads and other aviation proposals.**<br>**Air pollution - Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons > 750m² & manure stores > 3500t)**<br>**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.*

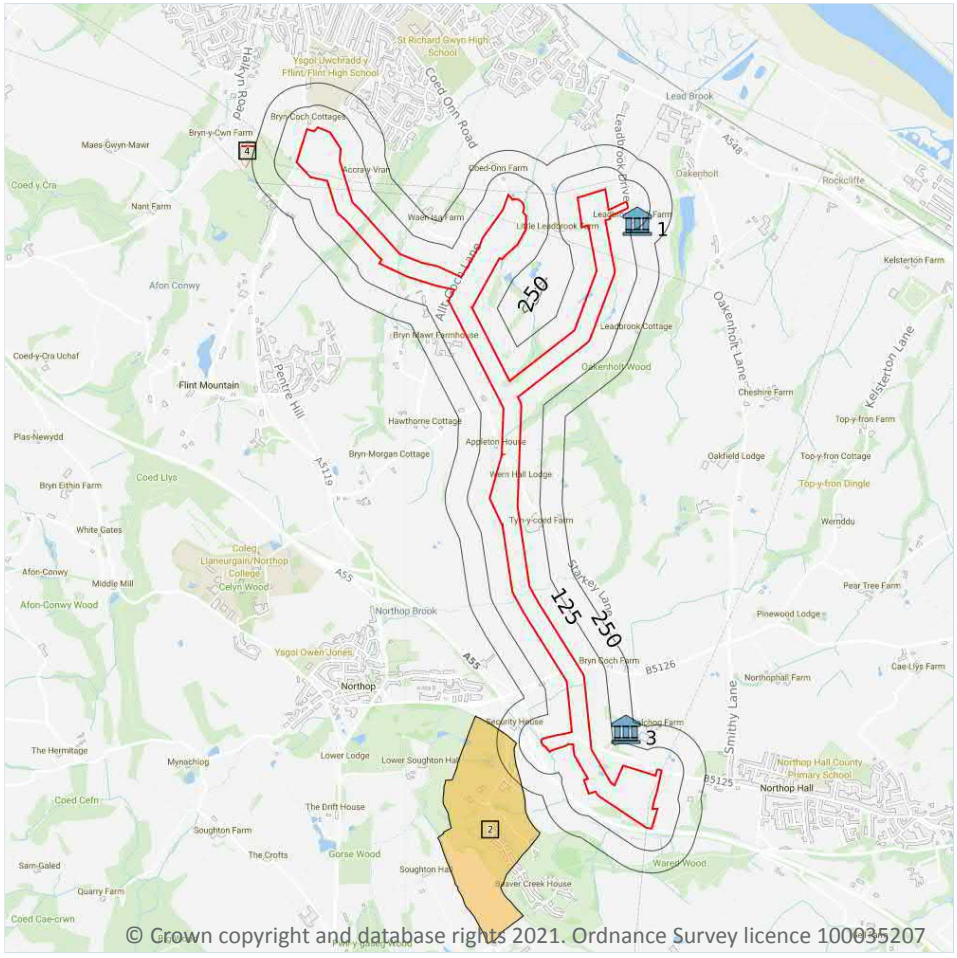
## 10.18 SSSI Units

| **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




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## 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 | 2 |
|---|---|

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.

Features are displayed on the Visual and cultural designations map on **page 103**

| ID | Location | Name | Grade | Reference Number | Listed date |
|---|---|---|---|---|---|
| 1 | 93m SE | Leadbrook Hall, About 800M S Of Junction With Chester Road | II | 16409 | 11/09/1995 |
| 3 | 204m N | Highfield Hall, Located At The End Of The Drive, The Entrance Facing S With Garden Front To The W | II | 322 | 11/06/1962 |

*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 | 1 |
|---|---|

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.

Features are displayed on the Visual and cultural designations map on **page 103**

| ID | Location | Ancient monument name | Reference number |
|---|---|---|---|
| 4 | 244m W | Bryn y Cwm Mound & Bailey Castle | 643 |

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

## 11.7 Registered Parks and Gardens

| Records within 250m | 1 |
|---|---|

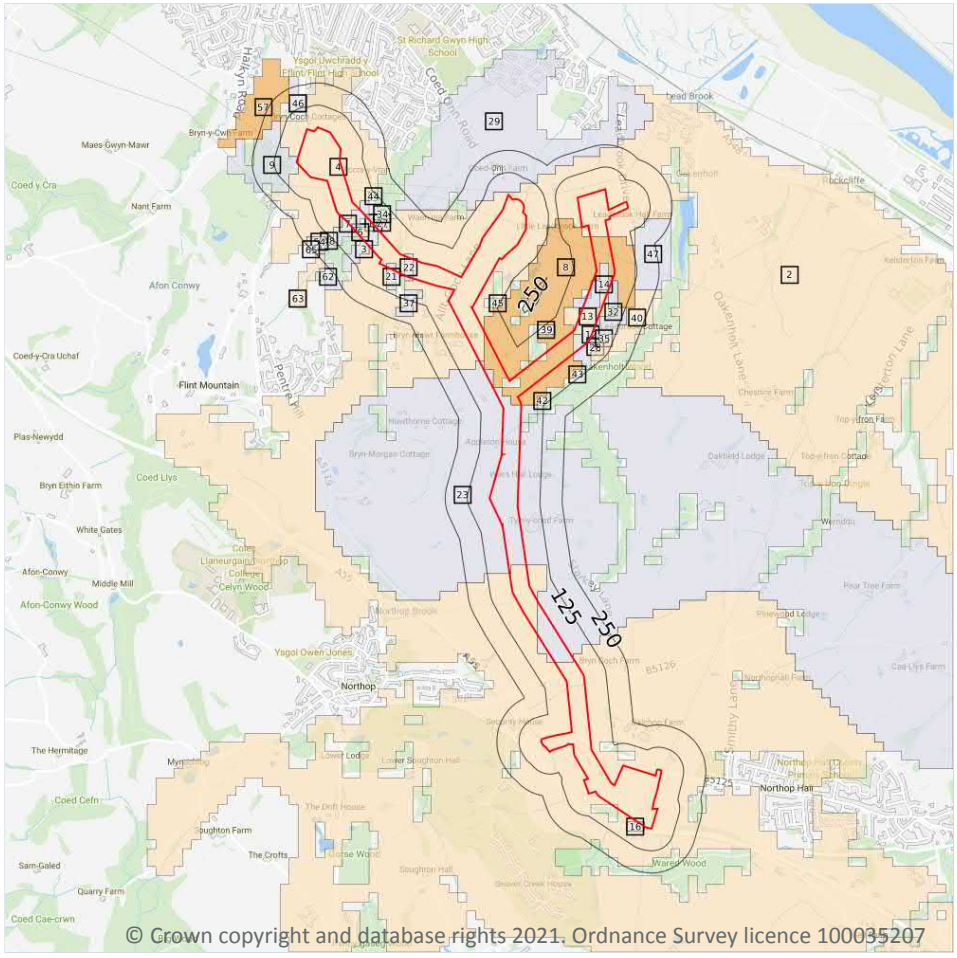
Parks and gardens assessed to be of particular interest and of special historic interest. The emphasis being on 'designed' landscapes, rather than on planting or botanical importance. Registration is a 'material consideration' in the planning process, meaning that planning authorities must consider the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

Features are displayed on the Visual and cultural designations map on **page 103**

| ID | Location | Name | Grade |
|---|---|---|---|
| 2 | 140m W | Soughton Hall | Essential Setting |

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

# 12 Agricultural designations




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## 12.1 Agricultural Land Classification

| Records within 250m | 36 |
|---|---|

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.

Features are displayed on the Agricultural designations map on **page 106**

| ID | Location | Classification | Description |
|---|---|---|---|
| **2** | **On site** | **Grade 3a** | **Good to moderate quality agricultural land** |
| **3** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |
| **4** | **On site** | **Grade 3a** | **Good to moderate quality agricultural land** |

| ID | Location | Classification | Description |
|---|---|---|---|
| **6** | **On site** | **Grade 3a** | **Good to moderate quality agricultural land** |
| **7** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |
| **8** | **On site** | **Grade 2** | **Good quality agricultural land** |
| **9** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |
| **12** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |
| **13** | **On site** | **Grade 3a** | **Good to moderate quality agricultural land** |
| **14** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |
| **16** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |
| **17** | **On site** | **Grade 3a** | **Good to moderate quality agricultural land** |
| **21** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |
| **22** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |
| **23** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |
| 27 | 8m NE | Grade 3b | Moderate quality agricultural land |
| 28 | 15m SE | Grade 2 | Good quality agricultural land |
| 29 | 15m N | Grade 3b | Moderate quality agricultural land |
| 32 | 35m E | Grade 2 | Good quality agricultural land |
| 34 | 41m NE | Grade 3a | Good to moderate quality agricultural land |
| 35 | 41m E | Grade 2 | Good quality agricultural land |
| 37 | 45m S | Grade 3b | Moderate quality agricultural land |
| 39 | 50m NW | Grade 3b | Moderate quality agricultural land |
| 40 | 52m SE | Grade 3a | Good to moderate quality agricultural land |
| 42 | 65m SE | Grade 3b | Moderate quality agricultural land |
| 43 | 70m SE | Grade 3b | Moderate quality agricultural land |
| 44 | 71m NE | Grade 3b | Moderate quality agricultural land |
| 45 | 79m SE | Grade 3a | Good to moderate quality agricultural land |
| 46 | 96m N | Grade 3b | Moderate quality agricultural land |
| 47 | 111m SE | Grade 3b | Moderate quality agricultural land |
| 48 | 112m SW | Grade 4 | Poor quality agricultural land |

| ID | Location | Classification | Description |
|---|---|---|---|
| 54 | 147m SW | Grade 3b | Moderate quality agricultural land |
| 57 | 157m W | Grade 2 | Good quality agricultural land |
| 62 | 212m SW | Grade 3b | Moderate quality agricultural land |
| 63 | 216m SW | Grade 3a | Good to moderate quality agricultural land |
| 65 | 217m SW | Grade 4 | Poor quality agricultural land |

*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.*

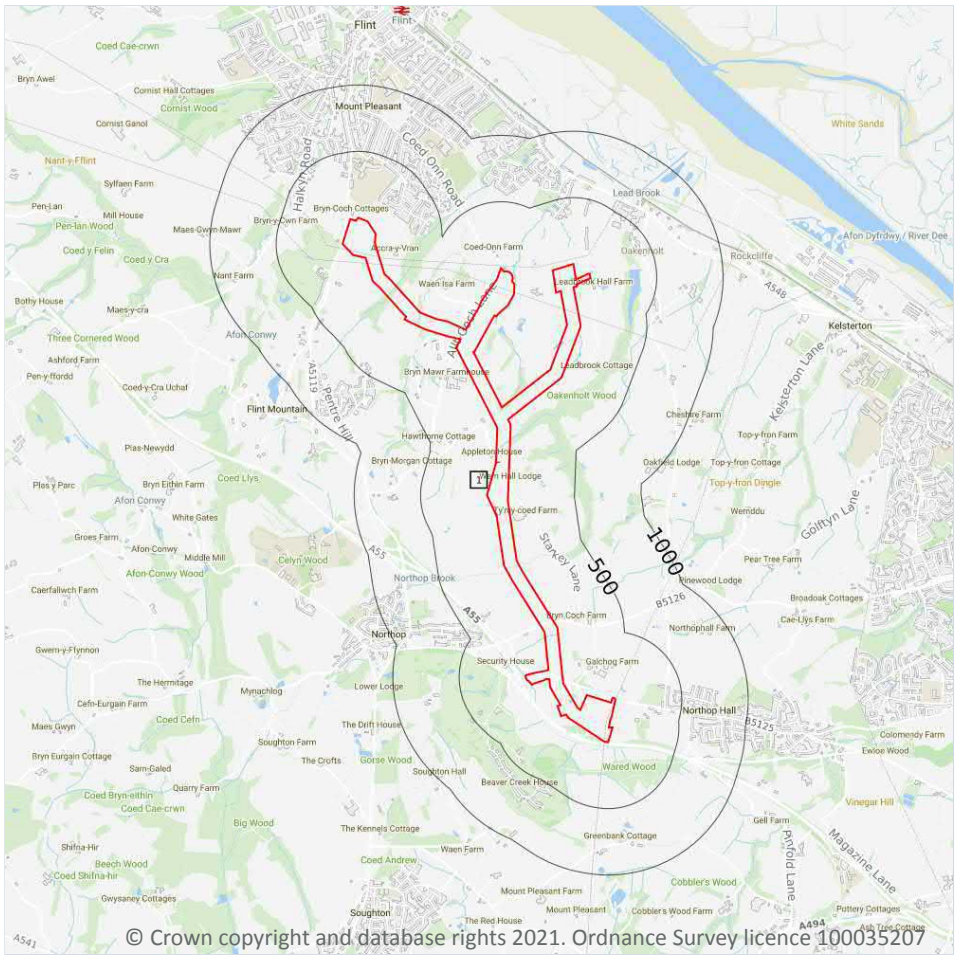
## 13.4 Limestone Pavement Orders

| 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



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Site Outline

Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

## 14.1 10k Availability

| Records within 500m | 1 |
|---|---|

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 111**

| ID | Location | Artificial | Superficial | Bedrock | Mass movement | Sheet No. |
|---|---|---|---|---|---|---|
| **1** | **On site** | **No coverage** | **No coverage** | **No coverage** | **No coverage** | **NoCov** |

*This data is sourced from the British Geological Survey.*

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

## 14.2 Artificial and made ground (10k)

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

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.

*This data is sourced from the British Geological Survey.*

# Geology 1:10,000 scale - Superficial

## 14.3 Superficial geology (10k)

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

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.

*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

## 14.5 Bedrock geology (10k)

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

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.

*This data is sourced from the British Geological Survey.*

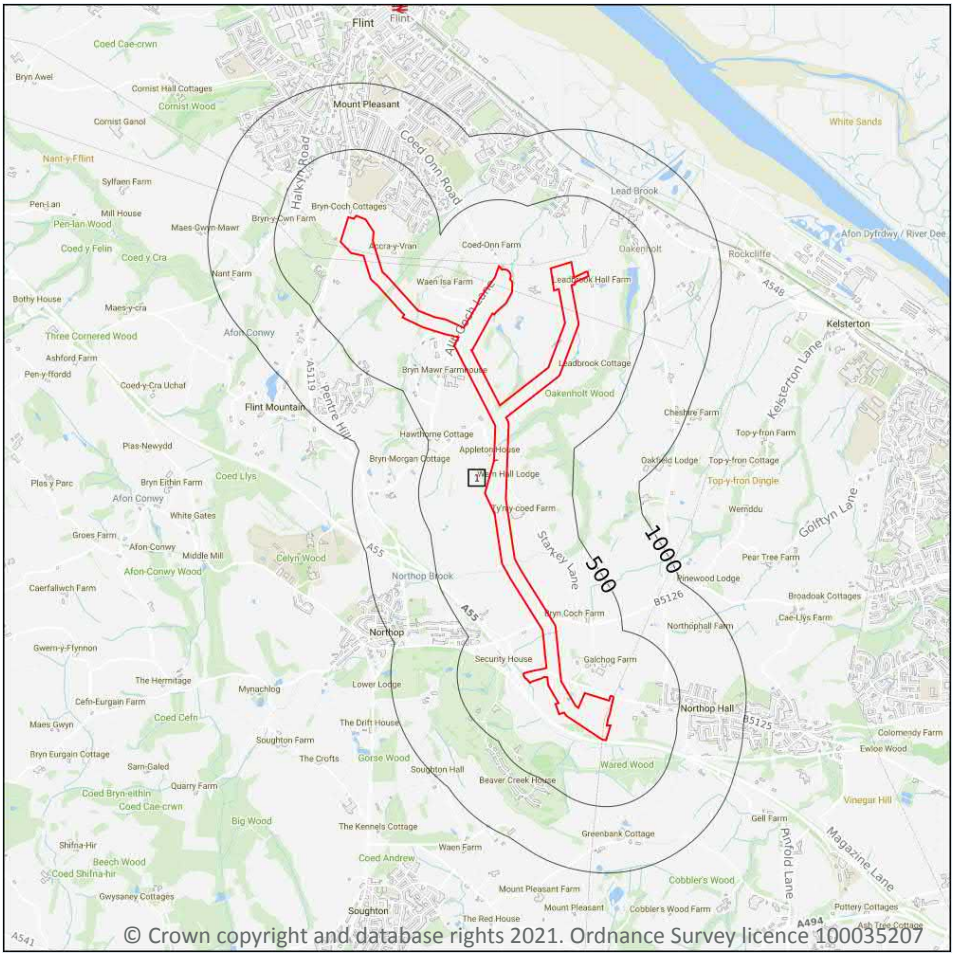
## 14.6 Bedrock faults and other linear features (10k)

| 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 | 1 |
|---|---|

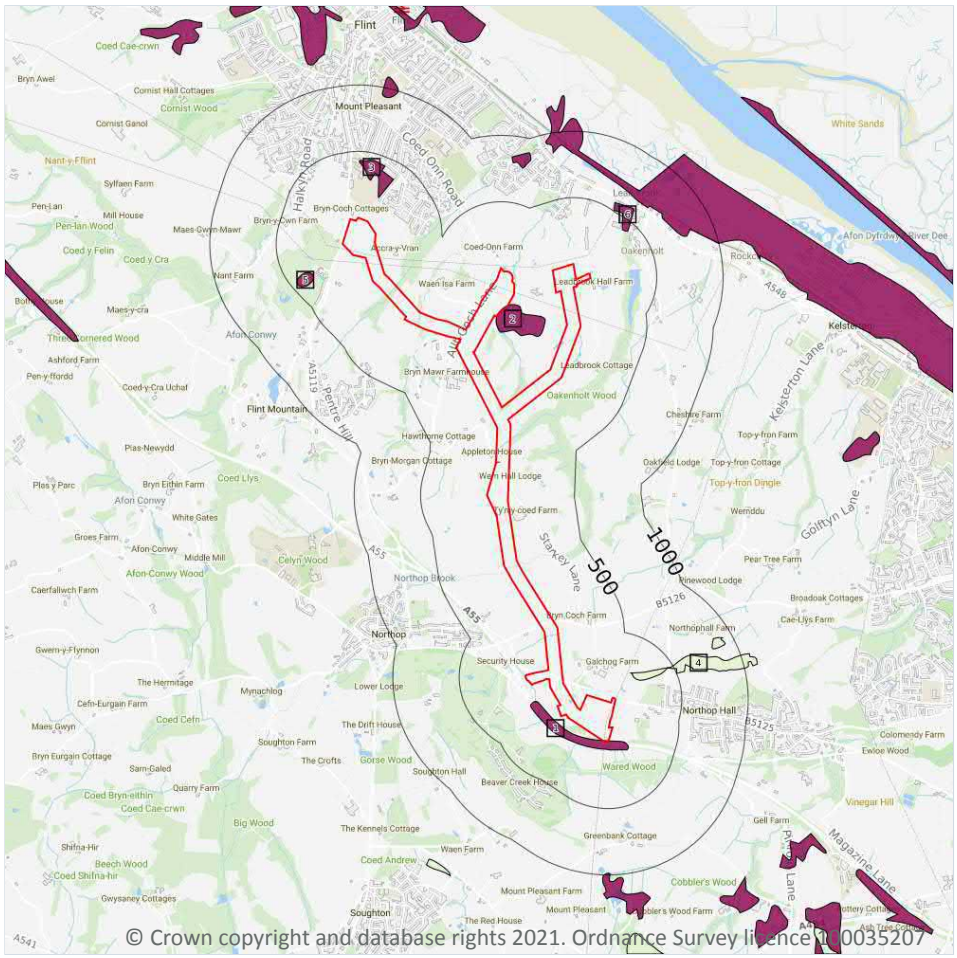
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme. Where 50k data is not available, this area has been filled in with 625k scale data.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 115**

| ID | Location | Artificial | Superficial | Bedrock | Mass movement | Sheet No. |
|---|---|---|---|---|---|---|
| **1** | **On site** | **Full** | **Full** | **Full** | **Full** | **EW108_flint_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** **6**

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 116**

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| **1** | **On site** | **MGR-ARTDP** | **MADE GROUND (UNDIVIDED)** | **ARTIFICIAL DEPOSIT** |
| **2** | **On site** | **MGR-ARTDP** | **MADE GROUND (UNDIVIDED)** | **ARTIFICIAL DEPOSIT** |
| 3 | 199m NE | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 4 | 215m NE | WMGR-ARTDP | INFILLED GROUND | ARTIFICIAL DEPOSIT |

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| 5 | 323m SW | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 6 | 415m NE | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |

*This data is sourced from the British Geological Survey.*

## 15.3 Artificial ground permeability (50k)

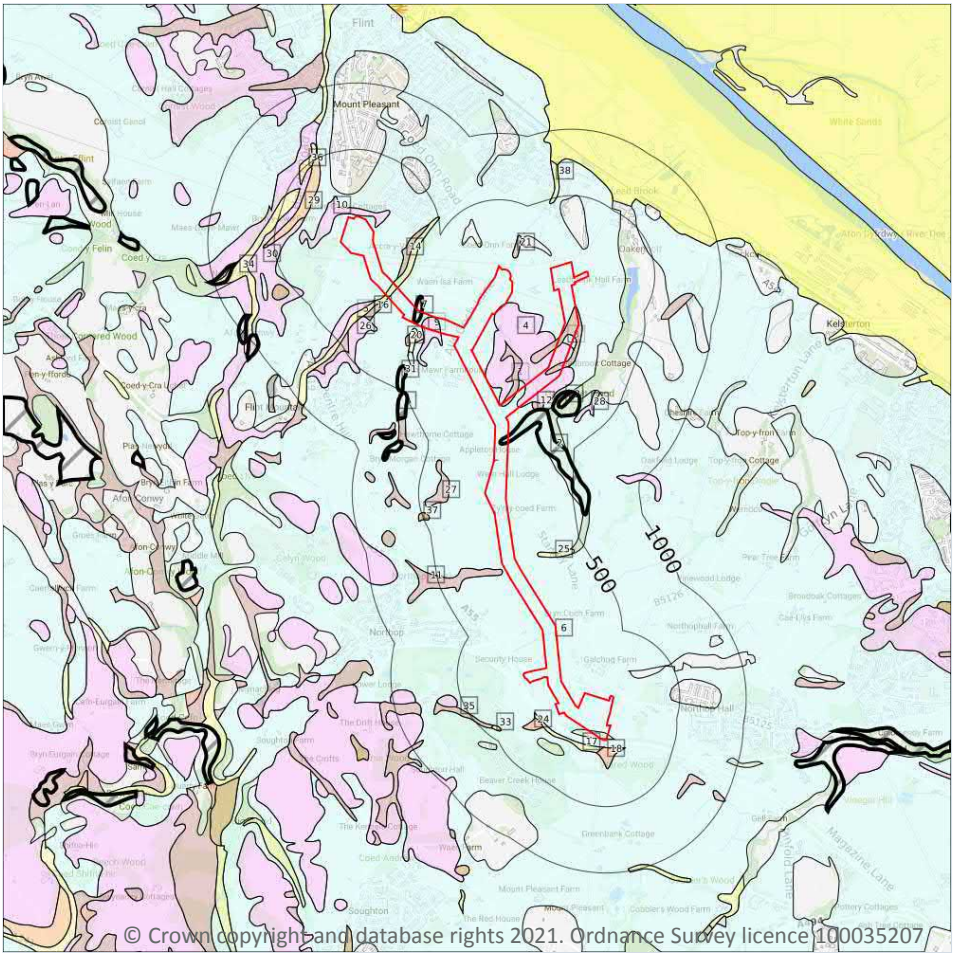
| **Records within 50m** | **2** |
|---|---|

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of any 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** |

*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 | 35 |
|---|---|

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 118**

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| 1 | On site | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 3 | On site | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 4 | On site | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL |

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| **5** | **On site** | **ALV-XCZSV** | **ALLUVIUM** | **CLAY, SILT, SAND AND GRAVEL** |
| **6** | **On site** | **TILLD-DMTN** | **TILL, DEVENSIAN** | **DIAMICTON** |
| **8** | **On site** | **TILLD-DMTN** | **TILL, DEVENSIAN** | **DIAMICTON** |
| **9** | **On site** | **GFDUD-XSV** | **GLACIOFLUVIAL DEPOSITS, DEVENSIAN** | **SAND AND GRAVEL** |
| 10 | 6m N | GFICD-XSV | GLACIOFLUVIAL ICE CONTACT DEPOSITS, DEVENSIAN | SAND AND GRAVEL |
| 11 | 25m SW | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 12 | 31m SE | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 13 | 34m SW | ALV-XCZSV | ALLUVIUM | CLAY, SILT, SAND AND GRAVEL |
| 14 | 40m NE | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 15 | 42m SW | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 16 | 44m SW | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 17 | 55m S | ALV-XCZSV | ALLUVIUM | CLAY, SILT, SAND AND GRAVEL |
| 18 | 55m S | ALF-XSV | ALLUVIAL FAN DEPOSITS | SAND AND GRAVEL |
| 19 | 78m SW | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL |
| 20 | 96m SW | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL |
| 21 | 106m NE | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 23 | 149m SE | ALV-XCZSV | ALLUVIUM | CLAY, SILT, SAND AND GRAVEL |
| 24 | 153m SW | ALF-XSV | ALLUVIAL FAN DEPOSITS | SAND AND GRAVEL |
| 25 | 165m NE | ALV-XCZSV | ALLUVIUM | CLAY, SILT, SAND AND GRAVEL |
| 26 | 209m W | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL |
| 27 | 273m W | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 28 | 295m SE | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL |
| 29 | 295m W | RTDU-XSV | RIVER TERRACE DEPOSITS (UNDIFFERENTIATED) | SAND AND GRAVEL |

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| 30 | 312m W | GFICD-XSV | GLACIOFLUVIAL ICE CONTACT DEPOSITS, DEVENSIAN | SAND AND GRAVEL |
| 32 | 397m SW | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 33 | 407m SW | ALV-XCZSV | ALLUVIUM | CLAY, SILT, SAND AND GRAVEL |
| 34 | 411m W | ALV-XCZSV | ALLUVIUM | CLAY, SILT, SAND AND GRAVEL |
| 35 | 426m SW | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 36 | 432m NW | ALV-XCZSV | ALLUVIUM | CLAY, SILT, SAND AND GRAVEL |
| 37 | 455m SW | PEAT-P | PEAT | PEAT |
| 38 | 466m N | ALV-XCZSV | ALLUVIUM | CLAY, SILT, SAND AND GRAVEL |
| A | 489m SW | SUPD-SED | SUPERFICIAL DEPOSITS | SEDIMENT |

*This data is sourced from the British Geological Survey.*

## 15.5 Superficial permeability (50k)

| **Records within 50m** | **16** |
|---|---|

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** | **Very Low** |
| **On site** | **Mixed** | **High** | **Low** |
| **On site** | **Intergranular** | **Very High** | **High** |
| **On site** | **Mixed** | **High** | **Very Low** |
| **On site** | **Intergranular** | **Very High** | **High** |
| **On site** | **Intergranular** | **High** | **Very Low** |
| **On site** | **Mixed** | **High** | **Low** |
| **On site** | **Mixed** | **High** | **Low** |
| 6m NW | Intergranular | Very High | High |
| 24m S | Mixed | High | Very Low |

| Location | Flow type | Maximum permeability | Minimum permeability |
|---|---|---|---|
| 31m NE | Mixed | High | Very Low |
| 34m NW | Intergranular | High | Very Low |
| 40m NW | Mixed | High | Very Low |
| 42m NW | Mixed | High | Very Low |
| 44m NW | Mixed | High | Very Low |

*This data is sourced from the British Geological Survey.*

## 15.6 Landslip (50k)

**Records within 500m** **5**

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.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 118**

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| **2** | **On site** | **SLIP-UKNOWN** | **LANDSLIDE DEPOSITS** | **UNKNOWN/UNCLASSIFIED ENTRY** |
| **7** | **On site** | **SLIP-UKNOWN** | **LANDSLIDE DEPOSITS** | **UNKNOWN/UNCLASSIFIED ENTRY** |
| 22 | 114m SE | SLIP-UKNOWN | LANDSLIDE DEPOSITS | UNKNOWN/UNCLASSIFIED ENTRY |
| 31 | 326m SW | SLIP-UKNOWN | LANDSLIDE DEPOSITS | UNKNOWN/UNCLASSIFIED ENTRY |
| A | 489m SW | SLIP-UKNOWN | LANDSLIDE DEPOSITS | UNKNOWN/UNCLASSIFIED ENTRY |

*This data is sourced from the British Geological Survey.*

## 15.7 Landslip 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 landslip deposits (the zone between the land surface and the water table).

| Flow type | Maximum permeability | Minimum permeability |
|---|---|---|
| Mixed | Very High | Low |
| Mixed | Very High | Low |

*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 | 42 |
|---|---|

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 123**

| ID | Location | LEX Code | Description | Rock age |
|---|---|---|---|---|
| 1 | On site | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 3 | On site | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |

| ID | Location | LEX Code | Description | Rock age |
|---|---|---|---|---|
| **4** | **On site** | **GS-SDAR** | **GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED** | **NAMURIAN** |
| **5** | **On site** | **PLCM-MDSS** | **PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| **6** | **On site** | **GS-SDAR** | **GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED** | **NAMURIAN** |
| **7** | **On site** | **PLCM-SDST** | **PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE** | **WESTPHALIAN** |
| **8** | **On site** | **ETM-MDSC** | **ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE** | **WESTPHALIAN** |
| **9** | **On site** | **PLCM-SDST** | **PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE** | **WESTPHALIAN** |
| **10** | **On site** | **PLCM-SDST** | **PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE** | **WESTPHALIAN** |
| **11** | **On site** | **ETM-MDSC** | **ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE** | **WESTPHALIAN** |
| **12** | **On site** | **PLCM-MDSS** | **PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| **13** | **On site** | **PLCM-MDSS** | **PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| **36** | **On site** | **PMCM-MDSS** | **PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| **37** | **On site** | **HLR-SDST** | **HOLLIN ROCK - SANDSTONE** | **WESTPHALIAN** |
| **38** | **On site** | **PLCM-SDST** | **PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE** | **WESTPHALIAN** |
| **39** | **On site** | **PMCM-MDSS** | **PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| 43 | 51m N | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 44 | 58m S | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 45 | 65m SE | GS-SDAR | GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED | NAMURIAN |

| ID | Location | LEX Code | Description | Rock age |
|---|---|---|---|---|
| 48 | 88m SW | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 49 | 93m E | PLCM-SDST | PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE | WESTPHALIAN |
| 50 | 93m SW | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 53 | 124m E | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 55 | 124m SW | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 56 | 130m E | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 60 | 149m W | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 61 | 153m S | ETM-MDSC | ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE | WESTPHALIAN |
| 62 | 154m SW | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 66 | 159m E | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 71 | 200m E | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 73 | 230m E | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 76 | 257m E | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 85 | 328m E | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 86 | 331m E | GS-SDAR | GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED | NAMURIAN |
| 89 | 356m E | PLCM-SDST | PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE | WESTPHALIAN |
| 90 | 358m SW | BSG-MDST | BOWLAND SHALE FORMATION - MUDSTONE | VISEAN |
| 92 | 359m SW | GS-SDAR | GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED | NAMURIAN |

| ID | Location | LEX Code | Description | Rock age |
|---|---|---|---|---|
| 94 | 379m E | PLCM-SDST | PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE | WESTPHALIAN |
| 98 | 419m E | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 99 | 447m E | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 102 | 474m E | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 104 | 495m E | GS-SDAR | GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED | NAMURIAN |

*This data is sourced from the British Geological Survey.*

## 15.9 Bedrock permeability (50k)

**Records within 50m** **13**

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** |
| **On site** | **Fracture** | **High** | **Low** |
| **On site** | **Fracture** | **Moderate** | **Low** |
| **On site** | **Fracture** | **High** | **Low** |
| **On site** | **Fracture** | **High** | **Low** |
| **On site** | **Fracture** | **Moderate** | **Low** |
| **On site** | **Fracture** | **High** | **Low** |
| **On site** | **Fracture** | **High** | **Low** |
| **On site** | **Fracture** | **High** | **Low** |
| **On site** | **Fracture** | **Moderate** | **Low** |
| **On site** | **Fracture** | **High** | **Moderate** |
| 3m N | Fracture | High | Low |

*This data is sourced from the British Geological Survey.*

## 15.10 Bedrock faults and other linear features (50k)

| Records within 500m | 62 |
|---|---|

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.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 123**

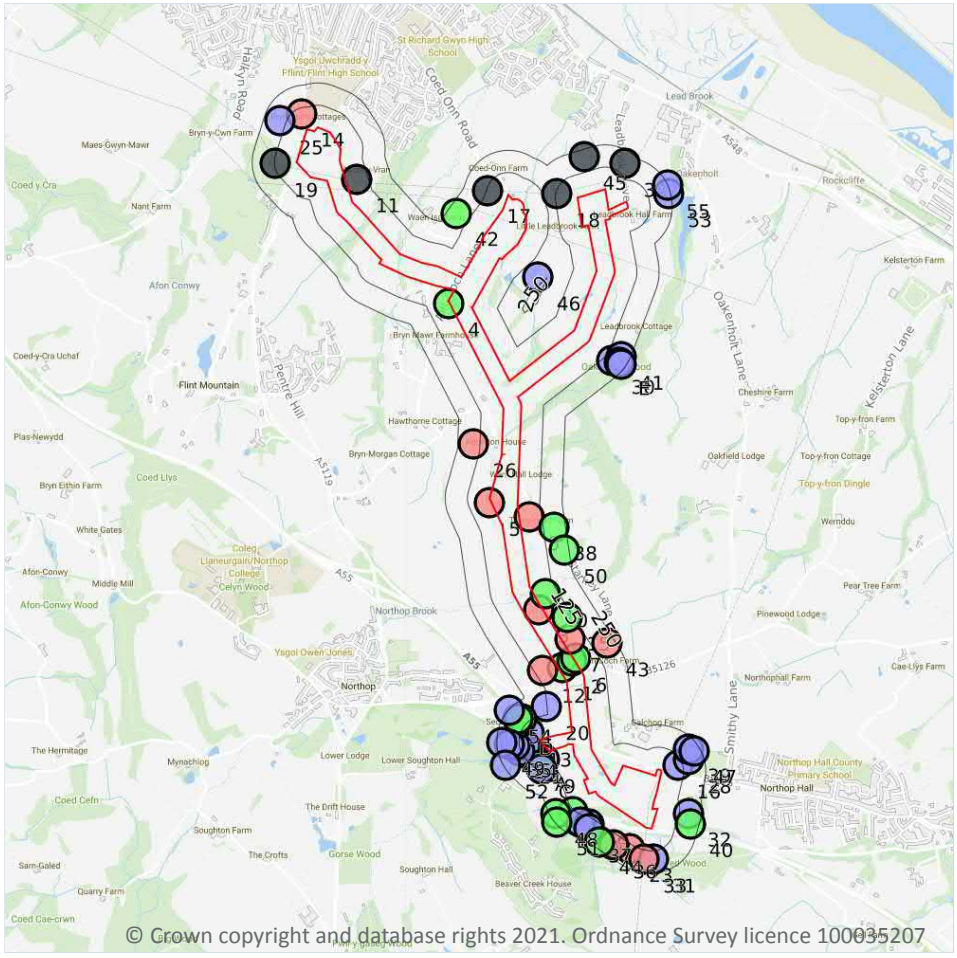
| ID | Location | Category | Description |
|---|---|---|---|
| 2 | On site | ROCK | Coal seam, inferred |
| 14 | On site | ROCK | Coal seam, inferred |
| 15 | On site | ROCK | Coal seam, inferred |
| 16 | On site | ROCK | Coal seam, inferred |
| 17 | On site | ROCK | Coal seam, inferred |
| 18 | On site | ROCK | Coal seam, inferred |
| 19 | On site | ROCK | Coal seam, inferred |
| 20 | On site | ROCK | Coal seam, inferred |
| 21 | On site | ROCK | Coal seam, inferred |
| 22 | On site | ROCK | Coal seam, inferred |
| 23 | On site | FAULT | Fault, inferred, displacement unknown |
| 24 | On site | FAULT | Fault, inferred, displacement unknown |
| 25 | On site | FAULT | Fault, inferred, displacement unknown |
| 26 | On site | FAULT | Fault, inferred, displacement unknown |
| 27 | On site | FAULT | Fault, inferred, displacement unknown |
| 28 | On site | FAULT | Fault, inferred, displacement unknown |
| 29 | On site | FAULT | Fault, inferred, displacement unknown |
| 30 | On site | FAULT | Fault, inferred, displacement unknown |
| 31 | On site | FAULT | Fault, inferred, displacement unknown |
| 32 | On site | FAULT | Fault, inferred |
| 33 | On site | FAULT | Fault, inferred |

| ID | Location | Category | Description |
|---|---|---|---|
| **34** | **On site** | **ROCK** | **Coal seam, inferred** |
| **35** | **On site** | **ROCK** | **Coal seam, inferred** |
| 40 | 1m E | ROCK | Coal seam, inferred |
| 41 | 23m W | FAULT | Fault, inferred, displacement unknown |
| 42 | 47m NE | ROCK | Coal seam, inferred |
| 46 | 68m E | FAULT | Fault, inferred, displacement unknown |
| 47 | 88m SW | ROCK | Coal seam, inferred |
| 51 | 93m SW | FAULT | Fault, inferred, displacement unknown |
| 52 | 121m SW | ROCK | Coal seam, inferred |
| 54 | 124m E | FAULT | Fault, inferred, displacement unknown |
| 57 | 133m NE | ROCK | Coal seam, inferred |
| 58 | 137m E | ROCK | Coal seam, inferred |
| 59 | 147m NE | FAULT | Fault, inferred, displacement unknown |
| 63 | 154m SW | ROCK | Coal seam, inferred |
| 64 | 157m NE | ROCK | Coal seam, inferred |
| 65 | 159m E | FAULT | Fault, inferred, displacement unknown |
| 67 | 172m NE | ROCK | Coal seam, inferred |
| 68 | 173m NE | ROCK | Coal seam, inferred |
| 69 | 178m NE | ROCK | Coal seam, inferred |
| 70 | 193m SE | ROCK | Coal seam, inferred |
| 72 | 215m NE | ROCK | Coal seam, inferred |
| 74 | 241m E | ROCK | Coal seam, inferred |
| 75 | 243m E | ROCK | Coal seam, inferred |
| 77 | 268m E | ROCK | Coal seam, inferred |
| 78 | 272m S | ROCK | Coal seam, inferred |
| 79 | 282m E | ROCK | Coal seam, inferred |
| 80 | 292m E | ROCK | Coal seam, inferred |
| 81 | 301m E | ROCK | Coal seam, inferred |

| ID | Location | Category | Description |
|---|---|---|---|
| 82 | 315m W | ROCK | Coal seam, inferred |
| 83 | 318m SE | FAULT | Fault, inferred, displacement unknown |
| 84 | 328m E | FAULT | Fault, inferred, displacement unknown |
| 87 | 340m E | ROCK | Coal seam, inferred |
| 88 | 351m E | ROCK | Coal seam, inferred |
| 91 | 358m SW | FAULT | Fault, inferred |
| 93 | 365m E | FAULT | Fault, inferred, displacement unknown |
| 95 | 405m E | ROCK | Coal seam, inferred |
| 96 | 413m N | FAULT | Fault, inferred, displacement unknown |
| 97 | 417m SW | ROCK | Coal seam, inferred |
| 100 | 465m E | ROCK | Coal seam, inferred |
| 101 | 472m N | ROCK | Coal seam, inferred |
| 103 | 486m NE | ROCK | Coal seam, inferred |

*This data is sourced from the British Geological Survey.*

# 16 Boreholes




## 16.1 BGS Boreholes

| Records within 250m | 67 |
|---|---|

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 130**

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 1 | On site | 325590 368520 | PONT-EINON | 17.1 | N | 146995 |
| 2 | On site | 325642 368558 | PONT EINION & EXTENSION OPENCAST SITE. 6070 | 29.0 | N | 148258 |

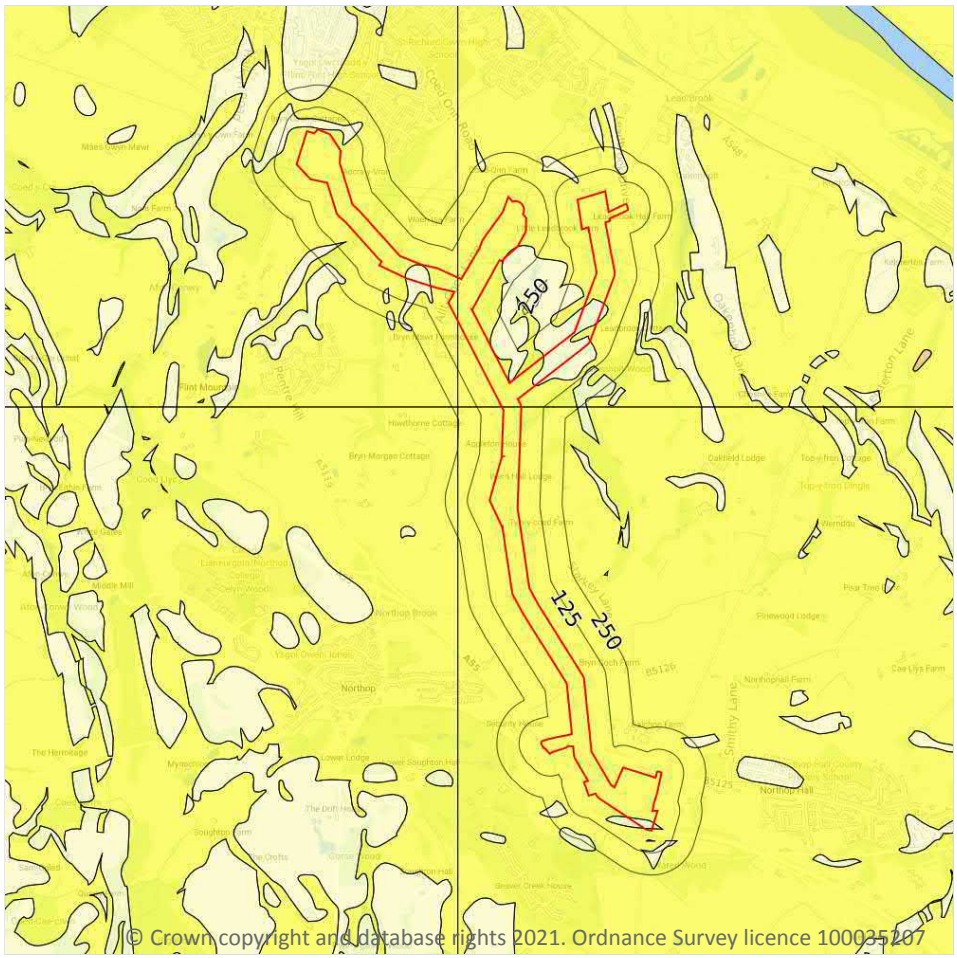
| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| **3** | **On site** | **325455 368848** | **PONT EINION & EXTENSION OPENCAST SITE. 6011** | **90.0** | **N** | **148253** |
| 4 | 6m SW | 324950 370570 | TROS-Y-MYNYDD FARM | 11.2 | N | 151390 |
| 5 | 10m SW | 325180 369450 | TYDDYN STARKEY, O/C SITE. 1 | 64.77 | N | 147019 |
| 6 | 14m NE | 325667 368572 | PONT EINION & EXTENSION OPENCAST SITE. 6067 | 19.0 | N | 148256 |
| 7 | 44m NE | 325634 368681 | PONT EINION & EXTENSION OPENCAST SITE. 6069 | 59.3 | N | 148257 |
| 8 | 54m E | 325400 369370 | TYN Y COED FARM | 70.0 | N | 20948247 |
| 9 | 55m SW | 325490 368000 | NORTHOP BY-PASS. 36 | 5.0 | N | 147013 |
| 10 | 57m NE | 325492 368936 | PONT EINION & EXTENSION OPENCAST SITE. 6014 | 20.0 | N | 148254 |
| 11 | 60m E | 324430 371270 | C.E.G.B. CONNAH'S QUAY. TOWER NO.241 | - | Y | N/A |
| 12 | 81m SW | 325479 368506 | PONT EINION & EXTENSION OPENCAST SITE. 6088 | 53.0 | N | 148259 |
| 13 | 81m NW | 325400 368150 | NORTHOP BY-PASS. 35 | 5.0 | N | 147012 |
| A | 83m SW | 325440 368010 | WARED WOOD, O/C SITE. 22 | 10.67 | N | 147497 |
| A | 88m SW | 325420 368020 | WARED WOOD, O/C SITE. 20 | 12.19 | N | 147496 |
| B | 91m SW | 325390 368060 | WARED WOOD, O/C SITE. 19 | 9.14 | N | 147494 |
| 14 | 91m N | 324120 371640 | DEE GREEN, BRYN COCH SHAFT | 149.96 | N | 151547 |
| B | 92m SW | 325400 368040 | WARED WOOD, O/C SITE. 21 | 10.67 | N | 147495 |
| B | 93m W | 325380 368080 | WARED WOOD, O/C SITE. 17 | 9.14 | N | 147493 |
| 15 | 95m NE | 325618 368803 | PONT EINION & EXTENSION O/C SITE. 6487 (6496) | 20.22 | N | 148278 |
| C | 97m SW | 325460 367970 | WARED WOOD, O/C SITE. 24 | 10.67 | N | 147498 |
| 16 | 98m E | 326240 367970 | MAIN COAL COLLIERY, NO.2 SHAFT D/C, NO.1 SHAFT | -2.0 | N | 147831 |
| C | 108m SW | 325470 367950 | GOLF COURSE, NORTHOP 5A | 5.5 | N | 15044499 |
| 17 | 117m W | 325170 371210 | GEGB PYLON, SITES 243,4 & 8 | - | Y | N/A |
| 18 | 117m W | 325560 371190 | GEGB PYLON, SITES 243,4 & 8 | - | Y | N/A |
| 19 | 122m W | 323970 371360 | C.E.G.B. CONNAH'S QUAY. TOWER NO.240 | - | Y | N/A |
| 20 | 128m W | 325500 368300 | HIGHFIELD HALL, O/C SITE | -2.0 | N | 147017 |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 21 | 131m SW | 325350 368050 | GOLF COURSE, NORTHOP 5 | 8.9 | N | 15044498 |
| 22 | 133m SW | 325650 367710 | WARED WOOD, O/C SITE. 109 | 27.43 | N | 147499 |
| 23 | 150m SW | 325970 367500 | WARED WOOD, O/C SITE. 116 | 30.48 | N | 147515 |
| 24 | 152m W | 325320 368080 | GOLF COURSE, NORTHOP 4 | 7.2 | N | 15044497 |
| D | 156m NW | 325350 368210 | NORTHOP BY-PASS. 45 | 12.7 | N | 147010 |
| 25 | 157m W | 324000 371600 | BRYNCOCH COLLIERY, MINE PLAN | -2.0 | N | 151384 |
| 26 | 160m W | 325090 369780 | TYDDYN STARKEY, O/C SITE. 3 | 100.28 | N | 147020 |
| 27 | 160m SW | 325740 367640 | WARED WOOD, O/C SITE. 1 | 9.14 | N | 147507 |
| D | 161m NW | 325360 368230 | NORTHOP BY-PASS. 43 | 13.1 | N | 147011 |
| 28 | 165m E | 326300 368000 | GALCHOG COLLIERY, MINE PLAN | -2.0 | N | 147684 |
| 29 | 167m S | 325690 367650 | WARED WOOD, O/C SITE. 3 | 8.23 | N | 147506 |
| 30 | 171m SE | 325870 370250 | SHALLOW SHAFT | -2.0 | N | 150922 |
| 31 | 173m S | 326100 367440 | WARED WOOD, O/C SITE. 308 | 9.45 | N | 147517 |
| D | 176m NW | 325340 368230 | NORTHOP BY-PASS. 44 | 12.3 | N | 147009 |
| 32 | 176m E | 326300 367700 | MAIN COLLIERY, MINE PLAN | -2.0 | N | 147685 |
| 33 | 178m S | 326050 367440 | WARED WOOD, O/C SITE. 117 | 39.62 | N | 147516 |
| 34 | 181m NE | 325940 371360 | CONNAH'S QUAY-BANGOR, 400KV TOWER NO.246 | - | Y | N/A |
| 35 | 181m W | 325290 368090 | GOLF COURSE, NORTHOP 3 | 6.0 | N | 15044496 |
| 36 | 183m SW | 325880 367520 | WARED WOOD, O/C SITE. 115 | 30.48 | N | 147514 |
| 37 | 185m SW | 325740 367610 | WARED WOOD, O/C SITE. 2 | 7.62 | N | 147508 |
| 38 | 188m E | 325544 369313 | PONT EINION & EXTENSION OPENCAST SITE. 6205 ? | 15.0 | N | 148266 |
| 39 | 195m NE | 326300 368060 | GALCLWG COLLIERY, NO.3 SHAFT UPCAST | -2.0 | N | 147832 |
| 40 | 201m E | 326310 367640 | PLAS-IFAN | 13.6 | N | 146996 |
| 41 | 201m SE | 325920 370270 | SHALLOW SHAFT | -2.0 | N | 150921 |
| 42 | 203m NW | 324990 371080 | UNNAMED BOREHOLE | 12.19 | N | 151586 |
| 43 | 204m NE | 325838 368658 | PONT EINION & EXTENSION OPENCAST SITE. 6040 | 70.2 | N | 148255 |
| E | 209m SE | 325910 370240 | SHALLOW SHAFT | -2.0 | N | 150923 |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 44 | 210m SW | 325800 367540 | WARED WOOD, O/C SITE. 114 | 28.96 | N | 147512 |
| 45 | 211m N | 325710 371400 | CROES ATTI PROJECT FLINT A | - | Y | N/A |
| 46 | 213m SE | 325450 370720 | LEADBROOK HALL FARM | 5.21 | N | 150914 |
| 47 | 214m NE | 326330 368050 | GALCLWG COLLIERY, NO.2 SHAFT | -2.0 | N | 147833 |
| 48 | 218m SW | 325550 367700 | WARED WOOD, O/C SITE. 110 | 29.57 | N | 147500 |
| 49 | 220m W | 325250 368100 | GOLF COURSE, NORTHOP 6 | 6.0 | N | 15044500 |
| E | 223m SE | 325920 370230 | BELL PITS | -2.0 | N | 150945 |
| 50 | 226m E | 325602 369184 | PONT EINION & EXTENSION OPENCAST SITE. 6225 | 21.0 | N | 148271 |
| 51 | 239m SW | 325560 367650 | WARED WOOD, O/C SITE. 14 | 10.67 | N | 147505 |
| 52 | 240m SW | 325270 367970 | GOLF COURSE, NORTHOP 7 | 5.5 | N | 15044504 |
| 53 | 242m E | 326190 371190 | SHALLOW SHAFT OR BELL PIT | -2.0 | N | 150985 |
| 54 | 246m NW | 325290 368280 | NORTHOP BY-PASS. 34 | 8.0 | N | 147008 |
| 55 | 248m NE | 326180 371240 | BELL PITS | -2.0 | N | 150931 |

*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 | 3 |
|---|---|

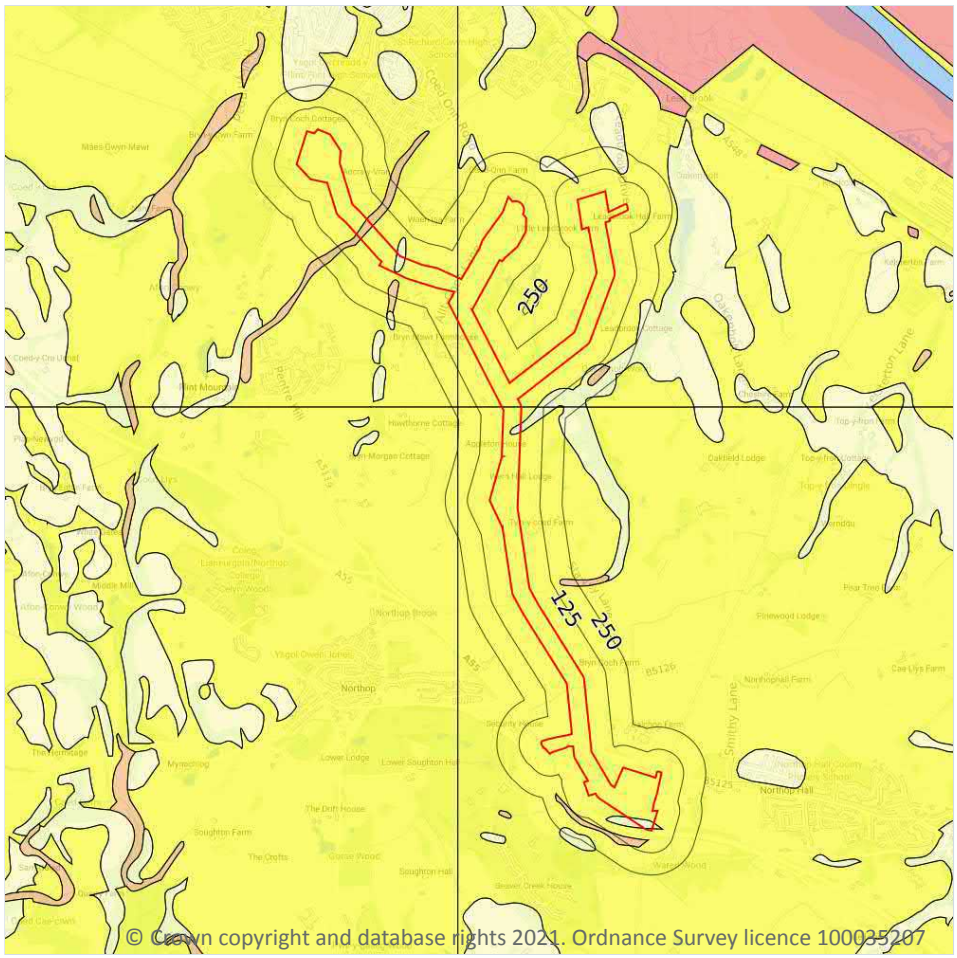
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 134**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Negligible** | **Ground conditions predominantly non-plastic.** |
| **On site** | **Very low** | **Ground conditions predominantly low plasticity.** |
| 6m N | Negligible | Ground conditions predominantly non-plastic. |

*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 | 4 |
|---|---|

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.

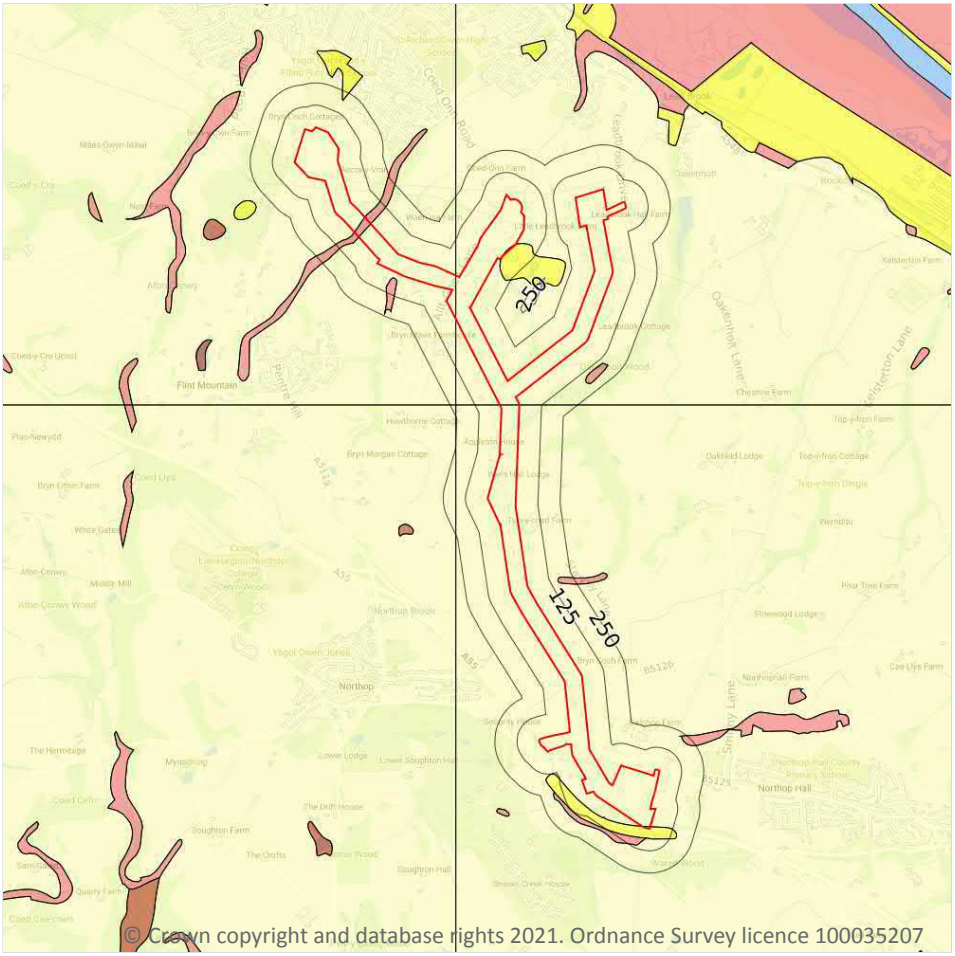
Features are displayed on the Natural ground subsidence - Running sands map on **page 136**

| 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.** |
| **On site** | **Low** | **Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.** |
| 34m SW | Low | Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water. |

*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 | 4 |
|---|---|

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.

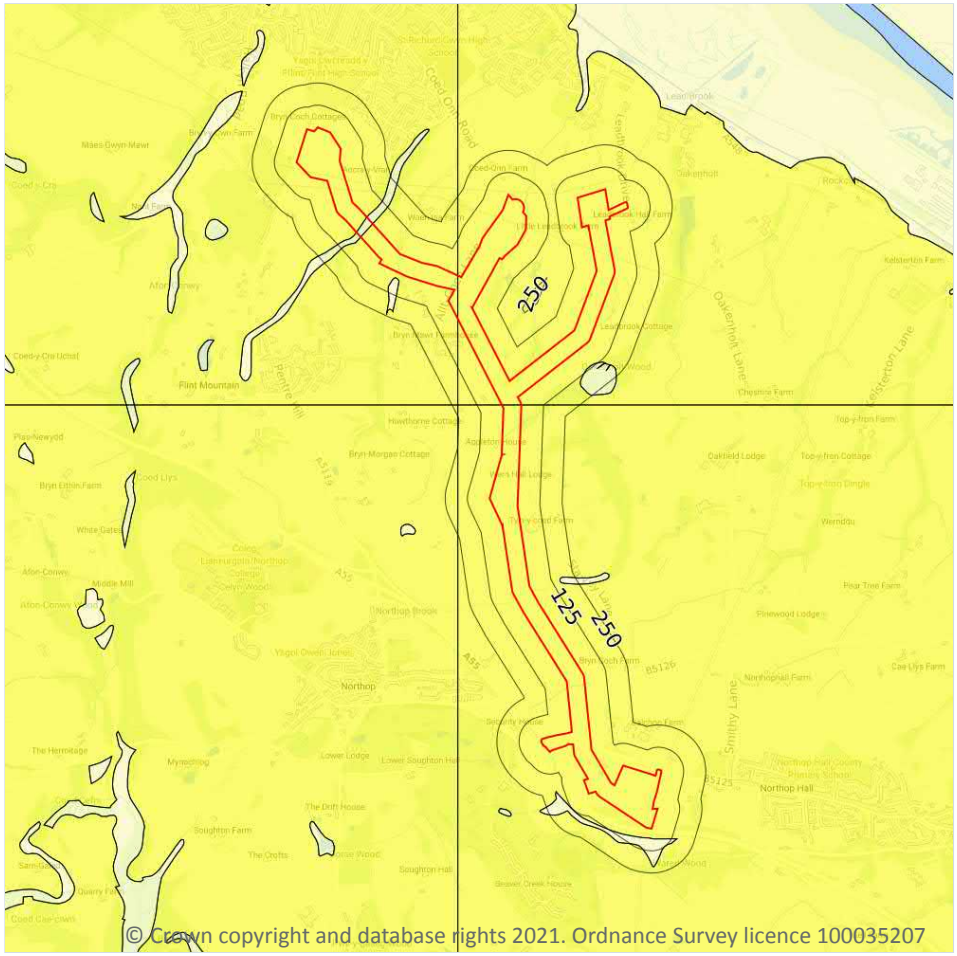
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 138**

| 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 |
|---|---|---|
| **On site** | **Moderate** | **Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.** |
| 34m SW | Moderate | Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site. |

*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 | 3 |
|---|---|

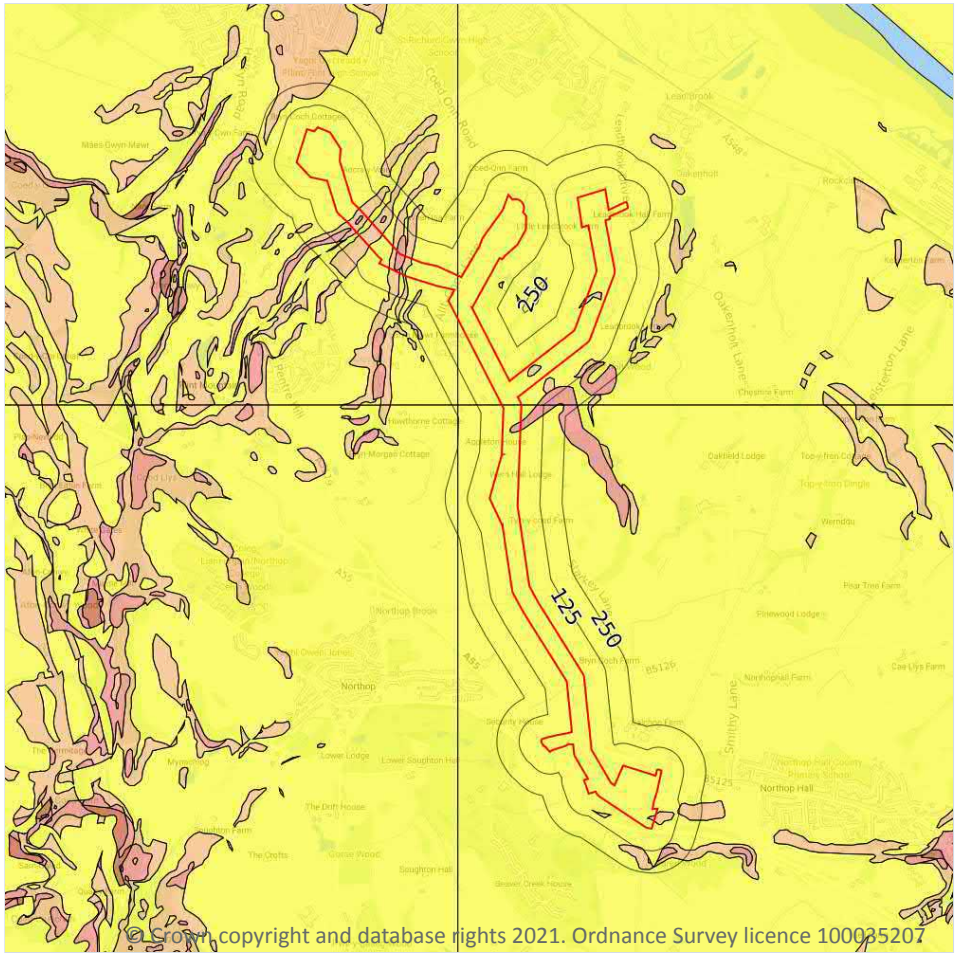
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 140**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Negligible** | **Deposits with potential to collapse when loaded and saturated are believed not to be present.** |
| **On site** | **Very low** | **Deposits with potential to collapse when loaded and saturated are unlikely to be present.** |
| 34m SW | Negligible | Deposits with potential to collapse when loaded and saturated are believed not to be present. |

*This data is sourced from the British Geological Survey.*

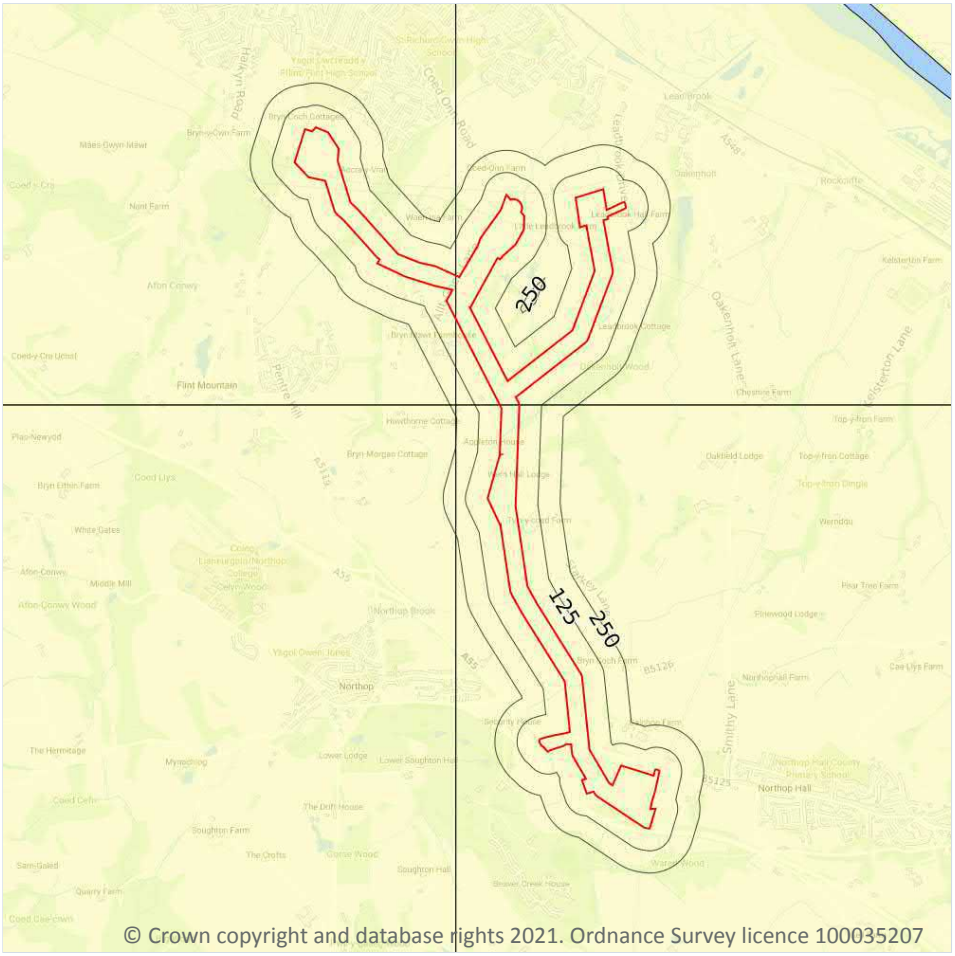
# Natural ground subsidence - Landslides


250
125
250
Northop
Northop Hall
Northop Brook
Lower Lodge
Lower Soughton Hall
Soughton Hall
Northop Hall Country Primary School
Northop Hall
Northinghall Farm
Pinewood Lodge
Pear Tree Farm
Oakfield Lodge
Cheshire Farm
Aqueduct House
Aqueduct Cottage
Hawthorne Cottage
Mill Morgan Cottage
Mill Lodge
Mill Farm
Mill Cottage
Mill Bridge
Mill Bridge Cottage
Mill Bridge Farm
Mill Bridge Lodge
Mill Bridge Barn
Mill Bridge Stables
Mill Bridge Workshop
Mill Bridge Yard
Mill Bridge Garage
Mill Bridge Shop
Mill Bridge Post Office
Mill Bridge Pub
Mill Bridge Hotel
Mill Bridge Restaurant
Mill Bridge Cafe
Mill Bridge Tea Rooms
Mill Bridge Bakery
Mill Bridge Butchers
Mill Bridge Greengrocers
Mill Bridge Fishmongers
Mill Bridge Delicatessen
Mill Bridge Off Licence
Mill Bridge Newsagents
Mill Bridge Chemists
Mill Bridge Hairdressers
Mill Bridge Beauty Salon
Mill Bridge Gym
Mill Bridge Swimming Pool
Mill Bridge Sports Centre
Mill Bridge Leisure Centre
Mill Bridge Library
Mill Bridge Museum
Mill Bridge Art Gallery
Mill Bridge Theatre
Mill Bridge Cinema
Mill Bridge Bowling Alley
Mill Bridge Skating Rink
Mill Bridge Ice Rink
Mill Bridge Roller Rink
Mill Bridge Skate Park
Mill Bridge Playground
Mill Bridge Park
Mill Bridge Recreation Ground
Mill Bridge Common
Mill Bridge Green
Mill Bridge Village Hall
Mill Bridge Church
Mill Bridge Chapel
Mill Bridge Cemetery
Mill Bridge Crematorium
Mill Bridge Graveyard
Mill Bridge Churchyard
Mill Bridge Vicarage
Mill Bridge Rectory
Mill Bridge Manse
Mill Bridge Presbytery
Mill Bridge Convent
Mill Bridge Monastery
Mill Bridge Abbey
Mill Bridge Priory
Mill Bridge Friary
Mill Bridge Hermitage
Mill Bridge Shrine
Mill Bridge Wayside Cross
Mill Bridge Milestone
Mill Bridge Boundary Stone
Mill Bridge Parish Boundary
Mill Bridge County Boundary
Mill Bridge National Boundary
Mill Bridge International Boundary
Mill Bridge Coastline
Mill Bridge Shoreline
Mill Bridge Beach
Mill Bridge Harbour
Mill Bridge Pier
Mill Bridge Jetty
Mill Bridge Lighthouse
Mill Bridge Lifeboat Station
Mill Bridge Coastguard Station
Mill Bridge Boathouse
Mill Bridge Slipway
Mill Bridge Quay
Mill Bridge Wharf
Mill Bridge Dock
Mill Bridge Marina
Mill Bridge Yacht Club
Mill Bridge Sailing Club
Mill Bridge Rowing Club
Mill Bridge Canoe Club
Mill Bridge Kayak Club
Mill Bridge Surfing Club
Mill Bridge Windsurfing Club
Mill Bridge Kitesurfing Club
Mill Bridge Diving Club
Mill Bridge Swimming Club
Mill Bridge Water Polo Club
Mill Bridge Synchronised Swimming Club
Mill Bridge Diving Board
Mill Bridge Swimming Pool
Mill Bridge Paddling Pool
Mill Bridge Lido
Mill Bridge Spa
Mill Bridge Sauna
Mill Bridge Steam Room
Mill Bridge Jacuzzi
Mill Bridge Hot Tub
Mill Bridge Plunge Pool
Mill Bridge Cold Plunge Pool
Mill Bridge Ice Bath
Mill Bridge Cryotherapy Chamber
Mill Bridge Float Tank
Mill Bridge Isolation Tank
Mill Bridge Sensory Deprivation Tank
Mill Bridge Flotation Tank
Mill Bridge Salt Water Tank
Mill Bridge Brine Tank
Mill Bridge Dead Sea Tank
Mill Bridge Epsom Salt Tank
Mill Bridge Magnesium Tank
Mill Bridge Mineral Tank
Mill Bridge Trace Element Tank
Mill Bridge Vitamin Tank
Mill Bridge Supplement Tank
Mill Bridge Nutrient Tank
Mill Bridge Hydration Tank
Mill Bridge Electrolyte Tank
Mill Bridge Rehydration Tank
Mill Bridge Oral Rehydration Tank
Mill Bridge Intravenous Rehydration Tank
Mill Bridge Subcutaneous Rehydration Tank
Mill Bridge Intramuscular Rehydration Tank
Mill Bridge Intraperitoneal Rehydration Tank
Mill Bridge Intrathecal Rehydration Tank
Mill Bridge Intraosseous Rehydration Tank
Mill Bridge Intradermal Rehydration Tank
Mill Bridge Intravitreal Rehydration Tank
Mill Bridge Intracardiac Rehydration Tank
Mill Bridge Intracavernosal Rehydration Tank
Mill Bridge Intracerebral Rehydration Tank
Mill Bridge Intracerebroventricular Rehydration Tank
Mill Bridge Intracisternal Rehydration Tank
Mill Bridge Intracoronary Rehydration Tank
Mill Bridge Intracorpus Cavernosum Rehydration Tank
Mill Bridge Intradiscal Rehydration Tank
Mill Bridge Intraductal Rehydration Tank
Mill Bridge Intraduodenal Rehydration Tank
Mill Bridge Intradural Rehydration Tank
Mill Bridge Intraepidermal Rehydration Tank
Mill Bridge Intraesophageal Rehydration Tank
Mill Bridge Intragastric Rehydration Tank
Mill Bridge Intragingival Rehydration Tank
Mill Bridge Intraileal Rehydration Tank
Mill Bridge Intralesional Rehydration Tank
Mill Bridge Intraluminal Rehydration Tank
Mill Bridge Intramedullary Rehydration Tank
Mill Bridge Intrameningeal Rehydration Tank
Mill Bridge Intramyocardial Rehydration Tank
Mill Bridge Intranasal Rehydration Tank
Mill Bridge Intraocular Rehydration Tank
Mill Bridge Intraovarian Rehydration Tank
Mill Bridge Intrapericardial Rehydration Tank
Mill Bridge Intraperitoneal Rehydration Tank
Mill Bridge Intrapleural Rehydration Tank
Mill Bridge Intraprostatic Rehydration Tank
Mill Bridge Intrapulmonary Rehydration Tank
Mill Bridge Intrarectal Rehydration Tank
Mill Bridge Intrarenal Rehydration Tank
Mill Bridge Intraretinal Rehydration Tank
Mill Bridge Intraspinal Rehydration Tank
Mill Bridge Intrasternal Rehydration Tank
Mill Bridge Intrasynovial Rehydration Tank
Mill Bridge Intratendinous Rehydration Tank
Mill Bridge Intratesticular Rehydration Tank
Mill Bridge Intrathecal Rehydration Tank
Mill Bridge Intrathoracic Rehydration Tank
Mill Bridge Intratracheal Rehydration Tank
Mill Bridge Intratympanic Rehydration Tank
Mill Bridge Intrauterine Rehydration Tank
Mill Bridge Intravascular Rehydration Tank
Mill Bridge Intravenous Rehydration Tank
Mill Bridge Intraventricular Rehydration Tank
Mill Bridge Intravesical Rehydration Tank
Mill Bridge Intravitreal Rehydration Tank
Mill Bridge Intravitreous Rehydration Tank
Mill Bridge Intravitreous Humor Rehydration Tank
Mill Bridge Intravitreous Humour Rehydration Tank
Mill Bridge Intravitreous Rehydration Tank
Mill Bridge Intravitreous Rehydration Tank
Mill Bridge Intravitreous

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Low** | **Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.** |
| **On site** | **Moderate** | **Slope instability problems are probably present or have occurred in the past. Land use should consider specifically the stability of the site.** |
| 10m SW | Moderate | Slope instability problems are probably present or have occurred in the past. Land use should consider specifically the stability of the site. |
| 20m SE | Low | Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site. |
| 38m NE | Moderate | Slope instability problems are probably present or have occurred in the past. Land use should consider specifically the stability of the site. |
| 47m S | Low | Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site. |

*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 |
|---|---|

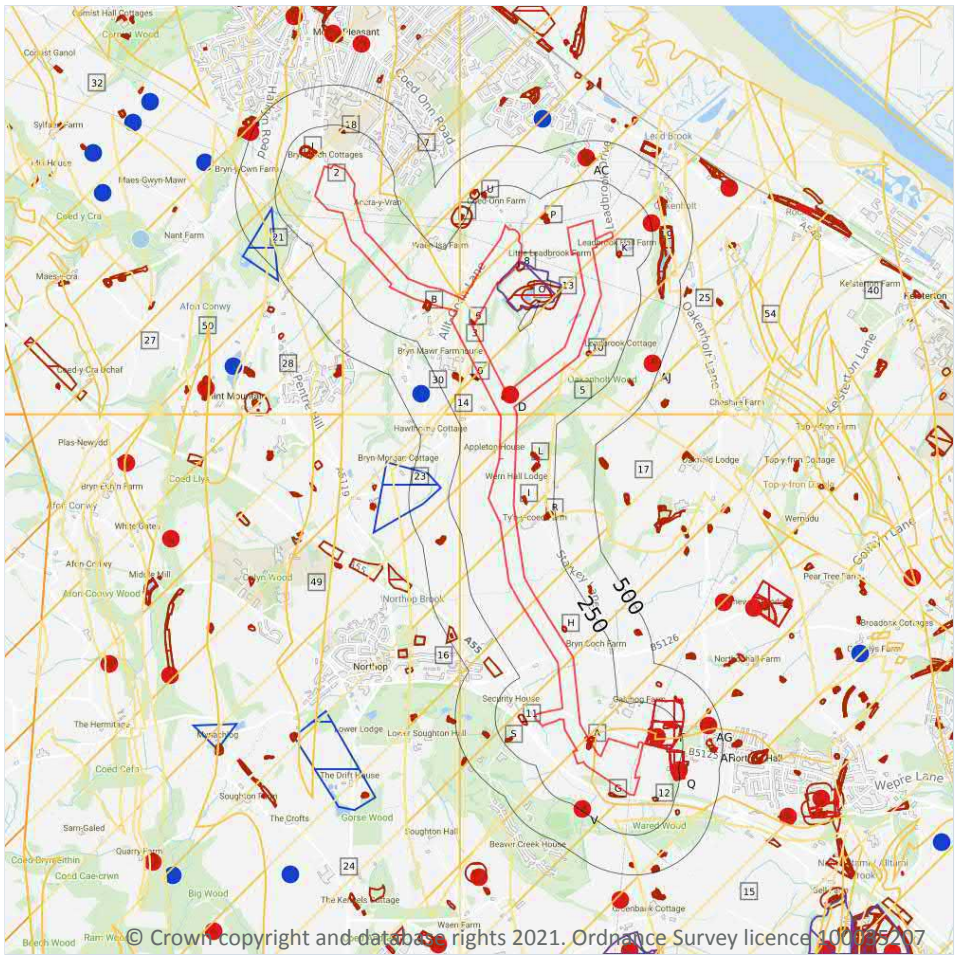
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 144**

| 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


500
250
Coed Onn Road
Pentre Hill
Oakenholt Lane
Weore Lane
Northop
Northop Brook
Bryn Coch Farm
Soughton Hall
Gorse Wood
Waredwood
Beaver Creek House
Weirn Farm
Cheshire Farm
Bryn Mawr Farm House
Appleton House
Weirn Hall Lodge
Conwy Lane
Pear Tree Farm
Broadoak Cottages
Soughton Hall Farm
Galltcoch Farm
Security House
Lower Soughton Hall
The Drift House
The Crofts
Beaver Creek Cottage
Coombank Cottage
Big Wood
Coed Cefn
Coed Llys
Afon Conwy
Nant Farm
Bryn-y-Coed Farm
Maes-y-Cra
Plas-Newydd
Bryn Mawr Cottage
Hawthorn Cottage
Top-y-fron Farm
Top-y-fron Cottage
Wernddu
Ash Lodge
Oakenholt Wood
Leadbrook Farm
Leadbrook Cottage
Kelsterton Farm
Kelsterton
Laid Brook
Coed Onn Farm
Ffynnon Beuno
Ffynnon Asaph
Ffynnon Tegid
Ffynnon Fair
Ffynnon Fawr
Ffynnon Gwenfrewi
Ffynnon Elian
Ffynnon Cynfarch
Ffynnon Gwyddelan
Ffynnon Gwenllian
Ffynnon Dewi
Ffynnon Mair
Ffynnon Teilo
Ffynnon Beblig
Ffynnon Gybi
Ffynnon Seiriol
Ffynnon Cadfan
Ffynnon Tydecho
Ffynnon Gwrthwl
Ffynnon Llwchwr
Ffynnon Llugwy
Ffynnon Llugwy
Ffynnon Llugwy

| ID | Location | Details | Source |
|---|---|---|---|
| 21 | 282m W | Type: Swallow Hole x 5<br>Superficial Geology: -<br>Bedrock Geology: Carboniferous Limestone Supergroup, Lower Coal Measures, Middle Coal Measures, Millstone Grit Group, Upper Carboniferous Limestone | Simple Bibliography: British Geological Survey<br>Full Bibliography: -<br>Confidentiality: Data source can be revealed, data can be used freely |
| 23 | 306m W | Type: Swallow Hole x 7<br>Superficial Geology: -<br>Bedrock Geology: Carboniferous Limestone Supergroup, Lower Coal Measures, Middle Coal Measures, Millstone Grit Group, Upper Carboniferous Limestone | Simple Bibliography: British Geological Survey<br>Full Bibliography: -<br>Confidentiality: Data source can be revealed, data can be used freely |
| 30 | 375m SW | Type: Swallow Hole x 1<br>Superficial Geology: -<br>Bedrock Geology: Carboniferous Limestone Supergroup, Lower Coal Measures, Middle Coal Measures, Millstone Grit Group, Upper Carboniferous Limestone | Simple Bibliography: British Geological Survey<br>Full Bibliography: -<br>Confidentiality: Data source can be revealed, data can be used freely |

*This data is sourced from Stantec UK Ltd.*

## 18.2 BritPits

| **Records within 500m** | **10** |
|---|---|

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 146**

| ID | Location | Details | Description |
|---|---|---|---|
| **D** | **On site** | **Name: Tros-y-mynydd**<br>**Address: Northop, MOLD, Flintshire**<br>**Commodity: Sand**<br>**Status: Ceased** | **Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site**<br>**Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority** |

| ID | Location | Details | Description |
|---|---|---|---|
| E | 101m NE | Name: Boar's Head Farm<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| F | 210m NE | Name: Boar's Head Farm<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| V | 235m SW | Name: Wared Wood Quarry<br>Address: Northrop, CONNAH'S QUAY, Flintshire<br>Commodity: Sandstone<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| Q | 253m E | Name: Boar's Head Farm<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| 19 | 253m E | Name: Leadbrook Hall<br>Address: Oakenholt, FLINT, Flintshire<br>Commodity: Coal, Surface Mined<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

| ID | Location | Details | Description |
|---|---|---|---|
| AC | 392m N | Name: Quarry Farm<br>Address: Oakenholt Mill, FLINT, Flintshire<br>Commodity: Sandstone<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AG | 427m E | Name: Boar's Head Farm<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AF | 436m E | Name: Northophall Cottages<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AJ | 450m E | Name: Oakenholt Wood<br>Address: Flint Mountain, CONNAH'S QUAY, Flintshire<br>Commodity: Sandstone<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

*This data is sourced from the British Geological Survey.*

## 18.3 Surface ground workings

| **Records within 250m** | **131** |
|---|---|

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 146**

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| **6** | **On site** | **Unspecified Pit** | **1871** | **1:10560** |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| **A** | **On site** | **Ponds** | **1991** | **1:10000** |
| **A** | **On site** | **Ponds** | **1987** | **1:10000** |
| **A** | **On site** | **Ponds** | **1981** | **1:10000** |
| **A** | **On site** | **Ponds** | **1970** | **1:10560** |
| **B** | **On site** | **Unspecified Pit** | **1938** | **1:10560** |
| **B** | **On site** | **Sand Pit** | **1871** | **1:10560** |
| **B** | **On site** | **Unspecified Pit** | **1938** | **1:10560** |
| **B** | **On site** | **Unspecified Pit** | **1959** | **1:10560** |
| **B** | **On site** | **Unspecified Pit** | **1948** | **1:10560** |
| **B** | **On site** | **Unspecified Ground Workings** | **1909** | **1:10560** |
| **D** | **On site** | **Sand Pit** | **1948** | **1:10560** |
| **D** | **On site** | **Sand Pit** | **1914** | **1:10560** |
| 8 | 7m SE | Pond | 1953 | 1:10560 |
| E | 15m E | Colliery | 1869 | 1:10560 |
| 9 | 18m SW | Ponds | 1898 | 1:10560 |
| F | 21m E | Disused Colliery | 1898 | 1:10560 |
| G | 36m SW | Unspecified Pit | 1960 | 1:10560 |
| H | 38m NE | Pond | 1991 | 1:10000 |
| H | 38m NE | Pond | 1987 | 1:10000 |
| 10 | 41m E | Sand Pit | 1871 | 1:10560 |
| G | 51m SW | Unspecified Ground Workings | 1970 | 1:10560 |
| I | 53m E | Pond | 1970 | 1:10560 |
| I | 54m E | Pond | 1991 | 1:10000 |
| I | 54m E | Pond | 1987 | 1:10000 |
| I | 54m E | Pond | 1981 | 1:10000 |
| 11 | 59m SW | Unspecified Heap | 1991 | 1:10000 |
| E | 68m NE | Unspecified Heap | 1869 | 1:10560 |
| E | 71m NE | Ponds | 1869 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| E | 76m NE | Ponds | 1948 | 1:10560 |
| E | 76m NE | Ponds | 1898 | 1:10560 |
| E | 76m NE | Ponds | 1938 | 1:10560 |
| E | 78m NE | Ponds | 1960 | 1:10560 |
| E | 78m NE | Ponds | 1970 | 1:10560 |
| E | 79m NE | Pond | 1987 | 1:10000 |
| E | 79m NE | Pond | 1981 | 1:10000 |
| E | 80m NE | Pond | 1991 | 1:10000 |
| J | 87m NW | Unspecified Heap | 1992 | 1:10000 |
| J | 87m NW | Unspecified Heap | 1969 | 1:10560 |
| J | 87m NW | Unspecified Heap | 1981 | 1:10000 |
| E | 88m NE | Unspecified Heap | 1938 | 1:10560 |
| E | 88m NE | Unspecified Heap | 1938 | 1:10560 |
| E | 89m E | Unspecified Heap | 1948 | 1:10560 |
| E | 89m E | Unspecified Heap | 1910 | 1:10560 |
| E | 90m E | Unspecified Pit | 1960 | 1:10560 |
| J | 91m NW | Unspecified Heap | 1909 | 1:10560 |
| J | 93m NW | Unspecified Heap | 1959 | 1:10560 |
| J | 93m NW | Unspecified Heap | 1938 | 1:10560 |
| J | 93m NW | Unspecified Heap | 1938 | 1:10560 |
| E | 93m E | Unspecified Heap | 1970 | 1:10560 |
| J | 94m NW | Unspecified Heap | 1948 | 1:10560 |
| K | 97m SE | Pond | 1938 | 1:10560 |
| L | 99m E | Ponds | 1991 | 1:10000 |
| L | 99m E | Ponds | 1987 | 1:10000 |
| L | 99m E | Ponds | 1981 | 1:10000 |
| L | 99m E | Ponds | 1970 | 1:10560 |
| L | 100m E | Ponds | 1948 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| L | 100m E | Ponds | 1898 | 1:10560 |
| M | 101m SW | Ponds | 1871 | 1:10560 |
| K | 102m SE | Pond | 1953 | 1:10560 |
| M | 106m SW | Ponds | 1948 | 1:10560 |
| J | 106m NW | Unspecified Heap | 1871 | 1:10560 |
| M | 107m SW | Ponds | 1938 | 1:10560 |
| N | 107m E | Ponds | 1948 | 1:10560 |
| N | 107m E | Ponds | 1898 | 1:10560 |
| N | 108m E | Pond | 1991 | 1:10000 |
| N | 108m E | Pond | 1987 | 1:10000 |
| N | 108m E | Pond | 1981 | 1:10000 |
| M | 110m SW | Ponds | 1898 | 1:10560 |
| O | 110m SE | Unspecified Ground Workings | 1981 | 1:10000 |
| O | 110m SE | Unspecified Ground Workings | 1969 | 1:10560 |
| L | 110m E | Ponds | 1871 | 1:10560 |
| N | 113m E | Pond | 1970 | 1:10560 |
| M | 115m SW | Ponds | 1992 | 1:10000 |
| M | 115m SW | Ponds | 1969 | 1:10560 |
| M | 115m SW | Ponds | 1981 | 1:10000 |
| M | 115m SW | Ponds | 1959 | 1:10560 |
| 12 | 115m E | Unspecified Heap | 1970 | 1:10560 |
| P | 122m W | Ponds | 1938 | 1:10560 |
| P | 123m W | Ponds | 1898 | 1:10560 |
| O | 124m SE | Old Sand Pit | 1953 | 1:10560 |
| P | 124m W | Ponds | 1938 | 1:10560 |
| P | 125m W | Ponds | 1981 | 1:10000 |
| P | 125m W | Ponds | 1969 | 1:10560 |
| P | 125m W | Ponds | 1953 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| P | 130m W | Ponds | 1948 | 1:10560 |
| P | 130m W | Ponds | 1898 | 1:10560 |
| J | 136m NW | Unspecified Heap | 1898 | 1:10560 |
| C | 142m SE | Sand Pit | 1871 | 1:10560 |
| 13 | 146m W | Sand Pit | 1871 | 1:10560 |
| F | 161m NE | Unspecified Heap | 1869 | 1:10560 |
| Q | 171m E | Colliery | 1948 | 1:10560 |
| Q | 171m E | Colliery | 1898 | 1:10560 |
| Q | 173m E | Colliery | 1938 | 1:10560 |
| Q | 173m E | Colliery | 1938 | 1:10560 |
| Q | 175m E | Colliery | 1910 | 1:10560 |
| R | 179m E | Ponds | 1991 | 1:10000 |
| R | 179m E | Ponds | 1987 | 1:10000 |
| R | 179m E | Ponds | 1981 | 1:10000 |
| R | 181m E | Ponds | 1948 | 1:10560 |
| R | 181m E | Ponds | 1898 | 1:10560 |
| R | 181m E | Ponds | 1970 | 1:10560 |
| F | 183m NE | Unspecified Heap | 1938 | 1:10560 |
| F | 183m NE | Unspecified Heap | 1938 | 1:10560 |
| R | 183m E | Ponds | 1960 | 1:10560 |
| S | 191m SW | Ponds | 1987 | 1:10000 |
| S | 191m SW | Ponds | 1981 | 1:10000 |
| F | 203m NE | Unspecified Heap | 1938 | 1:10560 |
| F | 203m NE | Unspecified Heap | 1938 | 1:10560 |
| F | 204m NE | Unspecified Heap | 1910 | 1:10560 |
| F | 204m NE | Unspecified Heap | 1948 | 1:10560 |
| 18 | 207m N | Pond | 1959 | 1:10560 |
| F | 208m NE | Unspecified Heap | 1970 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| F | 208m NE | Unspecified Heap | 1898 | 1:10560 |
| F | 208m NE | Unspecified Heap | 1987 | 1:10000 |
| F | 208m NE | Unspecified Heap | 1981 | 1:10000 |
| F | 209m NE | Unspecified Heap | 1991 | 1:10000 |
| F | 213m NE | Unspecified Heap | 1960 | 1:10560 |
| T | 214m W | Filter Bed | 1953 | 1:10560 |
| U | 214m NW | Unspecified Pit | 1981 | 1:10000 |
| U | 214m NW | Unspecified Pit | 1969 | 1:10560 |
| V | 214m SW | Unspecified Pit | 1871 | 1:10560 |
| Q | 216m E | Unspecified Ground Workings | 1970 | 1:10560 |
| Q | 216m E | Unspecified Ground Workings | 1910 | 1:10560 |
| T | 217m W | Filter Bed | 1948 | 1:10560 |
| Q | 217m E | Unspecified Heap | 1938 | 1:10560 |
| Q | 217m E | Unspecified Heap | 1938 | 1:10560 |
| U | 218m NW | Unspecified Heap | 1871 | 1:10560 |
| Q | 219m E | Unspecified Ground Workings | 1948 | 1:10560 |
| Q | 238m E | Unspecified Heap | 1898 | 1:10560 |
| W | 245m NW | Covered Reservoir | 1948 | 1:10560 |

*This is data is sourced from Ordnance Survey/Groundsure.*

## 18.4 Underground workings

**Records within 1000m** **51**

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 146**

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| E | 15m E | Colliery | 1869 | 1:10560 |
| F | 21m E | Disused Colliery | 1898 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| E | 87m E | Unspecified Shaft | 1869 | 1:10560 |
| E | 96m E | Unspecified Old Shaft | 1960 | 1:10560 |
| E | 96m E | Unspecified Old Shaft | 1970 | 1:10560 |
| E | 96m E | Old Coal Shaft | 1948 | 1:10560 |
| Q | 171m E | Colliery | 1948 | 1:10560 |
| Q | 171m E | Colliery | 1898 | 1:10560 |
| F | 182m NE | Unspecified Old Shafts | 1898 | 1:10560 |
| F | 187m NE | Unspecified Shafts | 1869 | 1:10560 |
| F | 190m NE | Old Coal Shafts | 1948 | 1:10560 |
| F | 191m NE | Unspecified Old Shafts | 1960 | 1:10560 |
| F | 191m NE | Unspecified Old Shafts | 1970 | 1:10560 |
| F | 191m NE | Unspecified Disused Shafts | 1987 | 1:10000 |
| F | 191m NE | Unspecified Disused Shafts | 1981 | 1:10000 |
| F | 195m NE | Unspecified Old Shafts | 1898 | 1:10560 |
| F | 195m NE | Unspecified Disused Shafts | 1991 | 1:10000 |
| F | 201m NE | Unspecified Shafts | 1869 | 1:10560 |
| F | 210m NE | Old Coal Shafts | 1948 | 1:10560 |
| F | 210m NE | Unspecified Old Shafts | 1970 | 1:10560 |
| F | 211m NE | Unspecified Disused Shafts | 1987 | 1:10000 |
| F | 211m NE | Unspecified Disused Shafts | 1981 | 1:10000 |
| F | 211m NE | Unspecified Old Shafts | 1960 | 1:10560 |
| F | 215m NE | Unspecified Disused Shafts | 1991 | 1:10000 |
| Q | 216m E | Unspecified Disused Mine | 1960 | 1:10560 |
| Q | 250m E | Unspecified Disused Shaft | 1970 | 1:10560 |
| AG | 411m E | Old Coal Shaft | 1948 | 1:10560 |
| AG | 411m E | Unspecified Old Shaft | 1898 | 1:10560 |
| AG | 413m E | Unspecified Old Shaft | 1960 | 1:10560 |
| AG | 413m E | Unspecified Old Shaft | 1970 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| AG | 416m E | Unspecified Disused Shaft | 1987 | 1:10000 |
| AG | 416m E | Unspecified Disused Shaft | 1981 | 1:10000 |
| AF | 418m E | Old Coal Shaft | 1948 | 1:10560 |
| AF | 418m E | Unspecified Old Shaft | 1898 | 1:10560 |
| AF | 421m E | Unspecified Old Shaft | 1960 | 1:10560 |
| BC | 652m S | Old Coal Shaft | 1948 | 1:10560 |
| BC | 652m S | Unspecified Old Shaft | 1898 | 1:10560 |
| BC | 655m S | Unspecified Old Shaft | 1960 | 1:10560 |
| BN | 756m NE | Coal Shaft | 1869 | 1:10560 |
| BN | 766m E | Disused Coal Pit | 1938 | 1:10560 |
| BN | 767m E | Disused Coal Pit | 1948 | 1:10560 |
| BN | 768m E | Disused Coal Pit | 1909 | 1:10560 |
| BN | 773m E | Unspecified Old Shaft | 1938 | 1:10560 |
| BN | 773m E | Coal Pit | 1898 | 1:10560 |
| BN | 774m E | Unspecified Old Shaft | 1948 | 1:10560 |
| BN | 776m E | Unspecified Old Shaft | 1909 | 1:10560 |
| BN | 777m E | Coal Pit | 1898 | 1:10560 |
| BO | 820m N | Unspecified Old Shaft | 1898 | 1:10560 |
| BZ | 946m N | Unspecified Old Shaft | 1948 | 1:10560 |
| BZ | 953m N | Unspecified Old Shaft | 1898 | 1:10560 |
| BT | 988m S | Unspecified Old Shaft | 1898 | 1:10560 |

*This is data is sourced from Ordnance Survey/Groundsure.*

## 18.5 Historical Mineral Planning Areas

| **Records within 500m** | **1** |
|---|---|

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 146**

| ID | Location | Site Name | Mineral | Type | Planning Status | Planning Status Date |
|---|---|---|---|---|---|---|
| **C** | **On site** | **Little Leadbrook Farm** | **Sand and gravel** | **Surface mineral working** | **Valid** | **Not available** |

*This data is sourced from the British Geological Survey.*

## 18.6 Non-coal mining

| **Records within 1000m** | **21** |
|---|---|

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).

Features are displayed on the Mining, ground workings and natural cavities map on **page 146**

| ID | Location | Name | Commodity | Class | Likelihood |
|---|---|---|---|---|---|
| **1** | **On site** | **Not available** | **Iron Ore (Bedded)** | **B** | **Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered** |
| **2** | **On site** | **Not available** | **Vein Mineral** | **A** | **Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered** |
| **3** | **On site** | **Not available** | **Vein Mineral** | **A** | **Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered** |
| **4** | **On site** | **Not available** | **Iron Ore (Bedded)** | **B** | **Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered** |
| **5** | **On site** | **Not available** | **Vein Mineral** | **A** | **Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered** |
| 7 | 3m NE | Not available | Iron Ore (Bedded) | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |

| ID | Location | Name | Commodity | Class | Likelihood |
|---|---|---|---|---|---|
| 14 | 148m SW | Not available | Iron Ore (Bedded) | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |
| 15 | 153m S | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 16 | 179m W | Not available | Iron Ore (Bedded) | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |
| 17 | 195m SE | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 24 | 314m SW | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 25 | 331m E | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 27 | 358m SW | Not available | Vein Mineral | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |
| 28 | 359m SW | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 32 | 568m W | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 34 | 599m SW | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |

| ID | Location | Name | Commodity | Class | Likelihood |
|---|---|---|---|---|---|
| 40 | 710m E | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 47 | 818m NW | Not available | Iron Ore (Bedded) | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |
| 49 | 847m SW | Not available | Iron Ore (Bedded) | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |
| 50 | 858m SW | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 54 | 896m E | Not available | Vein Mineral | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |

*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** | **1** |
|---|---|

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

| Location | Details |
|---|---|
| **On site** | **In addition to being located inside an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) have information such as mining plans and maps held within their archive of mining activities that have occurred within 1km of this property which may supplement this information. Please note, the plans held by JPB may also relate to non-mining records. Further details and a quote for services (if appropriate) can be obtained by emailing this report to enquiries.gs@jpb.co.uk.** |

*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 Mining Searches UK.*

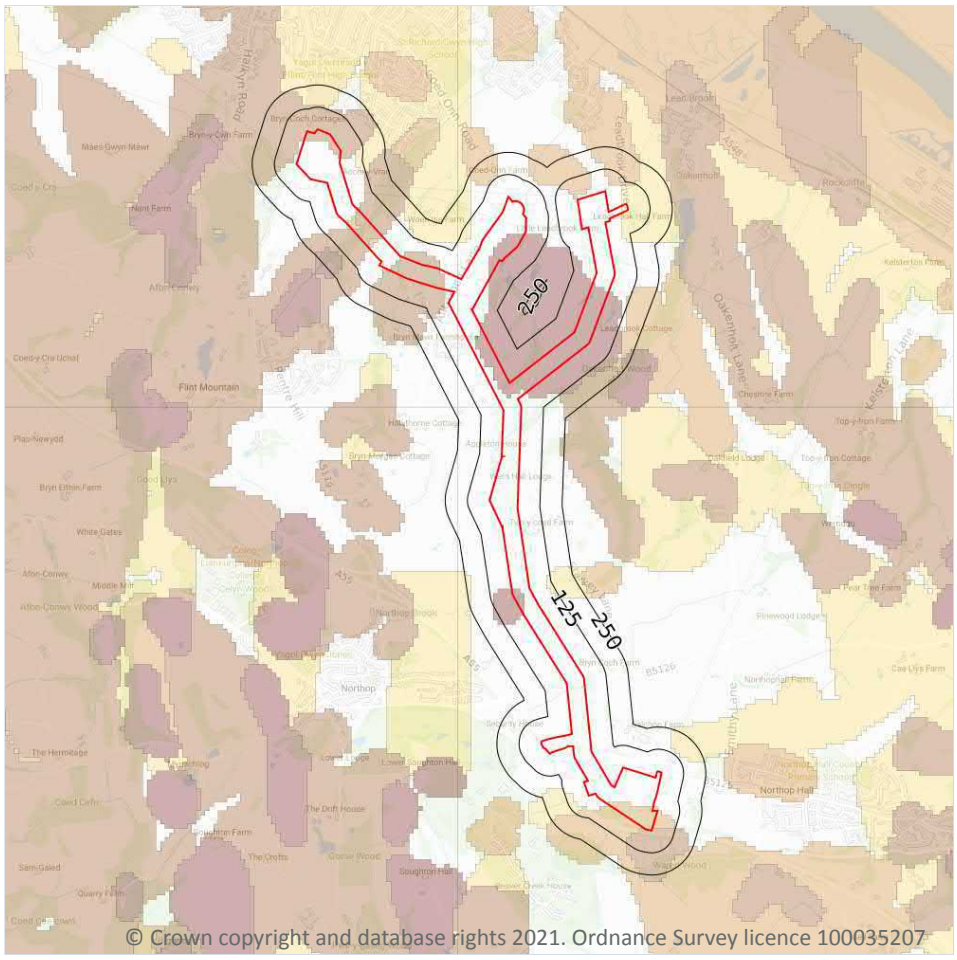
## 18.13 Clay mining

| 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




Site Outline

Search buffers in metres (m)

- Greater than 30%
- Between 10% and 30%
- Between 5% and 10%
- Between 3% and 5%
- Between 1% and 3%
- Less than 1%

## 19.1 Radon

| Records on site | 5 |
|---|---|

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 162**

| Location | Estimated properties affected | Radon Protection Measures required |
|---|---|---|
| **On site** | **Between 5% and 10%** | **Basic** |
| **On site** | **Between 1% and 3%** | **None** |

| Location | Estimated properties affected | Radon Protection Measures required |
|---|---|---|
| **On site** | **Less than 1%** | **None**** |
| **On site** | **Between 10% and 30%** | **Full** |
| **On site** | **Greater than 30%** | **Full** |

*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 | 99 |
|---|---|

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 $km^2$. 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 $km^2$; 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** | **25 - 35 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **25 - 35 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **25 - 35 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **25 - 35 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **25 - 35 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **25 - 35 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **25 - 35 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **25 - 35 mg/kg** | **No data** | **200 - 300 mg/kg** | **120 - 240 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |

| Location | Arsenic | Bioaccessible Arsenic | Lead | Bioaccessible Lead | Cadmium | Chromium | Nickel |
|---|---|---|---|---|---|---|---|
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **40 - 60 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **200 - 300 mg/kg** | **120 - 240 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **200 - 300 mg/kg** | **120 - 240 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **40 - 60 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **40 - 60 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
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| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |

| Location | Arsenic | Bioaccessible Arsenic | Lead | Bioaccessible Lead | Cadmium | Chromium | Nickel |
|---|---|---|---|---|---|---|---|
| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **200 - 300 mg/kg** | **120 - 240 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
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| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |

| Location | Arsenic | Bioaccessible Arsenic | Lead | Bioaccessible Lead | Cadmium | Chromium | Nickel |
|---|---|---|---|---|---|---|---|
| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 40 - 60 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 40 - 60 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 40 - 60 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 40 - 60 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 mg/kg |
| On site | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 mg/kg |
| On site | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |

| Location | Arsenic | Bioaccessible Arsenic | Lead | Bioaccessible Lead | Cadmium | Chromium | Nickel |
|---|---|---|---|---|---|---|---|
| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **40 - 60 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **300 - 600 mg/kg** | **240 - 360 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **200 - 300 mg/kg** | **120 - 240 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| 3m N | 15 mg/kg | No data | 200 - 300 mg/kg | 120 - 240 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 3m N | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 5m S | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| 5m S | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| 6m NW | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 20m NW | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 21m NE | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| 22m N | 25 - 35 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| 23m S | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| 24m S | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 24m S | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 24m S | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 24m S | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |

| Location | Arsenic | Bioaccessible Arsenic | Lead | Bioaccessible Lead | Cadmium | Chromium | Nickel |
|---|---|---|---|---|---|---|---|
| 27m NW | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 28m NW | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 28m NE | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| 31m S | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 31m S | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 31m NE | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 40 - 60 mg/kg | 15 - 30 mg/kg |
| 34m S | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 34m NW | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 40 - 60 mg/kg | 15 - 30 mg/kg |
| 36m NE | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| 40m NW | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 42m NW | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 42m NE | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| 44m NW | 15 mg/kg | No data | 300 - 600 mg/kg | 240 - 360 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 50m S | 15 mg/kg | No data | 200 - 300 mg/kg | 120 - 240 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 50m S | 15 mg/kg | No data | 200 - 300 mg/kg | 120 - 240 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 $km^2$).

*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 $km^2$.

*This data is sourced from the British Geological Survey.*

# 21 Railway infrastructure and projects

## 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 | 0 |
|---|---|

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.

*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/.

Groundsure LOCATION INTELLIGENCE

# Enviro+Geo Insight

## DCO Pipeline, Southern Route

## Order Details

**Date:** 30/07/2021

**Your ref:** DCO Pipeline, Southern Route

**Our Ref:** GSIP-2021-10877-7381_B

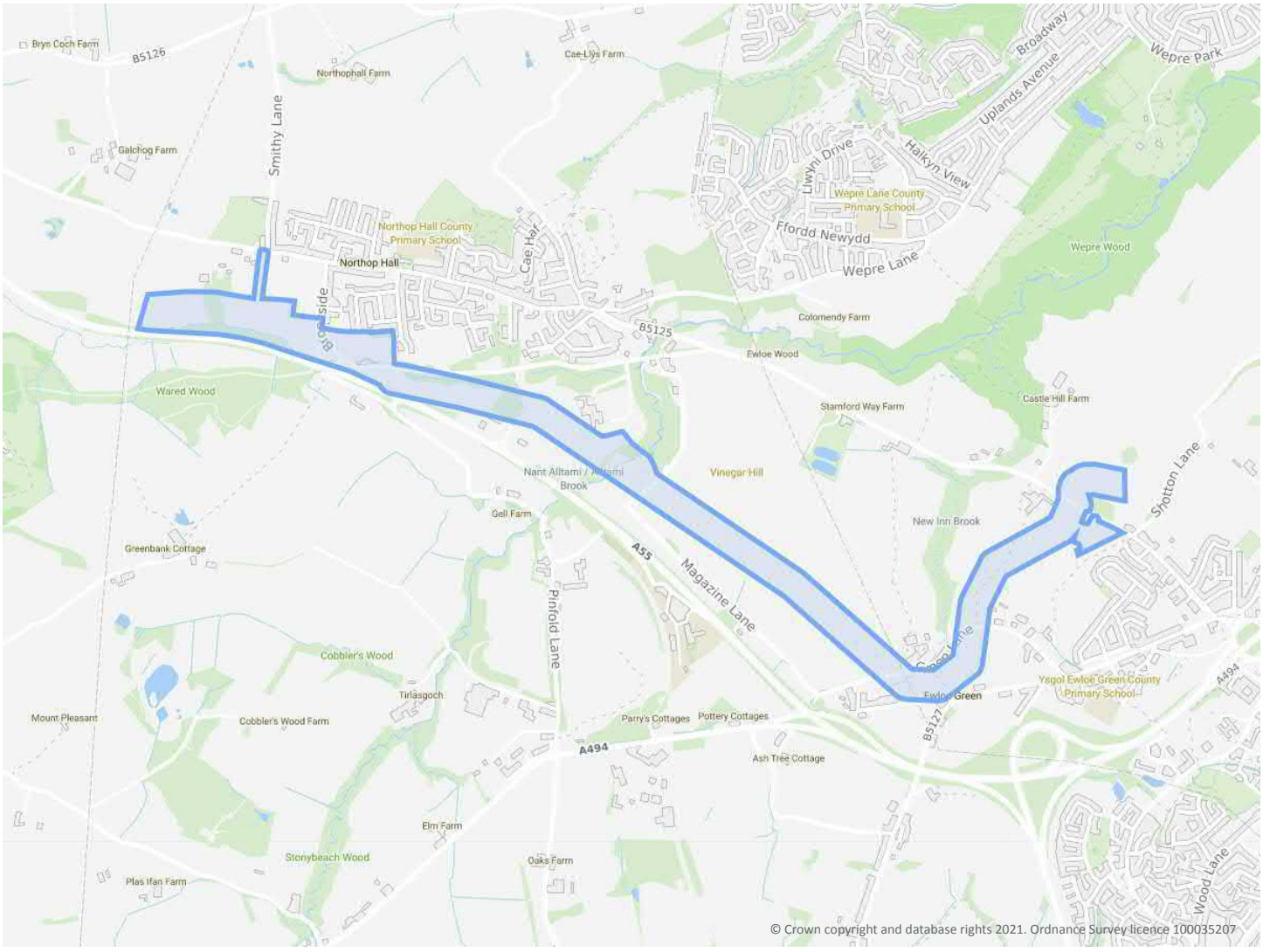
**Client:** WSP UK LIMITED

## Site Details

**Location:** 328108 367167

**Area:** 45.12 ha

**Authority:** Sir y Fflint - Flintshire County Council





**Summary of findings** p. 2

**OS MasterMap site plan** N/A: >10ha

**Aerial image** p. 8

**groundsure.com/insightuserguide**



Contact us with any questions at:
info@groundsure.com
08444 159 000

# Summary of findings

| Page | Section | Past land use | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| 13 | 1.1 | Historical industrial land uses | 34 | 19 | 167 | 172 | - |
| 28 | 1.2 | Historical tanks | 1 | 0 | 7 | 6 | - |
| 28 | 1.3 | Historical energy features | 0 | 1 | 8 | 8 | - |
| 29 | 1.4 | Historical petrol stations | 0 | 1 | 2 | 0 | - |
| 30 | 1.5 | Historical garages | 0 | 1 | 2 | 2 | - |
| 30 | 1.6 | Historical military land | 0 | 0 | 0 | 0 | - |
| Page | Section | Past land use - un-grouped | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 31 | 2.1 | Historical industrial land uses | 39 | 23 | 218 | 218 | - |
| 49 | 2.2 | Historical tanks | 1 | 0 | 15 | 8 | - |
| 51 | 2.3 | Historical energy features | 0 | 4 | 22 | 16 | - |
| 52 | 2.4 | Historical petrol stations | 0 | 4 | 2 | 0 | - |
| 53 | 2.5 | Historical garages | 0 | 2 | 4 | 7 | - |
| Page | Section | Waste and landfill | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 54 | 3.1 | Active or recent landfill | 0 | 0 | 0 | 1 | - |
| 55 | 3.2 | Historical landfill (BGS records) | 0 | 0 | 0 | 0 | - |
| 55 | 3.3 | Historical landfill (LA/mapping records) | 0 | 0 | 0 | 1 | - |
| 55 | 3.4 | Historical landfill (EA/NRW records) | 1 | 0 | 0 | 3 | - |
| 56 | 3.5 | Historical waste sites | 0 | 0 | 0 | 0 | - |
| 56 | 3.6 | Licensed waste sites | 0 | 0 | 0 | 0 | - |
| 57 | 3.7 | Waste exemptions | 0 | 0 | 30 | 5 | - |
| Page | Section | Current industrial land use | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 61 | 4.1 | Recent industrial land uses | 3 | 3 | 20 | - | - |
| 63 | 4.2 | Current or recent petrol stations | 0 | 1 | 2 | 1 | - |
| 63 | 4.3 | Electricity cables | 0 | 0 | 0 | 0 | - |
| 64 | 4.4 | Gas pipelines | 0 | 0 | 0 | 0 | - |
| 64 | 4.5 | Sites determined as Contaminated Land | 0 | 0 | 0 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 64 | 4.6 | Control of Major Accident Hazards (COMAH) | 0 | 0 | 0 | 0 | - |
| 64 | 4.7 | Regulated explosive sites | 0 | 0 | 0 | 0 | - |
| 64 | 4.8 | Hazardous substance storage/usage | 0 | 0 | 0 | 0 | - |
| 65 | 4.9 | Historical licensed industrial activities (IPC) | 0 | 0 | 0 | 0 | - |
| 65 | 4.10 | Licensed industrial activities (Part A(1)) | 0 | 0 | 0 | 0 | - |
| **65** | **4.11** | **Licensed pollutant release (Part A(2)/B)** | 0 | 0 | 2 | 4 | - |
| 66 | 4.12 | Radioactive Substance Authorisations | 0 | 0 | 0 | 0 | - |
| **66** | **4.13** | **Licensed Discharges to controlled waters** | 3 | 0 | 4 | 17 | - |
| 70 | 4.14 | Pollutant release to surface waters (Red List) | 0 | 0 | 0 | 0 | - |
| 70 | 4.15 | Pollutant release to public sewer | 0 | 0 | 0 | 0 | - |
| 70 | 4.16 | List 1 Dangerous Substances | 0 | 0 | 0 | 0 | - |
| 70 | 4.17 | List 2 Dangerous Substances | 0 | 0 | 0 | 0 | - |
| **70** | **4.18** | **Pollution Incidents (EA/NRW)** | 2 | 2 | 10 | 18 | - |
| 74 | 4.19 | Pollution inventory substances | 0 | 0 | 0 | 0 | - |
| 74 | 4.20 | Pollution inventory waste transfers | 0 | 0 | 0 | 0 | - |
| 74 | 4.21 | Pollution inventory radioactive waste | 0 | 0 | 0 | 0 | - |

| Page | Section | Hydrogeology | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| **75** | **5.1** | **Superficial aquifer** | Identified (within 500m) | | | | |
| **77** | **5.2** | **Bedrock aquifer** | Identified (within 500m) | | | | |
| **79** | **5.3** | **Groundwater vulnerability** | Identified (within 50m) | | | | |
| 82 | 5.4 | Groundwater vulnerability- soluble rock risk | None (within 0m) | | | | |
| 83 | 5.5 | Groundwater vulnerability- local information | None (within 0m) | | | | |
| **84** | **5.6** | **Groundwater abstractions** | 0 | 0 | 2 | 0 | 1 |
| **85** | **5.7** | **Surface water abstractions** | 0 | 0 | 0 | 0 | 1 |
| **86** | **5.8** | **Potable abstractions** | 0 | 0 | 2 | 0 | 0 |
| 87 | 5.9 | Source Protection Zones | 0 | 0 | 0 | 0 | - |
| 87 | 5.10 | Source Protection Zones (confined aquifer) | 0 | 0 | 0 | 0 | - |

| Page | Section | Hydrology | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| **88** | **6.1** | **Water Network (OS MasterMap)** | 11 | 12 | 26 | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 92 | 6.2 | Surface water features | 1 | 7 | 25 | - | - |
| 93 | 6.3 | WFD Surface water body catchments | 2 | - | - | - | - |
| 93 | 6.4 | WFD Surface water bodies | 1 | 0 | 0 | - | - |
| 94 | 6.5 | WFD Groundwater bodies | 1 | - | - | - | - |
| Page | Section | River and coastal flooding | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 95 | 7.1 | Risk of Flooding from Rivers and Sea (RoFRaS) | High (within 50m) | | | | |
| 96 | 7.2 | Historical Flood Events | 0 | 1 | 0 | - | - |
| 96 | 7.3 | Flood Defences | 0 | 0 | 0 | - | - |
| 96 | 7.4 | Areas Benefiting from Flood Defences | 0 | 0 | 0 | - | - |
| 97 | 7.5 | Flood Storage Areas | 0 | 0 | 0 | - | - |
| 98 | 7.6 | Flood Zone 2 | Identified (within 50m) | | | | |
| 99 | 7.7 | Flood Zone 3 | Identified (within 50m) | | | | |
| Page | Section | Surface water flooding | | | | | |
| 100 | 8.1 | Surface water flooding | 1 in 30 year, Greater than 1.0m (within 50m) | | | | |
| Page | Section | Groundwater flooding | | | | | |
| 102 | 9.1 | Groundwater flooding | Moderate (within 50m) | | | | |
| Page | Section | Environmental designations | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 103 | 10.1 | Sites of Special Scientific Interest (SSSI) | 0 | 1 | 1 | 1 | 19 |
| 104 | 10.2 | Conserved wetland sites (Ramsar sites) | 0 | 0 | 0 | 0 | 0 |
| 105 | 10.3 | Special Areas of Conservation (SAC) | 0 | 1 | 1 | 1 | 17 |
| 110 | 10.4 | Special Protection Areas (SPA) | 0 | 0 | 0 | 0 | 0 |
| 110 | 10.5 | National Nature Reserves (NNR) | 0 | 0 | 0 | 0 | 0 |
| 110 | 10.6 | Local Nature Reserves (LNR) | 0 | 0 | 0 | 0 | 2 |
| 111 | 10.7 | Designated Ancient Woodland | 2 | 4 | 11 | 14 | 76 |
| 115 | 10.8 | Biosphere Reserves | 0 | 0 | 0 | 0 | 0 |
| 115 | 10.9 | Forest Parks | 0 | 0 | 0 | 0 | 0 |
| 115 | 10.10 | Marine Conservation Zones | 0 | 0 | 0 | 0 | 0 |
| 116 | 10.11 | Green Belt | 0 | 0 | 0 | 0 | 0 |
| 116 | 10.12 | Proposed Ramsar sites | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 116 | 10.13 | Possible Special Areas of Conservation (pSAC) | 0 | 0 | 0 | 0 | 0 |
| 116 | 10.14 | Potential Special Protection Areas (pSPA) | 0 | 0 | 0 | 0 | 0 |
| 116 | 10.15 | Nitrate Sensitive Areas | 0 | 0 | 0 | 0 | 0 |
| 117 | 10.16 | Nitrate Vulnerable Zones | 0 | 0 | 0 | 0 | 0 |
| **118** | **10.17** | **SSSI Impact Risk Zones** | 1 | - | - | - | - |
| 119 | 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 |
| 120 | 11.1 | World Heritage Sites | 0 | 0 | 0 | - | - |
| 121 | 11.2 | Area of Outstanding Natural Beauty | 0 | 0 | 0 | - | - |
| 121 | 11.3 | National Parks | 0 | 0 | 0 | - | - |
| **121** | **11.4** | **Listed Buildings** | 0 | 0 | 6 | - | - |
| 122 | 11.5 | Conservation Areas | 0 | 0 | 0 | - | - |
| 122 | 11.6 | Scheduled Ancient Monuments | 0 | 0 | 0 | - | - |
| 122 | 11.7 | Registered Parks and Gardens | 0 | 0 | 0 | - | - |
| Page | Section | Agricultural designations | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| **123** | **12.1** | **Agricultural Land Classification** | Grade 3b (within 250m) | | | | |
| 124 | 12.2 | Open Access Land | 0 | 0 | 0 | - | - |
| 124 | 12.3 | Tree Felling Licences | 0 | 0 | 0 | - | - |
| 124 | 12.4 | Environmental Stewardship Schemes | 0 | 0 | 0 | - | - |
| 125 | 12.5 | Countryside Stewardship Schemes | 0 | 0 | 0 | - | - |
| Page | Section | Habitat designations | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 126 | 13.1 | Priority Habitat Inventory | 0 | 0 | 0 | - | - |
| 126 | 13.2 | Habitat Networks | 0 | 0 | 0 | - | - |
| 126 | 13.3 | Open Mosaic Habitat | 0 | 0 | 0 | - | - |
| 126 | 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 |
| **127** | **14.1** | **10k Availability** | Identified (within 500m) | | | | |
| 128 | 14.2 | Artificial and made ground (10k) | 0 | 0 | 0 | 0 | - |
| 129 | 14.3 | Superficial geology (10k) | 0 | 0 | 0 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 129 | 14.4 | Landslip (10k) | 0 | 0 | 0 | 0 | - |
| 130 | 14.5 | Bedrock geology (10k) | 0 | 0 | 0 | 0 | - |
| 130 | 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 |
| 131 | 15.1 | 50k Availability | Identified (within 500m) | | | | |
| 132 | 15.2 | Artificial and made ground (50k) | 1 | 0 | 4 | 5 | - |
| 133 | 15.3 | Artificial ground permeability (50k) | 1 | 0 | - | - | - |
| 134 | 15.4 | Superficial geology (50k) | 4 | 2 | 6 | 4 | - |
| 135 | 15.5 | Superficial permeability (50k) | Identified (within 50m) | | | | |
| 136 | 15.6 | Landslip (50k) | 1 | 0 | 3 | 0 | - |
| 136 | 15.7 | Landslip permeability (50k) | Identified (within 50m) | | | | |
| 137 | 15.8 | Bedrock geology (50k) | 22 | 5 | 12 | 17 | - |
| 141 | 15.9 | Bedrock permeability (50k) | Identified (within 50m) | | | | |
| 141 | 15.10 | Bedrock faults and other linear features (50k) | 28 | 4 | 26 | 37 | - |
| Page | Section | Boreholes | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 146 | 16.1 | BGS Boreholes | 17 | 15 | 131 | - | - |
| Page | Section | Natural ground subsidence | | | | | |
| 154 | 17.1 | Shrink swell clays | Very low (within 50m) | | | | |
| 156 | 17.2 | Running sands | Low (within 50m) | | | | |
| 158 | 17.3 | Compressible deposits | Moderate (within 50m) | | | | |
| 160 | 17.4 | Collapsible deposits | Very low (within 50m) | | | | |
| 161 | 17.5 | Landslides | Moderate (within 50m) | | | | |
| 163 | 17.6 | Ground dissolution of soluble rocks | Negligible (within 50m) | | | | |
| Page | Section | Mining, ground workings and natural cavities | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 165 | 18.1 | Natural cavities | 0 | 0 | 0 | 3 | - |
| 166 | 18.2 | BritPits | 0 | 2 | 7 | 16 | - |
| 171 | 18.3 | Surface ground workings | 28 | 27 | 129 | - | - |
| 178 | 18.4 | Underground workings | 5 | 2 | 35 | 25 | 108 |
| 185 | 18.5 | Historical Mineral Planning Areas | 0 | 0 | 2 | 2 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **185** | **18.6** | **Non-coal mining** | 5 | 0 | 1 | 2 | 7 |
| 187 | 18.7 | Mining cavities | 0 | 0 | 0 | 0 | 0 |
| **187** | **18.8** | **JPB mining areas** | Identified (within 0m) | | | | |
| **188** | **18.9** | **Coal mining** | Identified (within 0m) | | | | |
| 188 | 18.10 | Brine areas | None (within 0m) | | | | |
| 188 | 18.11 | Gypsum areas | None (within 0m) | | | | |
| 189 | 18.12 | Tin mining | None (within 0m) | | | | |
| 189 | 18.13 | Clay mining | None (within 0m) | | | | |

| Page | Section | Radon | |
|---|---|---|---|
| **190** | **19.1** | **Radon** | Greater than 30% (within 0m) |

| Page | Section | Soil chemistry | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| **192** | **20.1** | **BGS Estimated Background Soil Chemistry** | 68 | 18 | - | - | - |
| 197 | 20.2 | BGS Estimated Urban Soil Chemistry | 0 | 0 | - | - | - |
| 197 | 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 |
|---|---|---|---|---|---|---|---|
| 198 | 21.1 | Underground railways (London) | 0 | 0 | 0 | - | - |
| 198 | 21.2 | Underground railways (Non-London) | 0 | 0 | 0 | - | - |
| 199 | 21.3 | Railway tunnels | 0 | 0 | 0 | - | - |
| **199** | **21.4** | **Historical railway and tunnel features** | 2 | 0 | 18 | - | - |
| 200 | 21.5 | Royal Mail tunnels | 0 | 0 | 0 | - | - |
| **200** | **21.6** | **Historical railways** | 1 | 0 | 2 | - | - |
| 200 | 21.7 | Railways | 0 | 0 | 0 | - | - |
| 201 | 21.8 | Crossrail 1 | 0 | 0 | 0 | 0 | - |
| 201 | 21.9 | Crossrail 2 | 0 | 0 | 0 | 0 | - |
| 201 | 21.10 | HS2 | 0 | 0 | 0 | 0 | - |

## Recent aerial photograph




Capture Date: 10/04/2020

Site Area: 45.12ha

# Recent site history - 2017 aerial photograph




Capture Date: 07/05/2017

Site Area: 45.12ha

# Recent site history - 2013 aerial photograph




Capture Date: 04/06/2013

Site Area: 45.12ha

# Recent site history - 2009 aerial photograph




Capture Date: 20/04/2009

Site Area: 45.12ha

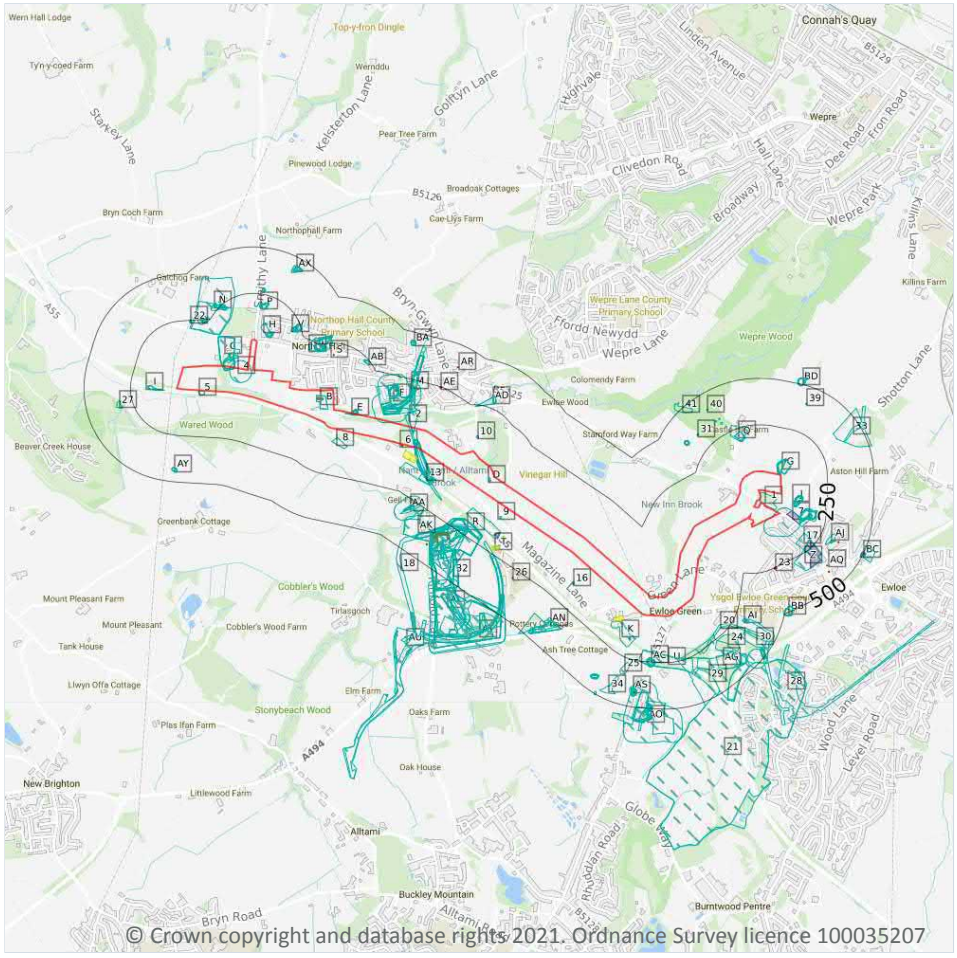
# Recent site history - 2001 aerial photograph




Capture Date: 28/07/2001

Site Area: 45.12ha

# 1 Past land use




## 1.1 Historical industrial land uses

| Records within 500m | 392 |
|---|---|

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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| **1** | **On site** | **Unspecified Heap** | **1869** | **803592** |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| 2 | On site | Unspecified Heap | 1991 | 803594 |
| 3 | On site | Old Colliery | 1869 | 808568 |
| 4 | On site | Magazine | 1948 | 827271 |
| A | On site | Cuttings | 1948 - 1960 | 988517 |
| A | On site | Cuttings | 1898 | 943999 |
| A | On site | Cuttings | 1970 | 928642 |
| A | On site | Cuttings | 1981 | 916118 |
| A | On site | Railway Sidings | 1869 | 794520 |
| A | On site | Unspecified Heap | 1938 | 934914 |
| A | On site | Cuttings | 1910 | 853212 |
| A | On site | Cuttings | 1869 | 897984 |
| B | On site | Unspecified Works | 1970 | 877369 |
| B | On site | Unspecified Tank | 1970 | 879190 |
| B | On site | Unspecified Tank | 1960 | 933449 |
| B | On site | Unspecified Tank | 1960 | 965600 |
| B | On site | Unspecified Tank | 1970 | 916301 |
| B | On site | Unspecified Works | 1960 | 901891 |
| C | On site | Colliery | 1938 | 908735 |
| C | On site | Colliery | 1948 | 904263 |
| C | On site | Unspecified Disused Mine | 1960 | 810915 |
| C | On site | Unspecified Ground Workings | 1948 | 893610 |
| C | On site | Unspecified Ground Workings | 1910 | 917742 |
| C | On site | Unspecified Heap | 1938 | 918071 |
| C | On site | Colliery | 1898 - 1910 | 927848 |
| C | On site | Unspecified Ground Workings | 1970 | 967188 |
| D | On site | Unspecified Disused Shafts | 1991 | 835400 |
| D | On site | Unspecified Disused Shafts | 1991 | 835399 |
| E | On site | Sand Pit | 1869 | 797379 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| **E** | **On site** | **Old Gravel Pit** | **1960** | **946740** |
| **E** | **On site** | **Old Gravel Pit** | **1938 - 1948** | **912603** |
| **E** | **On site** | **Old Gravel Pit** | **1910** | **911484** |
| **E** | **On site** | **Old Gravel Pit** | **1970** | **883458** |
| **F** | **On site** | **Colliery** | **1898** | **798231** |
| 5 | 1m S | Unspecified Heap | 1970 | 803588 |
| E | 2m N | Old Gravel Pit | 1898 | 885668 |
| G | 2m N | Unspecified Heap | 1869 | 892215 |
| G | 3m N | Refuse Heap | 1948 | 828558 |
| G | 5m N | Unspecified Heap | 1938 | 937790 |
| G | 5m N | Unspecified Heap | 1960 | 934185 |
| G | 7m N | Unspecified Ground Workings | 1910 | 799525 |
| C | 21m N | Unspecified Heap | 1898 | 856493 |
| F | 30m N | Disused Colliery | 1938 | 989627 |
| F | 31m N | Disused Colliery | 1948 | 942533 |
| F | 31m N | Unspecified Disused Mine | 1960 | 810938 |
| F | 32m N | Disused Colliery | 1910 | 967221 |
| F | 35m N | Unspecified Heap | 1938 | 954461 |
| F | 36m N | Unspecified Heap | 1970 | 885961 |
| F | 37m N | Unspecified Heap | 1960 | 919653 |
| F | 38m N | Unspecified Heap | 1910 | 907144 |
| 8 | 43m S | Cuttings | 1991 | 795494 |
| F | 49m N | Unspecified Heap | 1948 | 949435 |
| F | 49m N | Unspecified Heap | 1898 | 986461 |
| F | 54m N | Railway Sidings | 1938 - 1948 | 852769 |
| F | 56m N | Railway Sidings | 1960 | 902140 |
| 9 | 57m SW | Chimney | 1970 - 1991 | 884775 |
| F | 58m N | Railway Sidings | 1910 | 899192 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| H | 58m NE | Unspecified Heap | 1869 | 974348 |
| F | 60m N | Railway Sidings | 1898 | 924671 |
| C | 61m N | Unspecified Tank | 1987 | 824094 |
| C | 61m N | Unspecified Disused Shaft | 1970 | 812921 |
| H | 63m NE | Unspecified Heap | 1938 | 913282 |
| H | 64m NE | Unspecified Heap | 1898 | 923815 |
| H | 65m NE | Unspecified Heap | 1910 | 937871 |
| A | 66m S | Unspecified Hole | 1869 | 810981 |
| I | 73m W | Unspecified Pit | 1960 | 839175 |
| 10 | 74m N | Unspecified Tank | 1948 | 824112 |
| F | 78m N | Unspecified Shaft | 1960 | 813706 |
| F | 80m N | Unspecified Tank | 1938 | 824113 |
| J | 82m E | Unspecified Heap | 1948 | 855660 |
| J | 82m E | Unspecified Heap | 1869 - 1898 | 938035 |
| J | 83m E | Unspecified Heap | 1910 | 968519 |
| J | 84m SE | Unspecified Heap | 1981 - 1987 | 921811 |
| J | 84m SE | Unspecified Heap | 1938 | 952847 |
| 13 | 87m SW | Cuttings | 1991 | 863363 |
| J | 88m SE | Unspecified Heap | 1960 - 1970 | 845985 |
| 14 | 91m S | Cuttings | 1987 | 983960 |
| F | 93m N | Unspecified Shaft | 1948 | 945864 |
| F | 94m N | Unspecified Shaft | 1938 | 969495 |
| F | 94m N | Unspecified Shaft | 1910 | 860037 |
| H | 98m NE | Old Coal Shaft | 1938 | 864298 |
| H | 99m NE | Unspecified Old Shaft | 1960 | 954704 |
| H | 99m NE | Unspecified Old Shaft | 1898 | 927894 |
| H | 99m NE | Old Coal Shaft | 1948 | 943523 |
| H | 100m NE | Old Coal Shaft | 1910 | 962976 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| 15 | 103m SW | Cuttings | 1987 - 1991 | 877201 |
| I | 104m W | Unspecified Ground Workings | 1970 | 799544 |
| K | 105m SW | Refuse Heap | 1869 - 1898 | 848778 |
| L | 113m E | Unspecified Ground Workings | 1910 | 910106 |
| L | 113m E | Unspecified Heap | 1948 | 964776 |
| L | 114m E | Unspecified Heap | 1970 | 986529 |
| L | 115m E | Unspecified Heap | 1960 | 920641 |
| 16 | 116m SW | Magazine | 1869 | 913435 |
| L | 116m E | Unspecified Ground Workings | 1938 | 871383 |
| L | 117m E | Unspecified Heap | 1869 - 1898 | 909143 |
| L | 118m SE | Garage | 1981 - 1987 | 880213 |
| F | 124m N | Unspecified Heap | 1970 | 949948 |
| F | 124m N | Unspecified Heap | 1960 | 915597 |
| F | 124m N | Unspecified Heap | 1938 | 901513 |
| F | 125m N | Unspecified Heap | 1910 | 889019 |
| F | 135m N | Unspecified Heap | 1948 | 912966 |
| F | 135m N | Unspecified Heap | 1898 | 972930 |
| M | 140m N | Cuttings | 1869 | 967302 |
| K | 144m SW | Old Coal Shafts | 1948 | 836137 |
| K | 144m SW | Unspecified Old Shaft | 1898 | 860586 |
| K | 148m SW | Unspecified Old Shaft | 1960 | 917289 |
| K | 148m SW | Old Coal Shaft | 1909 - 1938 | 845838 |
| L | 159m E | Unspecified Shaft | 1898 | 813758 |
| L | 159m E | Unspecified Old Shaft | 1948 | 847737 |
| N | 161m NW | Disused Colliery | 1898 | 822314 |
| L | 163m E | Unspecified Old Shaft | 1938 | 960245 |
| L | 163m E | Unspecified Old Shaft | 1938 | 962641 |
| L | 164m E | Unspecified Old Shaft | 1910 | 954465 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| O | 166m NW | Colliery | 1869 | 798233 |
| F | 168m N | Unspecified Old Shaft | 1960 | 806216 |
| F | 168m N | Unspecified Disused Shaft | 1970 | 812936 |
| F | 168m N | Old Coal Shaft | 1910 - 1948 | 850159 |
| L | 168m E | Unspecified Old Shaft | 1960 | 806211 |
| 17 | 170m SE | Garage | 1970 | 901952 |
| P | 172m N | Unspecified Heap | 1938 | 911100 |
| P | 172m N | Unspecified Heap | 1910 | 983167 |
| Q | 173m N | Brewery | 1898 - 1910 | 906760 |
| F | 174m N | Unspecified Disused Shaft | 1991 | 812935 |
| P | 174m N | Unspecified Heap | 1948 | 897135 |
| P | 174m N | Unspecified Heap | 1898 | 941796 |
| P | 174m N | Unspecified Heap | 1960 | 908010 |
| P | 174m N | Unspecified Heap | 1970 - 1987 | 950963 |
| R | 175m SW | Railway Sidings | 1869 | 947604 |
| 18 | 176m SW | Mineral Railway Sidings | 1898 | 885181 |
| R | 178m SW | Railway Sidings | 1909 | 871822 |
| R | 178m SW | Railway Sidings | 1938 - 1948 | 874303 |
| Q | 178m N | Brewery | 1948 | 938554 |
| Q | 179m N | Brewery | 1869 | 913041 |
| P | 180m N | Old Coal Shaft | 1938 | 951225 |
| P | 182m N | Old Coal Shaft | 1948 | 867599 |
| P | 182m N | Unspecified Old Shaft | 1898 | 931688 |
| P | 182m N | Old Coal Shaft | 1910 | 882454 |
| P | 182m N | Unspecified Old Shaft | 1960 | 966997 |
| P | 182m N | Unspecified Old Shaft | 1970 | 986341 |
| P | 183m N | Unspecified Disused Shaft | 1981 - 1987 | 982781 |
| R | 186m SW | Brick Works | 1869 | 939573 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| R | 186m SW | Brick Works | 1898 | 882113 |
| R | 187m SW | Unspecified Works | 1960 | 990409 |
| T | 188m SW | Filling Station | 1991 | 810492 |
| U | 188m S | Cuttings | 1991 | 983084 |
| U | 189m S | Cuttings | 1987 | 908595 |
| R | 190m SW | Unspecified Workshop | 1991 | 876892 |
| R | 190m SW | Unspecified Workshop | 1981 - 1987 | 944480 |
| R | 194m SW | Railway Sidings | 1960 | 866972 |
| V | 195m E | Unspecified Quarry | 1869 | 816583 |
| M | 196m N | Cuttings | 1938 - 1948 | 989965 |
| 19 | 197m NE | Smithy | 1869 | 843097 |
| M | 197m N | Cuttings | 1910 | 850435 |
| W | 198m N | Cuttings | 1970 | 943066 |
| W | 198m N | Cuttings | 1960 | 945690 |
| X | 203m NE | Unspecified Heap | 1869 | 897058 |
| 20 | 204m SE | Unspecified Ground Workings | 1987 - 1991 | 983054 |
| V | 204m E | Unspecified Old Quarry | 1938 | 863805 |
| V | 206m E | Unspecified Old Quarry | 1948 - 1960 | 896360 |
| R | 207m SW | Brick Works | 1909 | 919805 |
| V | 207m E | Unspecified Old Quarry | 1898 | 860974 |
| V | 208m E | Unspecified Old Quarry | 1910 | 975641 |
| R | 208m SW | Brick Works | 1948 | 915885 |
| V | 208m E | Unspecified Ground Workings | 1970 | 799546 |
| R | 209m SW | Brick Works | 1938 | 902681 |
| X | 210m N | Unspecified Ground Workings | 1960 | 856297 |
| X | 210m N | Unspecified Heap | 1938 | 975929 |
| X | 211m N | Unspecified Ground Workings | 1910 | 950032 |
| X | 212m N | Unspecified Heap | 1970 | 898844 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| Y | 213m SW | Cuttings | 1869 | 986203 |
| N | 214m NW | Unspecified Heap | 1910 - 1948 | 850434 |
| Z | 214m SE | Garage | 1981 - 1991 | 920926 |
| N | 216m NW | Unspecified Heap | 1960 | 859195 |
| N | 216m NW | Unspecified Heap | 1970 - 1987 | 905587 |
| X | 218m N | Unspecified Ground Workings | 1898 | 957599 |
| X | 218m N | Unspecified Ground Workings | 1948 | 977741 |
| AA | 218m SW | Unspecified Old Quarry | 1960 | 958882 |
| V | 219m E | Lime Kiln | 1869 | 842746 |
| N | 221m NW | Unspecified Heap | 1898 | 927463 |
| R | 221m SW | Unspecified Heap | 1938 - 1948 | 975058 |
| R | 221m SW | Unspecified Ground Workings | 1909 | 799512 |
| R | 222m SW | Unspecified Heap | 1960 | 857179 |
| O | 223m N | Unspecified Heap | 1869 | 914965 |
| 21 | 225m SE | Opencast Workings | 1981 - 1987 | 896002 |
| AB | 226m NE | Unspecified Heap | 1938 | 896795 |
| AB | 227m NE | Unspecified Heap | 1948 | 884063 |
| N | 228m NW | Unspecified Heap | 1991 | 948322 |
| AC | 228m S | Unspecified Heap | 1869 | 879385 |
| O | 228m N | Unspecified Heap | 1948 | 900245 |
| O | 229m N | Unspecified Heap | 1910 - 1938 | 887399 |
| AB | 229m NE | Unspecified Heap | 1910 | 957442 |
| O | 230m N | Unspecified Pit | 1960 | 839176 |
| O | 231m N | Old Coal Shaft | 1938 | 926927 |
| R | 231m SW | Unspecified Heap | 1898 | 875139 |
| O | 231m N | Unspecified Old Shaft | 1960 | 925103 |
| O | 231m N | Unspecified Old Shaft | 1970 | 903416 |
| O | 231m N | Unspecified Heap | 1970 | 923120 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| O | 232m N | Old Coal Shaft | 1948 | 988776 |
| O | 234m N | Old Coal Shaft | 1910 | 849783 |
| N | 234m NW | Unspecified Heap | 1869 | 937178 |
| AC | 234m S | Unspecified Heap | 1938 | 897655 |
| AC | 235m S | Unspecified Heap | 1869 | 971878 |
| O | 235m N | Unspecified Shaft | 1869 | 813707 |
| AC | 236m S | Unspecified Heap | 1909 | 958678 |
| AC | 238m S | Unspecified Heap | 1948 | 967819 |
| AC | 238m S | Unspecified Heap | 1898 | 977130 |
| 22 | 238m N | Lime Kiln | 1869 | 842743 |
| N | 239m NW | Unspecified Old Shafts | 1970 | 920069 |
| N | 240m NW | Unspecified Old Shafts | 1960 | 918138 |
| R | 240m SW | Unspecified Works | 1970 | 990350 |
| AC | 241m S | Unspecified Heap | 1960 | 872863 |
| N | 242m NW | Old Coal Shafts | 1938 - 1948 | 848084 |
| N | 242m NW | Old Coal Shafts | 1910 | 921886 |
| N | 243m NW | Unspecified Disused Shafts | 1981 - 1987 | 866230 |
| AD | 243m N | Unspecified Pit | 1970 | 921487 |
| AD | 243m N | Unspecified Pit | 1987 - 1991 | 934853 |
| AA | 243m SW | Unspecified Quarry | 1869 | 816581 |
| N | 245m NW | Unspecified Old Shafts | 1898 | 793173 |
| Y | 247m SW | Cuttings | 1909 | 854877 |
| N | 248m NW | Unspecified Disused Shafts | 1991 | 835401 |
| N | 251m NW | Unspecified Shafts | 1869 | 809172 |
| Y | 253m SW | Cuttings | 1948 - 1960 | 899658 |
| Y | 256m SW | Cuttings | 1938 | 909769 |
| 24 | 259m SE | Unspecified Heap | 1987 - 1991 | 889305 |
| AF | 259m N | Unspecified Heap | 1938 | 904274 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| AF | 260m N | Unspecified Heap | 1948 | 957881 |
| N | 261m NW | Unspecified Heap | 1938 | 904714 |
| AF | 261m N | Unspecified Heap | 1910 | 883085 |
| AF | 261m N | Unspecified Heap | 1960 | 958716 |
| N | 263m NW | Unspecified Old Shafts | 1960 | 868847 |
| N | 263m NW | Unspecified Old Shafts | 1970 | 891045 |
| N | 264m NW | Old Coal Shafts | 1938 - 1948 | 865915 |
| N | 266m NW | Old Coal Shafts | 1910 | 900028 |
| N | 268m NW | Chimney | 1869 | 835665 |
| N | 269m NW | Unspecified Disused Shafts | 1981 - 1987 | 966208 |
| AA | 269m SW | Unspecified Old Quarry | 1910 | 989958 |
| AA | 269m SW | Unspecified Old Quarry | 1948 | 977017 |
| N | 270m NW | Unspecified Old Shafts | 1898 | 793174 |
| AA | 273m SW | Unspecified Old Quarry | 1938 | 944101 |
| 25 | 273m S | Refuse Heap | 1869 | 828572 |
| N | 274m NW | Unspecified Disused Shafts | 1991 | 854228 |
| N | 274m NW | Unspecified Shafts | 1869 | 809173 |
| AG | 275m SE | Cuttings | 1987 | 930875 |
| AD | 278m NE | Unspecified Ground Workings | 1981 | 799543 |
| W | 282m N | Cuttings | 1869 | 876901 |
| AH | 283m NW | Unspecified Tank | 1869 | 824044 |
| R | 286m SW | Unspecified Tanks | 1898 | 952699 |
| R | 286m SW | Unspecified Tanks | 1938 | 953215 |
| W | 286m N | Cuttings | 1938 | 915385 |
| W | 287m N | Cuttings | 1948 | 936868 |
| R | 288m SW | Unspecified Tanks | 1909 | 892146 |
| W | 289m N | Cuttings | 1910 | 929109 |
| R | 290m SW | Kilns | 1869 | 812678 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| R | 291m SW | Unspecified Tanks | 1869 | 937668 |
| R | 294m SW | Unspecified Kilns | 1869 | 822222 |
| AI | 294m SE | Refuse Heap | 1948 | 828570 |
| R | 294m SW | Unspecified Tanks | 1869 | 982158 |
| AJ | 295m SE | Refuse Heap | 1869 | 828559 |
| R | 297m SW | Unspecified Tanks | 1869 | 923975 |
| AI | 302m SE | Unspecified Heap | 1960 | 803591 |
| AH | 306m NW | Unspecified Tank | 1869 | 824045 |
| 27 | 310m W | Unspecified Pit | 1871 | 839174 |
| 28 | 311m E | Railway Sidings | 1898 | 846661 |
| R | 312m SW | Clay Pit | 1869 | 862741 |
| AJ | 312m SE | Old Coal Shafts | 1948 | 950586 |
| AJ | 312m SE | Unspecified Old Shafts | 1898 | 952377 |
| AJ | 312m SE | Old Coal Shafts | 1938 | 850398 |
| AK | 313m SW | Unspecified Commercial/Industrial | 1938 | 796397 |
| AJ | 313m SE | Old Coal Shafts | 1909 | 870708 |
| AI | 314m SE | Unspecified Shaft | 1898 | 813759 |
| AJ | 315m SE | Unspecified Old Shafts | 1960 | 845593 |
| AG | 323m SE | Cuttings | 1991 | 850160 |
| AJ | 324m SE | Old Coal Shafts | 1938 - 1948 | 866325 |
| AJ | 325m SE | Old Coal Shafts | 1909 | 859313 |
| AJ | 326m SE | Unspecified Old Shafts | 1898 | 906390 |
| 29 | 326m SE | Cuttings | 1987 - 1991 | 973603 |
| AJ | 328m SE | Unspecified Old Shafts | 1960 | 990252 |
| AL | 330m SW | Unspecified Ground Workings | 1960 | 992032 |
| AH | 332m NW | Unspecified Levels | 1898 | 832408 |
| AH | 333m NW | Unspecified Levels | 1898 | 832409 |
| 30 | 334m SE | Cuttings | 1987 - 1991 | 851519 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| 31 | 336m NW | Unspecified Old Shaft | 1898 | 806213 |
| R | 337m SW | Railway Sidings | 1960 | 976551 |
| R | 337m SW | Unspecified Tanks | 1938 | 957453 |
| AK | 338m SW | Railway Sidings | 1948 - 1960 | 956884 |
| R | 340m SW | Unspecified Mill | 1869 | 955794 |
| 32 | 341m SW | Unspecified Disused Pit | 1981 | 947440 |
| AL | 341m SW | Unspecified Disused Pit | 1987 | 873760 |
| AL | 341m SW | Clay Pit | 1970 | 918333 |
| R | 344m SW | Railway Sidings | 1898 | 902606 |
| R | 344m SW | Railway Sidings | 1938 - 1948 | 926489 |
| AM | 344m NW | Unspecified Heap | 1960 | 978886 |
| AN | 344m SW | Unspecified Mills | 1869 | 969163 |
| AM | 345m NW | Unspecified Heap | 1938 | 964787 |
| AM | 345m NW | Unspecified Heap | 1910 | 878816 |
| AN | 347m SW | Pottery | 1938 | 896292 |
| AL | 347m SW | Clay Quarry | 1991 | 797992 |
| AN | 348m SW | Pottery | 1909 | 879406 |
| R | 348m SW | Unspecified Tanks | 1970 | 814972 |
| AN | 349m SW | Pottery | 1898 | 975764 |
| AO | 350m S | Colliery | 1869 | 940702 |
| AM | 351m NW | Unspecified Heap | 1898 | 871064 |
| AM | 351m NW | Unspecified Heap | 1948 | 940517 |
| AL | 352m SW | Unspecified Ground Workings | 1948 | 938331 |
| R | 356m SW | Clay Pit | 1869 | 932330 |
| AP | 356m SW | Unspecified Ground Workings | 1938 | 964772 |
| R | 358m SW | Unspecified Ground Workings | 1869 | 889980 |
| AP | 358m SW | Unspecified Pit | 1898 | 839173 |
| 33 | 358m NE | Unspecified Pit | 1991 | 839192 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| AP | 358m SW | Unspecified Quarry | 1909 | 816582 |
| 34 | 363m S | Refuse Heap | 1869 | 828573 |
| 36 | 381m E | Coal Pit | 1898 | 808458 |
| AN | 381m SW | Unspecified Works | 1960 | 830098 |
| 37 | 387m NE | Unspecified Ground Workings | 1970 - 1987 | 876468 |
| AS | 391m S | Unspecified Heap | 1869 | 802851 |
| AL | 394m SW | Unspecified Disused Pit | 1981 | 880496 |
| AS | 396m S | Unspecified Old Quarry | 1938 | 981792 |
| AT | 397m SW | Railway Sidings | 1948 | 848653 |
| AS | 397m S | Unspecified Old Quarry | 1909 | 929356 |
| AS | 398m S | Unspecified Old Quarry | 1960 | 895469 |
| AU | 398m SW | Mineral Railway Sidings | 1938 | 960719 |
| 38 | 398m SE | Cuttings | 1991 | 987943 |
| AS | 398m S | Unspecified Old Quarry | 1948 | 891586 |
| AS | 398m S | Unspecified Old Quarry | 1898 | 917511 |
| AO | 400m S | Unspecified Heap | 1869 | 906270 |
| AS | 400m S | Unspecified Quarry | 1981 - 1987 | 928138 |
| 39 | 402m N | Old Lime Kiln | 1869 | 821891 |
| AN | 402m SW | Pottery | 1948 | 882551 |
| AV | 403m SE | Cuttings | 1987 - 1991 | 973231 |
| AW | 406m SW | Unspecified Heap | 1991 | 991248 |
| AO | 407m S | Colliery | 1869 | 969433 |
| AW | 409m SW | Unspecified Heap | 1938 - 1948 | 915483 |
| AT | 409m SW | Railway Sidings | 1960 | 878386 |
| AW | 409m SW | Unspecified Heap | 1909 | 851928 |
| AW | 409m SW | Unspecified Heap | 1981 - 1987 | 959840 |
| AU | 409m SW | Mineral Railway Sidings | 1898 - 1909 | 991598 |
| 40 | 410m NW | Unspecified Old Shaft | 1898 | 806212 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| AW | 410m SW | Unspecified Heap | 1970 | 970282 |
| AW | 410m SW | Unspecified Heap | 1960 | 967807 |
| AX | 412m NE | Unspecified Heap | 1869 | 848873 |
| AX | 419m NE | Unspecified Heap | 1938 | 905108 |
| AX | 420m NE | Unspecified Ground Workings | 1960 | 964617 |
| AX | 420m NE | Unspecified Ground Workings | 1910 | 981310 |
| AY | 423m S | Unspecified Heap | 1910 | 965565 |
| AY | 425m S | Unspecified Heap | 1938 - 1948 | 940217 |
| AZ | 425m SE | Unspecified Level | 1898 | 832114 |
| AY | 426m S | Unspecified Heap | 1960 | 933546 |
| BA | 428m N | Unspecified Heap | 1938 - 1948 | 860865 |
| BA | 429m N | Unspecified Heap | 1960 | 877775 |
| BA | 429m N | Unspecified Heap | 1970 | 864254 |
| BA | 430m N | Unspecified Heap | 1910 | 899158 |
| AT | 434m SW | Railway Sidings | 1869 | 980533 |
| AN | 444m SW | Pottery | 1869 | 907915 |
| AV | 445m SE | Cuttings | 1987 | 845520 |
| 41 | 449m NW | Unspecified Pit | 1970 - 1991 | 950796 |
| AN | 450m SW | Pottery | 1869 | 874556 |
| AZ | 456m SE | Unspecified Pit | 1948 | 896692 |
| AZ | 459m SE | Unspecified Pit | 1938 | 855671 |
| AO | 460m S | Old Colliery | 1898 | 808569 |
| AZ | 464m SE | Unspecified Pit | 1970 | 865834 |
| AZ | 464m SE | Unspecified Pit | 1960 | 911702 |
| BB | 471m SE | Unspecified Heap | 1938 | 944325 |
| BB | 472m SE | Unspecified Heap | 1909 | 919017 |
| BB | 472m SE | Unspecified Heap | 1948 | 884006 |
| BB | 472m SE | Unspecified Heap | 1898 | 891418 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| AO | 473m S | Unspecified Heap | 1938 | 888715 |
| AT | 473m SW | Brick Works | 1948 | 986557 |
| AO | 473m S | Unspecified Ground Workings | 1948 | 962085 |
| AO | 474m S | Unspecified Heap | 1898 | 921059 |
| BB | 474m SE | Unspecified Heap | 1970 | 973453 |
| BB | 474m SE | Unspecified Heap | 1960 | 964946 |
| AO | 475m S | Unspecified Ground Workings | 1909 | 866593 |
| 42 | 475m N | Railway Building | 1960 | 819561 |
| AT | 475m SW | Unspecified Works | 1960 | 895476 |
| 43 | 478m SE | Unspecified Disused Workings | 1991 | 842251 |
| AO | 479m S | Unspecified Ground Workings | 1960 | 936243 |
| AO | 479m S | Unspecified Heap | 1970 - 1987 | 954181 |
| 44 | 486m SW | Sand Pit | 1869 | 797378 |
| AT | 490m SW | Brick Works | 1898 | 942695 |
| AT | 491m SW | Brick Works | 1938 | 969148 |
| BD | 491m N | Sand Pit | 1948 | 963379 |
| BD | 492m N | Unspecified Pit | 1981 - 1991 | 851268 |
| BD | 492m N | Sand Pit | 1960 | 949712 |
| BD | 492m N | Sand Pit | 1938 | 991975 |
| BC | 493m SE | Garage | 1981 - 1987 | 890399 |
| BC | 493m SE | Garage | 1970 | 934977 |
| BD | 495m N | Sand Pit | 1910 | 972222 |
| BD | 496m N | Unspecified Pit | 1970 | 919425 |
| 45 | 498m SW | Unspecified Disused Works | 1970 | 813346 |
| AO | 498m S | Unspecified Disused Shafts | 1970 | 888158 |
| AO | 498m S | Unspecified Disused Shafts | 1987 - 1991 | 918194 |
| AT | 499m SW | Brick Works | 1909 | 883694 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.2 Historical tanks

| Records within 500m | 14 |
|---|---|

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| **B** | **On site** | **Tanks** | **1966** | **104554** |
| 12 | 77m N | Unspecified Tank | 1899 - 1912 | 145834 |
| F | 171m N | Unspecified Tank | 1988 - 1990 | 131259 |
| F | 171m N | Unspecified Tank | 1959 | 135467 |
| M | 204m N | Unspecified Tank | 1988 - 1991 | 135270 |
| M | 204m N | Unspecified Tank | 1959 | 148503 |
| M | 207m N | Unspecified Tank | 1992 - 1996 | 126237 |
| X | 229m N | Unspecified Tank | 1959 | 140869 |
| R | 288m SW | Tanks | 1899 - 1912 | 132218 |
| R | 309m SW | Unspecified Tank | 1899 - 1912 | 134580 |
| R | 348m SW | Unspecified Tank | 1963 | 111814 |
| R | 350m SW | Tanks | 1963 | 104550 |
| 35 | 364m S | Unspecified Tank | 1991 | 109411 |
| AQ | 378m SE | Unspecified Tank | 1912 | 111772 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.3 Historical energy features

| Records within 500m | 17 |
|---|---|

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| 6 | 4m S | Electricity Substation | 1991 - 1996 | 74634 |
| A | 52m SW | Electricity Substation | 1991 - 1996 | 80543 |
| S | 184m N | Electricity Substation | 1959 - 1991 | 76917 |
| S | 186m N | Electricity Substation | 1992 - 1996 | 67571 |
| V | 216m E | Electricity Substation | 1991 - 1996 | 69376 |
| AE | 243m N | Electricity Substation | 1959 | 68800 |
| AE | 243m N | Electricity Substation | 1988 - 1991 | 81134 |
| AE | 246m N | Electricity Substation | 1992 - 1996 | 74079 |
| AE | 247m N | Electricity Substation | 1959 | 83581 |
| 23 | 251m SE | Electricity Substation | 1966 - 1992 | 70984 |
| 26 | 293m SW | Electricity Substation | 1991 | 60005 |
| AJ | 349m SE | Electricity Substation | 1980 - 1992 | 65529 |
| AR | 381m NE | Electricity Substation | 1991 | 74857 |
| AR | 382m NE | Electricity Substation | 1992 - 1996 | 64624 |
| R | 400m SW | Electricity Substation | 1988 - 1991 | 67953 |
| AQ | 409m SE | Electricity Substation | 1987 | 64496 |
| AQ | 409m SE | Electricity Substation | 1980 - 1992 | 69194 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.4 Historical petrol stations

| **Records within 500m** | **3** |
|---|---|

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| A | 26m S | Filling Station | 1991 - 1994 | 1666 |
| 11 | 75m SW | Filling Station | 1966 | 1462 |
| T | 193m SW | Filling Station | 1991 | 1469 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.5 Historical garages

| **Records within 500m** | **5** |
|---|---|

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| 7 | 40m E | Garage | 1966 - 1980 | 25015 |
| Z | 220m SE | Garage | 1980 - 1992 | 27631 |
| Z | 222m SE | Garage | 1966 - 1987 | 27121 |
| BC | 490m SE | Garage | 1987 - 1992 | 27088 |
| BC | 491m SE | Garage | 1966 - 1980 | 25582 |

*This data is sourced from Ordnance Survey / Groundsure.*

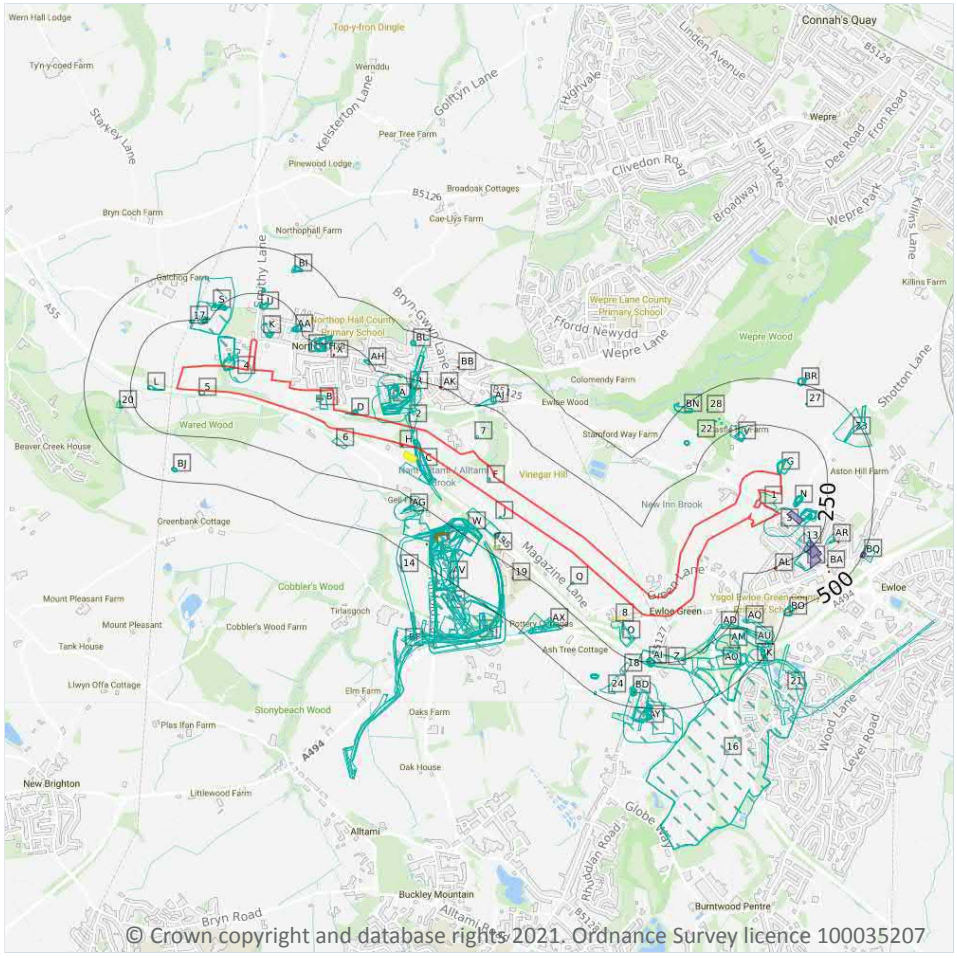
## 1.6 Historical military land

| **Records within 500m** | **0** |
|---|---|

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.

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

# 2 Past land use - un-grouped




## 2.1 Historical industrial land uses

| Records within 500m | 498 |
|---|---|

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 31**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| **1** | **On site** | **Unspecified Heap** | **1869** | **803592** |
| **2** | **On site** | **Unspecified Heap** | **1991** | **803594** |
| **3** | **On site** | **Old Colliery** | **1869** | **808568** |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| 4 | On site | Magazine | 1948 | 827271 |
| A | On site | Colliery | 1898 | 798231 |
| B | On site | Unspecified Works | 1960 | 901891 |
| B | On site | Unspecified Works | 1970 | 877369 |
| B | On site | Unspecified Tank | 1960 | 965600 |
| B | On site | Unspecified Tank | 1960 | 933449 |
| B | On site | Unspecified Tank | 1970 | 916301 |
| B | On site | Unspecified Tank | 1970 | 879190 |
| C | On site | Unspecified Heap | 1938 | 934914 |
| C | On site | Unspecified Heap | 1938 | 934914 |
| C | On site | Cuttings | 1948 | 988517 |
| C | On site | Cuttings | 1898 | 943999 |
| C | On site | Cuttings | 1869 | 897984 |
| C | On site | Cuttings | 1981 | 916118 |
| C | On site | Cuttings | 1960 | 988517 |
| C | On site | Cuttings | 1970 | 928642 |
| C | On site | Cuttings | 1910 | 853212 |
| C | On site | Railway Sidings | 1869 | 794520 |
| D | On site | Old Gravel Pit | 1938 | 912603 |
| D | On site | Sand Pit | 1869 | 797379 |
| D | On site | Old Gravel Pit | 1960 | 946740 |
| D | On site | Old Gravel Pit | 1970 | 883458 |
| D | On site | Old Gravel Pit | 1910 | 911484 |
| E | On site | Unspecified Disused Mine | 1960 | 810915 |
| E | On site | Colliery | 1898 | 927848 |
| E | On site | Unspecified Ground Workings | 1948 | 893610 |
| E | On site | Unspecified Ground Workings | 1970 | 967188 |
| E | On site | Colliery | 1938 | 908735 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| **E** | **On site** | **Unspecified Heap** | **1938** | **918071** |
| **E** | **On site** | **Colliery** | **1948** | **904263** |
| **E** | **On site** | **Colliery** | **1938** | **908735** |
| **E** | **On site** | **Unspecified Heap** | **1938** | **918071** |
| **E** | **On site** | **Colliery** | **1910** | **927848** |
| **E** | **On site** | **Unspecified Ground Workings** | **1910** | **917742** |
| **F** | **On site** | **Unspecified Disused Shafts** | **1991** | **835399** |
| **F** | **On site** | **Unspecified Disused Shafts** | **1991** | **835400** |
| 5 | 1m S | Unspecified Heap | 1970 | 803588 |
| D | 2m N | Old Gravel Pit | 1898 | 885668 |
| D | 2m N | Old Gravel Pit | 1948 | 912603 |
| G | 2m N | Unspecified Heap | 1869 | 892215 |
| G | 3m N | Refuse Heap | 1948 | 828558 |
| G | 5m N | Unspecified Heap | 1938 | 937790 |
| G | 5m N | Unspecified Heap | 1938 | 937790 |
| G | 5m N | Unspecified Heap | 1960 | 934185 |
| G | 7m N | Unspecified Ground Workings | 1910 | 799525 |
| E | 21m N | Unspecified Heap | 1898 | 856493 |
| A | 30m N | Disused Colliery | 1938 | 989627 |
| A | 30m N | Disused Colliery | 1938 | 989627 |
| A | 31m N | Disused Colliery | 1948 | 942533 |
| A | 31m N | Unspecified Disused Mine | 1960 | 810938 |
| A | 32m N | Disused Colliery | 1910 | 967221 |
| A | 35m N | Unspecified Heap | 1938 | 954461 |
| A | 35m N | Unspecified Heap | 1938 | 954461 |
| A | 36m N | Unspecified Heap | 1970 | 885961 |
| A | 37m N | Unspecified Heap | 1960 | 919653 |
| A | 38m N | Unspecified Heap | 1910 | 907144 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| 6 | 43m S | Cuttings | 1991 | 795494 |
| A | 49m N | Unspecified Heap | 1898 | 986461 |
| A | 49m N | Unspecified Heap | 1948 | 949435 |
| A | 54m N | Railway Sidings | 1948 | 852769 |
| A | 56m N | Railway Sidings | 1938 | 852769 |
| A | 56m N | Railway Sidings | 1960 | 902140 |
| J | 57m SW | Chimney | 1991 | 884775 |
| J | 57m SW | Chimney | 1970 | 884775 |
| A | 58m N | Railway Sidings | 1910 | 899192 |
| K | 58m NE | Unspecified Heap | 1869 | 974348 |
| J | 59m SW | Chimney | 1987 | 884775 |
| J | 59m SW | Chimney | 1981 | 884775 |
| A | 60m N | Railway Sidings | 1898 | 924671 |
| E | 61m N | Unspecified Tank | 1987 | 824094 |
| E | 61m N | Unspecified Disused Shaft | 1970 | 812921 |
| K | 63m NE | Unspecified Heap | 1938 | 913282 |
| K | 63m NE | Unspecified Heap | 1938 | 913282 |
| K | 64m NE | Unspecified Heap | 1898 | 923815 |
| K | 65m NE | Unspecified Heap | 1910 | 937871 |
| C | 66m S | Unspecified Hole | 1869 | 810981 |
| L | 73m W | Unspecified Pit | 1960 | 839175 |
| 7 | 74m N | Unspecified Tank | 1948 | 824112 |
| A | 78m N | Unspecified Shaft | 1960 | 813706 |
| A | 80m N | Unspecified Tank | 1938 | 824113 |
| N | 82m E | Unspecified Heap | 1948 | 855660 |
| N | 82m E | Unspecified Heap | 1898 | 938035 |
| N | 83m E | Unspecified Heap | 1910 | 968519 |
| N | 84m SE | Unspecified Heap | 1987 | 921811 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| N | 84m SE | Unspecified Heap | 1981 | 921811 |
| N | 84m SE | Unspecified Heap | 1938 | 952847 |
| N | 84m SE | Unspecified Heap | 1938 | 952847 |
| 9 | 87m SW | Cuttings | 1991 | 863363 |
| N | 88m SE | Unspecified Heap | 1970 | 845985 |
| N | 88m SE | Unspecified Heap | 1960 | 845985 |
| N | 89m SE | Unspecified Heap | 1869 | 938035 |
| 10 | 91m S | Cuttings | 1987 | 983960 |
| A | 93m N | Unspecified Shaft | 1948 | 945864 |
| A | 94m N | Unspecified Shaft | 1938 | 969495 |
| A | 94m N | Unspecified Shaft | 1938 | 969495 |
| A | 94m N | Unspecified Shaft | 1910 | 860037 |
| K | 98m NE | Old Coal Shaft | 1938 | 864298 |
| K | 99m NE | Unspecified Old Shaft | 1960 | 954704 |
| K | 99m NE | Old Coal Shaft | 1948 | 943523 |
| K | 99m NE | Unspecified Old Shaft | 1898 | 927894 |
| K | 100m NE | Old Coal Shaft | 1910 | 962976 |
| 11 | 103m SW | Cuttings | 1987 | 877201 |
| L | 104m W | Unspecified Ground Workings | 1970 | 799544 |
| O | 105m SW | Refuse Heap | 1869 | 848778 |
| O | 110m SW | Refuse Heap | 1898 | 848778 |
| 12 | 111m SW | Cuttings | 1991 | 877201 |
| P | 113m E | Unspecified Ground Workings | 1910 | 910106 |
| P | 113m E | Unspecified Heap | 1948 | 964776 |
| P | 114m E | Unspecified Heap | 1970 | 986529 |
| P | 115m E | Unspecified Heap | 1960 | 920641 |
| P | 116m E | Unspecified Ground Workings | 1938 | 871383 |
| P | 116m E | Unspecified Ground Workings | 1938 | 871383 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| Q | 116m SW | Magazine | 1869 | 913435 |
| P | 117m E | Unspecified Heap | 1898 | 909143 |
| P | 118m E | Unspecified Heap | 1869 | 909143 |
| P | 118m SE | Garage | 1987 | 880213 |
| P | 118m SE | Garage | 1981 | 880213 |
| Q | 119m SW | Magazine | 1869 | 913435 |
| A | 124m N | Unspecified Heap | 1960 | 915597 |
| A | 124m N | Unspecified Heap | 1970 | 949948 |
| A | 124m N | Unspecified Heap | 1938 | 901513 |
| A | 124m N | Unspecified Heap | 1938 | 901513 |
| A | 125m N | Unspecified Heap | 1910 | 889019 |
| A | 135m N | Unspecified Heap | 1948 | 912966 |
| A | 135m N | Unspecified Heap | 1898 | 972930 |
| R | 140m N | Cuttings | 1869 | 967302 |
| O | 144m SW | Old Coal Shafts | 1948 | 836137 |
| O | 144m SW | Unspecified Old Shaft | 1898 | 860586 |
| O | 148m SW | Unspecified Old Shaft | 1960 | 917289 |
| O | 148m SW | Old Coal Shaft | 1938 | 845838 |
| O | 149m SW | Old Coal Shaft | 1909 | 845838 |
| P | 159m E | Unspecified Old Shaft | 1948 | 847737 |
| P | 159m E | Unspecified Shaft | 1898 | 813758 |
| S | 161m NW | Disused Colliery | 1898 | 822314 |
| P | 163m E | Unspecified Old Shaft | 1938 | 960245 |
| P | 163m E | Unspecified Old Shaft | 1938 | 962641 |
| P | 164m E | Unspecified Old Shaft | 1910 | 954465 |
| T | 166m NW | Colliery | 1869 | 798233 |
| A | 168m N | Unspecified Old Shaft | 1960 | 806216 |
| A | 168m N | Unspecified Disused Shaft | 1970 | 812936 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| A | 168m N | Old Coal Shaft | 1948 | 850159 |
| A | 168m N | Old Coal Shaft | 1938 | 850159 |
| P | 168m E | Unspecified Old Shaft | 1960 | 806211 |
| A | 169m N | Old Coal Shaft | 1910 | 850159 |
| 13 | 170m SE | Garage | 1970 | 901952 |
| U | 172m N | Unspecified Heap | 1938 | 911100 |
| U | 172m N | Unspecified Heap | 1938 | 911100 |
| U | 172m N | Unspecified Heap | 1910 | 983167 |
| V | 173m N | Brewery | 1910 | 906760 |
| A | 174m N | Unspecified Disused Shaft | 1991 | 812935 |
| U | 174m N | Unspecified Heap | 1948 | 897135 |
| U | 174m N | Unspecified Heap | 1898 | 941796 |
| U | 174m N | Unspecified Heap | 1960 | 908010 |
| U | 174m N | Unspecified Heap | 1970 | 950963 |
| U | 175m N | Unspecified Heap | 1987 | 950963 |
| U | 175m N | Unspecified Heap | 1981 | 950963 |
| W | 175m SW | Railway Sidings | 1869 | 947604 |
| 14 | 176m SW | Mineral Railway Sidings | 1898 | 885181 |
| W | 178m SW | Railway Sidings | 1938 | 874303 |
| V | 178m N | Brewery | 1948 | 938554 |
| V | 178m N | Brewery | 1898 | 906760 |
| V | 179m N | Brewery | 1869 | 913041 |
| U | 180m N | Old Coal Shaft | 1938 | 951225 |
| W | 181m SW | Railway Sidings | 1948 | 874303 |
| U | 182m N | Old Coal Shaft | 1948 | 867599 |
| U | 182m N | Unspecified Old Shaft | 1898 | 931688 |
| U | 182m N | Old Coal Shaft | 1910 | 882454 |
| U | 182m N | Unspecified Old Shaft | 1960 | 966997 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| U | 182m N | Unspecified Old Shaft | 1970 | 986341 |
| U | 183m N | Unspecified Disused Shaft | 1987 | 982781 |
| U | 183m N | Unspecified Disused Shaft | 1981 | 982781 |
| W | 185m SW | Railway Sidings | 1909 | 871822 |
| W | 186m SW | Brick Works | 1869 | 939573 |
| W | 186m SW | Brick Works | 1898 | 882113 |
| W | 187m SW | Unspecified Works | 1960 | 990409 |
| Y | 188m SW | Filling Station | 1991 | 810492 |
| Z | 188m S | Cuttings | 1991 | 983084 |
| Z | 189m S | Cuttings | 1987 | 908595 |
| W | 189m SW | Brick Works | 1869 | 939573 |
| W | 190m SW | Railway Sidings | 1869 | 947604 |
| W | 190m SW | Unspecified Workshop | 1991 | 876892 |
| W | 190m SW | Unspecified Workshop | 1987 | 944480 |
| W | 190m SW | Unspecified Workshop | 1981 | 944480 |
| W | 194m SW | Railway Sidings | 1960 | 866972 |
| AA | 195m E | Unspecified Quarry | 1869 | 816583 |
| R | 196m N | Cuttings | 1948 | 989965 |
| R | 196m N | Cuttings | 1938 | 989965 |
| 15 | 197m NE | Smithy | 1869 | 843097 |
| R | 197m N | Cuttings | 1910 | 850435 |
| AB | 198m N | Cuttings | 1960 | 945690 |
| AB | 198m N | Cuttings | 1970 | 943066 |
| AC | 203m NE | Unspecified Heap | 1869 | 897058 |
| AD | 204m SE | Unspecified Ground Workings | 1991 | 983054 |
| AD | 204m SE | Unspecified Ground Workings | 1987 | 983054 |
| AA | 204m E | Unspecified Old Quarry | 1938 | 863805 |
| AA | 206m E | Unspecified Old Quarry | 1948 | 896360 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AA | 207m E | Unspecified Old Quarry | 1960 | 896360 |
| W | 207m SW | Brick Works | 1909 | 919805 |
| AA | 207m E | Unspecified Old Quarry | 1898 | 860974 |
| AA | 208m E | Unspecified Old Quarry | 1910 | 975641 |
| W | 208m SW | Brick Works | 1948 | 915885 |
| AA | 208m E | Unspecified Ground Workings | 1970 | 799546 |
| W | 209m SW | Brick Works | 1938 | 902681 |
| W | 209m SW | Brick Works | 1938 | 902681 |
| AC | 210m N | Unspecified Ground Workings | 1960 | 856297 |
| AC | 210m N | Unspecified Heap | 1938 | 975929 |
| AC | 210m N | Unspecified Heap | 1938 | 975929 |
| AC | 211m N | Unspecified Ground Workings | 1910 | 950032 |
| AC | 212m N | Unspecified Heap | 1970 | 898844 |
| AE | 213m SW | Cuttings | 1869 | 986203 |
| S | 214m NW | Unspecified Heap | 1948 | 850434 |
| AF | 214m SE | Garage | 1991 | 920926 |
| AF | 214m SE | Garage | 1987 | 920926 |
| AF | 214m SE | Garage | 1981 | 920926 |
| S | 215m NW | Unspecified Heap | 1938 | 850434 |
| S | 215m NW | Unspecified Heap | 1938 | 850434 |
| S | 216m NW | Unspecified Heap | 1910 | 850434 |
| S | 216m NW | Unspecified Heap | 1960 | 859195 |
| S | 216m NW | Unspecified Heap | 1970 | 905587 |
| AC | 218m N | Unspecified Ground Workings | 1948 | 977741 |
| AC | 218m N | Unspecified Ground Workings | 1898 | 957599 |
| S | 218m NW | Unspecified Heap | 1987 | 905587 |
| S | 218m NW | Unspecified Heap | 1981 | 905587 |
| AG | 218m SW | Unspecified Old Quarry | 1960 | 958882 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AA | 219m E | Lime Kiln | 1869 | 842746 |
| S | 221m NW | Unspecified Heap | 1898 | 927463 |
| AE | 221m SW | Cuttings | 1869 | 986203 |
| W | 221m SW | Unspecified Ground Workings | 1909 | 799512 |
| W | 221m SW | Unspecified Heap | 1948 | 975058 |
| W | 222m SW | Unspecified Heap | 1960 | 857179 |
| W | 222m SW | Unspecified Heap | 1938 | 975058 |
| W | 222m SW | Unspecified Heap | 1938 | 975058 |
| T | 223m N | Unspecified Heap | 1869 | 914965 |
| 16 | 225m SE | Opencast Workings | 1981 | 896002 |
| AH | 226m NE | Unspecified Heap | 1938 | 896795 |
| AH | 226m NE | Unspecified Heap | 1938 | 896795 |
| AH | 227m NE | Unspecified Heap | 1948 | 884063 |
| S | 228m NW | Unspecified Heap | 1991 | 948322 |
| AI | 228m S | Unspecified Heap | 1869 | 879385 |
| T | 228m N | Unspecified Heap | 1948 | 900245 |
| T | 229m N | Unspecified Heap | 1938 | 887399 |
| T | 229m N | Unspecified Heap | 1938 | 887399 |
| AH | 229m NE | Unspecified Heap | 1910 | 957442 |
| T | 230m N | Unspecified Heap | 1910 | 887399 |
| T | 230m N | Unspecified Pit | 1960 | 839176 |
| T | 231m N | Old Coal Shaft | 1938 | 926927 |
| W | 231m SW | Unspecified Heap | 1898 | 875139 |
| T | 231m N | Unspecified Old Shaft | 1960 | 925103 |
| T | 231m N | Unspecified Old Shaft | 1970 | 903416 |
| T | 231m N | Unspecified Heap | 1970 | 923120 |
| T | 232m N | Old Coal Shaft | 1948 | 988776 |
| T | 234m N | Old Coal Shaft | 1910 | 849783 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| S | 234m NW | Unspecified Heap | 1869 | 937178 |
| AI | 234m S | Unspecified Heap | 1938 | 897655 |
| AI | 234m S | Unspecified Heap | 1938 | 897655 |
| AI | 235m S | Unspecified Heap | 1869 | 971878 |
| T | 235m N | Unspecified Shaft | 1869 | 813707 |
| AI | 236m S | Unspecified Heap | 1909 | 958678 |
| AI | 238m S | Unspecified Heap | 1898 | 977130 |
| AI | 238m S | Unspecified Heap | 1948 | 967819 |
| 17 | 238m N | Lime Kiln | 1869 | 842743 |
| S | 239m NW | Unspecified Old Shafts | 1970 | 920069 |
| S | 240m NW | Unspecified Old Shafts | 1960 | 918138 |
| W | 240m SW | Unspecified Works | 1970 | 990350 |
| AI | 241m S | Unspecified Heap | 1960 | 872863 |
| S | 242m NW | Old Coal Shafts | 1948 | 848084 |
| S | 242m NW | Old Coal Shafts | 1910 | 921886 |
| S | 243m NW | Unspecified Disused Shafts | 1987 | 866230 |
| S | 243m NW | Unspecified Disused Shafts | 1981 | 866230 |
| S | 243m NW | Old Coal Shafts | 1938 | 848084 |
| AJ | 243m N | Unspecified Pit | 1991 | 934853 |
| AJ | 243m N | Unspecified Pit | 1987 | 934853 |
| AJ | 243m N | Unspecified Pit | 1970 | 921487 |
| AG | 243m SW | Unspecified Quarry | 1869 | 816581 |
| S | 245m NW | Unspecified Old Shafts | 1898 | 793173 |
| AE | 247m SW | Cuttings | 1909 | 854877 |
| S | 248m NW | Unspecified Disused Shafts | 1991 | 835401 |
| S | 251m NW | Unspecified Shafts | 1869 | 809172 |
| AE | 253m SW | Cuttings | 1948 | 899658 |
| AE | 254m SW | Cuttings | 1960 | 899658 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AE | 256m SW | Cuttings | 1938 | 909769 |
| AM | 259m SE | Unspecified Heap | 1987 | 889305 |
| AN | 259m N | Unspecified Heap | 1938 | 904274 |
| AN | 259m N | Unspecified Heap | 1938 | 904274 |
| AM | 260m SE | Unspecified Heap | 1991 | 889305 |
| AN | 260m N | Unspecified Heap | 1948 | 957881 |
| S | 261m NW | Unspecified Heap | 1938 | 904714 |
| S | 261m NW | Unspecified Heap | 1938 | 904714 |
| AN | 261m N | Unspecified Heap | 1910 | 883085 |
| AN | 261m N | Unspecified Heap | 1960 | 958716 |
| S | 263m NW | Unspecified Old Shafts | 1960 | 868847 |
| S | 263m NW | Unspecified Old Shafts | 1970 | 891045 |
| S | 264m NW | Old Coal Shafts | 1948 | 865915 |
| S | 265m NW | Old Coal Shafts | 1938 | 865915 |
| S | 266m NW | Old Coal Shafts | 1910 | 900028 |
| S | 268m NW | Chimney | 1869 | 835665 |
| S | 269m NW | Unspecified Disused Shafts | 1987 | 966208 |
| S | 269m NW | Unspecified Disused Shafts | 1981 | 966208 |
| AG | 269m SW | Unspecified Old Quarry | 1910 | 989958 |
| AG | 269m SW | Unspecified Old Quarry | 1948 | 977017 |
| S | 270m NW | Unspecified Old Shafts | 1898 | 793174 |
| AG | 273m SW | Unspecified Old Quarry | 1938 | 944101 |
| 18 | 273m S | Refuse Heap | 1869 | 828572 |
| S | 274m NW | Unspecified Disused Shafts | 1991 | 854228 |
| S | 274m NW | Unspecified Shafts | 1869 | 809173 |
| AO | 275m SE | Cuttings | 1987 | 930875 |
| AJ | 278m NE | Unspecified Ground Workings | 1981 | 799543 |
| AB | 282m N | Cuttings | 1869 | 876901 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AP | 283m NW | Unspecified Tank | 1869 | 824044 |
| W | 286m SW | Unspecified Tanks | 1898 | 952699 |
| W | 286m SW | Unspecified Tanks | 1938 | 953215 |
| AB | 286m N | Cuttings | 1938 | 915385 |
| AB | 287m N | Cuttings | 1948 | 936868 |
| W | 288m SW | Unspecified Tanks | 1909 | 892146 |
| AB | 289m N | Cuttings | 1910 | 929109 |
| W | 290m SW | Kilns | 1869 | 812678 |
| W | 291m SW | Unspecified Tanks | 1869 | 937668 |
| W | 294m SW | Unspecified Kilns | 1869 | 822222 |
| AQ | 294m SE | Refuse Heap | 1948 | 828570 |
| W | 294m SW | Unspecified Tanks | 1869 | 982158 |
| AR | 295m SE | Refuse Heap | 1869 | 828559 |
| W | 297m SW | Unspecified Tanks | 1869 | 923975 |
| AQ | 302m SE | Unspecified Heap | 1960 | 803591 |
| AP | 306m NW | Unspecified Tank | 1869 | 824045 |
| 20 | 310m W | Unspecified Pit | 1871 | 839174 |
| 21 | 311m E | Railway Sidings | 1898 | 846661 |
| W | 312m SW | Clay Pit | 1869 | 862741 |
| AR | 312m SE | Old Coal Shafts | 1948 | 950586 |
| AR | 312m SE | Unspecified Old Shafts | 1898 | 952377 |
| AR | 312m SE | Old Coal Shafts | 1938 | 850398 |
| W | 313m SW | Unspecified Commercial/Industrial | 1938 | 796397 |
| AR | 313m SE | Old Coal Shafts | 1909 | 870708 |
| AQ | 314m SE | Unspecified Shaft | 1898 | 813759 |
| W | 314m SW | Unspecified Tanks | 1869 | 937668 |
| AR | 315m SE | Unspecified Old Shafts | 1960 | 845593 |
| AO | 323m SE | Cuttings | 1991 | 850160 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AR | 324m SE | Old Coal Shafts | 1938 | 866325 |
| AR | 325m SE | Old Coal Shafts | 1909 | 859313 |
| AR | 326m SE | Old Coal Shafts | 1948 | 866325 |
| AR | 326m SE | Unspecified Old Shafts | 1898 | 906390 |
| AS | 326m SE | Cuttings | 1991 | 973603 |
| AS | 328m SE | Cuttings | 1987 | 973603 |
| AR | 328m SE | Unspecified Old Shafts | 1960 | 990252 |
| AT | 330m SW | Unspecified Ground Workings | 1960 | 992032 |
| AP | 332m NW | Unspecified Levels | 1898 | 832408 |
| AP | 333m NW | Unspecified Levels | 1898 | 832409 |
| AU | 334m SE | Cuttings | 1991 | 851519 |
| AU | 335m SE | Cuttings | 1987 | 851519 |
| 22 | 336m NW | Unspecified Old Shaft | 1898 | 806213 |
| W | 337m SW | Railway Sidings | 1960 | 976551 |
| W | 337m SW | Unspecified Tanks | 1938 | 957453 |
| W | 338m SW | Railway Sidings | 1948 | 956884 |
| W | 338m SW | Railway Sidings | 1960 | 956884 |
| W | 340m SW | Unspecified Mill | 1869 | 955794 |
| AV | 341m SW | Clay Pit | 1970 | 918333 |
| AV | 341m SW | Unspecified Disused Pit | 1987 | 873760 |
| AV | 341m SW | Unspecified Disused Pit | 1981 | 947440 |
| W | 342m SW | Unspecified Mill | 1869 | 955794 |
| W | 344m SW | Railway Sidings | 1898 | 902606 |
| W | 344m SW | Railway Sidings | 1948 | 926489 |
| AW | 344m NW | Unspecified Heap | 1960 | 978886 |
| AX | 344m SW | Unspecified Mills | 1869 | 969163 |
| AW | 345m NW | Unspecified Heap | 1938 | 964787 |
| AW | 345m NW | Unspecified Heap | 1938 | 964787 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AW | 345m NW | Unspecified Heap | 1910 | 878816 |
| AX | 347m SW | Pottery | 1938 | 896292 |
| AT | 347m SW | Clay Quarry | 1991 | 797992 |
| AX | 348m SW | Pottery | 1909 | 879406 |
| W | 348m SW | Unspecified Tanks | 1970 | 814972 |
| AX | 349m SW | Pottery | 1898 | 975764 |
| AY | 350m S | Colliery | 1869 | 940702 |
| AW | 351m NW | Unspecified Heap | 1948 | 940517 |
| AW | 351m NW | Unspecified Heap | 1898 | 871064 |
| AT | 352m SW | Unspecified Ground Workings | 1948 | 938331 |
| W | 356m SW | Clay Pit | 1869 | 932330 |
| W | 356m SW | Railway Sidings | 1938 | 926489 |
| AZ | 356m SW | Unspecified Ground Workings | 1938 | 964772 |
| AZ | 356m SW | Unspecified Ground Workings | 1938 | 964772 |
| W | 358m SW | Unspecified Ground Workings | 1869 | 889980 |
| AZ | 358m SW | Unspecified Pit | 1898 | 839173 |
| 23 | 358m NE | Unspecified Pit | 1991 | 839192 |
| AZ | 358m SW | Unspecified Quarry | 1909 | 816582 |
| 24 | 363m S | Refuse Heap | 1869 | 828573 |
| AX | 372m SW | Unspecified Mills | 1869 | 969163 |
| 26 | 381m E | Coal Pit | 1898 | 808458 |
| AX | 381m SW | Unspecified Works | 1960 | 830098 |
| BC | 387m NE | Unspecified Ground Workings | 1987 | 876468 |
| BC | 387m NE | Unspecified Ground Workings | 1981 | 876468 |
| BC | 387m NE | Unspecified Ground Workings | 1970 | 876468 |
| BD | 391m S | Unspecified Heap | 1869 | 802851 |
| AT | 394m SW | Unspecified Disused Pit | 1981 | 880496 |
| BD | 396m S | Unspecified Old Quarry | 1938 | 981792 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| BE | 397m SW | Railway Sidings | 1948 | 848653 |
| BD | 397m S | Unspecified Old Quarry | 1909 | 929356 |
| BD | 398m S | Unspecified Old Quarry | 1960 | 895469 |
| BF | 398m SW | Mineral Railway Sidings | 1938 | 960719 |
| BG | 398m SE | Cuttings | 1991 | 987943 |
| BD | 398m S | Unspecified Old Quarry | 1948 | 891586 |
| BD | 398m S | Unspecified Old Quarry | 1898 | 917511 |
| AY | 400m S | Unspecified Heap | 1869 | 906270 |
| BD | 400m S | Unspecified Quarry | 1987 | 928138 |
| BD | 400m S | Unspecified Quarry | 1981 | 928138 |
| 27 | 402m N | Old Lime Kiln | 1869 | 821891 |
| AX | 402m SW | Pottery | 1948 | 882551 |
| BG | 403m SE | Cuttings | 1987 | 973231 |
| BH | 406m SW | Unspecified Heap | 1991 | 991248 |
| AY | 407m S | Colliery | 1869 | 969433 |
| BH | 409m SW | Unspecified Heap | 1938 | 915483 |
| BH | 409m SW | Unspecified Heap | 1938 | 915483 |
| BE | 409m SW | Railway Sidings | 1960 | 878386 |
| BH | 409m SW | Unspecified Heap | 1909 | 851928 |
| BH | 409m SW | Unspecified Heap | 1987 | 959840 |
| BH | 409m SW | Unspecified Heap | 1981 | 959840 |
| BF | 409m SW | Mineral Railway Sidings | 1909 | 991598 |
| 28 | 410m NW | Unspecified Old Shaft | 1898 | 806212 |
| BH | 410m SW | Unspecified Heap | 1960 | 967807 |
| BH | 410m SW | Unspecified Heap | 1970 | 970282 |
| BH | 410m SW | Unspecified Heap | 1948 | 915483 |
| BI | 412m NE | Unspecified Heap | 1869 | 848873 |
| BI | 419m NE | Unspecified Heap | 1938 | 905108 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| BI | 419m NE | Unspecified Heap | 1938 | 905108 |
| BI | 420m NE | Unspecified Ground Workings | 1960 | 964617 |
| BI | 420m NE | Unspecified Ground Workings | 1910 | 981310 |
| BJ | 423m S | Unspecified Heap | 1910 | 965565 |
| BJ | 425m S | Unspecified Heap | 1938 | 940217 |
| BJ | 425m S | Unspecified Heap | 1938 | 940217 |
| BK | 425m SE | Unspecified Level | 1898 | 832114 |
| BJ | 426m S | Unspecified Heap | 1948 | 940217 |
| BJ | 426m S | Unspecified Heap | 1960 | 933546 |
| BL | 428m N | Unspecified Heap | 1938 | 860865 |
| BL | 428m N | Unspecified Heap | 1938 | 860865 |
| BL | 428m N | Unspecified Heap | 1948 | 860865 |
| BL | 429m N | Unspecified Heap | 1960 | 877775 |
| BL | 429m N | Unspecified Heap | 1970 | 864254 |
| BL | 430m N | Unspecified Heap | 1910 | 899158 |
| BE | 434m SW | Railway Sidings | 1869 | 980533 |
| BE | 438m SW | Railway Sidings | 1869 | 980533 |
| AX | 444m SW | Pottery | 1869 | 907915 |
| BM | 444m SE | Cuttings | 1991 | 973231 |
| BM | 445m SE | Cuttings | 1987 | 845520 |
| BN | 449m NW | Unspecified Pit | 1991 | 950796 |
| BN | 449m NW | Unspecified Pit | 1970 | 950796 |
| AX | 450m SW | Pottery | 1869 | 874556 |
| BN | 452m NW | Unspecified Pit | 1987 | 950796 |
| BN | 452m NW | Unspecified Pit | 1981 | 950796 |
| BK | 456m SE | Unspecified Pit | 1948 | 896692 |
| BK | 459m SE | Unspecified Pit | 1938 | 855671 |
| BK | 459m SE | Unspecified Pit | 1938 | 855671 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AY | 460m S | Old Colliery | 1898 | 808569 |
| AT | 460m SW | Clay Pit | 1970 | 918333 |
| AT | 460m SW | Unspecified Disused Pit | 1987 | 873760 |
| BK | 464m SE | Unspecified Pit | 1960 | 911702 |
| BK | 464m SE | Unspecified Pit | 1970 | 865834 |
| BO | 471m SE | Unspecified Heap | 1938 | 944325 |
| BO | 471m SE | Unspecified Heap | 1938 | 944325 |
| BO | 472m SE | Unspecified Heap | 1909 | 919017 |
| BO | 472m SE | Unspecified Heap | 1898 | 891418 |
| BO | 472m SE | Unspecified Heap | 1948 | 884006 |
| AY | 473m S | Unspecified Heap | 1938 | 888715 |
| AY | 473m S | Unspecified Heap | 1938 | 888715 |
| BE | 473m SW | Brick Works | 1948 | 986557 |
| AY | 473m S | Unspecified Ground Workings | 1948 | 962085 |
| AY | 474m S | Unspecified Heap | 1898 | 921059 |
| BO | 474m SE | Unspecified Heap | 1960 | 964946 |
| BO | 474m SE | Unspecified Heap | 1970 | 973453 |
| AY | 475m S | Unspecified Ground Workings | 1909 | 866593 |
| 29 | 475m N | Railway Building | 1960 | 819561 |
| BE | 475m SW | Unspecified Works | 1960 | 895476 |
| BP | 478m SE | Unspecified Disused Workings | 1991 | 842251 |
| BP | 478m SE | Opencast Workings | 1987 | 896002 |
| AY | 479m S | Unspecified Ground Workings | 1960 | 936243 |
| AY | 479m S | Unspecified Heap | 1987 | 954181 |
| AY | 479m S | Unspecified Heap | 1970 | 954181 |
| AY | 482m S | Unspecified Heap | 1981 | 954181 |
| 30 | 486m SW | Sand Pit | 1869 | 797378 |
| BE | 490m SW | Brick Works | 1898 | 942695 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| BF | 490m SW | Mineral Railway Sidings | 1898 | 991598 |
| BE | 491m SW | Brick Works | 1938 | 969148 |
| BE | 491m SW | Brick Works | 1938 | 969148 |
| BR | 491m N | Sand Pit | 1948 | 963379 |
| BR | 492m N | Unspecified Pit | 1991 | 851268 |
| BR | 492m N | Unspecified Pit | 1987 | 851268 |
| BR | 492m N | Unspecified Pit | 1981 | 851268 |
| BR | 492m N | Sand Pit | 1960 | 949712 |
| BR | 492m N | Sand Pit | 1938 | 991975 |
| BQ | 493m SE | Garage | 1987 | 890399 |
| BQ | 493m SE | Garage | 1981 | 890399 |
| BQ | 493m SE | Garage | 1970 | 934977 |
| BR | 495m N | Sand Pit | 1910 | 972222 |
| BR | 496m N | Unspecified Pit | 1970 | 919425 |
| 31 | 498m SW | Unspecified Disused Works | 1970 | 813346 |
| AY | 498m S | Unspecified Disused Shafts | 1991 | 918194 |
| AY | 498m S | Unspecified Disused Shafts | 1987 | 918194 |
| AY | 498m S | Unspecified Disused Shafts | 1970 | 888158 |
| BE | 499m SW | Brick Works | 1909 | 883694 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.2 Historical tanks

**Records within 500m** **24**

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 31**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| **B** | **On site** | **Tanks** | **1966** | **104554** |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| M | 77m N | Unspecified Tank | 1912 | 145834 |
| M | 77m N | Unspecified Tank | 1899 | 145834 |
| A | 171m N | Unspecified Tank | 1959 | 135467 |
| A | 171m N | Unspecified Tank | 1988 | 131259 |
| A | 171m N | Unspecified Tank | 1959 | 135467 |
| A | 171m N | Unspecified Tank | 1990 | 131259 |
| R | 204m N | Unspecified Tank | 1990 | 135270 |
| R | 204m N | Unspecified Tank | 1991 | 135270 |
| R | 204m N | Unspecified Tank | 1988 | 135270 |
| R | 204m N | Unspecified Tank | 1959 | 148503 |
| R | 207m N | Unspecified Tank | 1994 | 126237 |
| R | 207m N | Unspecified Tank | 1996 | 126237 |
| R | 207m N | Unspecified Tank | 1992 | 126237 |
| AC | 229m N | Unspecified Tank | 1959 | 140869 |
| AC | 229m N | Unspecified Tank | 1959 | 140869 |
| W | 288m SW | Tanks | 1899 | 132218 |
| W | 288m SW | Tanks | 1912 | 132218 |
| W | 309m SW | Unspecified Tank | 1912 | 134580 |
| W | 309m SW | Unspecified Tank | 1899 | 134580 |
| W | 348m SW | Unspecified Tank | 1963 | 111814 |
| W | 350m SW | Tanks | 1963 | 104550 |
| 25 | 364m S | Unspecified Tank | 1991 | 109411 |
| BA | 378m SE | Unspecified Tank | 1912 | 111772 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.3 Historical energy features

| **Records within 500m** | **42** |
|---|---|

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 31**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| H | 4m S | Electricity Substation | 1994 | 74634 |
| H | 4m S | Electricity Substation | 1992 | 74634 |
| H | 4m S | Electricity Substation | 1996 | 74634 |
| H | 5m S | Electricity Substation | 1991 | 74634 |
| C | 52m SW | Electricity Substation | 1996 | 80543 |
| C | 52m SW | Electricity Substation | 1994 | 80543 |
| C | 52m SW | Electricity Substation | 1992 | 80543 |
| C | 53m SW | Electricity Substation | 1991 | 80543 |
| C | 53m SW | Electricity Substation | 1991 | 80543 |
| X | 184m N | Electricity Substation | 1959 | 76917 |
| X | 184m N | Electricity Substation | 1959 | 76917 |
| X | 184m N | Electricity Substation | 1988 | 76917 |
| X | 184m N | Electricity Substation | 1991 | 76917 |
| X | 186m N | Electricity Substation | 1996 | 67571 |
| X | 186m N | Electricity Substation | 1992 | 67571 |
| AA | 216m E | Electricity Substation | 1991 | 69376 |
| AA | 218m E | Electricity Substation | 1996 | 69376 |
| AA | 218m E | Electricity Substation | 1992 | 69376 |
| AK | 243m N | Electricity Substation | 1959 | 68800 |
| AK | 243m N | Electricity Substation | 1990 | 81134 |
| AK | 243m N | Electricity Substation | 1991 | 81134 |
| AK | 243m N | Electricity Substation | 1988 | 81134 |
| AK | 246m N | Electricity Substation | 1996 | 74079 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AK | 246m N | Electricity Substation | 1994 | 74079 |
| AK | 246m N | Electricity Substation | 1992 | 74079 |
| AK | 247m N | Electricity Substation | 1959 | 83581 |
| AL | 251m SE | Electricity Substation | 1966 | 70984 |
| AL | 253m SE | Electricity Substation | 1980 | 70984 |
| AL | 253m SE | Electricity Substation | 1992 | 70984 |
| 19 | 293m SW | Electricity Substation | 1991 | 60005 |
| AR | 349m SE | Electricity Substation | 1987 | 65529 |
| AR | 349m SE | Electricity Substation | 1980 | 65529 |
| AR | 350m SE | Electricity Substation | 1992 | 65529 |
| BB | 381m NE | Electricity Substation | 1991 | 74857 |
| BB | 382m NE | Electricity Substation | 1996 | 64624 |
| BB | 382m NE | Electricity Substation | 1994 | 64624 |
| BB | 382m NE | Electricity Substation | 1992 | 64624 |
| W | 400m SW | Electricity Substation | 1988 | 67953 |
| W | 400m SW | Electricity Substation | 1991 | 67953 |
| BA | 409m SE | Electricity Substation | 1987 | 64496 |
| BA | 409m SE | Electricity Substation | 1980 | 69194 |
| BA | 409m SE | Electricity Substation | 1992 | 69194 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.4 Historical petrol stations

| **Records within 500m** | **6** |
|---|---|

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'.

Features are displayed on the Past land use - un-grouped map on **page 31**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| C | 26m S | Filling Station | 1994 | 1666 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| C | 26m S | Filling Station | 1992 | 1666 |
| C | 27m S | Filling Station | 1991 | 1666 |
| C | 27m S | Filling Station | 1991 | 1666 |
| 8 | 75m SW | Filling Station | 1966 | 1462 |
| Y | 193m SW | Filling Station | 1991 | 1469 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.5 Historical garages

**Records within 500m** **13**

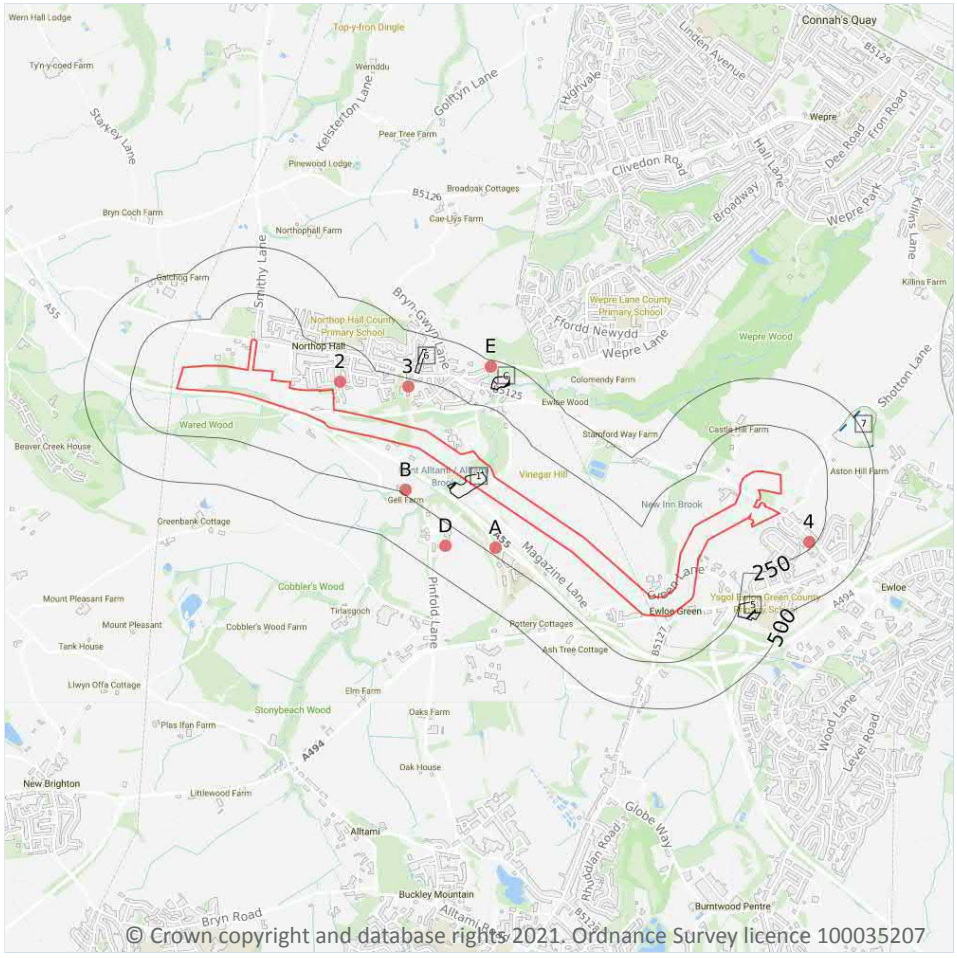
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 31**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| I | 40m E | Garage | 1966 | 25015 |
| I | 42m E | Garage | 1980 | 25015 |
| AF | 220m SE | Garage | 1980 | 27631 |
| AF | 222m SE | Garage | 1987 | 27121 |
| AF | 222m SE | Garage | 1966 | 27121 |
| AF | 248m SE | Garage | 1992 | 27631 |
| AF | 254m SE | Garage | 1980 | 27631 |
| AF | 254m SE | Garage | 1992 | 27631 |
| BQ | 490m SE | Garage | 1987 | 27088 |
| BQ | 491m SE | Garage | 1980 | 25582 |
| BQ | 492m SE | Garage | 1992 | 27088 |
| BQ | 492m SE | Garage | 1966 | 25582 |
| BQ | 492m SE | Garage | 1966 | 25582 |

*This data is sourced from Ordnance Survey / Groundsure.*

# 3 Waste and landfill




## 3.1 Active or recent landfill

| Records within 500m | 1 |
|---|---|

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

Features are displayed on the Waste and landfill map on **page 54**

| ID | Location | Details | |
|---|---|---|---|
| 7 | 352m NE | Operator: D Morgan Plc<br>Site Address: Old Aston Hill, Ewloe, Deeside, Flintshire, CH5 3AH | WML Number: 37019<br>EPR Reference: MOR001<br>Landfill type: A6 : Landfill taking other wastes<br>Status: Closure<br>IPPC Reference: -<br>EPR Number: EAEPR\EA/EPR/SP3394FL/V002 |

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

## 3.2 Historical landfill (BGS records)

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

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 | 1 |
|---|---|

Landfill sites identified from Local Authority records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 54**

| ID | Location | Site address | Source | Data type |
|---|---|---|---|---|
| C | 348m N | Refuse Tip | 1966 mapping | Polygon |

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

## 3.4 Historical landfill (EA/NRW records)

| Records within 500m | 4 |
|---|---|

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 54**

| ID | Location | Details | | |
|---|---|---|---|---|
| **1** | **On site** | **Site Address: New Bridge Farm**<br>**Licence Holder Address: -** | **Waste Licence: Yes**<br>**Site Reference: 123/83**<br>**Waste Type: Inert, Commercial**<br>**Environmental Permitting Regulations (Waste) Reference: -**<br>**Licence Issue: 01/11/1983**<br>**Licence Surrender: 01/11/1986** | **Operator: -**<br>**Licence Holder: A McAlpine and Sons (Northern) Limited**<br>**First Recorded 31/12/1983**<br>**Last Recorded: 31/12/1985** |

| ID | Location | Details | | |
|---|---|---|---|---|
| 5 | 254m E | Site Address: Land Adjacent to Ewloe C.P. School<br>Licence Holder Address: - | Waste Licence: Yes<br>Site Reference: 150/87<br>Waste Type: Inert, Industrial<br>Environmental Permitting Regulations (Waste) Reference: -<br>Licence Issue: 20/05/1987<br>Licence Surrender: 20/05/1989 | Operator: -<br>Licence Holder: F G Whitley and Sons Company Limited<br>First Recorded 31/12/1987<br>Last Recorded: 20/05/1989 |
| 6 | 291m N | Site Address: Old Railway Line<br>Licence Holder Address: - | Waste Licence: Yes<br>Site Reference: B/W/8/22<br>Waste Type: Inert, Commercial<br>Environmental Permitting Regulations (Waste) Reference: -<br>Licence Issue: 07/01/1985<br>Licence Surrender: 30/08/1987 | Operator: -<br>Licence Holder: Mrs M Moore/Mrs V M Massey<br>First Recorded 01/01/1980<br>Last Recorded: 31/01/1986 |
| C | 354m N | Site Address: Greenacres<br>Licence Holder Address: - | Waste Licence: -<br>Site Reference: BRE/50/2.94<br>Waste Type: Inert, Industrial, Commercial, Household, Special<br>Environmental Permitting Regulations (Waste) Reference: -<br>Licence Issue: -<br>Licence Surrender: - | Operator: -<br>Licence Holder: Flintshire County Council<br>First Recorded 31/12/1960<br>Last Recorded: 31/12/1970 |

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

## 3.5 Historical waste sites

| **Records within 500m** | **0** |
|---|---|

Waste site records derived from Local Authority planning records and high detail historical mapping.

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

## 3.6 Licensed waste sites

| **Records within 500m** | **0** |
|---|---|

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

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

## 3.7 Waste exemptions

| Records within 500m | 35 |
|---|---|

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 54**

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| 2 | 54m NE | Anwyl Construction Company Limited, Mitigation Land, Village Road, Northop Hall, Flintshire, CH76JF | NRW-WME027652 | Using waste exemption | Not on a farm | Use of waste in construction |
| 3 | 204m N | Anwyl Construction Company Limited, Phase 3, Village Road, Northop Hall, Flintshire, CH76LA | NRW-WME029875 | Using waste exemption | Not on a farm | Use of waste in construction |
| A | 215m SW | United Utilities PLC, Gwen Y Marl, Rhosemor Road, Northop Hall, Mold, Flintshire, CH76HB | NRW-WME034830 | Storing waste exemption | Not on a farm | Storage of sludge |
| A | 215m SW | United Utilities PLC, Gwen Y Marl, Rhosemor Road, Northop, Mold, CH76HB | NRW-WME035701 | Storing waste exemption | Not on a farm | Storage of sludge |
| A | 215m SW | United Utilities Water PLC, Gwen Y Marl, Rhosemor Road, Flintshire, CH76HB | NRW-WME025138 | Storing waste exemption | Not on a farm | Storage of sludge |
| 4 | 221m SE | Griffiths Groundworks civils, Boars Head, Holywell Road, Ewloe, Mold, Flintshire, CH53BS | NRW-WME044049 | Using waste exemption | On a farm | Use of waste in construction |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Yr Wyddgrug, CH76HE | NRW-WME020442 | Disposing of waste exemption | On a farm | Deposit of waste from dredging of inland waters |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Yr Wyddgrug, CH76HE | NRW-WME020442 | Storing waste exemption | On a farm | Storage of waste in secure containers |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Yr Wyddgrug, CH76HE | NRW-WME020442 | Using waste exemption | On a farm | Use of waste for a specified purpose |

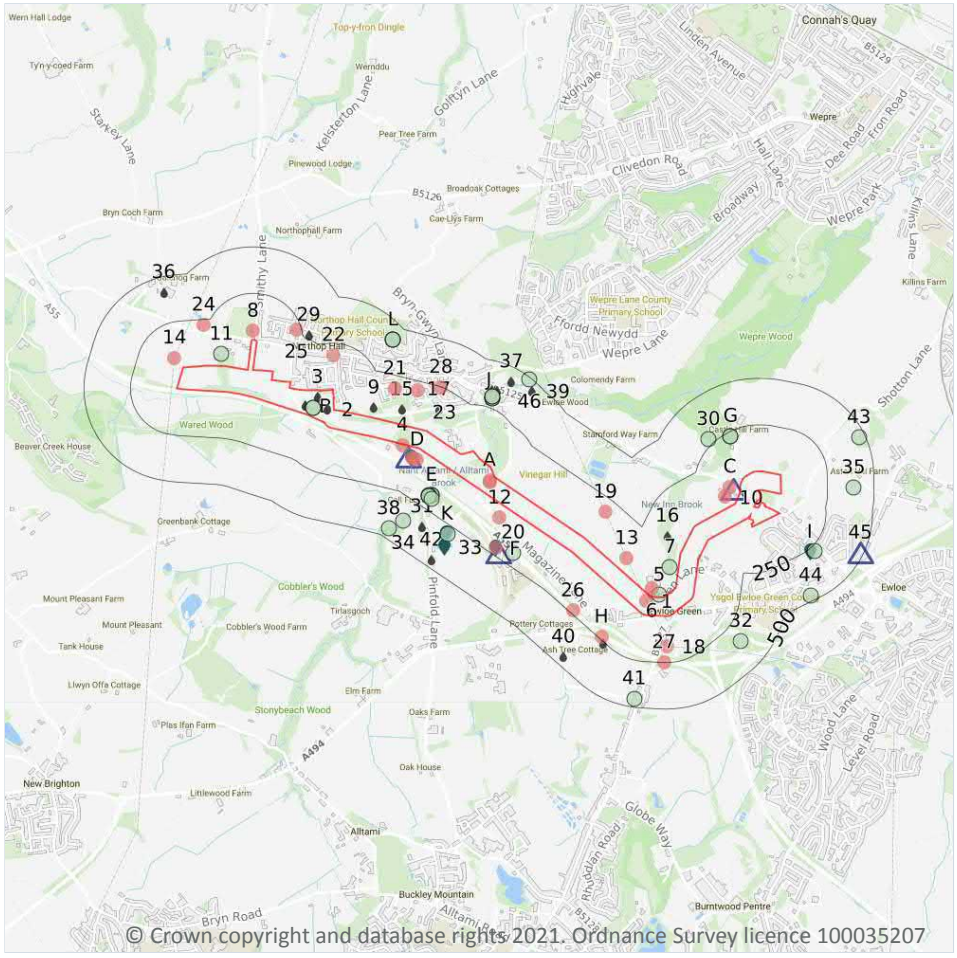
| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Yr Wyddgrug, CH76HE | NRW-WME020442 | Using waste exemption | On a farm | Use of waste in construction |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Yr Wyddgrug, CH76HE | NRW-WME020442 | Treating waste exemption | On a farm | Cleaning, washing, spraying or coating relevant waste |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Yr Wyddgrug, CH76HE | NRW-WME020442 | Disposing of waste exemption | On a farm | Burning waste in the open |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Yr Wyddgrug, CH76HE | NRW-WME020442 | Using waste exemption | On a farm | Spreading waste on agricultural land to confer benefit |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Yr Wyddgrug, CH76HE | NRW-WME020442 | Treating waste exemption | On a farm | Sorting mixed waste |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Yr Wyddgrug, CH76HE | NRW-WME020442 | Storing waste exemption | On a farm | Storage of waste in a secure place |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Yr Wyddgrug, CH76HE | NRW-WME020442 | Treating waste exemption | On a farm | Recovery of scrap metal |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Yr Wyddgrug, CH76HE | NRW-WME020442 | Treating waste exemption | On a farm | Mechanical treatment of end-of-life tyres |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Yr Wyddgrug, CH76HE | NRW-WME020442 | Using waste exemption | On a farm | Spreading of plant matter to confer benefit |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Mold, Flintshire, CH7 6HE | NRW-WME052717 | Storing waste exemption | On a farm | Storage of waste in a secure place |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Mold, Flintshire, CH7 6HE | NRW-WME052717 | Using waste exemption | On a farm | Use of waste in construction |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Mold, Flintshire, CH7 6HE | NRW-WME052717 | Treating waste exemption | On a farm | Sorting mixed waste |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Mold, Flintshire, CH7 6HE | NRW-WME052717 | Disposing of waste exemption | On a farm | Deposit of waste from dredging of inland waters |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Mold, Flintshire, CH7 6HE | NRW-WME052717 | Treating waste exemption | On a farm | Recovery of scrap metal |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Mold, Flintshire, CH7 6HE | NRW-WME052717 | Disposing of waste exemption | On a farm | Burning waste in the open |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Mold, Flintshire, CH7 6HE | NRW-WME052717 | Using waste exemption | On a farm | Spreading waste on agricultural land to confer benefit |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Mold, Flintshire, CH7 6HE | NRW-WME052717 | Using waste exemption | On a farm | Spreading of plant matter to confer benefit |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Mold, Flintshire, CH7 6HE | NRW-WME052717 | Using waste exemption | On a farm | Use of waste for a specified purpose |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Mold, Flintshire, CH7 6HE | NRW-WME052717 | Treating waste exemption | On a farm | Mechanical treatment of end-of-life tyres |
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Mold, Flintshire, CH7 6HE | NRW-WME052717 | Treating waste exemption | On a farm | Cleaning, washing, spraying or coating relevant waste |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| B | 229m SW | D T Jones & Son, Tirlas Goch Farm, Pinfold Lane, Northop Hall, Mold, Flintshire, CH7 6HE | NRW-WME052717 | Storing waste exemption | On a farm | Storage of waste in secure containers |
| D | 358m SW | Pinfold Lane, Alltami, Mold, Flintshire, ch76nz | NRW-WME001324 | Treating waste exemption | Waste Exemption - Non-Agricultural | Preparatory treatments (baling, sorting, shredding etc) |
| D | 358m SW | Pinfold Lane, Alltami, Mold, Flintshire, ch76nz | NRW-WME001324 | Storing waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Storage of waste in a secure place |
| E | 463m N | Pentre Farm, Wepre Lane, Northop Hall, Yr Wyddgrug, Flintshire, CH76LD | NRW-WME019456 | Disposing of waste exemption | On a farm | Burning waste in the open |
| E | 463m N | Pentre Farm, Wepre Lane, Northop Hall, Yr Wyddgrug, Flintshire, CH76LD | NRW-WME019456 | Using waste exemption | On a farm | Burning of waste as a fuel in a small appliance |
| E | 463m N | Pentre Farm, Wepre Lane, Northop Hall, Yr Wyddgrug, Flintshire, CH76LD | NRW-WME019456 | Using waste exemption | On a farm | Use of waste in construction |

*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

Current or recent petrol stations

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

Licensed Discharges to controlled waters

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 61**

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| 1 | On site | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| A | On site | Shaft (Disused) | Clwyd, CH7 | Unspecified Quarries Or Mines | Extractive Industries |
| A | On site | Tank | Clwyd, CH7 | Tanks (Generic) | Industrial Features |

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| 4 | 4m S | Electricity Sub Station | Clwyd, CH7 | Electrical Features | Infrastructure and Facilities |
| 6 | 37m NE | J Evans & Sons | Ewloe Green Farm, Green Lane, Ewloe Green, Deeside, Clwyd, CH5 3BP | Dairy Farming | Farming |
| 8 | 48m N | Gas Governor | Clwyd, CH7 | Gas Features | Infrastructure and Facilities |
| C | 55m W | Newbridge Service Station | Holywell Road, Ewloe, Deeside, Clwyd, CH5 3BS | Petrol and Fuel Stations | Road and Rail |
| D | 57m SW | Electricity Sub Station | Clwyd, CH7 | Electrical Features | Infrastructure and Facilities |
| 10 | 59m NW | H W Oultram | Newbridge Farm & Filling Station, Holywell Road, Ewloe, Deeside, Clwyd, CH5 3BS | Dairy Farming | Farming |
| D | 60m S | Shell Car Wash | Expressway, Northop Hall, Mold, Clwyd, CH7 6HF | Vehicle Cleaning Services | Personal, Consumer and Other Services |
| D | 63m S | Shell Service Station | Expressway, Northop Hall, Mold, Clwyd, CH7 6HF | Petrol and Fuel Stations | Road and Rail |
| 12 | 66m SW | Chimney | Clwyd, CH7 | Chimneys | Industrial Features |
| 13 | 70m NE | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 14 | 70m NW | Pylon | Clwyd, CH7 | Electrical Features | Infrastructure and Facilities |
| 18 | 162m S | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 19 | 180m NE | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 21 | 181m N | Shaft (Disused) | Clwyd, CH7 | Unspecified Quarries Or Mines | Extractive Industries |
| 22 | 186m N | Electricity Sub Station | Clwyd, CH7 | Electrical Features | Infrastructure and Facilities |
| 23 | 202m N | Tank | Clwyd, CH7 | Tanks (Generic) | Industrial Features |
| F | 215m SW | Shell Service Station | Westbound A55 Expressway, Northop Hall, Mold, Clwyd, CH7 6HB | Petrol and Fuel Stations | Road and Rail |
| 24 | 221m N | Mast (Telecommunication) | Clwyd, CH7 | Telecommunications Features | Infrastructure and Facilities |

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| 25 | 223m E | Electricity Sub Station | Clwyd, CH7 | Electrical Features | Infrastructure and Facilities |
| 26 | 234m SW | Gantry | Clwyd, CH5 | Travelling Cranes and Gantries | Industrial Features |
| H | 237m SW | Gantry | Clwyd, CH5 | Travelling Cranes and Gantries | Industrial Features |
| 27 | 248m S | Gantry | Clwyd, CH7 | Travelling Cranes and Gantries | Industrial Features |
| 28 | 249m N | Electricity Sub Station | Clwyd, CH7 | Electrical Features | Infrastructure and Facilities |

*This data is sourced from Ordnance Survey.*

## 4.2 Current or recent petrol stations

| **Records within 500m** | **4** |
|---|---|

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 61**

| ID | Location | Company | Address | LPG | Status |
|---|---|---|---|---|---|
| C | 39m W | DRAGON | Holywell Road, Ewloe, Deeside, Flintshire, CH5 3BS | No | Open |
| D | 61m S | SHELL | A55 Expressway Eastbound, Northop Hall, Mold, Flintshire, CH7 6HF | Yes | Open |
| F | 228m SW | SHELL | A55 Expressway Westbound, Northop Hall, Mold, Flintshire, CH7 6HB | Yes | Open |
| 45 | 483m SE | OBSOLETE | Liverpool Road, Ewloe, Deeside, Flintshire, CH5 3AR | Not Applicable | Obsolete |

*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 | 0 |
|---|---|

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.

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

## 4.10 Licensed industrial activities (Part A(1))

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

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

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

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

| Records within 500m | 6 |
|---|---|

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 61**

| ID | Location | Address | Details | |
|---|---|---|---|---|
| D | 61m S | Shell Northop Hall, Eastbound A55 Expressway, Northop Hall, Mold, Flintshire,CH7 6HF | Process: Unloading of Petrol into Storage at Service Stations<br>Status: Current Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| F | 214m SW | Shell Oil UK Ltd, Westbound A55 Expressway, Northop Hall, Mold, Flintshire, CH7 6HF | Process: Unloading of Petrol into Storage at Service Stations<br>Status: Current Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| I | 263m SE | Ewloe Service Station, Holywell Road, Ewloe, Flintshire, Flintshire, CH5 3BS | Process: Waste Oil Burner 0.4 MW<br>Status: New Legislation Applies<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| K | 296m SW | Deeside Truck Services, Pinfold Lane, Alltami, Mold, Flintshire, CH7 6NY | Process: Waste Oil Burner 0.4 MW<br>Status: New Legislation Applies<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |

| ID | Location | Address | Details | |
|---|---|---|---|---|
| K | 301m SW | Hunter Steel Treatments Ltd, Pinfold Lane, Alltami, Flintshire, CH7 6ES | Process: Coating Processes<br>Status: Current Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| 33 | 363m SW | Parry's Landfill Limited, Pinfold Lane, Mold, CH7 6NY | Process: Quarry Processes<br>Status: Current Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |

*This data is sourced from Local Authority records.*

## 4.12 Radioactive Substance Authorisations

**Records within 500m** **0**

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

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

## 4.13 Licensed Discharges to controlled waters

**Records within 500m** **24**

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 61**

| ID | Location | Address | Details | |
|---|---|---|---|---|
| **2** | **On site** | **NORTHOP HALL SWERAGE SYSTEM OFF ST., NORTHOP HALL SWERAGE SYSTEM OFF, SWERAGE SYSTEM OFF ST.MARY S D** | **Effluent Type: UNSPECIFIED<br>Permit Number: CM0025901<br>Permit Version: 1<br>Receiving Water: UN-NAMED TRIB. OF WEPRE BROOK** | **Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 25/11/1964<br>Effective Date: 25/11/1964<br>Revocation Date: 22/12/1992** |
| **3** | **On site** | **Northop Hall CSO, Nr 33 Elm Drive, NORTHOP HALL, Mold, CH7 6JJ** | **Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY<br>Permit Number: CM0168401<br>Permit Version: 3<br>Receiving Water: SURFACE WATER SEWER** | **Status: Effective<br>Issue date: 25/09/2019<br>Effective Date: 25/09/2019<br>Revocation Date: -** |

| ID | Location | Address | Details | |
|---|---|---|---|---|
| **B** | **On site** | **NORTHOP HALL HOUSING SITE, HOUSING SITE** | **Effluent Type: UNSPECIFIED**<br>**Permit Number: CM0078901**<br>**Permit Version: 1**<br>**Receiving Water: WEPR BROOK** | **Status: CONSENT EXPIRED - TIME LIMIT**<br>**Issue date: 29/07/1974**<br>**Effective Date: 29/07/1974**<br>**Revocation Date: 05/04/1995** |
| 9 | 54m N | NORTHOP HALL STW (CLOSED) | Effluent Type: UNSPECIFIED<br>Permit Number: CM0001101<br>Permit Version: 1<br>Receiving Water: WEPRE BROOK | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 31/01/1966<br>Effective Date: 31/01/1966<br>Revocation Date: 22/12/1992 |
| 15 | 80m N | EWLOE SERVICE STATION EWLOE HAWARDE, EWLOE SERVICE STATION EWLOE HAWA, EWLOE HAWARDEN CLWYD, HAWARDEN CLWYD, CLWYD | Effluent Type: UNSPECIFIED<br>Permit Number: CM0159601<br>Permit Version: 1<br>Receiving Water: TRIB WEPRE BROOK | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 11/04/1988<br>Effective Date: 11/04/1988<br>Revocation Date: 09/12/1994 |
| 16 | 106m NW | EWLOE GREEN | Effluent Type: UNSPECIFIED<br>Permit Number: CM0080001<br>Permit Version: 1<br>Receiving Water: NEW INN BROOK | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 15/01/1975<br>Effective Date: 15/01/1975<br>Revocation Date: 26/04/1995 |
| 17 | 134m NE | NORTHOP HALL | Effluent Type: UNSPECIFIED<br>Permit Number: CM0086101<br>Permit Version: 1<br>Receiving Water: WEPRE BROOK | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 05/09/1979<br>Effective Date: 05/09/1979<br>Revocation Date: 29/01/1993 |
| H | 261m SW | HAWARDEN CHEAPSIDE OPENCAST COAL SI, HAWARDEN CHEAPSIDE OPENCAST COAL, CHEAPSIDE OPENCAST COAL SITE | Effluent Type: UNSPECIFIED<br>Permit Number: CM0148502<br>Permit Version: 1<br>Receiving Water: NEW INN BROOK | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 04/08/1986<br>Effective Date: 04/08/1986<br>Revocation Date: 23/12/1992 |
| 29 | 270m N | NORTHOP HALL OFF ST MARYS DRIV, CH7 6JX | Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY<br>Permit Number: CM0168401<br>Permit Version: 2<br>Receiving Water: UNNAMED W/C | Status: Effective<br>Issue date: 08/09/2010<br>Effective Date: 08/09/2010<br>Revocation Date: - |
| J | 287m N | HOUSING SITE NORTHOP HALL PENTRE M, HOUSING SITE NORTHOP HALL PENTR, NORTHOP HALL PENTRE MOCH, PENTRE MOCH, PENTRE MOC | Effluent Type: UNSPECIFIED<br>Permit Number: CM0041601<br>Permit Version: 1<br>Receiving Water: WEPRE BROOK | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 25/04/1967<br>Effective Date: 25/04/1967<br>Revocation Date: 05/04/1995 |

| ID | Location | Address | Details | |
|---|---|---|---|---|
| J | 297m N | ROSE COTTAGE PINFORD LANE MOLD, ROSE COTTAGE, PINFORD LANE, MOLD, FLINTSHIRE, CH7 6HE | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: CG0394201<br>Permit Version: 1<br>Receiving Water: SURFACE WATER VIA SOAKAWAY | Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY<br>Issue date: 04/06/2001<br>Effective Date: 04/06/2001<br>Revocation Date: - |
| 31 | 339m SW | BROCK QUARRY PINFOLD LANE ALLTAMI, BROCK QUARRY, PINFOLD LANE, ALLTAMI, NEAR MOLD, CH7 6NZ | Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT<br>Permit Number: CG0387501<br>Permit Version: 1<br>Receiving Water: UNNAMED TRIB OF ALLTAMI BROOK | Status: Effective<br>Issue date: 23/06/2000<br>Effective Date: 23/06/2000<br>Revocation Date: - |
| J | 343m N | Northop Hall SPS, Chapel House Village Rd, NORTHOP HALL, MOLD, CH7 6LE | Effluent Type: SEWAGE DISCHARGES - STW STORM OVERFLOW/STORM TANK - WATER COMPANY<br>Permit Number: CM0194501<br>Permit Version: 3<br>Receiving Water: WEPRE BROOK | Status: Effective<br>Issue date: 17/12/2019<br>Effective Date: 17/12/2019<br>Revocation Date: - |
| J | 343m N | Northop Hall SPS, Chapel House Village Rd, NORTHOP HALL, MOLD, CH7 6LE | Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY<br>Permit Number: CM0194501<br>Permit Version: 3<br>Receiving Water: WEPRE BROOK | Status: Effective<br>Issue date: 17/12/2019<br>Effective Date: 17/12/2019<br>Revocation Date: - |
| J | 344m N | NORTHOP HALL PS | Effluent Type: UNSPECIFIED<br>Permit Number: CM0036101<br>Permit Version: 1<br>Receiving Water: WEPRE BROOK | Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88)<br>Issue date: 15/07/1966<br>Effective Date: 15/07/1966<br>Revocation Date: 08/02/2002 |
| J | 344m N | NORTHOP HALL PS | Effluent Type: UNSPECIFIED<br>Permit Number: CM0194501<br>Permit Version: 1<br>Receiving Water: WEPRE BROOK | Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88)<br>Issue date: 19/10/1989<br>Effective Date: 19/10/1989<br>Revocation Date: 07/02/2002 |
| J | 344m N | NORTHOP HALL PS | Effluent Type: -<br>Permit Number: CM0015301<br>Permit Version: 1<br>Receiving Water: WEPRE BROOK | Status: Effective<br>Issue date: 15/03/1963<br>Effective Date: 15/03/1963<br>Revocation Date: - |

| ID | Location | Address | Details | |
|---|---|---|---|---|
| J | 347m N | NORTHOP HALL PUMPING STATION, NORTHOP HALL | Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY<br>Permit Number: CM0036101<br>Permit Version: 2<br>Receiving Water: WEPRE BROOK | Status: Effective<br>Issue date: 08/02/2002<br>Effective Date: 09/02/2002<br>Revocation Date: - |
| J | 347m N | NORTHOP HALL PUMPING STATION, NORTHOP HALL | Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY<br>Permit Number: CM0194501<br>Permit Version: 2<br>Receiving Water: WEPRE BROOK | Status: Effective<br>Issue date: 08/02/2002<br>Effective Date: 09/02/2002<br>Revocation Date: - |
| 36 | 418m N | NORTHOP HALL HIGHFIELD LIVERY | Effluent Type: UNSPECIFIED<br>Permit Number: CM0148701<br>Permit Version: 1<br>Receiving Water: TO LAND | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 20/08/1986<br>Effective Date: 20/08/1986<br>Revocation Date: 18/09/1992 |
| 37 | 426m NE | NORTHOP HALL NR.VINEGAR HILL NORTHO, NORTHOP HALL NR.VINEGAR HILL NOR, NR.VINEGAR HILL NORTHOP HALL SDW, NORTHOP HALL SDW. | Effluent Type: UNSPECIFIED<br>Permit Number: CM0026001<br>Permit Version: 1<br>Receiving Water: WEPRE BROOK | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 25/11/1964<br>Effective Date: 25/11/1964<br>Revocation Date: 22/12/1992 |
| 39 | 451m NE | NORTHOP HALL 4 ELM BANK, 4 ELM BANK | Effluent Type: UNSPECIFIED<br>Permit Number: CM0009401<br>Permit Version: 1<br>Receiving Water: WEPRE BROOK | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 04/12/1970<br>Effective Date: 04/12/1970<br>Revocation Date: 02/02/1994 |
| 40 | 453m SW | HAWARDEN CHEAPSIDE OPENCAST COAL SI, HAWARDEN CHEAPSIDE OPENCAST COAL, CHEAPSIDE OPENCAST COAL SITE | Effluent Type: UNSPECIFIED<br>Permit Number: CM0148501<br>Permit Version: 1<br>Receiving Water: NEW INN BROOK | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 04/08/1986<br>Effective Date: 04/08/1986<br>Revocation Date: 23/12/1992 |
| 42 | 460m SW | PARRYS QUARRY PINFOLD LANE ALLTAMI, PARRYS QUARRY, PINFOLD LANE, ALLTAMI NEAR MOLD, Flintshire, CH7 6HE | Effluent Type: TRADE DISCHARGES - SITE DRAINAGE (CONTAM SURFACE WATER, NOT WASTE SIT<br>Permit Number: CG0392101<br>Permit Version: 1<br>Receiving Water: ALLTAMI BROOK VIA DRAIN | Status: Effective<br>Issue date: 14/02/2002<br>Effective Date: 14/02/2002<br>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 | 0 |
|---|---|

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.

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

## 4.18 Pollution Incidents (EA/NRW)

| Records within 500m | 32 |
|---|---|

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 61**

| ID | Location | Details | |
|---|---|---|---|
| **B** | **On site** | **Incident Date: 17/04/2016**<br>**Incident Identification: 1601792**<br>**Pollutant: -**<br>**Pollutant Description: -** | **Water Impact: Category 3 (Minor)**<br>**Land Impact: No Details**<br>**Air Impact: No Details** |
| **B** | **On site** | **Incident Date: 17/04/2016**<br>**Incident Identification: 1601792**<br>**Pollutant: Inert Materials and Waste**<br>**Pollutant Description: Soils and Clay** | **Water Impact: Category 3 (Minor)**<br>**Land Impact: No Details**<br>**Air Impact: No Details** |
| 5 | 11m N | Incident Date: 05/11/2015<br>Incident Identification: 1385956<br>Pollutant: Pollutant Not Identified<br>Pollutant Description: Not Identified | Water Impact: -<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |
| 7 | 46m W | Incident Date: 08/07/2002<br>Incident Identification: 89900<br>Pollutant: Agricultural Materials and Wastes<br>Pollutant Description: Other Agricultural Material or Waste | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| 11 | 64m N | Incident Date: 11/11/2014<br>Incident Identification: 1293682<br>Pollutant: Specific Waste Materials<br>Pollutant Description: Other Specific Waste Material | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 170m SW | Incident Date: 12/04/2016<br>Incident Identification: 1601650<br>Pollutant: -<br>Pollutant Description: - | Water Impact: Category 3 (Minor)<br>Land Impact: Other<br>Air Impact: Other |
| E | 170m SW | Incident Date: 12/04/2016<br>Incident Identification: 1601650<br>Pollutant: Inert Materials and Waste<br>Pollutant Description: Mineral Materials and Wastes | Water Impact: Category 3 (Minor)<br>Land Impact: Other<br>Air Impact: Other |
| E | 179m SW | Incident Date: 15/04/2016<br>Incident Identification: 1601753<br>Pollutant: Inert Materials and Waste<br>Pollutant Description: Soils and Clay | Water Impact: Category 2 (Significant)<br>Land Impact: No Details<br>Air Impact: No Details |
| 20 | 180m SW | Incident Date: 09/05/2014<br>Incident Identification: 1234093<br>Pollutant: Oils and Fuel<br>Pollutant Description: Diesel | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 182m SW | Incident Date: 22/04/2016<br>Incident Identification: 1601915<br>Pollutant: -<br>Pollutant Description: - | Water Impact: Category 3 (Minor)<br>Land Impact: Other<br>Air Impact: Other |

| ID | Location | Details | |
|---|---|---|---|
| E | 182m SW | Incident Date: 22/04/2016<br>Incident Identification: 1601915<br>Pollutant: Inert Materials and Waste<br>Pollutant Description: Soils and Clay | Water Impact: Category 3 (Minor)<br>Land Impact: Other<br>Air Impact: Other |
| E | 187m SW | Incident Date: 16/03/2017<br>Incident Identification: 1701328<br>Pollutant: Contaminated Water<br>Pollutant Description: Suspended Solids | Water Impact: Category 2 (Significant)<br>Land Impact: No Details<br>Air Impact: No Details |
| G | 227m NW | Incident Date: 20/02/2017<br>Incident Identification: 1700866<br>Pollutant: -<br>Pollutant Description: - | Water Impact: No Details<br>Land Impact: Category 4 (No Impact)<br>Air Impact: No Details |
| G | 227m NW | Incident Date: 20/02/2017<br>Incident Identification: 1700866<br>Pollutant: Sewage Material<br>Pollutant Description: Final Effluent | Water Impact: No Details<br>Land Impact: Category 4 (No Impact)<br>Air Impact: No Details |
| I | 277m SE | Incident Date: 05/10/2002<br>Incident Identification: 112815<br>Pollutant: Sewage Materials<br>Pollutant Description: Crude Sewage | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 2 (Significant) |
| 30 | 282m NW | Incident Date: 02/10/2001<br>Incident Identification: 34135<br>Pollutant: Oils and Fuel<br>Pollutant Description: Diesel | Water Impact: Category 3 (Minor)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| K | 294m SW | Incident Date: 20/02/2003<br>Incident Identification: 138193<br>Pollutant: Inorganic Chemicals/Products<br>Pollutant Description: Other Inorganic Chemical or Product | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| J | 304m N | Incident Date: 24/03/2017<br>Incident Identification: 1701503<br>Pollutant: Inert Materials and Waste<br>Pollutant Description: Soils and Clay | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: No Details |
| J | 304m N | Incident Date: 24/03/2017<br>Incident Identification: 1701503<br>Pollutant: -<br>Pollutant Description: - | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: No Details |
| J | 309m N | Incident Date: 28/03/2017<br>Incident Identification: 1701565<br>Pollutant: Inert Materials and Waste<br>Pollutant Description: Soils and Clay | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: No Details |

| ID | Location | Details | |
|---|---|---|---|
| J | 309m N | Incident Date: 28/03/2017<br>Incident Identification: 1701565<br>Pollutant: -<br>Pollutant Description: - | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: No Details |
| 32 | 349m SE | Incident Date: 16/09/2013<br>Incident Identification: 1159521<br>Pollutant: Contaminated Water<br>Pollutant Description: Firefighting Run-Off | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| 34 | 369m SW | Incident Date: 01/12/2008<br>Incident Identification: 638020<br>Pollutant: Agricultural Materials and Wastes<br>Pollutant Description: Slurry and Dilute Slurry | Water Impact: Category 2 (Significant)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| 35 | 389m E | Incident Date: 02/08/2003<br>Incident Identification: 178524<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Soils and Clay | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| L | 420m NE | Incident Date: 03/09/2002<br>Incident Identification: 105091<br>Pollutant: General Biodegradable Materials and Wastes<br>Pollutant Description: Composted Material | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| L | 420m NE | Incident Date: 03/09/2002<br>Incident Identification: 105091<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Construction and Demolition Materials and Wastes | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| L | 420m NE | Incident Date: 03/09/2002<br>Incident Identification: 105091<br>Pollutant: Inert Materials and Wastes:General Biodegradable Materials and Wastes<br>Pollutant Description: Construction and Demolition Materials and Wastes:Composted Material | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| 38 | 448m SW | Incident Date: 13/12/2005<br>Incident Identification: 365708<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Soils and Clay | Water Impact: Category 2 (Significant)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 41 | 453m S | Incident Date: 10/07/2015<br>Incident Identification: 1353756<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Other Inert Material or Waste | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| 43 | 466m NE | Incident Date: 25/01/2002<br>Incident Identification: 54360<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Soils and Clay | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| 44 | 469m SE | Incident Date: 04/09/2002<br>Incident Identification: 105420<br>Pollutant: Oils and Fuel<br>Pollutant Description: Lubricating Oils | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 46 | 490m NE | Incident Date: 15/07/2002<br>Incident Identification: 91628<br>Pollutant: Oils and Fuel<br>Pollutant Description: Mixed/Waste Oils | Water Impact: Category 3 (Minor)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |

*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.*

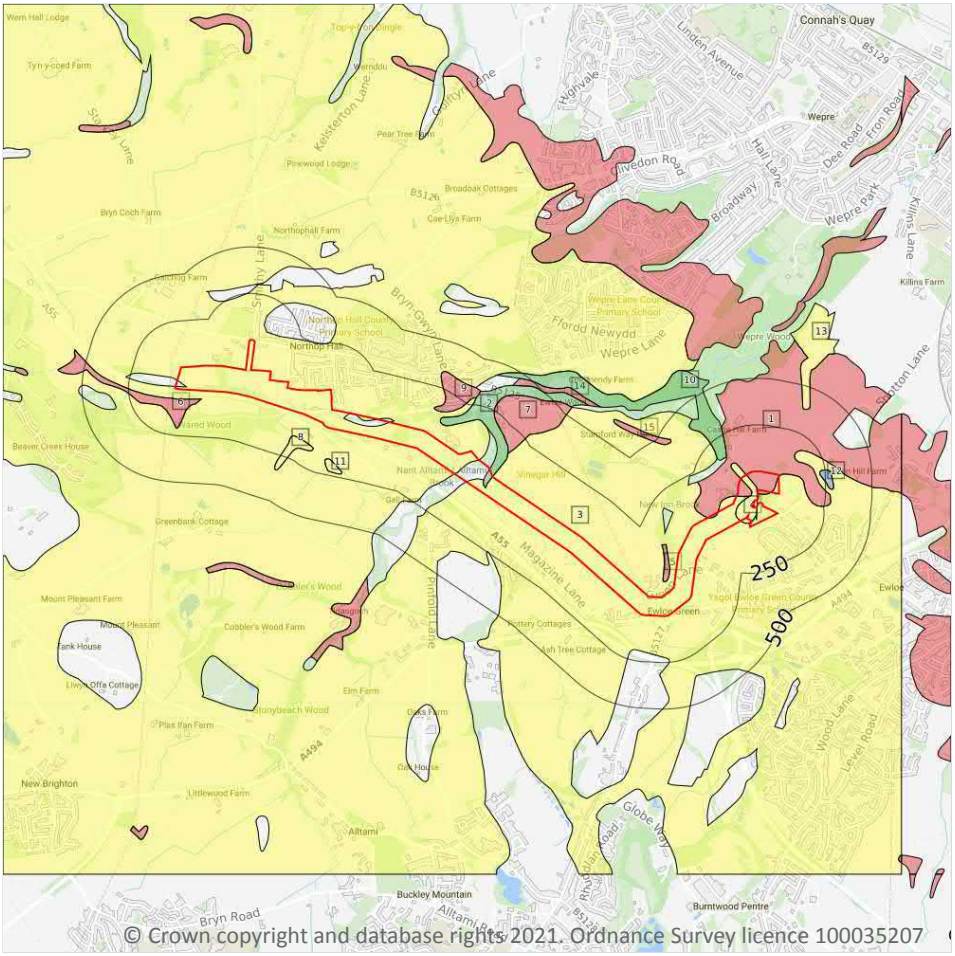
## 4.21 Pollution inventory radioactive waste

| **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 | 15 |
|---|---|

Aquifer status of groundwater held within superficial geology.

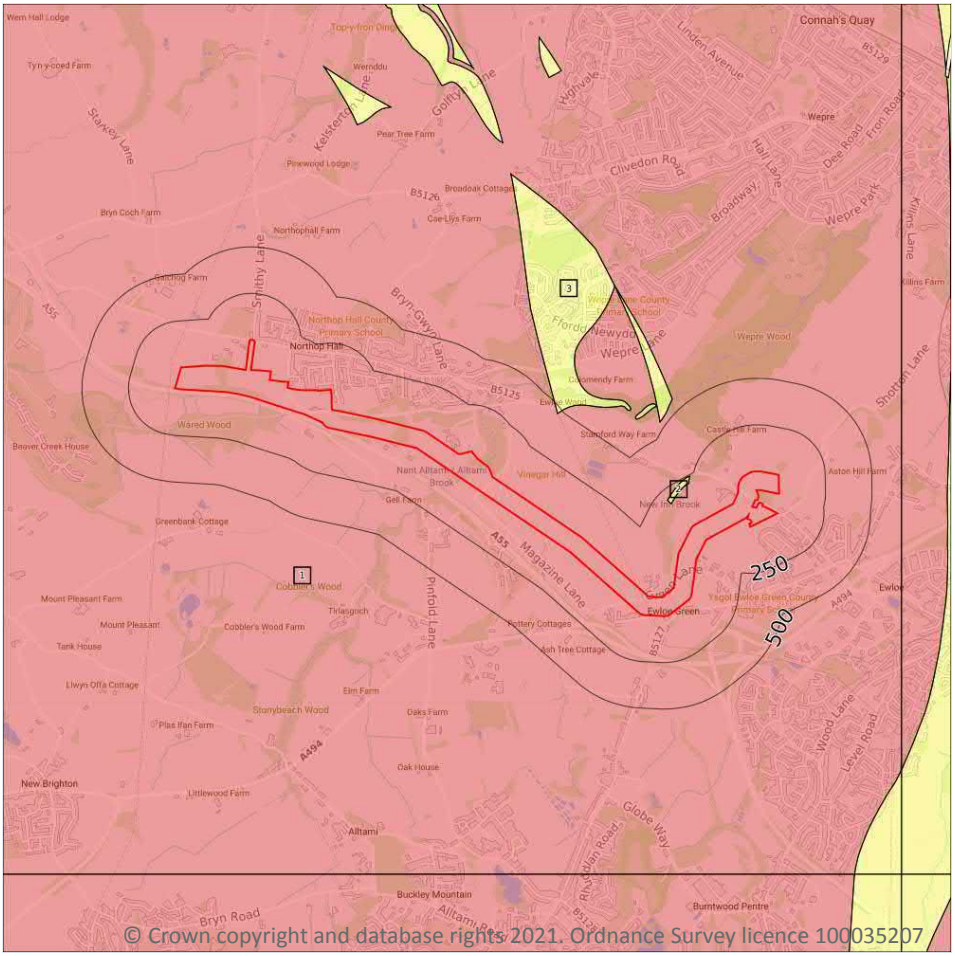
Features are displayed on the Hydrogeology map on **page 75**

| 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 | Unknown | Unknown |

| ID | Location | Designation | Description |
|---|---|---|---|
| **3** | **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** |
| **4** | **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** |
| 5 | 33m 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 |
| 6 | 45m S | Secondary A | Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers |
| 7 | 126m NE | Secondary A | Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers |
| 8 | 128m SW | 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 |
| 9 | 129m NE | Secondary A | Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers |
| 10 | 138m NW | Unknown | Unknown |
| 11 | 164m S | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |
| 12 | 221m E | Unproductive | These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow |
| 13 | 379m N | 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 |
| 14 | 418m NE | Secondary A | Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers |
| 15 | 426m NW | 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




## 5.2 Bedrock aquifer

**Records within 500m** **3**

Aquifer status of groundwater held within bedrock geology.

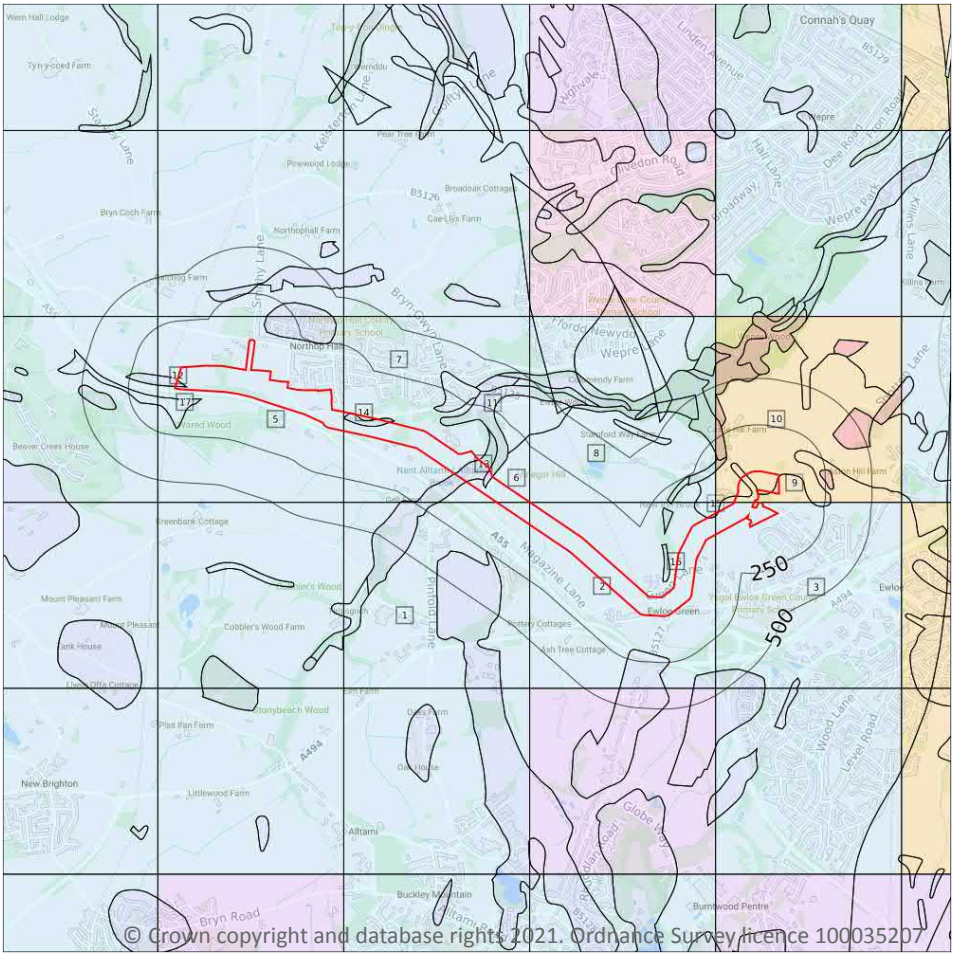
Features are displayed on the Bedrock aquifer map on **page 77**

| 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 | 168m NW | 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 | 471m NE | Secondary (undifferentiated) | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |

*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 | 17 |
|---|---|

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 79**

| 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: 3-10m 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: 3-10m Patchiness value: >90% Recharge potential: Low | Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures |
| 3 | 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 |
| 4 | 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 |
| 5 | 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: 3-10m Patchiness value: >90% Recharge potential: Low | Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures |
| 6 | 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: 3-10m Patchiness value: >90% Recharge potential: Low | Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures |

| ID | Location | Summary | Soil / surface | Superficial geology | Bedrock geology |
|---|---|---|---|---|---|
| 7 | On site | Summary Classification: Secondary superficial aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: Low<br>Aquifer type: Secondary<br>Thickness: 3-10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 8 | On site | Summary Classification: Secondary superficial aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: Low<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 9 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: <90%<br>Recharge potential: High | Vulnerability: High<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 10 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: <90%<br>Recharge potential: High | Vulnerability: High<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 11 | On site | Summary Classification: Secondary bedrock aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Unproductive Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: -<br>Aquifer type: Unknown (lakes+landslip)<br>Thickness: 3-10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 12 | On site | Summary Classification: Secondary bedrock aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: -<br>Aquifer type: -<br>Thickness: 3-10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |

| ID | Location | Summary | Soil / surface | Superficial geology | Bedrock geology |
|---|---|---|---|---|---|
| **13** | **On site** | **Summary Classification: Secondary bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer** | **Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year** | **Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: >90% Recharge potential: Low** | **Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures** |
| **14** | **On site** | **Summary Classification: Secondary bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer** | **Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year** | **Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: >90% Recharge potential: Low** | **Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures** |
| **15** | **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: 3-10m Patchiness value: >90% Recharge potential: Low** | **Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures** |
| 16 | 33m W | 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: 3-10m Patchiness value: >90% Recharge potential: Low | Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures |
| 17 | 45m S | 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: 3-10m 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.*

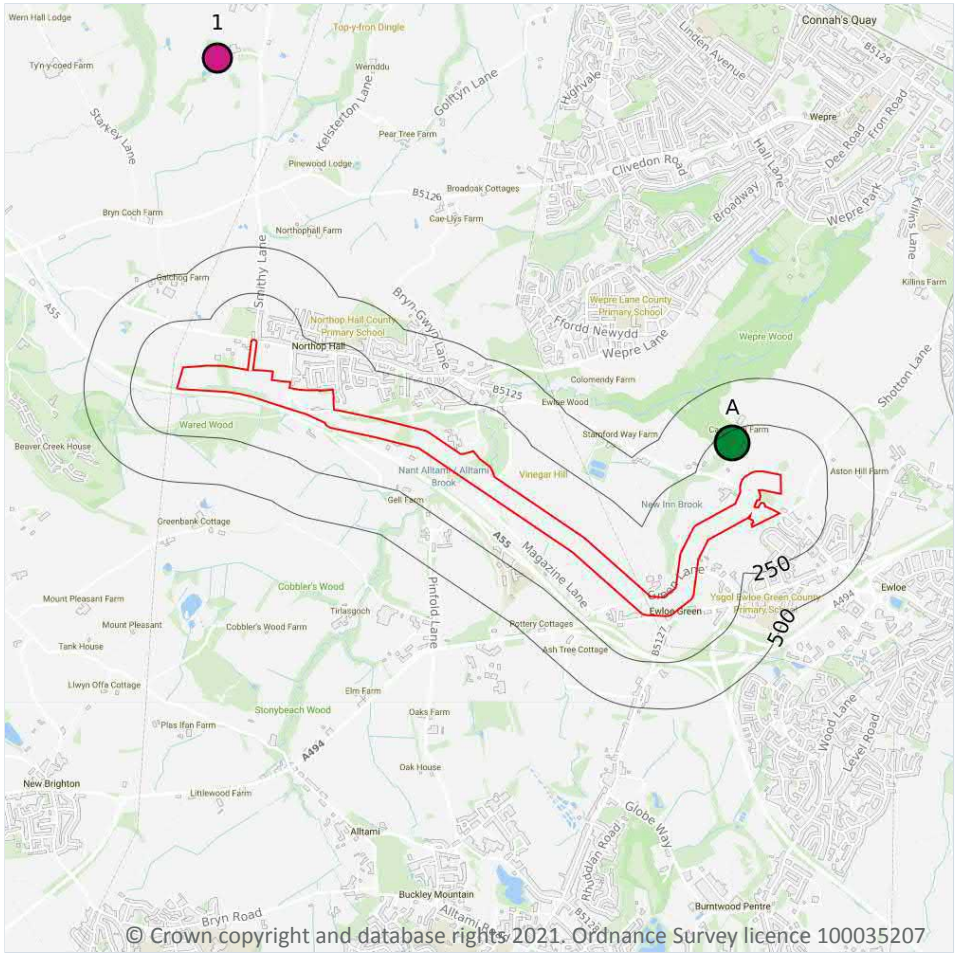
## 5.5 Groundwater vulnerability- local information

| 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




## 5.6 Groundwater abstractions

| Records within 2000m | 3 |
|---|---|

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 84**

| ID | Location | Details | |
|---|---|---|---|
| A | 190m NW | Status: Historical<br>Licence No: 24/67/10/0126<br>Details: Water Bottling<br>Direct Source: EAW Groundwater<br>Point: 50M DEEP, 200MM DIA. BOREHOLE<br>Data Type: Point<br>Name: Grant-Findlay<br>Easting: 329080<br>Northing: 367320 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 07/06/1996<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 07/06/1996<br>Version End Date: - |
| A | 190m NW | Status: Historical<br>Licence No: 24/67/10/0136<br>Details: Water Bottling<br>Direct Source: EAW Groundwater<br>Point: 50M DEEP, 200MM DIA. BOREHOLE<br>Data Type: Point<br>Name: Grant-Findlay<br>Easting: 329080<br>Northing: 367320 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 17/07/2001<br>Expiry Date: 17/07/2004<br>Issue No: 1<br>Version Start Date: 01/04/2003<br>Version End Date: - |
| 1 | 1527m N | Status: Historical<br>Licence No: 24/67/10/0014<br>Details: General Farming & Domestic<br>Direct Source: EAW Groundwater<br>Point: WELL<br>Data Type: Point<br>Name: Charlton<br>Easting: 326310<br>Northing: 369390 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 09/08/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 09/08/1966<br>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 84**

| ID | Location | Details | |
|---|---|---|---|
| - | 1879m SE | Status: Historical<br>Licence No: 24/67/10/0065<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: GROOMSDALE BROOK<br>Data Type: Point<br>Name: Hawarden Golf Club Ltd<br>Easting: 330770<br>Northing: 365730 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 06/06/1967<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 01/04/2004<br>Version End Date: - |

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

## 5.8 Potable abstractions

| **Records within 2000m** | **2** |
|---|---|

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.

Features are displayed on the Abstractions and Source Protection Zones map on **page 84**

| ID | Location | Details | |
|---|---|---|---|
| A | 190m NW | Status: Historical<br>Licence No: 24/67/10/0126<br>Details: Water Bottling<br>Direct Source: EAW Groundwater<br>Point: 50M DEEP, 200MM DIA. BOREHOLE<br>Data Type: Point<br>Name: Grant-Findlay<br>Easting: 329080<br>Northing: 367320 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 07/06/1996<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 07/06/1996<br>Version End Date: - |
| A | 190m NW | Status: Historical<br>Licence No: 24/67/10/0136<br>Details: Water Bottling<br>Direct Source: EAW Groundwater<br>Point: 50M DEEP, 200MM DIA. BOREHOLE<br>Data Type: Point<br>Name: Grant-Findlay<br>Easting: 329080<br>Northing: 367320 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 17/07/2001<br>Expiry Date: 17/07/2004<br>Issue No: 1<br>Version Start Date: 01/04/2003<br>Version End Date: - |

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

## 5.9 Source Protection Zones

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

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

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

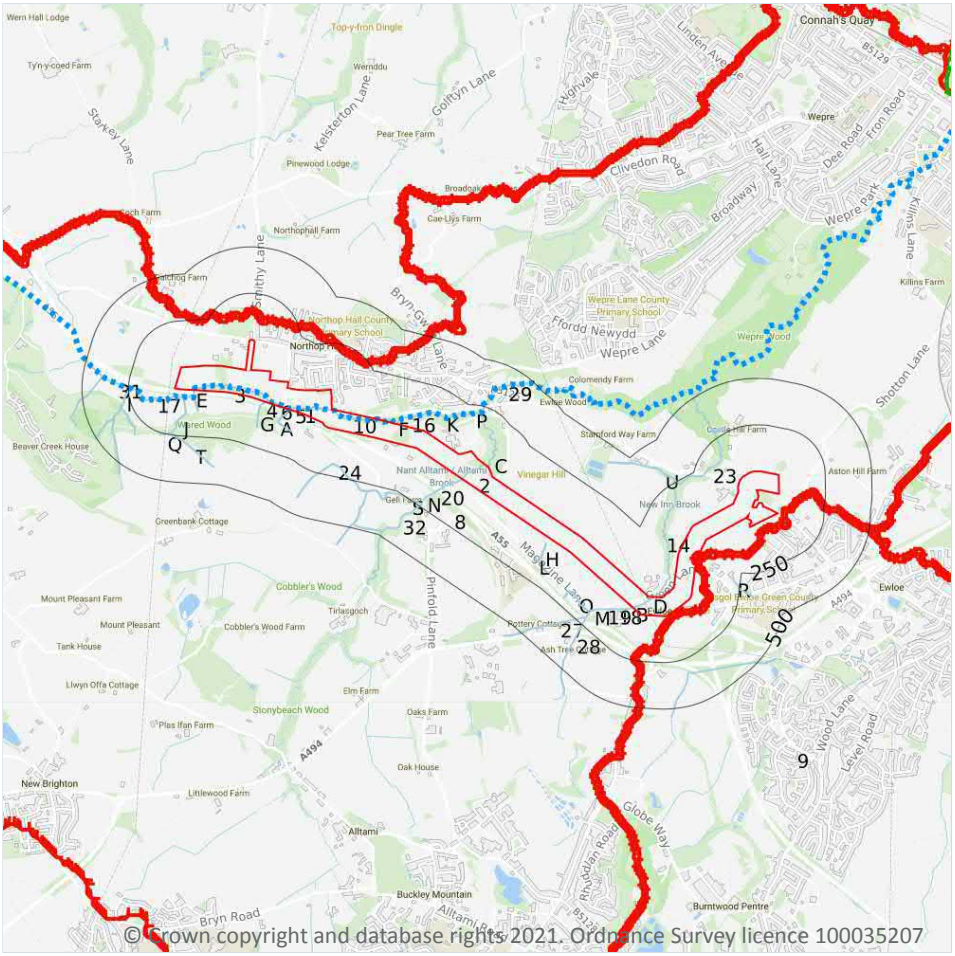
## 5.10 Source Protection Zones (confined aquifer)

| 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




## 6.1 Water Network (OS MasterMap)

| Records within 250m | 49 |
|---|---|

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 88**

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| **1** | **On site** | **Inland river not influenced by normal tidal action.** | **Not provided** | **Watercourse contains water year round (in normal circumstances)** | **-** |

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| **3** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **4** | **On site** | **Inland river not influenced by normal tidal action.** | **Not provided** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **5** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **6** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **10** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **A** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **B** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **New Inn Brook** |
| **C** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **Nant Alltami** |
| **D** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **New Inn Brook** |
| **E** | **On site** | **Inland river not influenced by normal tidal action.** | **Underground** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **D** | **On site** | **Inland river not influenced by normal tidal action.** | **Underground** | **Watercourse contains water year round (in normal circumstances)** | **New Inn Brook** |
| F | 11m N | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| F | 11m N | 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 |
|---|---|---|---|---|---|
| 14 | 14m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | New Inn Brook |
| G | 27m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| H | 32m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| E | 36m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 16 | 39m N | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| 17 | 40m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| E | 40m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| J | 40m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| E | 40m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 18 | 61m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | New Inn Brook |
| 19 | 69m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | New Inn Brook |
| K | 69m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 20 | 86m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Nant Alltami |

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| L | 133m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| M | 137m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | New Inn Brook |
| 23 | 145m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | New Inn Brook |
| N | 153m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Nant Alltami |
| O | 156m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| M | 173m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 24 | 184m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| P | 200m N | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| 27 | 204m SW | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| 28 | 204m SW | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| P | 206m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| R | 213m E | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 29 | 217m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Nant Gwepra |

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| S | 233m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 31 | 234m W | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| I | 234m W | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 32 | 236m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Nant Alltami |
| R | 237m E | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| Q | 240m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| T | 240m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| R | 241m E | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| U | 243m NW | Inland river not influenced by normal tidal action. | 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** | **33** |
|---|---|

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 88**

*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 88**

| ID | Location | Type | Water body catchment | Water body ID | Operational catchment | Management catchment |
|---|---|---|---|---|---|---|
| **8** | **On site** | **River WB catchment** | **Wepre Brook** | **GB111067056880** | **Dee Estuary** | **Dee** |
| **9** | **On site** | **River WB catchment** | **Sandycroft Drain** | **GB111067052160** | **Dee Estuary** | **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 88**

| ID | Location | Type | Name | Water body ID | Overall rating | Chemical rating | Ecological rating | Year |
|---|---|---|---|---|---|---|---|---|
| **7** | **On site** | **River** | **Wepre Brook** | **GB111067056880** | **Moderate** | **Good** | **Moderate** | **2016** |
| - | 2522m SE | River | Sandycroft Drain | GB111067052160 | Moderate | Good | Moderate | 2016 |

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

## 6.5 WFD Groundwater bodies

| Records on site | 1 |
|---|---|

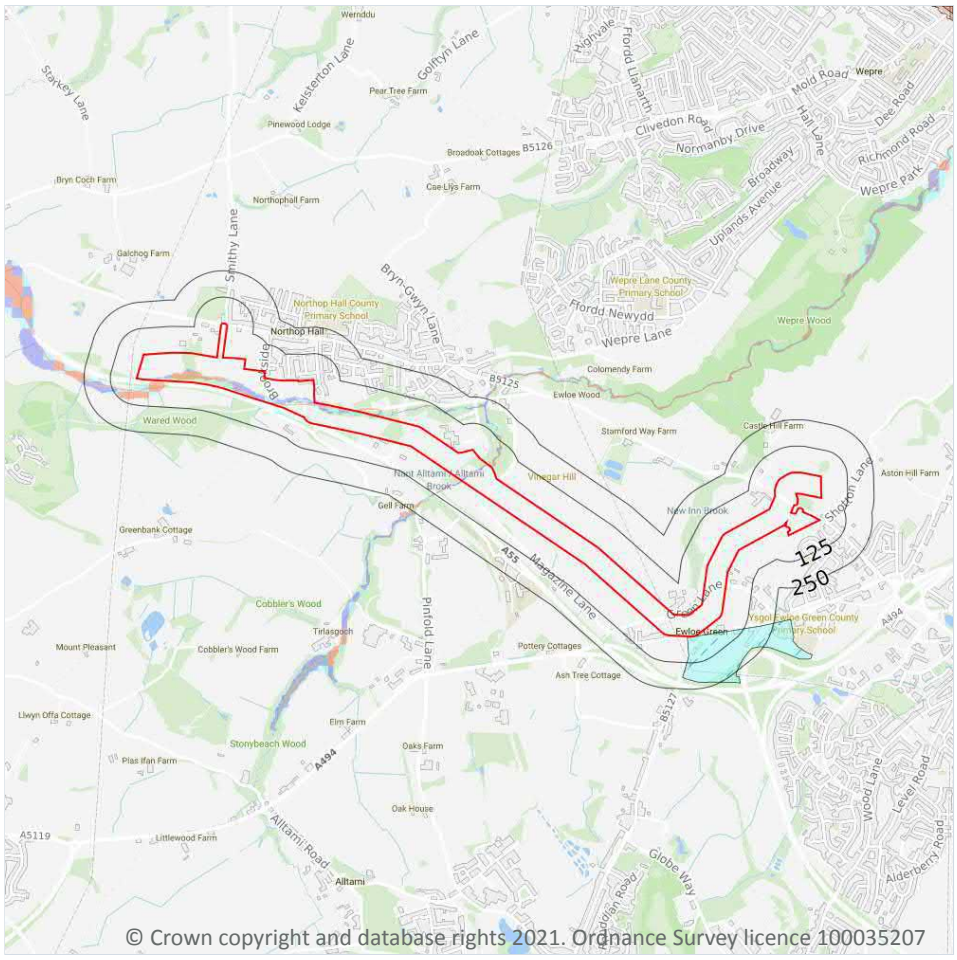
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place.

Features are displayed on the Hydrology map on **page 88**

| ID | Location | Name | Water body ID | Overall rating | Chemical rating | Quantitative | Year |
|---|---|---|---|---|---|---|---|
| **2** | **On site** | **Dee Carboniferous Coal Measures** | **GB41102G204800** | **Poor** | **Poor** | **Good** | **2016** |

*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 Sea (RoFRaS)

| **Records within 50m** | **84** |
|---|---|

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; 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).

Features are displayed on the River and coastal flooding map on **page 95**

| Distance | RoFRaS flood risk |
|---|---|
| **On site** | **High** |
| 0 - 50m | High |

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

## 7.2 Historical Flood Events

| Records within 250m | 1 |
|---|---|

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.

Features are displayed on the River and coastal flooding map on **page 95**

| ID | Location | Event name | Date of flood | Flood source | Flood cause | Type of flood |
|---|---|---|---|---|---|---|
| M | 2m S | Ewloe Green Oct/ Nov 2000 01 | 2000-10-26 2000-11-12 | Ordinary watercourse | Channel capacity exceeded (no raised defences) | Fluvial |

*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.*

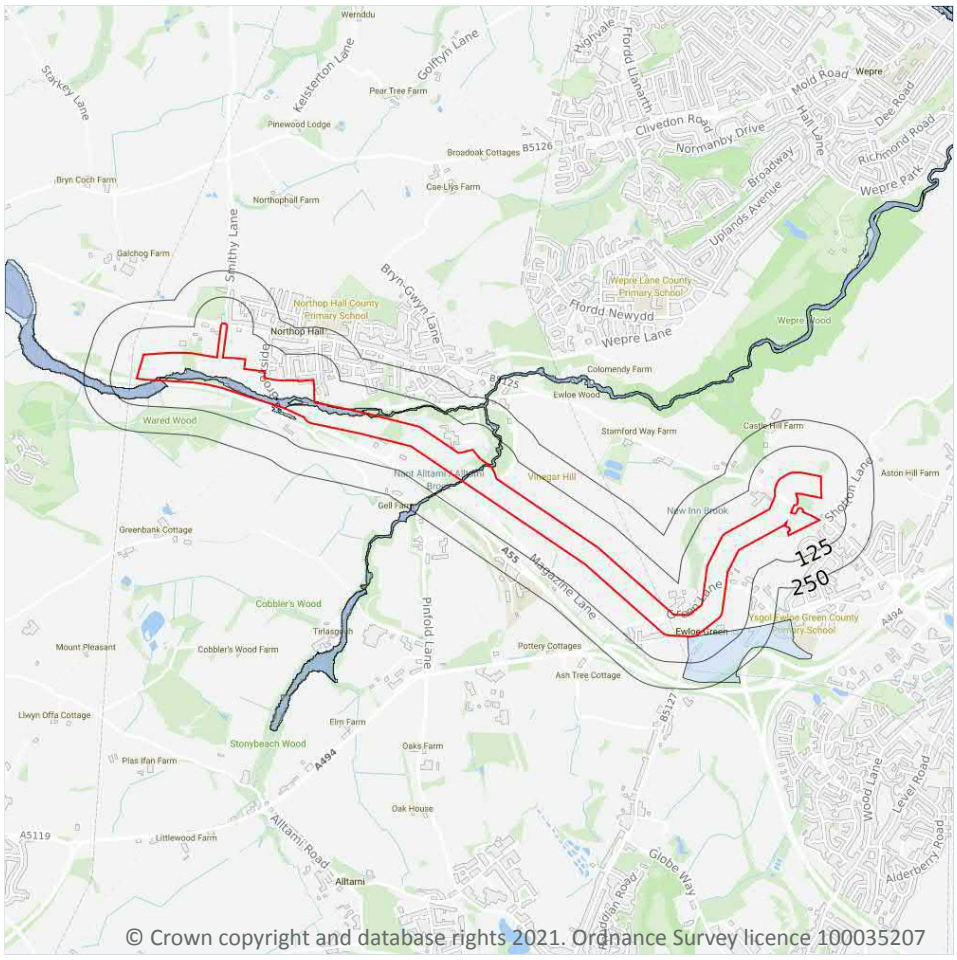
## 7.5 Flood Storage Areas

| 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 | 1 |
|---|---|

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.

Features are displayed on the River and coastal flooding map on **page 95**

| Location | Type |
|---|---|
| **On site** | **Zone 2 - (Fluvial /Tidal Models)** |

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

## 7.7 Flood Zone 3

| Records within 50m | 1 |
|---|---|

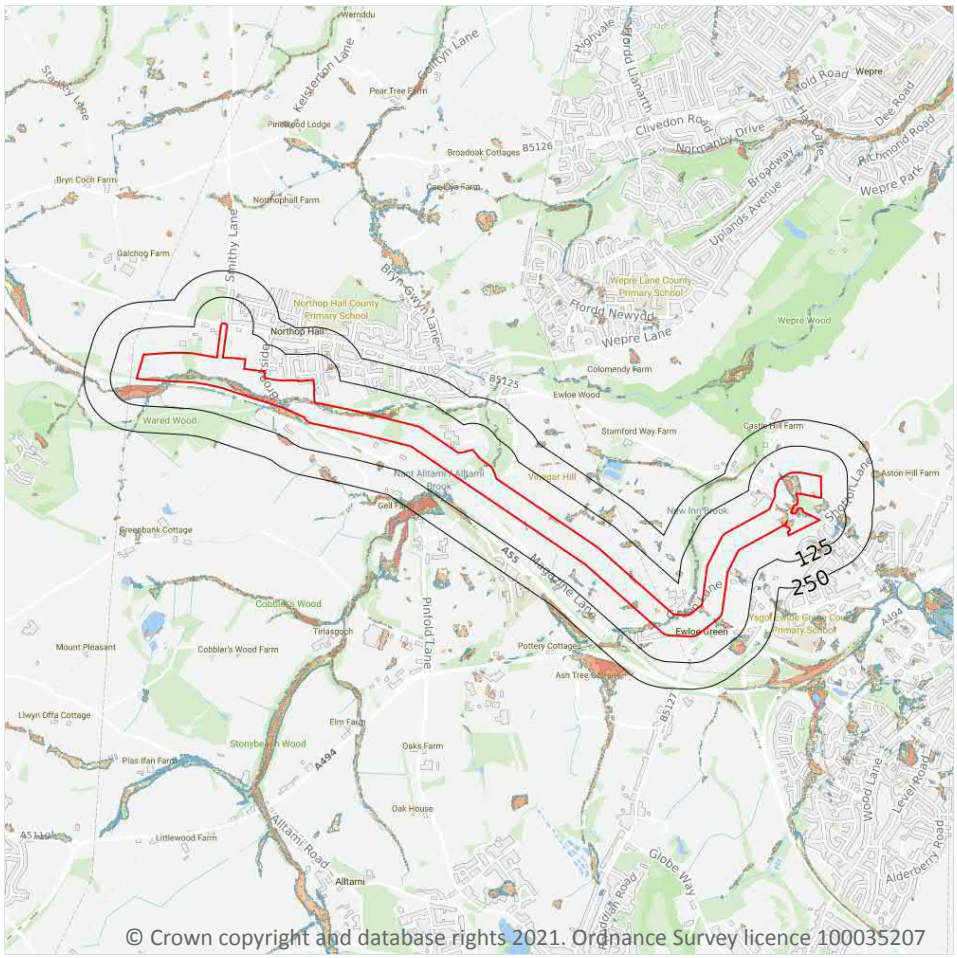
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 95**

| Location | Type |
|---|---|
| **On site** | **Zone 3 - (Fluvial Models)** |

*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 30 year, Greater than 1.0m** |
| **Highest risk within 50m** | **1 in 30 year, Greater than 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 100**

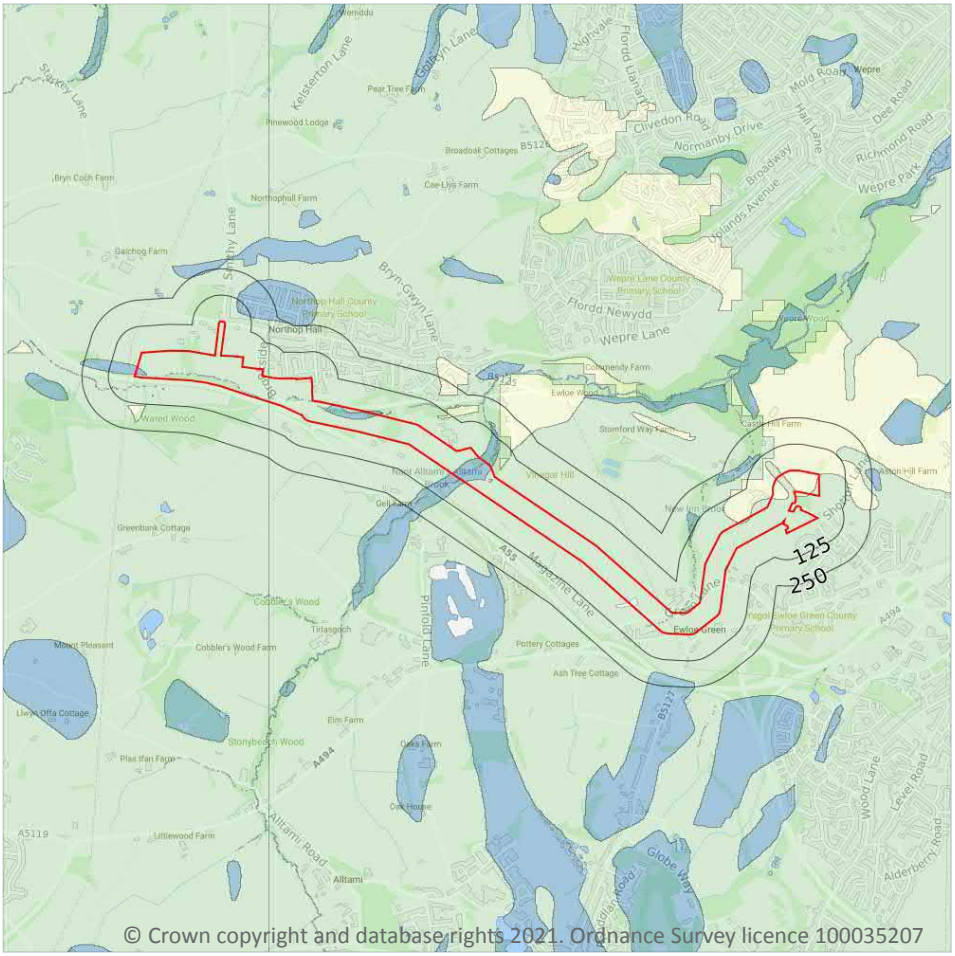
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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 | Greater than 1.0m |
| 1 in 250 year | Greater than 1.0m |
| 1 in 100 year | Greater than 1.0m |
| 1 in 30 year | Greater than 1.0m |

*This data is sourced from Ambiental Risk Analytics.*

# 9 Groundwater flooding




Site Outline

Search buffers in metres (m)

High

Moderate - High

Moderate

Low

Negligible

## 9.1 Groundwater flooding

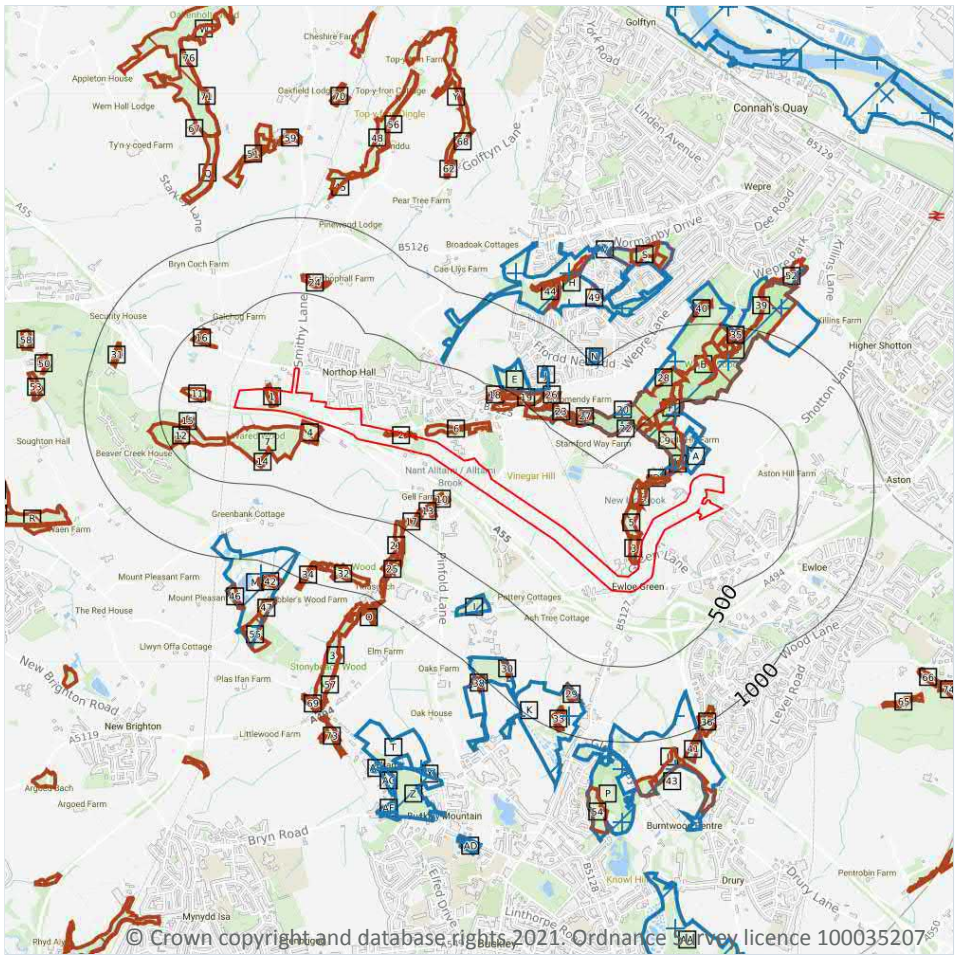
| | |
|---|---|
| **Highest risk on site** | **Moderate** |
| **Highest risk within 50m** | **Moderate** |

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 102**

*This data is sourced from Ambiental Risk Analytics.*

# 10 Environmental designations




Site Outline

Search buffers in metres (m)

- Sites of Special Scientific Interest (SSSI)
- Conserved wetland sites (Ramsar sites)
- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)
- Local Nature Reserves (LNR)
- Designated Ancient Woodland

## 10.1 Sites of Special Scientific Interest (SSSI)

| Records within 2000m | 22 |
|---|---|

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.

Features are displayed on the Environmental designations map on **page 103**

| ID | Location | Name | Data source |
|---|---|---|---|
| A | 43m NW | Connah's Quay Ponds And Woodland | Natural Resources Wales |

| ID | Location | Name | Data source |
|---|---|---|---|
| B | 98m NW | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| E | 491m N | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| H | 529m N | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| I | 567m SW | Buckley Claypits And Commons | Natural Resources Wales |
| J | 673m NE | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| K | 688m SW | Buckley Claypits And Commons | Natural Resources Wales |
| L | 752m SE | Buckley Claypits And Commons | Natural Resources Wales |
| M | 849m S | Maes Y Grug | Natural Resources Wales |
| N | 991m NE | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| P | 1040m S | Buckley Claypits And Commons | Natural Resources Wales |
| T | 1566m SW | Buckley Claypits And Commons | Natural Resources Wales |
| V | 1584m N | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| V | 1586m NE | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| X | 1681m SW | Buckley Claypits And Commons | Natural Resources Wales |
| Z | 1698m SW | Buckley Claypits And Commons | Natural Resources Wales |
| AA | 1874m S | Buckley Claypits And Commons | Natural Resources Wales |
| AB | 1887m SW | Buckley Claypits And Commons | Natural Resources Wales |
| AC | 1889m SW | Buckley Claypits And Commons | Natural Resources Wales |
| AD | 1901m SW | Buckley Claypits And Commons | Natural Resources Wales |
| AD | 1909m SW | Buckley Claypits And Commons | Natural Resources Wales |
| AE | 1999m SW | Buckley Claypits And Commons | Natural Resources Wales |

*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** | **20** |
|---|---|

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.

Features are displayed on the Environmental designations map on **page 103**

| ID | Location | Name | Features of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| A | 43m NW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| B | 98m NW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| E | 491m N | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |

| ID | Location | Name | Features of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| I | 567m SW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| J | 673m NE | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| K | 688m SW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| L | 752m SE | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |

| ID | Location | Name | Features of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| M | 849m S | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| H | 948m N | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| N | 991m NE | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| P | 1040m S | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |

| ID | Location | Name | Features of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| T | 1566m SW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| V | 1584m N | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| V | 1586m NE | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| X | 1681m SW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |

| ID | Location | Name | Features of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| Z | 1698m SW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| AA | 1874m S | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| AB | 1887m SW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| AC | 1889m SW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |

| ID | Location | Name | Features of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| AE | 1999m SW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |

*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** | **2** |
|---|---|

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.

Features are displayed on the Environmental designations map on **page 103**

| ID | Location | Name | Data source |
|---|---|---|---|
| 49 | 1255m NE | GATHERING GROUNDS WOODS & LLWYNI POND | Natural Resources Wales |

| ID | Location | Name | Data source |
|---|---|---|---|
| S | 1387m N | GATHERING GROUNDS WOODS & LLWYNI POND | Natural Resources Wales |

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

## 10.7 Designated Ancient Woodland

| **Records within 2000m** | **107** |
|---|---|

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 103**

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| **1** | **On site** | **Unknown** | **Ancient Semi Natural Woodland** |
| **2** | **On site** | **Unknown** | **Restored Ancient Woodland Site** |
| 3 | 14m W | Unknown | Ancient Semi Natural Woodland |
| 4 | 27m S | Unknown | Plantation on Ancient Woodland Site |
| 5 | 27m NW | Unknown | Restored Ancient Woodland Site |
| 6 | 31m N | Unknown | Restored Ancient Woodland Site |
| 7 | 70m S | Unknown | Restored Ancient Woodland Site |
| 8 | 92m NW | Unknown | Restored Ancient Woodland Site |
| C | 116m NW | Unknown | Restored Ancient Woodland Site |
| C | 145m NW | Unknown | Plantation on Ancient Woodland Site |
| 9 | 146m NW | Unknown | Restored Ancient Woodland Site |
| D | 148m W | Unknown | Restored Ancient Woodland Site |
| D | 153m W | Unknown | Restored Ancient Woodland Site |
| 10 | 164m SW | Unknown | Ancient Semi Natural Woodland |
| 11 | 178m W | Unknown | Restored Ancient Woodland Site |
| 12 | 216m S | Unknown | Restored Ancient Woodland Site |
| 13 | 237m SW | Unknown | Ancient Semi Natural Woodland |
| 14 | 260m S | Unknown | Restored Ancient Woodland Site |

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| 15 | 284m W | Unknown | Ancient Semi Natural Woodland |
| 16 | 327m NW | Unknown | Restored Ancient Woodland Site |
| 17 | 351m SW | Unknown | Restored Ancient Woodland Site |
| E | 351m N | Unknown | Ancient Semi Natural Woodland |
| F | 394m NW | Unknown | Plantation on Ancient Woodland Site |
| 18 | 402m N | Unknown | Restored Ancient Woodland Site |
| 19 | 440m NE | Unknown | Restored Ancient Woodland Site |
| 20 | 441m NE | Unknown | Ancient Semi Natural Woodland |
| F | 444m NW | Unknown | Restored Ancient Woodland Site |
| E | 465m NE | Unknown | Ancient Semi Natural Woodland |
| 21 | 470m SW | Unknown | Ancient Semi Natural Woodland |
| G | 479m N | Unknown | Restored Ancient Woodland Site |
| F | 495m NW | Unknown | Restored Ancient Woodland Site |
| F | 504m NW | Unknown | Restored Ancient Woodland Site |
| 22 | 540m NW | Unknown | Ancient Semi Natural Woodland |
| F | 548m N | Unknown | Restored Ancient Woodland Site |
| 23 | 550m NE | Unknown | Ancient Semi Natural Woodland |
| 24 | 553m N | Unknown | Ancient Semi Natural Woodland |
| 25 | 574m SW | Unknown | Restored Ancient Woodland Site |
| F | 577m N | Unknown | Restored Ancient Woodland Site |
| 26 | 586m NE | Unknown | Restored Ancient Woodland Site |
| G | 613m N | Unknown | Ancient Semi Natural Woodland |
| 27 | 656m NE | Unknown | Ancient Semi Natural Woodland |
| 28 | 668m N | Unknown | Ancient Semi Natural Woodland |
| 29 | 688m SW | Unknown | Restored Ancient Woodland Site |
| G | 811m N | Unknown | Plantation on Ancient Woodland Site |
| 30 | 814m SW | Unknown | Ancient Semi Natural Woodland |
| 31 | 823m W | Unknown | Restored Ancient Woodland Site |

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| 32 | 838m S | Unknown | Ancient Semi Natural Woodland |
| 33 | 843m SW | Unknown | Restored Ancient Woodland Site |
| G | 852m N | Unknown | Plantation on Ancient Woodland Site |
| 34 | 867m S | Unknown | Restored Ancient Woodland Site |
| 35 | 904m N | Unknown | Ancient Semi Natural Woodland |
| 36 | 916m SE | Unknown | Ancient Semi Natural Woodland |
| 37 | 984m SW | Unknown | Restored Ancient Woodland Site |
| 38 | 992m SW | Unknown | Restored Ancient Woodland Site |
| O | 1005m SW | Unknown | Restored Ancient Woodland Site |
| 39 | 1023m N | Unknown | Ancient Semi Natural Woodland |
| 40 | 1024m N | Unknown | Ancient Semi Natural Woodland |
| 41 | 1030m SE | Unknown | Ancient Semi Natural Woodland |
| O | 1052m SW | Unknown | Ancient Semi Natural Woodland |
| 42 | 1064m S | Unknown | Restored Ancient Woodland Site |
| 43 | 1078m S | Unknown | Ancient Semi Natural Woodland |
| 44 | 1115m NE | Unknown | Restored Ancient Woodland Site |
| 45 | 1157m N | Unknown | Restored Ancient Woodland Site |
| 46 | 1169m S | Unknown | Ancient Semi Natural Woodland |
| 47 | 1199m SW | Unknown | Restored Ancient Woodland Site |
| 48 | 1212m N | Unknown | Restored Ancient Woodland Site |
| H | 1234m N | Unknown | Restored Ancient Woodland Site |
| 50 | 1262m W | Unknown | Restored Ancient Woodland Site |
| 51 | 1268m N | Unknown | Restored Ancient Woodland Site |
| 52 | 1281m N | Unknown | Ancient Semi Natural Woodland |
| 53 | 1286m W | Unknown | Ancient Semi Natural Woodland |
| Q | 1286m N | Unknown | Ancient Semi Natural Woodland |
| Q | 1297m N | Unknown | Ancient Semi Natural Woodland |
| 54 | 1314m S | Unknown | Ancient Semi Natural Woodland |

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| R | 1322m SW | Unknown | Plantation on Ancient Woodland Site |
| H | 1322m NE | Unknown | Restored Ancient Woodland Site |
| R | 1334m SW | Unknown | Plantation on Ancient Woodland Site |
| 55 | 1341m SW | Unknown | Restored Ancient Woodland Site |
| 56 | 1345m N | Unknown | Restored Ancient Woodland Site |
| 57 | 1404m S | Unknown | Ancient Semi Natural Woodland |
| S | 1409m N | Unknown | Ancient Semi Natural Woodland |
| 58 | 1410m W | Unknown | Ancient Semi Natural Woodland |
| R | 1453m SW | Unknown | Restored Ancient Woodland Site |
| S | 1456m N | Unknown | Restored Ancient Woodland Site |
| 59 | 1491m N | Unknown | Restored Ancient Woodland Site |
| - | 1535m W | Unknown | Ancient Semi Natural Woodland |
| S | 1551m N | Unknown | Restored Ancient Woodland Site |
| - | 1580m W | Unknown | Restored Ancient Woodland Site |
| - | 1582m W | Unknown | Plantation on Ancient Woodland Site |
| - | 1594m W | Unknown | Ancient Semi Natural Woodland |
| 62 | 1602m NE | Unknown | Restored Ancient Woodland Site |
| 63 | 1606m W | Unknown | Restored Ancient Woodland Site |
| 64 | 1626m SW | Unknown | Ancient Semi Natural Woodland |
| W | 1632m N | Unknown | Restored Ancient Woodland Site |
| 65 | 1682m SE | Unknown | Restored Ancient Woodland Site |
| Y | 1689m NE | Unknown | Ancient Semi Natural Woodland |
| 66 | 1690m SE | Unknown | Ancient Semi Natural Woodland |
| 67 | 1707m NW | Unknown | Restored Ancient Woodland Site |
| 68 | 1729m NE | Unknown | Ancient Semi Natural Woodland |
| 69 | 1733m S | Unknown | Restored Ancient Woodland Site |
| 70 | 1766m N | Unknown | Ancient Semi Natural Woodland |
| 71 | 1797m N | Unknown | Restored Ancient Woodland Site |

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| - | 1813m SW | Unknown | Ancient Semi Natural Woodland |
| 73 | 1825m SW | Unknown | Ancient Semi Natural Woodland |
| 74 | 1857m SE | Unknown | Plantation on Ancient Woodland Site |
| - | 1934m W | Unknown | Ancient Semi Natural Woodland |
| 76 | 1959m N | 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.*

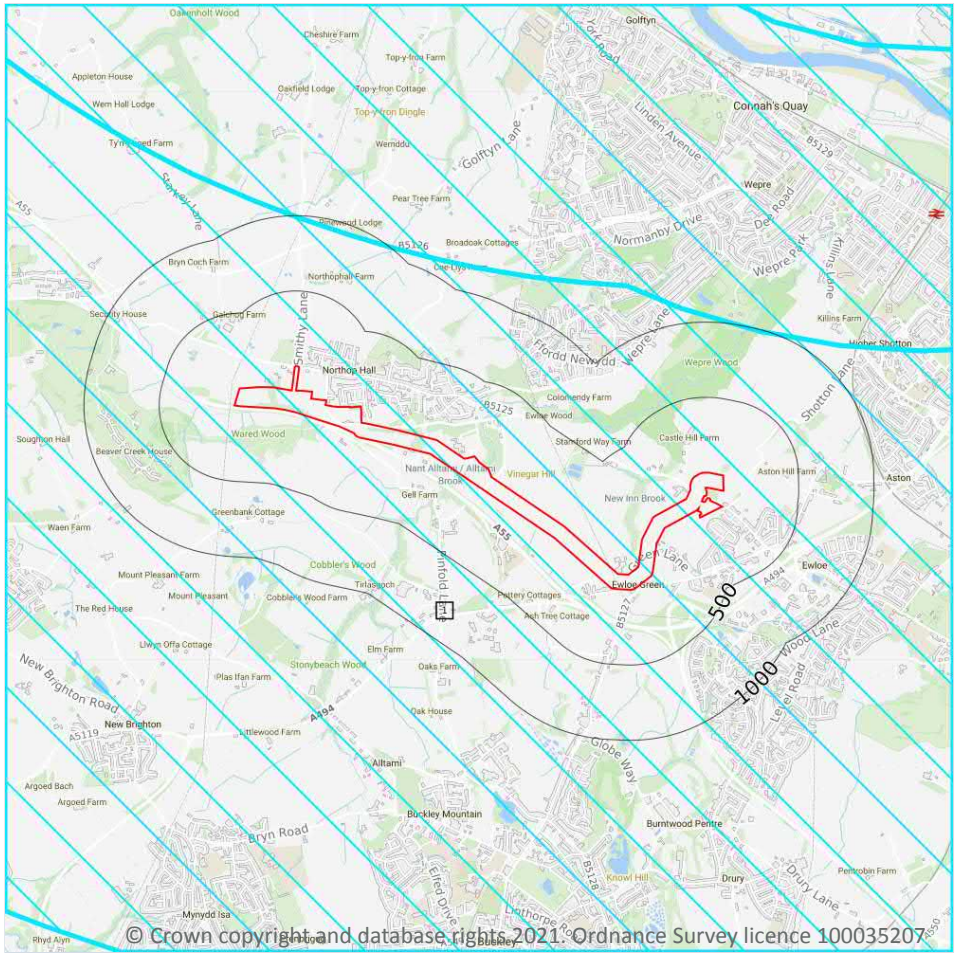
## 10.16 Nitrate Vulnerable Zones

| 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 118**

| ID | Location | Type of developments requiring consultation |
|---|---|---|
| **1** | **On site** | **Infrastructure - Airports, helipads and other aviation proposals.<br>Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons > 4000m².<br>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.*

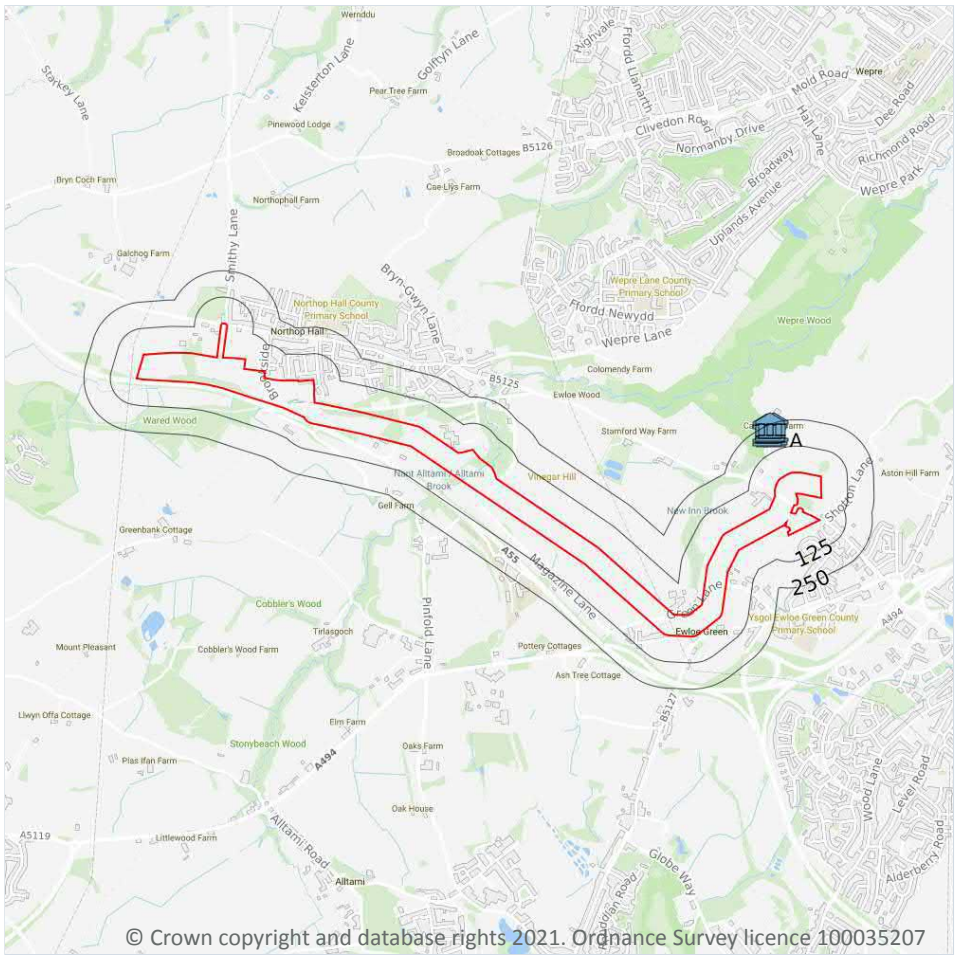
## 10.18 SSSI Units

| 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 | 6 |
|---|---|

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.

Features are displayed on the Visual and cultural designations map on **page 120**

| ID | Location | Name | Grade | Reference Number | Listed date |
|---|---|---|---|---|---|
| A | 214m N | Low Attached Extensions At Castle Hill Farm, Located At The End Of Its Own Lane, Off Holywell Road, And Forming One Side Of An Irregular Courtyard | II | 15106 | 16/11/1994 |
| A | 215m N | Main House At Castle Hill Farm, Located At The End Of Its Own Lane, Off Holywell Road, And Forming One Side Of An Irregular Courtyard | II | 15105 | 16/11/1994 |
| A | 225m NW | Former Stable Block At Castle Hill Farm, Opposite The Brewery To The Se | II | 15110 | 16/11/1994 |

| ID | Location | Name | Grade | Reference Number | Listed date |
|---|---|---|---|---|---|
| A | 231m N | Granary At Castle Hill Farm, Adjacent To The Main House, To The N | II | 15107 | 16/11/1994 |
| A | 239m NW | Adjacent Malting Tower At Castle Hill Farm, Opposite The Main House To The Ne | II | 15109 | 16/11/1994 |
| A | 240m N | Former Brewery At Castle Hill Farm, Opposite The Main House To The NE | II | 15108 | 16/11/1994 |

*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.*

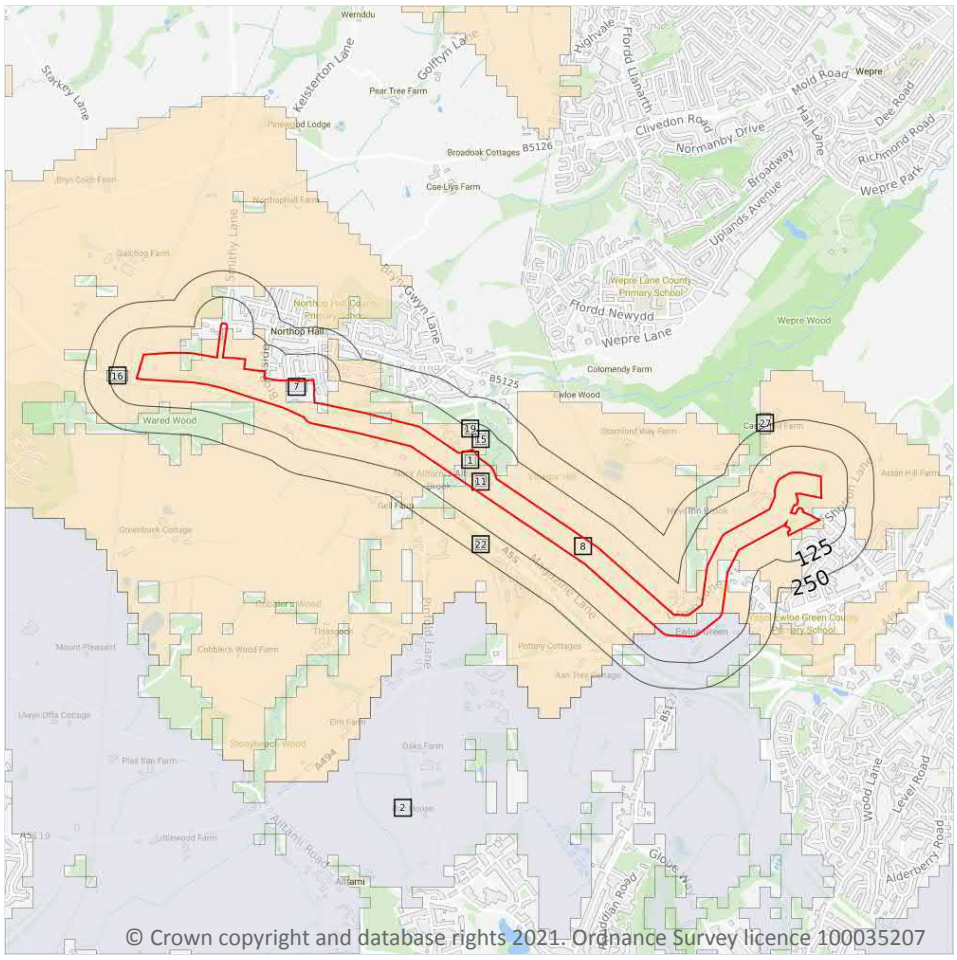
## 11.7 Registered Parks and Gardens

| 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 | 10 |
|---|---|

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.

Features are displayed on the Agricultural designations map on **page 123**

| ID | Location | Classification | Description |
|---|---|---|---|
| **1** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |
| **2** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |
| **7** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |

| ID | Location | Classification | Description |
|---|---|---|---|
| **8** | **On site** | **Grade 3a** | **Good to moderate quality agricultural land** |
| **11** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |
| 15 | 28m NE | Grade 3b | Moderate quality agricultural land |
| 16 | 42m W | Grade 3b | Moderate quality agricultural land |
| 19 | 75m N | Grade 3b | Moderate quality agricultural land |
| 22 | 165m SW | Grade 3b | Moderate quality agricultural land |
| 27 | 208m NW | Grade 3b | Moderate quality agricultural land |

*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.*

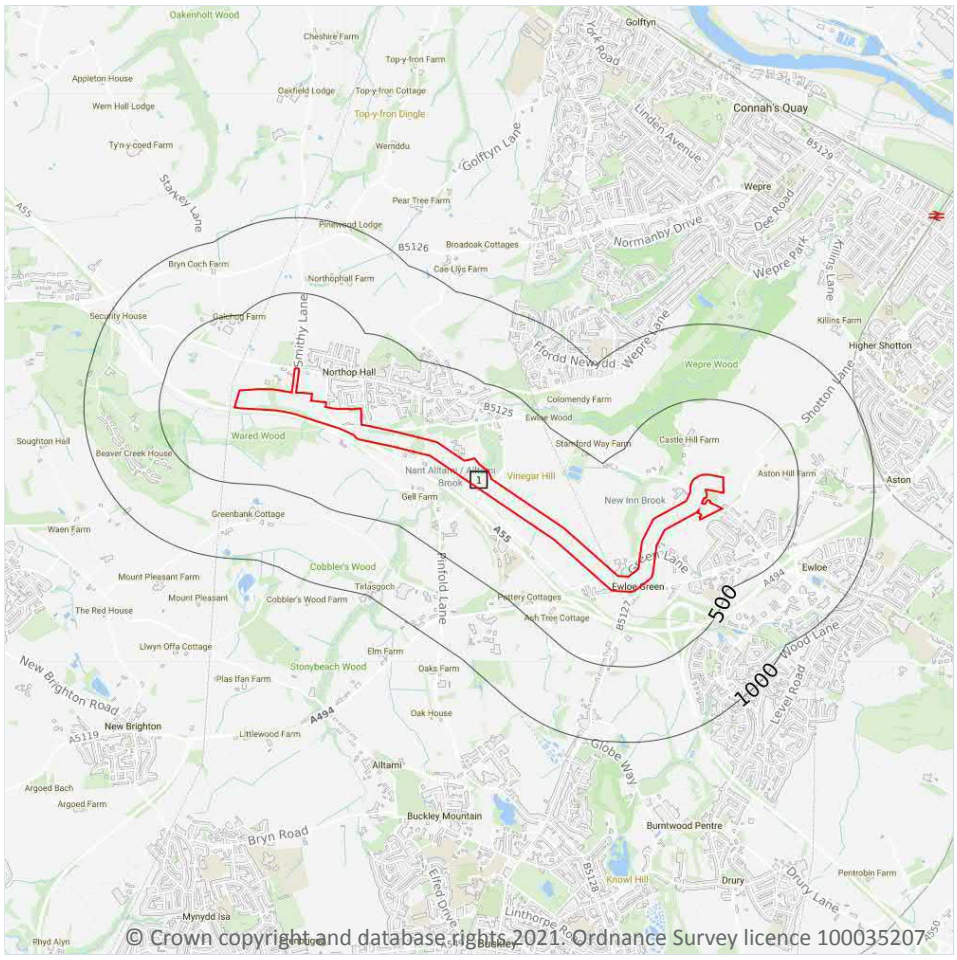
## 13.4 Limestone Pavement Orders

| 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




## 14.1 10k Availability

| Records within 500m | 1 |
|---|---|

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 127**

| ID | Location | Artificial | Superficial | Bedrock | Mass movement | Sheet No. |
|---|---|---|---|---|---|---|
| **1** | **On site** | **No coverage** | **No coverage** | **No coverage** | **No coverage** | **NoCov** |

*This data is sourced from the British Geological Survey.*

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

## 14.2 Artificial and made ground (10k)

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

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.

*This data is sourced from the British Geological Survey.*

# Geology 1:10,000 scale - Superficial

## 14.3 Superficial geology (10k)

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

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.

*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

## 14.5 Bedrock geology (10k)

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

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.

*This data is sourced from the British Geological Survey.*

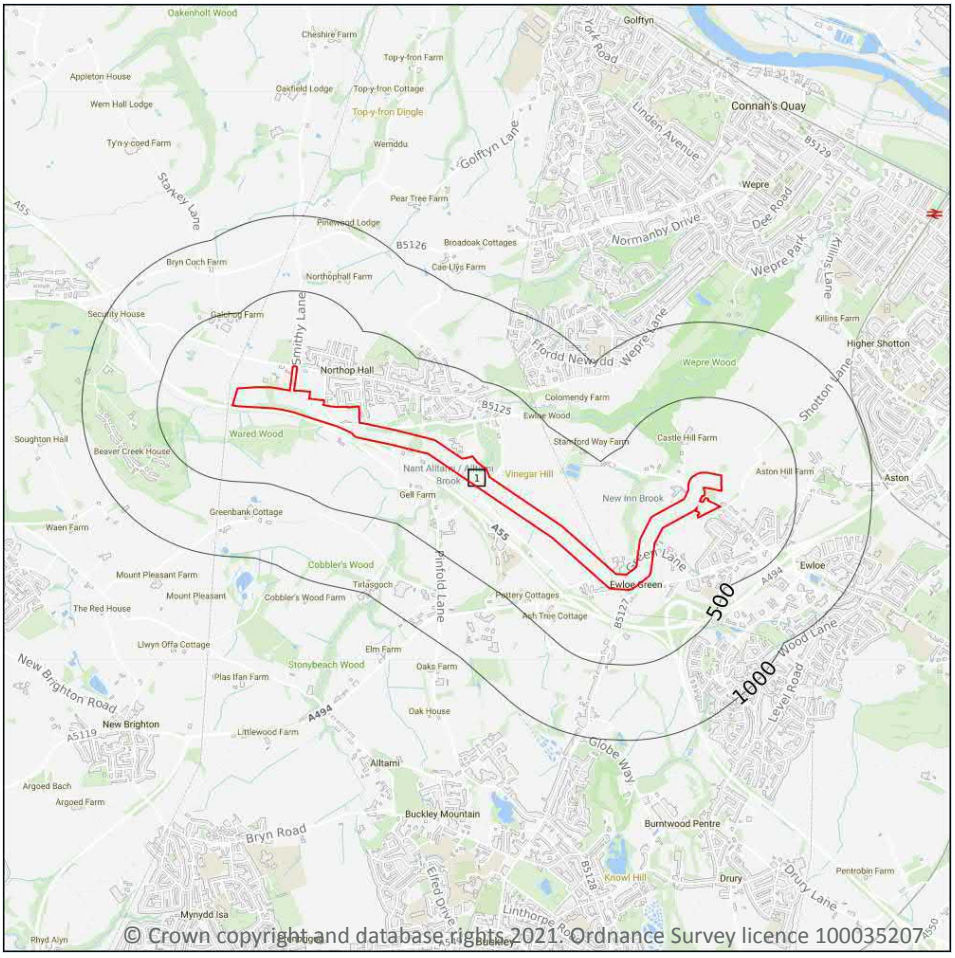
## 14.6 Bedrock faults and other linear features (10k)

| 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




## 15.1 50k Availability

| Records within 500m | 1 |
|---|---|

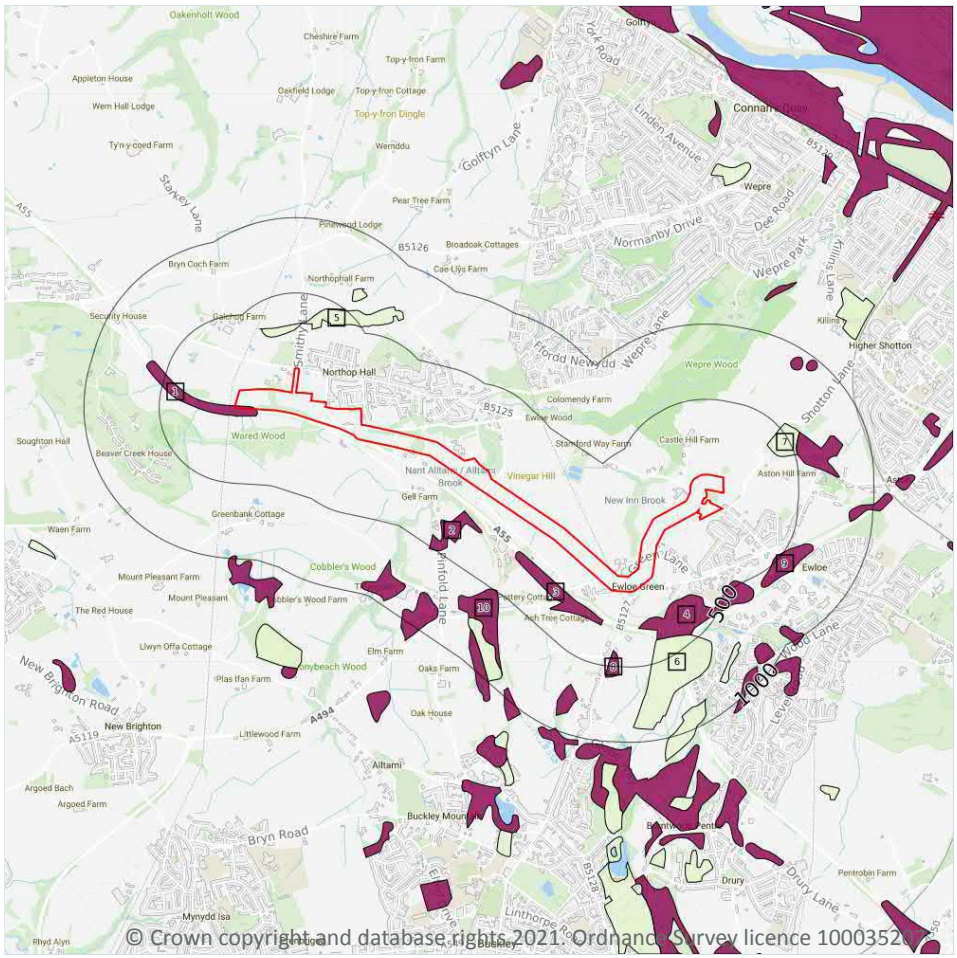
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme. Where 50k data is not available, this area has been filled in with 625k scale data.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 131**

| ID | Location | Artificial | Superficial | Bedrock | Mass movement | Sheet No. |
|---|---|---|---|---|---|---|
| **1** | **On site** | **Full** | **Full** | **Full** | **Full** | **EW108_flint_v4** |

*This data is sourced from the British Geological Survey.*

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




## 15.2 Artificial and made ground (50k)

| Records within 500m | 10 |
|---|---|

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 132**

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| **1** | **On site** | **MGR-ARTDP** | **MADE GROUND (UNDIVIDED)** | **ARTIFICIAL DEPOSIT** |
| 2 | 176m SW | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 3 | 192m SW | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 4 | 209m SE | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| 5 | 240m N | WMGR-ARTDP | INFILLED GROUND | ARTIFICIAL DEPOSIT |
| 6 | 358m SE | WMGR-ARTDP | INFILLED GROUND | ARTIFICIAL DEPOSIT |
| 7 | 363m NE | WMGR-ARTDP | INFILLED GROUND | ARTIFICIAL DEPOSIT |
| 8 | 395m S | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 9 | 477m SE | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 10 | 493m SW | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |

*This data is sourced from the British Geological Survey.*

## 15.3 Artificial ground permeability (50k)

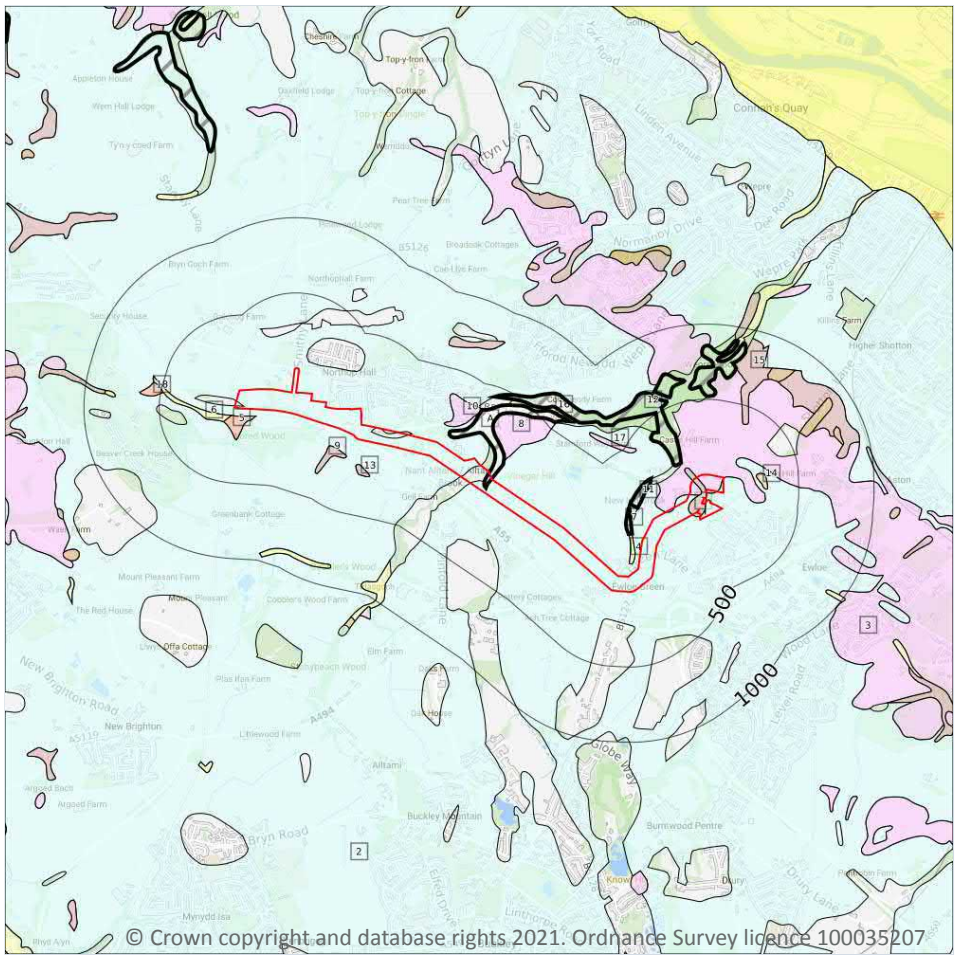
| **Records within 50m** | **1** |
|---|---|

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** |

*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** **16**

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 134**

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| 1 | On site | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 2 | On site | TILLD-DMTN | TILL, DEVENSIAN | DIAMICTON |
| 3 | On site | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL |

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| **A** | **On site** | **SUPD-SED** | **SUPERFICIAL DEPOSITS** | **SEDIMENT** |
| 4 | 33m W | ALV-XCZSV | ALLUVIUM | CLAY, SILT, SAND AND GRAVEL |
| 5 | 45m S | ALF-XSV | ALLUVIAL FAN DEPOSITS | SAND AND GRAVEL |
| 6 | 56m S | ALV-XCZSV | ALLUVIUM | CLAY, SILT, SAND AND GRAVEL |
| 8 | 126m NE | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL |
| 9 | 128m SW | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 10 | 129m NE | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL |
| 13 | 164m S | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 14 | 221m E | LDE-XCZ | LACUSTRINE DEPOSITS | CLAY AND SILT |
| 15 | 379m N | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 16 | 418m NE | ALV-XCZSV | ALLUVIUM | CLAY, SILT, SAND AND GRAVEL |
| 17 | 426m NW | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL |
| 18 | 485m W | ALF-XSV | ALLUVIAL FAN DEPOSITS | SAND AND GRAVEL |

*This data is sourced from the British Geological Survey.*

## 15.5 Superficial permeability (50k)

**Records within 50m** **6**

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** | **Very Low** |
| **On site** | **Mixed** | **High** | **Low** |
| **On site** | **Mixed** | **Very High** | **Very Low** |
| **On site** | **Intergranular** | **Very High** | **High** |
| 33m SE | Intergranular | High | Very Low |
| 45m W | Intergranular | Very High | High |

*This data is sourced from the British Geological Survey.*

## 15.6 Landslip (50k)

| Records within 500m | 4 |
|---|---|

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.

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

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| **A** | **On site** | **SLIP-UKNOWN** | **LANDSLIDE DEPOSITS** | **UNKNOWN/UNCLASSIFIED ENTRY** |
| 7 | 82m NW | SLIP-UKNOWN | LANDSLIDE DEPOSITS | UNKNOWN/UNCLASSIFIED ENTRY |
| 11 | 129m NW | SLIP-UKNOWN | LANDSLIDE DEPOSITS | UNKNOWN/UNCLASSIFIED ENTRY |
| 12 | 138m NW | SLIP-UKNOWN | LANDSLIDE DEPOSITS | UNKNOWN/UNCLASSIFIED ENTRY |

*This data is sourced from the British Geological Survey.*

## 15.7 Landslip permeability (50k)

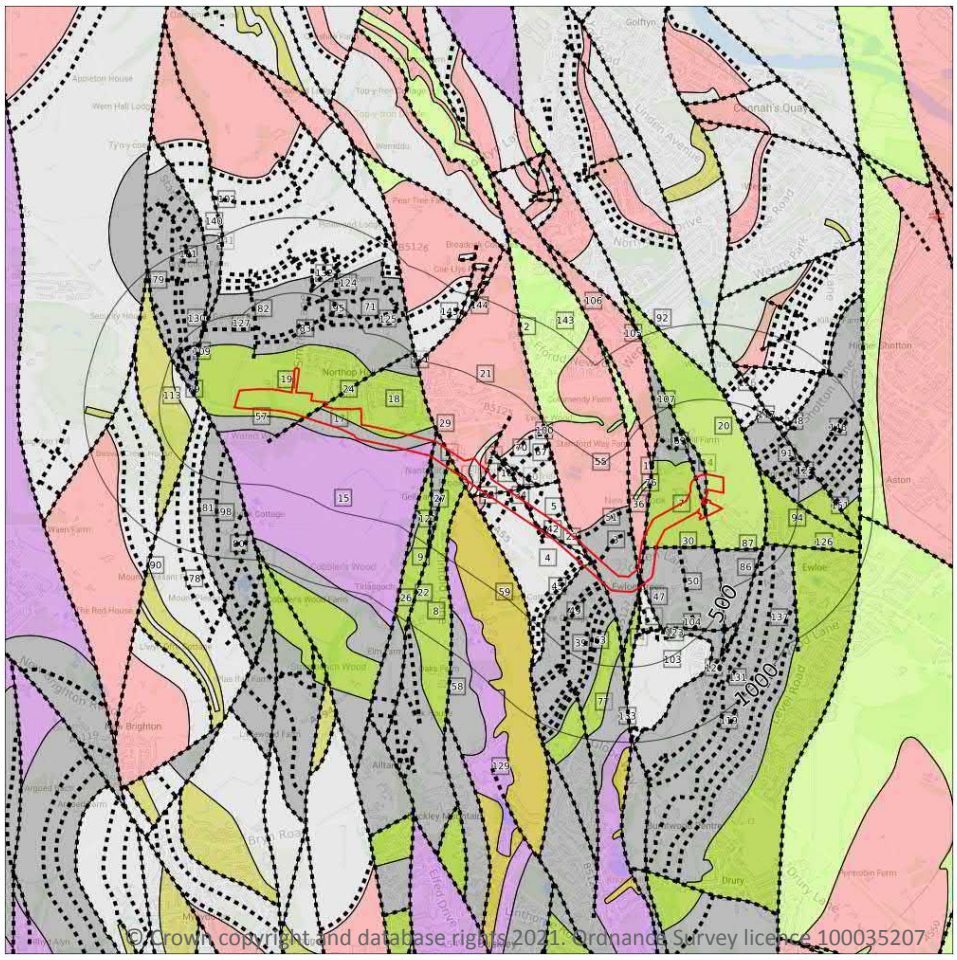
| Records within 50m | 1 |
|---|---|

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).

| Flow type | Maximum permeability | Minimum permeability |
|---|---|---|
| Mixed | Very High | Low |

*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 | 56 |
|---|---|

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 137**

| ID | Location | LEX Code | Description | Rock age |
|---|---|---|---|---|
| **1** | **On site** | **PLCM-MDSS** | **PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| **3** | **On site** | **PMCM-MDSS** | **PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |

| ID | Location | LEX Code | Description | Rock age |
|---|---|---|---|---|
| 4 | On site | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 5 | On site | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 6 | On site | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 7 | On site | HLR-SDST | HOLLIN ROCK - SANDSTONE | WESTPHALIAN |
| 8 | On site | HLR-SDST | HOLLIN ROCK - SANDSTONE | WESTPHALIAN |
| 9 | On site | HLR-SDST | HOLLIN ROCK - SANDSTONE | WESTPHALIAN |
| 10 | On site | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 11 | On site | GS-SDAR | GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED | NAMURIAN |
| 12 | On site | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 13 | On site | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 14 | On site | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 15 | On site | ETM-MDSC | ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE | WESTPHALIAN |
| 16 | On site | GS-SDAR | GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED | NAMURIAN |
| 17 | On site | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 18 | On site | HLR-SDST | HOLLIN ROCK - SANDSTONE | WESTPHALIAN |
| 19 | On site | HLR-SDST | HOLLIN ROCK - SANDSTONE | WESTPHALIAN |
| 20 | On site | PMCM-SDST | PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE | WESTPHALIAN |
| 21 | On site | GS-SDAR | GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED | NAMURIAN |
| 39 | On site | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |

| ID | Location | LEX Code | Description | Rock age |
|---|---|---|---|---|
| **50** | **On site** | **PMCM-MDSS** | **PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| 53 | 12m SW | GS-SDAR | GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED | NAMURIAN |
| 54 | 13m SE | HLR-SDST | HOLLIN ROCK - SANDSTONE | WESTPHALIAN |
| 55 | 17m NE | GS-SDAR | GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED | NAMURIAN |
| 57 | 37m S | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 59 | 39m SW | ETM-SDST | ETRURIA FORMATION - SANDSTONE | WESTPHALIAN |
| 60 | 58m NE | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 67 | 111m NE | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 69 | 113m NW | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 71 | 125m N | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 76 | 168m NW | BSG-MDST | BOWLAND SHALE FORMATION - MUDSTONE | VISEAN |
| 77 | 179m S | HLR-SDST | HOLLIN ROCK - SANDSTONE | WESTPHALIAN |
| 78 | 181m SW | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 80 | 181m SW | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 86 | 229m SE | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 89 | 233m W | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 91 | 239m E | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 94 | 239m E | HLR-SDST | HOLLIN ROCK - SANDSTONE | WESTPHALIAN |
| 101 | 286m W | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |

| ID | Location | LEX Code | Description | Rock age |
|---|---|---|---|---|
| 103 | 286m S | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 105 | 288m NW | GS-SDAR | GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED | NAMURIAN |
| 109 | 295m W | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 111 | 302m NE | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 113 | 305m W | PLCM-SDST | PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE | WESTPHALIAN |
| 116 | 335m NE | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 119 | 341m SE | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 121 | 350m SW | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 129 | 379m SW | ETM-MDSC | ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE | WESTPHALIAN |
| 133 | 393m S | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 141 | 449m NW | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 143 | 471m NE | BSG-MDST | BOWLAND SHALE FORMATION - MUDSTONE | VISEAN |
| 145 | 476m N | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 146 | 487m NE | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 148 | 487m NE | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 151 | 496m E | HLR-SDST | HOLLIN ROCK - SANDSTONE | WESTPHALIAN |

*This data is sourced from the British Geological Survey.*

## 15.9 Bedrock permeability (50k)

| Records within 50m | 16 |
|---|---|

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** | **High** | **Low** |
| **On site** | **Fracture** | **High** | **Low** |
| **On site** | **Fracture** | **High** | **Moderate** |
| **On site** | **Fracture** | **Moderate** | **Low** |
| **On site** | **Fracture** | **Moderate** | **Low** |
| **On site** | **Fracture** | **High** | **Moderate** |
| **On site** | **Fracture** | **High** | **Moderate** |
| **On site** | **Fracture** | **Moderate** | **Low** |
| **On site** | **Fracture** | **Moderate** | **Low** |
| **On site** | **Fracture** | **Moderate** | **Low** |
| **On site** | **Fracture** | **High** | **Low** |
| **On site** | **Fracture** | **High** | **Moderate** |
| 12m SW | Fracture | Moderate | Low |
| 13m SE | Fracture | High | Moderate |
| 39m S | Fracture | High | Moderate |

*This data is sourced from the British Geological Survey.*

## 15.10 Bedrock faults and other linear features (50k)

| Records within 500m | 95 |
|---|---|

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.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 137**

| ID | Location | Category | Description |
|---|---|---|---|
| 2 | On site | FAULT | Fault, inferred, displacement unknown |
| 22 | On site | FAULT | Fault, inferred, displacement unknown |
| 23 | On site | FAULT | Fault, inferred, displacement unknown |
| 24 | On site | FAULT | Fault, inferred, displacement unknown |
| 25 | On site | FAULT | Fault, inferred, displacement unknown |
| 26 | On site | FAULT | Fault, inferred, displacement unknown |
| 27 | On site | FAULT | Fault, inferred, displacement unknown |
| 28 | On site | FAULT | Fault, inferred, displacement unknown |
| 29 | On site | FAULT | Fault, inferred, displacement unknown |
| 30 | On site | FAULT | Fault, inferred, displacement unknown |
| 31 | On site | FAULT | Fault, inferred, displacement unknown |
| 32 | On site | FAULT | Fault, inferred, displacement unknown |
| 33 | On site | FAULT | Fault, inferred, displacement unknown |
| 34 | On site | FAULT | Fault, inferred, displacement unknown |
| 35 | On site | FAULT | Fault, inferred, displacement unknown |
| 36 | On site | FAULT | Fault, inferred, displacement unknown |
| 37 | On site | ROCK | Coal seam, inferred |
| 38 | On site | ROCK | Coal seam, inferred |
| 40 | On site | ROCK | Coal seam, inferred |
| 41 | On site | ROCK | Coal seam, inferred |
| 42 | On site | ROCK | Coal seam, inferred |
| 43 | On site | ROCK | Coal seam, inferred |
| 44 | On site | ROCK | Coal seam, inferred |
| 45 | On site | ROCK | Coal seam, inferred |
| 46 | On site | ROCK | Coal seam, inferred |
| 47 | On site | ROCK | Coal seam, inferred |
| 48 | On site | ROCK | Coal seam, inferred |
| 49 | On site | ROCK | Coal seam, inferred |

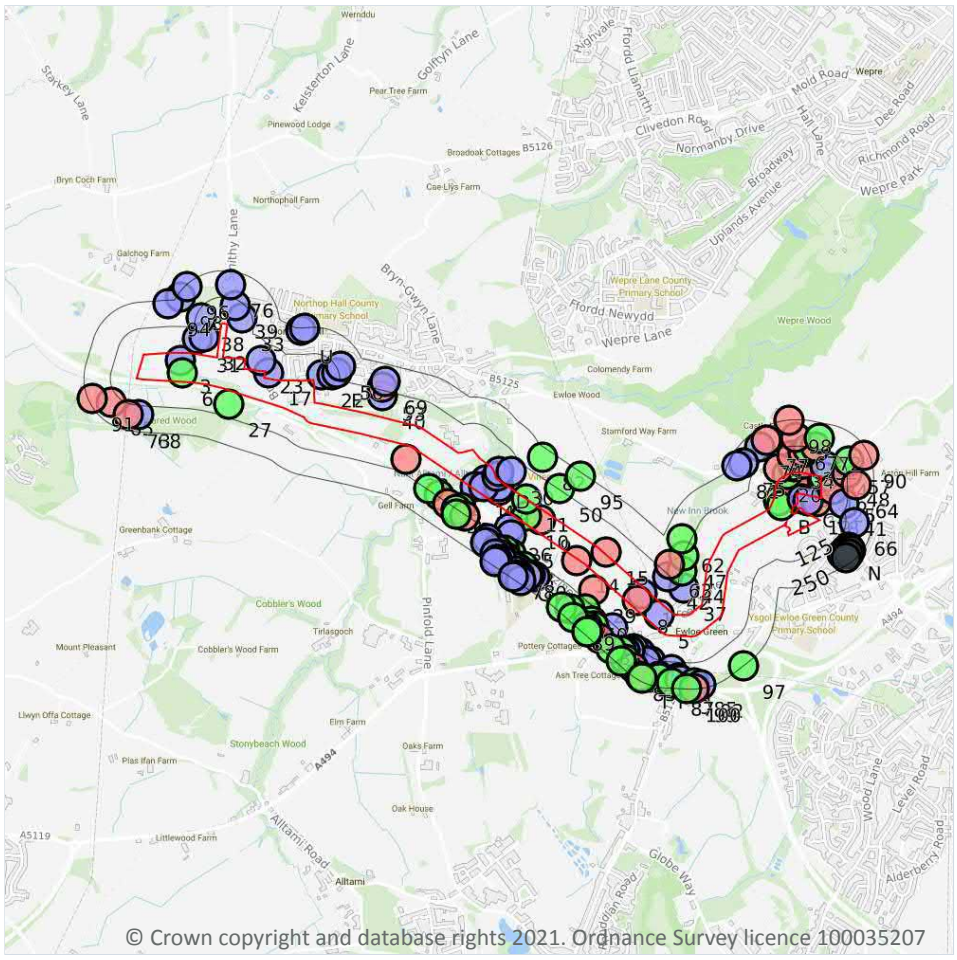
| ID | Location | Category | Description |
|---|---|---|---|
| 51 | 7m NE | ROCK | Coal seam, inferred |
| 52 | 10m SW | ROCK | Coal seam, inferred |
| 56 | 33m SW | ROCK | Coal seam, inferred |
| 58 | 39m SW | FAULT | Fault, inferred, displacement unknown |
| 61 | 58m NE | ROCK | Coal seam, inferred |
| 62 | 58m NE | FAULT | Fault, inferred, displacement unknown |
| 63 | 60m S | ROCK | Coal seam, inferred |
| 64 | 77m SE | ROCK | Coal seam, inferred |
| 65 | 84m N | ROCK | Coal seam, inferred |
| 66 | 94m NE | ROCK | Coal seam, inferred |
| 68 | 111m NE | FAULT | Fault, inferred, displacement unknown |
| 70 | 116m NE | ROCK | Coal seam, inferred |
| 72 | 125m S | ROCK | Coal seam, inferred |
| 73 | 135m NE | ROCK | Coal seam, inferred |
| 74 | 135m NE | ROCK | Coal seam, inferred |
| 75 | 137m SE | ROCK | Coal seam, inferred |
| 79 | 181m SW | FAULT | Fault, inferred |
| 81 | 181m SW | ROCK | Coal seam, inferred |
| 82 | 190m N | FAULT | Fault, inferred, displacement unknown |
| 83 | 194m N | ROCK | Coal seam, inferred |
| 84 | 196m W | ROCK | Coal seam, inferred |
| 85 | 198m S | ROCK | Coal seam, inferred |
| 87 | 229m SE | FAULT | Fault, inferred, displacement unknown |
| 88 | 230m NW | ROCK | Coal seam, inferred |
| 90 | 233m W | FAULT | Fault, inferred, displacement unknown |
| 92 | 239m E | FAULT | Fault, inferred, displacement unknown |
| 93 | 239m E | FAULT | Fault, inferred, displacement unknown |
| 95 | 240m N | ROCK | Coal seam, inferred |

| ID | Location | Category | Description |
|---|---|---|---|
| 96 | 241m NE | ROCK | Coal seam, inferred |
| 97 | 247m NE | ROCK | Coal seam, inferred |
| 98 | 272m S | ROCK | Coal seam, inferred |
| 99 | 276m E | ROCK | Coal seam, inferred |
| 100 | 283m NE | ROCK | Coal seam, inferred |
| 102 | 286m W | FAULT | Fault, inferred, displacement unknown |
| 104 | 286m S | FAULT | Fault, inferred, displacement unknown |
| 106 | 288m NW | FAULT | Fault, inferred, displacement unknown |
| 107 | 288m NW | FAULT | Fault, inferred, displacement unknown |
| 108 | 295m W | FAULT | Fault, inferred, displacement unknown |
| 110 | 298m NE | FAULT | Fault, inferred, displacement unknown |
| 112 | 303m SE | ROCK | Coal seam, inferred |
| 114 | 315m E | ROCK | Coal seam, inferred |
| 115 | 320m SE | ROCK | Coal seam, inferred |
| 117 | 335m NE | ROCK | Coal seam, inferred |
| 118 | 336m W | ROCK | Coal seam, inferred |
| 120 | 341m SE | ROCK | Coal seam, inferred |
| 122 | 353m E | ROCK | Coal seam, inferred |
| 123 | 358m SE | ROCK | Coal seam, inferred |
| 124 | 360m NE | FAULT | Fault, inferred, displacement unknown |
| 125 | 360m NE | ROCK | Coal seam, inferred |
| 126 | 363m SE | FAULT | Fault, inferred, displacement unknown |
| 127 | 371m NW | ROCK | Coal seam, inferred |
| 128 | 378m N | ROCK | Coal seam, inferred |
| 130 | 388m NW | ROCK | Coal seam, inferred |
| 131 | 389m SE | ROCK | Coal seam, inferred |
| 132 | 389m N | FAULT | Fault, inferred, displacement unknown |
| 134 | 400m E | ROCK | Coal seam, inferred |

| ID | Location | Category | Description |
|---|---|---|---|
| 135 | 401m NW | FAULT | Fault, inferred, displacement unknown |
| 136 | 404m W | ROCK | Coal seam, inferred |
| 137 | 414m SE | ROCK | Coal seam, inferred |
| 138 | 431m W | ROCK | Coal seam, inferred |
| 139 | 433m N | ROCK | Coal seam, inferred |
| 140 | 449m NW | FAULT | Fault, inferred, displacement unknown |
| 142 | 467m NW | ROCK | Coal seam, inferred |
| 144 | 476m N | FAULT | Fault, inferred, displacement unknown |
| 147 | 487m NE | FAULT | Fault, inferred, displacement unknown |
| 149 | 487m NE | ROCK | Coal seam, inferred |
| 150 | 490m NE | ROCK | Coal seam, inferred |

*This data is sourced from the British Geological Survey.*

# 16 Boreholes




## 16.1 BGS Boreholes

| Records within 250m | 163 |
|---|---|

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 146**

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 1 | On site | 328490 366590 | UNNAMED SHAFT | -2.0 | N | 148033 |
| 2 | On site | 327750 367130 | SYCAMORE COLLIERY, ADIT | -2.0 | N | 147859 |
| 3 | On site | 326300 367700 | MAIN COLLIERY, MINE PLAN | -2.0 | N | 147685 |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| **4** | **On site** | **327740 367100** | **SYCAMORE COLLIERY, ADIT** | **-2.0** | **N** | **147858** |
| **5** | **On site** | **328570 366490** | **UNNAMED SHAFT** | **-2.0** | **N** | **147989** |
| **6** | **On site** | **326310 367640** | **PLAS-IFAN** | **13.6** | **N** | **146996** |
| **7** | **On site** | **329215 367116** | **WEPCE OPENCAST SITE. 1020** | **56.0** | **N** | **148209** |
| **8** | **On site** | **328470 366560** | **PARK HILL COLLIERY O/C. 13** | **33.53** | **N** | **147061** |
| **9** | **On site** | **328010 366940** | **PARK HILL COLLIERY O/C. 1** | **35.05** | **N** | **147049** |
| **10** | **On site** | **327940 366960** | **PARK HILL COLLIERY O/C. 2** | **28.96** | **N** | **147050** |
| **11** | **On site** | **327940 367040** | **PARK HILL COLLIERY O/C. 3** | **26.52** | **N** | **147051** |
| **12** | **On site** | **327700 367100** | **SYCAMORE COLLIERY, MINE PLAN** | **-2.0** | **N** | **147686** |
| **A** | **On site** | **327810 367080** | **PARK HILL COLLIERY, ADIT** | **-2.0** | **N** | **147863** |
| **A** | **On site** | **327810 367100** | **PARK HILL COLLIERY, ADIT** | **-2.0** | **N** | **147862** |
| **B** | **On site** | **329140 367030** | **PROPOSED HAWARDEN BY-PASS. 1** | **12.2** | **N** | **146990** |
| **B** | **On site** | **329150 367010** | **NEW INN BRIDGE FARM** | **12.1** | **N** | **147001** |
| **C** | **On site** | **329256 367064** | **WEPCE OPENCAST SITE. 685** | **59.0** | **N** | **148225** |
| 13 | 2m NW | 329180 367160 | CASTLE HILL COLLIERY, O/C. 1 | 12.19 | N | 147201 |
| D | 4m E | 327800 367150 | PARK HILL COLLIERY | -2.0 | N | 148044 |
| 14 | 7m SW | 328180 366750 | PARK HILL COLLIERY O/C. 16 | 45.72 | N | 147064 |
| 15 | 10m NE | 328320 366790 | PARK HILL COLLIERY O/C. 15 | 32.0 | N | 147063 |
| 16 | 17m E | 329356 367144 | WEPCE OPENCAST SITE. 786 ? | 25.0 | N | 148190 |
| 17 | 19m E | 326720 367640 | NORTHOPHALL COLLIERY | -2.0 | N | 147851 |
| D | 20m E | 327810 367170 | SYCAMORE COLLIERY, ADIT | -2.0 | N | 147860 |
| C | 21m E | 329250 367040 | MARE HAY COLLIERY | -2.0 | N | 148078 |
| 18 | 24m S | 329318 367026 | WEPCE OPENCAST SITE. 684 | 40.0 | N | 148188 |
| E | 26m N | 329209 367192 | WEPCE OPENCAST SITE. 1021 | 56.0 | N | 148235 |
| 19 | 27m S | 329280 367030 | MARE HAY COLLIERY, ENGINE OR WATER SHAFT | -2.0 | N | 148079 |
| E | 34m N | 329210 367200 | CASTLE HILL COLLIERY, O/C. 2 | 12.19 | N | 147202 |
| 20 | 43m NW | 329140 367183 | WEPCE OPENCAST SITE. 115 | 47.0 | N | 148208 |
| 21 | 44m N | 329260 367208 | WEPCE OPENCAST SITE. 1017 | 46.46 | N | 148234 |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 22 | 46m NE | 326970 367630 | UNNAMED SHAFT | -2.0 | N | 147852 |
| 23 | 51m N | 326680 367700 | NORTHOPHALL COLLIERY | -2.0 | N | 147850 |
| 24 | 56m N | 329360 367200 | MARE HAY COLLIERY | -2.0 | N | 147872 |
| 25 | 56m E | 329397 367088 | WEPCE OPENCAST SITE. 686 | 71.0 | N | 148189 |
| 26 | 62m SW | 327860 366900 | PARK HILL COLLIERY NO.2, ADIT | -2.0 | N | 148045 |
| 27 | 64m S | 326530 367490 | WARED WOOD, O/C SITE. 309 | 18.29 | N | 147518 |
| 28 | 64m SW | 327370 367230 | NORTHORP HALL COLLIERY | 186.51 | N | 148296 |
| 29 | 64m SW | 328260 366610 | PARK HILL COLLIERY O/C. 14 | 30.48 | N | 147062 |
| 30 | 67m NE | 327870 367170 | SYCAMORE COLLIERY, Y PIT | -2.0 | N | 147861 |
| 31 | 71m N | 326380 367800 | MINE COAL COLLIERY, NO.1 SHAFT | -2.0 | N | 147844 |
| 32 | 75m W | 326410 367810 | MINE COAL COLLIERY, NO.3 SHAFT | -2.0 | N | 147845 |
| 33 | 77m NE | 326590 367900 | GALCHOG COLLIERY, OLD SHAFT | -2.0 | N | 147843 |
| 34 | 80m N | 329200 367246 | WEPCE OPENCAST SITE. 1074 | 60.0 | N | 148207 |
| 35 | 82m SW | 327870 366870 | PARK HILL COLLIERY NO.2, SECTION SHAFT | -2.0 | N | 148046 |
| F | 92m E | 327020 367630 | DUBLIN MAIN COLLIERY | -2.0 | N | 147853 |
| 36 | 94m N | 329255 367260 | WEPCE OPENCAST SITE. 1023 | 65.0 | N | 148236 |
| 37 | 95m W | 328690 366620 | UNNAMED SHAFT | -2.0 | N | 148034 |
| 38 | 98m W | 326400 367900 | NORTHOP HALL COLLIERY | -2.0 | N | 147014 |
| 39 | 99m NE | 326560 367960 | GALCHOG COLLIERY, OLD SHAFT | -2.0 | N | 147842 |
| 40 | 99m N | 327260 367530 | DUBLIN MAIN COLLIERY, NO.2 SHAFT DOWNCAST | -2.0 | N | 147856 |
| G | 108m SW | 327630 367000 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.5 | 14.5 | N | 147698 |
| 41 | 112m E | 329450 367020 | MARE HAY COLLIERY, ENGINE PIT | -2.0 | N | 147873 |
| 42 | 113m NE | 328610 366670 | UNNAMED PIT | -2.0 | N | 147990 |
| F | 114m E | 327040 367640 | DUBLIN MAIN COLLIERY | -2.0 | N | 147854 |
| 43 | 115m SW | 327530 367060 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.16 | 15.1 | N | 147702 |
| 44 | 116m W | 328680 366700 | PARK HILL COLLIERY O/C. 11 | 21.34 | N | 147059 |
| 45 | 118m SW | 327480 367090 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.15 | 21.3 | N | 147701 |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 46 | 118m N | 329280 367280 | CASTLE HILL COLLIERY, O/C. 3 | 12.19 | N | 147203 |
| 47 | 120m W | 328690 366770 | PARK HILL COLLIERY O/C. 10 | 16.76 | N | 147058 |
| 48 | 125m E | 329464 367162 | WEPCE OPENCAST SITE. 1126 | 61.0 | N | 148243 |
| 49 | 126m SW | 327570 367020 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.17 | 40.0 | N | 147703 |
| G | 128m SW | 327610 366990 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.6 | 15.7 | N | 147699 |
| 50 | 130m NE | 328100 367090 | PARK HILL COLLIERY O/C. 4 | 22.86 | N | 147052 |
| 51 | 130m SW | 327650 366960 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.18 | 40.0 | N | 147704 |
| 52 | 135m N | 329314 367290 | WEPCE OPENCAST SITE. 1003 | 71.0 | N | 148203 |
| 53 | 138m N | 327260 367570 | DUBLIN MAIN COLLIERY NORTHOPHALL | 135.94 | N | 146963 |
| 54 | 139m SW | 328350 366430 | MARE HAY COLLIERY, PIT | -2.0 | N | 147992 |
| 55 | 143m SW | 328480 366310 | CHE SIDE COLLIERY | -2.0 | N | 147884 |
| 56 | 144m NE | 327060 367670 | UNNAMED SHAFT | -2.0 | N | 148123 |
| G | 145m SW | 327610 366970 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.7 | 12.2 | N | 147700 |
| H | 146m SW | 328530 366270 | CHE SIDE COLLIERY, OLD SHAFT | -2.0 | N | 147886 |
| I | 148m SW | 328450 366330 | CHE SIDE COLLIERY | -2.0 | N | 147883 |
| 57 | 150m NE | 329470 367222 | WEPCE OPENCAST SITE. 711 | 29.0 | N | 148194 |
| 58 | 156m SW | 327870 366780 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.22 | 17.0 | N | 147706 |
| H | 156m SW | 328510 366270 | CHE SIDE COLLIERY | -2.0 | N | 147885 |
| 59 | 156m SW | 327840 366800 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.21 | 25.0 | N | 147705 |
| 60 | 158m SW | 328220 366520 | EWLOE BARN COLLIERY O/C. 13 | 12.27 | N | 147220 |
| J | 160m SW | 327759 366850 | A55 GATEWAY SERVICES CLWYD TP 8 | 2.7 | N | 15628155 |
| 61 | 163m S | 328630 366230 | UNNAMED SHAFT | -2.0 | N | 148068 |
| 62 | 164m NW | 328680 366850 | PARK HILL COLLIERY O/C. 9 | 27.43 | N | 147057 |
| 63 | 164m NE | 328620 366730 | PARK HILL COLLIERY O/C. 8 | 42.67 | N | 147056 |
| 64 | 166m E | 329506 367108 | WEPCE OPENCAST SITE. 1128 | 70.9 | N | 148222 |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 65 | 167m SW | 325970 367500 | WARED WOOD, O/C SITE. 116 | 30.48 | N | 147515 |
| 66 | 167m E | 329500 366930 | NEW MARE HAY COLLIERY | -2.0 | N | 147874 |
| 67 | 169m N | 329218 367335 | WEPCE OPENCAST SITE. 1004 | 60.0 | N | 148205 |
| I | 169m SW | 328430 366320 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.35A | 18.0 | N | 147719 |
| I | 169m SW | 328430 366320 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.35 | -2.0 | N | 147720 |
| 68 | 170m S | 326100 367440 | WARED WOOD, O/C SITE. 308 | 9.45 | N | 147517 |
| 69 | 170m N | 327270 367600 | DUBLIN MAIN COLLIERY, NO.1 SHAFT UPCAST | -2.0 | N | 147855 |
| 70 | 172m SW | 327930 366720 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.23 | 15.0 | N | 147707 |
| 71 | 174m SW | 327804 366803 | A55 GATEWAY SERVICES CLWYD TP 7 | 2.9 | N | 15628153 |
| 72 | 177m N | 329330 367330 | CASTLE HILL COLLIERY, O/C. 6 | 12.19 | N | 147206 |
| 73 | 178m S | 326050 367440 | WARED WOOD, O/C SITE. 117 | 39.62 | N | 147516 |
| J | 179m SW | 327749 366834 | A55 GATEWAY SERVICES CLWYD TP 9 | 3.0 | N | 15628157 |
| K | 181m SW | 327844 366768 | A55 GATEWAY SERVICES CLWYD TP 3 | 2.5 | N | 15628149 |
| 74 | 181m NW | 329050 367290 | UNNAMED SHAFT | -2.0 | N | 147870 |
| I | 182m SW | 328410 366320 | PIT | -2.0 | N | 148141 |
| L | 183m SW | 328250 366460 | HOMESTEAD | 15.3 | N | 147000 |
| L | 183m SW | 328250 366460 | EWLOE BARN COLLIERY O/C. 10 | 16.76 | N | 147219 |
| M | 185m SW | 327980 366670 | PROPOSED HAWARDEN BY-PASS. 8 | 9.0 | N | 146991 |
| 75 | 186m NW | 328970 367210 | UNNAMED SHAFT | -2.0 | N | 147871 |
| K | 188m SW | 327822 366774 | A55 GATEWAY SERVICES CLWYD 2 | 8.3 | N | 15628144 |
| M | 188m SW | 327960 366680 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.24 | 35.0 | N | 147708 |
| N | 189m SE | 329470 366810 | FORMER ATS DEPOT HOLYWELL ROAD EWLOE 1 | - | Y | N/A |
| N | 190m SE | 329460 366800 | FORMER ATS DEPOT HOLYWELL ROAD EWLOE WS2 | - | Y | N/A |
| 76 | 190m N | 326540 368060 | CHARLES PIT | -2.0 | N | 147835 |
| 77 | 191m NW | 329080 367320 | CASTLE HILL FARM | 50.0 | N | 1136365 |
| L | 192m SW | 328260 366440 | EWLOE BARN COLLIERY O/C. 1 | 18.29 | N | 147216 |

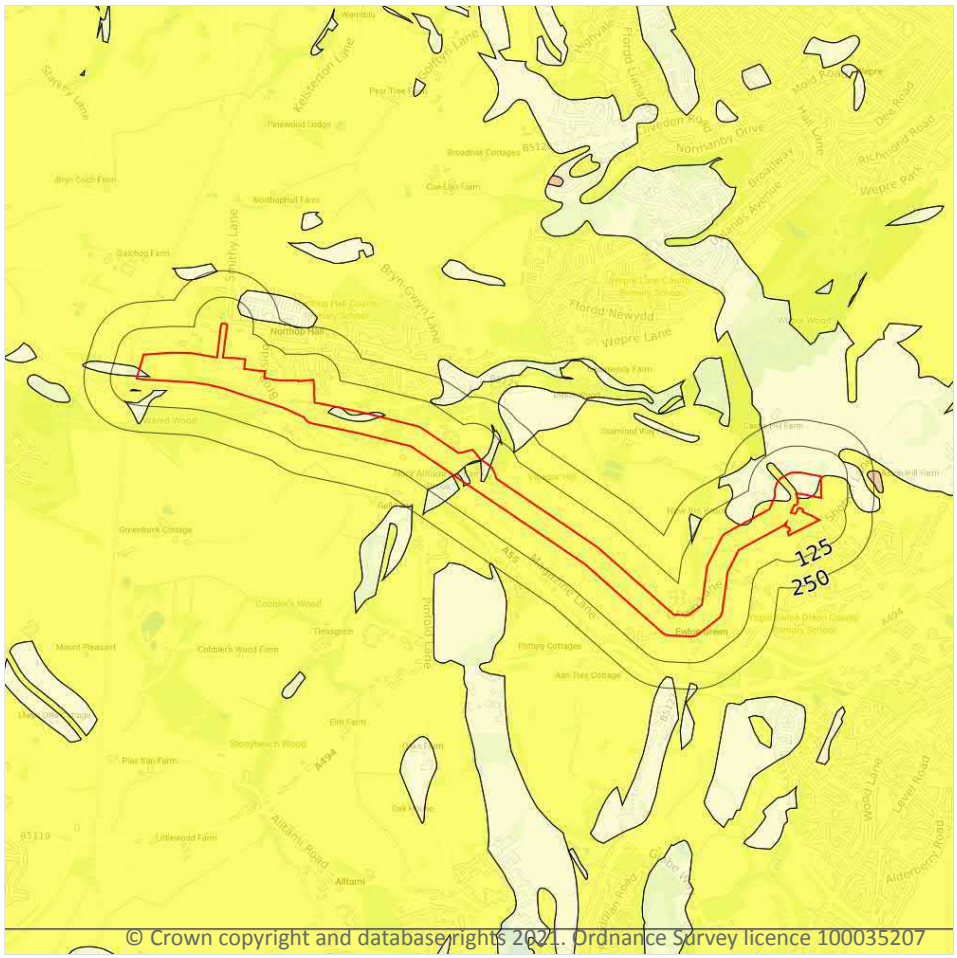
| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| O | 192m SW | 327903 366714 | A55 GATEWAY SERVICES CLWYD TP 17 | 2.5 | N | 15628166 |
| N | 193m SE | 329440 366780 | FORMER ATS DEPOT HOLYWELL ROAD EWLOE 3 | - | Y | N/A |
| I | 195m SW | 328390 366320 | EWLOE HALL SITE. 302 | 12.19 | N | 147657 |
| N | 197m SE | 329460 366790 | FORMER ATS DEPOT HOLYWELL ROAD EWLOE WS4 | - | Y | N/A |
| P | 199m S | 328570 366200 | PIT | -2.0 | N | 148142 |
| 78 | 200m SW | 327875 366723 | A55 GATEWAY SERVICES CLWYD TP 2 | 2.45 | N | 15628148 |
| 79 | 201m SW | 327792 366779 | A55 GATEWAY SERVICES CLWYD TP 6 | 2.9 | N | 15628152 |
| Q | 201m S | 328660 366190 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.39B | 20.0 | N | 147726 |
| M | 202m SW | 327944 366675 | A55 GATEWAY SERVICES CLWYD TP 1 | 2.6 | N | 15628147 |
| N | 204m SE | 329480 366800 | FORMER ATS DEPOT HOLYWELL ROAD EWLOE WS1 | - | Y | N/A |
| 80 | 205m SW | 328150 366520 | EWLOE BARN COLLIERY O/C. 14 | 12.8 | N | 147221 |
| K | 206m SW | 327824 366751 | A55 GATEWAY SERVICES CLWYD TP 4 | 2.4 | N | 15628150 |
| 81 | 209m NW | 328940 367200 | UNNAMED SHAFT | -2.0 | N | 148031 |
| P | 209m S | 328570 366190 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.38 | 20.0 | N | 147723 |
| 82 | 209m NE | 328020 367240 | PARK HILL COLLIERY O/C. 17 | 24.38 | N | 147065 |
| Q | 211m S | 328670 366180 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.42A | 9.0 | N | 147730 |
| N | 211m SE | 329470 366780 | FORMER ATS DEPOT HOLYWELL ROAD EWLOE 2 | - | Y | N/A |
| R | 211m SW | 328230 366440 | EWLOE BARN COLLIERY O/C. 9 | 16.76 | N | 147218 |
| S | 212m SW | 328410 366280 | EWLOE HALL SITE. 304 | 12.5 | N | 147658 |
| O | 214m SW | 327888 366698 | A55 GATEWAY SERVICES CLWYD TP 16 | 2.45 | N | 15628164 |
| 83 | 215m SW | 328450 366240 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.36 | 30.75 | N | 147721 |
| K | 217m SW | 327802 366753 | A55 GATEWAY SERVICES CLWYD 1A | 6.2 | N | 15628143 |
| 84 | 217m SW | 328290 366380 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.32 | 40.0 | N | 147716 |
| K | 217m SW | 327801 366753 | A55 GATEWAY SERVICES CLWYD 1 | 3.23 | N | 15628142 |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 85 | 219m S | 328740 366170 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.40 | 14.0 | N | 147727 |
| O | 219m SW | 327912 366675 | A55 GATEWAY SERVICES CLWYD TP 15 | 2.3 | N | 15628163 |
| R | 220m SW | 328240 366420 | EWLOE BARN COLLIERY O/C. 8 | 13.72 | N | 147217 |
| 86 | 221m SW | 328340 366330 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.31 | 12.0 | N | 147715 |
| N | 221m SE | 329460 366760 | FORMER ATS DEPOT HOLYWELL ROAD EWLOE WS3 | - | Y | N/A |
| 87 | 223m S | 328630 366170 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.39 | 20.0 | N | 147724 |
| 88 | 224m SW | 328110 366530 | EWLOE BARN COLLIERY O/C. 15 | 15.72 | N | 147222 |
| O | 226m SW | 327889 366683 | A55 GATEWAY SERVICES CLWYD 4 | 6.0 | N | 15628146 |
| K | 228m SW | 327794 366745 | A55 GATEWAY SERVICES CLWYD TP 5 | 2.5 | N | 15628151 |
| 89 | 228m SW | 328160 366480 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.27 | 11.5 | N | 147709 |
| 90 | 229m NE | 329544 367250 | WEPCE OPENCAST SITE. 712 | 46.0 | N | 148195 |
| T | 231m SW | 328480 366200 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.37 | 37.0 | N | 147722 |
| 91 | 232m SW | 325880 367520 | WARED WOOD, O/C SITE. 115 | 30.48 | N | 147514 |
| 92 | 232m S | 328770 366160 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.45 | 8.0 | N | 147734 |
| S | 233m SW | 328390 366270 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.34 | 17.0 | N | 147718 |
| 93 | 234m NW | 326300 368000 | GALCHOG COLLIERY, MINE PLAN | -2.0 | N | 147684 |
| R | 234m SW | 328230 366410 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.28 | 17.5 | N | 147710 |
| R | 234m SW | 328230 366410 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.28R | 15.25 | N | 147712 |
| O | 234m SW | 327914 366656 | A55 GATEWAY SERVICES CLWYD TP 18 | 2.7 | N | 15628168 |
| T | 235m SW | 328490 366190 | EWLOE HALL SITE. 128 | 11.58 | N | 147659 |
| 94 | 236m N | 326240 367970 | MAIN COAL COLLIERY, NO.2 SHAFT D/C, NO.1 SHAFT | -2.0 | N | 147831 |
| 95 | 236m NE | 328200 367150 | PARK HILL COLLIERY O/C. 5 | 25.91 | N | 147053 |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| U | 237m N | 326870 367840 | NORTHOPHALL COLLIERY, BELL PIT | -2.0 | N | 147849 |
| O | 239m SW | 327879 366674 | A55 GATEWAY SERVICES CLWYD TP 14 | 2.9 | N | 15628162 |
| 96 | 243m NW | 326330 368050 | GALCLWG COLLIERY, NO.2 SHAFT | -2.0 | N | 147833 |
| U | 247m N | 326890 367850 | NORTHOPHALL COLLIERY, BELL PIT | -2.0 | N | 147847 |
| 97 | 248m SE | 328970 366250 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.56 | 20.0 | N | 147745 |
| 98 | 249m N | 329188 367414 | WEPCE OPENCAST SITE. 1005 | 60.0 | N | 148239 |
| 99 | 249m S | 328740 366140 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.44 | 40.0 | N | 147733 |
| 100 | 249m S | 328700 366140 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.42 | 14.1 | N | 147729 |

*This data is sourced from the British Geological Survey.*

# 17 Natural ground subsidence - Shrink swell clays




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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

## 17.1 Shrink swell clays

| Records within 50m | 3 |
|---|---|

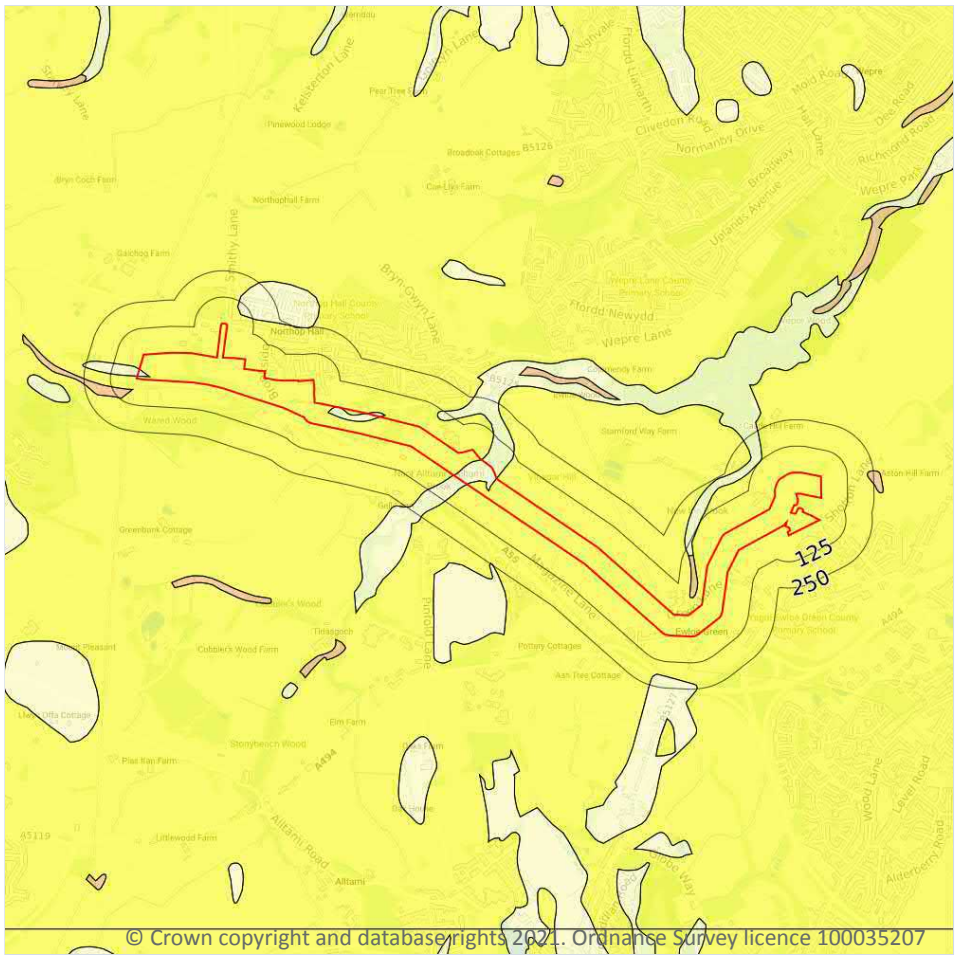
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 154**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Negligible** | **Ground conditions predominantly non-plastic.** |
| **On site** | **Very low** | **Ground conditions predominantly low plasticity.** |
| 45m S | Negligible | Ground conditions predominantly non-plastic. |

*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.

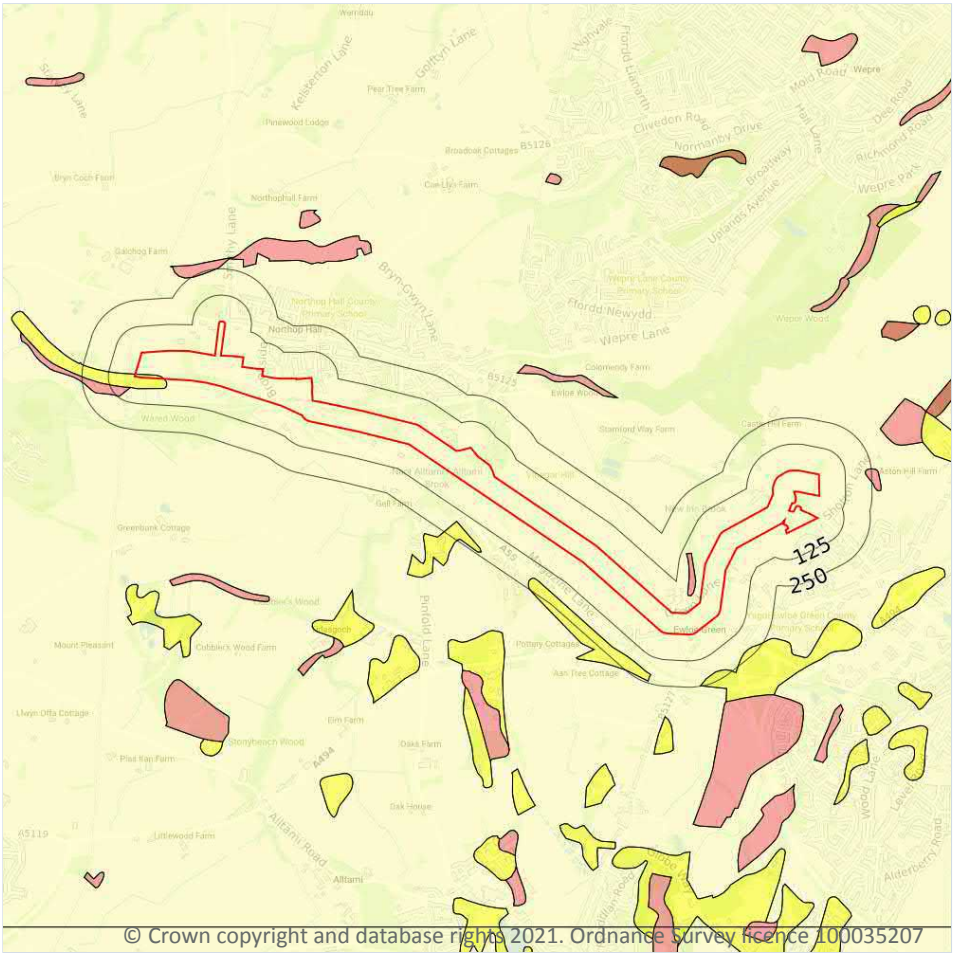
Features are displayed on the Natural ground subsidence - Running sands map on **page 156**

| 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.** |
| 33m W | Low | Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water. |

*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.

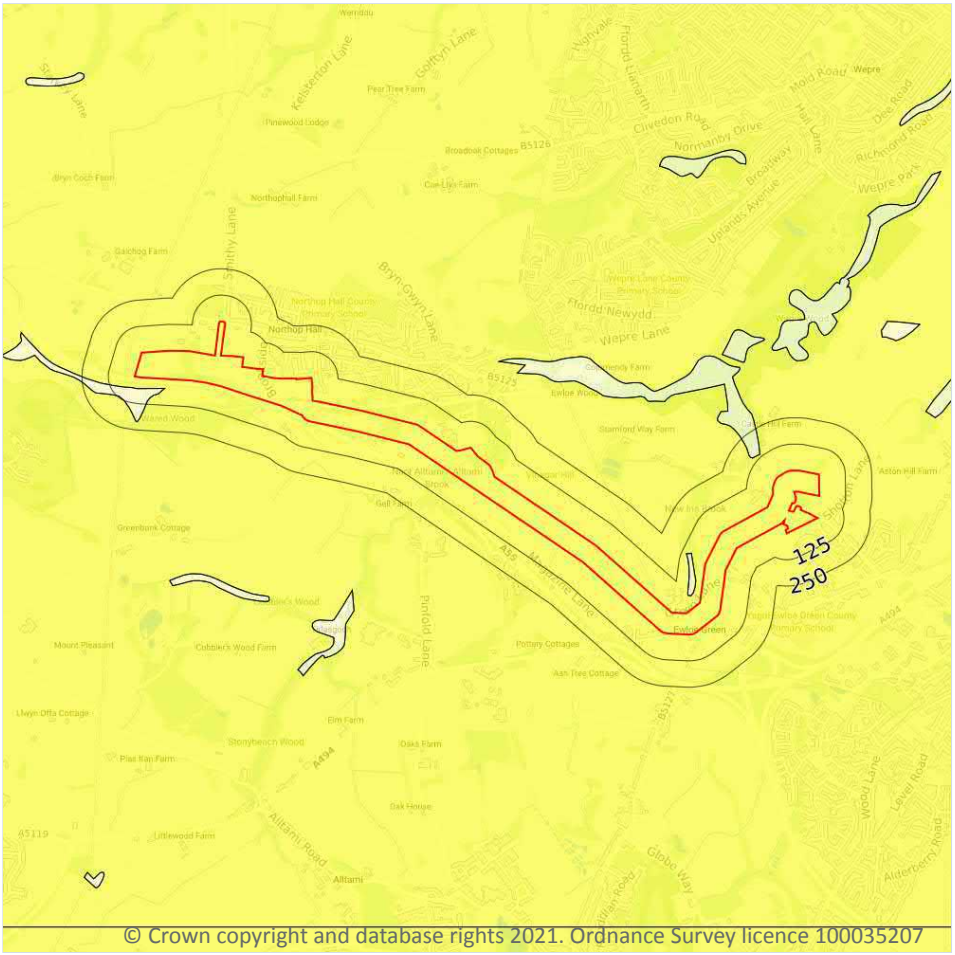
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 158**

| 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 |
|---|---|---|
| 33m W | Moderate | Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site. |

*This data is sourced from the British Geological Survey.*

# Natural ground subsidence - Collapsible deposits




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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

## 17.4 Collapsible deposits

| Records within 50m | 3 |
|---|---|

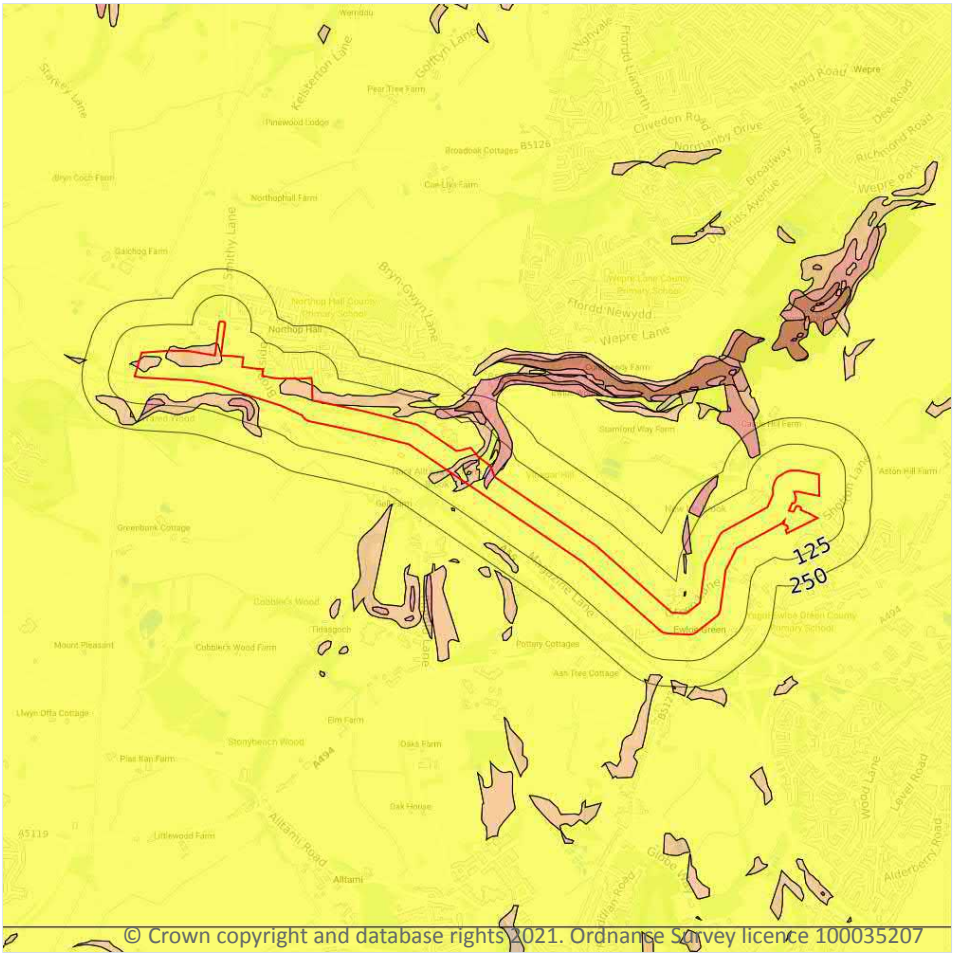
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 160**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Very low** | **Deposits with potential to collapse when loaded and saturated are unlikely to be present.** |
| 33m W | Negligible | Deposits with potential to collapse when loaded and saturated are believed not to be present. |
| 45m S | Negligible | Deposits with potential to collapse when loaded and saturated are believed not to be present. |

*This data is sourced from the British Geological Survey.*

# Natural ground subsidence - Landslides




Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

## 17.5 Landslides

| Records within 50m | 7 |
|---|---|

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

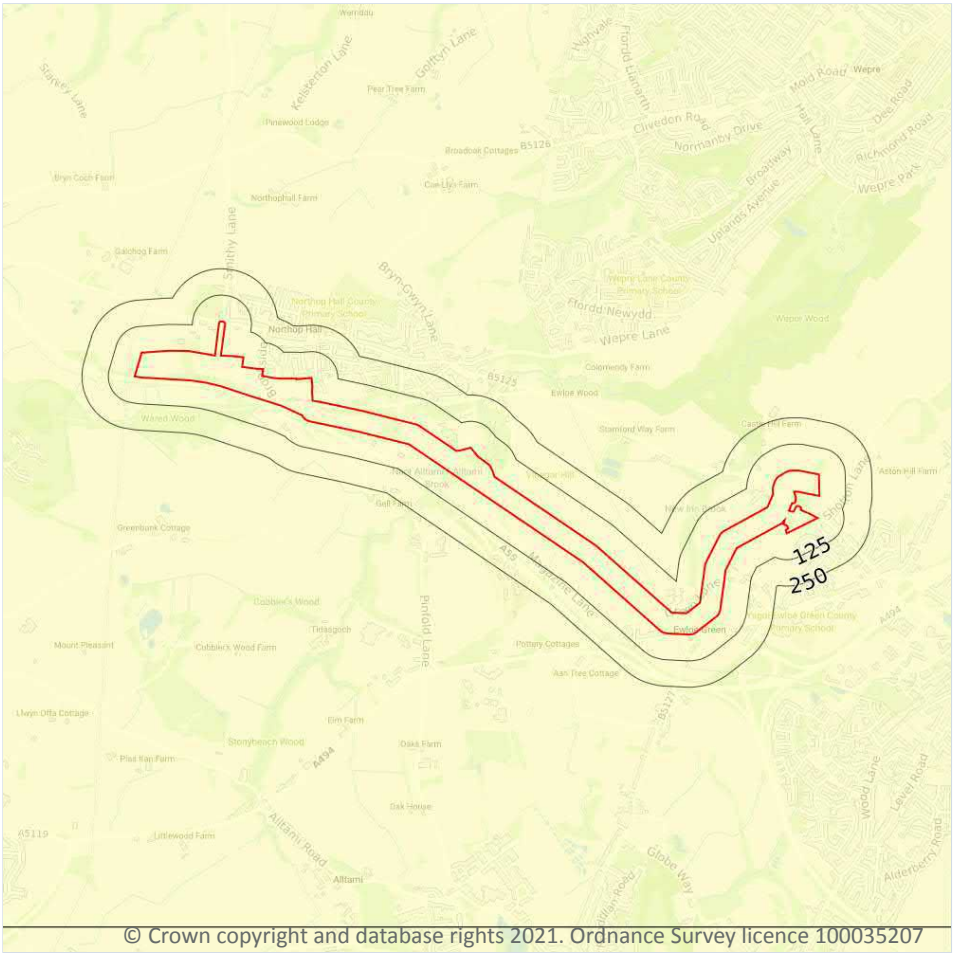
Features are displayed on the Natural ground subsidence - Landslides map on **page 161**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Very low** | **Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.** |

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Low** | **Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site.** |
| **On site** | **Moderate** | **Slope instability problems are probably present or have occurred in the past. Land use should consider specifically the stability of the site.** |
| 4m S | Low | Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site. |
| 24m S | Moderate | Slope instability problems are probably present or have occurred in the past. Land use should consider specifically the stability of the site. |
| 26m NE | Low | Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site. |
| 29m E | Low | Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site. |

*This data is sourced from the British Geological Survey.*

# Natural ground subsidence - Ground dissolution of soluble rocks




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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 |
|---|---|

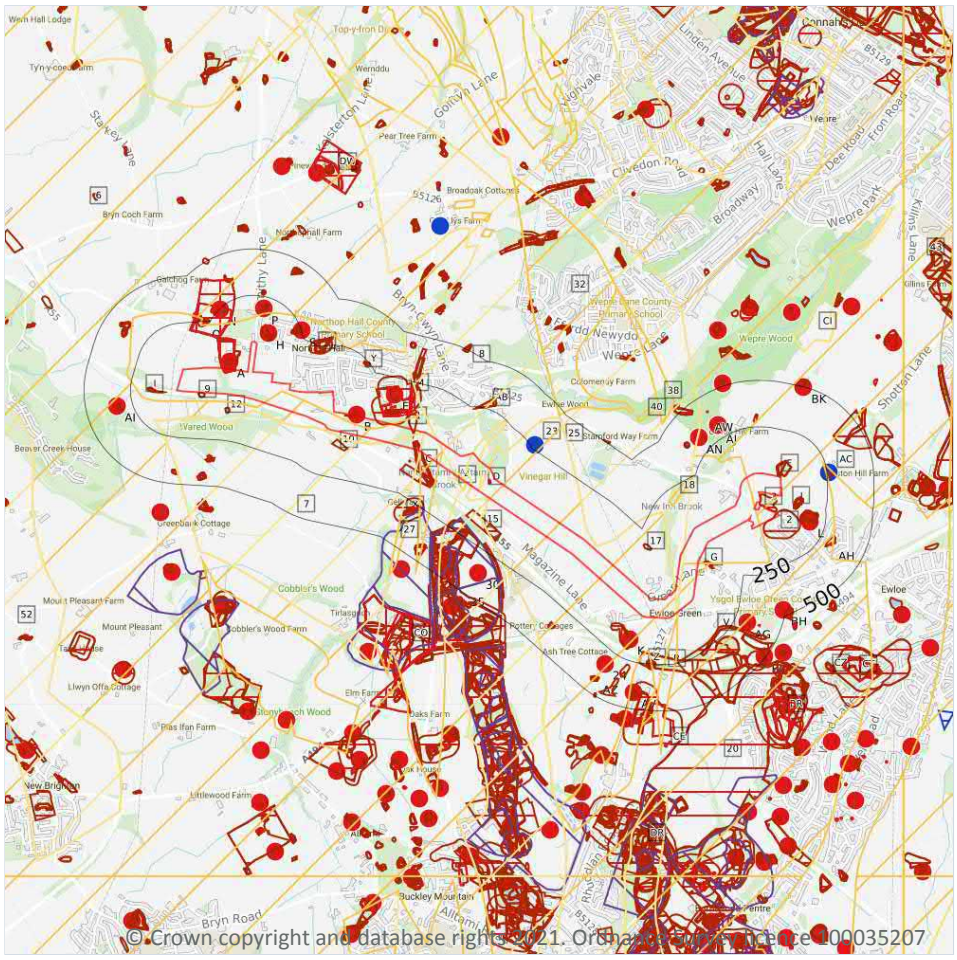
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 163**

| 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


250
500
Magazine Lane
Bryn Road
Ewloe
Ewloe Green
Broadway
Weppre Park
Shotton Lane
Vinegar Hill
Cobbler's Wood
Mount Pleasant
Buckley Mountain
Littlewood Farm
Bryn Cwyn Lane
Gonryn Lane
Hall Lane
Deer Road
Linden Avenue
Clwedon Road
Stanford Way Farm
Ewloe Wood
Weppre Wood
Vinegar Hill
Ash Tree Cottage
Potter Cottages
Yard Wood
Greenbank Cottage
Mount Pleasant Farm
Llwyn Offa Cottage
Pras Ifan Farm
Elm Farm
Oaks Farm
Broadoak Cottages
Bryn Coch Farm
Gatchog Farm
Pear Tree Farm
Werndda
Tyn-y-coed Farm
Wern Hall Lodge
Connahs Quay
Weppre Lane County Primary School
Northop Hall County Primary School
Ffordd Newydd
Ffordd Wepre
Ffordd Llanfynydd
Ffordd Llanfynydd
Ffordd Llanfynydd

| ID | Location | Details | Source |
|---|---|---|---|
| AC | 261m E | Type: Swallow Hole x 1<br>Superficial Geology: -<br>Bedrock Geology: Carboniferous Limestone Supergroup, Lower Coal Measures, Middle Coal Measures, Millstone Grit Group, Upper Carboniferous Limestone | Simple Bibliography: British Geological Survey<br>Full Bibliography: -<br>Confidentiality: Data source can be revealed, data can be used freely |
| 23 | 275m NE | Type: Swallow Hole x 1<br>Superficial Geology: -<br>Bedrock Geology: Carboniferous Limestone Supergroup, Lower Coal Measures, Middle Coal Measures, Millstone Grit Group, Upper Carboniferous Limestone | Simple Bibliography: British Geological Survey<br>Full Bibliography: -<br>Confidentiality: Data source can be revealed, data can be used freely |
| 25 | 334m NE | Type: Swallow Hole x 1<br>Superficial Geology: -<br>Bedrock Geology: Carboniferous Limestone Supergroup, Lower Coal Measures, Middle Coal Measures, Millstone Grit Group, Upper Carboniferous Limestone | Simple Bibliography: British Geological Survey<br>Full Bibliography: -<br>Confidentiality: Data source can be revealed, data can be used freely |

*This data is sourced from Stantec UK Ltd.*

## 18.2 BritPits

**Records within 500m** **25**

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 165**

| ID | Location | Details | Description |
|---|---|---|---|
| B | 7m N | Name: Dublin Main<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Sand & Gravel<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

| ID | Location | Details | Description |
|---|---|---|---|
| A | 39m N | Name: Boar's Head Farm<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| H | 82m NE | Name: Northophall Cottages<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| K | 141m SW | Name: Ewloegreen Farm<br>Address: Ewloe, BUCKLEY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| E | 159m N | Name: Dublin Main<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| L | 167m E | Name: Ashton Hill Farm<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Lead<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

| ID | Location | Details | Description |
|---|---|---|---|
| P | 185m N | Name: Boar's Head Farm<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| N | 244m NW | Name: Boar's Head Farm<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| O | 245m N | Name: Boar's Head Farm<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| S | 251m E | Name: Northophall Cottages<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Sandstone<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AH | 316m SE | Name: Boar's Head<br>Address: Ewloe, BUCKLEY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

| ID | Location | Details | Description |
|---|---|---|---|
| AG | 317m SE | Name: Ewloe Green<br>Address: Ewloe, BUCKLEY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AJ | 321m NW | Name: Castle Hill<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Lead<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| 24 | 326m SW | Name: Cheapside Colliery, No. 2 Shaft<br>Address: BUCKLEY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AN | 332m NW | Name: Castle Hill Brewery<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Lead<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AI | 332m W | Name: Wared Wood Quarry<br>Address: Northrop, CONNAH'S QUAY, Flintshire<br>Commodity: Sandstone<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

| ID | Location | Details | Description |
|---|---|---|---|
| 30 | 367m SW | Name: Parry's Quarry<br>Address: Ewloe, BUCKLEY, Flintshire<br>Commodity: Fireclay<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AW | 396m NW | Name: Castle Hill<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Lead<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AV | 409m S | Name: Cross Farm Quarry<br>Address: Ewloe, BUCKLEY, Flintshire<br>Commodity: Sandstone<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AZ | 419m SW | Name: Cheapside Colliery, No. 1 Shaft<br>Address: BUCKLEY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| Q | 458m SW | Name: Castle Brick Works<br>Address: Ewloe, BUCKLEY, Flintshire<br>Commodity: Fireclay<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

| ID | Location | Details | Description |
|---|---|---|---|
| BH | 465m S | Name: Marehay Colliery Pit<br>Address: Ewloe, BUCKLEY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| 35 | 489m SW | Name: Parry's Quarry<br>Address: Ewloebarn, BUCKLEY, Flintshire<br>Commodity: Clay & Shale<br>Status: Inactive | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, is not extracting minerals, but which still has a valid planning permission to do so, and can restart at any time. May be considered Mothballed by operator.May be considered to have Active or Dormant planning permission |
| BC | 490m SE | Name: Ewloe Green<br>Address: Ewloe, BUCKLEY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| BK | 497m N | Name: Wepre Wood<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Sand<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

*This data is sourced from the British Geological Survey.*

## 18.3 Surface ground workings

| **Records within 250m** | **184** |
|---|---|

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 165**

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| 1 | On site | Unspecified Heap | 1991 | 1:10000 |
| 2 | On site | Old Colliery | 1869 | 1:10560 |
| 3 | On site | Unspecified Heap | 1869 | 1:10560 |
| A | On site | Colliery | 1898 | 1:10560 |
| A | On site | Unspecified Ground Workings | 1910 | 1:10560 |
| A | On site | Colliery | 1910 | 1:10560 |
| A | On site | Unspecified Ground Workings | 1970 | 1:10560 |
| A | On site | Colliery | 1948 | 1:10560 |
| A | On site | Unspecified Ground Workings | 1948 | 1:10560 |
| A | On site | Colliery | 1938 | 1:10560 |
| A | On site | Unspecified Heap | 1938 | 1:10560 |
| A | On site | Colliery | 1938 | 1:10560 |
| A | On site | Unspecified Heap | 1938 | 1:10560 |
| B | On site | Old Gravel Pit | 1960 | 1:10560 |
| B | On site | Old Gravel Pit | 1910 | 1:10560 |
| B | On site | Old Gravel Pit | 1970 | 1:10560 |
| B | On site | Sand Pit | 1869 | 1:10560 |
| B | On site | Old Gravel Pit | 1938 | 1:10560 |
| C | On site | Cuttings | 1910 | 1:10560 |
| C | On site | Cuttings | 1981 | 1:10000 |
| C | On site | Cuttings | 1960 | 1:10560 |
| C | On site | Cuttings | 1970 | 1:10560 |
| C | On site | Unspecified Heap | 1938 | 1:10560 |
| C | On site | Cuttings | 1948 | 1:10560 |
| C | On site | Cuttings | 1898 | 1:10560 |
| C | On site | Cuttings | 1869 | 1:10560 |
| C | On site | Unspecified Heap | 1938 | 1:10560 |
| E | On site | Colliery | 1898 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| 9 | 1m S | Unspecified Heap | 1970 | 1:10560 |
| B | 2m N | Old Gravel Pit | 1948 | 1:10560 |
| B | 2m N | Old Gravel Pit | 1898 | 1:10560 |
| F | 2m N | Unspecified Heap | 1869 | 1:10560 |
| F | 3m N | Refuse Heap | 1948 | 1:10560 |
| F | 5m N | Unspecified Heap | 1938 | 1:10560 |
| F | 5m N | Unspecified Heap | 1938 | 1:10560 |
| F | 5m N | Unspecified Heap | 1960 | 1:10560 |
| F | 7m N | Unspecified Ground Workings | 1910 | 1:10560 |
| A | 21m N | Unspecified Heap | 1898 | 1:10560 |
| G | 29m SE | Pond | 1869 | 1:10560 |
| E | 30m N | Disused Colliery | 1938 | 1:10560 |
| E | 30m N | Disused Colliery | 1938 | 1:10560 |
| E | 31m N | Disused Colliery | 1948 | 1:10560 |
| E | 32m N | Disused Colliery | 1910 | 1:10560 |
| G | 33m SE | Pond | 1938 | 1:10560 |
| G | 34m SE | Pond | 1909 | 1:10560 |
| E | 35m N | Unspecified Heap | 1938 | 1:10560 |
| E | 35m N | Unspecified Heap | 1938 | 1:10560 |
| G | 35m SE | Ponds | 1898 | 1:10560 |
| E | 36m N | Unspecified Heap | 1970 | 1:10560 |
| E | 37m N | Unspecified Heap | 1960 | 1:10560 |
| E | 38m N | Unspecified Heap | 1910 | 1:10560 |
| G | 39m SE | Pond | 1960 | 1:10560 |
| 10 | 43m S | Cuttings | 1991 | 1:10000 |
| E | 49m N | Unspecified Heap | 1948 | 1:10560 |
| E | 49m N | Unspecified Heap | 1898 | 1:10560 |
| H | 58m NE | Unspecified Heap | 1869 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| H | 63m NE | Unspecified Heap | 1938 | 1:10560 |
| H | 63m NE | Unspecified Heap | 1938 | 1:10560 |
| H | 64m NE | Unspecified Heap | 1898 | 1:10560 |
| H | 65m NE | Unspecified Heap | 1910 | 1:10560 |
| 11 | 66m S | Unspecified Hole | 1869 | 1:10560 |
| 12 | 72m S | Ponds | 1869 | 1:10560 |
| I | 73m W | Unspecified Pit | 1960 | 1:10560 |
| J | 82m E | Unspecified Heap | 1948 | 1:10560 |
| J | 82m E | Unspecified Heap | 1898 | 1:10560 |
| J | 83m E | Unspecified Heap | 1910 | 1:10560 |
| J | 84m SE | Unspecified Heap | 1987 | 1:10000 |
| J | 84m SE | Unspecified Heap | 1981 | 1:10000 |
| J | 84m SE | Unspecified Heap | 1938 | 1:10560 |
| J | 84m SE | Unspecified Heap | 1938 | 1:10560 |
| 13 | 87m SW | Cuttings | 1991 | 1:10000 |
| J | 88m SE | Unspecified Heap | 1960 | 1:10560 |
| J | 88m SE | Unspecified Heap | 1970 | 1:10560 |
| J | 89m SE | Unspecified Heap | 1869 | 1:10560 |
| 14 | 91m S | Cuttings | 1987 | 1:10000 |
| 15 | 103m SW | Cuttings | 1987 | 1:10000 |
| I | 104m W | Unspecified Ground Workings | 1970 | 1:10560 |
| K | 105m SW | Refuse Heap | 1869 | 1:10560 |
| K | 110m SW | Refuse Heap | 1898 | 1:10560 |
| 16 | 111m SW | Cuttings | 1991 | 1:10000 |
| L | 113m E | Unspecified Ground Workings | 1910 | 1:10560 |
| L | 113m E | Unspecified Heap | 1948 | 1:10560 |
| L | 114m E | Unspecified Heap | 1970 | 1:10560 |
| L | 115m E | Unspecified Heap | 1960 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| L | 116m E | Unspecified Ground Workings | 1938 | 1:10560 |
| L | 116m E | Unspecified Ground Workings | 1938 | 1:10560 |
| L | 117m E | Unspecified Heap | 1898 | 1:10560 |
| L | 118m E | Unspecified Heap | 1869 | 1:10560 |
| E | 124m N | Unspecified Heap | 1960 | 1:10560 |
| E | 124m N | Unspecified Heap | 1970 | 1:10560 |
| E | 124m N | Unspecified Heap | 1938 | 1:10560 |
| E | 124m N | Unspecified Heap | 1938 | 1:10560 |
| E | 125m N | Unspecified Heap | 1910 | 1:10560 |
| E | 135m N | Unspecified Heap | 1948 | 1:10560 |
| E | 135m N | Unspecified Heap | 1898 | 1:10560 |
| M | 140m N | Cuttings | 1869 | 1:10560 |
| 17 | 161m W | Pond | 1991 | 1:10000 |
| N | 161m NW | Disused Colliery | 1898 | 1:10560 |
| O | 166m NW | Colliery | 1869 | 1:10560 |
| P | 172m N | Unspecified Heap | 1938 | 1:10560 |
| P | 172m N | Unspecified Heap | 1938 | 1:10560 |
| P | 172m N | Unspecified Heap | 1910 | 1:10560 |
| P | 174m N | Unspecified Heap | 1948 | 1:10560 |
| P | 174m N | Unspecified Heap | 1898 | 1:10560 |
| P | 174m N | Unspecified Heap | 1960 | 1:10560 |
| P | 174m N | Unspecified Heap | 1970 | 1:10560 |
| P | 175m N | Unspecified Heap | 1987 | 1:10000 |
| P | 175m N | Unspecified Heap | 1981 | 1:10000 |
| Q | 186m SW | Brick Works | 1869 | 1:10560 |
| Q | 186m SW | Brick Works | 1898 | 1:10560 |
| R | 188m S | Cuttings | 1991 | 1:10000 |
| R | 189m S | Cuttings | 1987 | 1:10000 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| Q | 189m SW | Brick Works | 1869 | 1:10560 |
| S | 195m E | Unspecified Quarry | 1869 | 1:10560 |
| M | 196m N | Cuttings | 1948 | 1:10560 |
| M | 196m N | Cuttings | 1938 | 1:10560 |
| M | 197m N | Cuttings | 1910 | 1:10560 |
| T | 198m N | Cuttings | 1960 | 1:10560 |
| T | 198m N | Cuttings | 1970 | 1:10560 |
| U | 203m NE | Unspecified Heap | 1869 | 1:10560 |
| V | 204m SE | Unspecified Ground Workings | 1991 | 1:10000 |
| V | 204m SE | Unspecified Ground Workings | 1987 | 1:10000 |
| S | 204m E | Unspecified Old Quarry | 1938 | 1:10560 |
| S | 206m E | Unspecified Old Quarry | 1948 | 1:10560 |
| S | 207m E | Unspecified Old Quarry | 1960 | 1:10560 |
| Q | 207m SW | Brick Works | 1909 | 1:10560 |
| S | 207m E | Unspecified Old Quarry | 1898 | 1:10560 |
| S | 208m E | Unspecified Old Quarry | 1910 | 1:10560 |
| Q | 208m SW | Brick Works | 1948 | 1:10560 |
| S | 208m E | Unspecified Ground Workings | 1970 | 1:10560 |
| Q | 209m SW | Brick Works | 1938 | 1:10560 |
| Q | 209m SW | Brick Works | 1938 | 1:10560 |
| U | 210m N | Unspecified Ground Workings | 1960 | 1:10560 |
| U | 210m N | Unspecified Heap | 1938 | 1:10560 |
| U | 210m N | Unspecified Heap | 1938 | 1:10560 |
| U | 211m N | Unspecified Ground Workings | 1910 | 1:10560 |
| U | 212m N | Unspecified Heap | 1970 | 1:10560 |
| W | 213m SW | Cuttings | 1869 | 1:10560 |
| N | 214m NW | Unspecified Heap | 1948 | 1:10560 |
| N | 215m NW | Unspecified Heap | 1938 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| N | 215m NW | Unspecified Heap | 1938 | 1:10560 |
| N | 216m NW | Unspecified Heap | 1910 | 1:10560 |
| N | 216m NW | Unspecified Heap | 1960 | 1:10560 |
| N | 216m NW | Unspecified Heap | 1970 | 1:10560 |
| U | 218m N | Unspecified Ground Workings | 1948 | 1:10560 |
| U | 218m N | Unspecified Ground Workings | 1898 | 1:10560 |
| N | 218m NW | Unspecified Heap | 1987 | 1:10000 |
| N | 218m NW | Unspecified Heap | 1981 | 1:10000 |
| X | 218m SW | Unspecified Old Quarry | 1960 | 1:10560 |
| N | 221m NW | Unspecified Heap | 1898 | 1:10560 |
| W | 221m SW | Cuttings | 1869 | 1:10560 |
| Q | 221m SW | Unspecified Heap | 1948 | 1:10560 |
| Q | 221m SW | Unspecified Ground Workings | 1909 | 1:10560 |
| Q | 222m SW | Unspecified Heap | 1960 | 1:10560 |
| Q | 222m SW | Unspecified Heap | 1938 | 1:10560 |
| Q | 222m SW | Unspecified Heap | 1938 | 1:10560 |
| O | 223m N | Unspecified Heap | 1869 | 1:10560 |
| 20 | 225m SE | Opencast Workings | 1981 | 1:10000 |
| Y | 226m NE | Unspecified Heap | 1938 | 1:10560 |
| Y | 226m NE | Unspecified Heap | 1938 | 1:10560 |
| Y | 227m NE | Unspecified Heap | 1948 | 1:10560 |
| N | 228m NW | Unspecified Heap | 1991 | 1:10000 |
| Z | 228m S | Unspecified Heap | 1869 | 1:10560 |
| O | 228m N | Unspecified Heap | 1948 | 1:10560 |
| O | 229m N | Unspecified Heap | 1938 | 1:10560 |
| O | 229m N | Unspecified Heap | 1938 | 1:10560 |
| Y | 229m NE | Unspecified Heap | 1910 | 1:10560 |
| O | 230m N | Unspecified Heap | 1910 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| O | 230m N | Unspecified Pit | 1960 | 1:10560 |
| Q | 231m SW | Unspecified Heap | 1898 | 1:10560 |
| O | 231m N | Unspecified Heap | 1970 | 1:10560 |
| N | 234m NW | Unspecified Heap | 1869 | 1:10560 |
| Z | 234m S | Unspecified Heap | 1938 | 1:10560 |
| Z | 234m S | Unspecified Heap | 1938 | 1:10560 |
| Z | 235m S | Unspecified Heap | 1869 | 1:10560 |
| Z | 236m S | Unspecified Heap | 1909 | 1:10560 |
| Z | 238m S | Unspecified Heap | 1948 | 1:10560 |
| Z | 238m S | Unspecified Heap | 1898 | 1:10560 |
| Z | 241m S | Unspecified Heap | 1960 | 1:10560 |
| AB | 243m N | Unspecified Pit | 1991 | 1:10000 |
| AB | 243m N | Unspecified Pit | 1987 | 1:10000 |
| AB | 243m N | Unspecified Pit | 1970 | 1:10560 |
| X | 243m SW | Unspecified Quarry | 1869 | 1:10560 |
| W | 247m SW | Cuttings | 1909 | 1:10560 |

*This is data is sourced from Ordnance Survey/Groundsure.*

## 18.4 Underground workings

**Records within 1000m** **175**

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 165**

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| **A** | **On site** | **Colliery** | **1948** | **1:10560** |
| **A** | **On site** | **Colliery** | **1898** | **1:10560** |
| **A** | **On site** | **Unspecified Disused Mine** | **1960** | **1:10560** |
| **D** | **On site** | **Unspecified Disused Shafts** | **1991** | **1:10000** |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| **D** | **On site** | **Unspecified Disused Shafts** | **1991** | **1:10000** |
| E | 31m N | Disused Colliery | 1948 | 1:10560 |
| E | 31m N | Unspecified Disused Mine | 1960 | 1:10560 |
| A | 61m N | Unspecified Disused Shaft | 1970 | 1:10560 |
| E | 78m N | Unspecified Shaft | 1960 | 1:10560 |
| E | 93m N | Unspecified Shaft | 1948 | 1:10560 |
| H | 99m NE | Unspecified Old Shaft | 1960 | 1:10560 |
| H | 99m NE | Old Coal Shaft | 1948 | 1:10560 |
| H | 99m NE | Unspecified Old Shaft | 1898 | 1:10560 |
| K | 144m SW | Old Coal Shafts | 1948 | 1:10560 |
| K | 144m SW | Unspecified Old Shaft | 1898 | 1:10560 |
| K | 148m SW | Unspecified Old Shaft | 1960 | 1:10560 |
| L | 159m E | Unspecified Old Shaft | 1948 | 1:10560 |
| L | 159m E | Unspecified Shaft | 1898 | 1:10560 |
| N | 161m NW | Disused Colliery | 1898 | 1:10560 |
| O | 166m NW | Colliery | 1869 | 1:10560 |
| E | 168m N | Unspecified Old Shaft | 1960 | 1:10560 |
| E | 168m N | Unspecified Disused Shaft | 1970 | 1:10560 |
| E | 168m N | Old Coal Shaft | 1948 | 1:10560 |
| L | 168m E | Unspecified Old Shaft | 1960 | 1:10560 |
| E | 174m N | Unspecified Disused Shaft | 1991 | 1:10000 |
| P | 182m N | Old Coal Shaft | 1948 | 1:10560 |
| P | 182m N | Unspecified Old Shaft | 1898 | 1:10560 |
| P | 182m N | Unspecified Old Shaft | 1960 | 1:10560 |
| P | 182m N | Unspecified Old Shaft | 1970 | 1:10560 |
| P | 183m N | Unspecified Disused Shaft | 1987 | 1:10000 |
| P | 183m N | Unspecified Disused Shaft | 1981 | 1:10000 |
| O | 231m N | Unspecified Old Shaft | 1960 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| O | 231m N | Unspecified Old Shaft | 1970 | 1:10560 |
| O | 232m N | Old Coal Shaft | 1948 | 1:10560 |
| O | 235m N | Unspecified Shaft | 1869 | 1:10560 |
| N | 239m NW | Unspecified Old Shafts | 1970 | 1:10560 |
| N | 240m NW | Unspecified Old Shafts | 1960 | 1:10560 |
| N | 242m NW | Old Coal Shafts | 1948 | 1:10560 |
| N | 243m NW | Unspecified Disused Shafts | 1987 | 1:10000 |
| N | 243m NW | Unspecified Disused Shafts | 1981 | 1:10000 |
| N | 245m NW | Unspecified Old Shafts | 1898 | 1:10560 |
| N | 248m NW | Unspecified Disused Shafts | 1991 | 1:10000 |
| N | 251m NW | Unspecified Shafts | 1869 | 1:10560 |
| N | 263m NW | Unspecified Old Shafts | 1960 | 1:10560 |
| N | 263m NW | Unspecified Old Shafts | 1970 | 1:10560 |
| N | 264m NW | Old Coal Shafts | 1948 | 1:10560 |
| N | 269m NW | Unspecified Disused Shafts | 1987 | 1:10000 |
| N | 269m NW | Unspecified Disused Shafts | 1981 | 1:10000 |
| N | 270m NW | Unspecified Old Shafts | 1898 | 1:10560 |
| N | 274m NW | Unspecified Disused Shafts | 1991 | 1:10000 |
| N | 274m NW | Unspecified Shafts | 1869 | 1:10560 |
| AH | 312m SE | Old Coal Shafts | 1948 | 1:10560 |
| AH | 312m SE | Unspecified Old Shafts | 1898 | 1:10560 |
| AG | 314m SE | Unspecified Shaft | 1898 | 1:10560 |
| AH | 315m SE | Unspecified Old Shafts | 1960 | 1:10560 |
| AH | 326m SE | Old Coal Shafts | 1948 | 1:10560 |
| AH | 326m SE | Unspecified Old Shafts | 1898 | 1:10560 |
| AH | 328m SE | Unspecified Old Shafts | 1960 | 1:10560 |
| AJ | 332m NW | Unspecified Levels | 1898 | 1:10560 |
| AJ | 333m NW | Unspecified Levels | 1898 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| AN | 336m NW | Unspecified Old Shaft | 1898 | 1:10560 |
| 31 | 381m E | Coal Pit | 1898 | 1:10560 |
| AW | 410m NW | Unspecified Old Shaft | 1898 | 1:10560 |
| AS | 460m S | Old Colliery | 1898 | 1:10560 |
| AS | 498m S | Unspecified Disused Shafts | 1991 | 1:10000 |
| AS | 498m S | Unspecified Disused Shafts | 1987 | 1:10000 |
| AS | 498m S | Unspecified Disused Shafts | 1970 | 1:10560 |
| AS | 501m S | Old Coal Shafts | 1948 | 1:10560 |
| BH | 502m SE | Old Coal Shafts | 1948 | 1:10560 |
| AS | 503m S | Unspecified Disused Shafts | 1981 | 1:10000 |
| AS | 504m S | Unspecified Old Shafts | 1960 | 1:10560 |
| BH | 506m SE | Unspecified Old Shaft | 1898 | 1:10560 |
| BH | 507m SE | Unspecified Old Shafts | 1960 | 1:10560 |
| BH | 521m SE | Old Coal Shafts | 1948 | 1:10560 |
| BH | 525m SE | Unspecified Old Shafts | 1960 | 1:10560 |
| AS | 544m S | Unspecified Shaft | 1869 | 1:10560 |
| AS | 546m S | Unspecified Shaft | 1898 | 1:10560 |
| AS | 547m S | Unspecified Disused Shafts | 1991 | 1:10000 |
| AS | 547m S | Unspecified Disused Shafts | 1987 | 1:10000 |
| AS | 549m S | Unspecified Disused Shafts | 1981 | 1:10000 |
| AS | 550m S | Old Coal Shafts | 1948 | 1:10560 |
| AS | 550m S | Unspecified Old Shafts | 1960 | 1:10560 |
| BP | 553m S | Old Coal Shafts | 1948 | 1:10560 |
| BP | 553m S | Unspecified Shaft | 1898 | 1:10560 |
| BP | 555m S | Unspecified Disused Shafts | 1991 | 1:10000 |
| BP | 555m S | Unspecified Disused Shafts | 1987 | 1:10000 |
| BP | 555m S | Unspecified Disused Shafts | 1970 | 1:10560 |
| BP | 558m S | Unspecified Disused Shafts | 1981 | 1:10000 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| BP | 559m S | Unspecified Old Shafts | 1960 | 1:10560 |
| BP | 560m S | Unspecified Disused Shafts | 1991 | 1:10000 |
| BP | 560m S | Unspecified Disused Shafts | 1987 | 1:10000 |
| BP | 560m S | Unspecified Disused Shafts | 1970 | 1:10560 |
| BH | 564m SE | Old Coal Shafts | 1948 | 1:10560 |
| BH | 564m SE | Unspecified Old Shaft | 1898 | 1:10560 |
| BP | 565m S | Unspecified Disused Shafts | 1981 | 1:10000 |
| BH | 566m E | Unspecified Disused Shaft | 1981 | 1:10000 |
| BH | 566m E | Unspecified Disused Shaft | 1970 | 1:10560 |
| BP | 567m S | Old Coal Shafts | 1948 | 1:10560 |
| BP | 568m S | Unspecified Old Shafts | 1960 | 1:10560 |
| BR | 643m SE | Colliery | 1898 | 1:10560 |
| CD | 651m S | Old Coal Shaft | 1948 | 1:10560 |
| CD | 651m S | Unspecified Old Shaft | 1898 | 1:10560 |
| CD | 654m S | Unspecified Old Shaft | 1960 | 1:10560 |
| CE | 663m S | Unspecified Disused Shaft | 1991 | 1:10000 |
| CE | 664m S | Unspecified Disused Shaft | 1970 | 1:10560 |
| CE | 679m S | Unspecified Disused Shaft | 1987 | 1:10000 |
| CE | 682m S | Unspecified Disused Shaft | 1981 | 1:10000 |
| CK | 696m SW | Colliery | 1869 | 1:10560 |
| BR | 706m SE | Colliery | 1869 | 1:10560 |
| BR | 707m SE | Unspecified Disused Mine | 1960 | 1:10560 |
| CO | 719m SW | Collieries | 1898 | 1:10560 |
| CO | 727m SW | Collieries | 1948 | 1:10560 |
| CO | 733m SW | Unspecified Mines | 1960 | 1:10560 |
| CL | 767m S | Old Coal Shafts | 1948 | 1:10560 |
| CL | 769m S | Unspecified Old Shafts | 1960 | 1:10560 |
| BR | 774m SE | Unspecified Shaft | 1869 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| CL | 777m S | Old Coal Shafts | 1948 | 1:10560 |
| CL | 779m S | Unspecified Old Shafts | 1960 | 1:10560 |
| CL | 779m S | Old Coal Shafts | 1948 | 1:10560 |
| CK | 779m SW | Unspecified Disused Shaft | 1991 | 1:10000 |
| CK | 784m SW | Unspecified Disused Shaft | 1970 | 1:10560 |
| CK | 785m SW | Unspecified Disused Shaft | 1987 | 1:10000 |
| CK | 785m SW | Unspecified Disused Shaft | 1981 | 1:10000 |
| CL | 790m S | Old Coal Shafts | 1948 | 1:10560 |
| CL | 792m S | Unspecified Old Shafts | 1960 | 1:10560 |
| CK | 801m SW | Unspecified Shaft | 1869 | 1:10560 |
| CK | 825m SW | Unspecified Disused Shaft | 1970 | 1:10560 |
| CZ | 830m SE | Unspecified Old Shafts | 1960 | 1:10560 |
| CZ | 831m SE | Old Coal Shafts | 1948 | 1:10560 |
| CZ | 831m SE | Unspecified Old Shaft | 1898 | 1:10560 |
| DK | 845m SE | Unspecified Disused Shafts | 1991 | 1:10000 |
| DK | 845m SE | Unspecified Disused Shafts | 1987 | 1:10000 |
| DK | 845m SE | Unspecified Disused Shafts | 1981 | 1:10000 |
| DK | 847m SE | Unspecified Old Shafts | 1898 | 1:10560 |
| CT | 850m SE | Unspecified Old Mine | 1960 | 1:10560 |
| DK | 856m SE | Unspecified Old Shafts | 1898 | 1:10560 |
| DK | 858m SE | Unspecified Disused Shafts | 1991 | 1:10000 |
| DK | 858m SE | Unspecified Disused Shafts | 1987 | 1:10000 |
| DK | 858m SE | Unspecified Disused Shafts | 1981 | 1:10000 |
| DO | 871m SE | Unspecified Shaft | 1869 | 1:10560 |
| DO | 877m SE | Old Coal Shafts | 1948 | 1:10560 |
| DO | 877m SE | Unspecified Shafts | 1898 | 1:10560 |
| DO | 881m SE | Unspecified Old Shafts | 1960 | 1:10560 |
| CT | 905m SE | Unspecified Shaft | 1869 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| DS | 913m NE | Unspecified Old Shafts | 1898 | 1:10560 |
| CT | 913m SE | Old Coal Shaft | 1948 | 1:10560 |
| CT | 913m SE | Unspecified Shafts | 1898 | 1:10560 |
| DW | 933m NE | Colliery | 1869 | 1:10560 |
| DS | 938m NE | Unspecified Old Shafts | 1898 | 1:10560 |
| DW | 939m NE | Old Colliery | 1898 | 1:10560 |
| DW | 939m NE | Old Colliery | 1948 | 1:10560 |
| DS | 953m NE | Unspecified Old Shafts | 1898 | 1:10560 |
| EB | 956m N | Unspecified Disused Shafts | 1991 | 1:10000 |
| EB | 956m N | Unspecified Disused Shafts | 1987 | 1:10000 |
| EB | 956m N | Unspecified Disused Shafts | 1981 | 1:10000 |
| EB | 956m N | Unspecified Disused Shafts | 1970 | 1:10560 |
| DW | 964m N | Unspecified Shaft | 1869 | 1:10560 |
| EB | 964m N | Old Coal Shafts | 1948 | 1:10560 |
| EB | 964m N | Unspecified Old Shafts | 1898 | 1:10560 |
| DW | 965m N | Unspecified Disused Shafts | 1970 | 1:10560 |
| DW | 965m N | Unspecified Old Mine | 1960 | 1:10560 |
| DW | 966m N | Unspecified Disused Shafts | 1987 | 1:10000 |
| DW | 966m N | Unspecified Disused Shafts | 1981 | 1:10000 |
| EB | 968m N | Unspecified Old Shafts | 1960 | 1:10560 |
| EB | 970m N | Unspecified Disused Shafts | 1991 | 1:10000 |
| EB | 970m N | Unspecified Disused Shafts | 1987 | 1:10000 |
| EB | 970m N | Unspecified Disused Shafts | 1981 | 1:10000 |
| EB | 970m N | Unspecified Disused Shafts | 1970 | 1:10560 |
| EB | 971m N | Unspecified Old Shafts | 1898 | 1:10560 |
| EB | 972m N | Old Coal Shafts | 1948 | 1:10560 |
| DW | 975m N | Unspecified Disused Shafts | 1991 | 1:10000 |
| DC | 978m SE | Unspecified Shaft | 1869 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| DX | 985m S | Unspecified Old Shaft | 1898 | 1:10560 |
| EI | 995m N | Unspecified Old Shafts | 1898 | 1:10560 |
| DC | 996m SE | Unspecified Shafts | 1898 | 1:10560 |

*This is data is sourced from Ordnance Survey/Groundsure.*

## 18.5 Historical Mineral Planning Areas

**Records within 500m** **4**

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 165**

| ID | Location | Site Name | Mineral | Type | Planning Status | Planning Status Date |
|---|---|---|---|---|---|---|
| 19 | 177m SW | New Works | Not available | Not available | Not available | Not available |
| AA | 242m SW | New Works | Not available | Not available | Not available | Not available |
| AL | 327m SW | Catherall Brickworks | Not available | Not available | Not available | Not available |
| AQ | 339m SW | Catherall Brickworks | Not available | Not available | Not available | Not available |

*This data is sourced from the British Geological Survey.*

## 18.6 Non-coal mining

**Records within 1000m** **15**

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).

Features are displayed on the Mining, ground workings and natural cavities map on **page 165**

| ID | Location | Name | Commodity | Class | Likelihood |
|---|---|---|---|---|---|
| **4** | **On site** | **Not available** | **Iron Ore (Bedded)** | **B** | **Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered** |
| **5** | **On site** | **Not available** | **Iron Ore (Bedded)** | **B** | **Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered** |
| **6** | **On site** | **Not available** | **Iron Ore (Bedded)** | **B** | **Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered** |
| **7** | **On site** | **Not available** | **Vein Mineral** | **A** | **Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered** |
| **8** | **On site** | **Not available** | **Vein Mineral** | **A** | **Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered** |
| 18 | 168m NW | Not available | Vein Mineral | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |
| 27 | 350m SW | Not available | Iron Ore (Bedded) | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |
| 32 | 471m NE | Not available | Vein Mineral | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |
| 38 | 533m NW | Not available | Vein Mineral | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |
| 40 | 601m NW | Not available | Vein Mineral | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |

| ID | Location | Name | Commodity | Class | Likelihood |
|---|---|---|---|---|---|
| 43 | 659m E | Not available | Iron Ore (Bedded) | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |
| CI | 686m N | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 52 | 833m W | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| DR | 902m S | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 58 | 905m E | Not available | Vein Mineral | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |

*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** | **1** |
|---|---|

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

| Location | Details |
|---|---|
| **On site** | **In addition to being located inside an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) have information such as mining plans and maps held within their archive of mining activities that have occurred within 1km of this property which may supplement this information. Please note, the plans held by JPB may also relate to non-mining records. Further details and a quote for services (if appropriate) can be obtained by emailing this report to enquiries.gs@jpb.co.uk.** |

*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 Mining Searches UK.*

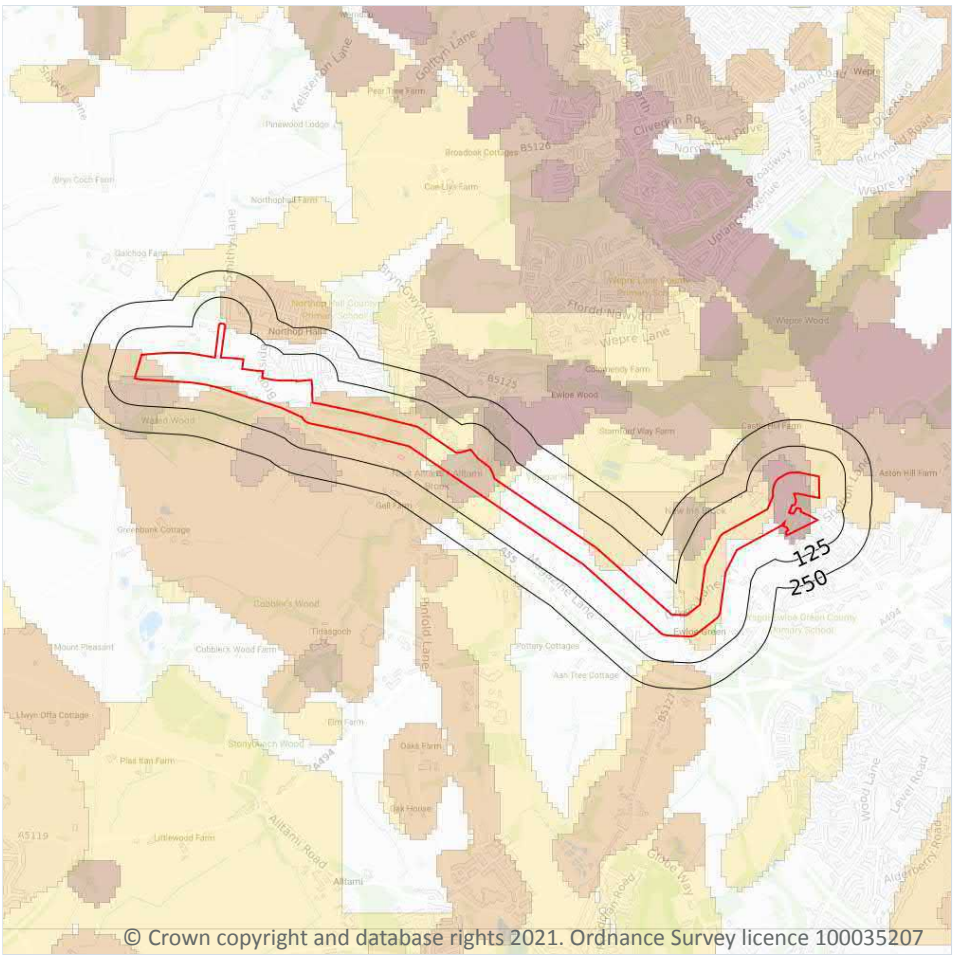
## 18.13 Clay mining

| 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




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Site Outline

Search buffers in metres (m)

Greater than 30%

Between 10% and 30%

Between 5% and 10%

Between 3% and 5%

Between 1% and 3%

Less than 1%

## 19.1 Radon

| Records on site | 6 |
|---|---|

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 190**

| Location | Estimated properties affected | Radon Protection Measures required |
|---|---|---|
| **On site** | **Less than 1%** | **None**** |
| **On site** | **Between 1% and 3%** | **None** |

| Location | Estimated properties affected | Radon Protection Measures required |
|---|---|---|
| **On site** | **Between 10% and 30%** | **Full** |
| **On site** | **Between 3% and 5%** | **Basic** |
| **On site** | **Greater than 30%** | **Full** |
| **On site** | **Between 5% and 10%** | **Basic** |

*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 | 86 |
|---|---|

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 $km^2$. 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 $km^2$; 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** |
| **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** |
| **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** |
| **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 - 200 mg/kg** | **60 - 120 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** |
| **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 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |

| Location | Arsenic | Bioaccessible Arsenic | Lead | Bioaccessible Lead | Cadmium | Chromium | Nickel |
|---|---|---|---|---|---|---|---|
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 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** |
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| **On site** | **15 mg/kg** | **No data** | **100 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
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| 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 - 200 mg/kg | 60 - 120 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 |
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| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 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 |
| 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 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
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| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 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 | 90 - 120 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 |
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| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 90 - 120 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 |
| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
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| 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 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
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| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 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 | 90 - 120 mg/kg | 15 - 30 mg/kg |
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| On site | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
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| 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 - 200 mg/kg** | **60 - 120 mg/kg** | **1.8 mg/kg** | **60 - 90 mg/kg** | **15 - 30 mg/kg** |
| 4m W | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 5m E | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| 12m SW | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 13m NW | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 13m SE | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 13m W | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 15m W | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 16m E | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| 16m E | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| 17m W | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| 17m E | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 33m SE | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 37m SW | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 37m W | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 38m W | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 39m SW | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |

| Location | Arsenic | Bioaccessible Arsenic | Lead | Bioaccessible Lead | Cadmium | Chromium | Nickel |
|---|---|---|---|---|---|---|---|
| 39m SW | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 45m W | 15 mg/kg | No data | 100 - 200 mg/kg | 60 - 120 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 $km^2$).

*This data is sourced from the British Geological Survey.*

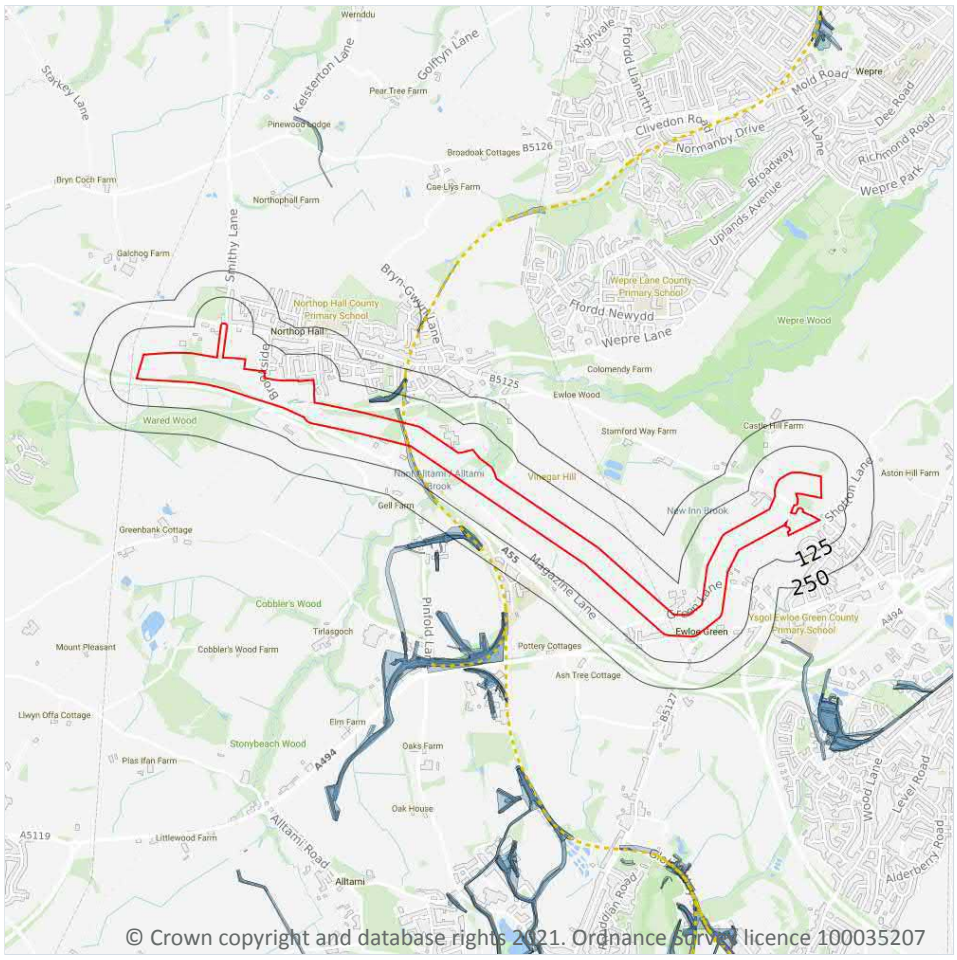
## 20.3 BGS Measured Urban Soil Chemistry

| 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 $km^2$.

*This data is sourced from the British Geological Survey.*

# 21 Railway infrastructure and projects




## 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 | 20 |
|---|---|

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 198**

| Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|
| **On site** | **Railway Sidings** | **1869** | **10560** |
| **On site** | **Railway Sidings** | **1870** | **2500** |
| 54m N | Railway Sidings | 1948 | 10560 |
| 56m N | Railway Sidings | 1938 | 10560 |
| 56m N | Railway Sidings | 1960 | 10560 |
| 57m N | Railway Sidings | 1912 | 2500 |
| 57m N | Railway Sidings | 1899 | 2500 |
| 58m N | Railway Sidings | 1910 | 10560 |
| 60m N | Railway Sidings | 1898 | 10560 |
| 175m SW | Railway Sidings | 1869 | 10560 |
| 176m SW | Mineral Railway Sidings | 1898 | 10560 |
| 178m SW | Railway Sidings | 1938 | 10560 |
| 181m SW | Railway Sidings | 1948 | 10560 |
| 181m SW | Railway Sidings | 1963 | 2500 |
| 183m SW | Railway Sidings | 1870 | 2500 |
| 185m SW | Railway Sidings | 1909 | 10560 |
| 186m SW | Mineral Railway Sidings | 1899 | 2500 |

| Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|
| 187m SW | Railway Sidings | 1912 | 2500 |
| 190m SW | Railway Sidings | 1869 | 10560 |
| 194m SW | Railway Sidings | 1960 | 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 | 3 |
|---|---|

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

Features are displayed on the Railway infrastructure and projects map on **page 198**

| Location | Description |
|---|---|
| **On site** | **Abandoned** |
| 224m SW | Razed |
| 230m N | Razed |

*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/.

Groundsure LOCATION INTELLIGENCE

# Enviro+Geo Insight

## DCO Pipeline, Southern Route

## Order Details

**Date:** 31/08/2021

**Your ref:** DCO Pipeline, Southern Route

**Our Ref:** GSIP-2021-10877-7381_C

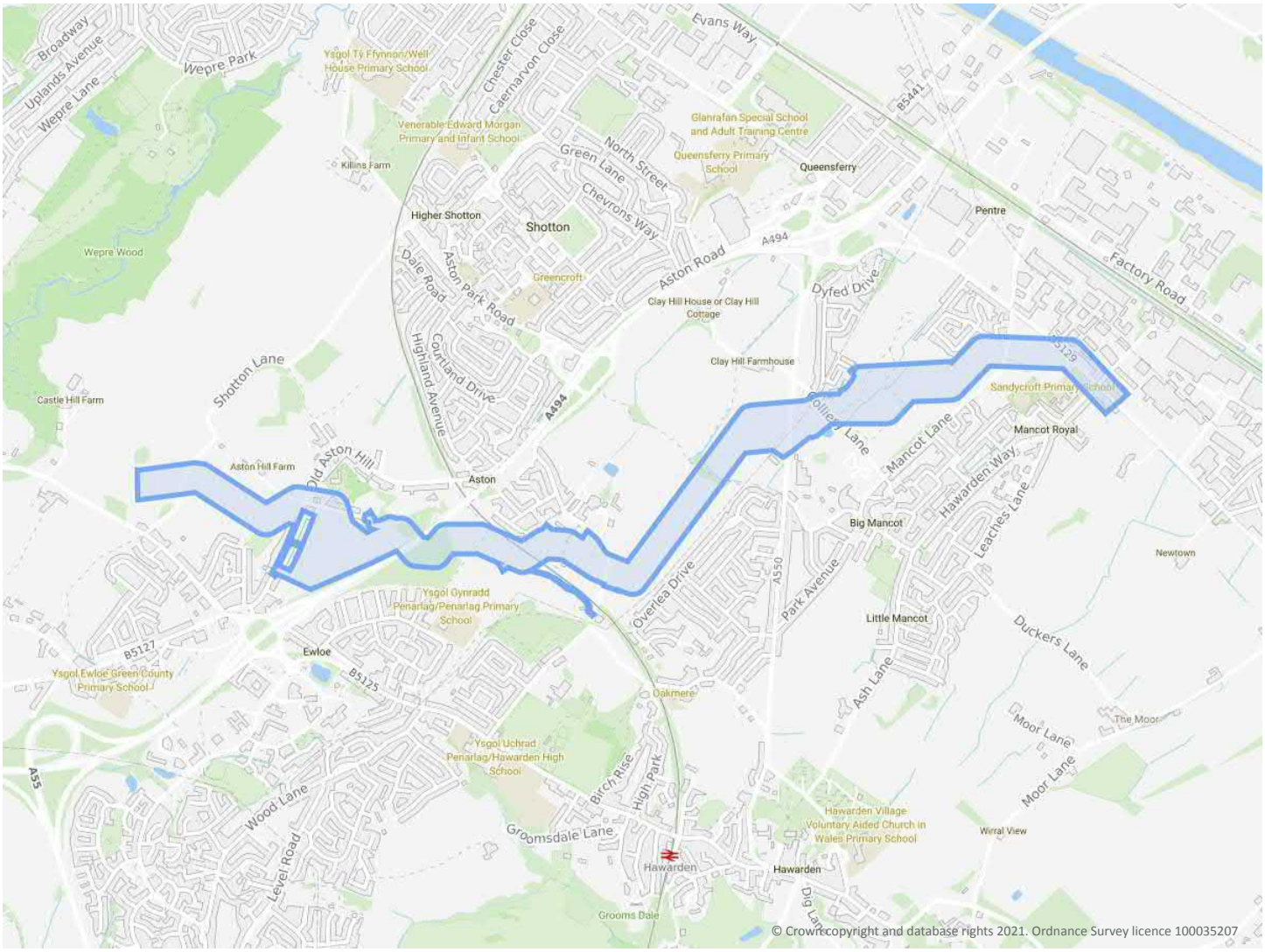
**Client:** WSP UK LIMITED

## Site Details

**Location:** 330716 367029

**Area:** 46.93 ha

**Authority:** Sir y Fflint - Flintshire County Council





**Summary of findings** p. 2

**OS MasterMap site plan** N/A: >10ha

**Aerial image** p. 8

**groundsure.com/insightuserguide**



Contact us with any questions at:
info@groundsure.com
08444 159 000

# Summary of findings

| Page | Section | Past land use | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| 13 | 1.1 | Historical industrial land uses | 58 | 61 | 132 | 129 | - |
| 27 | 1.2 | Historical tanks | 3 | 3 | 26 | 28 | - |
| 30 | 1.3 | Historical energy features | 1 | 0 | 17 | 25 | - |
| 32 | 1.4 | Historical petrol stations | 0 | 0 | 0 | 0 | - |
| 32 | 1.5 | Historical garages | 0 | 0 | 5 | 1 | - |
| 32 | 1.6 | Historical military land | 0 | 0 | 0 | 0 | - |
| Page | Section | Past land use - un-grouped | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 33 | 2.1 | Historical industrial land uses | 77 | 79 | 165 | 146 | - |
| 50 | 2.2 | Historical tanks | 4 | 6 | 36 | 44 | - |
| 54 | 2.3 | Historical energy features | 1 | 0 | 39 | 46 | - |
| 57 | 2.4 | Historical petrol stations | 0 | 0 | 0 | 0 | - |
| 57 | 2.5 | Historical garages | 0 | 0 | 10 | 5 | - |
| Page | Section | Waste and landfill | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 59 | 3.1 | Active or recent landfill | 0 | 0 | 2 | 0 | - |
| 60 | 3.2 | Historical landfill (BGS records) | 0 | 0 | 0 | 0 | - |
| 60 | 3.3 | Historical landfill (LA/mapping records) | 0 | 1 | 0 | 0 | - |
| 60 | 3.4 | Historical landfill (EA/NRW records) | 1 | 0 | 3 | 0 | - |
| 61 | 3.5 | Historical waste sites | 0 | 0 | 0 | 5 | - |
| 62 | 3.6 | Licensed waste sites | 0 | 0 | 16 | 37 | - |
| 76 | 3.7 | Waste exemptions | 0 | 0 | 0 | 96 | - |
| Page | Section | Current industrial land use | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 86 | 4.1 | Recent industrial land uses | 3 | 6 | 70 | - | - |
| 91 | 4.2 | Current or recent petrol stations | 0 | 0 | 1 | 1 | - |
| 92 | 4.3 | Electricity cables | 0 | 0 | 0 | 0 | - |
| 92 | 4.4 | Gas pipelines | 0 | 0 | 0 | 0 | - |
| 92 | 4.5 | Sites determined as Contaminated Land | 0 | 0 | 0 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 92 | 4.6 | Control of Major Accident Hazards (COMAH) | 0 | 1 | 2 | 1 | - |
| 93 | 4.7 | Regulated explosive sites | 0 | 0 | 0 | 0 | - |
| 93 | 4.8 | Hazardous substance storage/usage | 0 | 0 | 1 | 0 | - |
| 93 | 4.9 | Historical licensed industrial activities (IPC) | 0 | 0 | 8 | 0 | - |
| 94 | 4.10 | Licensed industrial activities (Part A(1)) | 0 | 0 | 36 | 1 | - |
| 102 | 4.11 | Licensed pollutant release (Part A(2)/B) | 0 | 0 | 0 | 6 | - |
| 102 | 4.12 | Radioactive Substance Authorisations | 0 | 0 | 0 | 0 | - |
| 103 | 4.13 | Licensed Discharges to controlled waters | 3 | 2 | 7 | 9 | - |
| 106 | 4.14 | Pollutant release to surface waters (Red List) | 0 | 0 | 0 | 0 | - |
| 106 | 4.15 | Pollutant release to public sewer | 0 | 0 | 0 | 1 | - |
| 106 | 4.16 | List 1 Dangerous Substances | 0 | 0 | 0 | 0 | - |
| 106 | 4.17 | List 2 Dangerous Substances | 0 | 0 | 1 | 0 | - |
| 107 | 4.18 | Pollution Incidents (EA/NRW) | 5 | 16 | 58 | 59 | - |
| 121 | 4.19 | Pollution inventory substances | 0 | 0 | 0 | 0 | - |
| 121 | 4.20 | Pollution inventory waste transfers | 0 | 0 | 0 | 0 | - |
| 121 | 4.21 | Pollution inventory radioactive waste | 0 | 0 | 0 | 0 | - |

| Page | Section | Hydrogeology | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| 122 | 5.1 | Superficial aquifer | Identified (within 500m) | | | | |
| 125 | 5.2 | Bedrock aquifer | Identified (within 500m) | | | | |
| 127 | 5.3 | Groundwater vulnerability | Identified (within 50m) | | | | |
| 132 | 5.4 | Groundwater vulnerability- soluble rock risk | None (within 0m) | | | | |
| 132 | 5.5 | Groundwater vulnerability- local information | None (within 0m) | | | | |
| 133 | 5.6 | Groundwater abstractions | 0 | 0 | 1 | 3 | 6 |
| 136 | 5.7 | Surface water abstractions | 0 | 0 | 0 | 0 | 12 |
| 138 | 5.8 | Potable abstractions | 0 | 0 | 0 | 2 | 0 |
| 139 | 5.9 | Source Protection Zones | 0 | 0 | 0 | 0 | - |
| 139 | 5.10 | Source Protection Zones (confined aquifer) | 0 | 0 | 0 | 0 | - |

| Page | Section | Hydrology | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| 140 | 6.1 | Water Network (OS MasterMap) | 15 | 11 | 33 | - | - |

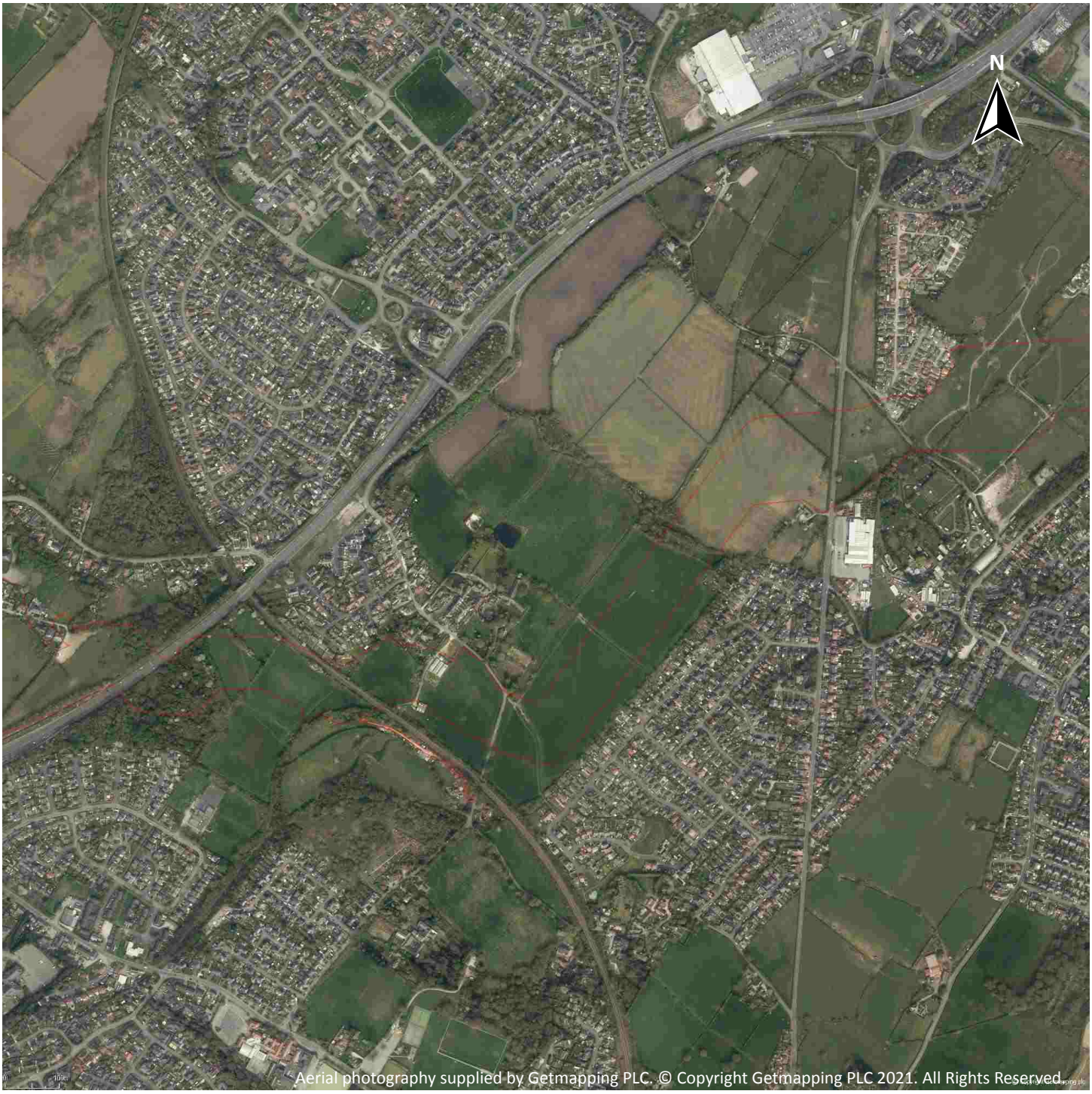
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 145 | 6.2 | Surface water features | 1 | 8 | 16 | - | - |
| 145 | 6.3 | WFD Surface water body catchments | 3 | - | - | - | - |
| 146 | 6.4 | WFD Surface water bodies | 0 | 0 | 0 | - | - |
| 146 | 6.5 | WFD Groundwater bodies | 1 | - | - | - | - |
| Page | Section | River and coastal flooding | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 147 | 7.1 | Risk of Flooding from Rivers and Sea (RoFRaS) | Medium (within 50m) | | | | |
| 148 | 7.2 | Historical Flood Events | 1 | 1 | 0 | - | - |
| 148 | 7.3 | Flood Defences | 0 | 0 | 0 | - | - |
| 148 | 7.4 | Areas Benefiting from Flood Defences | 2 | 0 | 1 | - | - |
| 149 | 7.5 | Flood Storage Areas | 0 | 0 | 0 | - | - |
| 150 | 7.6 | Flood Zone 2 | Identified (within 50m) | | | | |
| 151 | 7.7 | Flood Zone 3 | Identified (within 50m) | | | | |
| Page | Section | Surface water flooding | | | | | |
| 152 | 8.1 | Surface water flooding | 1 in 30 year, Greater than 1.0m (within 50m) | | | | |
| Page | Section | Groundwater flooding | | | | | |
| 154 | 9.1 | Groundwater flooding | High (within 50m) | | | | |
| Page | Section | Environmental designations | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 155 | 10.1 | Sites of Special Scientific Interest (SSSI) | 0 | 0 | 1 | 1 | 12 |
| 156 | 10.2 | Conserved wetland sites (Ramsar sites) | 0 | 0 | 0 | 0 | 1 |
| 157 | 10.3 | Special Areas of Conservation (SAC) | 0 | 0 | 1 | 1 | 12 |
| 162 | 10.4 | Special Protection Areas (SPA) | 0 | 0 | 0 | 0 | 1 |
| 163 | 10.5 | National Nature Reserves (NNR) | 0 | 0 | 0 | 0 | 0 |
| 163 | 10.6 | Local Nature Reserves (LNR) | 0 | 0 | 0 | 0 | 2 |
| 164 | 10.7 | Designated Ancient Woodland | 0 | 0 | 0 | 6 | 67 |
| 167 | 10.8 | Biosphere Reserves | 0 | 0 | 0 | 0 | 0 |
| 167 | 10.9 | Forest Parks | 0 | 0 | 0 | 0 | 0 |
| 167 | 10.10 | Marine Conservation Zones | 0 | 0 | 0 | 0 | 0 |
| 167 | 10.11 | Green Belt | 0 | 0 | 0 | 0 | 0 |
| 167 | 10.12 | Proposed Ramsar sites | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 168 | 10.13 | Possible Special Areas of Conservation (pSAC) | 0 | 0 | 0 | 0 | 0 |
| 168 | 10.14 | Potential Special Protection Areas (pSPA) | 0 | 0 | 0 | 0 | 0 |
| 168 | 10.15 | Nitrate Sensitive Areas | 0 | 0 | 0 | 0 | 0 |
| **168** | **10.16** | **Nitrate Vulnerable Zones** | 0 | 0 | 0 | 0 | 4 |
| **170** | **10.17** | **SSSI Impact Risk Zones** | 1 | - | - | - | - |
| 171 | 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 |
| 172 | 11.1 | World Heritage Sites | 0 | 0 | 0 | - | - |
| 173 | 11.2 | Area of Outstanding Natural Beauty | 0 | 0 | 0 | - | - |
| 173 | 11.3 | National Parks | 0 | 0 | 0 | - | - |
| **173** | **11.4** | **Listed Buildings** | 0 | 1 | 2 | - | - |
| 174 | 11.5 | Conservation Areas | 0 | 0 | 0 | - | - |
| 174 | 11.6 | Scheduled Ancient Monuments | 0 | 0 | 0 | - | - |
| 174 | 11.7 | Registered Parks and Gardens | 0 | 0 | 0 | - | - |
| Page | Section | Agricultural designations | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| **175** | **12.1** | **Agricultural Land Classification** | Grade 2 (within 250m) | | | | |
| 176 | 12.2 | Open Access Land | 0 | 0 | 0 | - | - |
| 176 | 12.3 | Tree Felling Licences | 0 | 0 | 0 | - | - |
| 177 | 12.4 | Environmental Stewardship Schemes | 0 | 0 | 0 | - | - |
| 177 | 12.5 | Countryside Stewardship Schemes | 0 | 0 | 0 | - | - |
| Page | Section | Habitat designations | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 178 | 13.1 | Priority Habitat Inventory | 0 | 0 | 0 | - | - |
| 178 | 13.2 | Habitat Networks | 0 | 0 | 0 | - | - |
| 178 | 13.3 | Open Mosaic Habitat | 0 | 0 | 0 | - | - |
| 178 | 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 |
| **179** | **14.1** | **10k Availability** | Identified (within 500m) | | | | |
| 180 | 14.2 | Artificial and made ground (10k) | 0 | 0 | 0 | 0 | - |
| 181 | 14.3 | Superficial geology (10k) | 0 | 0 | 0 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 181 | 14.4 | Landslip (10k) | 0 | 0 | 0 | 0 | - |
| 182 | 14.5 | Bedrock geology (10k) | 0 | 0 | 0 | 0 | - |
| 182 | 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 |
| 183 | 15.1 | 50k Availability | Identified (within 500m) | | | | |
| 184 | 15.2 | Artificial and made ground (50k) | 5 | 2 | 5 | 4 | - |
| 185 | 15.3 | Artificial ground permeability (50k) | 5 | 2 | - | - | - |
| 186 | 15.4 | Superficial geology (50k) | 6 | 1 | 2 | 6 | - |
| 187 | 15.5 | Superficial permeability (50k) | Identified (within 50m) | | | | |
| 188 | 15.6 | Landslip (50k) | 0 | 0 | 0 | 2 | - |
| 188 | 15.7 | Landslip permeability (50k) | None (within 50m) | | | | |
| 189 | 15.8 | Bedrock geology (50k) | 18 | 1 | 9 | 10 | - |
| 192 | 15.9 | Bedrock permeability (50k) | Identified (within 50m) | | | | |
| 192 | 15.10 | Bedrock faults and other linear features (50k) | 29 | 7 | 21 | 19 | - |
| Page | Section | Boreholes | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 196 | 16.1 | BGS Boreholes | 38 | 31 | 122 | - | - |
| Page | Section | Natural ground subsidence | | | | | |
| 205 | 17.1 | Shrink swell clays | Low (within 50m) | | | | |
| 207 | 17.2 | Running sands | Moderate (within 50m) | | | | |
| 209 | 17.3 | Compressible deposits | Moderate (within 50m) | | | | |
| 211 | 17.4 | Collapsible deposits | Very low (within 50m) | | | | |
| 212 | 17.5 | Landslides | Low (within 50m) | | | | |
| 214 | 17.6 | Ground dissolution of soluble rocks | Negligible (within 50m) | | | | |
| Page | Section | Mining, ground workings and natural cavities | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 216 | 18.1 | Natural cavities | 0 | 1 | 0 | 0 | - |
| 217 | 18.2 | BritPits | 2 | 1 | 11 | 6 | - |
| 221 | 18.3 | Surface ground workings | 66 | 55 | 109 | - | - |
| 230 | 18.4 | Underground workings | 6 | 4 | 27 | 16 | 56 |
| 234 | 18.5 | Historical Mineral Planning Areas | 0 | 0 | 0 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **234** | **18.6** | **Non-coal mining** | 6 | 0 | 1 | 3 | 5 |
| 236 | 18.7 | Mining cavities | 0 | 0 | 0 | 0 | 0 |
| **236** | **18.8** | **JPB mining areas** | Identified (within 0m) | | | | |
| **236** | **18.9** | **Coal mining** | Identified (within 0m) | | | | |
| 237 | 18.10 | Brine areas | None (within 0m) | | | | |
| 237 | 18.11 | Gypsum areas | None (within 0m) | | | | |
| 237 | 18.12 | Tin mining | None (within 0m) | | | | |
| 237 | 18.13 | Clay mining | None (within 0m) | | | | |
| Page | Section | Radon | | | | | |
| **238** | **19.1** | **Radon** | Greater than 30% (within 0m) | | | | |
| Page | Section | Soil chemistry | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| **240** | **20.1** | **BGS Estimated Background Soil Chemistry** | 63 | 17 | - | - | - |
| 244 | 20.2 | BGS Estimated Urban Soil Chemistry | 0 | 0 | - | - | - |
| 245 | 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 |
| 246 | 21.1 | Underground railways (London) | 0 | 0 | 0 | - | - |
| 246 | 21.2 | Underground railways (Non-London) | 0 | 0 | 0 | - | - |
| 247 | 21.3 | Railway tunnels | 0 | 0 | 0 | - | - |
| **247** | **21.4** | **Historical railway and tunnel features** | 8 | 10 | 7 | - | - |
| 248 | 21.5 | Royal Mail tunnels | 0 | 0 | 0 | - | - |
| 248 | 21.6 | Historical railways | 0 | 0 | 0 | - | - |
| **248** | **21.7** | **Railways** | 7 | 6 | 5 | - | - |
| 249 | 21.8 | Crossrail 1 | 0 | 0 | 0 | 0 | - |
| 250 | 21.9 | Crossrail 2 | 0 | 0 | 0 | 0 | - |
| 250 | 21.10 | HS2 | 0 | 0 | 0 | 0 | - |

## Recent aerial photograph




Capture Date: 10/04/2020

Site Area: 46.93ha

# Recent site history - 2017 aerial photograph




Capture Date: 07/05/2017

Site Area: 46.93ha

# Recent site history - 2009 aerial photograph




Capture Date: 20/04/2009

Site Area: 46.93ha

# Recent site history - 2001 aerial photograph




Capture Date: 28/07/2001

Site Area: 46.93ha

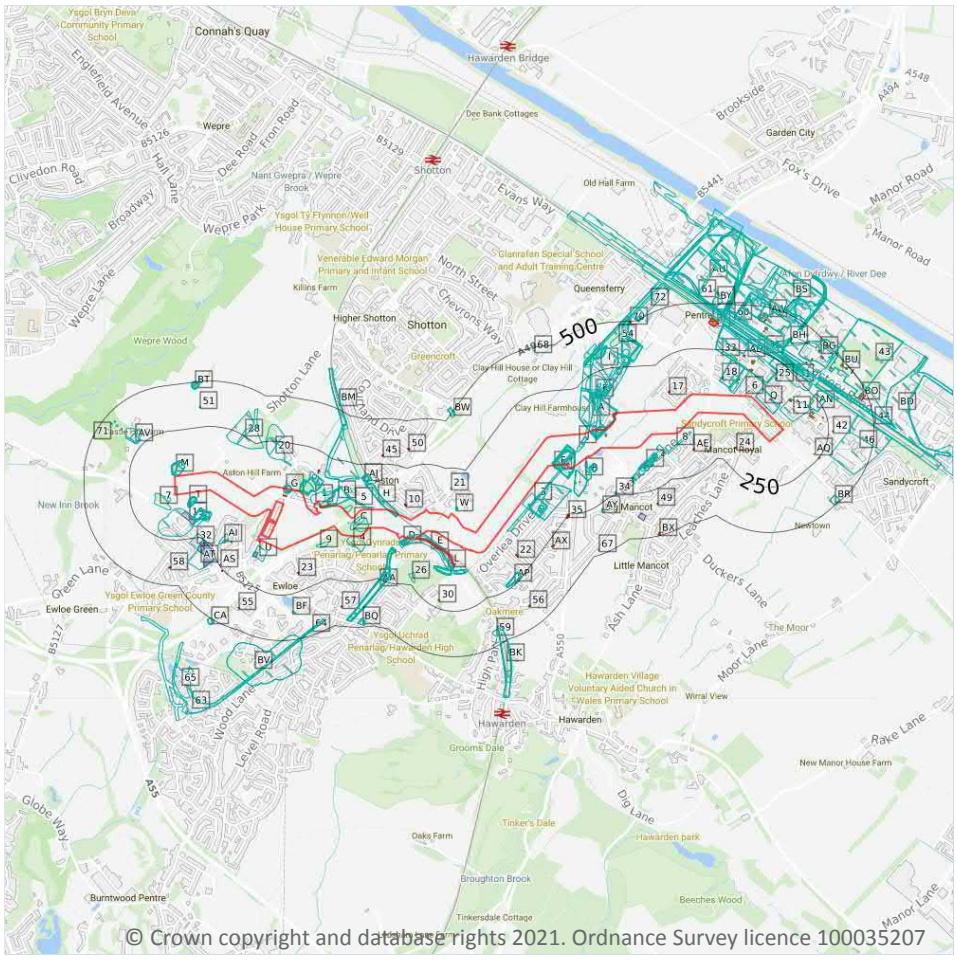
# Recent site history - 2000 aerial photograph




Capture Date: 04/09/2000

Site Area: 46.93ha

# 1 Past land use




Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

## 1.1 Historical industrial land uses

| Records within 500m | 380 |
|---|---|

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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| **1** | **On site** | **Unspecified Pit** | **1969** | **839191** |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| 2 | On site | Unspecified Pit | 1969 | 839196 |
| 3 | On site | Railway Sidings | 1938 | 794526 |
| A | On site | Old Colliery | 1898 | 903296 |
| A | On site | Unspecified Shafts | 1898 | 809166 |
| A | On site | Unspecified Shafts | 1869 | 809167 |
| A | On site | Unspecified Old Mine | 1960 | 814657 |
| A | On site | Clay Pit | 1869 | 827658 |
| A | On site | Colliery | 1869 | 855204 |
| A | On site | Unspecified Heap | 1938 - 1948 | 855571 |
| A | On site | Unspecified Heap | 1898 | 885446 |
| A | On site | Unspecified Ground Workings | 1989 | 885533 |
| A | On site | Old Colliery | 1948 | 917222 |
| A | On site | Unspecified Ground Workings | 1969 - 1976 | 939398 |
| A | On site | Old Colliery | 1938 | 939995 |
| A | On site | Old Colliery | 1909 | 959716 |
| A | On site | Unspecified Heap | 1909 | 965764 |
| B | On site | Sand Pit | 1869 | 797382 |
| B | On site | Unspecified Ground Workings | 1910 | 799523 |
| B | On site | Sand Pits | 1938 - 1948 | 864320 |
| B | On site | Sand Pits | 1960 | 908356 |
| C | On site | Unspecified Heap | 1989 | 803630 |
| C | On site | Unspecified Pit | 1969 | 839197 |
| D | On site | Unspecified Pit | 1969 - 1976 | 964709 |
| D | On site | Unspecified Pit | 1989 | 883227 |
| E | On site | Railway Building | 1938 | 819549 |
| E | On site | Railway Sidings | 1898 | 867409 |
| E | On site | Railway Sidings | 1909 - 1948 | 914346 |
| E | On site | Unspecified Ground Workings | 1969 - 1976 | 971149 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| F | On site | Unspecified Quarry | 1869 | 816569 |
| F | On site | Unspecified Works | 1960 | 830099 |
| F | On site | Unspecified Pit | 1898 | 879502 |
| F | On site | Unspecified Ground Workings | 1989 | 884238 |
| F | On site | Unspecified Ground Workings | 1909 | 885637 |
| F | On site | Unspecified Pits | 1960 | 903014 |
| F | On site | Brick Works | 1898 - 1909 | 931069 |
| F | On site | Unspecified Pit | 1948 | 931811 |
| F | On site | Brick Works | 1869 | 936745 |
| F | On site | Unspecified Pit | 1898 | 937583 |
| F | On site | Unspecified Ground Workings | 1969 - 1976 | 951222 |
| F | On site | Brick Works | 1948 | 959283 |
| F | On site | Unspecified Tank | 1898 | 971312 |
| F | On site | Unspecified Pits | 1938 | 973798 |
| F | On site | Unspecified Tank | 1909 - 1938 | 984547 |
| F | On site | Brick Works | 1938 | 988384 |
| G | On site | Unspecified Tank | 1960 | 824043 |
| G | On site | Unspecified Heap | 1970 | 942244 |
| G | On site | Unspecified Heap | 1981 - 1991 | 951952 |
| H | On site | Unspecified Pit | 1938 | 885652 |
| H | On site | Cuttings | 1948 - 1960 | 934681 |
| H | On site | Cuttings | 1910 | 944694 |
| I | On site | Railway Sidings | 1938 | 907494 |
| J | On site | Cuttings | 1960 | 926933 |
| J | On site | Cuttings | 1909 - 1938 | 934933 |
| K | On site | Railway Sidings | 1869 | 964495 |
| L | On site | Cuttings | 1938 - 1948 | 980501 |
| L | On site | Cuttings | 1909 | 981339 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| **L** | **On site** | **Railway Sidings** | **1948** | **991001** |
| 4 | 1m S | Refuse Heap | 1969 | 828563 |
| M | 2m N | Unspecified Heap | 1869 | 892215 |
| N | 3m NE | Sand Pits | 1960 | 920552 |
| E | 4m SW | Railway Building | 1898 | 819550 |
| M | 4m N | Refuse Heap | 1948 | 828558 |
| 5 | 5m N | Railway Sidings | 1869 | 794522 |
| N | 6m NE | Sand Pits | 1948 | 882720 |
| D | 7m S | Cuttings | 1909 | 962360 |
| D | 7m S | Cuttings | 1948 | 970074 |
| M | 9m NW | Unspecified Heap | 1960 | 934185 |
| O | 10m N | Disused Wire Works | 1869 | 832059 |
| P | 11m SE | Old Colliery | 1869 | 980727 |
| M | 11m NW | Unspecified Heap | 1938 | 937790 |
| N | 12m NE | Unspecified Pit | 1969 - 1976 | 862980 |
| N | 12m NE | Unspecified Pit | 1989 | 886227 |
| M | 14m NW | Unspecified Ground Workings | 1910 | 799525 |
| Q | 14m NE | Unspecified Depot | 1976 | 930588 |
| D | 14m S | Cuttings | 1938 | 941386 |
| D | 15m S | Unspecified Pit | 1960 | 972186 |
| R | 16m SE | Refuse Heaps | 1989 | 808250 |
| Q | 17m NE | Unspecified Depot | 1989 | 875842 |
| S | 18m SE | Nursery | 1969 | 869809 |
| N | 19m NE | Unspecified Ground Workings | 1938 | 875291 |
| N | 20m NE | Sand Pits | 1898 - 1910 | 887901 |
| O | 22m N | Corn Mill | 1898 | 904360 |
| S | 22m SE | Nursery | 1976 | 872354 |
| S | 22m SE | Nursery | 1989 | 965270 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| T | 23m S | Unspecified Heap | 1981 - 1987 | 921811 |
| T | 23m S | Unspecified Heap | 1948 | 855660 |
| T | 23m S | Unspecified Heap | 1869 - 1898 | 938035 |
| U | 23m S | Garage | 1970 | 934977 |
| F | 23m SW | Unspecified Tank | 1898 | 824033 |
| T | 23m S | Unspecified Heap | 1910 | 968519 |
| L | 26m S | Cuttings | 1938 | 930465 |
| V | 27m S | Railway Sidings | 1948 | 794527 |
| V | 27m S | Cuttings | 1948 - 1960 | 919213 |
| L | 27m SW | Cuttings | 1898 - 1909 | 867451 |
| L | 27m SW | Cuttings | 1960 | 871999 |
| L | 27m SW | Cuttings | 1969 - 1989 | 887763 |
| T | 28m S | Unspecified Heap | 1938 | 952847 |
| V | 29m S | Cuttings | 1909 | 886018 |
| T | 29m S | Unspecified Heap | 1960 - 1970 | 845985 |
| V | 32m SE | Cuttings | 1989 | 851627 |
| V | 32m SE | Cuttings | 1969 - 1976 | 906040 |
| L | 34m SW | Cuttings | 1948 | 968404 |
| 7 | 35m SW | Unspecified Heap | 1869 | 803592 |
| W | 35m NE | Unspecified Tank | 1948 | 848890 |
| W | 35m NE | Unspecified Tank | 1898 | 887812 |
| W | 35m NE | Unspecified Tank | 1960 | 881709 |
| 8 | 39m SE | Railway Sidings | 1869 | 794484 |
| P | 40m SE | Unspecified Shaft | 1898 | 813757 |
| P | 40m SE | Unspecified Old Shaft | 1948 | 868758 |
| P | 40m SE | Unspecified Old Shaft | 1960 | 868768 |
| X | 41m N | Unspecified Depot | 1976 | 870383 |
| X | 41m N | Unspecified Depot | 1989 | 892504 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| P | 41m SE | Unspecified Old Shaft | 1938 | 911954 |
| P | 41m SE | Unspecified Old Shaft | 1909 | 987828 |
| R | 42m SE | Refuse Heap | 1976 | 828562 |
| R | 50m S | Unspecified Heap | 1989 | 848524 |
| R | 50m S | Unspecified Heap | 1969 - 1976 | 852007 |
| R | 50m S | Unspecified Heap | 1960 | 981778 |
| P | 50m SE | Unspecified Tank | 1869 | 824035 |
| R | 51m S | Unspecified Heap | 1948 | 944821 |
| R | 51m S | Unspecified Heap | 1909 | 899183 |
| B | 52m NE | Sand Pits | 1910 - 1938 | 883401 |
| R | 53m SE | Unspecified Heap | 1938 | 983277 |
| Y | 53m SE | Old Colliery | 1898 | 855691 |
| Y | 53m SE | Old Colliery | 1948 | 931431 |
| 9 | 55m SE | Unspecified Pit | 1989 | 839190 |
| P | 58m SE | Old Colliery | 1909 | 905244 |
| Z | 59m S | Colliery | 1869 | 798229 |
| 11 | 61m NE | Unspecified Works | 1969 | 830087 |
| AA | 62m SW | Cuttings | 1938 | 905298 |
| U | 62m S | Garage | 1981 - 1987 | 890399 |
| AA | 62m SW | Cuttings | 1948 | 870133 |
| AA | 67m SW | Cuttings | 1909 | 912433 |
| 12 | 69m SW | Cuttings | 1960 | 914613 |
| B | 71m N | Sand Pits | 1898 | 856518 |
| AB | 75m SW | Cuttings | 1976 | 932841 |
| AB | 75m SW | Cuttings | 1969 | 948607 |
| AB | 75m SW | Cuttings | 1989 | 950389 |
| 13 | 76m N | Cuttings | 1960 | 857454 |
| 14 | 76m S | Old Colliery | 1869 | 808568 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| Z | 78m SE | Unspecified Heap | 1898 | 892564 |
| 16 | 82m N | Colliery | 1869 | 990758 |
| K | 84m W | Railway Sidings | 1898 | 970124 |
| N | 85m NE | Sand Pit | 1869 | 797383 |
| Z | 86m SE | Unspecified Ground Workings | 1938 | 897047 |
| Z | 86m SE | Unspecified Heap | 1948 | 956585 |
| Z | 87m SE | Unspecified Heap | 1960 | 955709 |
| Z | 87m SE | Unspecified Heap | 1909 | 989551 |
| P | 89m SE | Old Colliery | 1938 | 946848 |
| P | 93m SE | Unspecified Heap | 1909 | 981740 |
| Z | 95m SE | Unspecified Heap | 1869 | 857554 |
| P | 95m SE | Unspecified Heap | 1948 | 922819 |
| P | 96m SE | Unspecified Heap | 1938 | 852566 |
| AC | 97m S | Unspecified Heap | 1869 - 1898 | 909143 |
| AC | 98m S | Unspecified Heap | 1970 | 986529 |
| AC | 102m S | Unspecified Ground Workings | 1910 | 910106 |
| P | 102m SE | Unspecified Shaft | 1898 | 813756 |
| P | 102m SE | Unspecified Old Shaft | 1948 | 849731 |
| AD | 102m NE | Unspecified Works | 1989 | 892866 |
| P | 104m SE | Unspecified Heap | 1869 | 860462 |
| P | 104m SE | Unspecified Old Shaft | 1909 - 1938 | 952142 |
| Z | 105m S | Unspecified Old Shaft | 1898 - 1960 | 947172 |
| AC | 106m S | Unspecified Heap | 1960 | 920641 |
| AC | 106m S | Unspecified Heap | 1948 | 964776 |
| I | 106m NW | Colliery | 1909 | 888065 |
| AC | 106m S | Unspecified Ground Workings | 1938 | 871383 |
| I | 111m N | Colliery | 1914 | 936720 |
| I | 111m N | Railway Sidings | 1914 | 969200 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| AD | 112m NE | Unspecified Works | 1969 | 985990 |
| AD | 114m NE | Unspecified Works | 1976 | 872879 |
| P | 115m SE | Unspecified Tank | 1869 | 824034 |
| K | 118m N | Unspecified Heap | 1869 | 868439 |
| Z | 118m S | Unspecified Shaft | 1869 | 813709 |
| K | 120m NW | Unspecified Heap | 1948 | 982234 |
| K | 120m NW | Railway Sidings | 1909 | 849375 |
| K | 121m NW | Unspecified Heap | 1909 | 967655 |
| K | 121m NW | Unspecified Heap | 1938 | 909454 |
| K | 122m NW | Unspecified Heap | 1960 | 850887 |
| AC | 124m S | Unspecified Old Shaft | 1910 | 954465 |
| K | 124m NW | Unspecified Heap | 1869 | 941155 |
| AC | 124m S | Garage | 1981 - 1987 | 880213 |
| AC | 125m S | Unspecified Shaft | 1898 | 813758 |
| AC | 125m S | Unspecified Old Shaft | 1948 | 847737 |
| K | 126m N | Unspecified Heap | 1914 | 883710 |
| 20 | 127m N | Unspecified Ground Workings | 1970 - 1987 | 881305 |
| AC | 130m S | Unspecified Old Shaft | 1938 | 960245 |
| AC | 130m S | Unspecified Old Shaft | 1938 | 962641 |
| AC | 130m S | Unspecified Old Shaft | 1960 | 806211 |
| K | 132m NW | Unspecified Heap | 1960 | 858412 |
| K | 133m NW | Unspecified Heap | 1948 | 938788 |
| AF | 133m N | Unspecified Ground Workings | 1938 | 963066 |
| K | 133m NW | Unspecified Heap | 1909 | 959138 |
| K | 133m NW | Unspecified Heap | 1938 | 945488 |
| K | 133m NW | Unspecified Shaft | 1898 | 851185 |
| K | 135m NW | Unspecified Heap | 1898 | 947783 |
| 21 | 135m N | Unspecified Tank | 1869 | 824038 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| K | 136m NW | Unspecified Heap | 1914 | 883820 |
| AF | 137m N | Unspecified Pit | 1898 | 839194 |
| K | 141m N | Unspecified Shafts | 1869 | 809165 |
| K | 143m NW | Unspecified Shafts | 1869 | 809168 |
| AJ | 149m N | Cuttings | 1938 | 882087 |
| AJ | 150m N | Cuttings | 1948 | 877180 |
| AJ | 152m N | Cuttings | 1910 | 888660 |
| K | 152m NW | Unspecified Shaft | 1898 | 866825 |
| AJ | 153m N | Unspecified Pit | 1898 | 839195 |
| AI | 153m SW | Refuse Heap | 1869 | 828559 |
| AK | 155m S | Unspecified Heap | 1869 | 803626 |
| AI | 157m W | Unspecified Old Shafts | 1960 | 990252 |
| AJ | 157m N | Cuttings | 1989 | 855474 |
| AJ | 157m N | Cuttings | 1969 - 1976 | 960655 |
| AI | 162m W | Old Coal Shafts | 1938 - 1948 | 866325 |
| AI | 162m W | Unspecified Old Shafts | 1898 | 906390 |
| AI | 163m W | Old Coal Shafts | 1909 | 859313 |
| AA | 163m S | Cuttings | 1898 | 943799 |
| AK | 164m S | Unspecified Shaft | 1869 | 813708 |
| K | 168m NW | Unspecified Heap | 1898 | 803628 |
| AM | 170m S | Cuttings | 1989 | 899920 |
| AM | 170m S | Cuttings | 1969 - 1976 | 954595 |
| 26 | 173m SW | Unspecified Pit | 1869 | 839199 |
| AI | 177m W | Unspecified Old Shafts | 1960 | 845593 |
| 27 | 179m N | Unspecified Heap | 1991 | 803593 |
| AI | 182m W | Old Coal Shafts | 1938 | 850398 |
| AI | 183m W | Old Coal Shafts | 1909 | 870708 |
| AI | 183m W | Old Coal Shafts | 1948 | 950586 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| AI | 183m W | Unspecified Old Shafts | 1898 | 952377 |
| AN | 185m NE | Unspecified Warehouse | 1989 | 935972 |
| AN | 185m NE | Unspecified Warehouse | 1976 | 984849 |
| 28 | 188m NE | Unspecified Pit | 1991 | 839192 |
| 29 | 197m NE | Unspecified Ground Workings | 1970 - 1987 | 876468 |
| AA | 203m SW | Cuttings | 1960 | 933756 |
| 31 | 206m NE | Unspecified Works | 1969 | 830086 |
| AP | 209m SE | Unspecified Works | 1969 | 856253 |
| I | 210m N | Unspecified Heap | 1869 | 803627 |
| AP | 212m SE | Water Works | 1976 | 899998 |
| AP | 212m SE | Water Works | 1989 | 969198 |
| AP | 213m SE | Unspecified Works | 1960 | 923634 |
| AP | 214m SE | Sewage Works | 1948 | 811789 |
| I | 217m N | Unspecified Shafts | 1898 | 809170 |
| AA | 218m S | Cuttings | 1869 | 879908 |
| 32 | 225m S | Garage | 1970 | 901952 |
| AR | 231m N | Sawmill | 1948 | 808343 |
| AR | 233m N | Unspecified Mill | 1960 | 810203 |
| I | 234m N | Unspecified Shaft | 1869 | 813711 |
| 34 | 236m SE | Unspecified Tank | 1948 - 1960 | 897251 |
| I | 240m N | Unspecified Shafts | 1898 | 809169 |
| AA | 241m SW | Cuttings | 1989 | 853639 |
| AA | 241m SW | Cuttings | 1969 - 1976 | 940013 |
| AT | 247m W | Garage | 1981 - 1991 | 920926 |
| 36 | 249m NE | Unspecified Pit | 1914 | 839209 |
| AU | 249m NE | Railway Sidings | 1914 | 929950 |
| 38 | 252m NE | Railway Sidings | 1898 | 855202 |
| I | 254m N | Unspecified Heap | 1869 | 919098 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| I | 260m N | Unspecified Ground Workings | 1909 | 799530 |
| I | 261m N | Unspecified Heap | 1948 | 985862 |
| 39 | 263m NE | Railway Building | 1938 | 819511 |
| 40 | 263m NE | Railway Sidings | 1938 | 986490 |
| 41 | 265m NE | Railway Sidings | 1869 - 1898 | 947817 |
| I | 270m N | Unspecified Shaft | 1869 | 813710 |
| I | 271m N | Unspecified Shafts | 1898 | 809159 |
| I | 271m N | Old Clay Pits | 1898 | 814309 |
| AV | 273m NW | Brewery | 1898 - 1910 | 906760 |
| AW | 274m NE | Railway Sidings | 1960 | 917177 |
| AW | 274m NE | Railway Sidings | 1969 | 957506 |
| 43 | 275m NE | Railway Sidings | 1948 | 940526 |
| AW | 277m NE | Railway Sidings | 1909 | 977985 |
| AV | 278m NW | Brewery | 1948 | 938554 |
| AY | 279m SE | Unspecified Heap | 1869 | 803629 |
| I | 280m N | Unspecified Shafts | 1898 | 809171 |
| AV | 283m NW | Brewery | 1869 | 913041 |
| AY | 288m SE | Coal Pit | 1869 | 808457 |
| 44 | 291m NE | Cuttings | 1948 | 795368 |
| I | 291m N | Unspecified Heap | 1914 | 850145 |
| 46 | 293m SE | Unspecified Works | 1976 | 856256 |
| AZ | 296m NE | Cuttings | 1960 | 795402 |
| BA | 296m NE | Unspecified Pit | 1914 | 839205 |
| 47 | 300m NE | Unspecified Works | 1960 | 855852 |
| AZ | 303m NE | Unspecified Pit | 1914 | 839208 |
| BB | 308m NW | Railway Sidings | 1909 | 948491 |
| I | 310m N | Unspecified Heap | 1898 | 883651 |
| I | 311m N | Unspecified Shafts | 1898 | 809158 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| AW | 313m NE | Unspecified Works | 1938 - 1948 | 981335 |
| BC | 314m N | Old Clay Pits | 1909 | 925147 |
| AW | 314m NE | Engineering Works | 1909 - 1914 | 974477 |
| AZ | 314m NE | Unspecified Pit | 1914 | 839204 |
| BC | 314m N | Old Clay Pits | 1938 | 933040 |
| BC | 315m N | Old Clay Pits | 1948 | 960781 |
| AZ | 318m NE | Unspecified Factory | 1960 | 821305 |
| AW | 318m NE | Unspecified Works | 1969 | 939017 |
| BC | 320m N | Old Clay Pits | 1914 | 900092 |
| BB | 328m N | Railway Sidings | 1898 | 880753 |
| BA | 329m NE | Unspecified Pit | 1914 | 839206 |
| BD | 332m NE | Railway Sidings | 1989 | 868782 |
| BD | 332m NE | Railway Sidings | 1960 | 890455 |
| BD | 332m NE | Railway Sidings | 1969 - 1976 | 961262 |
| BF | 342m S | Unspecified Disused Shafts | 1981 - 1991 | 968640 |
| BF | 346m S | Unspecified Old Shafts | 1898 | 793276 |
| BG | 348m NE | Unspecified Depot | 1989 | 920251 |
| BG | 348m NE | Unspecified Depot | 1969 - 1976 | 984152 |
| BF | 351m S | Unspecified Disused Shafts | 1991 | 872313 |
| BF | 351m S | Unspecified Disused Shafts | 1981 - 1987 | 941526 |
| BF | 356m S | Unspecified Old Shafts | 1898 | 793271 |
| 51 | 358m N | Old Lime Kiln | 1869 | 821891 |
| 52 | 360m E | Unspecified Works | 1989 | 852609 |
| BC | 360m N | Old Clay Pits | 1898 | 969067 |
| 54 | 363m N | Unspecified Heap | 1989 | 955924 |
| BH | 367m NE | Unspecified Works | 1969 | 940565 |
| BH | 370m NE | Engine Shed | 1909 - 1914 | 903518 |
| BH | 370m NE | Engine Shed | 1938 | 929283 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| BH | 371m NE | Engine Shed | 1948 | 902516 |
| BE | 376m N | Unspecified Tank | 1989 | 909772 |
| BE | 378m N | Unspecified Tank | 1976 | 920982 |
| BE | 380m N | Unspecified Tank | 1969 | 953119 |
| AW | 386m NE | Unspecified Depot | 1976 | 855482 |
| AW | 386m NE | Unspecified Depot | 1989 | 928870 |
| AW | 387m NE | Unspecified Depot | 1969 | 928157 |
| BJ | 391m NW | Unspecified Tank | 1869 | 824044 |
| BK | 410m SE | Cuttings | 1909 - 1938 | 867080 |
| BL | 410m NE | Unspecified Works | 1976 | 982976 |
| BL | 410m NE | Unspecified Works | 1989 | 881656 |
| BK | 412m SE | Cuttings | 1948 | 871855 |
| BM | 412m NE | Cuttings | 1948 | 864119 |
| BK | 413m SE | Cuttings | 1960 | 934723 |
| I | 415m N | Pumping Station | 1989 | 822096 |
| BJ | 417m NW | Unspecified Tank | 1869 | 824045 |
| 59 | 421m SE | Unspecified Ground Workings | 1969 | 799521 |
| BK | 424m SE | Cuttings | 1898 | 950402 |
| BG | 424m NE | Cheese Factory | 1938 - 1948 | 939848 |
| BM | 430m NE | Cuttings | 1960 | 863101 |
| 61 | 430m N | Railway Sidings | 1960 | 871147 |
| AW | 432m N | Unspecified Depot | 1989 | 917877 |
| AW | 432m N | Unspecified Depot | 1976 | 973810 |
| AW | 432m N | Unspecified Depot | 1969 | 987919 |
| BM | 434m NE | Cuttings | 1938 | 851692 |
| BM | 435m NE | Cuttings | 1910 | 882818 |
| BG | 438m NE | Unspecified Tank | 1976 | 858773 |
| AU | 439m N | Unspecified Works | 1960 | 936753 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| BG | 439m NE | Unspecified Tank | 1969 | 926462 |
| BG | 439m NE | Unspecified Tank | 1989 | 882250 |
| 63 | 440m SE | Railway Sidings | 1938 | 879047 |
| BJ | 443m NW | Unspecified Levels | 1898 | 832409 |
| 64 | 443m SE | Railway Sidings | 1909 | 890527 |
| 65 | 443m SE | Railway Sidings | 1898 | 846661 |
| BP | 448m N | Unspecified Works | 1969 | 952834 |
| BJ | 448m NW | Unspecified Levels | 1898 | 832408 |
| BQ | 450m S | Police Station | 1976 | 958647 |
| BQ | 450m S | Police Station | 1989 | 969800 |
| BP | 451m N | Unspecified Works | 1976 | 947394 |
| 66 | 452m N | Chemical Works | 1869 - 1898 | 867829 |
| BP | 452m N | Unspecified Works | 1989 | 988744 |
| BQ | 456m S | Police Station | 1969 | 908790 |
| BR | 458m SE | Unspecified Works | 1976 | 887739 |
| BR | 458m SE | Unspecified Works | 1989 | 850953 |
| BS | 460m NE | Unspecified Works | 1976 | 900908 |
| BT | 462m N | Unspecified Pit | 1981 - 1991 | 851268 |
| BT | 462m N | Sand Pit | 1948 | 963379 |
| BT | 462m N | Sand Pit | 1960 | 949712 |
| BT | 463m N | Sand Pit | 1938 | 991975 |
| BT | 464m N | Sand Pit | 1910 | 972222 |
| BT | 466m N | Unspecified Pit | 1970 | 919425 |
| AW | 470m N | Unspecified Tank | 1948 | 824032 |
| BV | 474m S | Old Colliery | 1898 | 898087 |
| BV | 474m S | Old Colliery | 1948 | 955746 |
| 68 | 478m N | Unspecified Tank | 1948 | 824036 |
| BW | 480m NW | Smithy | 1948 | 853421 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| BW | 483m NW | Smithy | 1898 | 850881 |
| 69 | 484m NE | Unspecified Heap | 1914 | 803604 |
| BS | 484m N | Unspecified Works | 1989 | 914964 |
| BY | 487m N | Unspecified Heap | 1989 | 951105 |
| BY | 487m N | Unspecified Heap | 1969 - 1976 | 982473 |
| BK | 492m SE | Cuttings | 1989 | 854241 |
| BK | 492m SE | Cuttings | 1969 - 1976 | 969605 |
| 71 | 492m NW | Unspecified Old Shaft | 1898 | 806213 |
| 72 | 494m NW | Unspecified Works | 1969 | 830101 |
| BZ | 495m NW | Pumping Station | 1909 | 936556 |
| BZ | 496m NW | Pumping Station | 1914 | 945411 |
| BZ | 497m NW | Pumping Station | 1938 | 920378 |
| CA | 498m SW | Unspecified Pit | 1898 | 944620 |
| CA | 498m SW | Unspecified Pit | 1948 | 968543 |
| CA | 499m SW | Unspecified Pit | 1938 | 913683 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.2 Historical tanks

| **Records within 500m** | **60** |
|---|---|

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| **A** | **On site** | **Unspecified Tank** | **1870** | **111769** |
| **C** | **On site** | **Tank or Trough** | **1870** | **121132** |
| **F** | **On site** | **Unspecified Tank** | **1899 - 1911** | **145886** |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| F | 7m SW | Unspecified Tank | 1899 | 111771 |
| Q | 14m NE | Unspecified Tank | 1981 - 1993 | 123356 |
| 6 | 25m N | Unspecified Tank | 1981 - 1995 | 126045 |
| Q | 61m NE | Tanks | 1981 - 1984 | 123726 |
| 15 | 80m NE | Unspecified Tank | 1981 - 1984 | 132085 |
| S | 81m S | Unspecified Tank | 1980 | 111770 |
| S | 85m SE | Unspecified Tank | 1980 - 1992 | 137961 |
| AH | 137m N | Tanks | 1981 | 139798 |
| AH | 137m N | Tanks | 1984 | 122815 |
| AH | 140m N | Tanks | 1993 | 135609 |
| AH | 143m N | Tanks | 1993 | 131546 |
| AH | 145m N | Unspecified Tank | 1981 | 111764 |
| 25 | 159m NE | Tanks | 1984 - 1993 | 143263 |
| AL | 162m NE | Tanks | 1992 | 104611 |
| AL | 163m NE | Unspecified Tank | 1981 | 111675 |
| AG | 163m NE | Tanks | 1962 - 1969 | 139550 |
| AL | 171m NE | Unspecified Tank | 1981 | 111676 |
| AD | 177m N | Unspecified Tank | 1981 - 1995 | 129637 |
| AH | 177m N | Tanks | 1984 - 1993 | 136717 |
| AH | 179m N | Tanks | 1981 | 134728 |
| AL | 181m NE | Tanks | 1969 | 104608 |
| AL | 183m NE | Tanks | 1969 | 104609 |
| AD | 195m N | Unspecified Tank | 1981 | 142759 |
| AD | 195m N | Unspecified Tank | 1995 | 135792 |
| 30 | 203m SW | Unspecified Tank | 1899 - 1912 | 122345 |
| AO | 206m E | Unspecified Tank | 1981 - 1992 | 125184 |
| AQ | 214m SE | Unspecified Tank | 1981 - 1992 | 138105 |
| AS | 242m SW | Unspecified Tank | 1912 | 111772 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| AQ | 250m SE | Unspecified Tank | 1992 | 111673 |
| 37 | 251m N | Tanks | 1981 - 1995 | 143841 |
| AN | 265m NE | Tanks | 1993 | 104610 |
| 48 | 322m N | Tanks | 1981 - 1984 | 147347 |
| BE | 338m N | Tanks | 1981 | 138180 |
| BE | 338m N | Tanks | 1984 | 144093 |
| BE | 363m N | Unspecified Tank | 1981 - 1984 | 147924 |
| BE | 377m N | Unspecified Tank | 1962 - 1969 | 148213 |
| AZ | 377m NE | Unspecified Tank | 1981 - 1993 | 134714 |
| BN | 422m NE | Tanks | 1993 | 140270 |
| BN | 423m NE | Tanks | 1984 | 142945 |
| BN | 423m NE | Tanks | 1981 | 145137 |
| BN | 424m NE | Tanks | 1993 | 134080 |
| BN | 425m NE | Tanks | 1984 | 146813 |
| BG | 426m NE | Tanks | 1984 | 145107 |
| BN | 426m NE | Tanks | 1981 | 140843 |
| BG | 431m NE | Tanks | 1993 | 139164 |
| BG | 432m NE | Tanks | 1981 | 137883 |
| 62 | 433m NE | Tanks | 1981 - 1993 | 129103 |
| BG | 437m NE | Unspecified Tank | 1962 - 1969 | 122394 |
| BR | 464m SE | Unspecified Tank | 1981 | 111672 |
| BU | 472m NE | Unspecified Tank | 1969 - 1983 | 131426 |
| AW | 476m N | Tanks | 1911 | 104601 |
| BU | 479m NE | Unspecified Tank | 1969 - 1992 | 124339 |
| BG | 487m NE | Unspecified Tank | 1981 | 111678 |
| BG | 488m NE | Unspecified Tank | 1981 - 1993 | 131777 |
| BU | 488m NE | Tanks | 1969 - 1983 | 132559 |
| BU | 488m NE | Unspecified Tank | 1988 | 147167 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| BU | 491m NE | Unspecified Tank | 1992 | 148133 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.3 Historical energy features

| **Records within 500m** | **43** |
|---|---|

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| **G** | **On site** | **Electricity Substation** | **1991** | **60034** |
| 10 | 60m NE | Electricity Substation | 1969 - 1980 | 66321 |
| 17 | 91m NW | Electricity Substation | 1981 - 1995 | 79950 |
| 18 | 93m N | Electricity Substation | 1981 - 1995 | 72124 |
| AE | 121m SE | Electricity Substation | 1969 - 1995 | 75857 |
| AE | 121m SE | Electricity Substation | 1981 | 83718 |
| K | 123m NW | Electricity Substation | 1980 - 1996 | 75635 |
| AG | 135m NE | Electricity Substation | 1993 | 76963 |
| AG | 135m NE | Electricity Substation | 1969 - 1984 | 68467 |
| AI | 141m W | Electricity Substation | 1980 - 1992 | 65529 |
| N | 141m NE | Electricity Substation | 1969 - 1980 | 82980 |
| 22 | 148m SE | Electricity Substation | 1969 - 1980 | 75029 |
| 23 | 150m SE | Electricity Substation | 1980 - 1987 | 77304 |
| 24 | 155m SW | Electricity Substation | 1981 - 1995 | 73909 |
| AD | 217m N | Electricity Substation | 1981 - 1995 | 79243 |
| AO | 226m E | Electricity Substation | 1992 | 60062 |
| 33 | 226m N | Electricity Substation | 1981 - 1995 | 67211 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| 35 | 242m SE | Electricity Substation | 1969 - 1980 | 74133 |
| AS | 255m SW | Electricity Substation | 1980 - 1992 | 69194 |
| AS | 255m SW | Electricity Substation | 1987 | 64496 |
| 42 | 272m E | Electricity Substation | 1992 | 60061 |
| AX | 279m SE | Electricity Substation | 1969 | 60054 |
| AX | 281m SE | Electricity Substation | 1980 | 60052 |
| 45 | 293m N | Electricity Substation | 1980 | 60049 |
| 49 | 326m S | Electricity Substation | 1980 | 60058 |
| AZ | 338m NE | Electricity Substation | 1969 - 1993 | 71886 |
| 50 | 343m N | Electricity Substation | 1980 - 1984 | 85095 |
| BI | 376m N | Electricity Substation | 1981 | 73125 |
| BI | 377m N | Electricity Substation | 1984 - 1995 | 66652 |
| 55 | 379m S | Electricity Substation | 1990 | 60033 |
| 56 | 386m SE | Electricity Substation | 1980 | 60051 |
| 57 | 389m S | Electricity Substation | 1980 - 1989 | 68798 |
| BI | 389m N | Electricity Substation | 1969 | 76950 |
| 58 | 396m S | Electricity Substation | 1966 - 1992 | 70984 |
| BI | 404m N | Electricity Substation | 1980 - 1998 | 77273 |
| AW | 413m N | Power House | 1911 | 63660 |
| 60 | 424m N | Electricity Substation | 1993 - 1998 | 81585 |
| BO | 444m NE | Electricity Substation | 1983 - 1988 | 78913 |
| BO | 458m NE | Electricity Substation | 1992 | 80472 |
| 67 | 468m S | Electricity Substation | 1980 | 60053 |
| BX | 482m S | Electricity Substation | 1980 | 60057 |
| BX | 485m S | Electricity Substation | 1992 - 1997 | 81950 |
| 70 | 488m N | Electricity Substation | 1980 - 1996 | 76606 |

*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 un-grouped 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 | 6 |
|---|---|

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| U | 61m S | Garage | 1966 - 1980 | 25582 |
| U | 61m S | Garage | 1987 - 1992 | 27088 |
| 19 | 97m S | Garage | 1966 - 1980 | 25015 |
| AT | 246m W | Garage | 1980 - 1992 | 27631 |
| AT | 246m W | Garage | 1966 - 1987 | 27121 |
| 53 | 360m S | Garage | 1963 - 1969 | 25024 |

*This data is sourced from Ordnance Survey / Groundsure.*

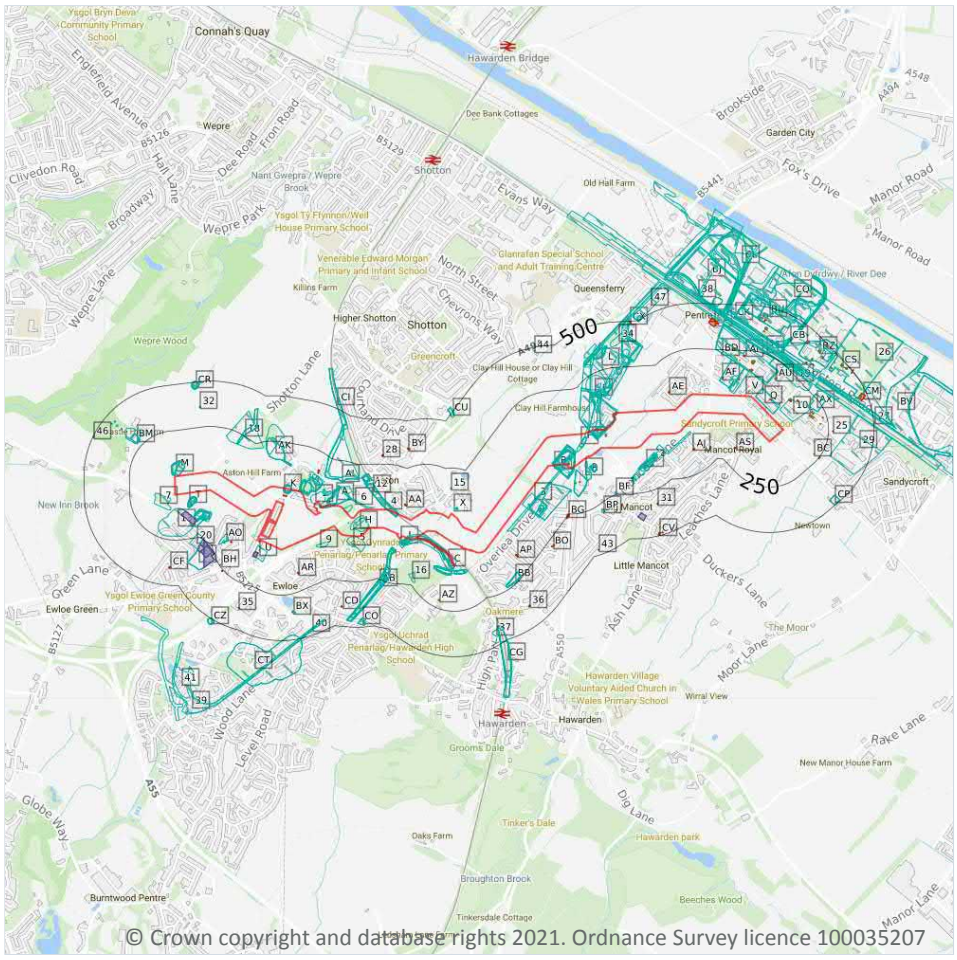
## 1.6 Historical military land

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

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.

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

# 2 Past land use - un-grouped




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Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

## 2.1 Historical industrial land uses

| Records within 500m | 467 |
|---|---|

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 33**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| 1 | On site | Unspecified Pit | 1969 | 839191 |
| 2 | On site | Unspecified Pit | 1969 | 839196 |
| 3 | On site | Railway Sidings | 1938 | 794526 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| 4 | On site | Cuttings | 1960 | 934681 |
| A | On site | Sand Pits | 1960 | 908356 |
| A | On site | Sand Pits | 1948 | 864320 |
| A | On site | Sand Pit | 1869 | 797382 |
| A | On site | Unspecified Ground Workings | 1910 | 799523 |
| A | On site | Sand Pits | 1938 | 864320 |
| B | On site | Unspecified Quarry | 1869 | 816569 |
| B | On site | Unspecified Ground Workings | 1909 | 885637 |
| B | On site | Unspecified Tank | 1909 | 984547 |
| B | On site | Brick Works | 1909 | 931069 |
| B | On site | Unspecified Ground Workings | 1969 | 951222 |
| B | On site | Unspecified Ground Workings | 1989 | 884238 |
| B | On site | Unspecified Ground Workings | 1976 | 951222 |
| B | On site | Unspecified Works | 1960 | 830099 |
| B | On site | Unspecified Pits | 1960 | 903014 |
| B | On site | Unspecified Pit | 1948 | 931811 |
| B | On site | Brick Works | 1948 | 959283 |
| B | On site | Unspecified Tank | 1898 | 971312 |
| B | On site | Unspecified Pit | 1898 | 879502 |
| B | On site | Unspecified Pit | 1898 | 937583 |
| B | On site | Brick Works | 1898 | 931069 |
| B | On site | Brick Works | 1869 | 936745 |
| B | On site | Brick Works | 1938 | 988384 |
| B | On site | Unspecified Pits | 1938 | 973798 |
| B | On site | Unspecified Tank | 1938 | 984547 |
| B | On site | Brick Works | 1938 | 988384 |
| B | On site | Unspecified Pits | 1938 | 973798 |
| C | On site | Cuttings | 1948 | 980501 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| C | On site | Cuttings | 1909 | 981339 |
| C | On site | Railway Sidings | 1948 | 991001 |
| C | On site | Cuttings | 1938 | 980501 |
| D | On site | Cuttings | 1948 | 934681 |
| D | On site | Cuttings | 1910 | 944694 |
| D | On site | Unspecified Pit | 1938 | 885652 |
| D | On site | Unspecified Pit | 1938 | 885652 |
| E | On site | Clay Pit | 1869 | 827658 |
| E | On site | Unspecified Heap | 1909 | 965764 |
| E | On site | Old Colliery | 1909 | 959716 |
| E | On site | Unspecified Ground Workings | 1969 | 939398 |
| E | On site | Unspecified Ground Workings | 1989 | 885533 |
| E | On site | Unspecified Ground Workings | 1976 | 939398 |
| E | On site | Unspecified Old Mine | 1960 | 814657 |
| E | On site | Old Colliery | 1948 | 917222 |
| E | On site | Unspecified Heap | 1948 | 855571 |
| E | On site | Old Colliery | 1898 | 903296 |
| E | On site | Unspecified Heap | 1898 | 885446 |
| E | On site | Unspecified Shafts | 1898 | 809166 |
| E | On site | Colliery | 1869 | 855204 |
| E | On site | Unspecified Shafts | 1869 | 809167 |
| E | On site | Unspecified Heap | 1938 | 855571 |
| E | On site | Old Colliery | 1938 | 939995 |
| E | On site | Unspecified Heap | 1938 | 855571 |
| E | On site | Old Colliery | 1938 | 939995 |
| F | On site | Cuttings | 1960 | 926933 |
| F | On site | Cuttings | 1909 | 934933 |
| F | On site | Cuttings | 1938 | 934933 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| **G** | **On site** | **Railway Sidings** | **1909** | **914346** |
| **G** | **On site** | **Unspecified Ground Workings** | **1969** | **971149** |
| **G** | **On site** | **Unspecified Ground Workings** | **1976** | **971149** |
| **G** | **On site** | **Railway Sidings** | **1898** | **867409** |
| **G** | **On site** | **Railway Sidings** | **1938** | **914346** |
| **G** | **On site** | **Railway Building** | **1938** | **819549** |
| **H** | **On site** | **Unspecified Pit** | **1969** | **839197** |
| **H** | **On site** | **Unspecified Heap** | **1989** | **803630** |
| **I** | **On site** | **Unspecified Pit** | **1969** | **964709** |
| **I** | **On site** | **Unspecified Pit** | **1989** | **883227** |
| **I** | **On site** | **Unspecified Pit** | **1976** | **964709** |
| **J** | **On site** | **Railway Sidings** | **1869** | **964495** |
| **K** | **On site** | **Unspecified Heap** | **1991** | **951952** |
| **K** | **On site** | **Unspecified Heap** | **1987** | **951952** |
| **K** | **On site** | **Unspecified Heap** | **1981** | **951952** |
| **K** | **On site** | **Unspecified Tank** | **1960** | **824043** |
| **K** | **On site** | **Unspecified Heap** | **1970** | **942244** |
| **L** | **On site** | **Railway Sidings** | **1938** | **907494** |
| I | 0m S | Railway Sidings | 1938 | 914346 |
| 5 | 1m S | Refuse Heap | 1969 | 828563 |
| M | 2m N | Unspecified Heap | 1869 | 892215 |
| I | 3m S | Railway Sidings | 1898 | 867409 |
| I | 3m S | Railway Sidings | 1948 | 914346 |
| N | 3m NE | Sand Pits | 1960 | 920552 |
| G | 4m SW | Railway Building | 1898 | 819550 |
| M | 4m N | Refuse Heap | 1948 | 828558 |
| 6 | 5m N | Railway Sidings | 1869 | 794522 |
| N | 6m NE | Sand Pits | 1948 | 882720 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| I | 6m S | Railway Sidings | 1909 | 914346 |
| I | 7m S | Cuttings | 1948 | 970074 |
| M | 9m NW | Unspecified Heap | 1960 | 934185 |
| O | 10m N | Disused Wire Works | 1869 | 832059 |
| P | 11m SE | Old Colliery | 1869 | 980727 |
| M | 11m NW | Unspecified Heap | 1938 | 937790 |
| M | 11m NW | Unspecified Heap | 1938 | 937790 |
| N | 12m NE | Unspecified Pit | 1969 | 862980 |
| N | 12m NE | Unspecified Pit | 1989 | 886227 |
| N | 12m NE | Unspecified Pit | 1976 | 862980 |
| I | 13m S | Cuttings | 1909 | 962360 |
| M | 14m NW | Unspecified Ground Workings | 1910 | 799525 |
| Q | 14m NE | Unspecified Depot | 1976 | 930588 |
| I | 14m S | Cuttings | 1938 | 941386 |
| I | 15m S | Unspecified Pit | 1960 | 972186 |
| R | 16m SE | Refuse Heaps | 1989 | 808250 |
| Q | 17m NE | Unspecified Depot | 1989 | 875842 |
| S | 18m SE | Nursery | 1969 | 869809 |
| N | 19m NE | Unspecified Ground Workings | 1938 | 875291 |
| N | 19m NE | Unspecified Ground Workings | 1938 | 875291 |
| N | 20m NE | Sand Pits | 1910 | 887901 |
| O | 22m N | Corn Mill | 1898 | 904360 |
| S | 22m SE | Nursery | 1976 | 872354 |
| S | 22m SE | Nursery | 1989 | 965270 |
| T | 23m S | Unspecified Heap | 1987 | 921811 |
| T | 23m S | Unspecified Heap | 1981 | 921811 |
| T | 23m S | Unspecified Heap | 1948 | 855660 |
| T | 23m S | Unspecified Heap | 1898 | 938035 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| U | 23m S | Garage | 1970 | 934977 |
| B | 23m SW | Unspecified Tank | 1898 | 824033 |
| T | 23m S | Unspecified Heap | 1910 | 968519 |
| C | 26m S | Cuttings | 1938 | 930465 |
| W | 27m S | Cuttings | 1948 | 919213 |
| W | 27m S | Railway Sidings | 1948 | 794527 |
| C | 27m SW | Cuttings | 1969 | 887763 |
| C | 27m SW | Cuttings | 1989 | 887763 |
| C | 27m SW | Cuttings | 1976 | 887763 |
| C | 27m SW | Cuttings | 1960 | 871999 |
| C | 27m SW | Cuttings | 1909 | 867451 |
| T | 28m S | Unspecified Heap | 1938 | 952847 |
| T | 28m S | Unspecified Heap | 1938 | 952847 |
| W | 29m S | Cuttings | 1909 | 886018 |
| T | 29m S | Unspecified Heap | 1960 | 845985 |
| T | 29m S | Unspecified Heap | 1970 | 845985 |
| W | 29m S | Cuttings | 1960 | 919213 |
| T | 29m S | Unspecified Heap | 1869 | 938035 |
| W | 32m SE | Cuttings | 1969 | 906040 |
| W | 32m SE | Cuttings | 1989 | 851627 |
| W | 32m SE | Cuttings | 1976 | 906040 |
| C | 34m SW | Cuttings | 1948 | 968404 |
| C | 34m SW | Cuttings | 1898 | 867451 |
| 7 | 35m SW | Unspecified Heap | 1869 | 803592 |
| X | 35m NE | Unspecified Tank | 1948 | 848890 |
| X | 35m NE | Unspecified Tank | 1898 | 887812 |
| X | 35m NE | Unspecified Tank | 1960 | 881709 |
| 8 | 39m SE | Railway Sidings | 1869 | 794484 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| P | 40m SE | Unspecified Old Shaft | 1960 | 868768 |
| P | 40m SE | Unspecified Old Shaft | 1948 | 868758 |
| P | 40m SE | Unspecified Shaft | 1898 | 813757 |
| O | 41m N | Unspecified Depot | 1989 | 892504 |
| O | 41m N | Unspecified Depot | 1976 | 870383 |
| P | 41m SE | Unspecified Old Shaft | 1909 | 987828 |
| P | 41m SE | Unspecified Old Shaft | 1938 | 911954 |
| P | 41m SE | Unspecified Old Shaft | 1938 | 911954 |
| R | 42m SE | Refuse Heap | 1976 | 828562 |
| R | 50m S | Unspecified Heap | 1969 | 852007 |
| R | 50m S | Unspecified Heap | 1989 | 848524 |
| R | 50m S | Unspecified Heap | 1976 | 852007 |
| R | 50m S | Unspecified Heap | 1960 | 981778 |
| P | 50m SE | Unspecified Tank | 1869 | 824035 |
| R | 51m S | Unspecified Heap | 1948 | 944821 |
| R | 51m S | Unspecified Heap | 1909 | 899183 |
| A | 52m NE | Sand Pits | 1938 | 883401 |
| O | 53m N | Corn Mill | 1898 | 904360 |
| R | 53m SE | Unspecified Heap | 1938 | 983277 |
| R | 53m SE | Unspecified Heap | 1938 | 983277 |
| Y | 53m SE | Old Colliery | 1948 | 931431 |
| Y | 53m SE | Old Colliery | 1898 | 855691 |
| A | 54m NE | Sand Pits | 1910 | 883401 |
| 9 | 55m SE | Unspecified Pit | 1989 | 839190 |
| N | 55m NE | Sand Pits | 1898 | 887901 |
| P | 58m SE | Old Colliery | 1909 | 905244 |
| Z | 59m S | Colliery | 1869 | 798229 |
| 10 | 61m NE | Unspecified Works | 1969 | 830087 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AB | 62m SW | Cuttings | 1938 | 905298 |
| U | 62m S | Garage | 1987 | 890399 |
| U | 62m S | Garage | 1981 | 890399 |
| AB | 62m SW | Cuttings | 1948 | 870133 |
| AB | 67m SW | Cuttings | 1909 | 912433 |
| 11 | 69m SW | Cuttings | 1960 | 914613 |
| A | 71m N | Sand Pits | 1898 | 856518 |
| AC | 75m SW | Cuttings | 1969 | 948607 |
| AC | 75m SW | Cuttings | 1989 | 950389 |
| AC | 75m SW | Cuttings | 1976 | 932841 |
| 12 | 76m N | Cuttings | 1960 | 857454 |
| 13 | 76m S | Old Colliery | 1869 | 808568 |
| Z | 78m SE | Unspecified Heap | 1898 | 892564 |
| 14 | 82m N | Colliery | 1869 | 990758 |
| J | 84m W | Railway Sidings | 1898 | 970124 |
| N | 85m NE | Sand Pit | 1869 | 797383 |
| Z | 86m SE | Unspecified Heap | 1948 | 956585 |
| Z | 86m SE | Unspecified Ground Workings | 1938 | 897047 |
| Z | 86m SE | Unspecified Ground Workings | 1938 | 897047 |
| Z | 87m SE | Unspecified Heap | 1909 | 989551 |
| Z | 87m SE | Unspecified Heap | 1960 | 955709 |
| P | 89m SE | Old Colliery | 1938 | 946848 |
| P | 89m SE | Old Colliery | 1938 | 946848 |
| P | 93m SE | Unspecified Heap | 1909 | 981740 |
| Z | 95m SE | Unspecified Heap | 1869 | 857554 |
| P | 95m SE | Unspecified Heap | 1948 | 922819 |
| P | 96m SE | Unspecified Heap | 1938 | 852566 |
| P | 96m SE | Unspecified Heap | 1938 | 852566 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AG | 97m S | Unspecified Heap | 1898 | 909143 |
| AG | 98m S | Unspecified Heap | 1970 | 986529 |
| AG | 102m S | Unspecified Ground Workings | 1910 | 910106 |
| P | 102m SE | Unspecified Old Shaft | 1948 | 849731 |
| P | 102m SE | Unspecified Shaft | 1898 | 813756 |
| AI | 102m NE | Unspecified Works | 1989 | 892866 |
| P | 104m SE | Unspecified Heap | 1869 | 860462 |
| AG | 104m S | Unspecified Heap | 1869 | 909143 |
| P | 104m SE | Unspecified Old Shaft | 1909 | 952142 |
| Z | 105m S | Unspecified Old Shaft | 1948 | 947172 |
| Z | 105m S | Unspecified Old Shaft | 1898 | 947172 |
| P | 105m SE | Unspecified Old Shaft | 1938 | 952142 |
| P | 105m SE | Unspecified Old Shaft | 1938 | 952142 |
| AG | 106m S | Unspecified Heap | 1960 | 920641 |
| AG | 106m S | Unspecified Heap | 1948 | 964776 |
| L | 106m NW | Colliery | 1909 | 888065 |
| AG | 106m S | Unspecified Ground Workings | 1938 | 871383 |
| AG | 106m S | Unspecified Ground Workings | 1938 | 871383 |
| Z | 107m S | Unspecified Old Shaft | 1938 | 947172 |
| Z | 107m S | Unspecified Old Shaft | 1938 | 947172 |
| Z | 107m S | Unspecified Old Shaft | 1960 | 947172 |
| Z | 108m S | Unspecified Old Shaft | 1909 | 947172 |
| L | 111m N | Colliery | 1914 | 936720 |
| L | 111m N | Railway Sidings | 1914 | 969200 |
| AI | 112m NE | Unspecified Works | 1969 | 985990 |
| AI | 114m NE | Unspecified Works | 1976 | 872879 |
| P | 115m SE | Unspecified Tank | 1869 | 824034 |
| J | 118m N | Unspecified Heap | 1869 | 868439 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| Z | 118m S | Unspecified Shaft | 1869 | 813709 |
| J | 120m NW | Unspecified Heap | 1948 | 982234 |
| J | 120m NW | Railway Sidings | 1909 | 849375 |
| J | 121m NW | Unspecified Heap | 1909 | 967655 |
| J | 121m NW | Unspecified Heap | 1938 | 909454 |
| J | 121m NW | Unspecified Heap | 1938 | 909454 |
| J | 122m NW | Unspecified Heap | 1960 | 850887 |
| AG | 124m S | Unspecified Old Shaft | 1910 | 954465 |
| J | 124m NW | Unspecified Heap | 1869 | 941155 |
| AG | 124m S | Garage | 1987 | 880213 |
| AG | 124m S | Garage | 1981 | 880213 |
| AG | 125m S | Unspecified Old Shaft | 1948 | 847737 |
| AG | 125m S | Unspecified Shaft | 1898 | 813758 |
| J | 126m N | Unspecified Heap | 1914 | 883710 |
| AK | 127m N | Unspecified Ground Workings | 1987 | 881305 |
| AK | 127m N | Unspecified Ground Workings | 1981 | 881305 |
| AK | 127m N | Unspecified Ground Workings | 1970 | 881305 |
| AG | 130m S | Unspecified Old Shaft | 1938 | 960245 |
| AG | 130m S | Unspecified Old Shaft | 1938 | 962641 |
| AG | 130m S | Unspecified Old Shaft | 1960 | 806211 |
| J | 132m NW | Unspecified Heap | 1960 | 858412 |
| J | 133m NW | Unspecified Heap | 1948 | 938788 |
| AL | 133m N | Unspecified Ground Workings | 1938 | 963066 |
| AL | 133m N | Unspecified Ground Workings | 1938 | 963066 |
| J | 133m NW | Unspecified Heap | 1909 | 959138 |
| J | 133m NW | Unspecified Shaft | 1898 | 851185 |
| J | 133m NW | Unspecified Heap | 1938 | 945488 |
| J | 133m NW | Unspecified Heap | 1938 | 945488 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| J | 135m NW | Unspecified Heap | 1898 | 947783 |
| 15 | 135m N | Unspecified Tank | 1869 | 824038 |
| J | 136m NW | Unspecified Heap | 1914 | 883820 |
| AL | 137m N | Unspecified Pit | 1898 | 839194 |
| J | 141m N | Unspecified Shafts | 1869 | 809165 |
| J | 143m NW | Unspecified Shafts | 1869 | 809168 |
| AQ | 149m N | Cuttings | 1938 | 882087 |
| AQ | 150m N | Cuttings | 1948 | 877180 |
| AQ | 152m N | Cuttings | 1910 | 888660 |
| J | 152m NW | Unspecified Shaft | 1898 | 866825 |
| AQ | 153m N | Unspecified Pit | 1898 | 839195 |
| AO | 153m SW | Refuse Heap | 1869 | 828559 |
| AT | 155m S | Unspecified Heap | 1869 | 803626 |
| AO | 157m W | Unspecified Old Shafts | 1960 | 990252 |
| AQ | 157m N | Cuttings | 1969 | 960655 |
| AQ | 157m N | Cuttings | 1989 | 855474 |
| AQ | 157m N | Cuttings | 1976 | 960655 |
| AO | 162m W | Old Coal Shafts | 1948 | 866325 |
| AO | 162m W | Unspecified Old Shafts | 1898 | 906390 |
| AO | 162m W | Old Coal Shafts | 1938 | 866325 |
| AO | 163m W | Old Coal Shafts | 1909 | 859313 |
| AB | 163m S | Cuttings | 1898 | 943799 |
| AT | 164m S | Unspecified Shaft | 1869 | 813708 |
| J | 168m NW | Unspecified Heap | 1898 | 803628 |
| AW | 170m S | Cuttings | 1969 | 954595 |
| AW | 170m S | Cuttings | 1989 | 899920 |
| AW | 170m S | Cuttings | 1976 | 954595 |
| 16 | 173m SW | Unspecified Pit | 1869 | 839199 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AO | 177m W | Unspecified Old Shafts | 1960 | 845593 |
| 17 | 179m N | Unspecified Heap | 1991 | 803593 |
| AO | 182m W | Old Coal Shafts | 1938 | 850398 |
| AO | 183m W | Old Coal Shafts | 1909 | 870708 |
| AO | 183m W | Old Coal Shafts | 1948 | 950586 |
| AO | 183m W | Unspecified Old Shafts | 1898 | 952377 |
| AX | 185m NE | Unspecified Warehouse | 1989 | 935972 |
| AX | 185m NE | Unspecified Warehouse | 1976 | 984849 |
| 18 | 188m NE | Unspecified Pit | 1991 | 839192 |
| AY | 197m NE | Unspecified Ground Workings | 1987 | 876468 |
| AY | 197m NE | Unspecified Ground Workings | 1981 | 876468 |
| AY | 197m NE | Unspecified Ground Workings | 1970 | 876468 |
| AB | 203m SW | Cuttings | 1960 | 933756 |
| 19 | 206m NE | Unspecified Works | 1969 | 830086 |
| BB | 209m SE | Unspecified Works | 1969 | 856253 |
| L | 210m N | Unspecified Heap | 1869 | 803627 |
| BB | 212m SE | Water Works | 1989 | 969198 |
| BB | 212m SE | Water Works | 1976 | 899998 |
| BB | 213m SE | Unspecified Works | 1960 | 923634 |
| BB | 214m SE | Sewage Works | 1948 | 811789 |
| L | 217m N | Unspecified Shafts | 1898 | 809170 |
| AB | 218m S | Cuttings | 1869 | 879908 |
| AB | 223m S | Cuttings | 1869 | 879908 |
| 20 | 225m S | Garage | 1970 | 901952 |
| BE | 231m N | Sawmill | 1948 | 808343 |
| BE | 233m N | Unspecified Mill | 1960 | 810203 |
| L | 234m N | Unspecified Shaft | 1869 | 813711 |
| BF | 236m SE | Unspecified Tank | 1948 | 897251 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| BF | 237m SE | Unspecified Tank | 1960 | 897251 |
| L | 240m N | Unspecified Shafts | 1898 | 809169 |
| AB | 241m SW | Cuttings | 1969 | 940013 |
| AB | 241m SW | Cuttings | 1989 | 853639 |
| AB | 241m SW | Cuttings | 1976 | 940013 |
| BI | 247m W | Garage | 1991 | 920926 |
| BI | 247m W | Garage | 1987 | 920926 |
| BI | 247m W | Garage | 1981 | 920926 |
| 21 | 249m NE | Unspecified Pit | 1914 | 839209 |
| BJ | 249m NE | Railway Sidings | 1914 | 929950 |
| 22 | 252m NE | Railway Sidings | 1898 | 855202 |
| L | 254m N | Unspecified Heap | 1869 | 919098 |
| L | 260m N | Unspecified Ground Workings | 1909 | 799530 |
| L | 261m N | Unspecified Heap | 1948 | 985862 |
| 23 | 263m NE | Railway Building | 1938 | 819511 |
| 24 | 263m NE | Railway Sidings | 1938 | 986490 |
| BL | 265m NE | Railway Sidings | 1869 | 947817 |
| L | 270m N | Unspecified Shaft | 1869 | 813710 |
| L | 271m N | Unspecified Shafts | 1898 | 809159 |
| L | 271m N | Old Clay Pits | 1898 | 814309 |
| BM | 273m NW | Brewery | 1910 | 906760 |
| BN | 274m NE | Railway Sidings | 1969 | 957506 |
| BN | 274m NE | Railway Sidings | 1960 | 917177 |
| 26 | 275m NE | Railway Sidings | 1948 | 940526 |
| BN | 277m NE | Railway Sidings | 1909 | 977985 |
| BM | 278m NW | Brewery | 1948 | 938554 |
| BM | 278m NW | Brewery | 1898 | 906760 |
| BP | 279m SE | Unspecified Heap | 1869 | 803629 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| BL | 279m NE | Railway Sidings | 1898 | 947817 |
| L | 280m N | Unspecified Shafts | 1898 | 809171 |
| BM | 283m NW | Brewery | 1869 | 913041 |
| BP | 288m SE | Coal Pit | 1869 | 808457 |
| 27 | 291m NE | Cuttings | 1948 | 795368 |
| L | 291m N | Unspecified Heap | 1914 | 850145 |
| 29 | 293m SE | Unspecified Works | 1976 | 856256 |
| BQ | 296m NE | Cuttings | 1960 | 795402 |
| BR | 296m NE | Unspecified Pit | 1914 | 839205 |
| 30 | 300m NE | Unspecified Works | 1960 | 855852 |
| BQ | 303m NE | Unspecified Pit | 1914 | 839208 |
| BS | 308m NW | Railway Sidings | 1909 | 948491 |
| L | 310m N | Unspecified Heap | 1898 | 883651 |
| L | 311m N | Unspecified Shafts | 1898 | 809158 |
| BN | 313m NE | Unspecified Works | 1938 | 981335 |
| BT | 314m N | Old Clay Pits | 1909 | 925147 |
| BN | 314m NE | Engineering Works | 1909 | 974477 |
| BQ | 314m NE | Unspecified Pit | 1914 | 839204 |
| BT | 314m N | Old Clay Pits | 1938 | 933040 |
| BT | 315m N | Old Clay Pits | 1948 | 960781 |
| BN | 317m NE | Unspecified Works | 1948 | 981335 |
| BQ | 318m NE | Unspecified Factory | 1960 | 821305 |
| BN | 318m NE | Unspecified Works | 1969 | 939017 |
| BT | 320m N | Old Clay Pits | 1914 | 900092 |
| BN | 321m NE | Engineering Works | 1914 | 974477 |
| BS | 328m N | Railway Sidings | 1898 | 880753 |
| BR | 329m NE | Unspecified Pit | 1914 | 839206 |
| BV | 332m NE | Railway Sidings | 1969 | 961262 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| BV | 332m NE | Railway Sidings | 1989 | 868782 |
| BV | 332m NE | Railway Sidings | 1976 | 961262 |
| BV | 332m NE | Railway Sidings | 1960 | 890455 |
| BX | 342m S | Unspecified Disused Shafts | 1991 | 968640 |
| BX | 342m S | Unspecified Disused Shafts | 1987 | 968640 |
| BX | 342m S | Unspecified Disused Shafts | 1981 | 968640 |
| BX | 346m S | Unspecified Old Shafts | 1898 | 793276 |
| BZ | 348m NE | Unspecified Depot | 1969 | 984152 |
| BZ | 348m NE | Unspecified Depot | 1989 | 920251 |
| BZ | 348m NE | Unspecified Depot | 1976 | 984152 |
| BX | 351m S | Unspecified Disused Shafts | 1991 | 872313 |
| BX | 351m S | Unspecified Disused Shafts | 1987 | 941526 |
| BX | 351m S | Unspecified Disused Shafts | 1981 | 941526 |
| BX | 356m S | Unspecified Old Shafts | 1898 | 793271 |
| 32 | 358m N | Old Lime Kiln | 1869 | 821891 |
| 33 | 360m E | Unspecified Works | 1989 | 852609 |
| BT | 360m N | Old Clay Pits | 1898 | 969067 |
| 34 | 363m N | Unspecified Heap | 1989 | 955924 |
| CB | 367m NE | Unspecified Works | 1969 | 940565 |
| CB | 370m NE | Engine Shed | 1909 | 903518 |
| CB | 370m NE | Engine Shed | 1938 | 929283 |
| CB | 371m NE | Engine Shed | 1948 | 902516 |
| CB | 375m NE | Engine Shed | 1914 | 903518 |
| BW | 376m N | Unspecified Tank | 1989 | 909772 |
| BW | 378m N | Unspecified Tank | 1976 | 920982 |
| BW | 380m N | Unspecified Tank | 1969 | 953119 |
| BN | 386m NE | Unspecified Depot | 1989 | 928870 |
| BN | 386m NE | Unspecified Depot | 1976 | 855482 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| BN | 387m NE | Unspecified Depot | 1969 | 928157 |
| CE | 391m NW | Unspecified Tank | 1869 | 824044 |
| CG | 410m SE | Cuttings | 1909 | 867080 |
| CH | 410m NE | Unspecified Works | 1976 | 982976 |
| CG | 410m SE | Cuttings | 1938 | 867080 |
| CH | 410m NE | Unspecified Works | 1989 | 881656 |
| CG | 412m SE | Cuttings | 1948 | 871855 |
| CI | 412m NE | Cuttings | 1948 | 864119 |
| CG | 413m SE | Cuttings | 1960 | 934723 |
| L | 415m N | Pumping Station | 1989 | 822096 |
| CE | 417m NW | Unspecified Tank | 1869 | 824045 |
| 37 | 421m SE | Unspecified Ground Workings | 1969 | 799521 |
| CG | 424m SE | Cuttings | 1898 | 950402 |
| BZ | 424m NE | Cheese Factory | 1938 | 939848 |
| BZ | 428m NE | Cheese Factory | 1948 | 939848 |
| CI | 430m NE | Cuttings | 1960 | 863101 |
| 38 | 430m N | Railway Sidings | 1960 | 871147 |
| BN | 432m N | Unspecified Depot | 1989 | 917877 |
| BN | 432m N | Unspecified Depot | 1976 | 973810 |
| BN | 432m N | Unspecified Depot | 1969 | 987919 |
| CI | 434m NE | Cuttings | 1938 | 851692 |
| CI | 435m NE | Cuttings | 1910 | 882818 |
| BZ | 438m NE | Unspecified Tank | 1976 | 858773 |
| BJ | 439m N | Unspecified Works | 1960 | 936753 |
| BZ | 439m NE | Unspecified Tank | 1969 | 926462 |
| BZ | 439m NE | Unspecified Tank | 1989 | 882250 |
| 39 | 440m SE | Railway Sidings | 1938 | 879047 |
| CE | 443m NW | Unspecified Levels | 1898 | 832409 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| 40 | 443m SE | Railway Sidings | 1909 | 890527 |
| 41 | 443m SE | Railway Sidings | 1898 | 846661 |
| CN | 448m N | Unspecified Works | 1969 | 952834 |
| CE | 448m NW | Unspecified Levels | 1898 | 832408 |
| CO | 450m S | Police Station | 1989 | 969800 |
| CO | 450m S | Police Station | 1976 | 958647 |
| CN | 451m N | Unspecified Works | 1976 | 947394 |
| 42 | 452m N | Chemical Works | 1898 | 867829 |
| CN | 452m N | Unspecified Works | 1989 | 988744 |
| CO | 456m S | Police Station | 1969 | 908790 |
| CP | 458m SE | Unspecified Works | 1989 | 850953 |
| CP | 458m SE | Unspecified Works | 1976 | 887739 |
| CQ | 460m NE | Unspecified Works | 1976 | 900908 |
| CR | 462m N | Sand Pit | 1948 | 963379 |
| CR | 462m N | Unspecified Pit | 1991 | 851268 |
| CR | 462m N | Unspecified Pit | 1987 | 851268 |
| CR | 462m N | Unspecified Pit | 1981 | 851268 |
| CR | 462m N | Sand Pit | 1960 | 949712 |
| CR | 463m N | Sand Pit | 1938 | 991975 |
| CR | 464m N | Sand Pit | 1910 | 972222 |
| CR | 466m N | Unspecified Pit | 1970 | 919425 |
| BN | 470m N | Unspecified Tank | 1948 | 824032 |
| CT | 474m S | Old Colliery | 1948 | 955746 |
| CT | 474m S | Old Colliery | 1898 | 898087 |
| 44 | 478m N | Unspecified Tank | 1948 | 824036 |
| CU | 480m NW | Smithy | 1948 | 853421 |
| CU | 483m NW | Smithy | 1898 | 850881 |
| 45 | 484m NE | Unspecified Heap | 1914 | 803604 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| CQ | 484m N | Unspecified Works | 1989 | 914964 |
| CW | 487m N | Unspecified Heap | 1969 | 982473 |
| CW | 487m N | Unspecified Heap | 1989 | 951105 |
| CW | 487m N | Unspecified Heap | 1976 | 982473 |
| CG | 492m SE | Cuttings | 1969 | 969605 |
| CG | 492m SE | Cuttings | 1989 | 854241 |
| CG | 492m SE | Cuttings | 1976 | 969605 |
| 46 | 492m NW | Unspecified Old Shaft | 1898 | 806213 |
| 47 | 494m NW | Unspecified Works | 1969 | 830101 |
| CY | 495m NW | Pumping Station | 1909 | 936556 |
| CY | 496m NW | Pumping Station | 1914 | 945411 |
| CY | 497m NW | Pumping Station | 1938 | 920378 |
| CZ | 498m SW | Unspecified Pit | 1898 | 944620 |
| CZ | 498m SW | Unspecified Pit | 1948 | 968543 |
| CZ | 499m SW | Unspecified Pit | 1938 | 913683 |
| CZ | 499m SW | Unspecified Pit | 1938 | 913683 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.2 Historical tanks

**Records within 500m** **90**

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 33**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| **B** | **On site** | **Unspecified Tank** | **1911** | **145886** |
| **B** | **On site** | **Unspecified Tank** | **1899** | **145886** |
| **E** | **On site** | **Unspecified Tank** | **1870** | **111769** |
| **H** | **On site** | **Tank or Trough** | **1870** | **121132** |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| B | 7m SW | Unspecified Tank | 1899 | 111771 |
| Q | 14m NE | Unspecified Tank | 1984 | 123356 |
| Q | 14m NE | Unspecified Tank | 1993 | 123356 |
| Q | 14m NE | Unspecified Tank | 1981 | 123356 |
| V | 25m N | Unspecified Tank | 1981 | 126045 |
| V | 25m N | Unspecified Tank | 1995 | 126045 |
| Q | 61m NE | Tanks | 1984 | 123726 |
| Q | 62m NE | Tanks | 1981 | 123726 |
| AD | 80m NE | Unspecified Tank | 1984 | 132085 |
| AD | 80m NE | Unspecified Tank | 1981 | 132085 |
| S | 81m S | Unspecified Tank | 1980 | 111770 |
| S | 85m SE | Unspecified Tank | 1980 | 137961 |
| S | 85m SE | Unspecified Tank | 1992 | 137961 |
| AN | 137m N | Tanks | 1981 | 139798 |
| AN | 137m N | Tanks | 1984 | 122815 |
| AN | 140m N | Tanks | 1993 | 135609 |
| AN | 143m N | Tanks | 1993 | 131546 |
| AN | 145m N | Unspecified Tank | 1981 | 111764 |
| AU | 159m NE | Tanks | 1984 | 143263 |
| AU | 159m NE | Tanks | 1993 | 143263 |
| AV | 162m NE | Tanks | 1992 | 104611 |
| AV | 163m NE | Unspecified Tank | 1981 | 111675 |
| AM | 163m NE | Tanks | 1962 | 139550 |
| AM | 163m NE | Tanks | 1969 | 139550 |
| AV | 171m NE | Unspecified Tank | 1981 | 111676 |
| AI | 177m N | Unspecified Tank | 1981 | 129637 |
| AN | 177m N | Tanks | 1993 | 136717 |
| AI | 178m N | Unspecified Tank | 1995 | 129637 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AN | 179m N | Tanks | 1981 | 134728 |
| AN | 180m N | Tanks | 1984 | 136717 |
| AV | 181m NE | Tanks | 1969 | 104608 |
| AV | 183m NE | Tanks | 1969 | 104609 |
| AI | 195m N | Unspecified Tank | 1981 | 142759 |
| AI | 195m N | Unspecified Tank | 1995 | 135792 |
| AZ | 203m SW | Unspecified Tank | 1899 | 122345 |
| AZ | 203m SW | Unspecified Tank | 1912 | 122345 |
| BA | 206m E | Unspecified Tank | 1981 | 125184 |
| BA | 206m E | Unspecified Tank | 1992 | 125184 |
| BC | 214m SE | Unspecified Tank | 1981 | 138105 |
| BC | 215m SE | Unspecified Tank | 1992 | 138105 |
| BH | 242m SW | Unspecified Tank | 1912 | 111772 |
| BC | 250m SE | Unspecified Tank | 1992 | 111673 |
| BK | 251m N | Tanks | 1995 | 143841 |
| BK | 252m N | Tanks | 1981 | 143841 |
| AX | 265m NE | Tanks | 1993 | 104610 |
| BU | 322m N | Tanks | 1981 | 147347 |
| BU | 322m N | Tanks | 1984 | 147347 |
| BW | 338m N | Tanks | 1981 | 138180 |
| BW | 338m N | Tanks | 1984 | 144093 |
| BW | 363m N | Unspecified Tank | 1981 | 147924 |
| BW | 363m N | Unspecified Tank | 1984 | 147924 |
| BW | 377m N | Unspecified Tank | 1962 | 148213 |
| BQ | 377m NE | Unspecified Tank | 1993 | 134714 |
| BW | 377m N | Unspecified Tank | 1969 | 148213 |
| BQ | 377m NE | Unspecified Tank | 1984 | 134714 |
| BQ | 378m NE | Unspecified Tank | 1981 | 134714 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| CJ | 422m NE | Tanks | 1993 | 140270 |
| CJ | 423m NE | Tanks | 1984 | 142945 |
| CJ | 423m NE | Tanks | 1981 | 145137 |
| CJ | 424m NE | Tanks | 1993 | 134080 |
| CJ | 425m NE | Tanks | 1984 | 146813 |
| BZ | 426m NE | Tanks | 1984 | 145107 |
| CJ | 426m NE | Tanks | 1981 | 140843 |
| BZ | 431m NE | Tanks | 1993 | 139164 |
| BZ | 432m NE | Tanks | 1981 | 137883 |
| CL | 433m NE | Tanks | 1993 | 129103 |
| CL | 434m NE | Tanks | 1984 | 129103 |
| CL | 434m NE | Tanks | 1981 | 129103 |
| BZ | 437m NE | Unspecified Tank | 1969 | 122394 |
| BZ | 438m NE | Unspecified Tank | 1962 | 122394 |
| CP | 464m SE | Unspecified Tank | 1981 | 111672 |
| CS | 472m NE | Unspecified Tank | 1969 | 131426 |
| CS | 472m NE | Unspecified Tank | 1983 | 131426 |
| BN | 476m N | Tanks | 1911 | 104601 |
| CS | 479m NE | Unspecified Tank | 1992 | 124339 |
| CS | 480m NE | Unspecified Tank | 1969 | 124339 |
| CS | 480m NE | Unspecified Tank | 1983 | 124339 |
| CS | 480m NE | Unspecified Tank | 1988 | 124339 |
| BZ | 487m NE | Unspecified Tank | 1981 | 111678 |
| BZ | 488m NE | Unspecified Tank | 1993 | 131777 |
| BZ | 488m NE | Unspecified Tank | 1984 | 131777 |
| CS | 488m NE | Tanks | 1983 | 132559 |
| CS | 488m NE | Unspecified Tank | 1988 | 147167 |
| BZ | 488m NE | Unspecified Tank | 1981 | 131777 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| CS | 488m NE | Tanks | 1969 | 132559 |
| CS | 491m NE | Unspecified Tank | 1992 | 148133 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.3 Historical energy features

| **Records within 500m** | **86** |
|---|---|

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 33**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| **K** | **On site** | **Electricity Substation** | **1991** | **60034** |
| AA | 60m NE | Electricity Substation | 1980 | 66321 |
| AA | 61m NE | Electricity Substation | 1969 | 66321 |
| AE | 91m NW | Electricity Substation | 1981 | 79950 |
| AE | 91m NW | Electricity Substation | 1995 | 79950 |
| AF | 93m N | Electricity Substation | 1995 | 72124 |
| AF | 94m N | Electricity Substation | 1981 | 72124 |
| AJ | 121m SE | Electricity Substation | 1969 | 75857 |
| AJ | 121m SE | Electricity Substation | 1981 | 83718 |
| AJ | 122m SE | Electricity Substation | 1993 | 75857 |
| AJ | 122m SE | Electricity Substation | 1995 | 75857 |
| AJ | 122m SE | Electricity Substation | 1992 | 75857 |
| J | 123m NW | Electricity Substation | 1996 | 75635 |
| J | 123m NW | Electricity Substation | 1996 | 75635 |
| J | 123m NW | Electricity Substation | 1992 | 75635 |
| J | 124m NW | Electricity Substation | 1980 | 75635 |
| AM | 135m NE | Electricity Substation | 1993 | 76963 |
| AM | 135m NE | Electricity Substation | 1969 | 68467 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AM | 136m NE | Electricity Substation | 1984 | 68467 |
| AM | 136m NE | Electricity Substation | 1981 | 68467 |
| AO | 141m W | Electricity Substation | 1980 | 65529 |
| AO | 141m W | Electricity Substation | 1992 | 65529 |
| N | 141m NE | Electricity Substation | 1980 | 82980 |
| N | 141m NE | Electricity Substation | 1969 | 82980 |
| AO | 142m W | Electricity Substation | 1987 | 65529 |
| AP | 148m SE | Electricity Substation | 1980 | 75029 |
| AP | 148m SE | Electricity Substation | 1969 | 75029 |
| AR | 150m SE | Electricity Substation | 1987 | 77304 |
| AR | 151m SE | Electricity Substation | 1980 | 77304 |
| AS | 155m SW | Electricity Substation | 1981 | 73909 |
| AS | 155m SW | Electricity Substation | 1993 | 73909 |
| AS | 155m SW | Electricity Substation | 1995 | 73909 |
| AS | 155m SW | Electricity Substation | 1992 | 73909 |
| AI | 217m N | Electricity Substation | 1995 | 79243 |
| AI | 217m N | Electricity Substation | 1981 | 79243 |
| BA | 226m E | Electricity Substation | 1992 | 60062 |
| BD | 226m N | Electricity Substation | 1995 | 67211 |
| BD | 227m N | Electricity Substation | 1981 | 67211 |
| BG | 242m SE | Electricity Substation | 1969 | 74133 |
| BG | 245m SE | Electricity Substation | 1980 | 74133 |
| BH | 255m SW | Electricity Substation | 1980 | 69194 |
| BH | 255m SW | Electricity Substation | 1992 | 69194 |
| BH | 255m SW | Electricity Substation | 1987 | 64496 |
| 25 | 272m E | Electricity Substation | 1992 | 60061 |
| BO | 279m SE | Electricity Substation | 1969 | 60054 |
| BO | 281m SE | Electricity Substation | 1980 | 60052 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| 28 | 293m N | Electricity Substation | 1980 | 60049 |
| 31 | 326m S | Electricity Substation | 1980 | 60058 |
| BQ | 338m NE | Electricity Substation | 1984 | 71886 |
| BQ | 340m NE | Electricity Substation | 1969 | 71886 |
| BQ | 341m NE | Electricity Substation | 1993 | 71886 |
| BQ | 343m NE | Electricity Substation | 1981 | 71886 |
| BY | 343m N | Electricity Substation | 1980 | 85095 |
| BY | 343m N | Electricity Substation | 1984 | 85095 |
| CC | 376m N | Electricity Substation | 1981 | 73125 |
| CC | 377m N | Electricity Substation | 1995 | 66652 |
| 35 | 379m S | Electricity Substation | 1990 | 60033 |
| 36 | 386m SE | Electricity Substation | 1980 | 60051 |
| CD | 389m S | Electricity Substation | 1980 | 68798 |
| CD | 389m S | Electricity Substation | 1989 | 68798 |
| CC | 389m N | Electricity Substation | 1969 | 76950 |
| CF | 396m S | Electricity Substation | 1966 | 70984 |
| CF | 398m S | Electricity Substation | 1980 | 70984 |
| CF | 399m S | Electricity Substation | 1992 | 70984 |
| CC | 404m N | Electricity Substation | 1984 | 66652 |
| CC | 404m N | Electricity Substation | 1980 | 77273 |
| CC | 404m N | Electricity Substation | 1993 | 77273 |
| CC | 404m N | Electricity Substation | 1998 | 77273 |
| CC | 404m N | Electricity Substation | 1992 | 77273 |
| CC | 404m N | Electricity Substation | 1993 | 77273 |
| BN | 413m N | Power House | 1911 | 63660 |
| CK | 424m N | Electricity Substation | 1993 | 81585 |
| CK | 424m N | Electricity Substation | 1998 | 81585 |
| CK | 424m N | Electricity Substation | 1993 | 81585 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| CM | 444m NE | Electricity Substation | 1983 | 78913 |
| CM | 444m NE | Electricity Substation | 1988 | 78913 |
| CM | 458m NE | Electricity Substation | 1992 | 80472 |
| 43 | 468m S | Electricity Substation | 1980 | 60053 |
| CV | 482m S | Electricity Substation | 1980 | 60057 |
| CV | 485m S | Electricity Substation | 1997 | 81950 |
| CV | 485m S | Electricity Substation | 1995 | 81950 |
| CV | 485m S | Electricity Substation | 1992 | 81950 |
| CX | 488m N | Electricity Substation | 1980 | 76606 |
| CX | 489m N | Electricity Substation | 1996 | 76606 |
| CX | 489m N | Electricity Substation | 1996 | 76606 |
| CX | 489m N | Electricity Substation | 1992 | 76606 |

*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 | 15 |
|---|---|

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'.

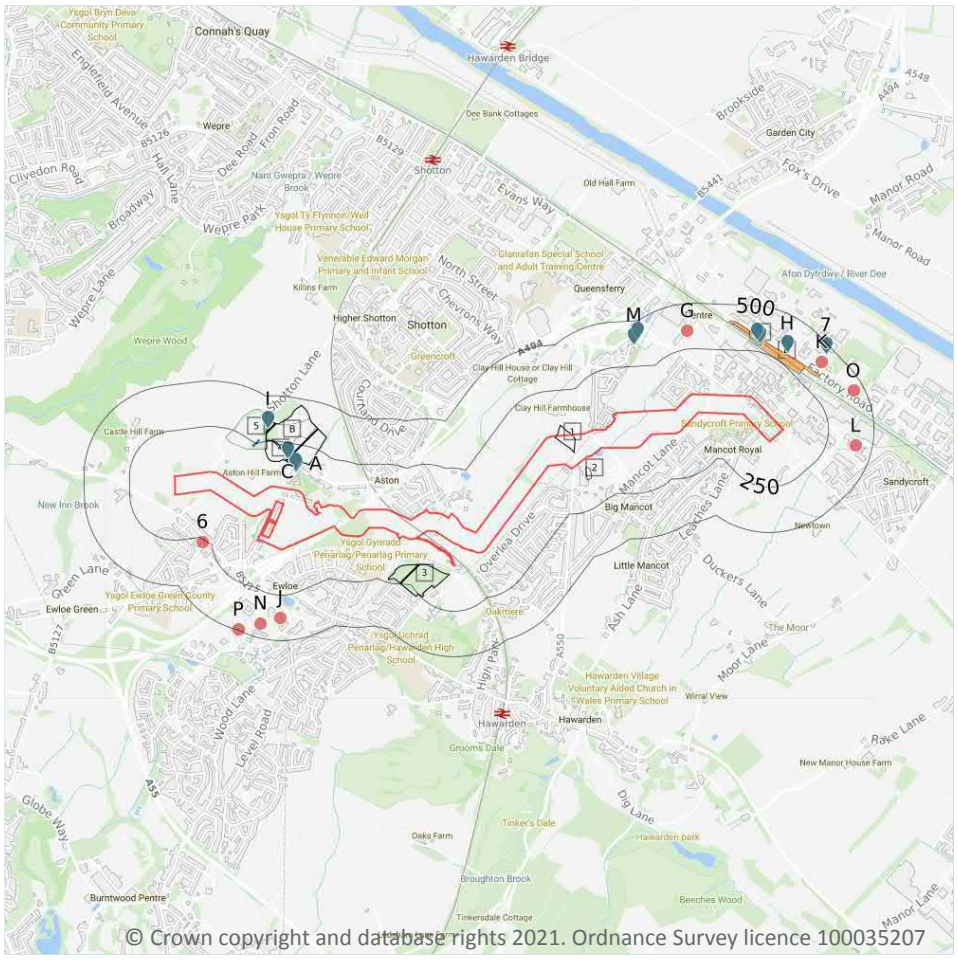
Features are displayed on the Past land use - un-grouped map on **page 33**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| U | 61m S | Garage | 1966 | 25582 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| U | 61m S | Garage | 1966 | 25582 |
| U | 61m S | Garage | 1980 | 25582 |
| U | 61m S | Garage | 1987 | 27088 |
| U | 63m SW | Garage | 1992 | 27088 |
| AH | 97m S | Garage | 1966 | 25015 |
| AH | 98m S | Garage | 1980 | 25015 |
| BI | 246m W | Garage | 1980 | 27631 |
| BI | 246m W | Garage | 1992 | 27631 |
| BI | 246m W | Garage | 1987 | 27121 |
| BI | 257m W | Garage | 1966 | 27121 |
| BI | 290m SW | Garage | 1980 | 27631 |
| BI | 291m SW | Garage | 1992 | 27631 |
| CA | 360m S | Garage | 1963 | 25024 |
| CA | 360m S | Garage | 1969 | 25024 |

*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 landfill (LA/OS)

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 59**

| ID | Location | Details | |
|---|---|---|---|
| 5 | 182m NE | Operator: D Morgan Plc<br>Site Address: Old Aston Hill, Ewloe, Deeside, Flintshire, CH5 3AH | WML Number: 37019<br>EPR Reference: MOR001<br>Landfill type: A6 : Landfill taking other wastes<br>Status: Closure<br>IPPC Reference: -<br>EPR Number: EAEPR\EA/EPR/SP3394FL/V002 |

| ID | Location | Details | |
|---|---|---|---|
| B | 194m N | Operator: D Morgan Plc<br>Site Address: Old Aston Hill, Ewloe, Deeside, Flintshire, CH5 3AH | WML Number: 37013<br>EPR Reference: MOR002<br>Landfill type: A6 : Landfill taking other wastes<br>Status: Closure<br>IPPC Reference: -<br>EPR Number: EAEPR\EA/EPR/BP3894FD/A001 |

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

## 3.2 Historical landfill (BGS records)

| **Records within 500m** | **0** |
|---|---|

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** | **1** |
|---|---|

Landfill sites identified from Local Authority records and high detail historical mapping.

Features are displayed on the Waste and landfill map on **page 59**

| ID | Location | Site address | Source | Data type |
|---|---|---|---|---|
| 2 | 41m SE | Refuse Tip | 1969 mapping | Polygon |

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

## 3.4 Historical landfill (EA/NRW records)

| **Records within 500m** | **4** |
|---|---|

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 59**

| ID | Location | Details | | |
|---|---|---|---|---|
| **1** | **On site** | **Site Address: Land off Gladstone Way**<br>**Licence Holder Address: -** | **Waste Licence: Yes**<br>**Site Reference: 115/82, 126/84**<br>**Waste Type: Inert**<br>**Environmental Permitting Regulations (Waste) Reference: -**<br>**Licence Issue: 04/06/1982**<br>**Licence Surrender: 04/06/1985** | **Operator: -**<br>**Licence Holder: John Connah**<br>**First Recorded 31/12/1982**<br>**Last Recorded: 31/12/1984** |
| 3 | 55m SW | Site Address: Upper Aston Hill Lane<br>Licence Holder Address: - | Waste Licence: Yes<br>Site Reference: UT8<br>Waste Type: Inert, Industrial, Commercial, Household, Special<br>Environmental Permitting Regulations (Waste) Reference: -<br>Licence Issue: -<br>Licence Surrender: - | Operator: -<br>Licence Holder: Alyn and Deeside District Council<br>First Recorded -<br>Last Recorded: - |
| 4 | 132m N | Site Address: Land at Rear Of Transport Yard<br>Licence Holder Address: - | Waste Licence: Yes<br>Site Reference: 121/83, 136/85<br>Waste Type: Inert, Commercial<br>Environmental Permitting Regulations (Waste) Reference: -<br>Licence Issue: 01/11/1983<br>Licence Surrender: 12/07/1986 | Operator: -<br>Licence Holder: Mr M R Jackson<br>First Recorded -<br>Last Recorded: 12/07/1986 |
| B | 149m N | Site Address: Sea View Farm<br>Licence Holder Address: - | Waste Licence: Yes<br>Site Reference: 154/88, NOW-437-L, 163, 6835/0091<br>Waste Type: Inert, Industrial, Commercial<br>Environmental Permitting Regulations (Waste) Reference: -<br>Licence Issue: 23/03/1979<br>Licence Surrender: - | Operator: -<br>Licence Holder: D Morgan Plc<br>First Recorded 23/03/1979<br>Last Recorded: 30/06/1997 |

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

## 3.5 Historical waste sites

| **Records within 500m** | **5** |
|---|---|

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 59**

| ID | Location | Address | Further Details | Date |
|---|---|---|---|---|
| D | 251m NE | Site Address: N/A | Type of Site: Scrap Yard<br>Planning application reference: N/A<br>Description: N/A<br>Data source: Historic Mapping<br>Data Type: Polygon | 1980 |
| D | 277m NE | Site Address: N/A | Type of Site: Scrap Yard<br>Planning application reference: N/A<br>Description: N/A<br>Data source: Historic Mapping<br>Data Type: Polygon | 1993 |
| E | 289m N | Site Address: N/A | Type of Site: Scrap Yard<br>Planning application reference: N/A<br>Description: N/A<br>Data source: Historic Mapping<br>Data Type: Polygon | 1984 |
| F | 334m N | Site Address: N/A | Type of Site: Scrap Yard<br>Planning application reference: N/A<br>Description: N/A<br>Data source: Historic Mapping<br>Data Type: Polygon | 1980 |
| F | 340m N | Site Address: N/A | Type of Site: Scrap Yard<br>Planning application reference: N/A<br>Description: N/A<br>Data source: Historic Mapping<br>Data Type: Polygon | 1995 |

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

## 3.6 Licensed waste sites

**Records within 500m** **53**

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

Features are displayed on the Waste and landfill map on **page 59**

| ID | Location | Details | | |
|---|---|---|---|---|
| A | 146m N | Site Name: -<br>Site Address: The Old Transport Yard, Old Aston Hill, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: XP3694FN<br>EPR reference: -<br>Operator: Mr M R Jackson<br>Waste Management licence No: 0<br>Annual Tonnage: 5000 | Issue Date: 15/12/2015<br>Effective Date: 15/12/2015<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |

| ID | Location | Details | | |
|---|---|---|---|---|
| A | 146m N | Site Name: -<br>Site Address: The Old Transport Yard, Old Aston Hill, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: XP3694FN<br>EPR reference: -<br>Operator: Mr M R Jackson<br>Waste Management licence No: 37067<br>Annual Tonnage: 5000 | Issue Date: 15/12/2015<br>Effective Date: 15/12/2015<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| A | 146m N | Site Name: The Old Transport Yard<br>Site Address: Mr M R Jackson, The Old Transport Yard, Old Aston Hill, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: XP3694FN<br>EPR reference: -<br>Operator: Mr M R Jackson<br>Waste Management licence No: 37067<br>Annual Tonnage: 5000 | Issue Date: 15/12/2015<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| A | 146m N | Site Name: -<br>Site Address: The Old Transport Yard, Old Aston Hill, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: XP3694FN<br>EPR reference: -<br>Operator: -<br>Waste Management licence No: 37067<br>Annual Tonnage: 5000 | Issue Date: 15/12/2015<br>Effective Date: 15/12/2015<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| A | 146m N | Site Name: -<br>Site Address: The Old Transport Yard, Old Aston Hill, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: XP3694FN<br>EPR reference: -<br>Operator: Mr M R Jackson<br>Waste Management licence No: 37067<br>Annual Tonnage: 5000 | Issue Date: 15/12/2015<br>Effective Date: 15/12/2015<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |

| ID | Location | Details | | |
|---|---|---|---|---|
| A | 146m N | Site Name: -<br>Site Address: The Old Transport Yard, Old Aston Hill, Ewloe, Flintshire, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: XP3694FN<br>EPR reference: -<br>Operator: Mr M R Jackson<br>Waste Management licence No: 37067<br>Annual Tonnage: 5000 | Issue Date: 15/12/2015<br>Effective Date: 15/12/2015<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| A | 147m N | Site Name: M R Jackson & Sons<br>Site Address: The Old Transport Yard, Old Aston Hill, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: JAC002<br>EPR reference: XP3694FN/V002<br>Operator: Jackson M R & Sons<br>Waste Management licence No: 37067<br>Annual Tonnage: 594 | Issue Date: 30/04/1993<br>Effective Date: -<br>Modified: 22/11/2004<br>Surrendered Date: 0<br>Expiry Date: 0<br>Cancelled Date: 0<br>Status: Modified |
| A | 148m N | Site Name: Sea View Farm 2<br>Site Address: -<br>Correspondence Address: New Hay, Chester Road, Great Sutton, South Wirral, L66 2LS | Type of Site: Household, Commercial & Industrial Waste Landfill<br>Size: >= 75000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: MOR001<br>EPR reference: -<br>Operator: D. Morgan Plc<br>Waste Management licence No: 37019<br>Annual Tonnage: 0 | Issue Date: 20/02/1991<br>Effective Date: -<br>Modified: 31/10/2001<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Modified |
| A | 159m N | Site Name: Sea Veiw Farm 1<br>Site Address: Old Aston Hill, Ewloe, CH66 2LS<br>Correspondence Address: New Hey, Chester Road, Great Sutton, South Wirral, L66 2LS | Type of Site: Landfill taking other wastes<br>Size: >= 75000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: MOR002<br>EPR reference: -<br>Operator: D. Morgan Plc<br>Waste Management licence No: 37013<br>Annual Tonnage: 0 | Issue Date: 02/11/1988<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Closure |

| ID | Location | Details | | |
|---|---|---|---|---|
| C | 212m N | Site Name: Sea View Farm 1<br>Site Address: Old Aston Hill, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Landfill taking other wastes<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: MOR002<br>EPR reference: EA/EPR/BP3894FD/A001<br>Operator: D Morgan Plc<br>Waste Management licence No: 37013<br>Annual Tonnage: 150000 | Issue Date: 02/11/1988<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Closure |
| C | 212m N | Site Name: -<br>Site Address: Sea View Farm 1, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: BP3894FD<br>EPR reference: -<br>Operator: D Morgan Plc<br>Waste Management licence No: 0<br>Annual Tonnage: 0 | Issue Date: 02/11/1988<br>Effective Date: 02/11/1988<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| C | 212m N | Site Name: -<br>Site Address: Sea View Farm 1, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Landfill taking other wastes<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: BP3894FD<br>EPR reference: -<br>Operator: -<br>Waste Management licence No: 37013<br>Annual Tonnage: 0 | Issue Date: 02/11/1988<br>Effective Date: 02/11/1988<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: 25/01/2002<br>Cancelled Date: -<br>Status: Effective |
| C | 212m N | Site Name: -<br>Site Address: Sea View Farm 1, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Landfill taking other wastes<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: BP3894FD<br>EPR reference: -<br>Operator: D Morgan Plc<br>Waste Management licence No: 37013<br>Annual Tonnage: 0 | Issue Date: 02/11/1988<br>Effective Date: 02/11/1988<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: 25/01/2002<br>Cancelled Date: -<br>Status: Effective |

| ID | Location | Details | | |
|---|---|---|---|---|
| C | 212m N | Site Name: -<br>Site Address: Sea View Farm 1, Ewloe, Flintshire, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: BP3894FD<br>EPR reference: -<br>Operator: D Morgan Plc<br>Waste Management licence No: 37013<br>Annual Tonnage: 0 | Issue Date: 02/11/1988<br>Effective Date: 02/11/1988<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: 25/01/2002<br>Cancelled Date: -<br>Status: Effective |
| C | 212m N | Site Name: -<br>Site Address: Sea View Farm 1, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Landfill taking other wastes<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: BP3894FD<br>EPR reference: -<br>Operator: D Morgan Plc<br>Waste Management licence No: 37013<br>Annual Tonnage: 0 | Issue Date: 02/11/1988<br>Effective Date: 02/11/1988<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: 25/01/2002<br>Cancelled Date: -<br>Status: Effective |
| C | 213m N | Site Name: Sea View Farm 1<br>Site Address: Old Aston Hill, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Landfill taking other wastes<br>Size: >= 75000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: MOR002<br>EPR reference: BP3894FD/A001<br>Operator: D Morgan Plc<br>Waste Management licence No: 37013<br>Annual Tonnage: 150000 | Issue Date: 02/11/1988<br>Effective Date: -<br>Modified: -<br>Surrendered Date: 0<br>Expiry Date: 0<br>Cancelled Date: 0<br>Status: Closure |
| E | 317m N | Site Name: A & A Car Dismantlers<br>Site Address: Dundas Sidings, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2DD<br>Correspondence Address: 26, Boundary Lane, Saltney, Chester, CH4 8LW | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: CHA003<br>EPR reference: -<br>Operator: Chadwick S J<br>Waste Management licence No: 37110<br>Annual Tonnage: 0 | Issue Date: 07/07/1994<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Issued |

| ID | Location | Details | | |
|---|---|---|---|---|
| E | 325m N | Site Name: -<br>Site Address: A & A Car Dismantlers, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: HP3194FC<br>EPR reference: -<br>Operator: James John Chadwick<br>Waste Management licence No: 0<br>Annual Tonnage: 0 | Issue Date: 07/07/1994<br>Effective Date: 07/07/1994<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Revoked |
| E | 325m N | Site Name: -<br>Site Address: A & A Car Dismantlers, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: HP3194FC<br>EPR reference: -<br>Operator: James John Chadwick<br>Waste Management licence No: 37110<br>Annual Tonnage: 0 | Issue Date: 07/07/1994<br>Effective Date: 07/07/1994<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Revoked |
| E | 325m N | Site Name: -<br>Site Address: A & A Car Dismantlers, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: HP3194FC<br>EPR reference: -<br>Operator: -<br>Waste Management licence No: 37110<br>Annual Tonnage: 0 | Issue Date: 07/07/1994<br>Effective Date: 07/07/1994<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Revoked |
| E | 325m N | Site Name: -<br>Site Address: A & A Car Dismantlers, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: HP3194FC<br>EPR reference: -<br>Operator: James John Chadwick<br>Waste Management licence No: 37110<br>Annual Tonnage: 0 | Issue Date: 07/07/1994<br>Effective Date: 07/07/1994<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Revoked |

| ID | Location | Details | | |
|---|---|---|---|---|
| E | 325m N | Site Name: -<br>Site Address: A & A Car Dismantlers, Sandycroft, Flintshire, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: HP3194FC<br>EPR reference: -<br>Operator: James John Chadwick<br>Waste Management licence No: 37110<br>Annual Tonnage: 0 | Issue Date: 07/07/1994<br>Effective Date: 07/07/1994<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Revoked |
| E | 326m N | Site Name: A & A Car Dismantlers<br>Site Address: Dundas Sidings, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: CHA003<br>EPR reference: HP3194FC/A001<br>Operator: Chadwick James John<br>Waste Management licence No: 37110<br>Annual Tonnage: 300 | Issue Date: 07/07/1994<br>Effective Date: -<br>Modified: -<br>Surrendered Date: 0<br>Expiry Date: 0<br>Cancelled Date: 0<br>Status: Revoked |
| E | 343m N | Site Name: Queensferry Depot<br>Site Address: Manweb Cfc Removal, Central Stores, Factory Road, Sandycroft, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Physical Treatment Facility<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: MAN001<br>EPR reference: EA/EPR/FP3194FH/A001<br>Operator: S P Manweb Plc<br>Waste Management licence No: 37120<br>Annual Tonnage: 50000 | Issue Date: 14/10/1994<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Issued |
| E | 343m N | Site Name: -<br>Site Address: Queensferry Depot, Factory Road, Sandycroft, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: FP3194FH<br>EPR reference: -<br>Operator: S P Manweb Plc<br>Waste Management licence No: 0<br>Annual Tonnage: 0 | Issue Date: 14/10/1994<br>Effective Date: 14/10/1994<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |

| ID | Location | Details | | |
|---|---|---|---|---|
| E | 343m N | Site Name: -<br>Site Address: Queensferry Depot, Factory Road, Sandycroft, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Physical Treatment Facility<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: FP3194FH<br>EPR reference: -<br>Operator: S P Manweb Plc<br>Waste Management licence No: 37120<br>Annual Tonnage: 0 | Issue Date: 14/10/1994<br>Effective Date: 14/10/1994<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| E | 343m N | Site Name: -<br>Site Address: Queensferry Depot, Factory Road, Sandycroft, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Physical Treatment Facility<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: FP3194FH<br>EPR reference: -<br>Operator: -<br>Waste Management licence No: 37120<br>Annual Tonnage: 0 | Issue Date: 14/10/1994<br>Effective Date: 14/10/1994<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| E | 343m N | Site Name: -<br>Site Address: Queensferry Depot, Factory Road, Flintshire, Sandycroft, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: FP3194FH<br>EPR reference: -<br>Operator: S P Manweb Plc<br>Waste Management licence No: 37120<br>Annual Tonnage: 0 | Issue Date: 14/10/1994<br>Effective Date: 14/10/1994<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| E | 343m N | Site Name: -<br>Site Address: Queensferry Depot, Factory Road, Sandycroft, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Physical Treatment Facility<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: FP3194FH<br>EPR reference: -<br>Operator: S P Manweb Plc<br>Waste Management licence No: 37120<br>Annual Tonnage: 0 | Issue Date: 14/10/1994<br>Effective Date: 14/10/1994<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |

| ID | Location | Details | | |
|---|---|---|---|---|
| E | 344m N | Site Name: Queensferry Depot<br>Site Address: Manweb Cfc Removal, Central Stores, Factory Road, Sandycroft, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Physical Treatment Facility<br>Size: >= 25000 tonnes 75000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: MAN001<br>EPR reference: FP3194FH/A001<br>Operator: S P Manweb Plc<br>Waste Management licence No: 37120<br>Annual Tonnage: 50000 | Issue Date: 14/10/1994<br>Effective Date: -<br>Modified: -<br>Surrendered Date: 0<br>Expiry Date: 0<br>Cancelled Date: 0<br>Status: Issued |
| H | 352m NE | Site Name: -<br>Site Address: Chadwicks Metal Processing Facility, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (mixed MRS's)<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: WP3194FL<br>EPR reference: -<br>Operator: Susan Joan Chadwick & Frances Susan Crump<br>Waste Management licence No: 37219<br>Annual Tonnage: 0 | Issue Date: 12/01/2001<br>Effective Date: 12/01/2001<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| H | 352m NE | Site Name: -<br>Site Address: Chadwicks Metal Processing Facility, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: WP3194FL<br>EPR reference: -<br>Operator: Susan Joan Chadwick & Frances Susan Crump<br>Waste Management licence No: 0<br>Annual Tonnage: 0 | Issue Date: 12/01/2001<br>Effective Date: 12/01/2001<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| H | 352m NE | Site Name: -<br>Site Address: Chadwicks Metal Processing Facility, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (mixed MRS's)<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: WP3194FL<br>EPR reference: -<br>Operator: -<br>Waste Management licence No: 37219<br>Annual Tonnage: 0 | Issue Date: 12/01/2001<br>Effective Date: 12/01/2001<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |

| ID | Location | Details | | |
|---|---|---|---|---|
| H | 352m NE | Site Name: -<br>Site Address: Chadwicks Metal Processing Facility, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (mixed MRS's)<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: WP3194FL<br>EPR reference: -<br>Operator: Susan Joan Chadwick & Frances Susan Crump<br>Waste Management licence No: 37219<br>Annual Tonnage: 0 | Issue Date: 12/01/2001<br>Effective Date: 12/01/2001<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| H | 352m NE | Site Name: -<br>Site Address: Chadwicks Metal Processing Facility, Sandycroft, Flintshire, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: WP3194FL<br>EPR reference: -<br>Operator: Susan Joan Chadwick & Frances Susan Crump<br>Waste Management licence No: 37219<br>Annual Tonnage: 0 | Issue Date: 12/01/2001<br>Effective Date: 12/01/2001<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| H | 353m NE | Site Name: Chadwicks Metal Processing Facility<br>Site Address: Chadwicks Metal Processing Facility, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (mixed MRS's)<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: CHA006<br>EPR reference: WP3194FL/V002<br>Operator: Susan Joan Chadwick & Frances Susan Crump<br>Waste Management licence No: 37219<br>Annual Tonnage: 4999 | Issue Date: 12/01/2001<br>Effective Date: -<br>Modified: 10/03/2006<br>Surrendered Date: 0<br>Expiry Date: 0<br>Cancelled Date: 0<br>Status: Modified |
| E | 358m N | Site Name: Manweb C F C Removal<br>Site Address: C F C Treatment, Central Stores, Factory Road, Sandycroft, CH1 4LR<br>Correspondence Address: C F C Treatment, Central Stores, Factory Road, Sandycroft, CH1 6LR | Type of Site: Physical Treatment Facility<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: MAN001<br>EPR reference: -<br>Operator: Scotish Power Manweb Plc<br>Waste Management licence No: 37120<br>Annual Tonnage: 0 | Issue Date: 14/10/1994<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Issued |

| ID | Location | Details | | |
|---|---|---|---|---|
| E | 358m N | Site Name: Manweb C F C Removal<br>Site Address: C F C Treatment, Central Stores, Factory Road, Sandycroft, CH1 4LR<br>Correspondence Address: C F C Treatment, Central Stores, Factory Road, Sandycroft, CH1 6LR | Type of Site: Physical Treatment Facility<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: MAN001<br>EPR reference: -<br>Operator: Sp Manweb Plc<br>Waste Management licence No: 37120<br>Annual Tonnage: 0 | Issue Date: 14/10/1994<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Issued |
| I | 370m N | Site Name: -<br>Site Address: Sea View Farm 2, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: SP3394FL<br>EPR reference: -<br>Operator: D Morgan Plc<br>Waste Management licence No: 0<br>Annual Tonnage: 0 | Issue Date: 20/02/1991<br>Effective Date: 20/02/1991<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| I | 370m N | Site Name: -<br>Site Address: Sea View Farm 2, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Landfill taking other wastes<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: SP3394FL<br>EPR reference: -<br>Operator: -<br>Waste Management licence No: 37019<br>Annual Tonnage: 0 | Issue Date: 20/02/1991<br>Effective Date: 20/02/1991<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: 12/02/2009<br>Cancelled Date: -<br>Status: Effective |
| I | 370m N | Site Name: -<br>Site Address: Sea View Farm 2, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Landfill taking other wastes<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: SP3394FL<br>EPR reference: -<br>Operator: D Morgan Plc<br>Waste Management licence No: 37019<br>Annual Tonnage: 0 | Issue Date: 20/02/1991<br>Effective Date: 20/02/1991<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: 12/02/2009<br>Cancelled Date: -<br>Status: Effective |

| ID | Location | Details | | |
|---|---|---|---|---|
| I | 370m N | Site Name: -<br>Site Address: Sea View Farm 2, Ewloe, Flintshire, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: SP3394FL<br>EPR reference: -<br>Operator: D Morgan Plc<br>Waste Management licence No: 37019<br>Annual Tonnage: 0 | Issue Date: 20/02/1991<br>Effective Date: 20/02/1991<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: 12/02/2009<br>Cancelled Date: -<br>Status: Effective |
| I | 370m N | Site Name: -<br>Site Address: Sea View Farm 2, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Landfill taking other wastes<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: SP3394FL<br>EPR reference: -<br>Operator: D Morgan Plc<br>Waste Management licence No: 37019<br>Annual Tonnage: 0 | Issue Date: 20/02/1991<br>Effective Date: 20/02/1991<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: 12/02/2009<br>Cancelled Date: -<br>Status: Effective |
| I | 371m N | Site Name: Sea View Farm 2<br>Site Address: Old Aston Hill, Ewloe, Deeside, Flintshire, CH5 3AH<br>Correspondence Address: - | Type of Site: Landfill taking other wastes<br>Size: >= 75000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: MOR001<br>EPR reference: SP3394FL/V002<br>Operator: D Morgan Plc<br>Waste Management licence No: 37019<br>Annual Tonnage: 1000000 | Issue Date: 20/02/1991<br>Effective Date: -<br>Modified: 31/10/2001<br>Surrendered Date: 0<br>Expiry Date: 0<br>Cancelled Date: 0<br>Status: Closure |
| M | 419m N | Site Name: -<br>Site Address: Queensferry Recycling Park, Queensferry, Deeside, Flintshire, CH5 1TD<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: BP3295VS<br>EPR reference: -<br>Operator: Flintshire County Council<br>Waste Management licence No: 0<br>Annual Tonnage: 8530 | Issue Date: 21/06/1993<br>Effective Date: 21/06/1993<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |

| ID | Location | Details | | |
|---|---|---|---|---|
| M | 419m N | Site Name: -<br>Site Address: Queensferry Recycling Park, Queensferry, Deeside, Flintshire, CH5 1TD<br>Correspondence Address: - | Type of Site: Household Waste Amenity Site<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: BP3295VS<br>EPR reference: -<br>Operator: Flintshire County Council<br>Waste Management licence No: 37072<br>Annual Tonnage: 8530 | Issue Date: 21/06/1993<br>Effective Date: 21/06/1993<br>Modified: -<br>Surrendered Date: 01/10/2020<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Surrender |
| M | 419m N | Site Name: Queensferry Civic Amenity Site<br>Site Address: Chester Road East, Queensferry, Deeside, Flintshire, CH5 1TD<br>Correspondence Address: - | Type of Site: Household, Commercial & Industrial Waste T Stn<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: FLI021<br>EPR reference: BP3295VS/T001<br>Operator: Flintshire County Council<br>Waste Management licence No: 37072<br>Annual Tonnage: 8530 | Issue Date: 21/06/1993<br>Effective Date: 08/04/2009<br>Modified: 30/10/2006<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Transferred |
| M | 419m N | Site Name: -<br>Site Address: Queensferry Recycling Park, Queensferry, Deeside, Flintshire, CH5 1TD<br>Correspondence Address: - | Type of Site: Household Waste Amenity Site<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: BP3295VS<br>EPR reference: -<br>Operator: -<br>Waste Management licence No: 37072<br>Annual Tonnage: 8530 | Issue Date: 21/06/1993<br>Effective Date: 21/06/1993<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| M | 419m N | Site Name: -<br>Site Address: Queensferry Recycling Park, Queensferry, Flintshire, Deeside, Flintshire, CH5 1TD<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: BP3295VS<br>EPR reference: -<br>Operator: Flintshire County Council<br>Waste Management licence No: 37072<br>Annual Tonnage: 8530 | Issue Date: 21/06/1993<br>Effective Date: 21/06/1993<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |

| ID | Location | Details | | |
|---|---|---|---|---|
| M | 419m N | Site Name: -<br>Site Address: Queensferry Recycling Park, Queensferry, Deeside, Flintshire, CH5 1TD<br>Correspondence Address: - | Type of Site: Household Waste Amenity Site<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: BP3295VS<br>EPR reference: -<br>Operator: Flintshire County Council<br>Waste Management licence No: 37072<br>Annual Tonnage: 8530 | Issue Date: 21/06/1993<br>Effective Date: 21/06/1993<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| M | 420m N | Site Name: Queensferry Recycling Park<br>Site Address: Queensferry Recycling Park, Chester Road East, Queensferry, Deeside, Flintshire, CH5 1TD<br>Correspondence Address: - | Type of Site: Household Waste Amenity Site<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: FLI021<br>EPR reference: BP3295VS/V002<br>Operator: Flintshire County Council<br>Waste Management licence No: 37072<br>Annual Tonnage: 8530 | Issue Date: 21/06/1993<br>Effective Date: 08/04/2009<br>Modified: 08/12/2011<br>Surrendered Date: 0<br>Expiry Date: 0<br>Cancelled Date: 0<br>Status: Modified |
| M | 449m N | Site Name: Queensferry Civic Amenity Site<br>Site Address: Chester Road East, Queensferry, Deeside, Flintshire, CH4 9QA<br>Correspondence Address: Standard Landfill, Spencers Industrial Estate, Buckley, Flintshire, CH7 3LY | Type of Site: Household, Commercial & Industrial Waste T Stn<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: ADW006<br>EPR reference: -<br>Operator: A D Waste Ltd<br>Waste Management licence No: 37072<br>Annual Tonnage: 0 | Issue Date: 21/06/1993<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Issued |
| 7 | 488m NE | Site Name: Trident Metals Ltd<br>Site Address: Factory Road West, Sandycroft, Deeside, Flintshire, CH5 2DD<br>Correspondence Address: Factory Road West, Sandycroft, Deeside, Flintshire, CH5 2DD | Type of Site: Metal Recycling Site (mixed MRS's)<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: TRI001<br>EPR reference: -<br>Operator: Trident Metals Ltd<br>Waste Management licence No: 37074<br>Annual Tonnage: 0 | Issue Date: 30/06/1993<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Issued |

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

## 3.7 Waste exemptions

| **Records within 500m** | **96** |
|---|---|

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 59**

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| 6 | 266m SW | Griffiths Groundworks civils, Boars Head, Holywell Road, Ewloe, Mold, Flintshire, CH53BS | NRW-WME044049 | Using waste exemption | On a farm | Use of waste in construction |
| G | 348m N | Booker Ltd, Makro S S W, Ffordd Pentre, Pentre, Deeside, Flintshire, CH5 2DW | NRW-WME060676 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| G | 348m N | Booker Ltd, Makro S S W, Ffordd Pentre, Deeside, Flintshire, CH52DW | NRW-WME028558 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| J | 376m S | Pen Cefn, Ynys Mon, CH5 3DT | NRW-WME004649 | Using waste exemption | Waste Exemption - Agricultural | Use of waste derived biodiesel as fuel |
| J | 376m S | Pen Cefn, Ynys Mon, CH5 3DT | NRW-WME004649 | Storing waste exemption | Waste Exemption - Non-Agricultural | Storage of sludge |
| K | 407m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Treating waste exemption | Not on a Farm | Preparatory treatments (baling, sorting, shredding etc) |
| K | 407m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Treating waste exemption | Not on a Farm | Recovery of textiles |
| K | 407m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Treating waste exemption | Not on a Farm | Manual treatment of waste |
| K | 407m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Treating waste exemption | Not on a Farm | Recovery of scrap metal |
| K | 407m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Treating waste exemption | Not on a Farm | Sorting mixed waste |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| K | 407m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Storing waste exemption | Not on a Farm | Storage of waste in a secure place |
| K | 407m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Storing waste exemption | Not on a Farm | Storage of waste in secure containers |
| K | 407m NE | Safer Surfacing Ltd, Sandycroft, Factory Road, Deeside, CH5 2QJ | WEX132158 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |
| K | 407m NE | Safer Surfacing Ltd, Sandycroft, Factory Road, Deeside, CH5 2QJ | WEX132158 | Using waste exemption | Not on a farm | Use of waste to manufacture finished goods |
| K | 407m NE | Centrica Business Solutions (UK) Ltd, Scottishpower, Queensferry Depot, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ | NRW-WME051020 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |
| K | 407m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Using waste exemption | Not on a farm | Use of waste to manufacture finished goods |
| K | 407m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Treating waste exemption | Not on a farm | Manual treatment of waste |
| K | 407m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| K | 407m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| K | 407m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Treating waste exemption | Not on a farm | Recovery of textiles |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| K | 407m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |
| K | 407m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Treating waste exemption | Not on a farm | Recovery of scrap metal |
| K | 407m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |
| K | 407m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Treating waste exemption | Not on a farm | Sorting mixed waste |
| K | 407m NE | Dwr Cymru Cyfyngedig, Dwr Cymru Queensferry Wastewater Treatment Works, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ | NRW-WME040491 | Treating waste exemption | Not on a farm | Recovery of waste at a waste water treatment works |
| K | 407m NE | ENER.G Combined heat and power, Scottishpower, Queensferry Depot, Factory Road, Sandycroft, Glannau Dyfrdwy, CH52QJ | NRW-WME019742 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |
| K | 407m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |
| K | 407m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| K | 407m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Cleaning, washing, spraying or coating relevant waste |
| K | 407m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Sorting mixed waste |
| K | 407m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Treatment of waste toner cartridges by sorting, dismantling, cleaning or refilling |
| K | 407m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Physical treatment of waste edible oil and fat to produce biodiesel |
| K | 407m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Recovery of textiles |
| K | 407m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| K | 407m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Screening and blending of waste |
| K | 407m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |
| K | 407m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| K | 407m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Recovery of scrap metal |
| K | 407m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Using waste exemption | Not on a farm | Use of waste in construction |
| K | 407m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |
| K | 407m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Cleaning, washing, spraying or coating relevant waste |
| K | 407m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Using waste exemption | Not on a farm | Use of baled end-of-life tyres in construction |
| K | 407m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |
| K | 407m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Recovery of scrap metal |
| K | 407m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Treatment of waste aerosol cans |
| K | 407m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Sorting mixed waste |
| K | 407m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Using waste exemption | Not on a farm | Use of waste to manufacture finished goods |
| K | 407m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Manual treatment of waste |
| K | 407m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| K | 407m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Treatment of waste toner cartridges by sorting, dismantling, cleaning or refilling |
| K | 407m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| K | 407m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| K | 407m NE | Trade Effluent Services Ltd, Unit 1, Factory Road, Deeside, Flintshire, CH52QJ | NRW-WME028692 | Using waste exemption | Not on a farm | Use of waste in construction |
| K | 407m NE | Safer Surfacing Ltd, Unit B, Deva Industrial Estate, Factory Road, Sandycroft, Deeside, CH52QJ | NRW-WME031186 | Using waste exemption | Not on a farm | Use of waste to manufacture finished goods |
| K | 407m NE | Safer Surfacing Ltd, Unit B, Deva Industrial Estate, Factory Road, Sandycroft, Deeside, CH52QJ | NRW-WME031186 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |
| K | 407m NE | MAN COED VM LTD, Factory Road, Sandycroft, UNIT B, Deeside, Flintshire, CH52QJ | NRW-WME032266 | Treating waste exemption | Not on a farm | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |
| K | 407m NE | SAFER SURFACING LTD, YARD A DEVA INDUSTRIAL ESTATE, SANDYCROFT, Deeside, Deeside, Cheshire, CH52QJ | NRW-WME032822 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| K | 407m NE | SAFER SURFACING LTD, YARD A DEVA INDUSTRIAL ESTATE, SANDYCROFT, Deeside, Deeside, Cheshire, CH52QJ | NRW-WME032822 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |
| K | 407m NE | SAFER SURFACING LTD, Safer Surfacing Ltd, Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME032908 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| K | 407m NE | SAFER SURFACING LTD, Safer Surfacing Ltd, Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME032908 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| K | 407m NE | Hollingsworth Bros Uk Ltd, Hollingsworth Bros., Land South of Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME034288 | Using waste exemption | Not on a farm | Use of waste in construction |
| K | 407m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |
| K | 407m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Treating waste exemption | Not on a farm | Manual treatment of waste |
| K | 407m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| K | 407m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| K | 407m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Treating waste exemption | Not on a farm | Sorting mixed waste |
| K | 407m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Treating waste exemption | Not on a farm | Recovery of scrap metal |
| K | 407m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Treating waste exemption | Not on a farm | Recovery of textiles |
| K | 407m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Cleaning, washing, spraying or coating relevant waste |
| K | 407m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Non-Agricultural | Recovery of textiles |
| K | 407m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Preparatory treatments (baling, sorting, shredding etc) |

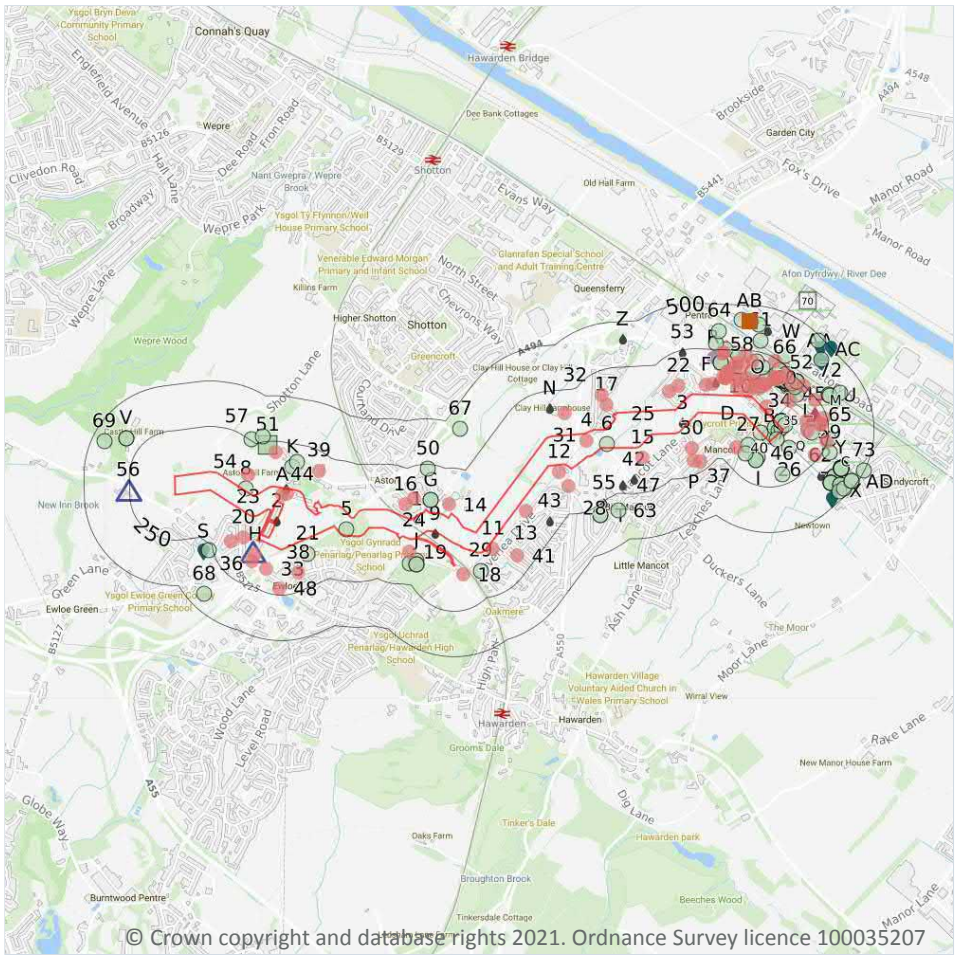
| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| K | 407m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Mechanical treatment of end-of-life tyres |
| K | 407m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Recovery of scrap metal |
| K | 407m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Sorting mixed waste |
| K | 407m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Non-Agricultural | Manual treatment of waste |
| K | 407m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Storing waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Storage of waste in secure containers |
| K | 407m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Storing waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Storage of waste in a secure place |
| K | 407m NE | Hollingsworth Bros (UK) LTD, LAND south of Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME002182 | Treating waste exemption | Waste Exemption - Non-Agricultural | Screening and blending of waste |
| K | 407m NE | Hollingsworth Bros (UK) LTD, LAND south of Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME002182 | Treating waste exemption | Waste Exemption - Non-Agricultural | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |
| K | 407m NE | Hollingsworth Bros (UK) LTD, LAND south of Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME002182 | Using waste exemption | Waste Exemption - Non-Agricultural | Use of waste in construction |
| K | 407m NE | Hollingsworth Bros (UK) LTD, LAND south of Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME002182 | Using waste exemption | Waste Exemption - Non-Agricultural | Use of waste in the construction of entertainment or educational installations etc |
| K | 407m NE | Hollingsworth Bros (UK) LTD, LAND south of Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME002182 | Using waste exemption | Waste Exemption - Non-Agricultural | Spreading waste on agricultural land to confer benefit |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| K | 407m NE | Hollingsworth Bros (UK) LTD, LAND south of Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME002182 | Using waste exemption | Waste Exemption - Non-Agricultural | Spreading waste on non-agricultural land to confer benefit |
| K | 407m NE | Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME003296 | Treating waste exemption | Waste Exemption - Non-Agricultural | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |
| L | 407m E | AM RECYCLING, Unit 1, Glendale Avenue, Glannau Dyfrdwy, CH52QP | NRW-WME004869 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| L | 407m E | AM RECYCLING, Unit 1, Glendale Avenue, Glannau Dyfrdwy, CH52QP | NRW-WME004869 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| L | 407m E | AM RECYCLING, Unit 5, Glendale Avenue, DEESIDE, FLINTSHIRE, CH52QP | NRW-WME028859 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| L | 407m E | AM RECYCLING, Unit 1, Glendale Avenue, Sandycroft Industrial Estate, Glannau Dyfrdwy, CH52QP | NRW-WME034127 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| L | 407m E | AM RECYCLING, Unit 1, Glendale Avenue, Sandycroft Industrial Estate, Glannau Dyfrdwy, CH52QP | NRW-WME034127 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| L | 407m E | Glendale Avenue, Sandycroft Industrial Estate, Deeside, Flintshire, CH5 2QP | NRW-WME001169 | Treating waste exemption | Waste Exemption - Non-Agricultural | Anaerobic digestion at premises not used for agriculture and burning of resultant biogas |
| N | 423m S | Cambria Maintenance Services, Cambria Maintenance Services, Ty Draig, Clos Dewi Sant, Ewloe, Deeside, Flintshire, CH53DT | NRW-WME037013 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| N | 423m S | Cambria Maintenance Services, Cambria Maintenance Services, Ty Draig, Clos Dewi Sant, Ewloe, Deeside, Flintshire, CH53DT | NRW-WME037083 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| O | 439m NE | Trade Effluent Services Ltd, 6 Factory Road, Sandycroft, Deeside, Flintshire, CH52DD | NRW-WME028361 | Using waste exemption | Not on a farm | Use of waste in construction |
| O | 439m NE | Trade Effluent Services Ltd, 6 Factory Road, Sandycroft, Deeside, Flintshire, CH52DD | NRW-WME028362 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| P | 500m SW | Redrow Homes Limited, Redrow Homes Ltd, Redrow House, St. Davids Park, Ewloe, Deeside, Flintshire, CH53RX | NRW-WME033087 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| P | 500m SW | Redrow Homes Limited, REDROW HOMES LTD, ST DAVIDS PARK, EWLOE, FLINTSHIRE, CH53RX | NRW-WME034701 | Using waste exemption | Not on a farm | Use of mulch |

*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
- Current or recent petrol stations
- Control of Major Accident Hazards
- Hazardous substance storage/usage
- Historical licensed industrial activities
- Part A(1) industrial activities
- Licensed pollutant release (Part A(2)/B)
- Licensed Discharges to controlled waters
- Pollutant release to public sewer
- List 2 Dangerous Substances
- Pollution Incidents (EA/NRW)

## 4.1 Recent industrial land uses

| Records within 250m | 79 |
|---|---|

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 86**

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| **4** | **On site** | **Pylon** | **Clwyd, CH5** | **Electrical Features** | **Infrastructure and Facilities** |
| **A** | **On site** | **Electricity Sub Station** | **Clwyd, CH5** | **Electrical Features** | **Infrastructure and Facilities** |
| **A** | **On site** | **Electricity Sub Station** | **Clwyd, CH5** | **Electrical Features** | **Infrastructure and Facilities** |

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| 10 | 20m NE | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |
| D | 24m N | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |
| 11 | 28m SE | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 12 | 39m S | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| E | 40m N | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 13 | 48m SE | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 14 | 51m N | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| F | 54m N | Pumping Station | Clwyd, CH5 | Water Pumping Stations | Industrial Features |
| D | 57m N | Pentre Industrial Estate | Clwyd, CH5 | Business Parks and Industrial Estates | Industrial Features |
| 15 | 62m SE | Sewage Pumping Station | Clwyd, CH5 | Waste Storage, Processing and Disposal | Infrastructure and Facilities |
| F | 63m N | Gas Governor | Clwyd, CH5 | Gas Features | Infrastructure and Facilities |
| D | 64m NE | North Wales Aeroforms | Unit 1e Pentre Industrial Estate, Chester Road, Pentre, Deeside, Clwyd, CH5 2DQ | Precision Engineers | Engineering Services |
| 16 | 65m NE | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 17 | 66m NW | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 18 | 67m SE | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 19 | 68m S | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| H | 76m S | Castle Garage Ewloe | Liverpool Road, Ewloe, Deeside, Clwyd, CH5 3AR | Vehicle Repair, Testing and Servicing | Repair and Servicing |

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| 20 | 78m W | Chester Gates & Barriers | 22, Yowley Road, Ewloe, Deeside, Clwyd, CH5 3AS | Fences, Gates and Railings | Industrial Products |
| 22 | 80m NW | Simply Pretty-handmade Jewellery | 23, Willow Lane, Pentre, Deeside, Clwyd, CH5 2AD | Jewellery, Gems, Clocks and Watches | Consumer Products |
| E | 83m N | Queensferry Industrial Estate | Clwyd, CH5 | Business Parks and Industrial Estates | Industrial Features |
| 23 | 84m NE | Graham Cuckson Joinery | Aston Hill Farm, Aston Hill, Ewloe, Deeside, Clwyd, CH5 3AH | General Construction Supplies | Industrial Products |
| 24 | 91m NW | Randups | 12, Moorfield Road, Hawarden, Deeside, Clwyd, CH5 3EZ | Office and Shop Equipment | Industrial Products |
| D | 93m N | A A Automotive | Unit 2d Pentre Industrial Estate, Chester Road, Pentre, Deeside, Clwyd, CH5 2DQ | Vehicle Repair, Testing and Servicing | Repair and Servicing |
| F | 94m N | D S D Motors | Unit 4 Queensferry Industrial Estate, Chester Road, Pentre, Deeside, Clwyd, CH5 2DJ | Vehicle Repair, Testing and Servicing | Repair and Servicing |
| 25 | 95m NW | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| F | 95m N | Flintshire Tyre & Autocare | Old School House, Chester Road, Sandycroft, Deeside, Clwyd, CH5 2QW | Vehicle Parts and Accessories | Motoring |
| E | 96m N | Advanced Building & Roofing Supplies | Unit 11 Queensferry Industrial Estate, Chester Road, Pentre, Deeside, Clwyd, CH5 2DJ | General Construction Supplies | Industrial Products |
| F | 98m N | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 28 | 98m S | Mast (Telecommunication) | Clwyd, CH5 | Telecommunications Features | Infrastructure and Facilities |
| D | 99m NE | The Caravan Man | Unit 5e Pentre Industrial Estate, Chester Road, Pentre, Deeside, Clwyd, CH5 2DQ | Sports and Leisure Equipment Repair | Repair and Servicing |
| D | 100m NE | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| E | 102m N | Ferry Chem Cleaning Solutions | Pentre Industrial Estate, Chester Road, Pentre, Deeside, Clwyd, CH5 2DQ | Cleaning Equipment and Supplies | Industrial Products |

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| F | 106m N | The Urban Design | UNIT 3A QUEENSFERRY INDUSTRIAL ESTATE, CHESTER ROAD, Pentre, Deeside, Clwyd, CH5 2DJ | Signs | Industrial Products |
| F | 108m N | Crawford & Co Ltd | Unit 3 Queensferry Industrial Estate, Chester Road, Pentre, Deeside, Clwyd, CH5 2DJ | Civil Engineers | Engineering Services |
| 30 | 113m SE | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| H | 117m S | T D C Services | T D C House, Ferry Hill, Ewloe, Deeside, Clwyd, CH5 3AW | Cleaning Equipment and Supplies | Industrial Products |
| 31 | 122m N | Star Oak Designs Ltd | Oak House Farm, Clay Hill Lane, Queensferry, Deeside, Clwyd, CH5 2AQ | Hobby, Sports and Pastime Products | Consumer Products |
| 32 | 123m NW | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 33 | 128m SW | Gantry | Clwyd, CH5 | Travelling Cranes and Gantries | Industrial Features |
| F | 134m N | Innate Automotive Solutions | Unit 7 Queensferry Industrial Estate, Chester Road, Pentre, Deeside, Clwyd, CH5 2DJ | Vehicle Repair, Testing and Servicing | Repair and Servicing |
| F | 134m N | C B M Automotive Customs & Repairs | Unit 7 Queensferry Industrial Estate, Chester Road, Pentre, Deeside, Clwyd, CH5 2DJ | Vehicle Repair, Testing and Servicing | Repair and Servicing |
| F | 134m N | Revolve Automotive Ltd | Unit 7 Queensferry Industrial Estate, Chester Road, Pentre, Deeside, Clwyd, CH5 2DJ | Vehicle Cleaning Services | Personal, Consumer and Other Services |
| L | 134m E | Factory | Clwyd, CH5 | Unspecified Works Or Factories | Industrial Features |
| 34 | 134m E | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 35 | 137m NE | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 36 | 143m W | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 38 | 153m SE | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 39 | 156m NE | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| 40 | 156m SW | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 41 | 160m SE | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| D | 161m NE | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |
| D | 162m NE | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |
| O | 162m N | Leba Systems Ltd | Unit 10, Queensferry Industrial Estate, Pentre, Deeside, Clwyd, CH5 2DJ | Electronic Equipment | Industrial Products |
| D | 163m NE | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| D | 165m NE | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |
| O | 172m N | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| P | 175m SE | Merlin Access | 51, Mancot Way, Mancot, Deeside, Clwyd, CH5 2AW | General Construction Supplies | Industrial Products |
| O | 183m N | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |
| D | 186m NE | Works | Clwyd, CH5 | Unspecified Works Or Factories | Industrial Features |
| 44 | 188m N | Jackson's Car Dismantlers | Transport Yard, Aston Hill, Ewloe, Deeside, Clwyd, CH5 3AH | Scrap Metal Merchants | Recycling Services |
| O | 192m N | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |
| P | 199m SE | Mel's Amazing Cakes | 42, Mancot Way, Mancot, Deeside, Clwyd, CH5 2AP | Baking and Confectionery | Foodstuffs |
| Q | 202m E | Chimney | Clwyd, CH5 | Chimneys | Industrial Features |
| D | 210m NE | Sandycroft M O T Centre | Rectors Lane, Pentre, Deeside, Clwyd, CH5 2DH | Vehicle Repair, Testing and Servicing | Repair and Servicing |
| 48 | 212m S | Gas Valve Compound | Clwyd, CH5 | Gas Features | Infrastructure and Facilities |
| Q | 214m E | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |
| D | 221m NE | Chimney | Clwyd, CH5 | Chimneys | Industrial Features |
| 49 | 222m SE | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| O | 226m N | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| O | 229m N | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| Q | 229m E | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| O | 233m N | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 52 | 235m NE | Chimney | Clwyd, CH5 | Chimneys | Industrial Features |
| M | 240m NE | F M C Agro Ltd | Rectors Lane, Pentre, Deeside, Clwyd, CH5 2DH | Agricultural Contractors | Contract Services |
| C | 249m E | Factory | Clwyd, CH5 | Unspecified Works Or Factories | Industrial Features |
| D | 250m NE | Sealand Van Hire | Unit 15 Hollands Yard, Rectors Lane, Pentre, Deeside, Clwyd, CH5 2DH | Vehicle Hire and Rental | Hire Services |

*This data is sourced from Ordnance Survey.*

## 4.2 Current or recent petrol stations

**Records within 500m** **2**

Open, closed, under development and obsolete petrol stations.

Features are displayed on the Current industrial land use map on **page 86**

| ID | Location | Company | Address | LPG | Status |
|---|---|---|---|---|---|
| H | 71m SW | OBSOLETE | Liverpool Road, Ewloe, Deeside, Flintshire, CH5 3AR | Not Applicable | Obsolete |
| 56 | 259m W | DRAGON | Holywell Road, Ewloe, Deeside, Flintshire, CH5 3BS | No | Open |

*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 | 4 |
|---|---|

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.

Features are displayed on the Current industrial land use map on **page 86**

| ID | Location | Company | Address | Operational status | Tier |
|---|---|---|---|---|---|
| C | 11m SE | Shopspec | North West Seelings Ltd (t/a Shopspec), Glendale Park, Sandycroft Ind Est, Flintshire, CH5 2QP | Historical NIHHS Site | - |
| M | 138m NE | Headland Agrochemicals Limited | Headland Agrochemicals Limited, Deeside, Rectors Lane, Pentre, Deeside, Flintshire, CH5 2DH | Historical COMAH Site | COMAH Upper Tier Operator |
| M | 138m NE | FMC Agro Limited | FMC Agro Limited, Deeside, Rectors Lane, Pentre, Deeside, Flintshire, CH5 2DH | Current COMAH Site | COMAH Upper Tier Operator |
| 70 | 451m NE | Cambrian Gas Limited | Cambrian Gas Limited, HQ/Factory Road, Factory Road Industrial Estate, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ | Current COMAH Site | COMAH Lower Tier Operator |

*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** | **1** |
|---|---|

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.

Features are displayed on the Current industrial land use map on **page 86**

| ID | Location | Details | |
|---|---|---|---|
| 45 | 189m NE | Application reference number: No Details<br>Application status: Approved<br>Application date: 18/03/2013<br>Address: FMC Agro Limited, Rectors Lane, Pentre, Deeside, Flintshire, Wales, CH5 2DH | Details: Hazardous Substances consent for agricultural chemical manufacture and storage<br>Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |

*This data is sourced from Local Authority records.*

## 4.9 Historical licensed industrial activities (IPC)

| **Records within 500m** | **8** |
|---|---|

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 86**

| ID | Location | Details | |
|---|---|---|---|
| R | 204m N | Operator: Knauf Insulation Ltd<br>Address: Chemistry Lane, Queensferry, Deeside, Clwyd, CH5 2DB<br>Process: Other Mineral Fibres<br>Permit Number: AH4292 | Original Permit Number: IPCAIRAPP<br>Date Approved: 20-6-1993<br>Effective Date: 20-6-1993<br>Status: Superseded By Variation |

| ID | Location | Details | |
|---|---|---|---|
| R | 204m N | Operator: Knauf Insulation Ltd<br>Address: Chemistry Lane, Deeside, Clwyd, CH5 2DB<br>Process: Other Mineral Fibres<br>Permit Number: AI0420 | Original Permit Number: IPCAIRAPP<br>Date Approved: 31-8-1993<br>Effective Date: 31-8-1993<br>Status: Superseded By Variation |
| R | 204m N | Operator: Knauf Insulation Ltd<br>Address: Chemistry Lane, Queensferry, Deeside, Clwyd, CH5 2DB<br>Process: Other Mineral Fibres<br>Permit Number: AN6973 | Original Permit Number: IPCMINVAR<br>Date Approved: 13-7-1994<br>Effective Date: 18-7-1994<br>Status: Superseded By Variation |
| R | 204m N | Operator: Knauf Insulation Ltd<br>Address: Chemistry Lane, Deeside, Clwyd, CH5 2DB<br>Process: Other Mineral Fibres<br>Permit Number: AN6981 | Original Permit Number: IPCMINVAR<br>Date Approved: 13-7-1994<br>Effective Date: 18-7-1994<br>Status: Surrendered |
| R | 204m N | Operator: Knauf Insulation Ltd<br>Address: Chemistry Lane, Queensferry, Deeside, Clwyd, CH5 2DB<br>Process: Other Mineral Fibres<br>Permit Number: AS1797 | Original Permit Number: IPCMINVAR<br>Date Approved: 6-7-1995<br>Effective Date: 10-7-1995<br>Status: Superseded By Variation |
| R | 204m N | Operator: Knauf Insulation Ltd<br>Address: Chemistry Lane, Queensferry, Deeside, Clwyd, CH5 2DB<br>Process: Other Mineral Fibres<br>Permit Number: AZ2481 | Original Permit Number: IPCMINVAR<br>Date Approved: 26-8-1997<br>Effective Date: 29-8-1997<br>Status: Superseded By Variation |
| R | 204m N | Operator: Knauf Insulation Ltd<br>Address: Chemistry Lane, Queensferry, Deeside, Clwyd, CH5 2DB<br>Process: Other Mineral Fibres<br>Permit Number: AZ8102 | Original Permit Number: IPCMAJVAR<br>Date Approved: 23-1-1998<br>Effective Date: 30-1-1998<br>Status: Superseded By Variation |
| R | 204m N | Operator: Knauf Insulation Ltd<br>Address: Chemistry Lane, Queensferry, Deeside, Clwyd, CH5 2DB<br>Process: Other Mineral Fibres<br>Permit Number: BE1399 | Original Permit Number: IPCMINVAR<br>Date Approved: 24-11-1998<br>Effective Date: 30-11-1998<br>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** | **37** |
|---|---|

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 86**

| ID | Location | Details | |
|---|---|---|---|
| L | 124m E | Operator: MARSHALL FOOD GROUP<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL, VEGETABLE AND FOOD; SLAUGHTERING ANIMALS >50 T/DAY<br>Permit Number: UP3135LL<br>Original Permit Number: BU2101IL | EPR Reference: -<br>Issue Date: 09/03/2006<br>Effective Date: 09/03/2006<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| L | 124m E | Operator: MARSHALL FOOD GROUP LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC ANIMAL RAW MATERIALS (NOT MILK) FOR FOOD >75T/D<br>Permit Number: BU2101IL<br>Original Permit Number: BU2101IL | EPR Reference: -<br>Issue Date: 28/02/2005<br>Effective Date: 28/02/2005<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| L | 124m E | Operator: 2 SISTERS POULTRY LIMITED<br>Installation Name: SANDYCROFT POULTRY EPR/YP3632EM<br>Process: TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ONLY ANIMAL RAW MATERIALS (OTHER THAN MILK ONLY) INTENDED FOR PRODUCTION OF FOOD OR FEED WITH A FINISHED PRODUCT CAPACITY GREATER THAN 75 T/D<br>Permit Number: YP3632EM<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: 05/02/2014<br>Effective Date: 05/02/2014<br>Last date noted as effective: 17/11/2015<br>Status: TRANSFER EFFECTIVE |
| L | 124m E | Operator: 2 SISTERS POULTRY LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ONLY ANIMAL RAW MATERIALS (OTHER THAN MILK ONLY) INTENDED FOR PRODUCTION OF FOOD OR FEED WITH A FINISHED PRODUCT CAPACITY GREATER THAN 75 T/D<br>Permit Number: ZP3933AT<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: -<br>Effective Date: -<br>Last date noted as effective: 17/11/2015<br>Status: REFUSED |
| L | 124m E | Operator: VION FOOD WALES & WEST ENGLAND LTD<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL, VEGETABLE AND FOOD; SLAUGHTERING ANIMALS >50 T/DAY<br>Permit Number: AP3633HT<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 24/08/2010<br>Effective Date: 24/08/2010<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |

| ID | Location | Details | |
|---|---|---|---|
| L | 124m E | Operator: VION FOOD WALES & WEST ENGLAND LTD<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL, VEGETABLE AND FOOD; SLAUGHTERING ANIMALS >50 T/DAY<br>Permit Number: BP3835HA<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 28/09/2010<br>Effective Date: 28/09/2010<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| L | 124m E | Operator: VION FOOD WALES & WEST ENGLAND LTD<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL, VEGETABLE AND FOOD; SLAUGHTERING ANIMALS >50 T/DAY<br>Permit Number: BP3935ZN<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 28/11/2012<br>Effective Date: 28/11/2012<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| L | 124m E | Operator: W&WE (WALES AND WEST ENGLAND) LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL, VEGETABLE AND FOOD; SLAUGHTERING ANIMALS >50 T/DAY<br>Permit Number: RP3936ZK<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 21/03/2013<br>Effective Date: 21/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| L | 124m E | Operator: W&WE (WALES AND WEST ENGLAND) LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ASSOCIATED PROCESS<br>Permit Number: RP3936ZK<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 21/03/2013<br>Effective Date: 21/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| L | 124m E | Operator: W&WE (WALES AND WEST ENGLAND) LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT<br>Permit Number: RP3936ZK<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 21/03/2013<br>Effective Date: 21/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |

| ID | Location | Details | |
|---|---|---|---|
| L | 124m E | Operator: W&WE (WALES AND WEST ENGLAND) LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ONLY ANIMAL RAW MATERIALS (OTHER THAN MILK ONLY) INTENDED FOR PRODUCTION OF FOOD OR FEED WITH A FINISHED PRODUCT CAPACITY GREATER THAN 75 T/D<br>Permit Number: RP3936ZK<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 21/03/2013<br>Effective Date: 21/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| L | 124m E | Operator: 2 SISTERS POULTRY LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: -<br>Permit Number: YP3632EM<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: 05/02/2014<br>Effective Date: 05/02/2014<br>Last date noted as effective: 01/12/2016<br>Status: EFFECTIVE |
| L | 124m E | Operator: WW&E (WALES AND WEST ENGLAND) LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ONLY ANIMAL RAW MATERIALS (OTHER THAN MILK ONLY) INTENDED FOR PRODUCTION OF FOOD OR FEED WITH A FINISHED PRODUCT CAPACITY GREATER THAN 75 T/D<br>Permit Number: RP3936ZK<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 21/03/2013<br>Effective Date: 21/03/2013<br>Last date noted as effective: 01/07/2013<br>Status: EFFECTIVE |
| L | 124m E | Operator: WW&E (WALES AND WEST ENGLAND) LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: CREATED BY IED - DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT<br>Permit Number: RP3936ZK<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 21/03/2013<br>Effective Date: 21/03/2013<br>Last date noted as effective: 01/07/2013<br>Status: EFFECTIVE |
| L | 124m E | Operator: 2 SISTERS FOOD GROUP LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: SLAUGHTERING ANIMALS AT A PLANT WITH A CARCASS PRODUCTION CAPACITY OF MORE THAN 50 TONNES PER DAY.<br>Permit Number: YP3632EM<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: 22/10/2019<br>Effective Date: 24/11/2019<br>Last date noted as effective: 01/04/2021<br>Status: EFFECTIVE |

| ID | Location | Details | |
|---|---|---|---|
| L | 124m E | Operator: 2 SISTERS FOOD GROUP LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>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<br>Permit Number: YP3632EM<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: 22/10/2019<br>Effective Date: 24/11/2019<br>Last date noted as effective: 01/04/2021<br>Status: EFFECTIVE |
| L | 124m E | Operator: 2 SISTERS FOOD GROUP LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>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<br>Permit Number: YP3632EM<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: 22/10/2019<br>Effective Date: 24/11/2019<br>Last date noted as effective: 01/04/2021<br>Status: EFFECTIVE |
| L | 124m E | Operator: 2 SISTERS POULTRY LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: SLAUGHTERING ANIMALS AT PLANT WITH A CARCASS PRODUCTION CAPACITY OF MORE THAN 50...<br>Permit Number: YP3632EM<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: 05/02/2014<br>Effective Date: 05/02/2014<br>Last date noted as effective: 01/04/2018<br>Status: EFFECTIVE |
| L | 124m E | Operator: CYMRU COUNTRY CHICKENS LTD<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC ANIMAL RAW MATERIALS (NOT MILK) FOR FOOD >75T/D<br>Permit Number: UP3135LL<br>Original Permit Number: BU2101IL | EPR Reference: -<br>Issue Date: 09/03/2006<br>Effective Date: 09/03/2006<br>Last date noted as effective: 02/10/2009<br>Status: EFFECTIVE |

| ID | Location | Details | |
|---|---|---|---|
| R | 204m N | Operator: KNAUF INSTALLATION LIMITED<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS EA/EPR/BR9383ID/V003<br>Process: GLASS AND GLASS FIBRE; GLASS/ENAMEL FRIT MANUFACTURE >100T/12 MONTHS<br>Permit Number: BR9383ID<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 25/06/2004<br>Effective Date: 25/06/2004<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| R | 204m N | Operator: KNAUF INSULATION LTD<br>Installation Name: -<br>Process: GLASS & GLASS FIBRE; GLASS/ENAMEL FRIT MANUFACTURE >100T/12 MONTHS<br>Permit Number: BR9383<br>Original Permit Number: BR9383 | EPR Reference: -<br>Issue Date: -<br>Effective Date: -<br>Last date noted as effective: 01/10/2004<br>Status: SUPERSEDED BY PAS |
| D | 218m NE | Operator: HEADLAND AGROCHEMICALS LIMITED<br>Installation Name: PENTRE AGROCHEMICALS PLANT EPR/FP3031CW<br>Process: -<br>Permit Number: FP3031CW<br>Original Permit Number: FP3031CW | EPR Reference: -<br>Issue Date: 27/09/2013<br>Effective Date: 27/09/2013<br>Last date noted as effective: 01/12/2016<br>Status: EFFECTIVE |
| D | 218m NE | Operator: HEADLAND AGROCHEMICALS LIMITED<br>Installation Name: PENTRE AGROCHEMICALS PLANT EPR/FP3031CW<br>Process: PRODUCING INORGANIC CHEMICALS SUCH AS:<br>(IV) SALTS SUCH AS AMMONIUM CHLORIDE, POT…<br>Permit Number: FP3031CW<br>Original Permit Number: FP3031CW | EPR Reference: -<br>Issue Date: 27/09/2013<br>Effective Date: 27/09/2013<br>Last date noted as effective: 01/04/2018<br>Status: EFFECTIVE |
| D | 218m NE | Operator: FMC AGRO LIMITED<br>Installation Name: PENTRE AGROCHEMICALS PLANT EPR/FP3031CW<br>Process: PRODUCING INORGANIC CHEMICALS SUCH AS:<br>(IV) SALTS (FOR EXAMPLE AMMONIUM CHLORIDE, POTASSIUM CHLORATE, POTASSIUM CARBONATE, SODIUM CARBONATE, PERBORATE, SILVER NITRATE, CUPRIC ACETATE, AMMONIUM PHOSPHOMOLYBDATE)<br>Permit Number: FP3031CW<br>Original Permit Number: FP3031CW | EPR Reference: -<br>Issue Date: 26/02/2020<br>Effective Date: 26/02/2020<br>Last date noted as effective: 01/04/2021<br>Status: EFFECTIVE |
| D | 218m NE | Operator: HEADLAND AGROCHEMICALS LIMITED<br>Installation Name: PENTRE AGROCHEMICALS PLANT EPR/FP3031CW<br>Process: INORGANIC CHEMICALS; SALTS EG AMMONIUM CHLORIDE<br>Permit Number: DP3836AE<br>Original Permit Number: FP3031CW | EPR Reference: -<br>Issue Date: 08/10/2015<br>Effective Date: 08/10/2015<br>Last date noted as effective: 17/11/2015<br>Status: EFFECTIVE |

| ID | Location | Details | |
|---|---|---|---|
| D | 218m NE | Operator: HEADLAND AGROCHEMICALS LIMITED<br>Installation Name: PENTRE AGROCHEMICALS PLANT EPR/FP3031CW<br>Process: INORGANIC CHEMICALS; SALTS EG AMMONIUM CHLORIDE<br>Permit Number: FP3031CW<br>Original Permit Number: FP3031CW | EPR Reference: -<br>Issue Date: 27/09/2013<br>Effective Date: 27/09/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| O | 228m N | Operator: KNAUF INSTALLATION LIMITED<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: GLASS AND GLASS FIBRE; GLASS/ENAMEL FRIT MANUFACTURE >100T/12 MONTHS<br>Permit Number: GP3737XW<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 12/02/2009<br>Effective Date: 12/02/2009<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| O | 228m N | Operator: KNAUF INSTALLATION LIMITED<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: GLASS AND GLASS FIBRE; GLASS/ENAMEL FRIT MANUFACTURE >100T/12 MONTHS<br>Permit Number: NP3835SW<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 11/02/2005<br>Effective Date: 23/02/2005<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| O | 228m N | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS EPR/BR9383ID<br>Process: GLASS AND GLASS FIBRE; GLASS/ENAMEL FRIT MANUFACTURE >100T/12 MONTHS<br>Permit Number: GP3230RF<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 31/07/2015<br>Effective Date: 31/07/2015<br>Last date noted as effective: 17/11/2015<br>Status: EFFECTIVE |
| O | 228m N | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS EPR/BR9383ID<br>Process: OTHER MINERAL FIBRES; MELTING >20 T/D (UNLESS 3.3 A(1) OR (2))<br>Permit Number: GP3230RF<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 31/07/2015<br>Effective Date: 31/07/2015<br>Last date noted as effective: 17/11/2015<br>Status: EFFECTIVE |
| O | 228m N | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: GLASS AND GLASS FIBRE; GLASS/ENAMEL FRIT MANUFACTURE >100T/12 MONTHS<br>Permit Number: PP3335HJ<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 21/02/2011<br>Effective Date: 21/02/2011<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |

| ID | Location | Details | |
|---|---|---|---|
| O | 228m N | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: GLASS AND GLASS FIBRE; GLASS/ENAMEL FRIT MANUFACTURE >100T/12 MONTHS<br>Permit Number: PP3431ZH<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 04/03/2013<br>Effective Date: 04/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| O | 228m N | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: OTHER MINERAL FIBRES; MELTING >20 T/D (UNLESS 3.3 A(1) OR (2))<br>Permit Number: PP3431ZH<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 04/03/2013<br>Effective Date: 04/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| O | 228m N | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: MELTING MINERAL SUBSTANCES INCLUDING THE PRODUCTION OF MINERAL FIBRES WITH A MEL...<br>Permit Number: BR9383ID<br>Original Permit Number: GP3230RF | EPR Reference: -<br>Issue Date: 08/08/2017<br>Effective Date: 08/08/2017<br>Last date noted as effective: 01/04/2018<br>Status: EFFECTIVE |
| O | 228m N | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: MELTING MINERAL SUBSTANCES INCLUDING THE PRODUCTION OF MINERAL FIBRES IN PLANTS WITH A MELTING CAPACITY EXCEEDING 20 TONNES PER DAY<br>Permit Number: BR9383ID<br>Original Permit Number: GP3230RF | EPR Reference: -<br>Issue Date: 29/01/2020<br>Effective Date: 29/01/2020<br>Last date noted as effective: 01/04/2021<br>Status: EFFECTIVE |
| O | 228m N | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: -<br>Permit Number: BR9383ID<br>Original Permit Number: - | EPR Reference: -<br>Issue Date: -<br>Effective Date: -<br>Last date noted as effective: 01/04/2017<br>Status: DULY MADE |
| AB | 412m N | Operator: TOYOTA MOTOR MANUFACTURING UK LTD<br>Installation Name: -<br>Process: NON-FERROUS METALS; MELTING WITH CAPACITY >4T/D LEAD/CADMIUM OR 20T/D OTHERS<br>Permit Number: BK6483<br>Original Permit Number: BK6483 | EPR Reference: -<br>Issue Date: 20/12/2002<br>Effective Date: 20/12/2002<br>Last date noted as effective: 01/10/2004<br>Status: SUPERSEDED BY PAS |

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

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

| **Records within 500m** | **6** |
|---|---|

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 86**

| ID | Location | Address | Details | |
|---|---|---|---|---|
| S | 304m W | Ewloe Service Station, Holywell Road, Ewloe, Flintshire, Flintshire, CH5 3BS | Process: Waste Oil Burner 0.4 MW<br>Status: New Legislation Applies<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| AA | 403m NE | Waste Oil Burner, Carillion, Prospect House, CH5 2QJ | Process: Waste Oil Burner 0.4 MW<br>Status: New Legislation Applies<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| AA | 406m NE | Mcalpine Business Services, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ | Process: Engineering Works<br>Status: Historical Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| AC | 455m NE | Trident Metals, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ | Process: Various Aluminium Processes<br>Status: Current Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| 71 | 466m SE | Sandycroft Textile Services Ltd, Chester Road, Sandycroft, Flintshire, CH5 2QW | Process: Dry Cleaning<br>Status: Historical Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| 72 | 494m NE | Durable Castings Ltd, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ | Process: Non-ferrous Metal Foundry Processes<br>Status: Current Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |

*This data is sourced from Local Authority records.*

## 4.12 Radioactive Substance Authorisations

| **Records within 500m** | **0** |
|---|---|

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

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

## 4.13 Licensed Discharges to controlled waters

| Records within 500m | 21 |
|---|---|

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 86**

| ID | Location | Address | Details | |
|---|---|---|---|---|
| **1** | **On site** | **ASTON - WATER MAIN** | **Effluent Type: UNSPECIFIED<br>Permit Number: CM0073702<br>Permit Version: 1<br>Receiving Water: UN-NAMED TRIB. OF QUEENSFERRY** | **Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 20/02/1973<br>Effective Date: 20/02/1973<br>Revocation Date: 20/11/1995** |
| **2** | **On site** | **ASTON NO2 - CHLORINATED O/F** | **Effluent Type: UNSPECIFIED<br>Permit Number: CM0201401<br>Permit Version: 1<br>Receiving Water: GROUND** | **Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 02/10/1989<br>Effective Date: 02/10/1989<br>Revocation Date: 17/03/1994** |
| **3** | **On site** | **MANCOT - COTTAGE LANE** | **Effluent Type: UNSPECIFIED<br>Permit Number: CM0117101<br>Permit Version: 1<br>Receiving Water: UNNAMED TRIB. OF QUEENSFERRY D** | **Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV<br>Issue date: 08/02/1967<br>Effective Date: 08/02/1967<br>Revocation Date: 04/03/2004** |
| **A** | **On site** | **ASTON NO1 - CHLORINATED O/F** | **Effluent Type: UNSPECIFIED<br>Permit Number: CM0201301<br>Permit Version: 1<br>Receiving Water: GROUND** | **Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 02/10/1989<br>Effective Date: 02/10/1989<br>Revocation Date: 17/03/1994** |
| 9 | 13m SW | ASTON - WATER MAIN | Effluent Type: UNSPECIFIED<br>Permit Number: CM0073701<br>Permit Version: 1<br>Receiving Water: UN-NAMED TRIB. OF QUEENSFERRY | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 20/02/1973<br>Effective Date: 20/02/1973<br>Revocation Date: 20/11/1995 |
| F | 68m N | QUEENSFERRY PENTRE PUMPING STATION, MANCOT LANE, MANCOT, Flintshire, WALES, CH5 2AJ | Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY<br>Permit Number: CG0415201<br>Permit Version: 1<br>Receiving Water: QUEENSFERRY DITCH | Status: Effective<br>Issue date: 04/03/2004<br>Effective Date: 04/03/2004<br>Revocation Date: - |
| N | 154m N | ASHFIELD HOUSE FARM, HAWARDEN, DEESIDE | Effluent Type: UNSPECIFIED<br>Permit Number: CM0093401<br>Permit Version: 1<br>Receiving Water: UN-NAMED TRIBS OF QUEENSFERRY | Status: REVOKED - UNSPECIFIED<br>Issue date: 25/08/1982<br>Effective Date: 25/08/1982<br>Revocation Date: 03/06/1986 |

| ID | Location | Address | Details | |
|---|---|---|---|---|
| N | 154m N | ASHFIELD HOUSE FARM, HAWARDEN, DEESIDE | Effluent Type: UNSPECIFIED<br>Permit Number: CM0093401<br>Permit Version: 2<br>Receiving Water: UN-NAMED TRIBS OF QUEENSFERRY | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 04/06/1986<br>Effective Date: 04/06/1986<br>Revocation Date: 02/02/1994 |
| 42 | 175m S | MANCOT LANE CSO, O/S 68 Mancot Lane, MANCOT, Deeside, CH5 2AH | Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY<br>Permit Number: CM0163801<br>Permit Version: 4<br>Receiving Water: QUEENSFERRY DITCH | Status: Effective<br>Issue date: 21/10/2019<br>Effective Date: 21/10/2019<br>Revocation Date: - |
| 43 | 187m SE | HAWARDEN BLACKBROOK AVENUE - S | Effluent Type: UNSPECIFIED<br>Permit Number: CM0166501<br>Permit Version: 1<br>Receiving Water: STREAM | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 20/10/1989<br>Effective Date: 20/10/1989<br>Revocation Date: 04/03/1994 |
| 47 | 203m S | MANCOT MANCOT LANE - SSO, MANCOT LANE - SSO | Effluent Type: UNSPECIFIED<br>Permit Number: CM0163801<br>Permit Version: 1<br>Receiving Water: PENTRE DRAIN SOUTH | Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88)<br>Issue date: 20/10/1989<br>Effective Date: 20/10/1989<br>Revocation Date: 03/03/2004 |
| 53 | 238m N | MANCOT LANE CSO, MANCOT LANE, MANCOT, FLINTSHIRE, WALES, CH5 2AH | Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY<br>Permit Number: CM0163801<br>Permit Version: 2<br>Receiving Water: QUEENSFERRY DITCH | Status: Effective<br>Issue date: 04/03/2004<br>Effective Date: 04/03/2004<br>Revocation Date: - |
| 55 | 257m SE | MANCOT COTTAGE LANE - SSO | Effluent Type: UNSPECIFIED<br>Permit Number: CM0197901<br>Permit Version: 1<br>Receiving Water: PENTRE DRAIN SOUTH | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 20/10/1989<br>Effective Date: 20/10/1989<br>Revocation Date: 04/03/1994 |
| 62 | 325m SE | SALTNEY CENTRAL TRADING ESTATE UNIT, SALTNEY CENTRAL TRADING ESTATE U, CENTRAL TRADING ESTATE UNIT 14, UNIT 14 | Effluent Type: UNSPECIFIED<br>Permit Number: CM0087501<br>Permit Version: 1<br>Receiving Water: PENTRE DRAIN NORTH | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 06/02/1980<br>Effective Date: 06/02/1980<br>Revocation Date: 26/04/1995 |
| W | 373m N | FACTORY ROAD, SANDYCROFT, DEESIDE, Flintshire, CH5 2QJ | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: WQD007720<br>Permit Version: 1<br>Receiving Water: River Dee | Status: Effective<br>Issue date: 14/08/2009<br>Effective Date: 14/08/2009<br>Revocation Date: - |

| ID | Location | Address | Details | |
|---|---|---|---|---|
| W | 373m N | FACTORY ROAD, SANDYCROFT, DEESIDE, FLINTSHIRE, CH5 2QJ | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: NPSWQD007720<br>Permit Version: 1<br>Receiving Water: RIVER DEE | Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995)<br>Issue date: 14/08/2009<br>Effective Date: 14/08/2009<br>Revocation Date: - |
| W | 373m N | FACTORY ROAD, SANDYCROFT, DEESIDE, FLINTSHIRE, CH5 2QJ | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: NPSWQD007720<br>Permit Version: 1<br>Receiving Water: RIVER DEE | Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995)<br>Issue date: 14/08/2009<br>Effective Date: 14/08/2009<br>Revocation Date: - |
| Z | 401m N | QUEENSFERRY PS CHESTER ROAD EAST, QUEENSFERRY PS, CHESTER ROAD EAST, QUENNSFERRY, FLINTSHIRE, CH5 1TD | Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY<br>Permit Number: CG0417801<br>Permit Version: 2<br>Receiving Water: QUEENSFERRY DRAIN | Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995)<br>Issue date: 14/09/2006<br>Effective Date: 14/09/2006<br>Revocation Date: 30/03/2008 |
| Z | 401m N | QUEENSFERRY PS CHESTER ROAD EAST, QUEENSFERRY PS, CHESTER ROAD EAST, QUENNSFERRY, FLINTSHIRE, CH5 1TD | Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY<br>Permit Number: CG0417801<br>Permit Version: 1<br>Receiving Water: QUEENSFERRY DRAIN | Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995)<br>Issue date: 18/02/2005<br>Effective Date: 31/03/2009<br>Revocation Date: 13/09/2006 |
| Z | 401m N | QUEENSFERRY PS CHESTER ROAD EAST, QUEENSFERRY PS, CHESTER ROAD EAST, QUENNSFERRY, FLINTSHIRE, CH5 1TD | Effluent Type: UNSPECIFIED<br>Permit Number: CM0194601<br>Permit Version: 1<br>Receiving Water: QUEENSFERRY DRAIN | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 19/10/1989<br>Effective Date: 19/10/1989<br>Revocation Date: 04/03/1994 |
| X | 438m SE | HOUSING ESTATE OFF HAMILTON AVENUE, HOUSING ESTATE OFF HAMILTON AVEN, OFF HAMILTON AVENUE SANDYCROFT, SANDYCROFT | Effluent Type: UNSPECIFIED<br>Permit Number: CM0045901<br>Permit Version: 1<br>Receiving Water: PENTRE DRAIN NORTH | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 16/11/1967<br>Effective Date: 16/11/1967<br>Revocation Date: 05/04/1995 |

*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 | 1 |
|---|---|

Discharges of Special Category Effluents to the public sewer.

Features are displayed on the Current industrial land use map on **page 86**

| ID | Location | Address | Details | |
|---|---|---|---|---|
| AB | 412m N | TOYOTA MOTOR MANUFACTURING UK LTD, TM (UK) ENGINE PLANT, DEESIDE INDUSTRIAL PARK, DEESIDE, CLWYD, CH5 2TW | Permission reference: AU5858<br>Local Authority: FLINTSHIRE COUNTY COUNCIL<br>First received date: 01/06/2001 | Last received date: 01/07/2017<br>Status: RECEIVED |

*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 | 1 |
|---|---|

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 86**

| ID | Location | Name | Status | Receiving Water | Authorised Substances |
|---|---|---|---|---|---|
| 51 | 231m N | Sea View Farm., Old Aston Hill Road, Ewloe, Deeside. | Not Active | - | Chromium, Copper, Lead, Nickel, Zinc |

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

## 4.18 Pollution Incidents (EA/NRW)

| Records within 500m | 138 |
|---|---|

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 86**

| ID | Location | Details | |
|---|---|---|---|
| **5** | **On site** | **Incident Date: 24/03/2003**<br>**Incident Identification: 145510**<br>**Pollutant: Specific Waste Materials**<br>**Pollutant Description: Commercial Waste** | **Water Impact: Category 4 (No Impact)**<br>**Land Impact: Category 3 (Minor)**<br>**Air Impact: Category 4 (No Impact)** |
| **6** | **On site** | **Incident Date: 11/12/2001**<br>**Incident Identification: 47685**<br>**Pollutant: Pollutant Not Identified**<br>**Pollutant Description: Not Identified** | **Water Impact: Category 4 (No Impact)**<br>**Land Impact: Category 3 (Minor)**<br>**Air Impact: Category 4 (No Impact)** |
| **B** | **On site** | **Incident Date: 11/03/2014**<br>**Incident Identification: 1216739**<br>**Pollutant: Other Pollutant**<br>**Pollutant Description: Noise** | **Water Impact: -**<br>**Land Impact: Category 4 (No Impact)**<br>**Air Impact: Category 4 (No Impact)** |
| **B** | **On site** | **Incident Date: 24/07/2014**<br>**Incident Identification: 1260378**<br>**Pollutant: Atmospheric Pollutants and Effects**<br>**Pollutant Description: Other Odour** | **Water Impact: -**<br>**Land Impact: Category 4 (No Impact)**<br>**Air Impact: Category 4 (No Impact)** |
| **B** | **On site** | **Incident Date: 08/04/2013**<br>**Incident Identification: 1100585**<br>**Pollutant: Multiple Pollutants**<br>**Pollutant Description: 2 Pollutants Including Other Odour** | **Water Impact: -**<br>**Land Impact: Category 4 (No Impact)**<br>**Air Impact: Category 4 (No Impact)** |
| **B** | **On site** | **Incident Date: 25/08/2013**<br>**Incident Identification: 1151969**<br>**Pollutant: Other Pollutant**<br>**Pollutant Description: Noise** | **Water Impact: -**<br>**Land Impact: Category 4 (No Impact)**<br>**Air Impact: Category 4 (No Impact)** |
| 7 | 2m SW | Incident Date: 18/06/2013<br>Incident Identification: 1123585<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 8 | 12m NE | Incident Date: 02/08/2003<br>Incident Identification: 178524<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Soils and Clay | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| B | 17m SE | Incident Date: 02/09/2015<br>Incident Identification: 1369849<br>Pollutant: -<br>Pollutant Description: - | Water Impact: -<br>Land Impact: -<br>Air Impact: - |
| B | 24m NE | Incident Date: 05/06/2013<br>Incident Identification: 1119315<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 24m NE | Incident Date: 06/08/2013<br>Incident Identification: 1144622<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 24m NE | Incident Date: 29/09/2013<br>Incident Identification: 1163346<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 24m NE | Incident Date: 16/07/2015<br>Incident Identification: 1355818<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 24m NE | Incident Date: 17/06/2013<br>Incident Identification: 1123338<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 24m NE | Incident Date: 30/08/2015<br>Incident Identification: 1369241<br>Pollutant: General Biodegradable Materials and Wastes<br>Pollutant Description: Blood and Offal | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 24m NE | Incident Date: 10/04/2013<br>Incident Identification: 1101506<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 24m NE | Incident Date: 04/06/2013<br>Incident Identification: 1118938<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 24m NE | Incident Date: 08/09/2013<br>Incident Identification: 1157507<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| B | 24m NE | Incident Date: 30/09/2013<br>Incident Identification: 1163509<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 24m NE | Incident Date: 11/06/2015<br>Incident Identification: 1344515<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 27m NE | Incident Date: 06/06/2013<br>Incident Identification: 1119746<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| G | 58m NE | Incident Date: 14/01/2017<br>Incident Identification: 1700211<br>Pollutant: -<br>Pollutant Description: - | Water Impact: No Details<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |
| G | 58m NE | Incident Date: 14/01/2017<br>Incident Identification: 1700211<br>Pollutant: Sewage Material<br>Pollutant Description: Crude Sewage | Water Impact: No Details<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |
| 21 | 78m SE | Incident Date: 03/09/2015<br>Incident Identification: 1370247<br>Pollutant: Multiple Pollutants<br>Pollutant Description: 2 Pollutants Including Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 82m NE | Incident Date: 09/06/2003<br>Incident Identification: 164486<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| 26 | 97m SE | Incident Date: 04/04/2013<br>Incident Identification: 1099472<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 27 | 97m SW | Incident Date: 23/10/2015<br>Incident Identification: 1383044<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 29 | 98m S | Incident Date: 13/05/2002<br>Incident Identification: 78332<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Construction and Demolition Materials and Wastes | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| I | 104m SW | Incident Date: 10/07/2013<br>Incident Identification: 1131334<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 112m NE | Incident Date: 19/11/2015<br>Incident Identification: 1389206<br>Pollutant: Oils and Fuel<br>Pollutant Description: Cutting Oils | Water Impact: -<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| J | 118m S | Incident Date: 01/05/2014<br>Incident Identification: 1232067<br>Pollutant: Sewage Materials<br>Pollutant Description: Crude Sewage | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| K | 122m N | Incident Date: 30/07/2003<br>Incident Identification: 177864<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Soils and Clay | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| I | 124m SW | Incident Date: 29/01/2014<br>Incident Identification: 1199274<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| I | 124m SW | Incident Date: 08/07/2013<br>Incident Identification: 1130347<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 128m NE | Incident Date: 09/06/2003<br>Incident Identification: 164502<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| J | 132m S | Incident Date: 15/05/2013<br>Incident Identification: 1112827<br>Pollutant: Sewage Materials<br>Pollutant Description: Storm Sewage | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| J | 137m S | Incident Date: 15/07/2016<br>Incident Identification: 1603943<br>Pollutant: -<br>Pollutant Description: - | Water Impact: No Details<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |
| J | 137m S | Incident Date: 15/07/2016<br>Incident Identification: 1603943<br>Pollutant: Sewage Material<br>Pollutant Description: Crude Sewage | Water Impact: No Details<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |

| ID | Location | Details | |
|---|---|---|---|
| E | 137m N | Incident Date: 16/03/2016<br>Incident Identification: 1600971<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: No Details<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |
| E | 137m N | Incident Date: 16/03/2016<br>Incident Identification: 1600971<br>Pollutant: -<br>Pollutant Description: - | Water Impact: No Details<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |
| 37 | 143m SW | Incident Date: 04/06/2013<br>Incident Identification: 1118721<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| K | 153m N | Incident Date: 27/02/2003<br>Incident Identification: 140119<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Soils and Clay | Water Impact: Category 3 (Minor)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| L | 156m E | Incident Date: 11/11/2015<br>Incident Identification: 1387136<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 173m NE | Incident Date: 17/02/2016<br>Incident Identification: 1411988<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 176m NE | Incident Date: 26/04/2013<br>Incident Identification: 1106989<br>Pollutant: Multiple Pollutants<br>Pollutant Description: 2 Pollutants Including Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| O | 176m N | Incident Date: 02/09/2015<br>Incident Identification: 1370021<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 177m NE | Incident Date: 23/01/2014<br>Incident Identification: 1197344<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| O | 181m N | Incident Date: 10/07/2016<br>Incident Identification: 1603795<br>Pollutant: -<br>Pollutant Description: - | Water Impact: No Details<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |

| ID | Location | Details | |
|---|---|---|---|
| O | 181m N | Incident Date: 10/07/2016<br>Incident Identification: 1603795<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: No Details<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |
| D | 181m NE | Incident Date: 18/08/2015<br>Incident Identification: 1365778<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 185m NE | Incident Date: 18/04/2014<br>Incident Identification: 1228381<br>Pollutant: Other Pollutant<br>Pollutant Description: Noise | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 186m NE | Incident Date: 26/04/2013<br>Incident Identification: 1106990<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 186m NE | Incident Date: 08/09/2014<br>Incident Identification: 1275157<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 187m NE | Incident Date: 27/04/2013<br>Incident Identification: 1107176<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Soot/Smuts | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 187m NE | Incident Date: 05/11/2001<br>Incident Identification: 41162<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| D | 187m NE | Incident Date: 23/06/2014<br>Incident Identification: 1248215<br>Pollutant: Multiple Pollutants<br>Pollutant Description: 2 Pollutants Including Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 188m NE | Incident Date: 25/06/2013<br>Incident Identification: 1125781<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Damage to Buildings, Vehicles and Vegetation | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 190m NE | Incident Date: 11/07/2014<br>Incident Identification: 1255038<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| 46 | 191m S | Incident Date: 11/10/2013<br>Incident Identification: 1166972<br>Pollutant: Multiple Pollutants<br>Pollutant Description: 2 Pollutants Including Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 195m NE | Incident Date: 10/08/2013<br>Incident Identification: 1146287<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| O | 196m N | Incident Date: 13/03/2014<br>Incident Identification: 1217688<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 200m NE | Incident Date: 19/09/2014<br>Incident Identification: 1279219<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 201m NE | Incident Date: 15/10/2015<br>Incident Identification: 1380901<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 202m NE | Incident Date: 28/11/2013<br>Incident Identification: 1179568<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 202m NE | Incident Date: 23/06/2015<br>Incident Identification: 1347912<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 204m NE | Incident Date: 31/05/2013<br>Incident Identification: 1117535<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 206m NE | Incident Date: 12/03/2014<br>Incident Identification: 1216947<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 207m NE | Incident Date: 25/07/2015<br>Incident Identification: 1358470<br>Pollutant: Other Pollutant<br>Pollutant Description: Noise | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| D | 209m NE | Incident Date: 26/04/2002<br>Incident Identification: 75118<br>Pollutant: Other Pollutant<br>Pollutant Description: Other | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |
| D | 212m NE | Incident Date: 27/03/2015<br>Incident Identification: 1324077<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Droplets | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 212m NE | Incident Date: 16/07/2013<br>Incident Identification: 1134275<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 214m NE | Incident Date: 10/05/2013<br>Incident Identification: 1111462<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 222m NE | Incident Date: 27/09/2013<br>Incident Identification: 1162695<br>Pollutant: Multiple Pollutants<br>Pollutant Description: 2 Pollutants Including Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 50 | 225m N | Incident Date: 09/09/2015<br>Incident Identification: 1371911<br>Pollutant: Oils and Fuel<br>Pollutant Description: Gas and Fuel Oils | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| O | 229m N | Incident Date: 15/10/2013<br>Incident Identification: 1167691<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| D | 234m NE | Incident Date: 11/05/2002<br>Incident Identification: 78087<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Mineral Materials and Wastes | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| D | 237m NE | Incident Date: 06/06/2002<br>Incident Identification: 83192<br>Pollutant: Pollutant Not Identified<br>Pollutant Description: Not Identified | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |
| D | 237m NE | Incident Date: 06/06/2002<br>Incident Identification: 83192<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |

| ID | Location | Details | |
|---|---|---|---|
| D | 237m NE | Incident Date: 06/06/2002<br>Incident Identification: 83192<br>Pollutant: Atmospheric Pollutants and Effects:Pollutant Not Identified<br>Pollutant Description: Other Atmospheric Pollutant or Effect:Not Identified | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |
| 54 | 255m NE | Incident Date: 25/01/2002<br>Incident Identification: 54360<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Soils and Clay | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| O | 256m N | Incident Date: 29/07/2014<br>Incident Identification: 1262020<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| C | 258m E | Incident Date: 25/07/2014<br>Incident Identification: 1260658<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| C | 258m E | Incident Date: 21/07/2014<br>Incident Identification: 1258455<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| C | 258m E | Incident Date: 07/08/2014<br>Incident Identification: 1266009<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| C | 258m E | Incident Date: 22/07/2014<br>Incident Identification: 1259118<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| S | 274m W | Incident Date: 05/10/2002<br>Incident Identification: 112815<br>Pollutant: Sewage Materials<br>Pollutant Description: Crude Sewage | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 2 (Significant) |
| 57 | 279m N | Incident Date: 14/01/2003<br>Incident Identification: 131069<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Soils and Clay | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| 58 | 282m N | Incident Date: 06/11/2015<br>Incident Identification: 1386112<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| 59 | 284m SE | Incident Date: 01/09/2014<br>Incident Identification: 1273035<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 60 | 291m NE | Incident Date: 28/09/2015<br>Incident Identification: 1376454<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| T | 302m SE | Incident Date: 14/11/2002<br>Incident Identification: 120840<br>Pollutant: Sewage Materials<br>Pollutant Description: Storm Sewage | Water Impact: Category 3 (Minor)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |
| T | 302m SE | Incident Date: 03/11/2002<br>Incident Identification: 118494<br>Pollutant: Sewage Materials<br>Pollutant Description: Crude Sewage | Water Impact: Category 3 (Minor)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |
| 61 | 314m N | Incident Date: 17/07/2014<br>Incident Identification: 1257396<br>Pollutant: Sewage Materials<br>Pollutant Description: Crude Sewage | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| U | 316m NE | Incident Date: 13/10/2016<br>Incident Identification: 1606230<br>Pollutant: Sewage Material<br>Pollutant Description: Other Sewage Material | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |
| U | 316m NE | Incident Date: 13/10/2016<br>Incident Identification: 1606230<br>Pollutant: -<br>Pollutant Description: - | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |
| U | 319m NE | Incident Date: 30/10/2002<br>Incident Identification: 117695<br>Pollutant: Agricultural Materials and Wastes<br>Pollutant Description: Other Agricultural Material or Waste | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 63 | 333m SE | Incident Date: 04/07/2001<br>Incident Identification: 13585<br>Pollutant: Oils and Fuel<br>Pollutant Description: Other Oil or Fuel | Water Impact: Category 3 (Minor)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| V | 341m NW | Incident Date: 20/02/2017<br>Incident Identification: 1700866<br>Pollutant: -<br>Pollutant Description: - | Water Impact: No Details<br>Land Impact: Category 4 (No Impact)<br>Air Impact: No Details |

| ID | Location | Details | |
|---|---|---|---|
| V | 341m NW | Incident Date: 20/02/2017<br>Incident Identification: 1700866<br>Pollutant: Sewage Material<br>Pollutant Description: Final Effluent | Water Impact: No Details<br>Land Impact: Category 4 (No Impact)<br>Air Impact: No Details |
| 64 | 353m N | Incident Date: 06/07/2015<br>Incident Identification: 1352008<br>Pollutant: Pollutant Not Identified<br>Pollutant Description: Not Identified | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| 65 | 373m NE | Incident Date: 27/08/2015<br>Incident Identification: 1368613<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| X | 379m SE | Incident Date: 16/07/2013<br>Incident Identification: 1134011<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 380m SE | Incident Date: 30/05/2013<br>Incident Identification: 1117391<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 380m SE | Incident Date: 09/09/2013<br>Incident Identification: 1157946<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 380m SE | Incident Date: 01/09/2013<br>Incident Identification: 1154550<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 380m SE | Incident Date: 13/09/2013<br>Incident Identification: 1159189<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| X | 381m SE | Incident Date: 24/06/2013<br>Incident Identification: 1125463<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| X | 381m SE | Incident Date: 26/06/2013<br>Incident Identification: 1126180<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| X | 381m SE | Incident Date: 19/06/2013<br>Incident Identification: 1124119<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| X | 381m SE | Incident Date: 07/08/2013<br>Incident Identification: 1145130<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 386m SE | Incident Date: 16/08/2013<br>Incident Identification: 1148455<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 386m SE | Incident Date: 17/10/2013<br>Incident Identification: 1168513<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 386m SE | Incident Date: 25/09/2013<br>Incident Identification: 1162324<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 386m SE | Incident Date: 01/07/2013<br>Incident Identification: 1127501<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 386m SE | Incident Date: 09/09/2015<br>Incident Identification: 1371899<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 386m SE | Incident Date: 19/09/2013<br>Incident Identification: 1160479<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 386m SE | Incident Date: 27/08/2013<br>Incident Identification: 1152771<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 386m SE | Incident Date: 24/09/2013<br>Incident Identification: 1161995<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| Y | 386m SE | Incident Date: 03/09/2013<br>Incident Identification: 1155510<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| X | 393m SE | Incident Date: 22/09/2013<br>Incident Identification: 1161179<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| X | 393m SE | Incident Date: 23/05/2013<br>Incident Identification: 1115621<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| X | 393m SE | Incident Date: 10/09/2013<br>Incident Identification: 1158203<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| X | 393m SE | Incident Date: 23/08/2013<br>Incident Identification: 1151446<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| X | 393m SE | Incident Date: 11/09/2013<br>Incident Identification: 1158641<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 66 | 395m N | Incident Date: 15/04/2015<br>Incident Identification: 1329057<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 67 | 410m NW | Incident Date: 03/06/2003<br>Incident Identification: 162906<br>Pollutant: Specific Waste Materials<br>Pollutant Description: Asbestos | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| AA | 416m NE | Incident Date: 22/07/2014<br>Incident Identification: 1259193<br>Pollutant: Sewage Materials<br>Pollutant Description: Crude Sewage | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| 68 | 416m SW | Incident Date: 04/09/2002<br>Incident Identification: 105420<br>Pollutant: Oils and Fuel<br>Pollutant Description: Lubricating Oils | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| AB | 417m N | Incident Date: 22/04/2013<br>Incident Identification: 1104974<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 69 | 434m NW | Incident Date: 02/10/2001<br>Incident Identification: 34135<br>Pollutant: Oils and Fuel<br>Pollutant Description: Diesel | Water Impact: Category 3 (Minor)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| X | 437m SE | Incident Date: 04/08/2014<br>Incident Identification: 1264741<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| X | 437m SE | Incident Date: 06/05/2013<br>Incident Identification: 1109977<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| X | 459m SE | Incident Date: 01/05/2013<br>Incident Identification: 1108314<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| X | 466m SE | Incident Date: 04/07/2013<br>Incident Identification: 1128995<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| AD | 471m SE | Incident Date: 04/08/2014<br>Incident Identification: 1264554<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| AD | 471m SE | Incident Date: 23/07/2014<br>Incident Identification: 1259775<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| AC | 478m NE | Incident Date: 29/04/2013<br>Incident Identification: 1107640<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 73 | 497m SE | Incident Date: 30/05/2013<br>Incident Identification: 1117276<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>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.*

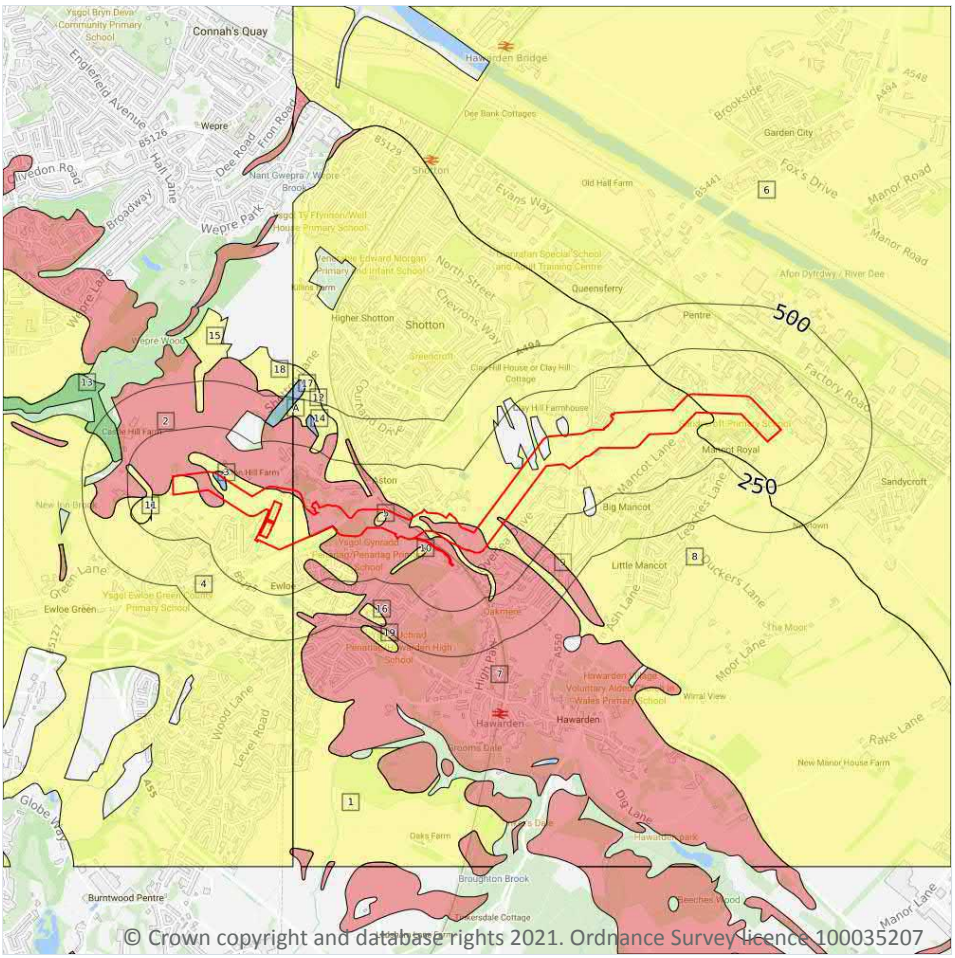
## 4.21 Pollution inventory radioactive waste

| 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 | 21 |
|---|---|

Aquifer status of groundwater held within superficial geology.

Features are displayed on the Hydrogeology map on **page 122**

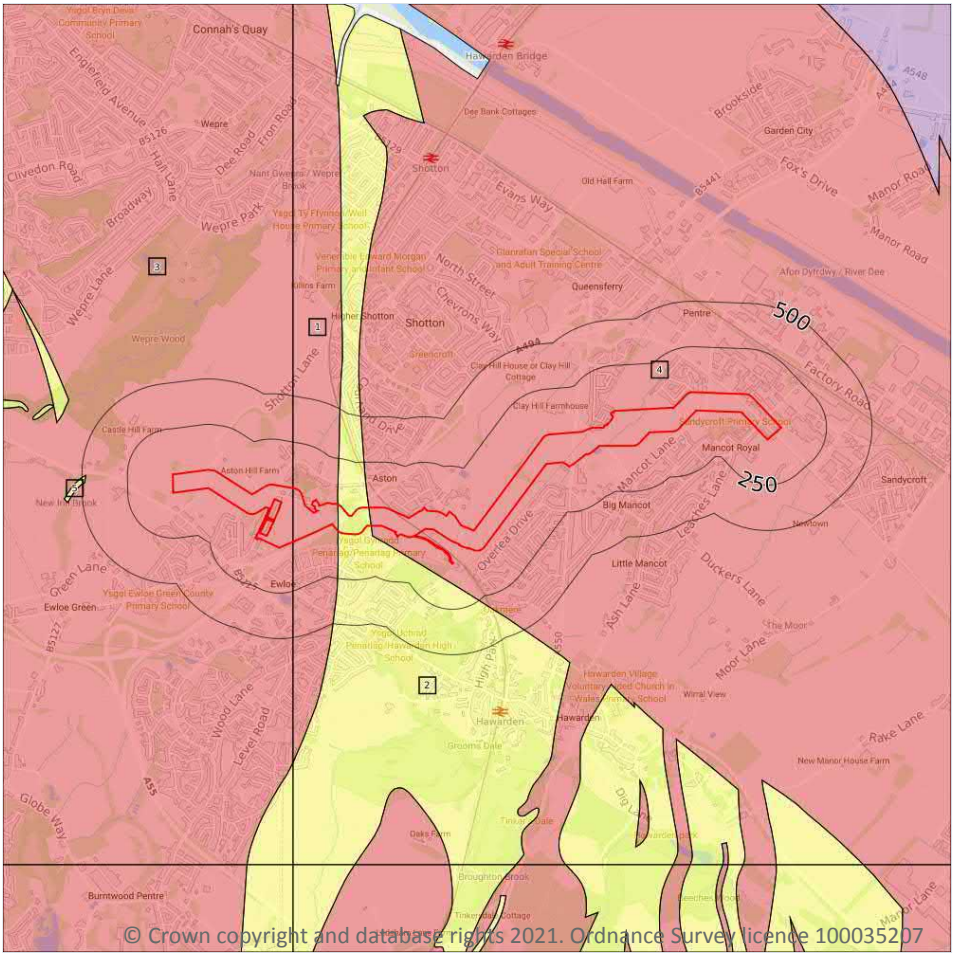
| ID | Location | Designation | Description |
|---|---|---|---|
| 1 | On site | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |
| 2 | On site | Secondary 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** | **On site** | **Unproductive** | **These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow** |
| **4** | **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** |
| **5** | **On site** | **Secondary Undifferentiated** | **Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type** |
| **6** | **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** |
| **7** | **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** |
| **8** | **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** |
| **9** | **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** |
| 10 | 34m S | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |
| 11 | 114m W | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |
| 12 | 228m N | 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 |
| 13 | 297m W | Unknown | Unknown |
| 14 | 319m N | Unproductive | These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow |
| A | 328m N | Unproductive | These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow |
| 15 | 331m N | 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 |
| A | 360m N | 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 |
|---|---|---|---|
| 16 | 375m S | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |
| 17 | 460m N | Unproductive | These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow |
| 18 | 485m N | 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 |
| 19 | 492m S | Secondary Undifferentiated | Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type |

*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

## 5.2 Bedrock aquifer

| Records within 500m | 5 |
|---|---|

Aquifer status of groundwater held within bedrock geology.

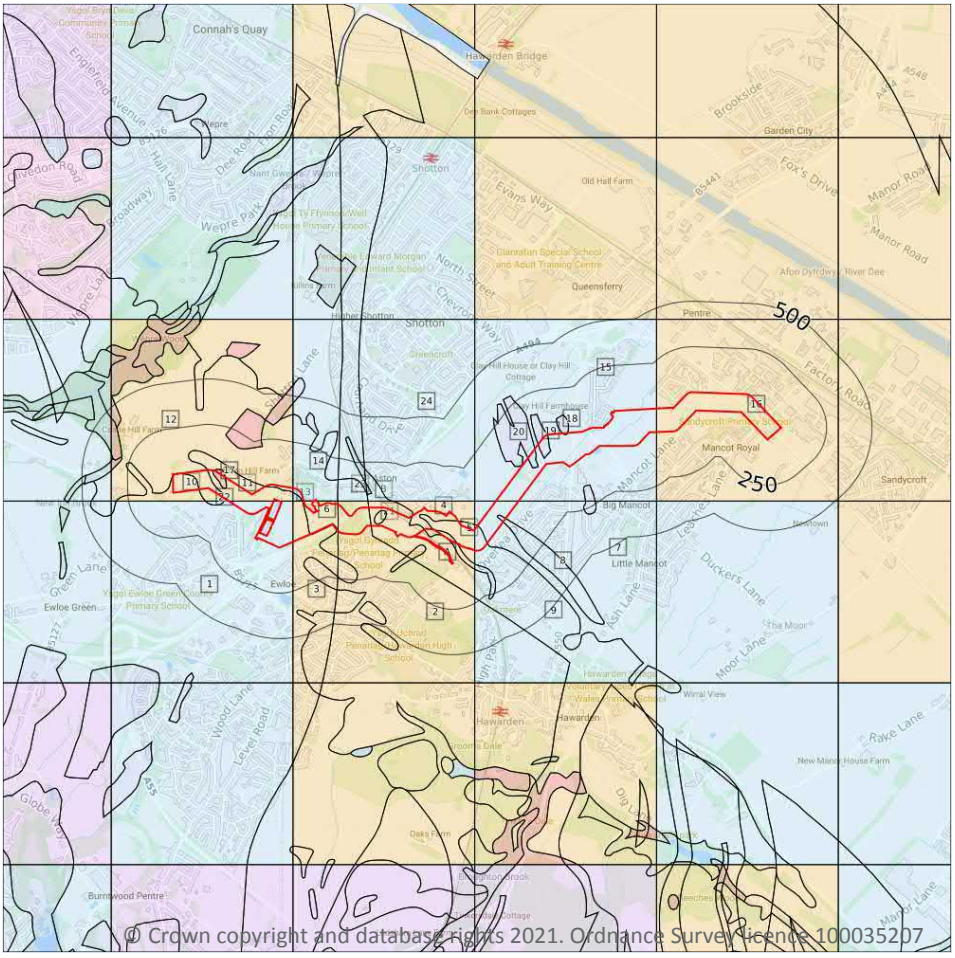
Features are displayed on the Bedrock aquifer map on **page 125**

| 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 (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** | **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** |
| **4** | **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** |
| 5 | 480m W | 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 |

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

# Groundwater vulnerability




Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

## 5.3 Groundwater vulnerability

| Records within 50m | 27 |
|---|---|

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 127**

| ID | Location | Summary | Soil / surface | Superficial geology | Bedrock geology |
|---|---|---|---|---|---|
| 1 | On site | Summary Classification: Secondary superficial aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: Low<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 2 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 3 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 4 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 5 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 6 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |

| ID | Location | Summary | Soil / surface | Superficial geology | Bedrock geology |
|---|---|---|---|---|---|
| 7 | 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: High | Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures |
| 8 | 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: High | Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures |
| 9 | 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: High | Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures |
| 10 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year | Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: <90% Recharge potential: High | Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures |
| 11 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year | Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: <90% Recharge potential: High | Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures |
| 12 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year | Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: <90% Recharge potential: High | Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures |

| ID | Location | Summary | Soil / surface | Superficial geology | Bedrock geology |
|---|---|---|---|---|---|
| 13 | On site | Summary Classification: Secondary superficial aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: Low<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 14 | On site | Summary Classification: Secondary superficial aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: Low<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 15 | On site | Summary Classification: Secondary superficial aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: Low<br>Aquifer type: Secondary<br>Thickness: 3-10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 16 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 17 | On site | Summary Classification: Secondary bedrock aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Unproductive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: Unproductive<br>Aquifer type: Unproductive<br>Thickness: >10m<br>Patchiness value: <90%<br>Recharge potential: High | Vulnerability: High<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 18 | On site | Summary Classification: Secondary bedrock aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: -<br>Aquifer type: -<br>Thickness: 3-10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |

| ID | Location | Summary | Soil / surface | Superficial geology | Bedrock geology |
|---|---|---|---|---|---|
| **19** | **On site** | **Summary Classification: Secondary bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer** | **Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year** | **Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: >90% Recharge potential: Low** | **Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures** |
| **20** | **On site** | **Summary Classification: Secondary bedrock aquifer - Low Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer** | **Leaching class: Low Infiltration value: <40% Dilution value: 300-550mm/year** | **Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: >90% Recharge potential: Low** | **Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures** |
| **21** | **On site** | **Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer** | **Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year** | **Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low** | **Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures** |
| **A** | **On site** | **Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer** | **Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year** | **Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low** | **Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures** |
| 22 | 14m SW | 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 |
| 23 | 17m N | 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 |

| ID | Location | Summary | Soil / surface | Superficial geology | Bedrock geology |
|---|---|---|---|---|---|
| A | 34m S | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| B | 35m N | Summary Classification: Secondary superficial aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: Low<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 24 | 36m N | Summary Classification: Secondary superficial aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: Low<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>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.*

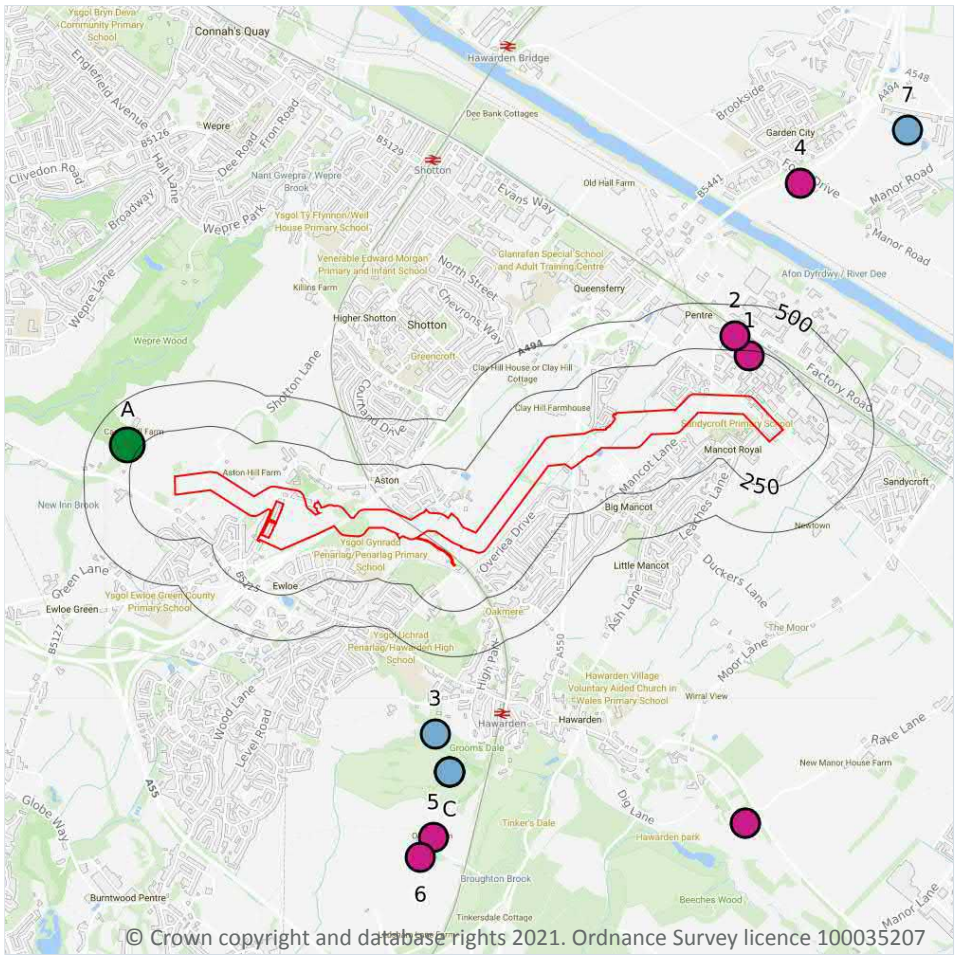
## 5.5 Groundwater vulnerability- local information

| 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
- 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 | 10 |
|---|---|

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 133**

| ID | Location | Details | |
|---|---|---|---|
| 1 | 222m N | Status: Historical<br>Licence No: 24/67/10/0106<br>Details: Process water<br>Direct Source: EAW Groundwater<br>Point: WELL B<br>Data Type: Point<br>Name: Knauf Insulation Ltd<br>Easting: 332500<br>Northing: 367810 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 15/12/1983<br>Expiry Date: -<br>Issue No: 103<br>Version Start Date: 01/01/2003<br>Version End Date: - |
| A | 311m NW | Status: Historical<br>Licence No: 24/67/10/0126<br>Details: Water Bottling<br>Direct Source: EAW Groundwater<br>Point: 50M DEEP, 200MM DIA. BOREHOLE<br>Data Type: Point<br>Name: Grant-Findlay<br>Easting: 329080<br>Northing: 367320 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 07/06/1996<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 07/06/1996<br>Version End Date: - |
| A | 311m NW | Status: Historical<br>Licence No: 24/67/10/0136<br>Details: Water Bottling<br>Direct Source: EAW Groundwater<br>Point: 50M DEEP, 200MM DIA. BOREHOLE<br>Data Type: Point<br>Name: Grant-Findlay<br>Easting: 329080<br>Northing: 367320 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 17/07/2001<br>Expiry Date: 17/07/2004<br>Issue No: 1<br>Version Start Date: 01/04/2003<br>Version End Date: - |
| 2 | 329m N | Status: Historical<br>Licence No: 24/67/10/0106<br>Details: Process water<br>Direct Source: EAW Groundwater<br>Point: WELL A<br>Data Type: Point<br>Name: Knauf Insulation Ltd<br>Easting: 332420<br>Northing: 367920 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 15/12/1983<br>Expiry Date: -<br>Issue No: 103<br>Version Start Date: 01/01/2003<br>Version End Date: - |
| - | 1074m E | Status: Historical<br>Licence No: 24/67/10/0112<br>Details: General Use Relating To Secondary Category (Medium Loss)<br>Direct Source: EAW Groundwater<br>Point: BOREHOLE<br>Data Type: Point<br>Name: Archimica Limited<br>Easting: 333760<br>Northing: 367420 | Annual Volume ($m^3$): 119814<br>Max Daily Volume ($m^3$): 327.36<br>Original Application No: -<br>Original Start Date: 16/08/1988<br>Expiry Date: 31/03/2008<br>Issue No: 106<br>Version Start Date: 01/07/2006<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| - | 1074m E | Status: Historical<br>Licence No: 24/67/10/0154<br>Details: General Use Relating To Secondary Category (Medium Loss)<br>Direct Source: EAW Groundwater<br>Point: BOREHOLE<br>Data Type: Point<br>Name: Archimica Limited<br>Easting: 333760<br>Northing: 367420 | Annual Volume ($m^3$): 119814<br>Max Daily Volume ($m^3$): 327.36<br>Original Application No: -<br>Original Start Date: 01/04/2008<br>Expiry Date: 31/03/2015<br>Issue No: 1<br>Version Start Date: 01/04/2008<br>Version End Date: - |
| 4 | 1205m N | Status: Historical<br>Licence No: 24/67/10/0046<br>Details: General Farming & Domestic<br>Direct Source: EAW Groundwater<br>Point: BOREHOLE<br>Data Type: Point<br>Name: Jones Balers Ltd<br>Easting: 332780<br>Northing: 368760 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 24/02/1967<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 06/06/1967<br>Version End Date: - |
| - | 1313m E | Status: Historical<br>Licence No: 24/67/10/0141<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Groundwater<br>Point: REACH A - A ON THE SEALAND MAIN DRAIN<br>Data Type: Line<br>Name: WT Banks & Co. (Farming) Ltd.<br>Easting: 333960<br>Northing: 367720 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 01/08/2003<br>Expiry Date: 31/03/2014<br>Issue No: 1<br>Version Start Date: 01/08/2003<br>Version End Date: - |
| 5 | 1499m S | Status: Historical<br>Licence No: 24/67/10/0020<br>Details: General Farming & Domestic<br>Direct Source: EAW Groundwater<br>Point: WELL B<br>Data Type: Point<br>Name: Newport Brothers<br>Easting: 330760<br>Northing: 365160 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 25/10/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 25/10/1966<br>Version End Date: - |
| 6 | 1614m S | Status: Historical<br>Licence No: 24/67/10/0020<br>Details: General Farming & Domestic<br>Direct Source: EAW Groundwater<br>Point: WELL A<br>Data Type: Point<br>Name: Newport Brothers<br>Easting: 330690<br>Northing: 365051 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 25/10/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 25/10/1966<br>Version End Date: - |

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

## 5.7 Surface water abstractions

| **Records within 2000m** | **12** |
|---|---|

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 133**

| ID | Location | Details | |
|---|---|---|---|
| 3 | 931m S | Status: Historical<br>Licence No: 24/67/10/0065<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: GROOMSDALE BROOK<br>Data Type: Point<br>Name: Hawarden Golf Club Ltd<br>Easting: 330770<br>Northing: 365730 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 06/06/1967<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 01/04/2004<br>Version End Date: - |
| C | 1135m S | Status: Historical<br>Licence No: 24/67/10/0065<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: SURFACE WATER RESERVOIR AT HAWARDEN GOLF CLUB<br>Data Type: Point<br>Name: Hawarden Golf Club Ltd<br>Easting: 330850<br>Northing: 365520 | Annual Volume ($m^3$): 2000<br>Max Daily Volume ($m^3$): 30<br>Original Application No: -<br>Original Start Date: 06/06/1967<br>Expiry Date: -<br>Issue No: 102<br>Version Start Date: 19/10/2005<br>Version End Date: - |
| C | 1135m S | Status: Historical<br>Licence No: 24/67/10/0162<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: SURFACE WATER RESERVOIR AT HAWARDEN GOLF CLUB<br>Data Type: Point<br>Name: Hawarden Golf Club Ltd<br>Easting: 330850<br>Northing: 365520 | Annual Volume ($m^3$): 2000<br>Max Daily Volume ($m^3$): 30<br>Original Application No: -<br>Original Start Date: 01/04/2008<br>Expiry Date: 31/03/2015<br>Issue No: 2<br>Version Start Date: 17/05/2010<br>Version End Date: - |
| C | 1135m S | Status: Historical<br>Licence No: WA/067/0010/014<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: RESERVOIR AT HAWARDEN GOLF CLUB<br>Data Type: Point<br>Name: Hawarden Golf Club Limited<br>Easting: 330850<br>Northing: 365520 | Annual Volume ($m^3$): 2000<br>Max Daily Volume ($m^3$): 30<br>Original Application No: -<br>Original Start Date: 01/04/2015<br>Expiry Date: 31/03/2027<br>Issue No: 1<br>Version Start Date: 01/04/2015<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| C | 1135m S | Status: Active<br>Licence No: WA/067/0010/014<br>Details: Spray Irrigation - Direct - High<br>Direct Source: -<br>Point: -<br>Data Type: Point<br>Name: -<br>Easting: 330850<br>Northing: 365520 | Annual Volume ($m^3$): 2,000<br>Max Daily Volume ($m^3$): 172.80<br>Original Application No: -<br>Original Start Date: 2015-04-01 00:00:00.0000000<br>Expiry Date: 2027-03-31 00:00:00.0000000<br>Issue No: -<br>Version Start Date: -<br>Version End Date: - |
| - | 1308m E | Status: Historical<br>Licence No: WA/067/0010/011<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: SEALAND MAIN DRAIN<br>Data Type: Line<br>Name: WT Banks & Co (Farming) Ltd<br>Easting: 333955<br>Northing: 367720 | Annual Volume ($m^3$): 67962.7<br>Max Daily Volume ($m^3$): 1227.42<br>Original Application No: -<br>Original Start Date: 30/07/2014<br>Expiry Date: 31/03/2027<br>Issue No: 2<br>Version Start Date: 26/11/2014<br>Version End Date: - |
| - | 1308m E | Status: Active<br>Licence No: WA/067/0010/011<br>Details: Spray Irrigation - Direct - High<br>Direct Source: -<br>Point: -<br>Data Type: Line<br>Name: -<br>Easting: 333955<br>Northing: 367720 | Annual Volume ($m^3$): 67,962.70<br>Max Daily Volume ($m^3$): 2,727.60<br>Original Application No: -<br>Original Start Date: 2014-11-26 00:00:00.0000000<br>Expiry Date: 2027-03-31 00:00:00.0000000<br>Issue No: -<br>Version Start Date: -<br>Version End Date: - |
| - | 1313m E | Status: Historical<br>Licence No: 24/67/10/0129<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: REACH A TO A AT SEALAND MAIN DRAIN<br>Data Type: Line<br>Name: Banks<br>Easting: 333960<br>Northing: 367720 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 31/07/1998<br>Expiry Date: 31/07/2003<br>Issue No: 100<br>Version Start Date: 01/04/2001<br>Version End Date: - |
| - | 1313m E | Status: Historical<br>Licence No: 24/67/10/0141<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: REACH A-A ON THE SEALAND MAIN DRAIN<br>Data Type: Line<br>Name: WT Banks & Co (Farming) Ltd<br>Easting: 333960<br>Northing: 367720 | Annual Volume ($m^3$): 104558<br>Max Daily Volume ($m^3$): 1227.42<br>Original Application No: -<br>Original Start Date: 01/08/2003<br>Expiry Date: 31/03/2014<br>Issue No: 2<br>Version Start Date: 19/07/2010<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| 7 | 1699m NE | Status: Historical<br>Licence No: 24/67/10/0103<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: MANOR DRAIN POINT B<br>Data Type: Point<br>Name: Jones Balers Ltd<br>Easting: 333370<br>Northing: 369050 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 17/11/1987<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 27/04/1989<br>Version End Date: - |
| - | 1711m E | Status: Historical<br>Licence No: 24/67/10/0103<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: SEALAND MAIN DRAIN POINT C<br>Data Type: Point<br>Name: Jones Balers Ltd<br>Easting: 334300<br>Northing: 367970 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 17/11/1987<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 27/04/1989<br>Version End Date: - |
| - | 1991m NE | Status: Historical<br>Licence No: 24/67/10/0103<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: MANOR DRAIN POINT B<br>Data Type: Point<br>Name: Jones Balers Ltd<br>Easting: 334300<br>Northing: 368570 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 17/11/1987<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 27/04/1989<br>Version End Date: - |

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

## 5.8 Potable abstractions

| **Records within 2000m** | **2** |
|---|---|

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.

Features are displayed on the Abstractions and Source Protection Zones map on **page 133**

| ID | Location | Details | |
|---|---|---|---|
| A | 311m NW | Status: Historical<br>Licence No: 24/67/10/0126<br>Details: Water Bottling<br>Direct Source: EAW Groundwater<br>Point: 50M DEEP, 200MM DIA. BOREHOLE<br>Data Type: Point<br>Name: Grant-Findlay<br>Easting: 329080<br>Northing: 367320 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 07/06/1996<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 07/06/1996<br>Version End Date: - |
| A | 311m NW | Status: Historical<br>Licence No: 24/67/10/0136<br>Details: Water Bottling<br>Direct Source: EAW Groundwater<br>Point: 50M DEEP, 200MM DIA. BOREHOLE<br>Data Type: Point<br>Name: Grant-Findlay<br>Easting: 329080<br>Northing: 367320 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 17/07/2001<br>Expiry Date: 17/07/2004<br>Issue No: 1<br>Version Start Date: 01/04/2003<br>Version End Date: - |

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

## 5.9 Source Protection Zones

| **Records within 500m** | **0** |
|---|---|

Source Protection Zones define the sensitivity of an area around a potable abstraction site to contamination.

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

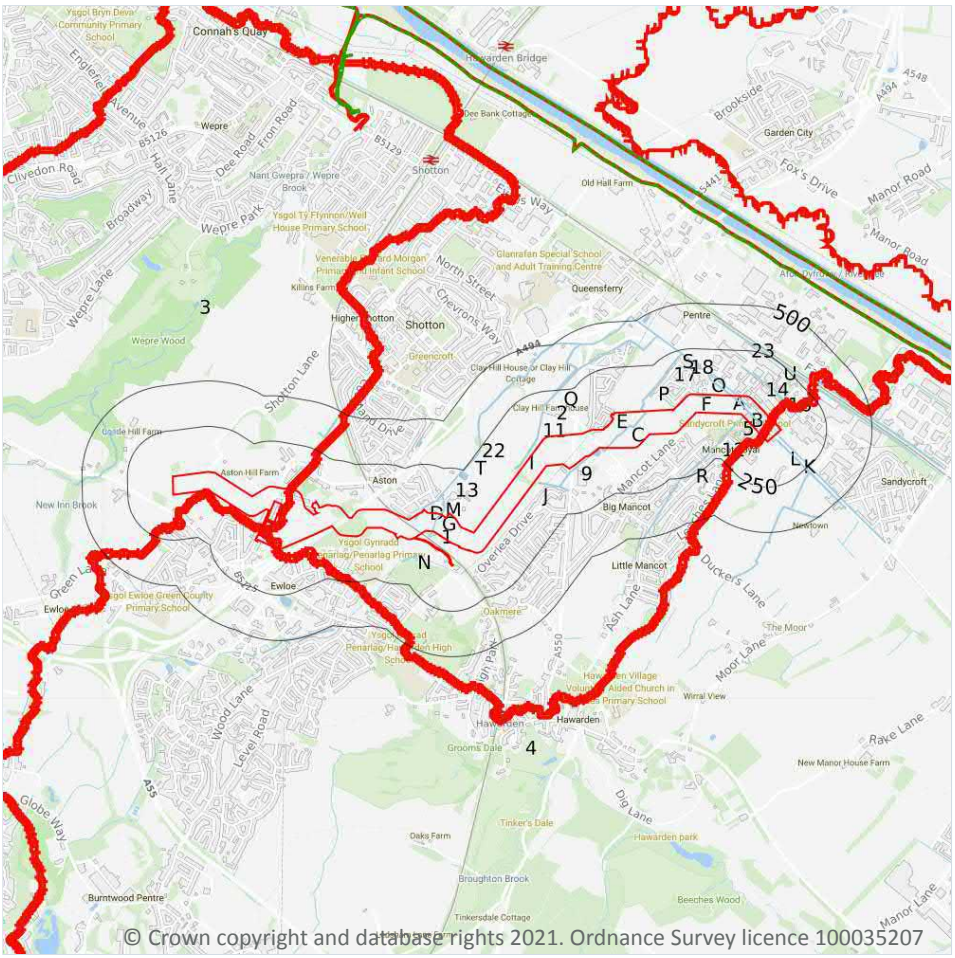
## 5.10 Source Protection Zones (confined aquifer)

| **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




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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 | 59 |
|---|---|

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 140**

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| **5** | **On site** | **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 | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| A | On site | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| B | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| B | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| C | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| D | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| E | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| E | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| F | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | On site | 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 |
|---|---|---|---|---|---|
| **G** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| 9 | 7m S | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| I | 18m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| J | 18m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| K | 21m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | 22m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| J | 22m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | 25m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 11 | 29m NW | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| L | 29m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| M | 33m NE | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| J | 49m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| N | 75m S | Lake, loch or reservoir. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| 12 | 76m S | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| O | 79m N | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| J | 82m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| N | 93m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| N | 96m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| N | 97m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 13 | 112m N | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| J | 112m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 14 | 113m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| O | 119m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| N | 124m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| N | 124m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| N | 125m S | 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 |
|---|---|---|---|---|---|
| N | 125m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| P | 133m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 16 | 137m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| P | 138m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| O | 141m N | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| O | 142m N | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| 17 | 164m NW | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| Q | 168m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 18 | 169m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| K | 194m SE | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| R | 207m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| K | 213m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| S | 230m N | 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 |
|---|---|---|---|---|---|
| T | 239m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| S | 241m N | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| Q | 241m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| U | 244m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 22 | 245m NW | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| 23 | 249m NE | Inland river not influenced by normal tidal action. | 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 | 25 |
|---|---|

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 140**

*This data is sourced from the Ordnance Survey.*

## 6.3 WFD Surface water body catchments

| Records on site | 3 |
|---|---|

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 140**

| ID | Location | Type | Water body catchment | Water body ID | Operational catchment | Management catchment |
|---|---|---|---|---|---|---|
| **2** | **On site** | **Coastal catchment** | **Not part of a river WB catchment** | **166** | **Dee Estuary** | **Dee** |
| **3** | **On site** | **River WB catchment** | **Wepre Brook** | **GB111067056880** | **Dee Estuary** | **Dee** |
| **4** | **On site** | **River WB catchment** | **Sandycroft Drain** | **GB111067052160** | **Dee Estuary** | **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 140**

| ID | Location | Type | Name | Water body ID | Overall rating | Chemical rating | Ecological rating | Year |
|---|---|---|---|---|---|---|---|---|
| - | 621m NW | River | Wepre Brook | GB111067056880 | Moderate | Good | Moderate | 2016 |
| - | 843m SE | River | Sandycroft Drain | GB111067052160 | Moderate | Good | Moderate | 2016 |

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

## 6.5 WFD Groundwater bodies

| **Records on site** | **1** |
|---|---|

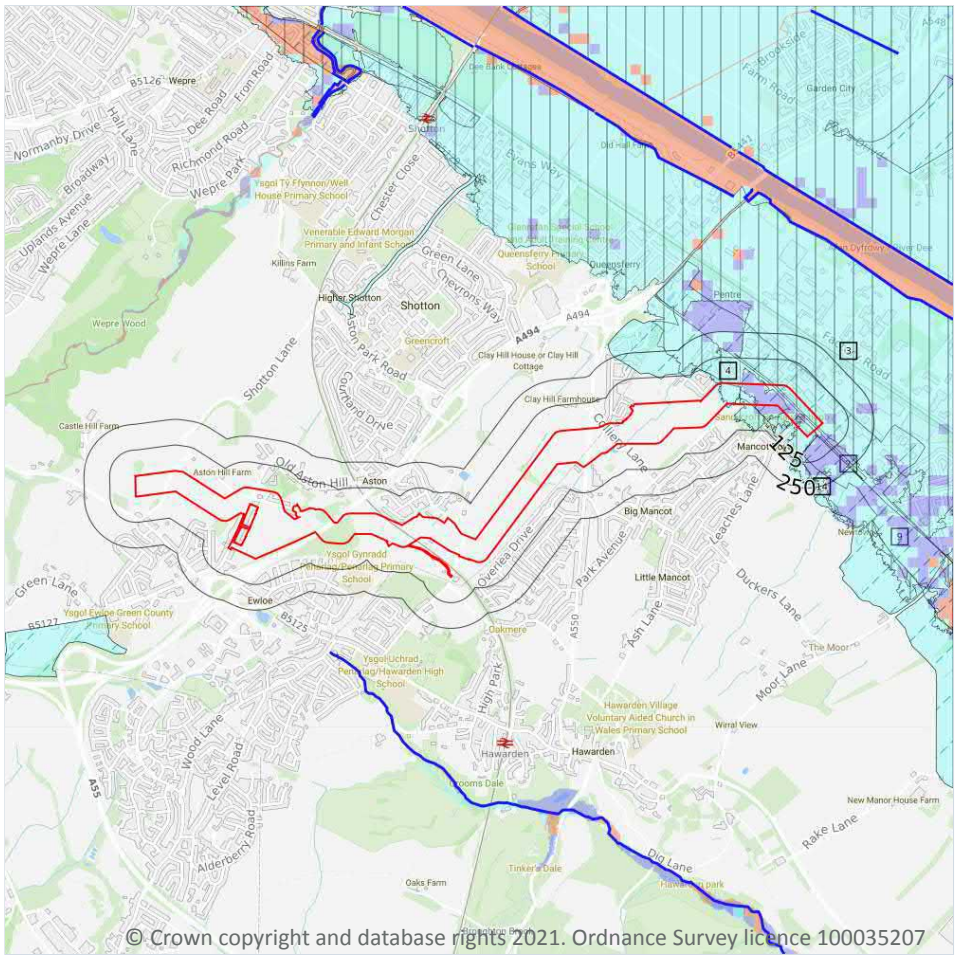
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place.

Features are displayed on the Hydrology map on **page 140**

| ID | Location | Name | Water body ID | Overall rating | Chemical rating | Quantitative | Year |
|---|---|---|---|---|---|---|---|
| **1** | **On site** | **Dee Carboniferous Coal Measures** | **GB41102G204800** | **Poor** | **Poor** | **Good** | **2016** |

*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 Sea (RoFRaS)

| **Records within 50m** | **5** |
|---|---|

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; 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).

Features are displayed on the River and coastal flooding map on **page 147**

| Distance | RoFRaS flood risk |
|---|---|
| **On site** | **Medium** |
| 0 - 50m | Medium |

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

## 7.2 Historical Flood Events

| **Records within 250m** | **2** |
|---|---|

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.

Features are displayed on the River and coastal flooding map on **page 147**

| ID | Location | Event name | Date of flood | Flood source | Flood cause | Type of flood |
|---|---|---|---|---|---|---|
| **2** | **On site** | **Queensferry Drain September 1976** | **1976-09-26 1976-09-27** | **Main river** | **Channel capacity exceeded (no raised defences)** | **Fluvial** |
| 9 | 30m SE | Sandycroft / Hawarden Airport 1964 01 | 1964-01-01 1964-01-01 | Main river | Channel capacity exceeded (no raised defences) | Fluvial |

*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** | **3** |
|---|---|

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.

Features are displayed on the River and coastal flooding map on **page 147**

| ID | Location | |
|---|---|---|
| **3** | **On site** | **Area benefiting from flood defences** |
| **4** | **On site** | **Area benefiting from flood defences** |

| ID | Location | |
|---|---|---|
| 14 | 180m S | Area benefiting from flood defences |

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

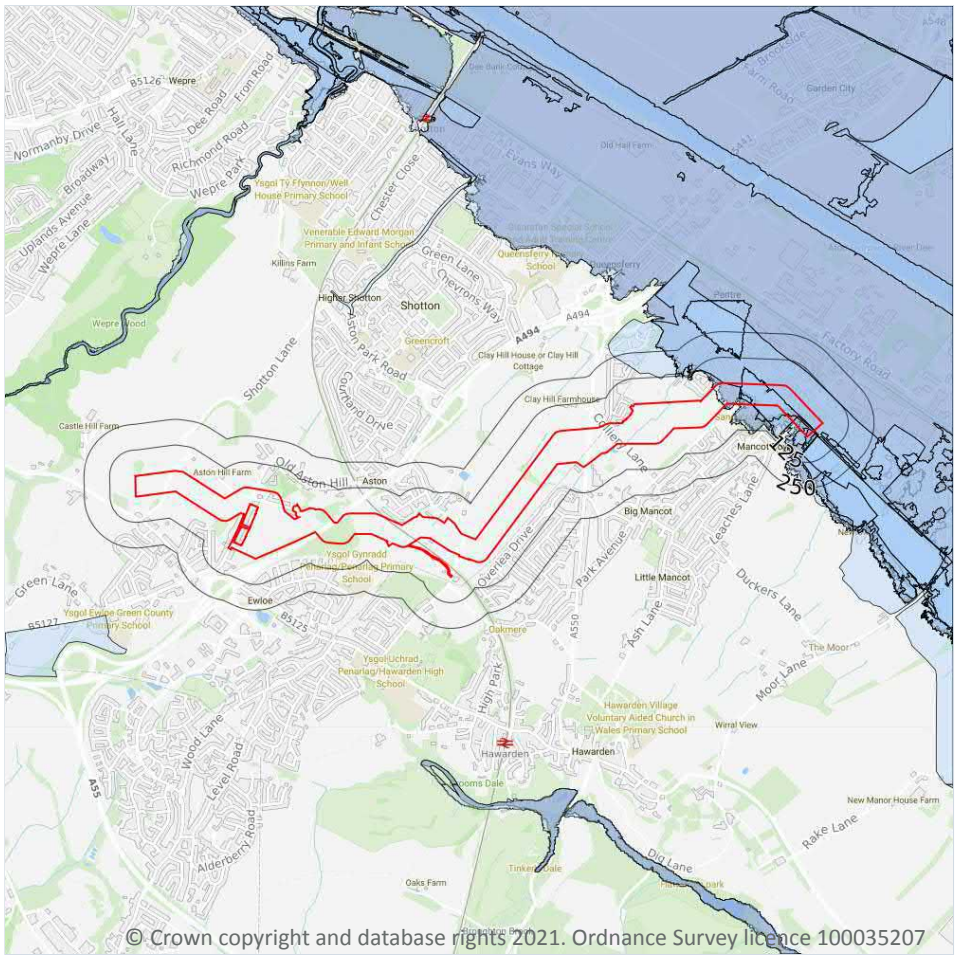
## 7.5 Flood Storage Areas

| **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 | 1 |
|---|---|

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.

Features are displayed on the River and coastal flooding map on **page 147**

| Location | Type |
|---|---|
| **On site** | **Zone 2 - (Fluvial /Tidal Models)** |

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

## 7.7 Flood Zone 3

| Records within 50m | 1 |
|---|---|

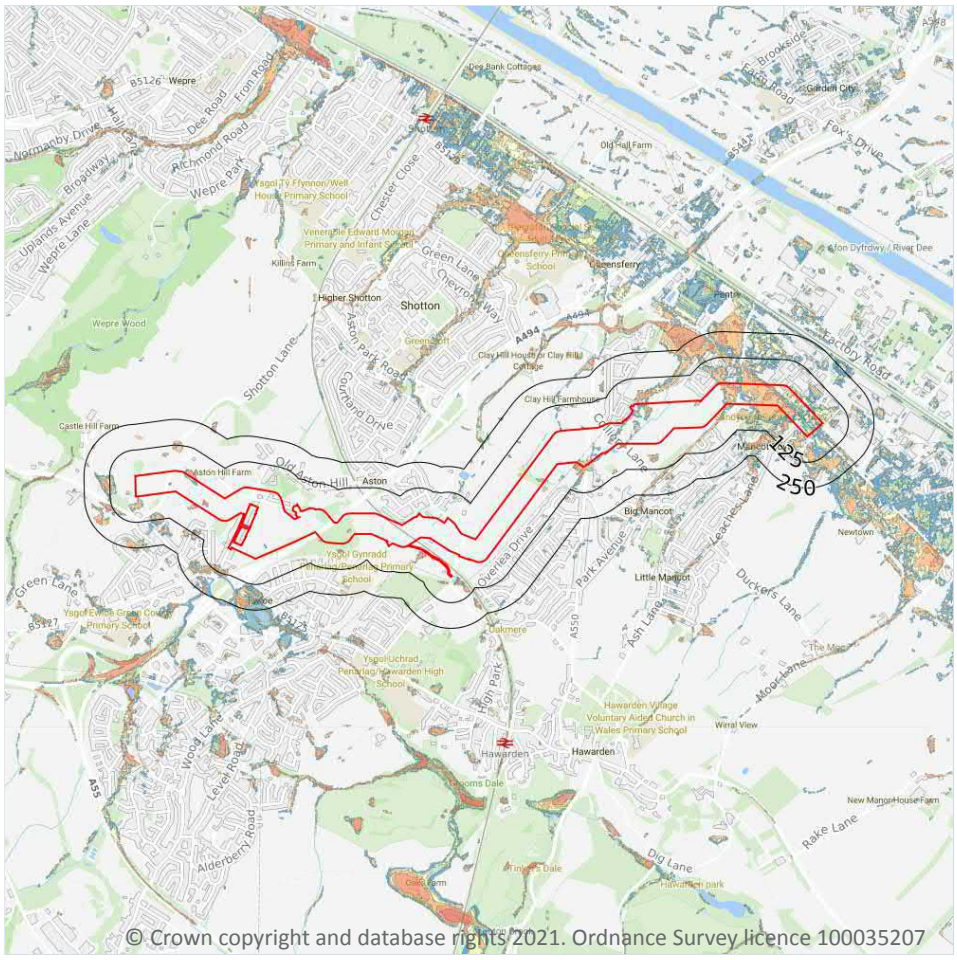
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 147**

| Location | Type |
|---|---|
| **On site** | **Zone 3 - (Fluvial Models)** |

*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 30 year, Greater than 1.0m** |
| **Highest risk within 50m** | **1 in 30 year, Greater than 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 152**

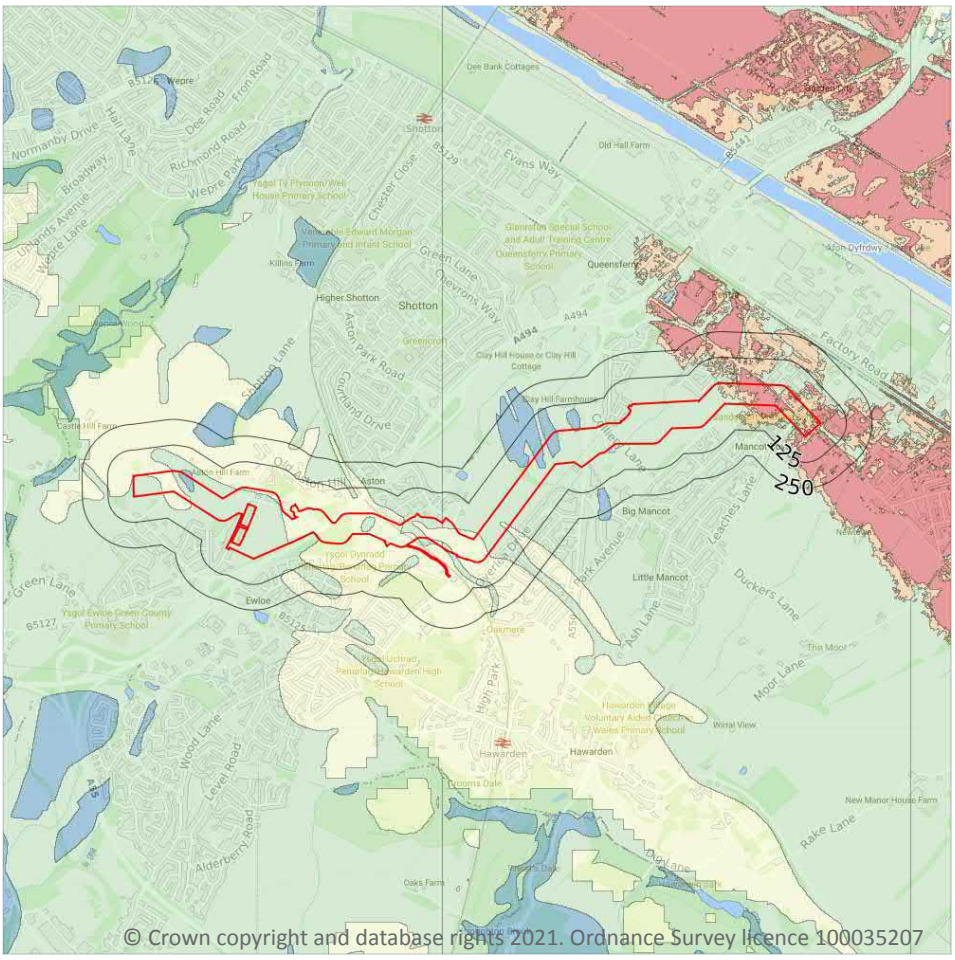
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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 | Greater than 1.0m |
| 1 in 250 year | Greater than 1.0m |
| 1 in 100 year | Greater than 1.0m |
| 1 in 30 year | Greater than 1.0m |

*This data is sourced from Ambiental Risk Analytics.*

# 9 Groundwater flooding




## 9.1 Groundwater flooding

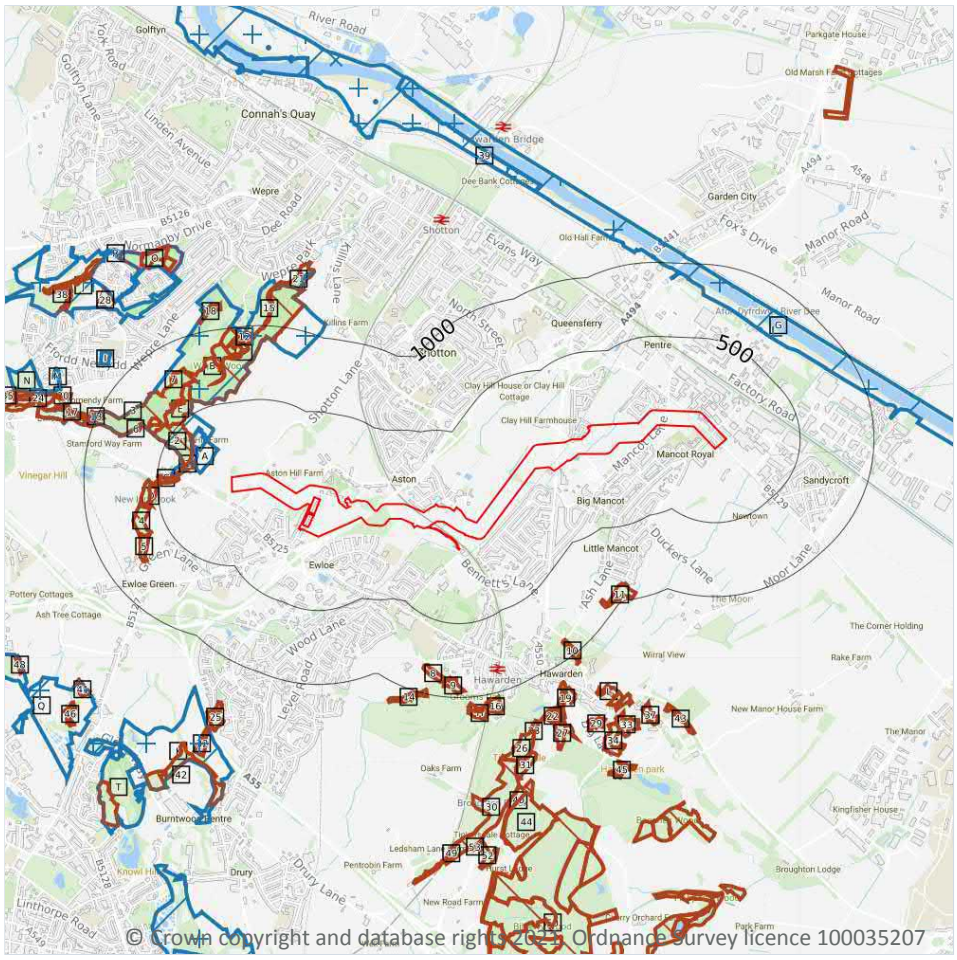
| | |
|---|---|
| **Highest risk on site** | **High** |
| **Highest risk within 50m** | **High** |

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 154**

*This data is sourced from Ambiental Risk Analytics.*

# 10 Environmental designations




Site Outline

Search buffers in metres (m)

- Sites of Special Scientific Interest (SSSI)
- Conserved wetland sites (Ramsar sites)
- Special Areas of Conservation (SAC)
- Special Protection Areas (SPA)
- Local Nature Reserves (LNR)
- Designated Ancient Woodland
- Green Belt

## 10.1 Sites of Special Scientific Interest (SSSI)

| **Records within 2000m** | **14** |
|---|---|

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.

Features are displayed on the Environmental designations map on **page 155**

| ID | Location | Name | Data source |
|---|---|---|---|
| A | 174m NW | Connah's Quay Ponds And Woodland | Natural Resources Wales |

| ID | Location | Name | Data source |
|---|---|---|---|
| B | 257m W | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| G | 689m NE | Afon Dyfrdwy (River Dee) | Natural Resources Wales |
| I | 1132m NW | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| J | 1248m NW | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| K | 1282m SW | Buckley Claypits And Commons | Natural Resources Wales |
| M | 1300m NW | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| N | 1314m NW | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| P | 1626m N | Dee Estuary / Aber Afon Dyfrdwy | Natural Resources Wales |
| Q | 1639m SW | Buckley Claypits And Commons | Natural Resources Wales |
| R | 1660m NW | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| R | 1723m NW | Connah's Quay Ponds And Woodland | Natural Resources Wales |
| - | 1730m SW | Buckley Claypits And Commons | Natural Resources Wales |
| T | 1873m SW | Buckley Claypits And Commons | Natural Resources Wales |

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

## 10.2 Conserved wetland sites (Ramsar sites)

| **Records within 2000m** | **1** |
|---|---|

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.

Features are displayed on the Environmental designations map on **page 155**

| ID | Location | Site | Details |
|---|---|---|---|
| P | 1626m N | Name: The Dee Estuary (Wales)<br>Site status: -<br>Data source: Natural Resources Wales | Overview: The Dee is a large funnel-shaped sheltered estuary and is one of the top ten estuaries in the UK for wintering and passage waterfowl populations. The estuary supports internationally important numbers of waterfowl and waders. The estuary is an accreting system and the extent of saltmarsh continues to expand as the estuary seeks to achieve a new equilibrium situation following large-scale historical land-claim at the head of the estuary which commenced in the 1730s. Nevertheless, the estuary still supports extensive areas of intertidal sand and mudflats as well as saltmarsh. Where land-claim has not occurred, the saltmarshes grade into transitional brackish and freshwater swamp vegetation, on the upper shore. The site includes the three sandstone islands of Hilbre with their important cliff vegetation and maritime heathland/grassland, the sand dune system between the Point of Ayr and Prestatyn in Wales and Red Rocks in England, various Welsh coastal fields historically reclaimed from the estuary but used by the Dee Estuary wintering waterfowl populations, freshwater lagoons and reedbeds at Shotton supporting the largest common tern breeding colony in Wales and freshwater lagoons at Inner Marsh Farm used by waterfowl throughout the year but particularly in winter. The two shorelines of the estuary show a marked contrast between the industrialised usage of the coastal belt in Wales and residential and recreational usage in England.<br>Ramsar criteria: Ramsar criterion 1 Extensive intertidal mud and sand flats (20 km by 9 km) with large expanses of saltmarsh towards the head of the estuary. Habitats Directive Annex I features present on the pSAC include: H1130 Estuaries H1140 Mudflats and sandflats not covered by seawater at low tide H1210 Annual vegetation of drift lines H1230 Vegetated sea cliffs of the Atlantic and Baltic coasts H1310 Salicornia and other annuals colonising mud and sand H1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) H2110 Embryonic shifting dunes H2120 Shifting dunes along the shoreline with Ammophila arenaria (“white dunes”) H2130 Fixed dunes with herbaceous vegetation (“grey dunes”) H2190 Humid dune slacks Criterion 2, it supports breeding colonies of the vulnerable Natterjack Toad, Epidalea calamita |

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

## 10.3 Special Areas of Conservation (SAC)

| **Records within 2000m** | **14** |
|---|---|

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.

Features are displayed on the Environmental designations map on **page 155**

| ID | Location | Name | Features of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| A | 174m NW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| B | 257m W | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| G | 689m NE | River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid (Wales) | Rivers with floating vegetation often dominated by water-crowfoot; Mixed woodland on base-rich soils associated with rocky slopes; Western acidic oak woodland; Alder woodland on floodplains; Sea lamprey; Brook lamprey; River lamprey; Twaite shad; Atlantic salmon; Bullhead; Freshwater pearl mussel; Otter; Floating water-plantain. | Broad-leaved deciduous woodland; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Improved grassland; Inland water bodies (Standing water, Running water); Salt marshes, Salt pastures, Salt steppes | Natural Resources Wales |

| ID | Location | Name | Features of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| I | 1132m NW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| J | 1248m NW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| K | 1282m SW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |

| ID | Location | Name | Features of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| M | 1300m NW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| N | 1314m NW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| P | 1626m N | Dee Estuary / Aber Dyfrdwy (Wales) | Estuaries; Intertidal mudflats and sandflats; Lagoons; Annual vegetation of drift lines; Vegetated sea cliffs; Glasswort and other annuals colonising mud and sand; Cord-grass swards; Atlantic salt meadows; Shifting dunes; Shifting dunes with marram; Dune grassland; Humid dune slacks; Dry heaths; Sea lamprey; River lamprey; Twaite shad; Otter; Grey seal; Petalwort. | Shingle, Sea cliffs, Islets; Salt marshes, Salt pastures, Salt steppes; Humid grassland, Mesophile grassland; Improved grassland; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Bogs, Marshes, Water fringed vegetation, Fens; Broad-leaved deciduous woodland; Coastal sand dunes, Sand beaches, Machair; Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites) | Natural Resources Wales |

| ID | Location | Name | Features of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| Q | 1639m SW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| R | 1660m NW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| R | 1723m NW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |

| ID | Location | Name | Features of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| - | 1730m SW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |
| T | 1873m SW | Deeside and Buckley Newt sites | Western acidic oak woodland; Alder woodland on floodplains; Great crested newt; Bullhead. | Coniferous woodland; Broad-leaved deciduous woodland; Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites); Dry grassland, Steppes; Improved grassland; Heath, Scrub, Maquis and Garrigue, Phygrana; Mixed woodland | Natural Resources Wales |

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

## 10.4 Special Protection Areas (SPA)

| **Records within 2000m** | **1** |
|---|---|

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.

Features are displayed on the Environmental designations map on **page 155**

| ID | Location | Name | Species of interest | Habitat description | Data source |
|---|---|---|---|---|---|
| 39 | 1626m N | The Dee Estuary (Wales) | Common shelduck; Eurasian teal; Northern pintail; Eurasian oystercatcher; Grey plover; Red knot; Bar-tailed godwit; Eurasian curlew; Common redshank; Common redshank; Sandwich tern; Common tern; Little tern; Black-tailed godwit; Dunlin | Broad-leaved deciduous woodland; Shingle, Sea cliffs, Islets; Coastal sand dunes, Sand beaches, Machair; Mixed woodland; Dry grassland, Steppes; Inland water bodies (Standing water, Running water); Other land (including Towns, Villages, Roads, Waste plac | |

*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** | **2** |
|---|---|

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.

Features are displayed on the Environmental designations map on **page 155**

| ID | Location | Name | Data source |
|---|---|---|---|
| 28 | 1411m NW | GATHERING GROUNDS WOODS & LLWYNI POND | Natural Resources Wales |
| O | 1437m N | GATHERING GROUNDS WOODS & LLWYNI POND | Natural Resources Wales |

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

## 10.7 Designated Ancient Woodland

| **Records within 2000m** | **73** |
|---|---|

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 155**

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| 1 | 257m W | Unknown | Restored Ancient Woodland Site |
| 2 | 304m NW | Unknown | Restored Ancient Woodland Site |
| C | 360m W | Unknown | Restored Ancient Woodland Site |
| C | 365m W | Unknown | Restored Ancient Woodland Site |
| D | 465m W | Unknown | Restored Ancient Woodland Site |
| E | 494m NW | Unknown | Plantation on Ancient Woodland Site |
| F | 517m N | Unknown | Restored Ancient Woodland Site |
| D | 544m W | Unknown | Plantation on Ancient Woodland Site |
| 3 | 567m NW | Unknown | Ancient Semi Natural Woodland |
| 4 | 568m W | Unknown | Restored Ancient Woodland Site |
| E | 595m NW | Unknown | Restored Ancient Woodland Site |
| 5 | 626m SW | Unknown | Ancient Semi Natural Woodland |
| F | 643m N | Unknown | Ancient Semi Natural Woodland |
| 6 | 697m NW | Unknown | Ancient Semi Natural Woodland |
| 7 | 746m NW | Unknown | Ancient Semi Natural Woodland |
| 8 | 807m S | Unknown | Ancient Semi Natural Woodland |
| F | 813m N | Unknown | Plantation on Ancient Woodland Site |
| 9 | 868m S | Unknown | Plantation on Ancient Woodland Site |
| F | 868m N | Unknown | Plantation on Ancient Woodland Site |
| 10 | 883m SE | Unknown | Restored Ancient Woodland Site |
| 11 | 885m S | Unknown | Restored Ancient Woodland Site |
| 12 | 904m N | Unknown | Ancient Semi Natural Woodland |

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| 13 | 956m NW | Unknown | Ancient Semi Natural Woodland |
| 14 | 971m S | Unknown | Restored Ancient Woodland Site |
| 15 | 979m N | Unknown | Ancient Semi Natural Woodland |
| 16 | 1031m S | Unknown | Ancient Semi Natural Woodland |
| H | 1041m S | Unknown | Ancient Semi Natural Woodland |
| H | 1043m S | Unknown | Plantation on Ancient Woodland Site |
| 17 | 1055m W | Unknown | Ancient Semi Natural Woodland |
| 18 | 1061m N | Unknown | Ancient Semi Natural Woodland |
| 19 | 1116m SE | Unknown | Restored Ancient Woodland Site |
| 20 | 1217m NW | Unknown | Restored Ancient Woodland Site |
| 21 | 1232m N | Unknown | Ancient Semi Natural Woodland |
| 22 | 1244m S | Unknown | Restored Ancient Woodland Site |
| 23 | 1268m SE | Unknown | Ancient Semi Natural Woodland |
| 24 | 1273m NW | Unknown | Restored Ancient Woodland Site |
| 25 | 1285m SW | Unknown | Ancient Semi Natural Woodland |
| L | 1285m SE | Unknown | Plantation on Ancient Woodland Site |
| 26 | 1318m S | Unknown | Ancient Semi Natural Woodland |
| 27 | 1339m SE | Unknown | Ancient Semi Natural Woodland |
| L | 1393m SE | Unknown | Plantation on Ancient Woodland Site |
| 29 | 1429m SE | Unknown | Ancient Semi Natural Woodland |
| N | 1430m W | Unknown | Ancient Semi Natural Woodland |
| 30 | 1440m S | Unknown | Restored Ancient Woodland Site |
| L | 1440m SE | Unknown | Restored Ancient Woodland Site |
| 31 | 1455m S | Unknown | Restored Ancient Woodland Site |
| O | 1460m N | Unknown | Ancient Semi Natural Woodland |
| N | 1460m NW | Unknown | Ancient Semi Natural Woodland |
| 32 | 1468m SW | Unknown | Ancient Semi Natural Woodland |
| 33 | 1513m SE | Unknown | Restored Ancient Woodland Site |

| ID | Location | Name | Woodland Type |
|---|---|---|---|
| O | 1518m N | Unknown | Restored Ancient Woodland Site |
| 34 | 1525m SE | Unknown | Ancient Semi Natural Woodland |
| 35 | 1557m W | Unknown | Restored Ancient Woodland Site |
| - | 1577m W | Unknown | Restored Ancient Woodland Site |
| 37 | 1577m SE | Unknown | Restored Ancient Woodland Site |
| 38 | 1591m NW | Unknown | Restored Ancient Woodland Site |
| O | 1611m N | Unknown | Restored Ancient Woodland Site |
| 40 | 1637m S | Unknown | Plantation on Ancient Woodland Site |
| 41 | 1639m SW | Unknown | Restored Ancient Woodland Site |
| 42 | 1644m SW | Unknown | Ancient Semi Natural Woodland |
| J | 1657m NW | Unknown | Restored Ancient Woodland Site |
| J | 1676m NW | Unknown | Restored Ancient Woodland Site |
| 43 | 1682m SE | Unknown | Ancient Semi Natural Woodland |
| 44 | 1703m S | Unknown | Plantation on Ancient Woodland Site |
| 45 | 1766m SE | Unknown | Restored Ancient Woodland Site |
| 46 | 1783m SW | Unknown | Restored Ancient Woodland Site |
| - | 1821m W | Unknown | Ancient Semi Natural Woodland |
| 48 | 1827m SW | Unknown | Ancient Semi Natural Woodland |
| 49 | 1883m S | Unknown | Restored Ancient Woodland Site |
| 50 | 1898m S | Unknown | Restored Ancient Woodland Site |
| - | 1917m W | Unknown | Ancient Semi Natural Woodland |
| 52 | 1976m S | Unknown | Restored Ancient Woodland Site |
| 53 | 1978m S | Unknown | Restored Ancient Woodland Site |

*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 | 4 |
|---|---|

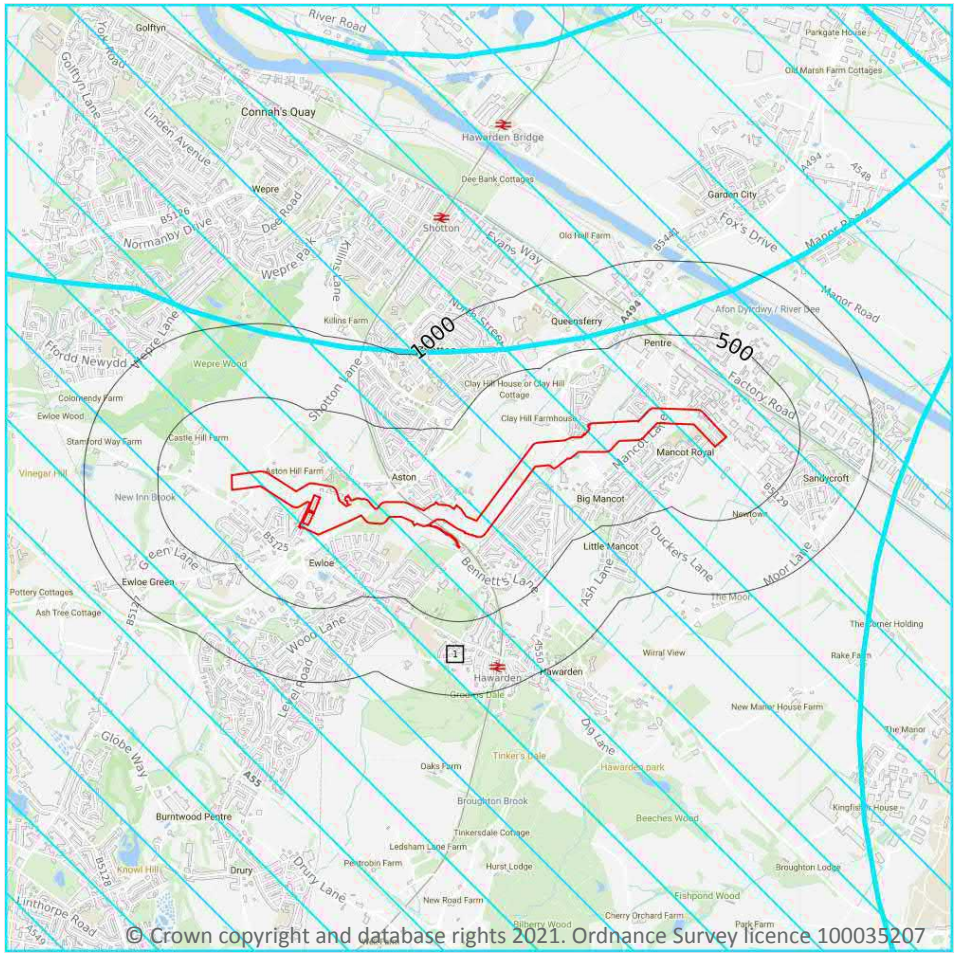
Areas at risk from agricultural nitrate pollution designated under the EC Nitrate Directive (91/676/EEC). These are areas of land that drain into waters polluted by nitrates. Farmers operating within these areas have to follow mandatory rules to tackle nitrate loss from agriculture.

| Location | Name | Type | NVZ ID | Status |
|---|---|---|---|---|
| 860m NE | Shotwick Brook NVZ | Surface Water | S708 | Existing |

| Location | Name | Type | NVZ ID | Status |
|---|---|---|---|---|
| 1020m NE | | Surface Water | 708 | New |
| 1846m NE | Shotwick Brook NVZ | Surface Water | S708 | Existing |
| 1904m NE | | Surface Water | 708 | New |

*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 170**

| ID | Location | Type of developments requiring consultation |
|---|---|---|
| 1 | On site | **Infrastructure - Airports, helipads and other aviation proposals.<br>Air pollution - Livestock & poultry units with floorspace > 500m², slurry lagoons > 4000m².<br>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.*

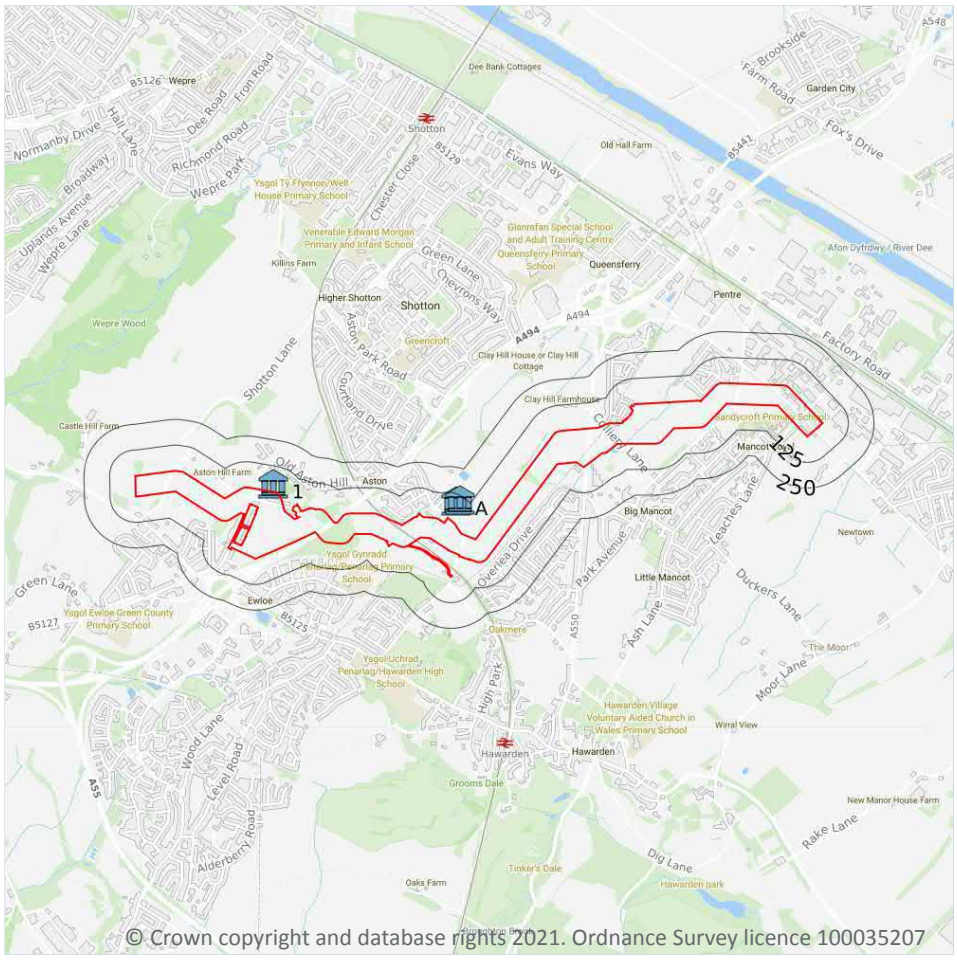
## 10.18 SSSI Units

| 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 | 3 |
|---|---|

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.

Features are displayed on the Visual and cultural designations map on **page 172**

| ID | Location | Name | Grade | Reference Number | Listed date |
|---|---|---|---|---|---|
| 1 | 39m N | Church Of The Holy Spirit, Set Back On The East Side Of The Road At The Crest Of Aston Hill | II | 20115 | 03/07/1998 |
| A | 93m NE | Aedocular Gateway At Aston Hall, To The W Of Aston Hall, And Adjoining A Modern, Single-Storey Building | II | 15103 | 02/07/1962 |
| A | 104m NE | Aston Hall, Situated Off The Road In Its Own Walled Grounds | II* | 23 | 02/07/1962 |

*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.*

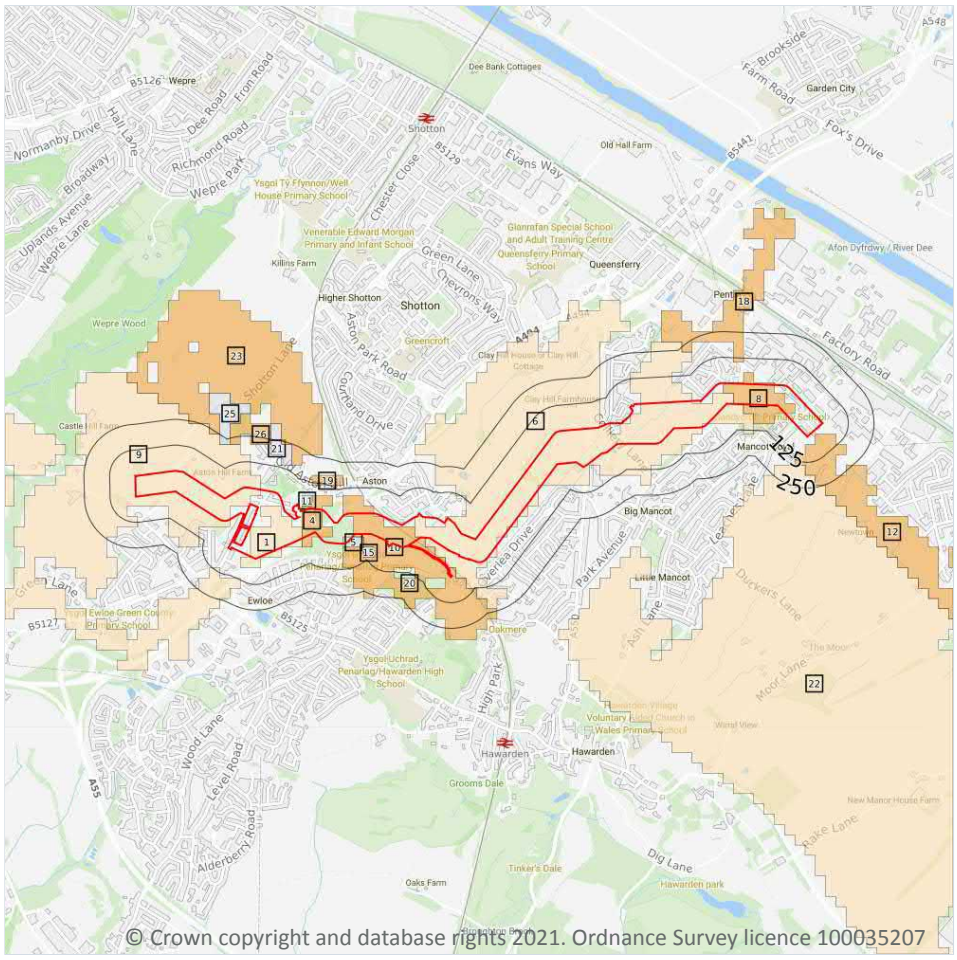
## 11.7 Registered Parks and Gardens

| 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 | 18 |
|---|---|

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.

Features are displayed on the Agricultural designations map on **page 175**

| ID | Location | Classification | Description |
|---|---|---|---|
| **1** | **On site** | **Grade 3a** | **Good to moderate quality agricultural land** |
| **4** | **On site** | **Grade 2** | **Good quality agricultural land** |
| **5** | **On site** | **Grade 3b** | **Moderate quality agricultural land** |

| ID | Location | Classification | Description |
|---|---|---|---|
| **6** | **On site** | **Grade 3a** | **Good to moderate quality agricultural land** |
| **8** | **On site** | **Grade 2** | **Good quality agricultural land** |
| **9** | **On site** | **Grade 3a** | **Good to moderate quality agricultural land** |
| **10** | **On site** | **Grade 2** | **Good quality agricultural land** |
| 11 | 10m N | Grade 3b | Moderate quality agricultural land |
| 12 | 17m SE | Grade 2 | Good quality agricultural land |
| 15 | 54m SW | Grade 3b | Moderate quality agricultural land |
| 18 | 103m N | Grade 2 | Good quality agricultural land |
| 19 | 111m N | Grade 2 | Good quality agricultural land |
| 20 | 132m SW | Grade 3b | Moderate quality agricultural land |
| 21 | 137m N | Grade 3b | Moderate quality agricultural land |
| 22 | 139m S | Grade 3a | Good to moderate quality agricultural land |
| 23 | 155m NE | Grade 2 | Good quality agricultural land |
| 25 | 208m NE | Grade 3b | Moderate quality agricultural land |
| 26 | 210m N | Grade 2 | Good quality agricultural land |

*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.*

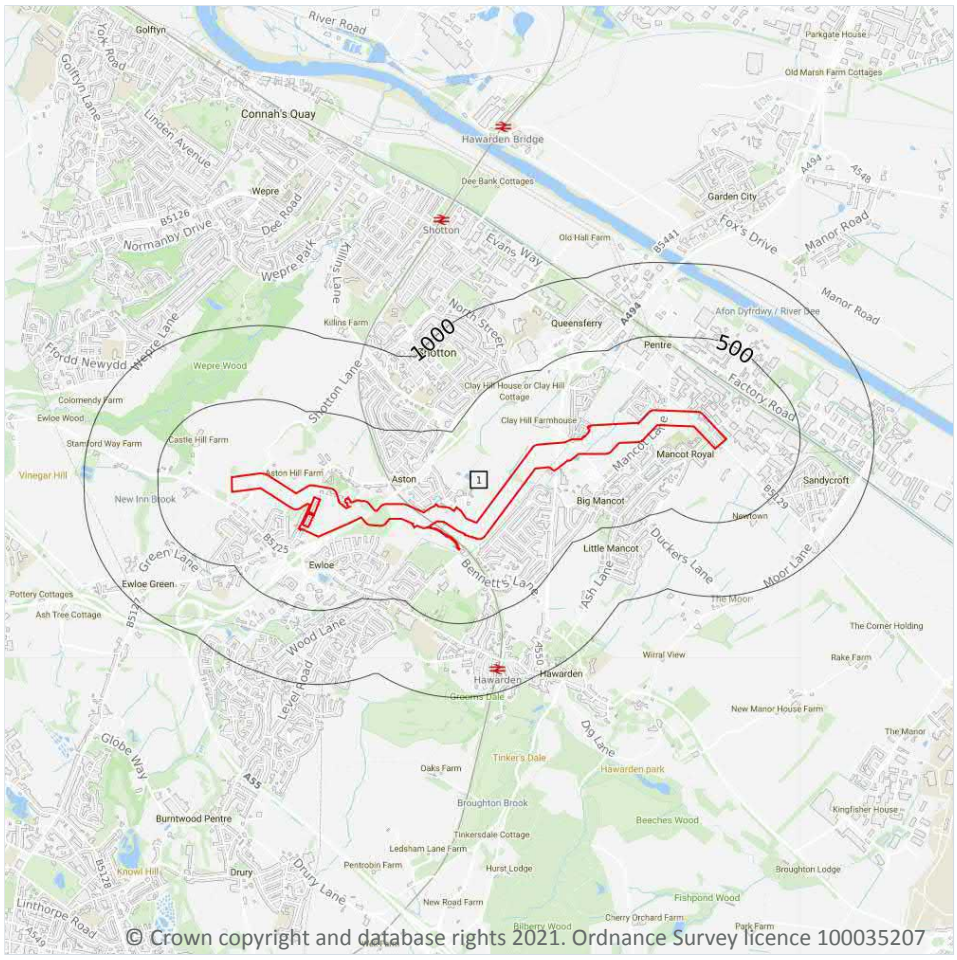
## 13.4 Limestone Pavement Orders

| 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




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Site Outline

Search buffers in metres (m)

- Full coverage
- Partial coverage
- No coverage

## 14.1 10k Availability

| Records within 500m | 1 |
|---|---|

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 179**

| ID | Location | Artificial | Superficial | Bedrock | Mass movement | Sheet No. |
|---|---|---|---|---|---|---|
| **1** | **On site** | **No coverage** | **No coverage** | **No coverage** | **No coverage** | **NoCov** |

*This data is sourced from the British Geological Survey.*

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

## 14.2 Artificial and made ground (10k)

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

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.

*This data is sourced from the British Geological Survey.*

# Geology 1:10,000 scale - Superficial

## 14.3 Superficial geology (10k)

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

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.

*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

## 14.5 Bedrock geology (10k)

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

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.

*This data is sourced from the British Geological Survey.*

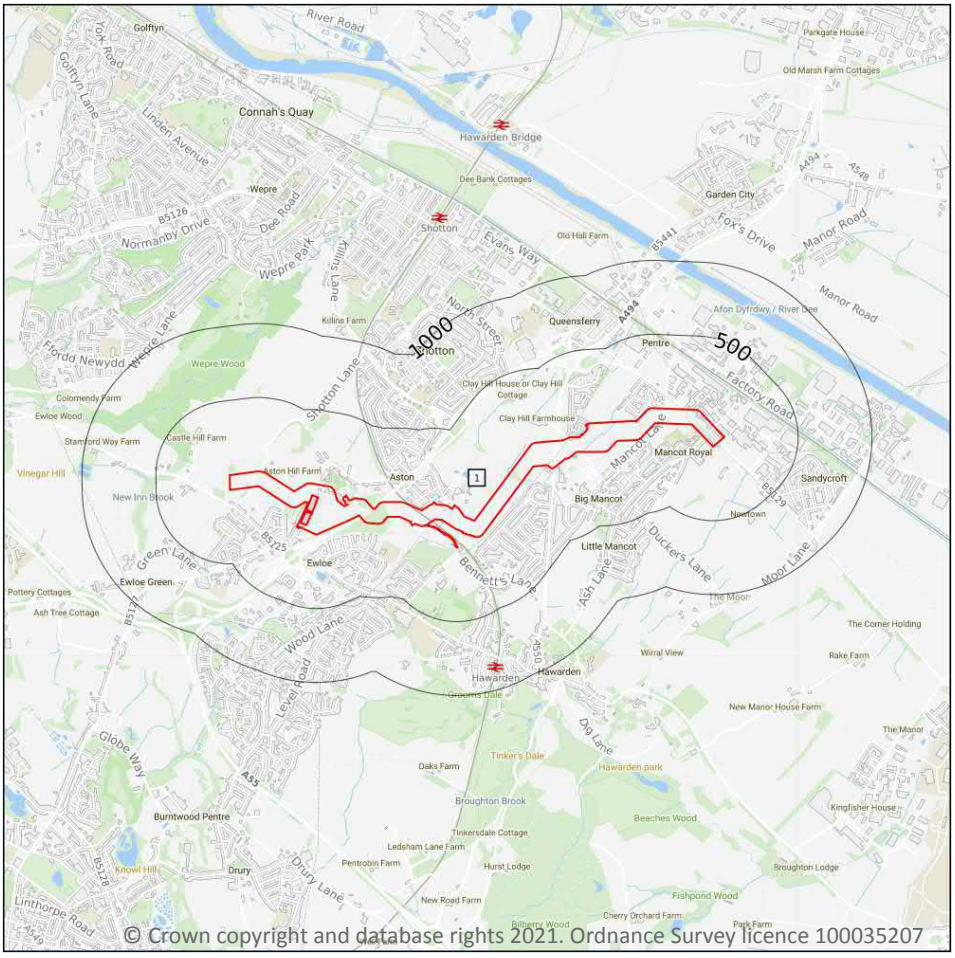
## 14.6 Bedrock faults and other linear features (10k)

| 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



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Site Outline

Search buffers in metres (m)

Geological map tile

## 15.1 50k Availability

| Records within 500m | 1 |
|---|---|

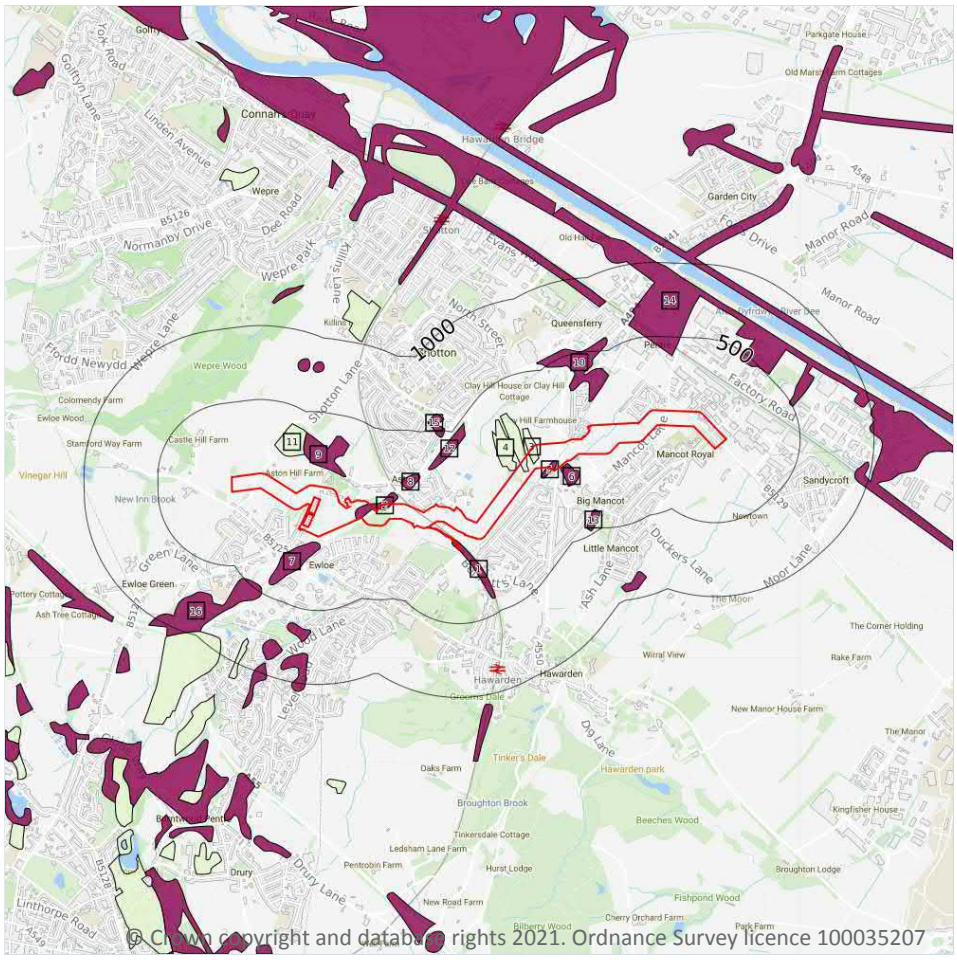
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme. Where 50k data is not available, this area has been filled in with 625k scale data.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 183**

| ID | Location | Artificial | Superficial | Bedrock | Mass movement | Sheet No. |
|---|---|---|---|---|---|---|
| **1** | **On site** | **Full** | **Full** | **Full** | **Full** | **EW108_flint_v4** |

*This data is sourced from the British Geological Survey.*

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


1000
500
Connah's Quay
Wepre
Queensferry
Shotton
Hawarden Bridge
Garden City
Mancot Royal
Big Mancot
Little Mancot
Sandycroft
Ewloe
Ewloe Green
Hawarden
Broughton Brook
Drury
Pentrobin Farm
Hurst Lodge
Broughton Lodge
Fishpond Wood
Cherry Orchard Farm
Park Farm
Bilberry Wood
New Road Farm
Tinkersdale Cottage
Ledsham Lane Farm
Beeches Wood
Kingfisher House
New Manor House Farm
Rake Farm
The Corner Holding
Wirral View
Hawarden park
Oaks Farm
Tinker's Dale
Groom's Dale
Ash Tree Cottage
Vinegar Hill
Castle Hill Farm
Stamford Way Farm
Colomendy Farm
Ewloe Wood
Wepre Wood
Clay Hall House or Clay Hill Cottage
Hill Farmhouse
Parkgate House
Old Manor Farm Cottages
Normanby Drive
Linden Avenue
Golftyn Lane
Fford Newydd
Wepre Lane
Shotton Lane
North Street
Factory Road
Manor Road
Mancot Lane
Ash Lane
Duckers Lane
Moor Lane
Green Lane
Wood Lane
Dog Lane
Drury Lane
Linthorpe Road
Newtown
The Moor
New Inn Brook
Old Hall
Killins Lane
Dee Road
Weprre Park
Ffordd Pen Y Maes
Ffordd Yr Afon
Ffordd Y Llan
Ffordd Y Parc
Ffordd Y Goron
Ffordd Y Dderwen
Ffordd Y Castell
Ffordd Y Capel
Ffordd Y Bont
Ffordd Y Bryn
Ffordd Y Coed
Ffordd Y Dyffryn
Ffordd Y Felin
Ffordd Y Gaer
Ffordd Y Glyn
Ffordd Y Graig
Ffordd Y Llyn
Ffordd Y Mynydd
Ffordd Y Nant
Ffordd Y Pant
Ffordd Y Pentre
Ffordd Y Rhos
Ffordd Y Tir
Ffordd Y Traeth
Ffordd Y Twyn
Ffordd Y Waun
Ffordd Y Wern
Ffordd Y Ysgol
Ffordd Yr Eglwys
Ffordd Yr Ysgol
Ffordd Yr Orsaf
Ffordd Yr Ysbyty
Ffordd Yr Ysgol
Ffordd Yr Ysgol
Ffordd Yr Ysgol

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| **5** | **On site** | **MGR-ARTDP** | **MADE GROUND (UNDIVIDED)** | **ARTIFICIAL DEPOSIT** |
| 6 | 11m SE | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 7 | 41m S | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 8 | 103m N | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 9 | 109m NE | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 10 | 161m N | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 11 | 175m NE | WMGR-ARTDP | INFILLED GROUND | ARTIFICIAL DEPOSIT |
| 12 | 236m N | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 13 | 371m SE | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 14 | 374m N | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 15 | 455m N | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |
| 16 | 467m SW | MGR-ARTDP | MADE GROUND (UNDIVIDED) | ARTIFICIAL DEPOSIT |

*This data is sourced from the British Geological Survey.*

## 15.3 Artificial ground permeability (50k)

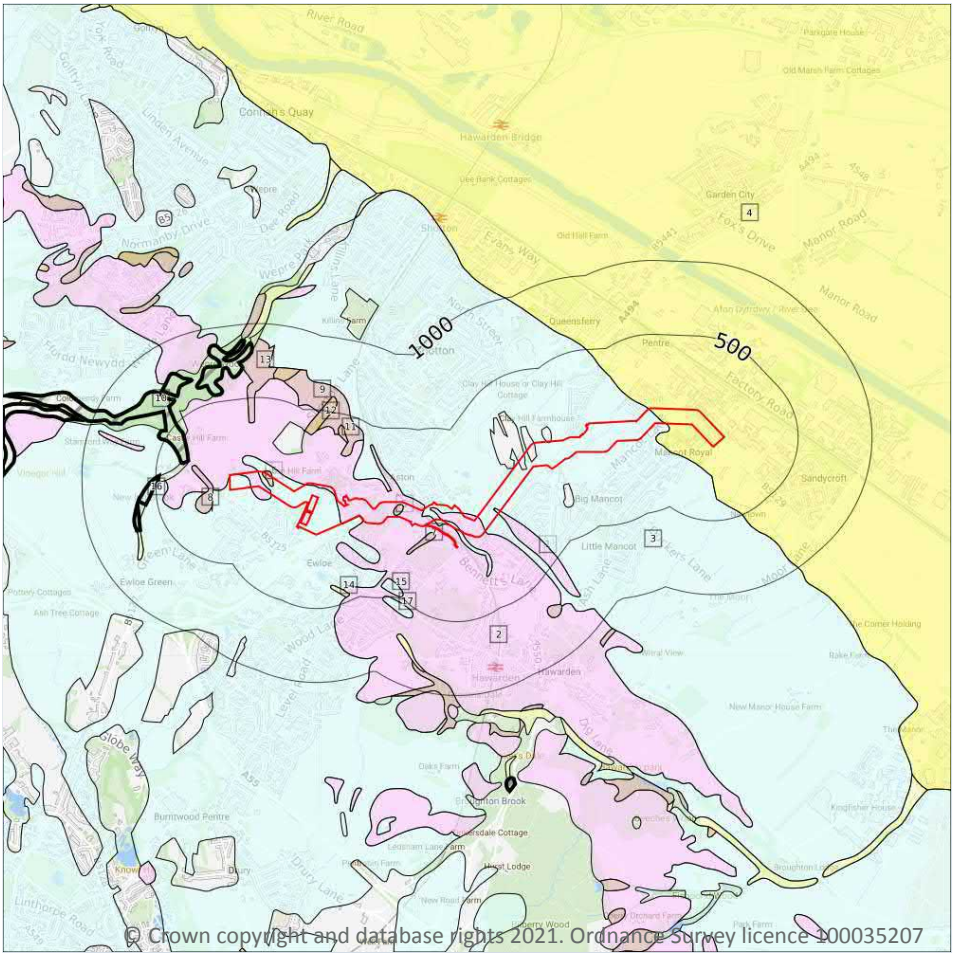
**Records within 50m** **7**

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** |
| **On site** | **Mixed** | **Very High** | **Low** |
| **On site** | **Mixed** | **Very High** | **Low** |
| 11m E | Mixed | Very High | Low |
| 41m SW | 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** **15**

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 186**

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| 1 | On site | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL |
| 2 | On site | GFDUD-XSV | GLACIOFLUVIAL DEPOSITS, DEVENSIAN | SAND AND GRAVEL |
| 3 | On site | TILLD-DMTN | TILL, DEVENSIAN | DIAMICTON |

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| **4** | **On site** | **TFD-XCZS** | **TIDAL FLAT DEPOSITS** | **CLAY, SILT AND SAND** |
| **5** | **On site** | **HEAD-XCZSV** | **HEAD** | **CLAY, SILT, SAND AND GRAVEL** |
| **6** | **On site** | **LDE-XCZ** | **LACUSTRINE DEPOSITS** | **CLAY AND SILT** |
| 7 | 34m S | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 8 | 114m W | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 9 | 228m N | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 11 | 319m N | PEAT-P | PEAT | PEAT |
| 12 | 328m N | PEAT-P | PEAT | PEAT |
| 13 | 331m N | HEAD-XCZSV | HEAD | CLAY, SILT, SAND AND GRAVEL |
| 14 | 359m S | ALV-XCZSV | ALLUVIUM | CLAY, SILT, SAND AND GRAVEL |
| 15 | 375m S | TILLD-DMTN | TILL, DEVENSIAN | DIAMICTON |
| 17 | 492m S | TILLD-DMTN | TILL, DEVENSIAN | DIAMICTON |

*This data is sourced from the British Geological Survey.*

## 15.5 Superficial permeability (50k)

**Records within 50m** **10**

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** | **Very Low** |
| **On site** | **Mixed** | **Low** | **Very Low** |
| **On site** | **Intergranular** | **Very High** | **High** |
| **On site** | **Intergranular** | **Very High** | **High** |
| **On site** | **Mixed** | **High** | **Low** |
| **On site** | **Intergranular** | **Very High** | **High** |

| Location | Flow type | Maximum permeability | Minimum permeability |
|---|---|---|---|
| **On site** | **Intergranular** | **Moderate** | **Very Low** |
| **On site** | **Mixed** | **High** | **Low** |
| **On site** | **Mixed** | **High** | **Low** |
| 34m SW | Mixed | High | Very Low |

*This data is sourced from the British Geological Survey.*

## 15.6 Landslip (50k)

| **Records within 500m** | **2** |
|---|---|

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.

Features are displayed on the Geology 1:50,000 scale - Superficial map on **page 186**

| ID | Location | LEX Code | Description | Rock description |
|---|---|---|---|---|
| 10 | 297m W | SLIP-UKNOWN | LANDSLIDE DEPOSITS | UNKNOWN/UNCLASSIFIED ENTRY |
| 16 | 480m W | SLIP-UKNOWN | LANDSLIDE DEPOSITS | UNKNOWN/UNCLASSIFIED ENTRY |

*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** **38**

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 189**

| ID | Location | LEX Code | Description | Rock age |
|---|---|---|---|---|
| 2 | On site | BSG-MDST | BOWLAND SHALE FORMATION - MUDSTONE | VISEAN |
| 3 | On site | HLR-SDST | HOLLIN ROCK - SANDSTONE | WESTPHALIAN |
| 4 | On site | HLR-SDST | HOLLIN ROCK - SANDSTONE | WESTPHALIAN |

| ID | Location | LEX Code | Description | Rock age |
|---|---|---|---|---|
| **5** | **On site** | **ETM-MDSC** | **ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE** | **WESTPHALIAN** |
| **6** | **On site** | **ETM-MDSC** | **ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE** | **WESTPHALIAN** |
| **7** | **On site** | **PMCM-MDSS** | **PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| **8** | **On site** | **PMCM-MDSS** | **PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| **9** | **On site** | **PMCM-MDSS** | **PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| **10** | **On site** | **PLCM-MDSS** | **PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| **11** | **On site** | **PMCM-MDSS** | **PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| **12** | **On site** | **PMCM-SDST** | **PENNINE MIDDLE COAL MEASURES FORMATION - SANDSTONE** | **WESTPHALIAN** |
| **13** | **On site** | **PMCM-MDSS** | **PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| **14** | **On site** | **ETM-MDSC** | **ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE** | **WESTPHALIAN** |
| **15** | **On site** | **PMCM-MDSS** | **PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| **16** | **On site** | **PMCM-MDSS** | **PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE** | **WESTPHALIAN** |
| **17** | **On site** | **GS-SDAR** | **GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED** | **NAMURIAN** |
| **18** | **On site** | **BSG-MDST** | **BOWLAND SHALE FORMATION - MUDSTONE** | **VISEAN** |
| **20** | **On site** | **HLR-SDST** | **HOLLIN ROCK - SANDSTONE** | **WESTPHALIAN** |
| 48 | 2m S | ETM-MDSC | ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE | WESTPHALIAN |
| 56 | 64m S | HLR-SDST | HOLLIN ROCK - SANDSTONE | WESTPHALIAN |
| 61 | 76m N | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 63 | 101m S | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |

| ID | Location | LEX Code | Description | Rock age |
|---|---|---|---|---|
| 66 | 114m W | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 68 | 134m SW | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 72 | 152m W | HLR-SDST | HOLLIN ROCK - SANDSTONE | WESTPHALIAN |
| 80 | 225m E | ETM-MDSC | ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE | WESTPHALIAN |
| 82 | 230m SW | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 83 | 242m NW | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 86 | 262m E | ETM-MDSC | ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE | WESTPHALIAN |
| 89 | 290m N | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 90 | 301m NW | ETM-MDSC | ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE | WESTPHALIAN |
| 91 | 309m NE | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 97 | 364m S | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 101 | 385m NE | PLCM-MDSS | PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |
| 108 | 479m W | GS-SDAR | GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED | NAMURIAN |
| 109 | 480m W | BSG-MDST | BOWLAND SHALE FORMATION - MUDSTONE | VISEAN |
| 110 | 481m W | GS-SDAR | GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED | NAMURIAN |
| 113 | 499m S | PMCM-MDSS | PENNINE MIDDLE COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE | WESTPHALIAN |

*This data is sourced from the British Geological Survey.*

## 15.9 Bedrock permeability (50k)

| Records within 50m | 10 |
|---|---|

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** | **High** | **Moderate** |
| **On site** | **Fracture** | **Moderate** | **Low** |
| **On site** | **Fracture** | **Low** | **Low** |
| **On site** | **Fracture** | **High** | **Moderate** |
| **On site** | **Fracture** | **Moderate** | **Low** |
| **On site** | **Fracture** | **Moderate** | **Low** |
| **On site** | **Fracture** | **High** | **Moderate** |
| **On site** | **Fracture** | **High** | **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 | 76 |
|---|---|

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.

Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 189**

| ID | Location | Category | Description |
|---|---|---|---|
| **1** | **On site** | **ROCK** | **Coal seam, inferred** |
| **19** | **On site** | **ROCK** | **Coal seam, inferred** |
| **21** | **On site** | **ROCK** | **Coal seam, inferred** |
| **22** | **On site** | **ROCK** | **Coal seam, inferred** |
| **23** | **On site** | **ROCK** | **Coal seam, inferred** |

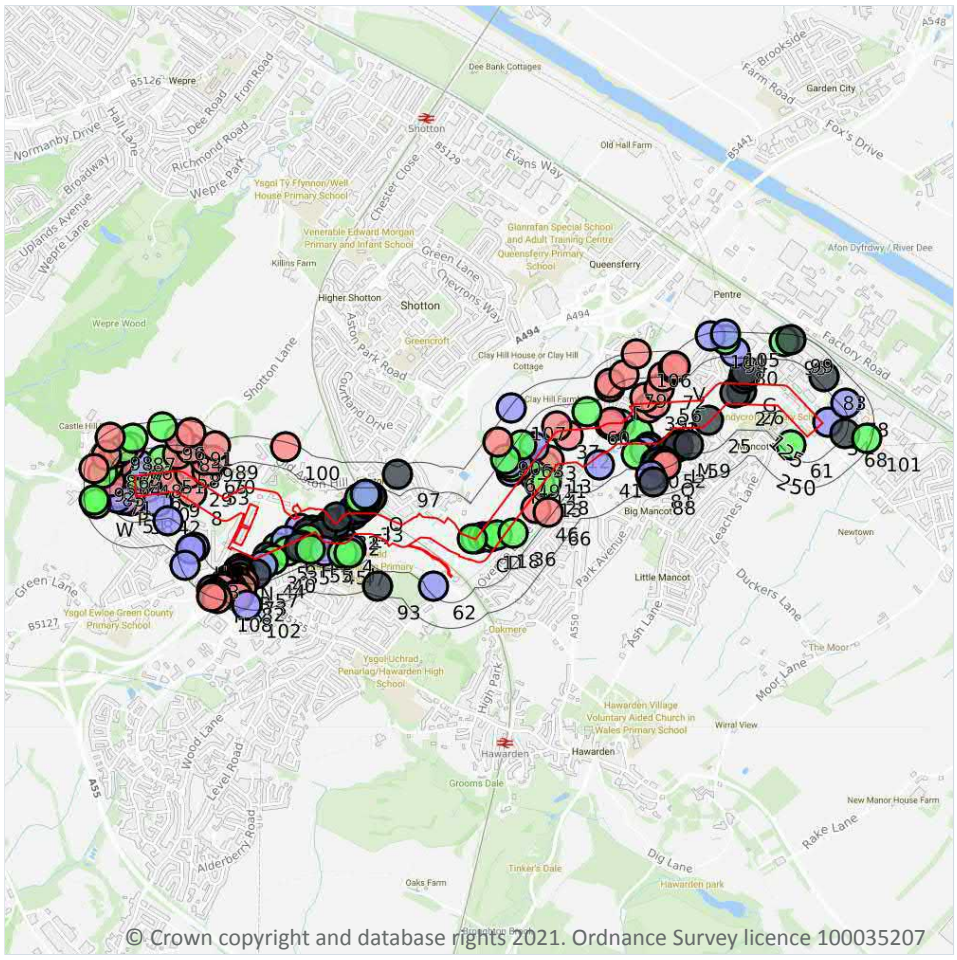
| ID | Location | Category | Description |
|---|---|---|---|
| **24** | **On site** | **ROCK** | **Coal seam, inferred** |
| **25** | **On site** | **ROCK** | **Coal seam, inferred** |
| **26** | **On site** | **ROCK** | **Coal seam, inferred** |
| **27** | **On site** | **ROCK** | **Coal seam, inferred** |
| **28** | **On site** | **ROCK** | **Coal seam, inferred** |
| **29** | **On site** | **ROCK** | **Coal seam, inferred** |
| **30** | **On site** | **ROCK** | **Coal seam, inferred** |
| **31** | **On site** | **ROCK** | **Coal seam, inferred** |
| **32** | **On site** | **ROCK** | **Coal seam, inferred** |
| **33** | **On site** | **ROCK** | **Coal seam, inferred** |
| **34** | **On site** | **ROCK** | **Coal seam, inferred** |
| **35** | **On site** | **ROCK** | **Coal seam, inferred** |
| **36** | **On site** | **FAULT** | **Fault, inferred, displacement unknown** |
| **37** | **On site** | **FAULT** | **Fault, inferred, displacement unknown** |
| **38** | **On site** | **FAULT** | **Fault, inferred, displacement unknown** |
| **39** | **On site** | **FAULT** | **Fault, inferred, displacement unknown** |
| **40** | **On site** | **FAULT** | **Fault, inferred, displacement unknown** |
| **41** | **On site** | **FAULT** | **Fault, inferred, displacement unknown** |
| **42** | **On site** | **FAULT** | **Fault, inferred, displacement unknown** |
| **43** | **On site** | **FAULT** | **Fault, inferred, displacement unknown** |
| **44** | **On site** | **FAULT** | **Fault, inferred, displacement unknown** |
| **45** | **On site** | **FAULT** | **Fault, inferred, displacement unknown** |
| **46** | **On site** | **FAULT** | **Fault, inferred, displacement unknown** |
| **47** | **On site** | **FAULT** | **Fault, inferred** |
| 49 | 9m NW | ROCK | Coal seam, inferred |
| 50 | 13m NE | ROCK | Coal seam, inferred |
| 51 | 13m N | ROCK | Coal seam, inferred |
| 52 | 21m NE | ROCK | Coal seam, inferred |

| ID | Location | Category | Description |
|---|---|---|---|
| 53 | 26m N | ROCK | Coal seam, inferred |
| 54 | 33m NE | ROCK | Coal seam, inferred |
| 55 | 48m N | ROCK | Coal seam, inferred |
| 57 | 64m S | FAULT | Fault, inferred, displacement unknown |
| 58 | 64m NW | ROCK | Coal seam, inferred |
| 59 | 71m N | FAULT | Fault, inferred, displacement unknown |
| 60 | 74m N | ROCK | Coal seam, inferred |
| 62 | 101m S | FAULT | Fault, inferred, displacement unknown |
| 64 | 106m N | ROCK | Coal seam, inferred |
| 65 | 114m W | FAULT | Fault, inferred, displacement unknown |
| 67 | 114m N | ROCK | Coal seam, inferred |
| 69 | 135m NW | ROCK | Coal seam, inferred |
| 70 | 147m N | ROCK | Coal seam, inferred |
| 71 | 148m N | ROCK | Coal seam, inferred |
| 73 | 152m W | FAULT | Fault, inferred, displacement unknown |
| 74 | 155m SW | ROCK | Coal seam, inferred |
| 75 | 162m NW | ROCK | Coal seam, inferred |
| 76 | 174m NW | ROCK | Coal seam, inferred |
| 77 | 175m N | ROCK | Coal seam, inferred |
| 78 | 208m E | ROCK | Coal seam, inferred |
| 79 | 225m E | FAULT | Fault, inferred, displacement unknown |
| 81 | 230m SW | FAULT | Fault, inferred, displacement unknown |
| 84 | 246m NW | ROCK | Coal seam, inferred |
| 85 | 247m SW | ROCK | Coal seam, inferred |
| 87 | 263m N | ROCK | Coal seam, inferred |
| 88 | 290m N | ROCK | Coal seam, inferred |
| 92 | 309m NE | ROCK | Coal seam, inferred |
| 93 | 311m NW | ROCK | Coal seam, inferred |

| ID | Location | Category | Description |
|---|---|---|---|
| 94 | 331m NE | ROCK | Coal seam, inferred |
| 95 | 347m N | ROCK | Coal seam, inferred |
| 96 | 355m N | ROCK | Coal seam, inferred |
| 98 | 364m S | FAULT | Fault, inferred, displacement unknown |
| 99 | 366m NW | ROCK | Coal seam, inferred |
| 100 | 380m N | FAULT | Fault, inferred, displacement unknown |
| 102 | 385m NE | ROCK | Coal seam, inferred |
| 103 | 389m N | ROCK | Coal seam, inferred |
| 104 | 394m N | ROCK | Coal seam, inferred |
| 105 | 437m S | ROCK | Coal seam, inferred |
| 106 | 467m SW | ROCK | Coal seam, inferred |
| 107 | 479m W | FAULT | Fault, inferred, displacement unknown |
| 111 | 481m W | FAULT | Fault, inferred, displacement unknown |
| 112 | 482m W | FAULT | Fault, inferred, displacement unknown |
| 114 | 499m S | FAULT | Fault, inferred, displacement unknown |

*This data is sourced from the British Geological Survey.*

# 16 Boreholes




## 16.1 BGS Boreholes

| Records within 250m | 191 |
|---|---|

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 196**

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 1 | On site | 331700 367400 | CLAY HILL | 8.0 | N | 156598 |
| 2 | On site | 330140 366890 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 14 | 6.1 | N | 156128 |
| 3 | On site | 330290 366910 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 12 | 9.14 | N | 156126 |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 4 | On site | 330350 366830 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 15 | 6.1 | N | 156129 |
| 5 | On site | 330030 366800 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 7 | 11.28 | N | 156121 |
| 6 | On site | 330070 366830 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 6 | 9.14 | N | 156120 |
| 7 | On site | 329464 367162 | WEPCE OPENCAST SITE. 1126 | 61.0 | N | 148243 |
| 8 | On site | 329614 367068 | WEPCE OPENCAST SITE. 1135 | 70.0 | N | 148224 |
| 9 | On site | 329506 367108 | WEPCE OPENCAST SITE. 1128 | 70.9 | N | 148222 |
| 10 | On site | 329397 367088 | WEPCE OPENCAST SITE. 686 | 71.0 | N | 148189 |
| 11 | On site | 331329 367198 | ASHFIELD HOUSE FARM (QUEENSFERRY RD)O/C SITE 314 | 11.0 | N | 156409 |
| 12 | On site | 331444 367343 | ASHFIELD HOUSE FARM (QUEENSFERRY RD)O/C SITE 316 | 112.0 | N | 156410 |
| 13 | On site | 331352 367224 | ASHFIELD HOUSE FARM (QUEENSFERRY RD)O/C SITE 317 | 90.0 | N | 156411 |
| 14 | On site | 331282 367148 | ASHFIELD HOUSE FARM (QUEENSFERRY RD)O/C SITE 326 | 18.1 | N | 156412 |
| 15 | On site | 331308 367108 | ASHFIELD HOUSE FARM (QUEENSFERRY RD)O/C SITE 341 | 100.0 | N | 156414 |
| 16 | On site | 329356 367144 | WEPCE OPENCAST SITE. 786 ? | 25.0 | N | 148190 |
| 17 | On site | 331030 366850 | ASTON HALL, O/C SITE. 7 | 12.19 | N | 156234 |
| 18 | On site | 331100 366860 | ASTON HALL, O/C SITE. 10 | 12.19 | N | 156237 |
| 19 | On site | 331790 367360 | QUEENSFERRY COLLIERY, O/C SITE. 1 | 19.51 | N | 156200 |
| 20 | On site | 331840 367480 | QUEENSFERRY COLLIERY, O/C SITE. 101 | 48.77 | N | 156203 |
| 21 | On site | 331870 367500 | QUEENSFERRY COLLIERY, O/C SITE. 102 | 33.53 | N | 156204 |
| 22 | On site | 330322 366918 | A494 Drome Corner to Ewloe Improvement WS25 | - | Y | N/A |
| 23 | On site | 330200 366881 | A494 Drome Corner to Ewloe Improvement BH42 | - | Y | N/A |
| 24 | On site | 330177 366869 | A494 Drome Corner to Ewloe Improvement TP37 | - | Y | N/A |
| 25 | On site | 332130 367420 | MANCOT CSO TP8 | - | Y | N/A |
| 26 | On site | 332290 367560 | MANCOT CSO TP10 | - | Y | N/A |
| 27 | On site | 332260 367550 | MANCOT CSO TP9 | - | Y | N/A |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| **A** | **On site** | **331670 367390** | **QUEENSFERRY (OR ASTON) COLLIERY** | **-2.0** | **N** | **156333** |
| **A** | **On site** | **331650 367400** | **QUEENSFERRY (OR ASTON) COLLIERY PIT 5** | **161.12** | **N** | **156072** |
| **B** | **On site** | **330230 366880** | **QUEENSFERRY, FLINT C.C ROAD SURVEY. 13** | **11.58** | **N** | **156127** |
| **B** | **On site** | **330240 366870** | **PROPOSED HAWARDEN BY-PASS. 2** | **15.3** | **N** | **156184** |
| **B** | **On site** | **330248 366867** | **A494 Drome Corner to Ewloe Improvement WS24** | **-** | **Y** | **N/A** |
| **C** | **On site** | **331000 366840** | **ASTON HALL, O/C SITE. 6** | **12.19** | **N** | **156233** |
| **C** | **On site** | **330980 366840** | **ASTON HALL, O/C SITE. 5** | **12.19** | **N** | **156232** |
| **D** | **On site** | **331060 366850** | **ASTON HALL, O/C SITE. 8** | **12.19** | **N** | **156235** |
| **D** | **On site** | **331070 366850** | **ASTON HALL, O/C SITE. 9** | **12.19** | **N** | **156236** |
| **E** | **On site** | **330393 366955** | **A494 Drome Corner to Ewloe Improvement BH41** | **-** | **Y** | **N/A** |
| **E** | **On site** | **330404 366961** | **A494 Drome Corner to Ewloe Improvement TP33** | **-** | **Y** | **N/A** |
| A | 7m N | 331660 367410 | QUEENSFERRY (OR ASTON) COLLIERY NO.4 SHAFT | 91.5 | N | 156332 |
| 28 | 8m SE | 331340 367120 | QUEENSFERRY ROAD, O/C SITE. 11 | 12.19 | N | 156255 |
| 29 | 11m NE | 329604 367159 | WEPCE OPENCAST SITE. 1121 | 92.5 | N | 148221 |
| F | 14m S | 331840 367290 | QUEENSFERRY COLLIERY, O/C SITE. 103 | 22.86 | N | 156205 |
| 30 | 14m SE | 329981 366753 | A494 Drome Corner to Ewloe Improvement BH29 | - | Y | N/A |
| E | 15m N | 330400 366979 | A494 Drome Corner to Ewloe Improvement WS26 | - | Y | N/A |
| 31 | 15m SE | 330180 366840 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 5 | 12.19 | N | 156119 |
| 32 | 22m NW | 330319 366949 | A494 Drome Corner to Ewloe Improvement WS23 | - | Y | N/A |
| F | 24m S | 331840 367280 | OLD SHAFT | -2.0 | N | 156340 |
| 33 | 24m N | 330437 366988 | A494 Drome Corner to Ewloe Improvement TP32 | - | Y | N/A |
| G | 25m N | 332300 367620 | MANCOT CSO 10 | - | Y | N/A |
| 34 | 25m E | 332710 367410 | SANDYCROFT INDUSTRIAL ESTATE 8 | 9.3 | N | 156389 |
| 35 | 28m SE | 330080 366780 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 4 | 10.06 | N | 156118 |
| 36 | 29m SE | 331180 366870 | ASTON HALL, O/C SITE. 11 | 12.19 | N | 156229 |
| H | 29m SE | 330150 366810 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 9 | 8.26 | N | 156123 |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 37 | 30m N | 331392 367392 | ASHFIELD HOUSE FARM (QUEENSFERRY RD)O/C SITE 329 | 87.0 | N | 156413 |
| 38 | 31m SW | 329318 367026 | WEPCE OPENCAST SITE. 684 | 40.0 | N | 148188 |
| 39 | 31m N | 331820 367530 | SHELL PIPELINE CONTRACT 1 AREA K(I) 4/68 | 36.58 | N | 156369 |
| F | 34m S | 331820 367270 | OLD SHAFT | -2.0 | N | 156341 |
| H | 34m SE | 330136 366798 | A494 Drome Corner to Ewloe Improvement BH44 | - | Y | N/A |
| 40 | 37m SE | 330010 366740 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 8 | 10.67 | N | 156122 |
| 41 | 38m SE | 331600 367200 | MAIN SEAM PLAN (QUEENSFERRY & MANCOT COLLIERYS) | -2.0 | N | 156281 |
| I | 39m SE | 330390 366790 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 18 | 4.57 | N | 156132 |
| 42 | 40m S | 329450 367020 | MARE HAY COLLIERY, ENGINE PIT | -2.0 | N | 147873 |
| 43 | 42m NW | 331280 367290 | QUEENSFERRY ROAD, O/C SITE. 17 | 8.53 | N | 156256 |
| 44 | 45m SE | 329960 366710 | QUEENSFERRY AREA, FLINTS C.C. ROAD SURVEY | 6.1 | N | 146979 |
| 45 | 45m S | 330260 366780 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 11 | 9.14 | N | 156125 |
| G | 45m N | 332310 367640 | MANCOT CSO TP11 | - | Y | N/A |
| 46 | 45m SE | 331290 366990 | ASTON HALL COLLIERY, NO.5 PITS QUEENSFERRY COLL. | 95.1 | N | 156338 |
| 47 | 47m S | 330350 366770 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 16 | 11.58 | N | 156130 |
| J | 48m N | 330463 367012 | A494 Drome Corner to Ewloe Improvement BH28 | - | Y | N/A |
| 48 | 51m N | 329360 367200 | MARE HAY COLLIERY | -2.0 | N | 147872 |
| 49 | 53m NW | 331200 367200 | ASHFIELD HOUSE FARM, O/C SITE | -2.0 | N | 156286 |
| I | 53m S | 330380 366770 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 17 | 10.97 | N | 156131 |
| 50 | 54m S | 331780 367250 | QUEENSFERRY COLLIERY, O/C SITE. 2 | 24.99 | N | 156201 |
| J | 56m N | 330450 367020 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 31 | 10.36 | N | 156145 |
| 51 | 58m N | 329470 367222 | WEPCE OPENCAST SITE. 711 | 29.0 | N | 148194 |
| K | 59m NW | 331170 367170 | ASTON HALL, O/C SITE. 3 | 9.75 | N | 156230 |
| 52 | 61m SE | 331910 367250 | MANCOT CSO P3 | - | Y | N/A |
| 53 | 63m NE | 329687 367168 | WEPCE OPENCAST SITE. 1129 | 87.0 | N | 148223 |
| 54 | 64m W | 329280 367030 | MARE HAY COLLIERY, ENGINE OR WATER SHAFT | -2.0 | N | 148079 |
| 55 | 64m SE | 330190 366790 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 10 | 10.67 | N | 156124 |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| G | 65m N | 332310 367660 | MANCOT CSO 9 | - | Y | N/A |
| J | 66m N | 330440 367030 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 29 | 18.29 | N | 156143 |
| L | 66m SE | 331950 367270 | MANCOT CSO 3 | - | Y | N/A |
| L | 66m SE | 331950 367270 | MANCOT CSO R3 | - | Y | N/A |
| 56 | 67m N | 331890 367570 | SHELL PIPELINE CONTRACT 1 AREA K(I) 1/68 | 36.88 | N | 156366 |
| M | 67m SE | 331980 367300 | MANCOT CSO R4 | - | Y | N/A |
| K | 71m NW | 331170 367190 | ASTON HALL, O/C SITE. 2 | 12.19 | N | 156228 |
| N | 71m SW | 329853 366699 | A494 Drome Corner to Ewloe Improvement WS43 | - | Y | N/A |
| M | 74m SE | 331980 367290 | MANCOT CSO 4 | - | Y | N/A |
| 57 | 76m S | 329926 366668 | A494 Drome Corner to Ewloe Improvement WS22 | - | Y | N/A |
| O | 76m N | 330480 367040 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 33 | 9.45 | N | 156147 |
| J | 76m N | 330430 367040 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 30 | 11.16 | N | 156144 |
| 58 | 79m N | 329544 367250 | WEPCE OPENCAST SITE. 712 | 46.0 | N | 148195 |
| 59 | 81m S | 332030 367300 | MANCOT CSO TP7 | - | Y | N/A |
| O | 82m N | 330489 367046 | A494 Drome Corner to Ewloe Improvement BH27 | - | Y | N/A |
| 60 | 83m N | 331540 367460 | QUEENSFERRY ROAD, O/C SITE. 2 | 18.9 | N | 156254 |
| N | 84m SW | 329840 366690 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.79 | 42.3 | N | 147771 |
| 61 | 85m SW | 332530 367300 | LOWER ASH FARM, O/C SITE. 2 | 12.19 | N | 156219 |
| P | 85m W | 329256 367064 | WEPCE OPENCAST SITE. 685 | 59.0 | N | 148225 |
| O | 86m N | 330470 367050 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 28 | 18.29 | N | 156142 |
| Q | 87m S | 331900 367220 | MANCOT CSO TP1 | - | Y | N/A |
| Q | 90m S | 331910 367220 | MANCOT CSO P2 | - | Y | N/A |
| K | 91m NW | 331160 367210 | ASTON HALL, O/C SITE. 1 | 9.75 | N | 156227 |
| P | 92m W | 329250 367040 | MARE HAY COLLIERY | -2.0 | N | 148078 |
| 62 | 93m SW | 330790 366610 | PROPOSED HAWARDEN BY-PASS. 3 | 8.8 | N | 156185 |
| Q | 94m S | 331870 367210 | MANCOT CSO P1 | - | Y | N/A |
| Q | 94m S | 331880 367210 | MANCOT CSO 1 | - | Y | N/A |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| N | 95m SW | 329848 366675 | A494 Drome Corner to Ewloe Improvement WS12A | - | Y | N/A |
| N | 95m SW | 329848 366675 | A494 Drome Corner to Ewloe Improvement WS12 | - | Y | N/A |
| O | 96m N | 330460 367060 | QUEENSFERRY, FLINT C.C ROAD SURVEY. 32 | 9.45 | N | 156146 |
| 63 | 96m NW | 331220 367300 | QUEENSFERRY ROAD, O/C SITE. 18 | 12.19 | N | 156257 |
| 64 | 100m NW | 329260 367208 | WEPCE OPENCAST SITE. 1017 | 46.46 | N | 148234 |
| 65 | 104m NE | 329678 367222 | WEPCE OPENCAST SITE. 1112 | 62.0 | N | 148242 |
| 66 | 105m SE | 331350 366970 | ASTON HALL COLL. NO.5 PITS QUEENSFERRY COLL. NO.1 | 92.35 | N | 156339 |
| Q | 109m S | 331910 367200 | QUEENSFERRY COLLIERY, O/C SITE. 104 | 30.48 | N | 156206 |
| Q | 112m S | 331920 367200 | GREAT MANCOT COLLIERY | 94.6 | N | 156199 |
| R | 117m SW | 329850 366650 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.81 | 42.0 | N | 147773 |
| 67 | 119m NW | 331140 367230 | ASTON HALL, O/C SITE. 4 | 12.19 | N | 156231 |
| 68 | 119m SE | 332793 367353 | GLENDALE AVENUE SANDYCROFT 1 | - | Y | N/A |
| 69 | 120m N | 329610 367280 | WEPCE OPENCAST SITE. 1107 | 54.1 | N | 148241 |
| 70 | 124m NE | 329716 367222 | WEPCE OPENCAST SITE. 1093 | 70.0 | N | 148219 |
| 71 | 125m W | 329215 367116 | WEPCE OPENCAST SITE. 1020 | 56.0 | N | 148209 |
| 72 | 126m N | 331910 367630 | SHELL PIPELINE CONTRACT 1 2/68 | 43.0 | N | 156367 |
| 73 | 126m SW | 329870 366630 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.82 | 43.7 | N | 147774 |
| R | 134m SW | 329830 366640 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.80 | 40.0 | N | 147772 |
| 74 | 136m S | 329500 366930 | NEW MARE HAY COLLIERY | -2.0 | N | 147874 |
| S | 138m W | 329209 367192 | WEPCE OPENCAST SITE. 1021 | 56.0 | N | 148235 |
| T | 139m NW | 331650 367580 | QUEENSFERRY COLLIERY | 54.86 | N | 156336 |
| S | 140m W | 329210 367200 | CASTLE HILL COLLIERY, O/C. 2 | 12.19 | N | 147202 |
| 75 | 140m NW | 329255 367260 | WEPCE OPENCAST SITE. 1023 | 65.0 | N | 148236 |
| R | 142m SW | 329810 366640 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.77 | 41.5 | N | 147767 |
| 76 | 144m N | 329314 367290 | WEPCE OPENCAST SITE. 1003 | 71.0 | N | 148203 |

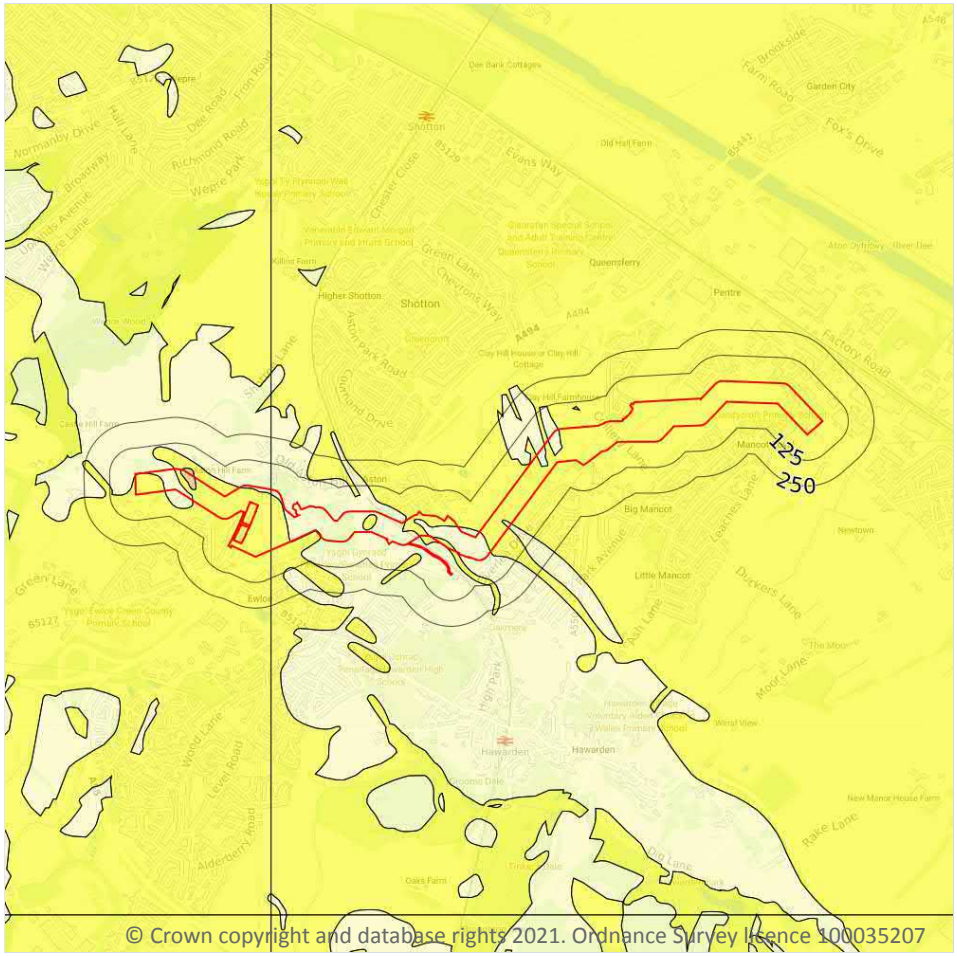
| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 77 | 145m NW | 329280 367280 | CASTLE HILL COLLIERY, O/C. 3 | 12.19 | N | 147203 |
| R | 147m SW | 329795 366642 | A494 Drome Corner to Ewloe Improvement BH31 | - | Y | N/A |
| 78 | 150m NE | 332800 367500 | SANDYCROFT INDUSTRIAL ESTATE 1 | 6.55 | N | 156383 |
| 79 | 152m N | 331720 367640 | QUEENSFERRY COLLIERY, NO.1 SHAFT | 36.58 | N | 156334 |
| T | 152m NW | 331650 367600 | QUEENSFERRY COLLIERY, NO.2 SHAFT | 82.3 | N | 156335 |
| 80 | 153m N | 332260 367750 | CHESTER ROAD EAST TP15 | 2.7 | N | 15988283 |
| 81 | 154m S | 331850 367150 | OLD SHAFT | -2.0 | N | 156337 |
| R | 156m SW | 329820 366620 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.78 | 40.3 | N | 147770 |
| 82 | 158m SW | 329860 366600 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.204 | 50.35 | N | 147775 |
| 83 | 159m NE | 332690 367630 | OWENS CORNING QUEENSFERRY 1 | - | Y | N/A |
| 84 | 159m N | 329555 367330 | WEPCE OPENCAST SITE. 706 | 38.0 | N | 148226 |
| R | 160m S | 329790 366630 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.77A | 44.0 | N | 147768 |
| R | 160m S | 329789 366630 | A494 Drome Corner to Ewloe Improvement BH32 | - | Y | N/A |
| 85 | 160m W | 329180 367160 | CASTLE HILL COLLIERY, O/C. 1 | 12.19 | N | 147201 |
| R | 161m S | 329781 366630 | A494 Drome Corner to Ewloe Improvement WS13 | - | Y | N/A |
| R | 162m SW | 329790 366628 | A494 Drome Corner to Ewloe Improvement HP21 | - | Y | N/A |
| U | 163m W | 329630 366800 | OLD SHAFT | -2.0 | N | 147994 |
| V | 163m N | 331960 367670 | SHELL PIPELINE CONTRACT 1 AREA K(I) 3/68 | 42.0 | N | 156368 |
| 86 | 171m NW | 329200 367246 | WEPCE OPENCAST SITE. 1074 | 60.0 | N | 148207 |
| V | 173m N | 331970 367680 | SHELL PIPELINE CONTRACT 1 AREA K(I) 5/68 | 31.8 | N | 156370 |
| R | 173m SW | 329808 366607 | A494 Drome Corner to Ewloe Improvement HP24 | - | Y | N/A |
| R | 174m SW | 329800 366610 | UNNAMED SHAFT | -2.0 | N | 148035 |
| R | 176m SW | 329804 366606 | A494 Drome Corner to Ewloe Improvement HP23 | - | Y | N/A |
| R | 181m S | 329780 366610 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.77B | 40.0 | N | 147769 |
| 87 | 182m N | 329330 367330 | CASTLE HILL COLLIERY, O/C. 6 | 12.19 | N | 147206 |
| U | 183m W | 329610 366790 | OLD SHAFT | -2.0 | N | 147993 |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| 88 | 184m S | 331860 367120 | MANCOT CSO 7 | - | Y | N/A |
| R | 187m SW | 329790 366600 | UNNAMED SHAFT | -2.0 | N | 148036 |
| 89 | 191m NE | 329731 367292 | WEPCE OPENCAST SITE. 1101 | 59.5 | N | 148220 |
| 90 | 194m NW | 331107 367312 | ASHFIELD HOUSE FARM (QUEENSFERRY RD)O/C SITE 337 | 41.0 | N | 156415 |
| R | 194m S | 329760 366600 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.75 | 39.5 | N | 147766 |
| W | 195m W | 329150 367010 | NEW INN BRIDGE FARM | 12.1 | N | 147001 |
| 91 | 195m N | 329609 367358 | WEPCE OPENCAST SITE. 1086 | 60.0 | N | 148218 |
| X | 198m SW | 329830 366570 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.205 | 50.15 | N | 147776 |
| W | 202m W | 329140 367030 | PROPOSED HAWARDEN BY-PASS. 1 | 12.2 | N | 146990 |
| X | 202m SW | 329840 366560 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.73 | 39.85 | N | 147765 |
| 92 | 203m W | 329140 367183 | WEPCE OPENCAST SITE. 115 | 47.0 | N | 148208 |
| 93 | 203m S | 330520 366610 | EWLOE CUTTING 4 | - | Y | N/A |
| 94 | 211m N | 332210 367810 | CHESTER ROAD EAST 2 | 10.15 | N | 15988264 |
| 95 | 212m N | 332500 367800 | POWELL DYFFRYN, TIMBER INDUSTRIES | 15.54 | N | 156285 |
| 96 | 218m N | 329472 367384 | WEPCE OPENCAST SITE. 699 | 12.0 | N | 148193 |
| Y | 219m SW | 329711 366591 | A494 Drome Corner to Ewloe Improvement WS14 | - | Y | N/A |
| 97 | 220m NE | 330617 367157 | A494 Drome Corner to Ewloe Improvement GB2 | - | Y | N/A |
| Y | 222m S | 329730 366580 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.72 | 41.0 | N | 147764 |
| 98 | 223m NW | 329218 367335 | WEPCE OPENCAST SITE. 1004 | 60.0 | N | 148205 |
| 99 | 225m N | 332530 367810 | OWENS CORNING QUEENSFERRY 2 | - | Y | N/A |
| 100 | 226m N | 330069 367288 | WEPIE OPENCAST SITE 590 | 50.0 | N | 156398 |
| 101 | 227m E | 332900 367330 | SANDYCROFT INDUSTRIAL ESTATE 7 | 18.59 | N | 156388 |
| 102 | 228m S | 329880 366520 | UNNAMED SHAFT | -2.0 | N | 148067 |
| 103 | 230m W | 329580 366710 | NCB SHAFT 267 | -2.0 | N | 148077 |
| 104 | 237m N | 332140 367830 | CHESTER ROAD EAST TP16 | 2.5 | N | 15988284 |

| ID | Location | Grid reference | Name | Length | Confidential | Web link |
|---|---|---|---|---|---|---|
| Y | 238m S | 329719 366567 | A494 Drome Corner to Ewloe Improvement HP18 | - | Y | N/A |
| Y | 239m S | 329714 366568 | A494 Drome Corner to Ewloe Improvement WS28 | - | Y | N/A |
| Y | 240m S | 329716 366566 | A494 Drome Corner to Ewloe Improvement HP17 | - | Y | N/A |
| 105 | 241m N | 332210 367840 | CHESTER ROAD EAST TP14 | 2.9 | N | 15988280 |
| 106 | 243m N | 331780 367740 | QUEENSFERRY (OR ASTON) COLLIERY NO.2, DOWNCAST | 156.36 | N | 156331 |
| 107 | 244m NW | 331170 367480 | OLD SHAFT NO 40 | -2.0 | N | 156343 |
| 108 | 248m S | 329740 366550 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.71 | 40.55 | N | 147763 |
| Y | 248m S | 329710 366560 | HAWARDEN BY-PASS, (EXPLORATION ASSOCIATES). NO.70 | 39.85 | N | 147761 |

*This data is sourced from the British Geological Survey.*

# 17 Natural ground subsidence - Shrink swell clays




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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

## 17.1 Shrink swell clays

| Records within 50m | 4 |
|---|---|

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).

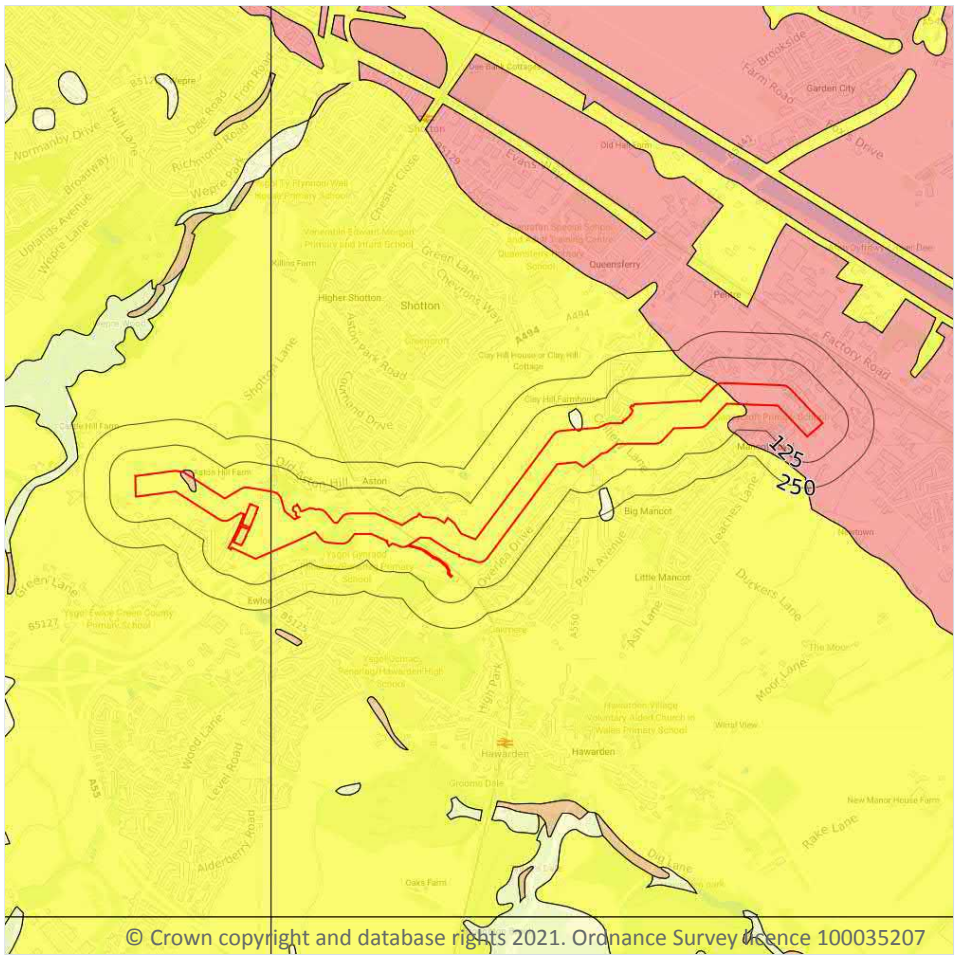
Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 205**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Negligible** | **Ground conditions predominantly non-plastic.** |
| **On site** | **Very low** | **Ground conditions predominantly low plasticity.** |
| **On site** | **Low** | **Ground conditions predominantly medium plasticity.** |

| Location | Hazard rating | Details |
|---|---|---|
| 34m S | Very low | Ground conditions predominantly low plasticity. |

*This data is sourced from the British Geological Survey.*

# Natural ground subsidence - Running sands




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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

## 17.2 Running sands

| Records within 50m | 4 |
|---|---|

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 207**

| 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.** |
| **On site** | **Low** | **Running sand conditions may be present. Constraints may apply to land uses involving excavation or the addition or removal of water.** |
| **On site** | **Moderate** | **Running sand conditions are probably present. Constraints may apply to land uses involving excavation or the addition or removal of water.** |

*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 | 5 |
|---|---|

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.

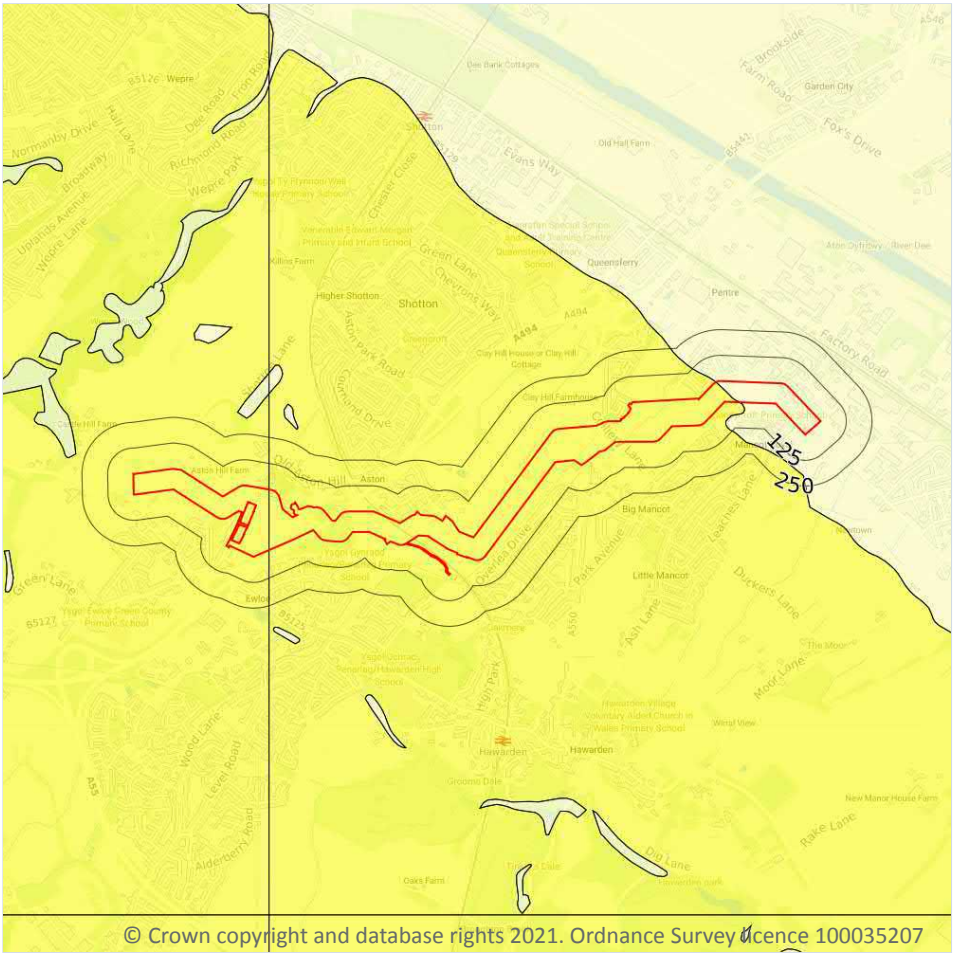
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 209**

| 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 |
|---|---|---|
| **On site** | **Moderate** | **Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.** |
| 11m SE | Very low | Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses. |
| 41m S | Very low | Compressibility and uneven settlement problems are not likely to be significant on the site for most land uses. |

*This data is sourced from the British Geological Survey.*

# Natural ground subsidence - Collapsible deposits




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Site Outline

Search buffers in metres (m)

- No data
- Negligible
- Very low
- Low
- Moderate
- High

## 17.4 Collapsible deposits

| Records within 50m | 2 |
|---|---|

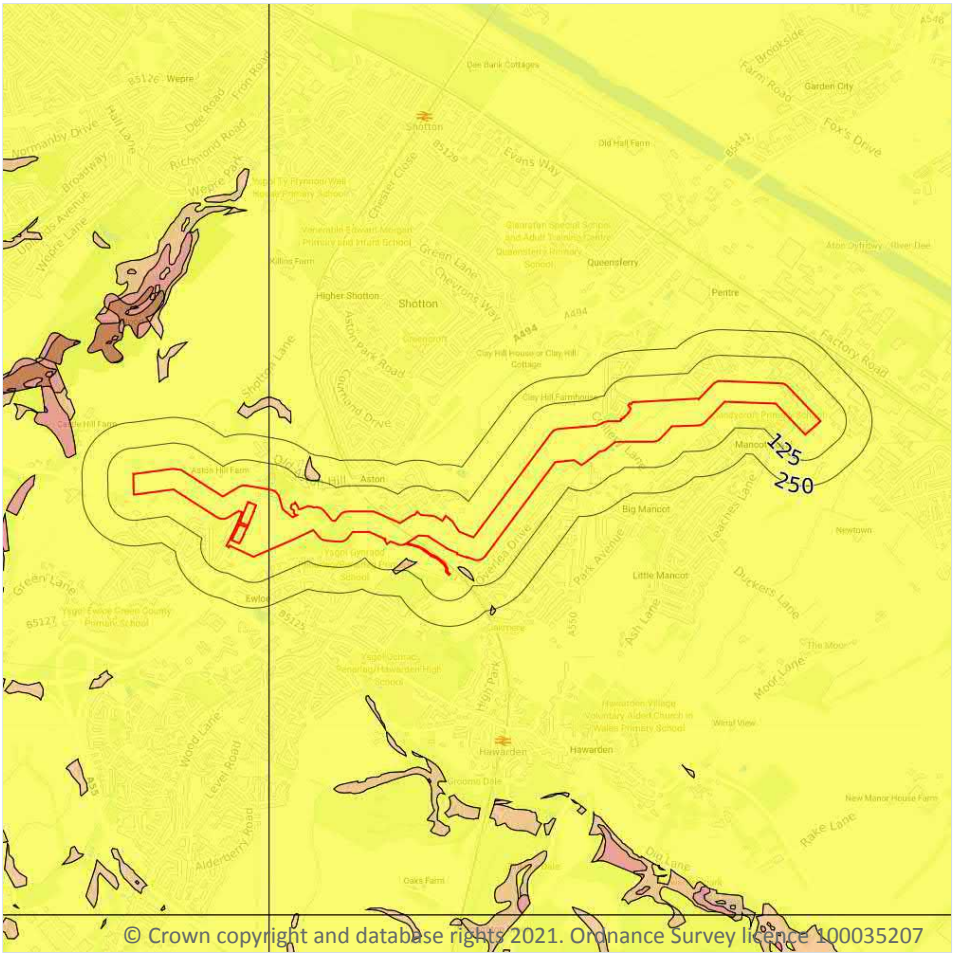
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 211**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Negligible** | **Deposits with potential to collapse when loaded and saturated are believed not to be present.** |
| **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 - Landslides




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## 17.5 Landslides

| Records within 50m | 2 |
|---|---|

The potential for landsliding (slope instability) to be a hazard assessed using 1:50,000 scale digital maps of superficial and bedrock deposits, combined with information from the BGS National Landslide Database and scientific and engineering reports.

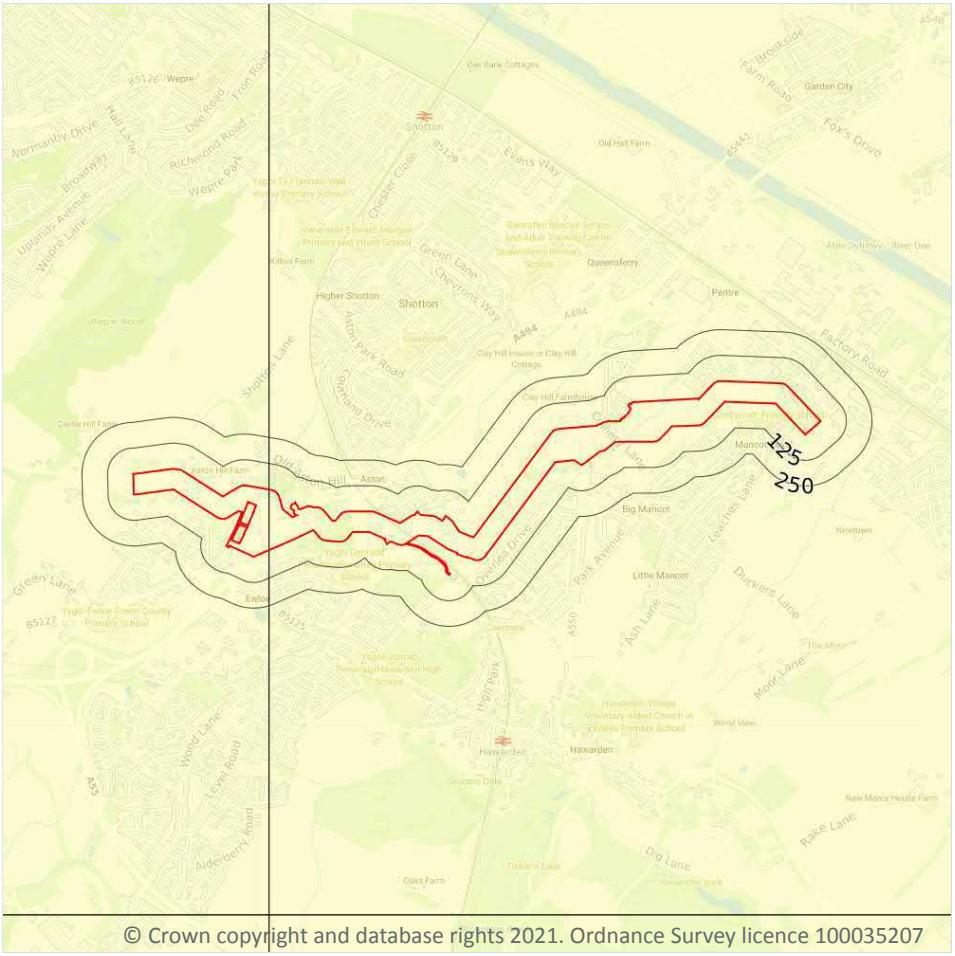
Features are displayed on the Natural ground subsidence - Landslides map on **page 212**

| Location | Hazard rating | Details |
|---|---|---|
| **On site** | **Very low** | **Slope instability problems are not likely to occur but consideration to potential problems of adjacent areas impacting on the site should always be considered.** |

| Location | Hazard rating | Details |
|---|---|---|
| 49m NE | Low | Slope instability problems may be present or anticipated. Site investigation should consider specifically the slope stability of the site. |

*This data is sourced from the British Geological Survey.*

# Natural ground subsidence - Ground dissolution of soluble rocks




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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 |
|---|---|

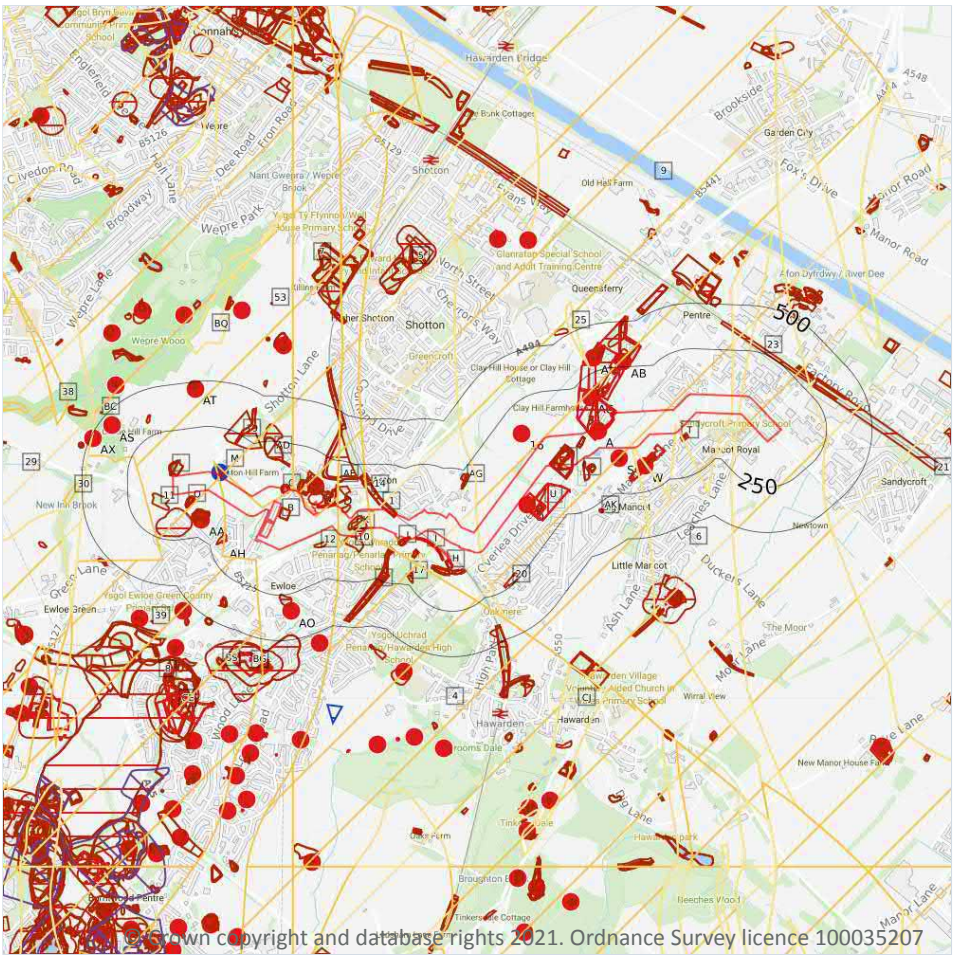
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 214**

| 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 | 1 |
|---|---|

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 216**

| ID | Location | Details | Source |
|---|---|---|---|
| M | 18m NE | Type: Swallow Hole x 1<br>Superficial Geology: -<br>Bedrock Geology: Carboniferous Limestone Supergroup, Lower Coal Measures, Middle Coal Measures, Millstone Grit Group, Upper Carboniferous Limestone | Simple Bibliography: British Geological Survey<br>Full Bibliography: -<br>Confidentiality: Data source can be revealed, data can be used freely |

*This data is sourced from Stantec UK Ltd.*

## 18.2 BritPits

| **Records within 500m** | **20** |
|---|---|

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.

Features are displayed on the Mining, ground workings and natural cavities map on **page 216**

| ID | Location | Details | Description |
|---|---|---|---|
| **A** | **On site** | **Name: Clay Hill**<br>**Address: Queensferry, CONNAH'S QUAY, Flintshire**<br>**Commodity: Coal, Deep**<br>**Status: Ceased** | **Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)**<br>**Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority** |
| **A** | **On site** | **Name: Clay Hill**<br>**Address: Queensferry, CONNAH'S QUAY, Flintshire**<br>**Commodity: Coal, Deep**<br>**Status: Ceased** | **Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)**<br>**Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority** |
| O | 44m SE | Name: Aston Hall<br>Address: Ashton, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

| ID | Location | Details | Description |
|---|---|---|---|
| S | 54m S | Name: Big Mancot<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| O | 76m SE | Name: Aston Hall<br>Address: Ashton, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| N | 84m N | Name: Ricketty Houses<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Sand<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| D | 93m N | Name: Ricketty Houses<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Sand<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| O | 112m SE | Name: Aston Hall<br>Address: Ashton, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

| ID | Location | Details | Description |
|---|---|---|---|
| W | 113m SE | Name: Big Mancot<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| 16 | 114m NW | Name: Queensferry Road OCCS<br>Address: Aston, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Surface Mined<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| W | 143m S | Name: Lower Ash Farm<br>Address: Big Mancot, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AC | 151m NW | Name: Clay Hill<br>Address: Queensferry, CONNAH'S QUAY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AA | 157m S | Name: Ashton Hill Farm<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Lead<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

| ID | Location | Details | Description |
|---|---|---|---|
| AH | 184m W | Name: Boar's Head<br>Address: Ewloe, BUCKLEY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AB | 278m N | Name: Mechanic's Arms<br>Address: Queensferry, CONNAH'S QUAY, Flintshire<br>Commodity: Lead<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AN | 324m N | Name: Mechanic's Arms<br>Address: Queensferry, CONNAH'S QUAY, Flintshire<br>Commodity: Clay & Shale<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AO | 343m S | Name: Ewloe Pit<br>Address: Ewloe, BUCKLEY, Flintshire<br>Commodity: Coal, Deep<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AS | 436m NW | Name: Castle Hill<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Lead<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

| ID | Location | Details | Description |
|---|---|---|---|
| AT | 463m N | Name: Wepre Wood<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Sand<br>Status: Ceased | Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |
| AX | 488m NW | Name: Castle Hill Brewery<br>Address: Connah's Quay, CONNAH'S QUAY, Flintshire<br>Commodity: Lead<br>Status: Ceased | Type: Working is wholly underground, access by shaft, adit or drift. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun Ee - Scots)<br>Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority |

*This data is sourced from the British Geological Survey.*

## 18.3 Surface ground workings

| **Records within 250m** | **230** |
|---|---|

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 216**

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| **1** | **On site** | **Cuttings** | **1967** | **1:10560** |
| **2** | **On site** | **Unspecified Pit** | **1969** | **1:10560** |
| **3** | **On site** | **Unspecified Pit** | **1969** | **1:10560** |
| **A** | **On site** | **Unspecified Heap** | **1938** | **1:10560** |
| **A** | **On site** | **Old Colliery** | **1938** | **1:10560** |
| **A** | **On site** | **Clay Pit** | **1869** | **1:10560** |
| **A** | **On site** | **Unspecified Heap** | **1938** | **1:10560** |
| **A** | **On site** | **Old Colliery** | **1938** | **1:10560** |
| **A** | **On site** | **Unspecified Ground Workings** | **1969** | **1:10560** |
| **A** | **On site** | **Unspecified Ground Workings** | **1989** | **1:10000** |
| **A** | **On site** | **Unspecified Ground Workings** | **1976** | **1:10000** |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| A | On site | Old Colliery | 1948 | 1:10560 |
| A | On site | Unspecified Heap | 1948 | 1:10560 |
| A | On site | Old Colliery | 1898 | 1:10560 |
| A | On site | Unspecified Heap | 1898 | 1:10560 |
| A | On site | Colliery | 1869 | 1:10560 |
| A | On site | Unspecified Heap | 1909 | 1:10560 |
| A | On site | Old Colliery | 1909 | 1:10560 |
| B | On site | Covered Reservoir | 1991 | 1:10000 |
| B | On site | Covered Reservoir | 1987 | 1:10000 |
| B | On site | Covered Reservoir | 1981 | 1:10000 |
| C | On site | Unspecified Heap | 1991 | 1:10000 |
| C | On site | Unspecified Heap | 1987 | 1:10000 |
| C | On site | Unspecified Heap | 1981 | 1:10000 |
| C | On site | Unspecified Heap | 1970 | 1:10560 |
| C | On site | Reservoir | 1948 | 1:10560 |
| C | On site | Reservoir | 1938 | 1:10560 |
| D | On site | Sand Pits | 1967 | 1:10560 |
| D | On site | Sand Pits | 1948 | 1:10560 |
| D | On site | Sand Pit | 1869 | 1:10560 |
| D | On site | Sand Pits | 1938 | 1:10560 |
| D | On site | Unspecified Ground Workings | 1910 | 1:10560 |
| E | On site | Cuttings | 1967 | 1:10560 |
| E | On site | Cuttings | 1938 | 1:10560 |
| E | On site | Cuttings | 1909 | 1:10560 |
| F | On site | Brick Works | 1938 | 1:10560 |
| F | On site | Unspecified Pits | 1938 | 1:10560 |
| F | On site | Unspecified Quarry | 1869 | 1:10560 |
| F | On site | Brick Works | 1938 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| F | On site | Unspecified Pits | 1938 | 1:10560 |
| F | On site | Unspecified Ground Workings | 1969 | 1:10560 |
| F | On site | Unspecified Ground Workings | 1989 | 1:10000 |
| F | On site | Unspecified Ground Workings | 1976 | 1:10000 |
| F | On site | Unspecified Pits | 1967 | 1:10560 |
| F | On site | Unspecified Pit | 1948 | 1:10560 |
| F | On site | Brick Works | 1948 | 1:10560 |
| F | On site | Unspecified Pit | 1898 | 1:10560 |
| F | On site | Unspecified Pit | 1898 | 1:10560 |
| F | On site | Brick Works | 1898 | 1:10560 |
| F | On site | Brick Works | 1869 | 1:10560 |
| F | On site | Unspecified Ground Workings | 1909 | 1:10560 |
| F | On site | Brick Works | 1909 | 1:10560 |
| G | On site | Unspecified Pit | 1938 | 1:10560 |
| G | On site | Cuttings | 1948 | 1:10560 |
| G | On site | Unspecified Pit | 1938 | 1:10560 |
| G | On site | Cuttings | 1910 | 1:10560 |
| H | On site | Cuttings | 1948 | 1:10560 |
| H | On site | Cuttings | 1938 | 1:10560 |
| H | On site | Cuttings | 1909 | 1:10560 |
| I | On site | Unspecified Ground Workings | 1969 | 1:10560 |
| I | On site | Unspecified Ground Workings | 1976 | 1:10000 |
| J | On site | Unspecified Pit | 1969 | 1:10560 |
| J | On site | Unspecified Pit | 1989 | 1:10000 |
| J | On site | Unspecified Pit | 1976 | 1:10000 |
| K | On site | Unspecified Pit | 1969 | 1:10560 |
| K | On site | Unspecified Heap | 1989 | 1:10000 |
| 10 | 1m S | Refuse Heap | 1969 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| L | 2m N | Unspecified Heap | 1869 | 1:10560 |
| M | 2m NE | Pond | 1987 | 1:10000 |
| N | 3m NE | Sand Pits | 1967 | 1:10560 |
| L | 4m N | Refuse Heap | 1948 | 1:10560 |
| N | 6m NE | Sand Pits | 1948 | 1:10560 |
| J | 7m S | Cuttings | 1948 | 1:10560 |
| L | 9m NW | Unspecified Heap | 1960 | 1:10560 |
| O | 11m SE | Old Colliery | 1869 | 1:10560 |
| L | 11m NW | Unspecified Heap | 1938 | 1:10560 |
| L | 11m NW | Unspecified Heap | 1938 | 1:10560 |
| N | 12m NE | Unspecified Pit | 1969 | 1:10560 |
| N | 12m NE | Unspecified Pit | 1989 | 1:10000 |
| N | 12m NE | Unspecified Pit | 1976 | 1:10000 |
| J | 13m S | Cuttings | 1909 | 1:10560 |
| L | 14m NW | Unspecified Ground Workings | 1910 | 1:10560 |
| J | 14m S | Cuttings | 1938 | 1:10560 |
| J | 15m S | Unspecified Pit | 1967 | 1:10560 |
| P | 16m SE | Refuse Heaps | 1989 | 1:10000 |
| N | 19m NE | Unspecified Ground Workings | 1938 | 1:10560 |
| N | 19m NE | Unspecified Ground Workings | 1938 | 1:10560 |
| N | 20m NE | Sand Pits | 1910 | 1:10560 |
| Q | 23m S | Unspecified Heap | 1987 | 1:10000 |
| Q | 23m S | Unspecified Heap | 1981 | 1:10000 |
| Q | 23m S | Unspecified Heap | 1948 | 1:10560 |
| Q | 23m S | Unspecified Heap | 1898 | 1:10560 |
| Q | 23m S | Unspecified Heap | 1910 | 1:10560 |
| H | 26m S | Cuttings | 1938 | 1:10560 |
| R | 27m S | Cuttings | 1948 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| H | 27m SW | Cuttings | 1969 | 1:10560 |
| H | 27m SW | Cuttings | 1989 | 1:10000 |
| H | 27m SW | Cuttings | 1976 | 1:10000 |
| H | 27m SW | Cuttings | 1967 | 1:10560 |
| H | 27m SW | Cuttings | 1909 | 1:10560 |
| Q | 28m S | Unspecified Heap | 1938 | 1:10560 |
| Q | 28m S | Unspecified Heap | 1938 | 1:10560 |
| R | 29m S | Cuttings | 1909 | 1:10560 |
| Q | 29m S | Unspecified Heap | 1960 | 1:10560 |
| Q | 29m S | Unspecified Heap | 1970 | 1:10560 |
| R | 29m S | Cuttings | 1967 | 1:10560 |
| Q | 29m S | Unspecified Heap | 1869 | 1:10560 |
| S | 31m S | Pond | 1869 | 1:10560 |
| R | 32m SE | Cuttings | 1969 | 1:10560 |
| R | 32m SE | Cuttings | 1989 | 1:10000 |
| R | 32m SE | Cuttings | 1976 | 1:10000 |
| H | 34m SW | Cuttings | 1948 | 1:10560 |
| H | 34m SW | Cuttings | 1898 | 1:10560 |
| 11 | 35m SW | Unspecified Heap | 1869 | 1:10560 |
| T | 36m SE | Pond | 1898 | 1:10560 |
| P | 42m SE | Refuse Heap | 1976 | 1:10000 |
| T | 48m SE | Pond | 1869 | 1:10560 |
| P | 50m S | Unspecified Heap | 1969 | 1:10560 |
| P | 50m S | Unspecified Heap | 1989 | 1:10000 |
| P | 50m S | Unspecified Heap | 1976 | 1:10000 |
| P | 50m S | Unspecified Heap | 1967 | 1:10560 |
| A | 50m N | Reservoir | 1948 | 1:10560 |
| A | 51m N | Reservoir | 1938 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| P | 51m S | Unspecified Heap | 1948 | 1:10560 |
| P | 51m S | Unspecified Heap | 1909 | 1:10560 |
| D | 52m NE | Sand Pits | 1938 | 1:10560 |
| P | 53m SE | Unspecified Heap | 1938 | 1:10560 |
| P | 53m SE | Unspecified Heap | 1938 | 1:10560 |
| U | 53m SE | Old Colliery | 1948 | 1:10560 |
| U | 53m SE | Old Colliery | 1898 | 1:10560 |
| D | 54m NE | Sand Pits | 1910 | 1:10560 |
| 12 | 55m SE | Unspecified Pit | 1989 | 1:10000 |
| N | 55m NE | Sand Pits | 1898 | 1:10560 |
| O | 58m SE | Old Colliery | 1909 | 1:10560 |
| V | 58m S | Pond | 1969 | 1:10560 |
| V | 58m S | Pond | 1989 | 1:10000 |
| V | 58m S | Pond | 1976 | 1:10000 |
| W | 59m S | Colliery | 1869 | 1:10560 |
| X | 62m SW | Cuttings | 1938 | 1:10560 |
| X | 62m SW | Cuttings | 1948 | 1:10560 |
| X | 67m SW | Cuttings | 1909 | 1:10560 |
| 13 | 69m SW | Cuttings | 1967 | 1:10560 |
| D | 71m N | Sand Pits | 1898 | 1:10560 |
| Y | 75m SW | Cuttings | 1969 | 1:10560 |
| Y | 75m SW | Cuttings | 1989 | 1:10000 |
| Y | 75m SW | Cuttings | 1976 | 1:10000 |
| 14 | 76m N | Cuttings | 1967 | 1:10560 |
| 15 | 76m S | Old Colliery | 1869 | 1:10560 |
| W | 78m SE | Unspecified Heap | 1898 | 1:10560 |
| Z | 82m N | Colliery | 1869 | 1:10560 |
| N | 85m NE | Sand Pit | 1869 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| W | 86m SE | Unspecified Ground Workings | 1938 | 1:10560 |
| W | 86m SE | Unspecified Ground Workings | 1938 | 1:10560 |
| W | 86m SE | Unspecified Heap | 1948 | 1:10560 |
| W | 87m SE | Unspecified Heap | 1967 | 1:10560 |
| W | 87m SE | Unspecified Heap | 1909 | 1:10560 |
| O | 89m SE | Old Colliery | 1938 | 1:10560 |
| O | 89m SE | Old Colliery | 1938 | 1:10560 |
| O | 93m SE | Unspecified Heap | 1909 | 1:10560 |
| W | 95m SE | Unspecified Heap | 1869 | 1:10560 |
| O | 95m SE | Unspecified Heap | 1948 | 1:10560 |
| O | 96m SE | Unspecified Heap | 1938 | 1:10560 |
| O | 96m SE | Unspecified Heap | 1938 | 1:10560 |
| AA | 97m S | Unspecified Heap | 1898 | 1:10560 |
| AA | 98m S | Unspecified Heap | 1970 | 1:10560 |
| AA | 102m S | Unspecified Ground Workings | 1910 | 1:10560 |
| O | 104m SE | Unspecified Heap | 1869 | 1:10560 |
| AA | 104m S | Unspecified Heap | 1869 | 1:10560 |
| AA | 106m S | Unspecified Heap | 1960 | 1:10560 |
| AA | 106m S | Unspecified Heap | 1948 | 1:10560 |
| AB | 106m NW | Colliery | 1909 | 1:10560 |
| AA | 106m S | Unspecified Ground Workings | 1938 | 1:10560 |
| AA | 106m S | Unspecified Ground Workings | 1938 | 1:10560 |
| AB | 111m N | Colliery | 1914 | 1:10560 |
| AC | 118m N | Unspecified Heap | 1869 | 1:10560 |
| AC | 120m NW | Unspecified Heap | 1948 | 1:10560 |
| AC | 121m NW | Unspecified Heap | 1909 | 1:10560 |
| AC | 121m NW | Unspecified Heap | 1938 | 1:10560 |
| AC | 121m NW | Unspecified Heap | 1938 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| AC | 122m NW | Unspecified Heap | 1967 | 1:10560 |
| AC | 124m NW | Unspecified Heap | 1869 | 1:10560 |
| AC | 126m N | Unspecified Heap | 1914 | 1:10560 |
| AD | 127m N | Unspecified Ground Workings | 1987 | 1:10000 |
| AD | 127m N | Unspecified Ground Workings | 1981 | 1:10000 |
| AD | 127m N | Unspecified Ground Workings | 1970 | 1:10560 |
| AC | 132m NW | Unspecified Heap | 1967 | 1:10560 |
| AC | 133m NW | Unspecified Heap | 1948 | 1:10560 |
| AE | 133m N | Unspecified Ground Workings | 1938 | 1:10560 |
| AE | 133m N | Unspecified Ground Workings | 1938 | 1:10560 |
| AC | 133m NW | Unspecified Heap | 1909 | 1:10560 |
| AC | 133m NW | Unspecified Heap | 1938 | 1:10560 |
| AC | 133m NW | Unspecified Heap | 1938 | 1:10560 |
| AC | 135m NW | Unspecified Heap | 1898 | 1:10560 |
| AC | 136m NW | Unspecified Heap | 1914 | 1:10560 |
| AE | 137m N | Unspecified Pit | 1898 | 1:10560 |
| AF | 149m N | Cuttings | 1938 | 1:10560 |
| AF | 150m N | Cuttings | 1948 | 1:10560 |
| AF | 152m N | Cuttings | 1910 | 1:10560 |
| AG | 152m NE | Pond | 1869 | 1:10560 |
| AF | 153m N | Unspecified Pit | 1898 | 1:10560 |
| AH | 153m SW | Refuse Heap | 1869 | 1:10560 |
| W | 155m S | Unspecified Heap | 1869 | 1:10560 |
| AF | 157m N | Cuttings | 1969 | 1:10560 |
| AF | 157m N | Cuttings | 1989 | 1:10000 |
| AF | 157m N | Cuttings | 1976 | 1:10000 |
| X | 163m S | Cuttings | 1898 | 1:10560 |
| AG | 166m NE | Pond | 1948 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| AG | 166m NE | Pond | 1898 | 1:10560 |
| AC | 168m NW | Unspecified Heap | 1898 | 1:10560 |
| AI | 170m S | Cuttings | 1969 | 1:10560 |
| AI | 170m S | Cuttings | 1989 | 1:10000 |
| AI | 170m S | Cuttings | 1976 | 1:10000 |
| 17 | 173m SW | Unspecified Pit | 1869 | 1:10560 |
| 18 | 179m N | Unspecified Heap | 1991 | 1:10000 |
| 19 | 188m NE | Unspecified Pit | 1991 | 1:10000 |
| AG | 196m NE | Pond | 1989 | 1:10000 |
| AG | 196m NE | Pond | 1976 | 1:10000 |
| AJ | 197m NE | Unspecified Ground Workings | 1987 | 1:10000 |
| AJ | 197m NE | Unspecified Ground Workings | 1981 | 1:10000 |
| AJ | 197m NE | Unspecified Ground Workings | 1970 | 1:10560 |
| X | 203m SW | Cuttings | 1967 | 1:10560 |
| AB | 210m N | Unspecified Heap | 1869 | 1:10560 |
| 20 | 214m SE | Sewage Works | 1948 | 1:10560 |
| X | 218m S | Cuttings | 1869 | 1:10560 |
| X | 223m S | Cuttings | 1869 | 1:10560 |
| X | 241m SW | Cuttings | 1969 | 1:10560 |
| X | 241m SW | Cuttings | 1989 | 1:10000 |
| X | 241m SW | Cuttings | 1976 | 1:10000 |
| 22 | 247m S | Pond | 1991 | 1:10000 |
| 23 | 249m NE | Unspecified Pit | 1914 | 1:10560 |

*This is data is sourced from Ordnance Survey/Groundsure.*

## 18.4 Underground workings

| **Records within 1000m** | **109** |
|---|---|

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

Features are displayed on the Mining, ground workings and natural cavities map on **page 216**

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| **A** | **On site** | **Unspecified Old Mine** | **1960** | **1:10560** |
| **A** | **On site** | **Old Colliery** | **1948** | **1:10560** |
| **A** | **On site** | **Old Colliery** | **1898** | **1:10560** |
| **A** | **On site** | **Unspecified Shafts** | **1898** | **1:10560** |
| **A** | **On site** | **Colliery** | **1869** | **1:10560** |
| **A** | **On site** | **Unspecified Shafts** | **1869** | **1:10560** |
| O | 11m SE | Old Colliery | 1869 | 1:10560 |
| O | 40m SE | Unspecified Old Shaft | 1960 | 1:10560 |
| O | 40m SE | Unspecified Old Shaft | 1948 | 1:10560 |
| O | 40m SE | Unspecified Shaft | 1898 | 1:10560 |
| U | 53m SE | Old Colliery | 1948 | 1:10560 |
| U | 53m SE | Old Colliery | 1898 | 1:10560 |
| W | 59m S | Colliery | 1869 | 1:10560 |
| Z | 82m N | Colliery | 1869 | 1:10560 |
| O | 102m SE | Unspecified Old Shaft | 1948 | 1:10560 |
| O | 102m SE | Unspecified Shaft | 1898 | 1:10560 |
| W | 105m S | Unspecified Old Shaft | 1948 | 1:10560 |
| W | 105m S | Unspecified Old Shaft | 1898 | 1:10560 |
| W | 107m S | Unspecified Old Shaft | 1960 | 1:10560 |
| AB | 111m N | Colliery | 1910 | 1:10560 |
| W | 118m S | Unspecified Shaft | 1869 | 1:10560 |
| AA | 125m S | Unspecified Old Shaft | 1948 | 1:10560 |
| AA | 125m S | Unspecified Shaft | 1898 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| AA | 130m S | Unspecified Old Shaft | 1960 | 1:10560 |
| AC | 141m N | Unspecified Shafts | 1869 | 1:10560 |
| AC | 143m NW | Unspecified Shafts | 1869 | 1:10560 |
| AC | 152m NW | Unspecified Shaft | 1898 | 1:10560 |
| AH | 157m W | Unspecified Old Shafts | 1960 | 1:10560 |
| AH | 162m W | Old Coal Shafts | 1948 | 1:10560 |
| AH | 162m W | Unspecified Old Shafts | 1898 | 1:10560 |
| W | 164m S | Unspecified Shaft | 1869 | 1:10560 |
| AH | 177m W | Unspecified Old Shafts | 1960 | 1:10560 |
| AH | 183m W | Old Coal Shafts | 1948 | 1:10560 |
| AH | 183m W | Unspecified Old Shafts | 1898 | 1:10560 |
| AB | 217m N | Unspecified Shafts | 1898 | 1:10560 |
| AB | 234m N | Unspecified Shaft | 1869 | 1:10560 |
| AB | 240m N | Unspecified Shafts | 1898 | 1:10560 |
| AB | 270m N | Unspecified Shaft | 1869 | 1:10560 |
| AB | 271m N | Unspecified Shafts | 1898 | 1:10560 |
| AB | 280m N | Unspecified Shafts | 1898 | 1:10560 |
| AK | 288m SE | Coal Pit | 1869 | 1:10560 |
| AB | 311m N | Unspecified Shafts | 1898 | 1:10560 |
| AO | 342m S | Unspecified Disused Shafts | 1991 | 1:10000 |
| AO | 342m S | Unspecified Disused Shafts | 1987 | 1:10000 |
| AO | 342m S | Unspecified Disused Shafts | 1981 | 1:10000 |
| AO | 346m S | Unspecified Old Shafts | 1898 | 1:10560 |
| AO | 351m S | Unspecified Disused Shafts | 1991 | 1:10000 |
| AO | 351m S | Unspecified Disused Shafts | 1987 | 1:10000 |
| AO | 351m S | Unspecified Disused Shafts | 1981 | 1:10000 |
| AO | 356m S | Unspecified Old Shafts | 1898 | 1:10560 |
| AS | 443m NW | Unspecified Levels | 1898 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| AS | 448m NW | Unspecified Levels | 1898 | 1:10560 |
| AX | 492m NW | Unspecified Old Shaft | 1898 | 1:10560 |
| BC | 524m NW | Unspecified Old Shaft | 1898 | 1:10560 |
| BF | 557m SW | Unspecified Old Shafts | 1960 | 1:10560 |
| BF | 558m SW | Old Coal Shafts | 1948 | 1:10560 |
| BF | 558m SW | Unspecified Old Shaft | 1898 | 1:10560 |
| BF | 571m SW | Unspecified Old Shafts | 1960 | 1:10560 |
| BF | 573m SW | Old Coal Shafts | 1948 | 1:10560 |
| BF | 582m SW | Old Coal Shafts | 1948 | 1:10560 |
| BF | 582m SW | Unspecified Old Shaft | 1898 | 1:10560 |
| BF | 582m SW | Unspecified Disused Shaft | 1970 | 1:10560 |
| BF | 585m SW | Unspecified Disused Shaft | 1981 | 1:10000 |
| BG | 600m S | Unspecified Old Mine | 1960 | 1:10560 |
| BG | 617m S | Unspecified Shaft | 1869 | 1:10560 |
| BG | 627m S | Old Coal Shaft | 1948 | 1:10560 |
| BG | 627m S | Unspecified Shafts | 1898 | 1:10560 |
| BP | 644m S | Unspecified Shaft | 1869 | 1:10560 |
| BP | 653m S | Old Coal Shafts | 1948 | 1:10560 |
| BP | 653m S | Unspecified Shafts | 1898 | 1:10560 |
| BP | 655m S | Unspecified Old Shafts | 1960 | 1:10560 |
| AU | 657m S | Unspecified Shaft | 1869 | 1:10560 |
| AU | 675m S | Unspecified Shafts | 1898 | 1:10560 |
| BS | 695m S | Unspecified Old Shafts | 1960 | 1:10560 |
| BS | 695m S | Old Coal Shafts | 1948 | 1:10560 |
| BS | 695m S | Unspecified Old Shaft | 1898 | 1:10560 |
| 39 | 704m S | Coal Pit | 1898 | 1:10560 |
| BT | 710m S | Unspecified Shaft | 1898 | 1:10560 |
| CD | 761m N | Unspecified Old Shafts | 1898 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| CD | 787m N | Unspecified Old Shafts | 1898 | 1:10560 |
| CD | 799m N | Unspecified Old Shafts | 1898 | 1:10560 |
| BW | 839m S | Unspecified Shafts | 1869 | 1:10560 |
| BW | 858m S | Unspecified Shafts | 1869 | 1:10560 |
| BW | 876m S | Unspecified Shaft | 1898 | 1:10560 |
| CW | 914m N | Unspecified Old Shafts | 1898 | 1:10560 |
| CW | 919m N | Unspecified Old Shafts | 1898 | 1:10560 |
| CE | 929m SW | Colliery | 1898 | 1:10560 |
| CE | 941m SW | Colliery | 1869 | 1:10560 |
| CT | 949m S | Unspecified Disused Shaft | 1969 | 1:10560 |
| CT | 949m S | Unspecified Disused Shaft | 1989 | 1:10000 |
| CT | 949m S | Unspecified Disused Shaft | 1976 | 1:10000 |
| CE | 962m SW | Unspecified Disused Mine | 1960 | 1:10560 |
| CZ | 965m S | Unspecified Disused Shafts | 1969 | 1:10560 |
| CZ | 965m S | Unspecified Disused Shafts | 1976 | 1:10000 |
| CZ | 968m S | Unspecified Old Shaft | 1960 | 1:10560 |
| CZ | 968m S | Unspecified Disused Shaft | 1989 | 1:10000 |
| CZ | 968m S | Old Coal Shaft | 1948 | 1:10560 |
| CZ | 968m S | Unspecified Old Shaft | 1898 | 1:10560 |
| CE | 975m SW | Unspecified Shaft | 1869 | 1:10560 |
| 53 | 979m N | Unspecified Old Shafts | 1898 | 1:10560 |
| DC | 994m S | Unspecified Disused Shafts | 1969 | 1:10560 |
| DC | 994m S | Unspecified Disused Shafts | 1976 | 1:10000 |
| DC | 994m S | Old Coal Shaft | 1948 | 1:10560 |
| DC | 994m S | Unspecified Old Shafts | 1898 | 1:10560 |
| DC | 997m S | Unspecified Disused Shaft | 1989 | 1:10000 |
| DC | 997m S | Unspecified Old Shafts | 1960 | 1:10560 |
| DD | 999m S | Unspecified Disused Shafts | 1969 | 1:10560 |

| ID | Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|---|
| DD | 999m S | Unspecified Disused Shafts | 1989 | 1:10000 |
| DD | 999m S | Unspecified Disused Shafts | 1976 | 1:10000 |

*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** | **15** |
|---|---|

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).

Features are displayed on the Mining, ground workings and natural cavities map on **page 216**

| ID | Location | Name | Commodity | Class | Likelihood |
|---|---|---|---|---|---|
| **4** | **On site** | **Not available** | **Vein Mineral** | **B** | **Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered** |
| **5** | **On site** | **Not available** | **Vein Mineral** | **A** | **Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered** |
| **6** | **On site** | **Not available** | **Vein Mineral** | **A** | **Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered** |
| **7** | **On site** | **Not available** | **Iron Ore (Bedded)** | **B** | **Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered** |

| ID | Location | Name | Commodity | Class | Likelihood |
|---|---|---|---|---|---|
| **8** | **On site** | **Not available** | **Iron Ore (Bedded)** | **B** | **Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered** |
| **9** | **On site** | **Not available** | **Iron Ore (Bedded)** | **B** | **Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered** |
| 21 | 225m E | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 25 | 301m NW | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 29 | 479m W | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 30 | 480m W | Not available | Vein Mineral | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |
| BQ | 654m N | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |
| 38 | 691m NW | Not available | Vein Mineral | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |
| 42 | 756m NW | Not available | Vein Mineral | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |
| CJ | 789m SE | Not available | Vein Mineral | A | Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered |

| ID | Location | Name | Commodity | Class | Likelihood |
|---|---|---|---|---|---|
| 44 | 871m NW | Not available | Vein Mineral | B | Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered |

*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 | 1 |
|---|---|

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

| Location | Details |
|---|---|
| **On site** | **In addition to being located inside an area where The Coal Authority have information on coal mining activities, Johnson Poole & Bloomer (JPB) have information such as mining plans and maps held within their archive of mining activities that have occurred within 1km of this property which may supplement this information. Please note, the plans held by JPB may also relate to non-mining records. Further details and a quote for services (if appropriate) can be obtained by emailing this report to enquiries.gs@jpb.co.uk.** |

*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 Mining Searches UK.*

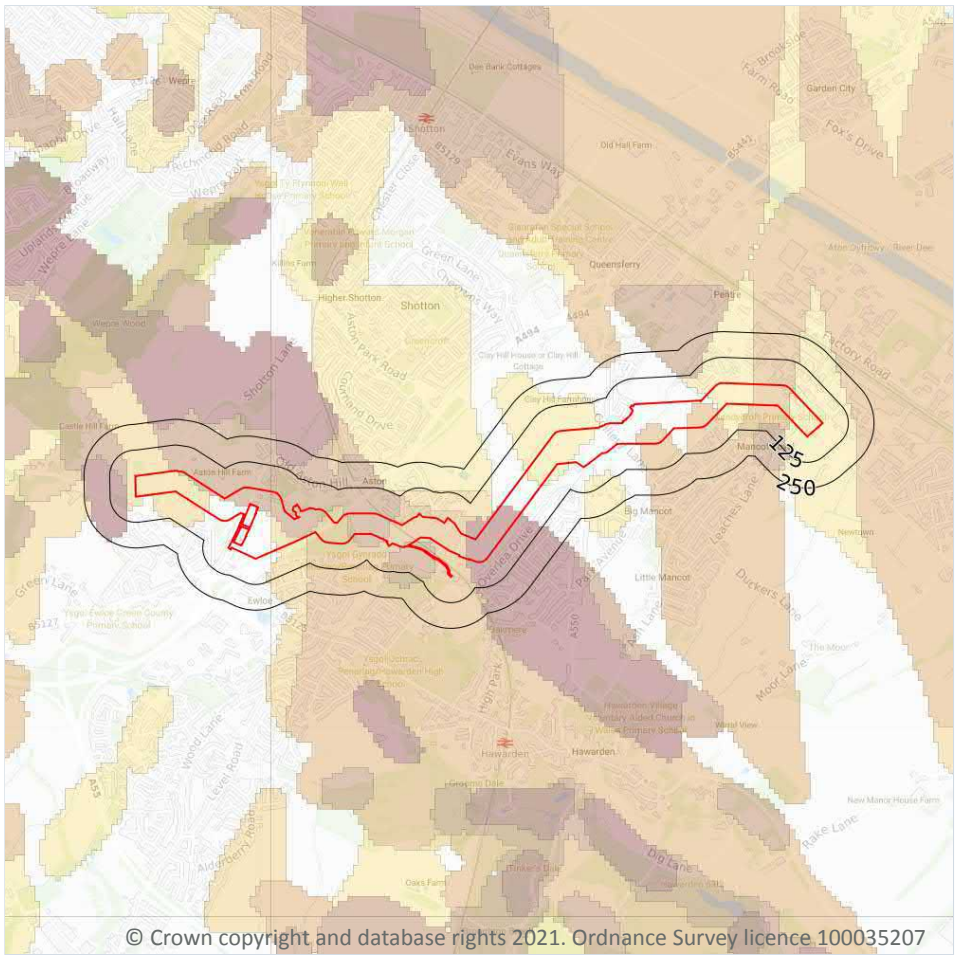
## 18.13 Clay mining

| 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




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## 19.1 Radon

| Records on site | 6 |
|---|---|

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 238**

| Location | Estimated properties affected | Radon Protection Measures required |
|---|---|---|
| **On site** | **Less than 1%** | **None**** |
| **On site** | **Between 1% and 3%** | **None** |

| Location | Estimated properties affected | Radon Protection Measures required |
|---|---|---|
| **On site** | **Between 3% and 5%** | **Basic** |
| **On site** | **Between 10% and 30%** | **Full** |
| **On site** | **Greater than 30%** | **Full** |
| **On site** | **Between 5% and 10%** | **Basic** |

*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 | 80 |
|---|---|

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 $km^2$. 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 $km^2$; 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** | **25 - 35 mg/kg** | **No data** | **100 mg/kg** | **60 mg/kg** | **1.8 mg/kg** | **90 - 120 mg/kg** | **15 - 30 mg/kg** |
| **On site** | **25 - 35 mg/kg** | **No data** | **100 mg/kg** | **60 mg/kg** | **1.8 mg/kg** | **90 - 120 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** |
| **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** |
| **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** |
| **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** |
| **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** |
| **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** |

| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 | 40 - 60 mg/kg | 15 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 |

| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| On site | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 90 - 120 mg/kg | 15 - 30 mg/kg |
| On site | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 40 - 60 mg/kg | 15 mg/kg |
| On site | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 40 - 60 mg/kg | 15 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 |
| 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 |

| 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** | **90 - 120 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** |
| **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** | **40 - 60 mg/kg** | **15 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** |
| **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** |
| **On site** | **15 mg/kg** | **No data** | **100 mg/kg** | **60 mg/kg** | **1.8 mg/kg** | **40 - 60 mg/kg** | **15 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** |
| **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** |
| **On site** | **15 mg/kg** | **No data** | **100 mg/kg** | **60 mg/kg** | **1.8 mg/kg** | **40 - 60 mg/kg** | **15 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** |
| **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** |
| 2m E | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 3m NE | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 6m W | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |

| Location | Arsenic | Bioaccessible Arsenic | Lead | Bioaccessible Lead | Cadmium | Chromium | Nickel |
|---|---|---|---|---|---|---|---|
| 12m W | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 14m W | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 14m W | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 16m NE | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 18m W | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 26m W | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 32m W | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 34m SW | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 36m W | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 36m W | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 37m NW | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 41m W | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 42m SW | 15 mg/kg | No data | 100 mg/kg | 60 mg/kg | 1.8 mg/kg | 60 - 90 mg/kg | 15 - 30 mg/kg |
| 46m W | 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 km$^2$).

*This data is sourced from the British Geological Survey.*

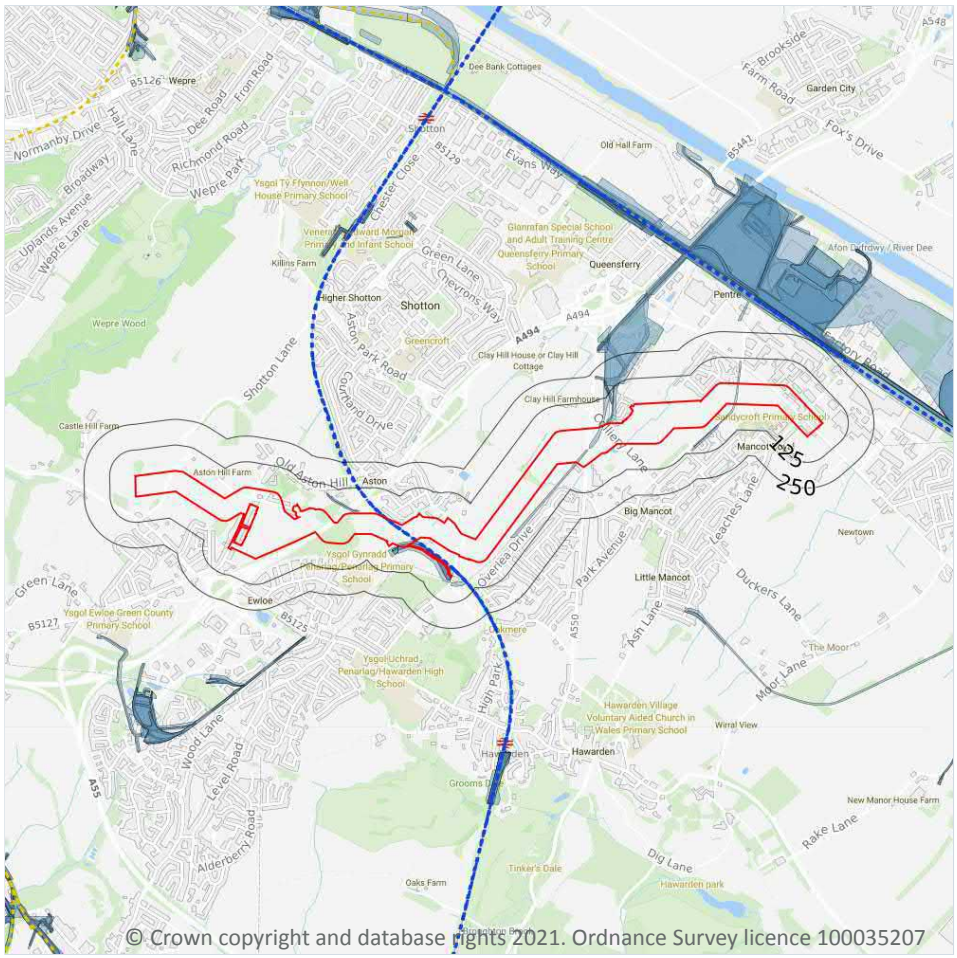
## 20.3 BGS Measured Urban Soil Chemistry

| 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 km$^2$.

*This data is sourced from the British Geological Survey.*

# 21 Railway infrastructure and projects




## 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 | 25 |
|---|---|

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 246**

| Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|
| **On site** | **Railway Sidings** | **1899** | **2500** |
| **On site** | **Railway Sidings** | **1912** | **2500** |
| **On site** | **Railway Sidings** | **1870** | **2500** |
| **On site** | **Railway Sidings** | **1948** | **10560** |
| **On site** | **Railway Sidings** | **1898** | **10560** |
| **On site** | **Railway Sidings** | **1938** | **10560** |
| **On site** | **Railway Sidings** | **1909** | **10560** |
| **On site** | **Railway Sidings** | **1869** | **10560** |
| 0m S | Railway Sidings | 1938 | 10560 |
| 3m S | Railway Sidings | 1948 | 10560 |
| 3m S | Railway Sidings | 1898 | 10560 |
| 5m N | Railway Sidings | 1869 | 10560 |
| 6m S | Railway Sidings | 1909 | 10560 |
| 10m S | Railway Sidings | 1912 | 2500 |
| 11m S | Railway Sidings | 1899 | 2500 |
| 13m N | Railway Sidings | 1870 | 2500 |
| 27m S | Railway Sidings | 1948 | 10560 |

| Location | Land Use | Year of mapping | Mapping scale |
|---|---|---|---|
| 39m SE | Railway Sidings | 1869 | 10560 |
| 84m W | Railway Sidings | 1898 | 10560 |
| 87m W | Railway Sidings | 1899 | 2500 |
| 111m N | Railway Sidings | 1914 | 10560 |
| 119m NW | Railway Sidings | 1911 | 2500 |
| 120m NW | Railway Sidings | 1909 | 10560 |
| 180m N | Railway Sidings | 1911 | 2500 |
| 249m NE | Railway Sidings | 1914 | 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 | 18 |
|---|---|

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

Features are displayed on the Railway infrastructure and projects map on **page 246**

| Location | Name | Type |
|---|---|---|
| **On site** | **Borderlands Line** | **rail** |

| Location | Name | Type |
|---|---|---|
| **On site** | **Borderlands Line** | **rail** |
| **On site** | **Not given** | **Multi Track** |
| **On site** | **Not given** | **Multi Track** |
| **On site** | **Not given** | **Multi Track** |
| **On site** | **Not given** | **Multi Track** |
| **On site** | **Not given** | **Multi Track** |
| 8m NE | Not given | Multi Track |
| 15m NE | Borderlands Line | rail |
| 19m NE | Borderlands Line | rail |
| 27m NE | Borderlands Line | rail |
| 30m N | Not given | Multi Track |
| 31m NE | Borderlands Line | rail |
| 54m E | Not given | Multi Track |
| 70m E | Not given | Multi Track |
| 91m N | Not given | Multi Track |
| 157m N | Not given | Multi Track |
| 167m N | Not given | Multi Track |

*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/.

Groundsure LOCATION INTELLIGENCE

Enviro+Geo Insight

# DCO Pipeline, Southern Route

## Order Details

**Date:** 31/08/2021

**Your ref:** DCO Pipeline, Southern Route

**Our Ref:** GSIP-2021-10877-7381_D

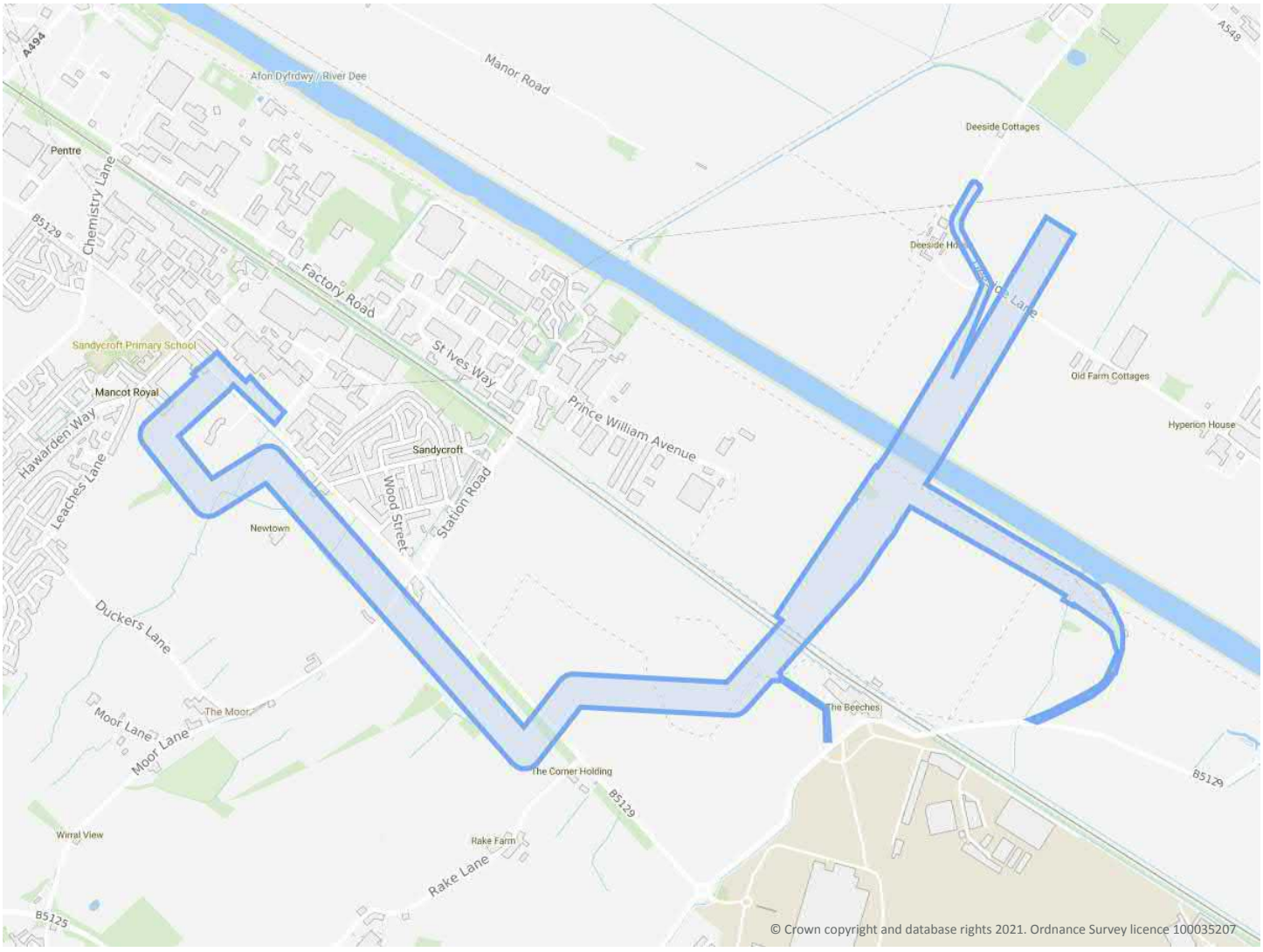
**Client:** WSP UK LIMITED

## Site Details

**Location:** 334303 366858

**Area:** 58.76 ha

**Authority:** Sir y Fflint - Flintshire County Council





**Summary of findings** p. 2

**OS MasterMap site plan** N/A: >10ha

**Aerial image** p. 8

**groundsure.com/insightuserguide**



Contact us with any questions at:
info@groundsure.com
08444 159 000

# Summary of findings

| Page | Section | Past land use | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| 13 | 1.1 | Historical industrial land uses | 11 | 11 | 15 | 77 | - |
| 18 | 1.2 | Historical tanks | 1 | 4 | 19 | 37 | - |
| 20 | 1.3 | Historical energy features | 0 | 0 | 7 | 12 | - |
| 21 | 1.4 | Historical petrol stations | 0 | 0 | 0 | 0 | - |
| 22 | 1.5 | Historical garages | 0 | 0 | 3 | 0 | - |
| 22 | 1.6 | Historical military land | 0 | 0 | 0 | 0 | - |
| Page | Section | Past land use - un-grouped | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 23 | 2.1 | Historical industrial land uses | 13 | 14 | 17 | 90 | - |
| 28 | 2.2 | Historical tanks | 1 | 5 | 29 | 57 | - |
| 32 | 2.3 | Historical energy features | 0 | 0 | 13 | 26 | - |
| 34 | 2.4 | Historical petrol stations | 0 | 0 | 0 | 0 | - |
| 34 | 2.5 | Historical garages | 0 | 0 | 4 | 0 | - |
| Page | Section | Waste and landfill | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 35 | 3.1 | Active or recent landfill | 0 | 0 | 0 | 0 | - |
| 35 | 3.2 | Historical landfill (BGS records) | 0 | 0 | 0 | 0 | - |
| 36 | 3.3 | Historical landfill (LA/mapping records) | 0 | 0 | 0 | 0 | - |
| 36 | 3.4 | Historical landfill (EA/NRW records) | 0 | 0 | 0 | 0 | - |
| 36 | 3.5 | Historical waste sites | 0 | 0 | 0 | 5 | - |
| 37 | 3.6 | Licensed waste sites | 0 | 0 | 0 | 18 | - |
| 42 | 3.7 | Waste exemptions | 1 | 0 | 7 | 123 | - |
| Page | Section | Current industrial land use | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 56 | 4.1 | Recent industrial land uses | 0 | 5 | 27 | - | - |
| 58 | 4.2 | Current or recent petrol stations | 0 | 0 | 0 | 0 | - |
| 59 | 4.3 | Electricity cables | 0 | 0 | 0 | 0 | - |
| 59 | 4.4 | Gas pipelines | 0 | 0 | 0 | 0 | - |
| 59 | 4.5 | Sites determined as Contaminated Land | 0 | 0 | 0 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 59 | 4.6 | Control of Major Accident Hazards (COMAH) | 1 | 0 | 2 | 0 | - |
| 60 | 4.7 | Regulated explosive sites | 0 | 0 | 0 | 0 | - |
| 60 | 4.8 | Hazardous substance storage/usage | 0 | 0 | 1 | 0 | - |
| 60 | 4.9 | Historical licensed industrial activities (IPC) | 0 | 0 | 0 | 4 | - |
| 61 | 4.10 | Licensed industrial activities (Part A(1)) | 0 | 0 | 24 | 20 | - |
| 70 | 4.11 | Licensed pollutant release (Part A(2)/B) | 1 | 0 | 0 | 6 | - |
| 71 | 4.12 | Radioactive Substance Authorisations | 0 | 0 | 0 | 0 | - |
| 71 | 4.13 | Licensed Discharges to controlled waters | 0 | 2 | 8 | 5 | - |
| 73 | 4.14 | Pollutant release to surface waters (Red List) | 0 | 0 | 0 | 0 | - |
| 73 | 4.15 | Pollutant release to public sewer | 0 | 0 | 0 | 0 | - |
| 73 | 4.16 | List 1 Dangerous Substances | 0 | 0 | 0 | 0 | - |
| 74 | 4.17 | List 2 Dangerous Substances | 0 | 0 | 0 | 0 | - |
| 74 | 4.18 | Pollution Incidents (EA/NRW) | 5 | 18 | 60 | 73 | - |
| 90 | 4.19 | Pollution inventory substances | 0 | 0 | 0 | 0 | - |
| 90 | 4.20 | Pollution inventory waste transfers | 0 | 0 | 0 | 0 | - |
| 90 | 4.21 | Pollution inventory radioactive waste | 0 | 0 | 0 | 0 | - |

| Page | Section | Hydrogeology | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| 91 | 5.1 | Superficial aquifer | Identified (within 500m) | | | | |
| 93 | 5.2 | Bedrock aquifer | Identified (within 500m) | | | | |
| 95 | 5.3 | Groundwater vulnerability | Identified (within 50m) | | | | |
| 97 | 5.4 | Groundwater vulnerability- soluble rock risk | None (within 0m) | | | | |
| 97 | 5.5 | Groundwater vulnerability- local information | None (within 0m) | | | | |
| 98 | 5.6 | Groundwater abstractions | 1 | 0 | 0 | 1 | 12 |
| 101 | 5.7 | Surface water abstractions | 4 | 0 | 0 | 1 | 7 |
| 104 | 5.8 | Potable abstractions | 0 | 0 | 0 | 0 | 0 |
| 104 | 5.9 | Source Protection Zones | 2 | 0 | 0 | 0 | - |
| 105 | 5.10 | Source Protection Zones (confined aquifer) | 0 | 0 | 0 | 0 | - |

| Page | Section | Hydrology | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| 106 | 6.1 | Water Network (OS MasterMap) | 20 | 23 | 58 | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 114 | 6.2 | Surface water features | 1 | 12 | 26 | - | - |
| 115 | 6.3 | WFD Surface water body catchments | 3 | - | - | - | - |
| 115 | 6.4 | WFD Surface water bodies | 2 | 0 | 1 | - | - |
| 116 | 6.5 | WFD Groundwater bodies | 1 | - | - | - | - |
| Page | Section | River and coastal flooding | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 117 | 7.1 | Risk of Flooding from Rivers and Sea (RoFRaS) | High (within 50m) | | | | |
| 118 | 7.2 | Historical Flood Events | 5 | 2 | 0 | - | - |
| 118 | 7.3 | Flood Defences | 2 | 0 | 2 | - | - |
| 119 | 7.4 | Areas Benefiting from Flood Defences | 7 | 0 | 5 | - | - |
| 120 | 7.5 | Flood Storage Areas | 0 | 0 | 0 | - | - |
| 121 | 7.6 | Flood Zone 2 | Identified (within 50m) | | | | |
| 122 | 7.7 | Flood Zone 3 | Identified (within 50m) | | | | |
| Page | Section | Surface water flooding | | | | | |
| 123 | 8.1 | Surface water flooding | 1 in 30 year, 0.3m - 1.0m (within 50m) | | | | |
| Page | Section | Groundwater flooding | | | | | |
| 125 | 9.1 | Groundwater flooding | High (within 50m) | | | | |
| Page | Section | Environmental designations | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 126 | 10.1 | Sites of Special Scientific Interest (SSSI) | 1 | 0 | 0 | 0 | 0 |
| 127 | 10.2 | Conserved wetland sites (Ramsar sites) | 0 | 0 | 0 | 0 | 0 |
| 127 | 10.3 | Special Areas of Conservation (SAC) | 1 | 0 | 0 | 0 | 0 |
| 128 | 10.4 | Special Protection Areas (SPA) | 0 | 0 | 0 | 0 | 0 |
| 128 | 10.5 | National Nature Reserves (NNR) | 0 | 0 | 0 | 0 | 0 |
| 128 | 10.6 | Local Nature Reserves (LNR) | 0 | 0 | 0 | 0 | 0 |
| 128 | 10.7 | Designated Ancient Woodland | 0 | 0 | 0 | 0 | 22 |
| 129 | 10.8 | Biosphere Reserves | 0 | 0 | 0 | 0 | 0 |
| 130 | 10.9 | Forest Parks | 0 | 0 | 0 | 0 | 0 |
| 130 | 10.10 | Marine Conservation Zones | 0 | 0 | 0 | 0 | 0 |
| 130 | 10.11 | Green Belt | 0 | 0 | 0 | 0 | 1 |
| 130 | 10.12 | Proposed Ramsar sites | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 131 | 10.13 | Possible Special Areas of Conservation (pSAC) | 0 | 0 | 0 | 0 | 0 |
| 131 | 10.14 | Potential Special Protection Areas (pSPA) | 0 | 0 | 0 | 0 | 0 |
| 131 | 10.15 | Nitrate Sensitive Areas | 0 | 0 | 0 | 0 | 0 |
| **131** | **10.16** | **Nitrate Vulnerable Zones** | 0 | 0 | 0 | 0 | 4 |
| **133** | **10.17** | **SSSI Impact Risk Zones** | 2 | - | - | - | - |
| 134 | 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 |
| 135 | 11.1 | World Heritage Sites | 0 | 0 | 0 | - | - |
| 136 | 11.2 | Area of Outstanding Natural Beauty | 0 | 0 | 0 | - | - |
| 136 | 11.3 | National Parks | 0 | 0 | 0 | - | - |
| **136** | **11.4** | **Listed Buildings** | 0 | 0 | 1 | - | - |
| 137 | 11.5 | Conservation Areas | 0 | 0 | 0 | - | - |
| 137 | 11.6 | Scheduled Ancient Monuments | 0 | 0 | 0 | - | - |
| 137 | 11.7 | Registered Parks and Gardens | 0 | 0 | 0 | - | - |
| Page | Section | Agricultural designations | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| **138** | **12.1** | **Agricultural Land Classification** | Grade 3a (within 250m) | | | | |
| 139 | 12.2 | Open Access Land | 0 | 0 | 0 | - | - |
| 139 | 12.3 | Tree Felling Licences | 0 | 0 | 0 | - | - |
| 139 | 12.4 | Environmental Stewardship Schemes | 0 | 0 | 0 | - | - |
| 139 | 12.5 | Countryside Stewardship Schemes | 0 | 0 | 0 | - | - |
| Page | Section | Habitat designations | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 140 | 13.1 | Priority Habitat Inventory | 0 | 0 | 0 | - | - |
| 140 | 13.2 | Habitat Networks | 0 | 0 | 0 | - | - |
| 140 | 13.3 | Open Mosaic Habitat | 0 | 0 | 0 | - | - |
| 140 | 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 |
| **141** | **14.1** | **10k Availability** | Identified (within 500m) | | | | |
| 142 | 14.2 | Artificial and made ground (10k) | 0 | 0 | 0 | 0 | - |
| 143 | 14.3 | Superficial geology (10k) | 0 | 0 | 0 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 143 | 14.4 | Landslip (10k) | 0 | 0 | 0 | 0 | - |
| 144 | 14.5 | Bedrock geology (10k) | 0 | 0 | 0 | 0 | - |
| 144 | 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 |
| 145 | 15.1 | 50k Availability | Identified (within 500m) | | | | |
| 146 | 15.2 | Artificial and made ground (50k) | 2 | 0 | 0 | 1 | - |
| 147 | 15.3 | Artificial ground permeability (50k) | 3 | 0 | - | - | - |
| 148 | 15.4 | Superficial geology (50k) | 2 | 0 | 0 | 0 | - |
| 149 | 15.5 | Superficial permeability (50k) | Identified (within 50m) | | | | |
| 149 | 15.6 | Landslip (50k) | 0 | 0 | 0 | 0 | - |
| 149 | 15.7 | Landslip permeability (50k) | None (within 50m) | | | | |
| 150 | 15.8 | Bedrock geology (50k) | 6 | 2 | 2 | 3 | - |
| 151 | 15.9 | Bedrock permeability (50k) | Identified (within 50m) | | | | |
| 152 | 15.10 | Bedrock faults and other linear features (50k) | 4 | 3 | 1 | 3 | - |
| Page | Section | Boreholes | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 153 | 16.1 | BGS Boreholes | 2 | 20 | 42 | - | - |
| Page | Section | Natural ground subsidence | | | | | |
| 157 | 17.1 | Shrink swell clays | Very low (within 50m) | | | | |
| 158 | 17.2 | Running sands | Moderate (within 50m) | | | | |
| 160 | 17.3 | Compressible deposits | Moderate (within 50m) | | | | |
| 162 | 17.4 | Collapsible deposits | Very low (within 50m) | | | | |
| 163 | 17.5 | Landslides | Very low (within 50m) | | | | |
| 164 | 17.6 | Ground dissolution of soluble rocks | Negligible (within 50m) | | | | |
| Page | Section | Mining, ground workings and natural cavities | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
| 166 | 18.1 | Natural cavities | 0 | 0 | 0 | 0 | - |
| 167 | 18.2 | BritPits | 0 | 0 | 1 | 0 | - |
| 167 | 18.3 | Surface ground workings | 2 | 10 | 1 | - | - |
| 168 | 18.4 | Underground workings | 0 | 0 | 0 | 1 | 39 |
| 169 | 18.5 | Historical Mineral Planning Areas | 0 | 0 | 0 | 0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **170** | **18.6** | **Non-coal mining** | 2 | 1 | 0 | 0 | 0 |
| 170 | 18.7 | Mining cavities | 0 | 0 | 0 | 0 | 0 |
| **170** | **18.8** | **JPB mining areas** | Identified (within 0m) | | | | |
| **171** | **18.9** | **Coal mining** | Identified (within 0m) | | | | |
| 171 | 18.10 | Brine areas | None (within 0m) | | | | |
| 171 | 18.11 | Gypsum areas | None (within 0m) | | | | |
| 172 | 18.12 | Tin mining | None (within 0m) | | | | |
| 172 | 18.13 | Clay mining | None (within 0m) | | | | |

| Page | Section | Radon | |
|---|---|---|---|
| **173** | **19.1** | **Radon** | Between 10% and 30% (within 0m) |

| Page | Section | Soil chemistry | On site | 0-50m | 50-250m | 250-500m | 500-2000m |
|---|---|---|---|---|---|---|---|
| **175** | **20.1** | **BGS Estimated Background Soil Chemistry** | 26 | 13 | - | - | - |
| 176 | 20.2 | BGS Estimated Urban Soil Chemistry | 0 | 0 | - | - | - |
| 177 | 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 |
|---|---|---|---|---|---|---|---|
| 178 | 21.1 | Underground railways (London) | 0 | 0 | 0 | - | - |
| 178 | 21.2 | Underground railways (Non-London) | 0 | 0 | 0 | - | - |
| 179 | 21.3 | Railway tunnels | 0 | 0 | 0 | - | - |
| **179** | **21.4** | **Historical railway and tunnel features** | 3 | 0 | 5 | - | - |
| 179 | 21.5 | Royal Mail tunnels | 0 | 0 | 0 | - | - |
| 180 | 21.6 | Historical railways | 0 | 0 | 0 | - | - |
| **180** | **21.7** | **Railways** | 3 | 0 | 1 | - | - |
| 180 | 21.8 | Crossrail 1 | 0 | 0 | 0 | 0 | - |
| 180 | 21.9 | Crossrail 2 | 0 | 0 | 0 | 0 | - |
| 181 | 21.10 | HS2 | 0 | 0 | 0 | 0 | - |

## Recent aerial photograph




Capture Date: 10/04/2020

Site Area: 58.76ha

# Recent site history - 2017 aerial photograph




Capture Date: 07/05/2017

Site Area: 58.76ha

# Recent site history - 2013 aerial photograph




Capture Date: 04/06/2013

Site Area: 58.76ha

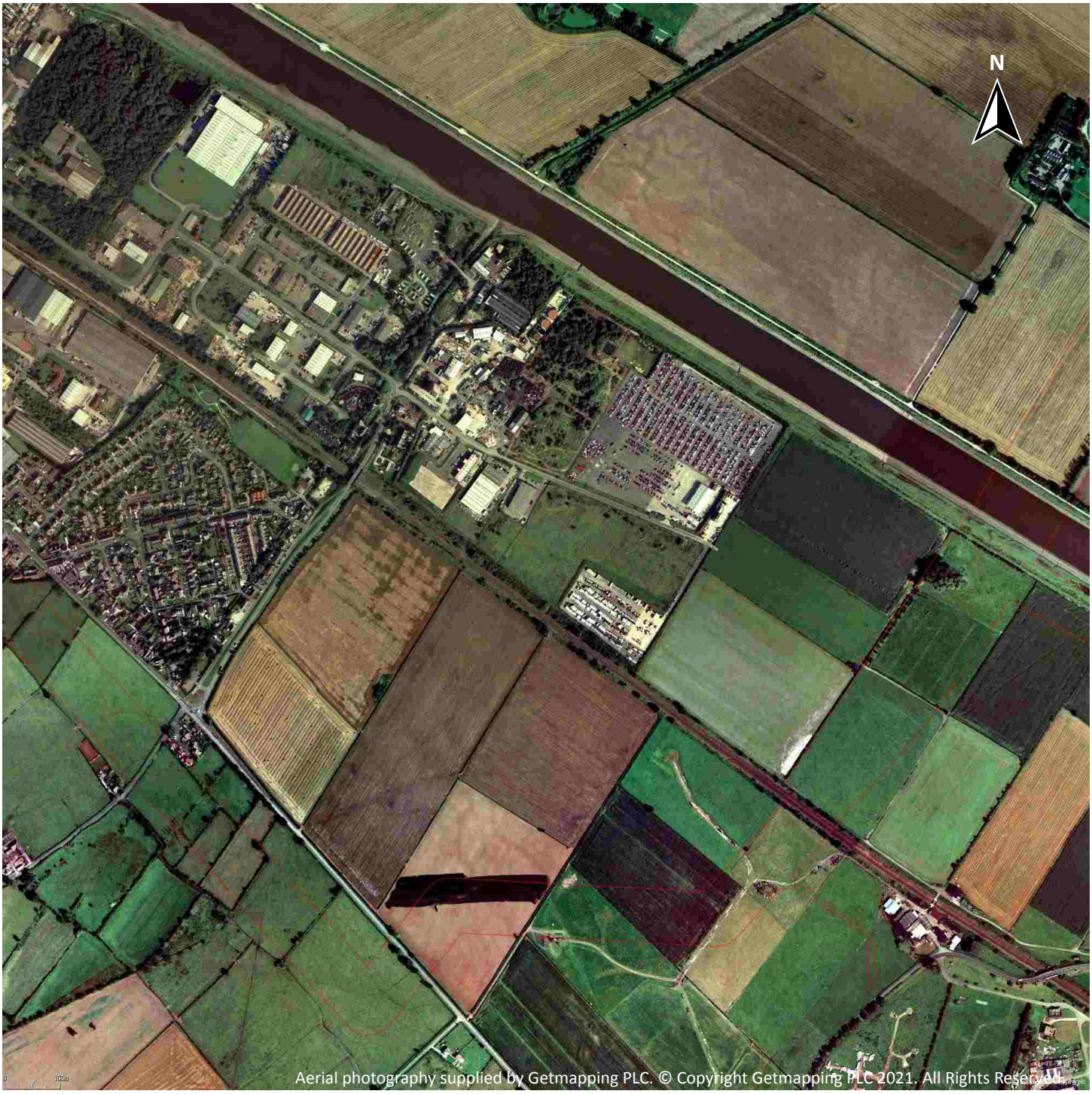
# Recent site history - 2009 aerial photograph




Capture Date: 20/04/2009

Site Area: 58.76ha

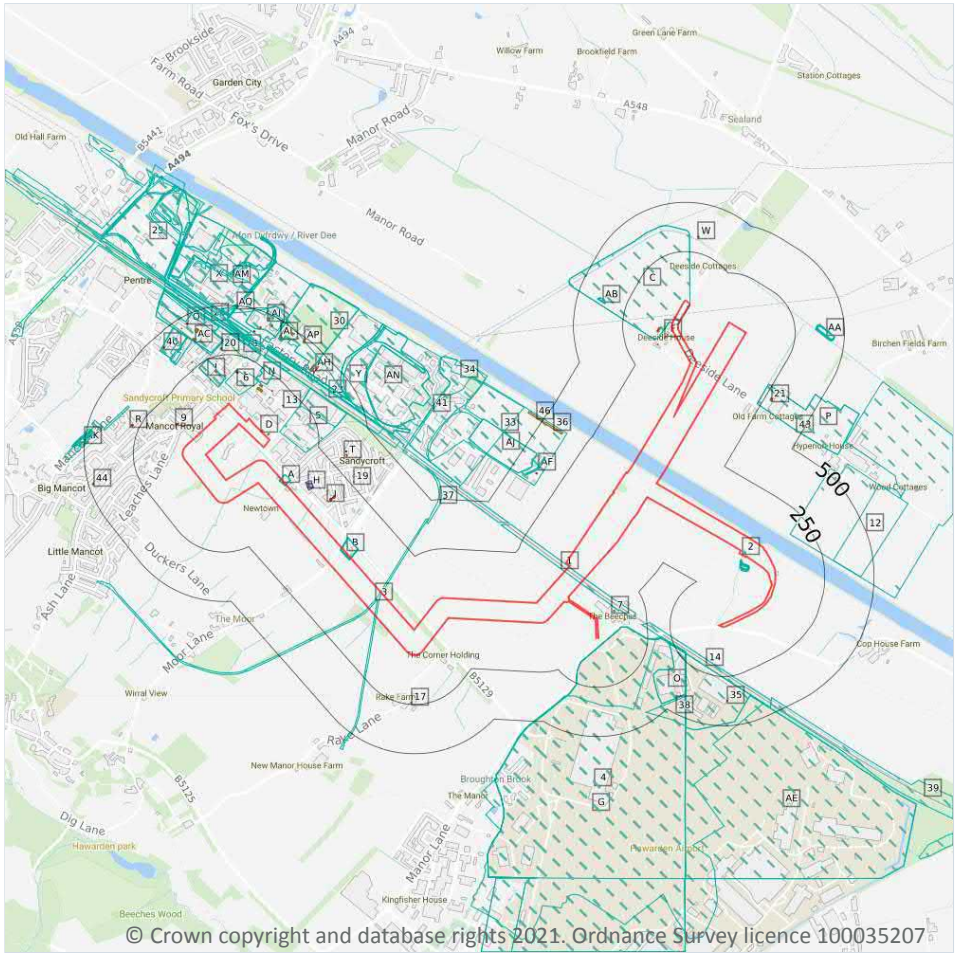
# Recent site history - 2000 aerial photograph




Capture Date: 25/08/2000

Site Area: 58.76ha

# 1 Past land use




Site Outline

Search buffers in metres (m)

Historical industrial land uses

Historical tanks

Historical energy features

Historical garages

## 1.1 Historical industrial land uses

| Records within 500m | 114 |
|---|---|

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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| **1** | **On site** | **Railway Sidings** | **1898** | **794483** |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| **2** | **On site** | **Unspecified Tank** | **1938** | **823907** |
| **3** | **On site** | **Railway Sidings** | **1869** | **899983** |
| **A** | **On site** | **Unspecified Works** | **1976** | **887739** |
| **A** | **On site** | **Unspecified Works** | **1989** | **850953** |
| **B** | **On site** | **Engineering Works** | **1948** | **811583** |
| **B** | **On site** | **Unspecified Works** | **1960** | **913883** |
| **B** | **On site** | **Unspecified Works** | **1969 - 1976** | **916874** |
| **B** | **On site** | **Unspecified Works** | **1989** | **917578** |
| **C** | **On site** | **Nursery** | **1976 - 1989** | **941696** |
| **C** | **On site** | **Nursery** | **1969** | **950364** |
| E | 24m SW | Unspecified Heap | 1913 | 907561 |
| E | 24m SW | Unspecified Ground Workings | 1938 | 799522 |
| E | 26m SW | Unspecified Heap | 1948 | 860027 |
| E | 30m SW | Unspecified Heap | 1938 | 909687 |
| 4 | 35m SE | Airport | 1976 | 922848 |
| G | 35m SE | Airfield | 1960 | 888073 |
| G | 35m SE | Airport | 1982 - 1989 | 906935 |
| G | 35m SE | Airfield | 1966 | 917925 |
| G | 35m SE | Airport | 1969 | 991563 |
| E | 40m SW | Unspecified Heap | 1968 - 1974 | 884408 |
| E | 40m SW | Unspecified Heap | 1989 | 878864 |
| 5 | 65m NE | Unspecified Works | 1976 | 856256 |
| 6 | 67m NE | Unspecified Works | 1969 | 830087 |
| I | 100m NW | Unspecified Depot | 1976 | 930588 |
| I | 103m NW | Unspecified Depot | 1989 | 875842 |
| 12 | 151m NE | Nursery | 1913 | 991736 |
| 14 | 180m SW | Railway Sidings | 1898 | 794485 |
| N | 185m NE | Unspecified Warehouse | 1989 | 935972 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| N | 185m NE | Unspecified Warehouse | 1976 | 984849 |
| 15 | 211m SW | Airfield | 1948 | 883826 |
| O | 221m SW | Unspecified Depot | 1989 | 918756 |
| O | 221m SW | Unspecified Depot | 1969 - 1976 | 929537 |
| P | 232m SE | Nursery | 1989 | 898994 |
| P | 232m SE | Nursery | 1968 - 1974 | 968504 |
| 16 | 233m NE | Unspecified Works | 1989 | 852609 |
| 18 | 245m N | Unspecified Works | 1969 | 830086 |
| Q | 265m N | Unspecified Works | 1989 | 892866 |
| Q | 272m N | Unspecified Works | 1976 | 872879 |
| Q | 275m N | Unspecified Works | 1969 | 985990 |
| 23 | 295m NE | Cuttings | 1948 | 795368 |
| 24 | 300m E | Nursery | 1914 - 1938 | 970522 |
| 25 | 300m NE | Railway Sidings | 1898 | 855202 |
| S | 301m NE | Unspecified Pit | 1914 | 839205 |
| 26 | 302m NE | Unspecified Pit | 1914 | 839209 |
| 27 | 324m N | Railway Sidings | 1914 | 929950 |
| 28 | 326m N | Railway Sidings | 1869 - 1898 | 947817 |
| U | 326m NE | Cuttings | 1960 | 795402 |
| V | 327m NW | Disused Wire Works | 1869 | 832059 |
| 29 | 334m N | Railway Sidings | 1938 | 986490 |
| S | 336m NE | Unspecified Pit | 1914 | 839206 |
| U | 336m NE | Unspecified Pit | 1914 | 839204 |
| X | 337m N | Railway Sidings | 1960 | 917177 |
| X | 337m N | Railway Sidings | 1969 | 957506 |
| 30 | 337m N | Railway Sidings | 1948 | 940526 |
| V | 339m NW | Corn Mill | 1898 | 904360 |
| Y | 340m NE | Railway Sidings | 1989 | 868782 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| Y | 340m NE | Railway Sidings | 1960 | 890455 |
| Y | 340m NE | Railway Sidings | 1969 - 1976 | 961262 |
| Z | 343m N | Railway Sidings | 1909 | 977985 |
| 31 | 343m N | Railway Building | 1938 | 819511 |
| 32 | 347m NW | Railway Sidings | 1869 | 794484 |
| U | 348m N | Unspecified Pit | 1914 | 839208 |
| 33 | 352m NW | Unspecified Works | 1969 | 987999 |
| AA | 354m E | Unspecified Heap | 1968 | 978284 |
| AB | 355m W | Sand Pit | 1909 | 961741 |
| AB | 355m W | Sand Pit | 1938 - 1948 | 981430 |
| 34 | 356m NW | Railway Sidings | 1898 | 876090 |
| AB | 356m W | Sand Pit | 1914 | 868588 |
| AB | 356m W | Sand Pit | 1960 | 989384 |
| AA | 358m E | Unspecified Heap | 1898 | 910295 |
| AA | 358m E | Unspecified Heap | 1938 | 940750 |
| AA | 359m E | Unspecified Heap | 1974 | 846700 |
| AA | 359m E | Unspecified Heap | 1989 | 921857 |
| AD | 366m NW | Unspecified Depot | 1976 | 870383 |
| AD | 366m NW | Unspecified Depot | 1989 | 892504 |
| U | 370m NE | Unspecified Factory | 1960 | 821305 |
| AE | 370m S | Aircraft Factory | 1974 - 1989 | 861247 |
| AE | 370m S | Aircraft Factory | 1968 | 976461 |
| AF | 381m NW | Unspecified Ground Workings | 1969 - 1976 | 963060 |
| AF | 381m NW | Unspecified Ground Workings | 1989 | 985605 |
| 37 | 385m N | Railway Sidings | 1869 | 906651 |
| AG | 389m NE | Unspecified Works | 1976 | 982976 |
| AG | 390m NE | Unspecified Works | 1989 | 881656 |
| 38 | 402m SW | Unspecified Depot | 1969 | 818227 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| AI | 405m N | Unspecified Depot | 1989 | 920251 |
| AI | 405m N | Unspecified Depot | 1969 - 1976 | 984152 |
| AJ | 413m NW | Unspecified Works | 1989 | 909456 |
| AJ | 415m NW | Unspecified Works | 1976 | 858592 |
| AK | 424m W | Colliery | 1869 | 798229 |
| 39 | 424m SE | Railway Sidings | 1898 | 944426 |
| AM | 445m N | Engineering Works | 1909 - 1914 | 974477 |
| AI | 446m NE | Cheese Factory | 1938 - 1948 | 939848 |
| AM | 446m N | Unspecified Works | 1938 - 1948 | 981335 |
| 41 | 447m NE | Unspecified Works | 1960 | 970833 |
| Z | 449m N | Unspecified Works | 1969 | 939017 |
| 42 | 451m N | Unspecified Works | 1960 | 855852 |
| AN | 457m NE | Unspecified Depot | 1989 | 872045 |
| AN | 457m NE | Unspecified Depot | 1969 - 1976 | 922778 |
| AK | 464m W | Unspecified Heap | 1869 | 857554 |
| AK | 470m W | Unspecified Heap | 1898 | 892564 |
| AO | 470m NW | Sawmill | 1948 | 808343 |
| AI | 471m NE | Unspecified Tank | 1976 | 858773 |
| AK | 471m W | Unspecified Heap | 1948 | 956585 |
| AK | 472m W | Unspecified Heap | 1909 | 989551 |
| AK | 472m W | Unspecified Heap | 1960 | 955709 |
| AI | 472m NE | Unspecified Tank | 1989 | 882250 |
| AO | 473m NW | Unspecified Mill | 1960 | 810203 |
| AI | 474m NE | Unspecified Tank | 1969 | 926462 |
| AK | 479m W | Unspecified Ground Workings | 1938 | 897047 |
| AQ | 483m N | Unspecified Works | 1969 | 940565 |
| AQ | 489m N | Engine Shed | 1909 - 1914 | 903518 |
| AQ | 489m N | Engine Shed | 1938 | 929283 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| AQ | 490m N | Engine Shed | 1948 | 902516 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.2 Historical tanks

| **Records within 500m** | **61** |
|---|---|

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| **A** | **On site** | **Unspecified Tank** | **1981** | **111672** |
| D | 8m NE | Unspecified Tank | 1981 - 1992 | 138105 |
| D | 11m NE | Unspecified Tank | 1992 | 111673 |
| F | 31m SW | Unspecified Tank | 1911 | 111654 |
| F | 46m SW | Unspecified Tank | 1911 | 111655 |
| F | 61m W | Tanks | 1992 - 1999 | 145229 |
| F | 62m W | Unspecified Tank | 1965 | 111652 |
| F | 62m W | Unspecified Tank | - | 104342 |
| F | 68m W | Unspecified Tank | 1965 | 111653 |
| F | 68m W | Unspecified Tank | - | 104386 |
| 7 | 90m NE | Unspecified Tank | 1993 | 145075 |
| 8 | 97m SW | Unspecified Tank | 1999 | 111656 |
| 10 | 135m E | Unspecified Tank | 1965 - 1992 | 132408 |
| 11 | 140m N | Unspecified Tank | 1981 - 1984 | 132085 |
| K | 146m NE | Unspecified Tank | 1981 - 1992 | 125184 |
| L | 149m NE | Tanks | 1992 | 104611 |
| L | 149m NE | Unspecified Tank | 1981 | 111676 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| I | 152m NW | Unspecified Tank | 1981 - 1993 | 123356 |
| L | 154m N | Unspecified Tank | 1981 | 111675 |
| L | 170m N | Tanks | 1969 | 104609 |
| I | 173m N | Tanks | 1981 - 1984 | 123726 |
| M | 174m NE | Tanks | 1962 - 1969 | 139550 |
| L | 175m N | Tanks | 1969 | 104608 |
| 17 | 239m S | Unspecified Tank | 1993 | 134292 |
| 19 | 266m NE | Unspecified Tank | 1911 | 111671 |
| N | 266m NE | Tanks | 1993 | 104610 |
| 20 | 277m N | Tanks | 1984 - 1993 | 143263 |
| 21 | 278m SE | Unspecified Tank | 1965 - 1993 | 131984 |
| 22 | 282m NW | Unspecified Tank | 1981 - 1995 | 126045 |
| W | 330m N | Unspecified Tank | 1965 - 1992 | 126628 |
| W | 330m N | Unspecified Tank | 1984 | 139455 |
| AC | 364m NW | Tanks | 1981 | 139798 |
| AC | 364m NW | Tanks | 1984 | 122815 |
| AC | 365m NW | Tanks | 1993 | 135609 |
| 35 | 370m S | Unspecified Tank | 1993 | 134038 |
| AC | 374m NW | Tanks | 1993 | 131546 |
| AC | 376m NW | Unspecified Tank | 1981 | 111764 |
| 36 | 380m NW | Unspecified Tank | 1992 - 1999 | 144463 |
| AC | 396m NW | Tanks | 1984 - 1993 | 136717 |
| AC | 398m NW | Tanks | 1981 | 134728 |
| U | 412m N | Unspecified Tank | 1981 - 1993 | 134714 |
| AL | 427m NE | Tanks | 1993 | 140270 |
| AL | 428m NE | Tanks | 1993 | 134080 |
| AL | 429m NE | Tanks | 1984 | 142945 |
| AL | 429m NE | Tanks | 1981 | 145137 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| AL | 430m NE | Tanks | 1984 | 146813 |
| AL | 430m NE | Tanks | 1981 | 140843 |
| Q | 446m NW | Unspecified Tank | 1981 - 1995 | 129637 |
| AI | 447m NE | Tanks | 1984 | 145107 |
| Q | 450m NW | Unspecified Tank | 1981 | 142759 |
| Q | 451m NW | Unspecified Tank | 1995 | 135792 |
| AI | 453m NE | Tanks | 1993 | 139164 |
| AI | 455m NE | Tanks | 1981 | 137883 |
| AI | 471m NE | Unspecified Tank | 1962 - 1969 | 122394 |
| AP | 473m NE | Tanks | 1969 - 1983 | 132559 |
| AP | 473m NE | Unspecified Tank | 1988 | 147167 |
| AP | 473m NE | Unspecified Tank | 1969 - 1983 | 131426 |
| AP | 475m NE | Unspecified Tank | 1969 - 1992 | 124339 |
| AP | 476m NE | Unspecified Tank | 1992 | 148133 |
| 45 | 487m N | Tanks | 1981 - 1984 | 147347 |
| 46 | 493m NW | Unspecified Tank | 1992 - 1999 | 135902 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 1.3 Historical energy features

**Records within 500m** **19**

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| 9 | 108m NW | Electricity Substation | 1981 - 1995 | 73909 |
| J | 115m NE | Electricity Substation | 1992 - 1993 | 72666 |

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| J | 116m NE | Electricity Substation | 1981 | 64896 |
| M | 161m N | Electricity Substation | 1993 | 76963 |
| M | 162m N | Electricity Substation | 1969 - 1984 | 68467 |
| 13 | 170m NE | Electricity Substation | 1992 | 60061 |
| K | 180m NE | Electricity Substation | 1992 | 60062 |
| R | 283m NW | Electricity Substation | 1969 - 1995 | 75857 |
| R | 283m NW | Electricity Substation | 1981 | 83718 |
| T | 326m NE | Electricity Substation | 1981 | 60060 |
| T | 336m NE | Electricity Substation | 1969 - 1988 | 76540 |
| AF | 373m NW | Electricity Substation | 1992 - 1999 | 75768 |
| U | 383m N | Electricity Substation | 1969 - 1993 | 71886 |
| AH | 393m NE | Electricity Substation | 1983 - 1988 | 78913 |
| AH | 408m NE | Electricity Substation | 1992 | 80472 |
| 40 | 432m NW | Electricity Substation | 1981 - 1995 | 72124 |
| Q | 454m NW | Electricity Substation | 1981 - 1995 | 79243 |
| 43 | 467m SE | Electricity Substation | 1988 - 1993 | 70379 |
| 44 | 475m W | Electricity Substation | 1980 | 60058 |

*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 un-grouped 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 | 3 |
|---|---|

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 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 13**

| ID | Location | Land use | Dates present | Group ID |
|---|---|---|---|---|
| H | 68m NE | Garage | 1981 | 23460 |
| H | 80m NE | Garage | 1992 - 1993 | 24874 |
| H | 81m NE | Garage | 1981 | 20076 |

*This data is sourced from Ordnance Survey / Groundsure.*

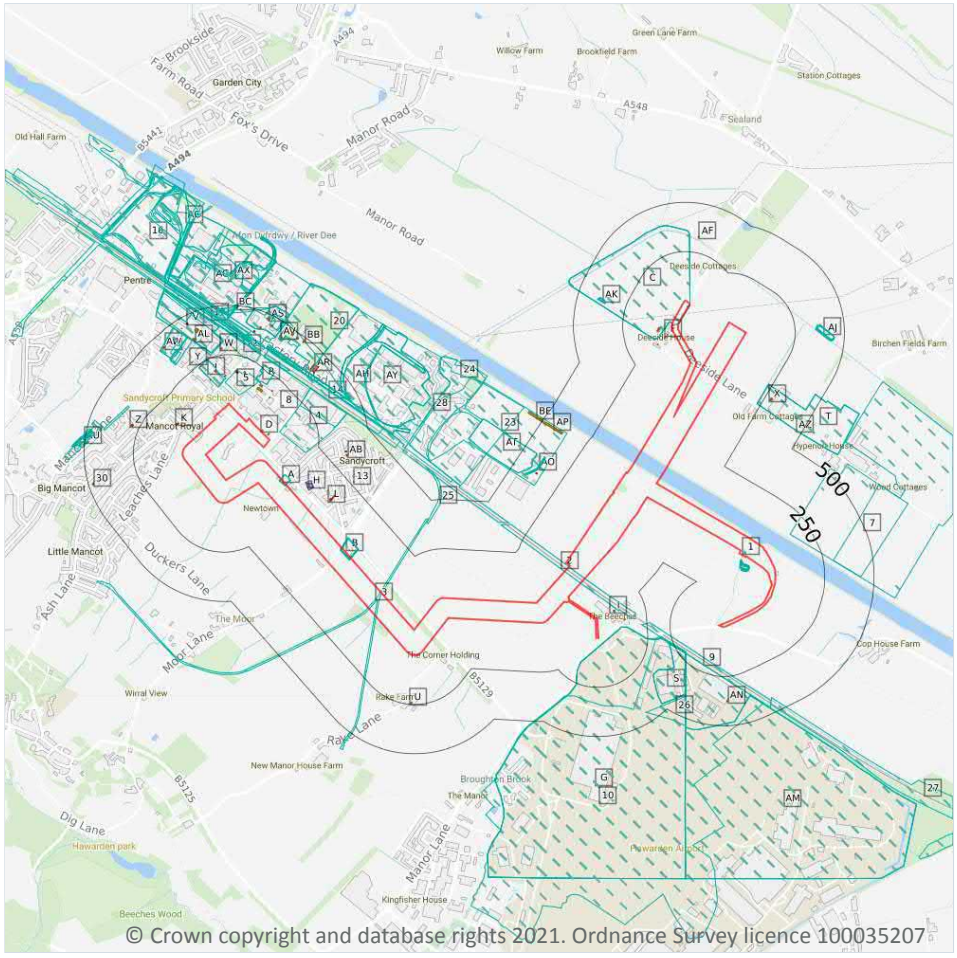
## 1.6 Historical military land

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

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.

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

# 2 Past land use - un-grouped



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## 2.1 Historical industrial land uses

| Records within 500m | 134 |
|---|---|

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 23**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| **1** | **On site** | **Unspecified Tank** | **1938** | **823907** |
| **2** | **On site** | **Railway Sidings** | **1898** | **794483** |
| **3** | **On site** | **Railway Sidings** | **1869** | **899983** |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| **A** | **On site** | **Unspecified Works** | **1989** | **850953** |
| **A** | **On site** | **Unspecified Works** | **1976** | **887739** |
| **B** | **On site** | **Unspecified Works** | **1969** | **916874** |
| **B** | **On site** | **Unspecified Works** | **1989** | **917578** |
| **B** | **On site** | **Unspecified Works** | **1976** | **916874** |
| **B** | **On site** | **Unspecified Works** | **1960** | **913883** |
| **B** | **On site** | **Engineering Works** | **1948** | **811583** |
| **C** | **On site** | **Nursery** | **1969** | **950364** |
| **C** | **On site** | **Nursery** | **1989** | **941696** |
| **C** | **On site** | **Nursery** | **1976** | **941696** |
| E | 24m SW | Unspecified Heap | 1913 | 907561 |
| E | 24m SW | Unspecified Heap | 1913 | 907561 |
| E | 24m SW | Unspecified Ground Workings | 1938 | 799522 |
| E | 26m SW | Unspecified Heap | 1948 | 860027 |
| E | 29m SW | Unspecified Heap | 1948 | 860027 |
| E | 30m SW | Unspecified Heap | 1938 | 909687 |
| E | 30m SW | Unspecified Heap | 1938 | 909687 |
| G | 35m SE | Airport | 1969 | 991563 |
| G | 35m SE | Airport | 1989 | 906935 |
| G | 35m SE | Airport | 1976 | 922848 |
| G | 35m SE | Airfield | 1960 | 888073 |
| E | 40m SW | Unspecified Heap | 1989 | 878864 |
| E | 40m SW | Unspecified Heap | 1974 | 884408 |
| E | 40m SW | Unspecified Heap | 1968 | 884408 |
| 4 | 65m NE | Unspecified Works | 1976 | 856256 |
| 5 | 67m NE | Unspecified Works | 1969 | 830087 |
| J | 100m NW | Unspecified Depot | 1976 | 930588 |
| J | 103m NW | Unspecified Depot | 1989 | 875842 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| 7 | 151m NE | Nursery | 1913 | 991736 |
| 9 | 180m SW | Railway Sidings | 1898 | 794485 |
| R | 185m NE | Unspecified Warehouse | 1989 | 935972 |
| R | 185m NE | Unspecified Warehouse | 1976 | 984849 |
| 10 | 211m SW | Airfield | 1948 | 883826 |
| S | 221m SW | Unspecified Depot | 1969 | 929537 |
| S | 221m SW | Unspecified Depot | 1989 | 918756 |
| S | 221m SW | Unspecified Depot | 1976 | 929537 |
| T | 232m SE | Nursery | 1989 | 898994 |
| T | 232m SE | Nursery | 1974 | 968504 |
| T | 232m SE | Nursery | 1968 | 968504 |
| 11 | 233m NE | Unspecified Works | 1989 | 852609 |
| 12 | 245m N | Unspecified Works | 1969 | 830086 |
| V | 265m N | Unspecified Works | 1989 | 892866 |
| V | 272m N | Unspecified Works | 1976 | 872879 |
| V | 275m N | Unspecified Works | 1969 | 985990 |
| 14 | 295m NE | Cuttings | 1948 | 795368 |
| 15 | 300m E | Nursery | 1938 | 970522 |
| 16 | 300m NE | Railway Sidings | 1898 | 855202 |
| AA | 301m NE | Unspecified Pit | 1914 | 839205 |
| 17 | 302m NE | Unspecified Pit | 1914 | 839209 |
| 18 | 324m N | Railway Sidings | 1914 | 929950 |
| AC | 326m N | Railway Sidings | 1869 | 947817 |
| AD | 326m NE | Cuttings | 1960 | 795402 |
| AE | 327m NW | Disused Wire Works | 1869 | 832059 |
| 19 | 334m N | Railway Sidings | 1938 | 986490 |
| AA | 336m NE | Unspecified Pit | 1914 | 839206 |
| AD | 336m NE | Unspecified Pit | 1914 | 839204 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AG | 337m N | Railway Sidings | 1969 | 957506 |
| AG | 337m N | Railway Sidings | 1960 | 917177 |
| 20 | 337m N | Railway Sidings | 1948 | 940526 |
| AE | 339m NW | Corn Mill | 1898 | 904360 |
| AH | 340m NE | Railway Sidings | 1969 | 961262 |
| AH | 340m NE | Railway Sidings | 1989 | 868782 |
| AH | 340m NE | Railway Sidings | 1976 | 961262 |
| AH | 340m NE | Railway Sidings | 1960 | 890455 |
| AI | 343m N | Railway Sidings | 1909 | 977985 |
| 21 | 343m N | Railway Building | 1938 | 819511 |
| 22 | 347m NW | Railway Sidings | 1869 | 794484 |
| AD | 348m N | Unspecified Pit | 1914 | 839208 |
| AC | 348m N | Railway Sidings | 1898 | 947817 |
| 23 | 352m NW | Unspecified Works | 1969 | 987999 |
| AJ | 354m E | Unspecified Heap | 1968 | 978284 |
| AK | 355m W | Sand Pit | 1948 | 981430 |
| AK | 355m W | Sand Pit | 1909 | 961741 |
| 24 | 356m NW | Railway Sidings | 1898 | 876090 |
| AK | 356m W | Sand Pit | 1914 | 868588 |
| AK | 356m W | Sand Pit | 1960 | 989384 |
| AK | 358m W | Sand Pit | 1938 | 981430 |
| AJ | 358m E | Unspecified Heap | 1938 | 940750 |
| AJ | 358m E | Unspecified Heap | 1898 | 910295 |
| AJ | 359m E | Unspecified Heap | 1989 | 921857 |
| AJ | 359m E | Unspecified Heap | 1974 | 846700 |
| AE | 360m NW | Corn Mill | 1898 | 904360 |
| AE | 366m NW | Unspecified Depot | 1989 | 892504 |
| AE | 366m NW | Unspecified Depot | 1976 | 870383 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AD | 370m NE | Unspecified Factory | 1960 | 821305 |
| AM | 370m S | Aircraft Factory | 1989 | 861247 |
| AM | 370m S | Aircraft Factory | 1974 | 861247 |
| AM | 370m S | Aircraft Factory | 1968 | 976461 |
| AO | 381m NW | Unspecified Ground Workings | 1969 | 963060 |
| AO | 381m NW | Unspecified Ground Workings | 1989 | 985605 |
| AO | 381m NW | Unspecified Ground Workings | 1976 | 963060 |
| 25 | 385m N | Railway Sidings | 1869 | 906651 |
| AQ | 389m NE | Unspecified Works | 1976 | 982976 |
| AQ | 390m NE | Unspecified Works | 1989 | 881656 |
| 26 | 402m SW | Unspecified Depot | 1969 | 818227 |
| AS | 405m N | Unspecified Depot | 1969 | 984152 |
| AS | 405m N | Unspecified Depot | 1989 | 920251 |
| AS | 405m N | Unspecified Depot | 1976 | 984152 |
| AT | 413m NW | Unspecified Works | 1989 | 909456 |
| AT | 415m NW | Unspecified Works | 1976 | 858592 |
| AU | 424m W | Colliery | 1869 | 798229 |
| 27 | 424m SE | Railway Sidings | 1898 | 944426 |
| AX | 445m N | Engineering Works | 1909 | 974477 |
| AS | 446m NE | Cheese Factory | 1938 | 939848 |
| AX | 446m N | Unspecified Works | 1948 | 981335 |
| AS | 447m NE | Cheese Factory | 1948 | 939848 |
| 28 | 447m NE | Unspecified Works | 1960 | 970833 |
| AI | 449m N | Unspecified Works | 1969 | 939017 |
| AX | 449m N | Engineering Works | 1914 | 974477 |
| 29 | 451m N | Unspecified Works | 1960 | 855852 |
| AY | 457m NE | Unspecified Depot | 1969 | 922778 |
| AY | 457m NE | Unspecified Depot | 1989 | 872045 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AY | 457m NE | Unspecified Depot | 1976 | 922778 |
| AX | 461m N | Unspecified Works | 1938 | 981335 |
| AU | 464m W | Unspecified Heap | 1869 | 857554 |
| AU | 470m W | Unspecified Heap | 1898 | 892564 |
| BA | 470m NW | Sawmill | 1948 | 808343 |
| AS | 471m NE | Unspecified Tank | 1976 | 858773 |
| AU | 471m W | Unspecified Heap | 1948 | 956585 |
| AU | 472m W | Unspecified Heap | 1909 | 989551 |
| AU | 472m W | Unspecified Heap | 1960 | 955709 |
| AS | 472m NE | Unspecified Tank | 1989 | 882250 |
| BA | 473m NW | Unspecified Mill | 1960 | 810203 |
| AS | 474m NE | Unspecified Tank | 1969 | 926462 |
| AU | 479m W | Unspecified Ground Workings | 1938 | 897047 |
| AU | 479m W | Unspecified Ground Workings | 1938 | 897047 |
| BC | 483m N | Unspecified Works | 1969 | 940565 |
| BC | 489m N | Engine Shed | 1909 | 903518 |
| BC | 489m N | Engine Shed | 1938 | 929283 |
| BC | 490m N | Engine Shed | 1948 | 902516 |
| BC | 494m N | Engine Shed | 1914 | 903518 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.2 Historical tanks

| **Records within 500m** | **92** |
|---|---|

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 23**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| **A** | **On site** | **Unspecified Tank** | **1981** | **111672** |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| D | 8m NE | Unspecified Tank | 1992 | 138105 |
| D | 8m NE | Unspecified Tank | 1981 | 138105 |
| D | 11m NE | Unspecified Tank | 1992 | 111673 |
| F | 31m SW | Unspecified Tank | 1911 | 111654 |
| F | 46m SW | Unspecified Tank | 1911 | 111655 |
| F | 61m W | Tanks | 1999 | 145229 |
| F | 62m W | Unspecified Tank | 1965 | 111652 |
| F | 62m W | Unspecified Tank | - | 104342 |
| F | 64m W | Tanks | 1992 | 145229 |
| F | 68m W | Unspecified Tank | 1965 | 111653 |
| F | 68m W | Unspecified Tank | - | 104386 |
| I | 90m NE | Unspecified Tank | 1993 | 145075 |
| I | 90m NE | Unspecified Tank | 1993 | 145075 |
| 6 | 97m SW | Unspecified Tank | 1999 | 111656 |
| M | 135m E | Unspecified Tank | 1992 | 132408 |
| M | 136m E | Unspecified Tank | 1965 | 132408 |
| N | 140m N | Unspecified Tank | 1981 | 132085 |
| N | 141m N | Unspecified Tank | 1984 | 132085 |
| O | 146m NE | Unspecified Tank | 1981 | 125184 |
| O | 147m NE | Unspecified Tank | 1992 | 125184 |
| P | 149m NE | Tanks | 1992 | 104611 |
| P | 149m NE | Unspecified Tank | 1981 | 111676 |
| J | 152m NW | Unspecified Tank | 1993 | 123356 |
| J | 153m NW | Unspecified Tank | 1981 | 123356 |
| J | 154m NW | Unspecified Tank | 1984 | 123356 |
| P | 154m N | Unspecified Tank | 1981 | 111675 |
| P | 170m N | Tanks | 1969 | 104609 |
| J | 173m N | Tanks | 1981 | 123726 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| J | 173m N | Tanks | 1984 | 123726 |
| Q | 174m NE | Tanks | 1962 | 139550 |
| Q | 174m NE | Tanks | 1969 | 139550 |
| P | 175m N | Tanks | 1969 | 104608 |
| U | 239m S | Unspecified Tank | 1993 | 134292 |
| U | 239m S | Unspecified Tank | 1993 | 134292 |
| 13 | 266m NE | Unspecified Tank | 1911 | 111671 |
| R | 266m NE | Tanks | 1993 | 104610 |
| W | 277m N | Tanks | 1993 | 143263 |
| X | 278m SE | Unspecified Tank | 1988 | 131984 |
| W | 278m N | Tanks | 1984 | 143263 |
| X | 280m SE | Unspecified Tank | 1993 | 131984 |
| X | 280m SE | Unspecified Tank | 1993 | 131984 |
| X | 280m SE | Unspecified Tank | 1965 | 131984 |
| Y | 282m NW | Unspecified Tank | 1981 | 126045 |
| Y | 282m NW | Unspecified Tank | 1995 | 126045 |
| AF | 330m N | Unspecified Tank | 1984 | 139455 |
| AF | 330m N | Unspecified Tank | 1992 | 126628 |
| AF | 330m N | Unspecified Tank | 1965 | 126628 |
| AL | 364m NW | Tanks | 1981 | 139798 |
| AL | 364m NW | Tanks | 1984 | 122815 |
| AL | 365m NW | Tanks | 1993 | 135609 |
| AN | 370m S | Unspecified Tank | 1993 | 134038 |
| AN | 370m S | Unspecified Tank | 1993 | 134038 |
| AL | 374m NW | Tanks | 1993 | 131546 |
| AL | 376m NW | Unspecified Tank | 1981 | 111764 |
| AP | 380m NW | Unspecified Tank | 1999 | 144463 |
| AP | 382m NW | Unspecified Tank | 1992 | 144463 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| AL | 396m NW | Tanks | 1993 | 136717 |
| AL | 398m NW | Tanks | 1981 | 134728 |
| AL | 398m NW | Tanks | 1984 | 136717 |
| AD | 412m N | Unspecified Tank | 1993 | 134714 |
| AD | 415m N | Unspecified Tank | 1984 | 134714 |
| AD | 415m N | Unspecified Tank | 1981 | 134714 |
| AV | 427m NE | Tanks | 1993 | 140270 |
| AV | 428m NE | Tanks | 1993 | 134080 |
| AV | 429m NE | Tanks | 1984 | 142945 |
| AV | 429m NE | Tanks | 1981 | 145137 |
| AV | 430m NE | Tanks | 1984 | 146813 |
| AV | 430m NE | Tanks | 1981 | 140843 |
| V | 446m NW | Unspecified Tank | 1981 | 129637 |
| V | 447m NW | Unspecified Tank | 1995 | 129637 |
| AS | 447m NE | Tanks | 1984 | 145107 |
| V | 450m NW | Unspecified Tank | 1981 | 142759 |
| V | 451m NW | Unspecified Tank | 1995 | 135792 |
| AS | 453m NE | Tanks | 1993 | 139164 |
| AS | 455m NE | Tanks | 1981 | 137883 |
| AS | 471m NE | Unspecified Tank | 1969 | 122394 |
| AS | 471m NE | Unspecified Tank | 1962 | 122394 |
| BB | 473m NE | Tanks | 1983 | 132559 |
| BB | 473m NE | Unspecified Tank | 1988 | 147167 |
| BB | 473m NE | Tanks | 1969 | 132559 |
| BB | 473m NE | Unspecified Tank | 1969 | 131426 |
| BB | 474m NE | Unspecified Tank | 1983 | 131426 |
| BB | 475m NE | Unspecified Tank | 1992 | 124339 |
| BB | 475m NE | Unspecified Tank | 1969 | 124339 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| BB | 476m NE | Unspecified Tank | 1983 | 124339 |
| BB | 476m NE | Unspecified Tank | 1988 | 124339 |
| BB | 476m NE | Unspecified Tank | 1992 | 148133 |
| BD | 487m N | Tanks | 1981 | 147347 |
| BD | 488m N | Tanks | 1984 | 147347 |
| BE | 493m NW | Unspecified Tank | 1999 | 135902 |
| BE | 496m NW | Unspecified Tank | 1992 | 135902 |

*This data is sourced from Ordnance Survey / Groundsure.*

## 2.3 Historical energy features

| **Records within 500m** | **39** |
|---|---|

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 23**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| K | 108m NW | Electricity Substation | 1993 | 73909 |
| K | 108m NW | Electricity Substation | 1995 | 73909 |
| K | 108m NW | Electricity Substation | 1992 | 73909 |
| K | 110m NW | Electricity Substation | 1981 | 73909 |
| L | 115m NE | Electricity Substation | 1993 | 72666 |
| L | 115m NE | Electricity Substation | 1992 | 72666 |
| L | 116m NE | Electricity Substation | 1981 | 64896 |
| Q | 161m N | Electricity Substation | 1993 | 76963 |
| Q | 162m N | Electricity Substation | 1984 | 68467 |
| Q | 162m N | Electricity Substation | 1981 | 68467 |
| Q | 162m N | Electricity Substation | 1969 | 68467 |
| 8 | 170m NE | Electricity Substation | 1992 | 60061 |
| O | 180m NE | Electricity Substation | 1992 | 60062 |

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| Z | 283m NW | Electricity Substation | 1993 | 75857 |
| Z | 283m NW | Electricity Substation | 1995 | 75857 |
| Z | 283m NW | Electricity Substation | 1992 | 75857 |
| Z | 283m NW | Electricity Substation | 1981 | 83718 |
| Z | 283m NW | Electricity Substation | 1969 | 75857 |
| AB | 326m NE | Electricity Substation | 1981 | 60060 |
| AB | 336m NE | Electricity Substation | 1983 | 76540 |
| AB | 336m NE | Electricity Substation | 1988 | 76540 |
| AB | 337m NE | Electricity Substation | 1969 | 76540 |
| AO | 373m NW | Electricity Substation | 1999 | 75768 |
| AO | 374m NW | Electricity Substation | 1992 | 75768 |
| AD | 383m N | Electricity Substation | 1984 | 71886 |
| AD | 383m N | Electricity Substation | 1969 | 71886 |
| AD | 384m N | Electricity Substation | 1993 | 71886 |
| AD | 387m N | Electricity Substation | 1981 | 71886 |
| AR | 393m NE | Electricity Substation | 1983 | 78913 |
| AR | 393m NE | Electricity Substation | 1988 | 78913 |
| AR | 408m NE | Electricity Substation | 1992 | 80472 |
| AW | 432m NW | Electricity Substation | 1981 | 72124 |
| AW | 433m NW | Electricity Substation | 1995 | 72124 |
| V | 454m NW | Electricity Substation | 1995 | 79243 |
| V | 454m NW | Electricity Substation | 1981 | 79243 |
| AZ | 467m SE | Electricity Substation | 1988 | 70379 |
| AZ | 469m SE | Electricity Substation | 1993 | 70379 |
| AZ | 469m SE | Electricity Substation | 1993 | 70379 |
| 30 | 475m W | Electricity Substation | 1980 | 60058 |

*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 | 4 |
|---|---|

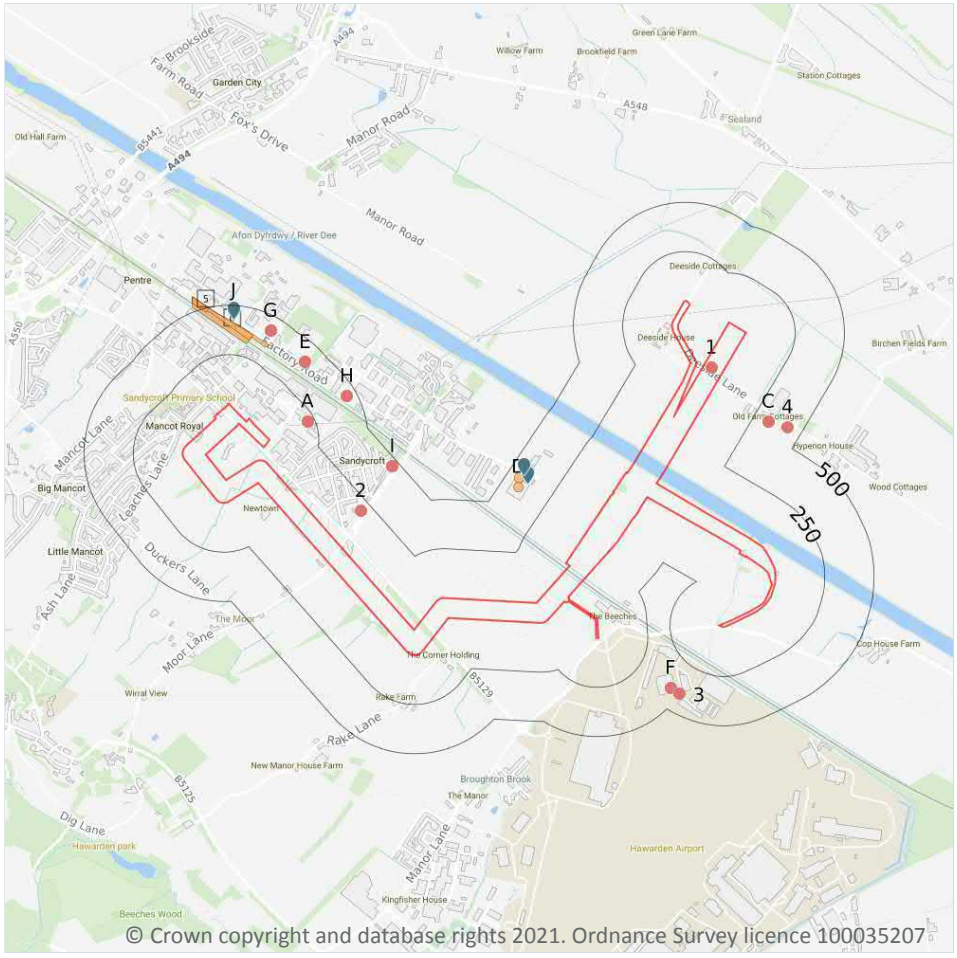
Garages digitised from historical Ordnance Survey mapping at high-detail 1:1,250 and 1:2,500 scale. Any records shown are available intelligently grouped in section 1. Grouped and the original un-grouped features can be cross-referenced across sections 1 and 2 using the 'Group ID'.

Features are displayed on the Past land use - un-grouped map on **page 23**

| ID | Location | Land Use | Date | Group ID |
|---|---|---|---|---|
| H | 68m NE | Garage | 1981 | 23460 |
| H | 80m NE | Garage | 1993 | 24874 |
| H | 80m NE | Garage | 1992 | 24874 |
| H | 81m NE | Garage | 1981 | 20076 |

*This data is sourced from Ordnance Survey / Groundsure.*

# 3 Waste and landfill



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## 3.1 Active or recent landfill

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

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

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

## 3.2 Historical landfill (BGS records)

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

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 |
|---|---|

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 | 0 |
|---|---|

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.

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

## 3.5 Historical waste sites

| Records within 500m | 5 |
|---|---|

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 35**

| ID | Location | Address | Further Details | Date |
|---|---|---|---|---|
| B | 317m N | Site Address: N/A | Type of Site: Scrap Yard<br>Planning application reference: N/A<br>Description: N/A<br>Data source: Historic Mapping<br>Data Type: Polygon | 1980 |
| B | 339m N | Site Address: N/A | Type of Site: Scrap Yard<br>Planning application reference: N/A<br>Description: N/A<br>Data source: Historic Mapping<br>Data Type: Polygon | 1993 |
| D | 389m NW | Site Address: Recyclo Ltd, Prince William Avenue, Sandycroft, DEESIDE, Clwyd, CH5 2QZ | Type of Site: Recycling Building (conversion)<br>Planning application reference: 38554<br>Description: Scheme comprises change of use to material recycling facility (MRF) including invessel composting. Construction - bathroom, kitchen fittings. An application (ref: 038554) for Detailed Planning permission was granted by Flintshire C.C. on 25th January 2 5. Planning decision obtained<br>Data source: Historic Planning Application<br>Data Type: Point | - |

| ID | Location | Address | Further Details | Date |
|---|---|---|---|---|
| D | 412m NW | Site Address: Recyclo Limited, Prince William Avenue, Sandycroft, Deeside, Clwyd, CH5 2QZ | Type of Site: Waste Transfer Station (Extension/Alterations)<br>Planning application reference: 57363<br>Description: Scheme comprises reconfiguration and expansion of car parking, siting of temporary building, installation of access control barrier.<br>Data source: Historic Planning Application<br>Data Type: Point | - |
| 5 | 478m N | Site Address: N/A | Type of Site: Scrap Yard<br>Planning application reference: N/A<br>Description: N/A<br>Data source: Historic Mapping<br>Data Type: Polygon | 1984 |

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

## 3.6 Licensed waste sites

**Records within 500m** **18**

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

Features are displayed on the Waste and landfill map on **page 35**

| ID | Location | Details | | |
|---|---|---|---|---|
| D | 408m NW | Site Name: Recyclo Ltd<br>Site Address: Recyclo Ltd, Prince William Avenue, Sandycroft, Deeside, Flintshire, CH5 2QZ<br>Correspondence Address: - | Type of Site: Household, Commercial & Industrial Waste T Stn<br>Size: >= 25000 tonnes 75000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: REC005<br>EPR reference: JP3094FC/V003<br>Operator: Recyclo Ltd<br>Waste Management licence No: 37280<br>Annual Tonnage: 74094 | Issue Date: 12/05/2005<br>Effective Date: -<br>Modified: 24/01/2012<br>Surrendered Date: 0<br>Expiry Date: 0<br>Cancelled Date: 0<br>Status: Modified |

| ID | Location | Details | | |
|---|---|---|---|---|
| D | 409m NW | Site Name: Recyclo Ltd<br>Site Address: Prince William Avenue, Sandycroft, Deeside, Flintshire, CH5 2QZ<br>Correspondence Address: Recyclo Ltd, Prince William Avenue, Sandycroft, Deeside, Flintshire, CH5 2QZ | Type of Site: Household, Commercial & Industrial Waste T Stn<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: REC005<br>EPR reference: -<br>Operator: Recyclo Ltd<br>Waste Management licence No: 37280<br>Annual Tonnage: 0 | Issue Date: 12/05/2005<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Issued |
| D | 409m NW | Site Name: Recyclo Ltd<br>Site Address: Recyclo Ltd, Prince William Avenue, Sandycroft, Deeside, Flintshire, CH5 2QZ<br>Correspondence Address: - | Type of Site: Household, Commercial & Industrial Waste T Stn<br>Size: >= 75000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: REC005<br>EPR reference: EA/EPR/JP3094FC/V003<br>Operator: Recyclo Ltd<br>Waste Management licence No: 37280<br>Annual Tonnage: 74094 | Issue Date: 12/05/2005<br>Effective Date: -<br>Modified: 24/01/2012<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Modified |
| D | 409m NW | Site Name: -<br>Site Address: Recyclo Ltd, Sandycroft, Deeside, Flintshire, CH5 2QZ<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: JP3094FC<br>EPR reference: -<br>Operator: Recyclo Ltd<br>Waste Management licence No: 0<br>Annual Tonnage: 74094 | Issue Date: 12/05/2005<br>Effective Date: 12/05/2005<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| D | 409m NW | Site Name: -<br>Site Address: Recyclo Ltd, Sandycroft, Deeside, Flintshire, CH5 2QZ<br>Correspondence Address: - | Type of Site: Household, Commercial & Industrial Waste T Stn<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: JP3094FC<br>EPR reference: -<br>Operator: -<br>Waste Management licence No: 37280<br>Annual Tonnage: 74094 | Issue Date: 12/05/2005<br>Effective Date: 12/05/2005<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: 27/06/2017<br>Cancelled Date: -<br>Status: Expired |

| ID | Location | Details | | |
|---|---|---|---|---|
| D | 409m NW | Site Name: -<br>Site Address: Recyclo Ltd, Sandycroft, Deeside, Flintshire, CH5 2QZ<br>Correspondence Address: - | Type of Site: Household, Commercial & Industrial Waste T Stn<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: JP3094FC<br>EPR reference: -<br>Operator: Recyclo Ltd<br>Waste Management licence No: 37280<br>Annual Tonnage: 74094 | Issue Date: 12/05/2005<br>Effective Date: 12/05/2005<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: 27/06/2017<br>Cancelled Date: -<br>Status: Expired |
| D | 409m NW | Site Name: -<br>Site Address: Recyclo Ltd, Sandycroft, Deeside, Flintshire, CH5 2QZ<br>Correspondence Address: - | Type of Site: Household, Commercial & Industrial Waste T Stn<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: JP3094FC<br>EPR reference: -<br>Operator: Recyclo Ltd<br>Waste Management licence No: 37280<br>Annual Tonnage: 74094 | Issue Date: 12/05/2005<br>Effective Date: 12/05/2005<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: 27/06/2017<br>Cancelled Date: -<br>Status: Expired |
| D | 409m NW | Site Name: -<br>Site Address: Recyclo Ltd, Sandycroft, Flintshire, Deeside, Flintshire, CH5 2QZ<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: JP3094FC<br>EPR reference: -<br>Operator: Recyclo Ltd<br>Waste Management licence No: 37280<br>Annual Tonnage: 74094 | Issue Date: 12/05/2005<br>Effective Date: 12/05/2005<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: 27/06/2017<br>Cancelled Date: -<br>Status: Expired |
| D | 449m NW | Site Name: Copart U K - Prince William Avenue<br>Site Address: Land / Premises At, Prince William Avenue, Sandycroft, Chester, Flintshire, CH5 2QZ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: USE005<br>EPR reference: WP3394FG/V002<br>Operator: Copart U K Ltd<br>Waste Management licence No: 37210<br>Annual Tonnage: 12000 | Issue Date: 01/09/2000<br>Effective Date: 15/04/2008<br>Modified: 02/03/2012<br>Surrendered Date: 0<br>Expiry Date: 0<br>Cancelled Date: 0<br>Status: Modified |

| ID | Location | Details | | |
|---|---|---|---|---|
| D | 449m NW | Site Name: Universal Salvage Auction<br>Site Address: Prince William Avenue, Sandycroft, Nr Chester, Flintshire, CH5 2QZ<br>Correspondence Address: Acrey Fields, Woburn Road, Wootton, Bedfordshire, MK43 9EJ | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: UNI001<br>EPR reference: -<br>Operator: Universal Salvage Plc<br>Waste Management licence No: 37210<br>Annual Tonnage: 12000 | Issue Date: 01/09/2000<br>Effective Date: -<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Issued |
| D | 449m NW | Site Name: Copart U K<br>Site Address: Prince William Avenue, Sandycroft, Nr Chester, Flintshire, CH5 2QZ<br>Correspondence Address: Acrey Fields, Woburn Road, Wootton, Beds, MK43 9EJ | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: USE005<br>EPR reference: -<br>Operator: Userve Ltd<br>Waste Management licence No: 37210<br>Annual Tonnage: 12000 | Issue Date: 01/09/2000<br>Effective Date: 15/04/2008<br>Modified: 10/03/2006<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Transferred |
| D | 449m NW | Site Name: Copart U K<br>Site Address: Land / Premises At, Prince William Avenue, Sandycroft, Chester, Flintshire, CH5 2QZ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (Vehicle Dismantler)<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: USE005<br>EPR reference: EA/EPR/WP3394FG/T003<br>Operator: Copart Limited<br>Waste Management licence No: 37210<br>Annual Tonnage: 12000 | Issue Date: 01/09/2000<br>Effective Date: 15/04/2008<br>Modified: 10/03/2006<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Transferred |
| J | 472m N | Site Name: -<br>Site Address: Chadwicks Metal Processing Facility, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (mixed MRS's)<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: WP3194FL<br>EPR reference: -<br>Operator: Susan Joan Chadwick & Frances Susan Crump<br>Waste Management licence No: 37219<br>Annual Tonnage: 0 | Issue Date: 12/01/2001<br>Effective Date: 12/01/2001<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |

| ID | Location | Details | | |
|---|---|---|---|---|
| J | 472m N | Site Name: -<br>Site Address: Chadwicks Metal Processing Facility, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: WP3194FL<br>EPR reference: -<br>Operator: Susan Joan Chadwick & Frances Susan Crump<br>Waste Management licence No: 0<br>Annual Tonnage: 0 | Issue Date: 12/01/2001<br>Effective Date: 12/01/2001<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| J | 472m N | Site Name: -<br>Site Address: Chadwicks Metal Processing Facility, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (mixed MRS's)<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: WP3194FL<br>EPR reference: -<br>Operator: -<br>Waste Management licence No: 37219<br>Annual Tonnage: 0 | Issue Date: 12/01/2001<br>Effective Date: 12/01/2001<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| J | 472m N | Site Name: -<br>Site Address: Chadwicks Metal Processing Facility, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (mixed MRS's)<br>Size: -<br>Environmental Permitting Regulations (Waste) Licence Number: WP3194FL<br>EPR reference: -<br>Operator: Susan Joan Chadwick & Frances Susan Crump<br>Waste Management licence No: 37219<br>Annual Tonnage: 0 | Issue Date: 12/01/2001<br>Effective Date: 12/01/2001<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |
| J | 472m N | Site Name: -<br>Site Address: Chadwicks Metal Processing Facility, Sandycroft, Flintshire, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: -<br>Size: Unknown<br>Environmental Permitting Regulations (Waste) Licence Number: WP3194FL<br>EPR reference: -<br>Operator: Susan Joan Chadwick & Frances Susan Crump<br>Waste Management licence No: 37219<br>Annual Tonnage: 0 | Issue Date: 12/01/2001<br>Effective Date: 12/01/2001<br>Modified: -<br>Surrendered Date: -<br>Expiry Date: -<br>Cancelled Date: -<br>Status: Effective |

| ID | Location | Details | | |
|---|---|---|---|---|
| J | 473m N | Site Name: Chadwicks Metal Processing Facility<br>Site Address: Chadwicks Metal Processing Facility, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ<br>Correspondence Address: - | Type of Site: Metal Recycling Site (mixed MRS's)<br>Size: 25000 tonnes<br>Environmental Permitting Regulations (Waste) Licence Number: CHA006<br>EPR reference: WP3194FL/V002<br>Operator: Susan Joan Chadwick & Frances Susan Crump<br>Waste Management licence No: 37219<br>Annual Tonnage: 4999 | Issue Date: 12/01/2001<br>Effective Date: -<br>Modified: 10/03/2006<br>Surrendered Date: 0<br>Expiry Date: 0<br>Cancelled Date: 0<br>Status: Modified |

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

## 3.7 Waste exemptions

**Records within 500m** **131**

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 35**

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| **1** | **On site** | **4R Group, Wood Farm, Deeside Lane, Sealand, Chester, Flintshire, CH1 6BP** | **NRW-WME053730** | **Storing waste exemption** | **Not on a farm** | **Storage of sludge** |
| 2 | 196m NE | DCWW, Gladstone Estaes, Station Road, Sandycroft, Glannau Dyfrdwy, Flintshire, CH52PZ | NRW-WME020220 | Storing waste exemption | Not on a farm | Storage of sludge |
| A | 212m NE | AM RECYCLING, Unit 1, Glendale Avenue, Glannau Dyfrdwy, CH52QP | NRW-WME004869 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| A | 212m NE | AM RECYCLING, Unit 1, Glendale Avenue, Glannau Dyfrdwy, CH52QP | NRW-WME004869 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| A | 212m NE | AM RECYCLING, Unit 5, Glendale Avenue, DEESIDE, FLINTSHIRE, CH52QP | NRW-WME028859 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| A | 212m NE | AM RECYCLING, Unit 1, Glendale Avenue, Sandycroft Industrial Estate, Glannau Dyfrdwy, CH52QP | NRW-WME034127 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| A | 212m NE | AM RECYCLING, Unit 1, Glendale Avenue, Sandycroft Industrial Estate, Glannau Dyfrdwy, CH52QP | NRW-WME034127 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| A | 212m NE | Glendale Avenue, Sandycroft Industrial Estate, Deeside, Flintshire, CH5 2QP | NRW-WME001169 | Treating waste exemption | Waste Exemption - Non-Agricultural | Anaerobic digestion at premises not used for agriculture and burning of resultant biogas |
| C | 326m SE | 4 Recycling Ltd, Wood Farm House, Deeside Lane, Sealand, Chester, Flintshire, CH16BP | NRW-WME005060 | Storing waste exemption | Not on a farm | Storage of sludge |
| C | 326m SE | Wood Farm, Deeside Lane, Sealand, Chester, Flintshire, CH16BP | NRW-WME006944 | Using waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Use of waste in construction |
| C | 326m SE | WT Banks, Deeside Farm, Deeside Lane, Sealand, Chester, Flintshire, Ch16bp | NRW-WME006980 | Disposing of waste exemption | On a farm | Burning waste in the open |
| C | 326m SE | Wood Farm House, Deeside Lane, Chester, Flintshire, CH1 6BP | NRW-WME003367 | Storing waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Storage of sludge |
| C | 326m SE | Wood Farm, Deeside Lane, Chester, Flintshire, CH1 6BP | NRW-WME004214 | Storing waste exemption | Waste Exemption - Agricultural | Storage of sludge |
| C | 326m SE | Wood Farm, Deeside Lane, Chester, Flintshire, CH1 6BP | NRW-WME004257 | Storing waste exemption | Waste Exemption - Non-Agricultural | Storage of sludge |
| E | 402m NE | Trade Effluent Services Ltd, 6 Factory Road, Sandycroft, Deeside, Flintshire, CH52DD | NRW-WME028361 | Using waste exemption | Not on a farm | Use of waste in construction |
| E | 402m NE | Trade Effluent Services Ltd, 6 Factory Road, Sandycroft, Deeside, Flintshire, CH52DD | NRW-WME028362 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| F | 404m SW | Chester Green Services Ltd, Bay 10, Aviation Park, Sandycroft, Sandycroft, Flintshire, CH4 0GZ | NRW-WME059972 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| F | 404m SW | Chester Green Services Ltd, Bay 10, Aviation Park, Sandycroft, Sandycroft, Flintshire, CH4 0GZ | NRW-WME059972 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| F | 404m SW | New Horizon Plastics Co Ltd, Bay 10, Aviation Park, Flint Road, Chester, CH4 0GZ | NRW-WME055172 | Storing waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Storage of waste in a secure place |
| F | 404m SW | New Horizon Plastics Co Ltd, Bay 10, Aviation Park, Flint Road, Chester, CH4 0GZ | NRW-WME055172 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Preparatory treatments (baling, sorting, shredding etc) |
| F | 404m SW | International House, Flint Road, Chester, CH4 0GZ | WEX085270 | Disposing of waste exemption | Not on a farm | Burning waste in the open |
| F | 404m SW | Aviation Park Group ltd, Aviation Park Group Ltd, Aviation Park, Flint Road, Saltney Ferry, Caer, CH40GZ | NRW-WME021706 | Disposing of waste exemption | Not on a farm | Burning waste in the open |
| 3 | 406m SW | Aviation Park Group ltd, Aviation Park Group Ltd, Aviation Park, Flint Road, Saltney Ferry, Chester, Flintshire, CH4 0GZ | NRW-WME048359 | Disposing of waste exemption | Not on a farm | Burning waste in the open |
| 4 | 425m SE | 4R Group, Wood Farm, Deeside Lane, Sealand, Chester, Flintshire, CH1 6BP | NRW-WME053729 | Storing waste exemption | Not on a farm | Storage of sludge |
| G | 425m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Treating waste exemption | Not on a Farm | Preparatory treatments (baling, sorting, shredding etc) |
| G | 425m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Treating waste exemption | Not on a Farm | Recovery of textiles |
| G | 425m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Treating waste exemption | Not on a Farm | Manual treatment of waste |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| G | 425m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Treating waste exemption | Not on a Farm | Recovery of scrap metal |
| G | 425m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Treating waste exemption | Not on a Farm | Sorting mixed waste |
| G | 425m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Storing waste exemption | Not on a Farm | Storage of waste in a secure place |
| G | 425m NE | UNIT C&D, FACTORY ROAD, SANDYCROFT, DEESIDE, CH5 2QJ | WEX158042 | Storing waste exemption | Not on a Farm | Storage of waste in secure containers |
| G | 425m NE | Safer Surfacing Ltd, Sandycroft, Factory Road, Deeside, CH5 2QJ | WEX132158 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |
| G | 425m NE | Safer Surfacing Ltd, Sandycroft, Factory Road, Deeside, CH5 2QJ | WEX132158 | Using waste exemption | Not on a farm | Use of waste to manufacture finished goods |
| G | 425m NE | Centrica Business Solutions (UK) Ltd, Scottishpower, Queensferry Depot, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ | NRW-WME051020 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |
| G | 425m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Using waste exemption | Not on a farm | Use of waste to manufacture finished goods |
| G | 425m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Treating waste exemption | Not on a farm | Manual treatment of waste |
| G | 425m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| G | 425m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| G | 425m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Treating waste exemption | Not on a farm | Recovery of textiles |
| G | 425m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |
| G | 425m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Treating waste exemption | Not on a farm | Recovery of scrap metal |
| G | 425m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |
| G | 425m NE | SAFER SURFACING LTD, UNIT A-D DEVA INDUSTRIAL ESTATE, FACTORY ROAD, DEESIDE, DEESIDE, CH5 2QJ | NRW-WME046571 | Treating waste exemption | Not on a farm | Sorting mixed waste |
| G | 425m NE | Dwr Cymru Cyfyngedig, Dwr Cymru Queensferry Wastewater Treatment Works, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ | NRW-WME040491 | Treating waste exemption | Not on a farm | Recovery of waste at a waste water treatment works |
| G | 425m NE | ENER.G Combined heat and power, Scottishpower, Queensferry Depot, Factory Road, Sandycroft, Glannau Dyfrdwy, CH52QJ | NRW-WME019742 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| G | 425m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |
| G | 425m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| G | 425m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Cleaning, washing, spraying or coating relevant waste |
| G | 425m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Sorting mixed waste |
| G | 425m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Treatment of waste toner cartridges by sorting, dismantling, cleaning or refilling |
| G | 425m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Physical treatment of waste edible oil and fat to produce biodiesel |
| G | 425m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Recovery of textiles |
| G | 425m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| G | 425m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Screening and blending of waste |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| G | 425m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |
| G | 425m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |
| G | 425m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Treating waste exemption | Not on a farm | Recovery of scrap metal |
| G | 425m NE | Reclaimed Plastic Polymers Ltd, Unit 7, Deva Industrial Park off Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME023863 | Using waste exemption | Not on a farm | Use of waste in construction |
| G | 425m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |
| G | 425m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Cleaning, washing, spraying or coating relevant waste |
| G | 425m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Using waste exemption | Not on a farm | Use of baled end-of-life tyres in construction |
| G | 425m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |
| G | 425m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Recovery of scrap metal |
| G | 425m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Treatment of waste aerosol cans |
| G | 425m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Sorting mixed waste |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| G | 425m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Using waste exemption | Not on a farm | Use of waste to manufacture finished goods |
| G | 425m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Manual treatment of waste |
| G | 425m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |
| G | 425m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Treatment of waste toner cartridges by sorting, dismantling, cleaning or refilling |
| G | 425m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| G | 425m NE | 3-- Recycling Ltd, Unit A-D, Factory Road, Deeside, Cheshire, CH52QJ | NRW-WME025993 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| G | 425m NE | Trade Effluent Services Ltd, Unit 1, Factory Road, Deeside, Flintshire, CH52QJ | NRW-WME028692 | Using waste exemption | Not on a farm | Use of waste in construction |
| G | 425m NE | Safer Surfacing Ltd, Unit B, Deva Industrial Estate, Factory Road, Sandycroft, Deeside, CH52QJ | NRW-WME031186 | Using waste exemption | Not on a farm | Use of waste to manufacture finished goods |
| G | 425m NE | Safer Surfacing Ltd, Unit B, Deva Industrial Estate, Factory Road, Sandycroft, Deeside, CH52QJ | NRW-WME031186 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |
| G | 425m NE | MAN COED VM LTD, Factory Road, Sandycroft, UNIT B, Deeside, Flintshire, CH52QJ | NRW-WME032266 | Treating waste exemption | Not on a farm | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |
| G | 425m NE | SAFER SURFACING LTD, YARD A DEVA INDUSTRIAL ESTATE, SANDYCROFT, Deeside, Deeside, Cheshire, CH52QJ | NRW-WME032822 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| G | 425m NE | SAFER SURFACING LTD, YARD A DEVA INDUSTRIAL ESTATE, SANDYCROFT, Deeside, Deeside, Cheshire, CH52QJ | NRW-WME032822 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |
| G | 425m NE | SAFER SURFACING LTD, Safer Surfacing Ltd, Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME032908 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |
| G | 425m NE | SAFER SURFACING LTD, Safer Surfacing Ltd, Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME032908 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| G | 425m NE | Hollingsworth Bros Uk Ltd, Hollingsworth Bros., Land South of Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME034288 | Using waste exemption | Not on a farm | Use of waste in construction |
| G | 425m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |
| G | 425m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Treating waste exemption | Not on a farm | Manual treatment of waste |
| G | 425m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| G | 425m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| G | 425m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Treating waste exemption | Not on a farm | Sorting mixed waste |
| G | 425m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Treating waste exemption | Not on a farm | Recovery of scrap metal |
| G | 425m NE | Endurmeta ltd, Unit A-D deva ind park, Factory road, Deeside, CH52QJ | NRW-WME036814 | Treating waste exemption | Not on a farm | Recovery of textiles |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| G | 425m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Cleaning, washing, spraying or coating relevant waste |
| G | 425m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Non-Agricultural | Recovery of textiles |
| G | 425m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Preparatory treatments (baling, sorting, shredding etc) |
| G | 425m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Mechanical treatment of end-of-life tyres |
| G | 425m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Recovery of scrap metal |
| G | 425m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Sorting mixed waste |
| G | 425m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Treating waste exemption | Waste Exemption - Non-Agricultural | Manual treatment of waste |
| G | 425m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Storing waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Storage of waste in secure containers |
| G | 425m NE | Land off, Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME001381 | Storing waste exemption | Waste Exemption - Agricultural and Non-Agricultural | Storage of waste in a secure place |
| G | 425m NE | Hollingsworth Bros (UK) LTD, LAND south of Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME002182 | Treating waste exemption | Waste Exemption - Non-Agricultural | Screening and blending of waste |
| G | 425m NE | Hollingsworth Bros (UK) LTD, LAND south of Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME002182 | Treating waste exemption | Waste Exemption - Non-Agricultural | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| G | 425m NE | Hollingsworth Bros (UK) LTD, LAND south of Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME002182 | Using waste exemption | Waste Exemption - Non-Agricultural | Use of waste in construction |
| G | 425m NE | Hollingsworth Bros (UK) LTD, LAND south of Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME002182 | Using waste exemption | Waste Exemption - Non-Agricultural | Use of waste in the construction of entertainment or educational installations etc |
| G | 425m NE | Hollingsworth Bros (UK) LTD, LAND south of Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME002182 | Using waste exemption | Waste Exemption - Non-Agricultural | Spreading waste on agricultural land to confer benefit |
| G | 425m NE | Hollingsworth Bros (UK) LTD, LAND south of Factory Road, Deeside, Flintshire, CH5 2QJ | NRW-WME002182 | Using waste exemption | Waste Exemption - Non-Agricultural | Spreading waste on non-agricultural land to confer benefit |
| G | 425m NE | Factory Road, Sandycroft, Deeside, Flintshire, CH52QJ | NRW-WME003296 | Treating waste exemption | Waste Exemption - Non-Agricultural | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |
| H | 450m NE | Clarke Technologies Ltd, Unit AD, Deva Industrial Estate, Factory Road, SandyCroft, Deeside, CH5 2QY | WEX077586 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| H | 450m NE | Clarke Technologies Ltd, Unit AD, Deva Industrial Estate, Factory Road, SandyCroft, Deeside, CH5 2QY | WEX077586 | Treating waste exemption | Not on a farm | Sorting mixed waste |
| H | 450m NE | Clarke Technologies Ltd, Unit AD, Deva Industrial Estate, Factory Road, SandyCroft, Deeside, CH5 2QY | WEX077586 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| H | 450m NE | Clarke Technologies Ltd, Unit AD, Deva Industrial Estate, Factory Road, SandyCroft, Deeside, CH5 2QY | WEX077586 | Using waste exemption | Not on a farm | Use of waste to manufacture finished goods |

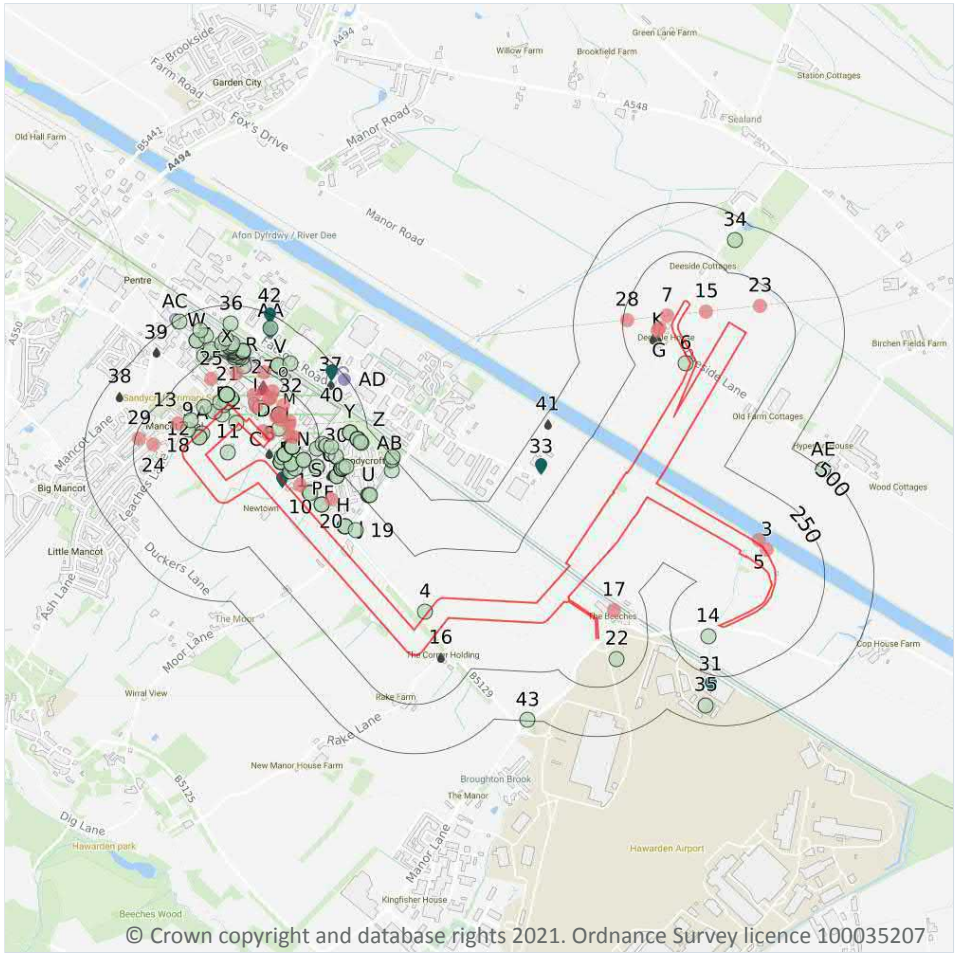
| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| H | 450m NE | R N Roberts & Sons Ltd, R N Roberts & Sons Ltd, Whittle Close, Engineering park, Sandycroft, Flintshire, ch52qy | NRW-WME008374 | Disposing of waste exemption | Not on a farm | Burning waste in the open |
| H | 450m NE | R N Roberts & Sons Ltd, R N Roberts & Sons Ltd, Whittle Close, Engineering park, Sandycroft, Flintshire, ch52qy | NRW-WME008374 | Using waste exemption | Not on a farm | Use of waste in construction |
| H | 450m NE | 3-- Recycling Ltd, Clarke Techologies Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Sandycroft, Deeside, Deeside, CH52QY | NRW-WME019874 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| H | 450m NE | 3-- Recycling Ltd, Clarke Techologies Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Sandycroft, Deeside, Deeside, CH52QY | NRW-WME019874 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |
| H | 450m NE | 3-- Recycling Ltd, Clarke Techologies Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Sandycroft, Deeside, Deeside, CH52QY | NRW-WME019874 | Treating waste exemption | Not on a farm | Sorting mixed waste |
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Treating waste exemption | Not on a farm | Treatment of waste toner cartridges by sorting, dismantling, cleaning or refilling |
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Treating waste exemption | Not on a farm | Mechanical treatment of end-of-life tyres |
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Treating waste exemption | Not on a farm | Manual treatment of waste |
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Storing waste exemption | Not on a farm | Storage of waste in secure containers |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Using waste exemption | Not on a farm | Use of waste to manufacture finished goods |
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Treating waste exemption | Not on a farm | Treatment of waste aerosol cans |
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Treating waste exemption | Not on a farm | Treatment of waste food |
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Using waste exemption | Not on a farm | Use of baled end-of-life tyres in construction |
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Treating waste exemption | Not on a farm | Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising |
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Treating waste exemption | Not on a farm | Sorting mixed waste |
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Treating waste exemption | Not on a farm | Cleaning, washing, spraying or coating relevant waste |
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Treating waste exemption | Not on a farm | Recovery of scrap metal |
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |

| ID | Location | Site | Reference | Category | Sub-Category | Description |
|---|---|---|---|---|---|---|
| H | 450m NE | 3-- Recycling Ltd, 300 Recycling Ltd, Unit A-D, Deva Industrial Estate, Factory Road, Deeside, Deeside, CH52QY | NRW-WME021111 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| I | 466m NE | Cheshire Tarmac & driveways Ltd, The Yard, Station Road, Sandycroft, Flintshire, Flintshire, -Select State, CH5 2PT | NRW-WME058951 | Treating waste exemption | Not on a farm | Screening and blending of waste |
| I | 466m NE | Harold Roberts & Son LTD, J S M (Deeside) Ltd, Station Road, Sandycroft, Deeside, Flintshire, CH5 2PT | NRW-WME041123 | Using waste exemption | Not on a farm | Use of waste in construction |
| I | 466m NE | PJK DEVELOPMENTS (HILDEN MILL) LTD, Spraytec, Station Road, Sandycroft, Deeside, Flintshire, CH5 2PT | NRW-WME041328 | Treating waste exemption | Not on a farm | Preparatory treatments (baling, sorting, shredding etc) |
| I | 466m NE | Cheshire Tarmac & driveways Ltd, The yard, Station road, sandycroft, deeside, flintshire, Ch52PT | NRW-WME037124 | Using waste exemption | Not on a farm | Use of waste in construction |
| I | 466m NE | Cheshire Tarmac & driveways Ltd, The yard, Station road, sandycroft, deeside, flintshire, Ch52PT | NRW-WME037124 | Storing waste exemption | Not on a farm | Storage of waste in a secure place |

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

# 4 Current industrial land use




## 4.1 Recent industrial land uses

| Records within 250m | 32 |
|---|---|

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 56**

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| 3 | 7m NE | Mooring Post | Clwyd, CH1 | Moorings and Unloading Facilities | Water |
| D | 11m NE | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |
| D | 15m NE | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| 5 | 19m NE | Landing Stage | Clwyd, CH1 | Moorings and Unloading Facilities | Water |
| 7 | 40m NW | Pylon | Clwyd, CH1 | Electrical Features | Infrastructure and Facilities |
| 10 | 54m NE | Gallaghers of Sandycroft | Chester Road, Sandycroft, Deeside, Clwyd, CH5 2QN | New Vehicles | Motoring |
| G | 66m W | Tank | Clwyd, CH1 | Tanks (Generic) | Industrial Features |
| I | 71m NE | Factory | Clwyd, CH5 | Unspecified Works Or Factories | Industrial Features |
| G | 74m W | Tank | Clwyd, CH1 | Tanks (Generic) | Industrial Features |
| 15 | 91m E | Pylon | Clwyd, CH1 | Electrical Features | Infrastructure and Facilities |
| 17 | 96m NE | Tank | Clwyd, CH4 | Tanks (Generic) | Industrial Features |
| L | 104m E | Metlab Supplies Ltd | Unit 7 Glendale Avenue, Sandycroft Industrial Estate, Sandycroft, Deeside, Clwyd, CH5 2QP | Colours, Chemicals and Water Softeners and Supplies | Industrial Products |
| C | 105m NE | Factory | Clwyd, CH5 | Unspecified Works Or Factories | Industrial Features |
| 18 | 112m NW | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| C | 112m NE | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |
| C | 121m NE | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| L | 121m E | Factory | Clwyd, CH5 | Unspecified Works Or Factories | Industrial Features |
| 20 | 122m NE | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 21 | 123m N | Pylon | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| C | 124m NE | Parker | Glendale Avenue, Sandycroft Industrial Estate, Sandycroft, Deeside, Clwyd, CH5 2QP | Pumps and Compressors | Industrial Products |

| ID | Location | Company | Address | Activity | Category |
|---|---|---|---|---|---|
| C | 139m NE | White Self Storage | Glendale Avenue, Sandycroft Industrial Estate, Sandycroft, Deeside, Clwyd, CH5 2QP | Container and Storage | Transport, Storage and Delivery |
| M | 141m NE | Chimney | Clwyd, CH5 | Chimneys | Industrial Features |
| M | 151m NE | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |
| 23 | 155m NE | Pylon | Clwyd, CH1 | Electrical Features | Infrastructure and Facilities |
| 24 | 155m W | Steel & Glass Balustrades | 1, Hawarden Way, Mancot, Deeside, Clwyd, CH5 2EL | Glass | Industrial Products |
| 25 | 156m NW | Tank | Clwyd, CH5 | Tanks (Generic) | Industrial Features |
| 26 | 161m N | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| C | 172m NE | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| M | 183m NE | Electricity Sub Station | Clwyd, CH5 | Electrical Features | Infrastructure and Facilities |
| 28 | 229m W | Pylon | Clwyd, CH1 | Electrical Features | Infrastructure and Facilities |
| 29 | 230m W | Mel's Amazing Cakes | 42, Mancot Way, Mancot, Deeside, Clwyd, CH5 2AP | Baking and Confectionery | Foodstuffs |
| O | 240m NE | F M C Agro Ltd | Rectors Lane, Pentre, Deeside, Clwyd, CH5 2DH | Agricultural Contractors | Contract Services |

*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 | 3 |
|---|---|

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.

Features are displayed on the Current industrial land use map on **page 56**

| ID | Location | Company | Address | Operational status | Tier |
|---|---|---|---|---|---|
| **C** | **On site** | **Shopspec** | **North West Seelings Ltd (t/a Shopspec), Glendale Park, Sandycroft Ind Est, Flintshire, CH5 2QP** | **Historical NIHHS Site** | **-** |
| O | 156m NE | FMC Agro Limited | FMC Agro Limited, Deeside, Rectors Lane, Pentre, Deeside, Flintshire, CH5 2DH | Current COMAH Site | COMAH Upper Tier Operator |
| O | 157m NE | Headland Agrochemicals Limited | Headland Agrochemicals Limited, Deeside, Rectors Lane, Pentre, Deeside, Flintshire, CH5 2DH | Historical COMAH Site | COMAH Upper Tier Operator |

*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 | 1 |
|---|---|

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.

Features are displayed on the Current industrial land use map on **page 56**

| ID | Location | Details | |
|---|---|---|---|
| 27 | 171m NE | Application reference number: No Details<br>Application status: Approved<br>Application date: 18/03/2013<br>Address: FMC Agro Limited, Rectors Lane, Pentre, Deeside, Flintshire, Wales, CH5 2DH | Details: Hazardous Substances consent for agricultural chemical manufacture and storage<br>Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |

*This data is sourced from Local Authority records.*

## 4.9 Historical licensed industrial activities (IPC)

| Records within 500m | 4 |
|---|---|

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 56**

| ID | Location | Details | |
|---|---|---|---|
| AD | 488m NE | Operator: J Reid Trading Ltd<br>Address: The Laboratories, Factory Road, Sandycroft, Deeside, Clwyd, CH5 2QJ<br>Process: Incineration<br>Permit Number: AH1234 | Original Permit Number: IPCAPP<br>Date Approved: 29-12-1993<br>Effective Date: 29-12-1993<br>Status: Superseded By Variation |
| AD | 488m NE | Operator: J Reid Trading Ltd<br>Address: The Laboratories, Factory Road, Sandycroft, Deeside, Clwyd, CH5 2QJ<br>Process: Incineration<br>Permit Number: AM8431 | Original Permit Number: IPCMINVAR<br>Date Approved: 13-6-1995<br>Effective Date: 23-6-1995<br>Status: Superseded By Variation |

| ID | Location | Details | |
|---|---|---|---|
| AD | 488m NE | Operator: J Reid Trading Ltd<br>Address: The Laboratories, Factory Road, Sandycroft, Deeside, Clwyd, CH5 2QJ<br>Process: Incineration<br>Permit Number: AW9846 | Original Permit Number: IPCMINVAR<br>Date Approved: 2-12-1996<br>Effective Date: 6-12-1996<br>Status: Superseded By Variation |
| AD | 488m NE | Operator: J Reid Trading Ltd<br>Address: The Laboratories, Factory Road, Sandycroft, Deeside, Clwyd, CH5 2QJ<br>Process: Incineration<br>Permit Number: BD7367 | Original Permit Number: IPCMINVAR<br>Date Approved: 24-11-1998<br>Effective Date: 30-11-1998<br>Status: Revoked |

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

## 4.10 Licensed industrial activities (Part A(1))

**Records within 500m** **44**

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 56**

| ID | Location | Details | |
|---|---|---|---|
| I | 73m N | Operator: MARSHALL FOOD GROUP<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL, VEGETABLE AND FOOD; SLAUGHTERING ANIMALS >50 T/DAY<br>Permit Number: UP3135LL<br>Original Permit Number: BU2101IL | EPR Reference: -<br>Issue Date: 09/03/2006<br>Effective Date: 09/03/2006<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| I | 73m N | Operator: MARSHALL FOOD GROUP LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC ANIMAL RAW MATERIALS (NOT MILK) FOR FOOD >75T/D<br>Permit Number: BU2101IL<br>Original Permit Number: BU2101IL | EPR Reference: -<br>Issue Date: 28/02/2005<br>Effective Date: 28/02/2005<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |

| ID | Location | Details | |
|---|---|---|---|
| I | 73m N | Operator: 2 SISTERS POULTRY LIMITED<br>Installation Name: SANDYCROFT POULTRY EPR/YP3632EM<br>Process: TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ONLY ANIMAL RAW MATERIALS (OTHER THAN MILK ONLY) INTENDED FOR PRODUCTION OF FOOD OR FEED WITH A FINISHED PRODUCT CAPACITY GREATER THAN 75 T/D<br>Permit Number: YP3632EM<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: 05/02/2014<br>Effective Date: 05/02/2014<br>Last date noted as effective: 17/11/2015<br>Status: TRANSFER EFFECTIVE |
| I | 73m N | Operator: 2 SISTERS POULTRY LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ONLY ANIMAL RAW MATERIALS (OTHER THAN MILK ONLY) INTENDED FOR PRODUCTION OF FOOD OR FEED WITH A FINISHED PRODUCT CAPACITY GREATER THAN 75 T/D<br>Permit Number: ZP3933AT<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: -<br>Effective Date: -<br>Last date noted as effective: 17/11/2015<br>Status: REFUSED |
| I | 73m N | Operator: VION FOOD WALES & WEST ENGLAND LTD<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL, VEGETABLE AND FOOD; SLAUGHTERING ANIMALS >50 T/DAY<br>Permit Number: AP3633HT<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 24/08/2010<br>Effective Date: 24/08/2010<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| I | 73m N | Operator: VION FOOD WALES & WEST ENGLAND LTD<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL, VEGETABLE AND FOOD; SLAUGHTERING ANIMALS >50 T/DAY<br>Permit Number: BP3835HA<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 28/09/2010<br>Effective Date: 28/09/2010<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| I | 73m N | Operator: VION FOOD WALES & WEST ENGLAND LTD<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL, VEGETABLE AND FOOD; SLAUGHTERING ANIMALS >50 T/DAY<br>Permit Number: BP3935ZN<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 28/11/2012<br>Effective Date: 28/11/2012<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |

| ID | Location | Details | |
|---|---|---|---|
| I | 73m N | Operator: W&WE (WALES AND WEST ENGLAND) LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL, VEGETABLE AND FOOD; SLAUGHTERING ANIMALS >50 T/DAY<br>Permit Number: RP3936ZK<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 21/03/2013<br>Effective Date: 21/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| I | 73m N | Operator: W&WE (WALES AND WEST ENGLAND) LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ASSOCIATED PROCESS<br>Permit Number: RP3936ZK<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 21/03/2013<br>Effective Date: 21/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| I | 73m N | Operator: W&WE (WALES AND WEST ENGLAND) LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT<br>Permit Number: RP3936ZK<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 21/03/2013<br>Effective Date: 21/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| I | 73m N | Operator: W&WE (WALES AND WEST ENGLAND) LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ONLY ANIMAL RAW MATERIALS (OTHER THAN MILK ONLY) INTENDED FOR PRODUCTION OF FOOD OR FEED WITH A FINISHED PRODUCT CAPACITY GREATER THAN 75 T/D<br>Permit Number: RP3936ZK<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 21/03/2013<br>Effective Date: 21/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| I | 73m N | Operator: 2 SISTERS POULTRY LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: -<br>Permit Number: YP3632EM<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: 05/02/2014<br>Effective Date: 05/02/2014<br>Last date noted as effective: 01/12/2016<br>Status: EFFECTIVE |

| ID | Location | Details | |
|---|---|---|---|
| I | 73m N | Operator: WW&E (WALES AND WEST ENGLAND) LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: TREATMENT AND PROCESSING (OTHER THAN PACKAGING) OF ONLY ANIMAL RAW MATERIALS (OTHER THAN MILK ONLY) INTENDED FOR PRODUCTION OF FOOD OR FEED WITH A FINISHED PRODUCT CAPACITY GREATER THAN 75 T/D<br>Permit Number: RP3936ZK<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 21/03/2013<br>Effective Date: 21/03/2013<br>Last date noted as effective: 01/07/2013<br>Status: EFFECTIVE |
| I | 73m N | Operator: WW&E (WALES AND WEST ENGLAND) LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: CREATED BY IED - DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING PHYSICO-CHEMICAL TREATMENT<br>Permit Number: RP3936ZK<br>Original Permit Number: AP3633HT | EPR Reference: -<br>Issue Date: 21/03/2013<br>Effective Date: 21/03/2013<br>Last date noted as effective: 01/07/2013<br>Status: EFFECTIVE |
| I | 73m N | Operator: 2 SISTERS FOOD GROUP LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: SLAUGHTERING ANIMALS AT A PLANT WITH A CARCASS PRODUCTION CAPACITY OF MORE THAN 50 TONNES PER DAY.<br>Permit Number: YP3632EM<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: 22/10/2019<br>Effective Date: 24/11/2019<br>Last date noted as effective: 01/04/2021<br>Status: EFFECTIVE |
| I | 73m N | Operator: 2 SISTERS FOOD GROUP LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>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<br>Permit Number: YP3632EM<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: 22/10/2019<br>Effective Date: 24/11/2019<br>Last date noted as effective: 01/04/2021<br>Status: EFFECTIVE |

| ID | Location | Details | |
|---|---|---|---|
| I | 73m N | Operator: 2 SISTERS FOOD GROUP LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>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<br>Permit Number: YP3632EM<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: 22/10/2019<br>Effective Date: 24/11/2019<br>Last date noted as effective: 01/04/2021<br>Status: EFFECTIVE |
| I | 73m N | Operator: 2 SISTERS POULTRY LIMITED<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: SLAUGHTERING ANIMALS AT PLANT WITH A CARCASS PRODUCTION CAPACITY OF MORE THAN 50...<br>Permit Number: YP3632EM<br>Original Permit Number: YP3632EM | EPR Reference: -<br>Issue Date: 05/02/2014<br>Effective Date: 05/02/2014<br>Last date noted as effective: 01/04/2018<br>Status: EFFECTIVE |
| I | 73m N | Operator: CYMRU COUNTRY CHICKENS LTD<br>Installation Name: SANDYCROFT POULTRY PROCESSING<br>Process: ANIMAL VEGETABLE AND FOOD; TREATING ETC ANIMAL RAW MATERIALS (NOT MILK) FOR FOOD >75T/D<br>Permit Number: UP3135LL<br>Original Permit Number: BU2101IL | EPR Reference: -<br>Issue Date: 09/03/2006<br>Effective Date: 09/03/2006<br>Last date noted as effective: 02/10/2009<br>Status: EFFECTIVE |
| R | 227m NE | Operator: HEADLAND AGROCHEMICALS LIMITED<br>Installation Name: PENTRE AGROCHEMICALS PLANT EPR/FP3031CW<br>Process: -<br>Permit Number: FP3031CW<br>Original Permit Number: FP3031CW | EPR Reference: -<br>Issue Date: 27/09/2013<br>Effective Date: 27/09/2013<br>Last date noted as effective: 01/12/2016<br>Status: EFFECTIVE |
| R | 227m NE | Operator: HEADLAND AGROCHEMICALS LIMITED<br>Installation Name: PENTRE AGROCHEMICALS PLANT EPR/FP3031CW<br>Process: PRODUCING INORGANIC CHEMICALS SUCH AS:<br>(IV) SALTS SUCH AS AMMONIUM CHLORIDE, POT...<br>Permit Number: FP3031CW<br>Original Permit Number: FP3031CW | EPR Reference: -<br>Issue Date: 27/09/2013<br>Effective Date: 27/09/2013<br>Last date noted as effective: 01/04/2018<br>Status: EFFECTIVE |

| ID | Location | Details | |
|---|---|---|---|
| R | 227m NE | Operator: FMC AGRO LIMITED<br>Installation Name: PENTRE AGROCHEMICALS PLANT EPR/FP3031CW<br>Process: PRODUCING INORGANIC CHEMICALS SUCH AS:<br>(IV) SALTS (FOR EXAMPLE AMMONIUM CHLORIDE, POTASSIUM CHLORATE, POTASSIUM CARBONATE, SODIUM CARBONATE, PERBORATE, SILVER NITRATE, CUPRIC ACETATE, AMMONIUM PHOSPHOMOLYBDATE)<br>Permit Number: FP3031CW<br>Original Permit Number: FP3031CW | EPR Reference: -<br>Issue Date: 26/02/2020<br>Effective Date: 26/02/2020<br>Last date noted as effective: 01/04/2021<br>Status: EFFECTIVE |
| R | 227m NE | Operator: HEADLAND AGROCHEMICALS LIMITED<br>Installation Name: PENTRE AGROCHEMICALS PLANT EPR/FP3031CW<br>Process: INORGANIC CHEMICALS; SALTS EG AMMONIUM CHLORIDE<br>Permit Number: DP3836AE<br>Original Permit Number: FP3031CW | EPR Reference: -<br>Issue Date: 08/10/2015<br>Effective Date: 08/10/2015<br>Last date noted as effective: 17/11/2015<br>Status: EFFECTIVE |
| R | 227m NE | Operator: HEADLAND AGROCHEMICALS LIMITED<br>Installation Name: PENTRE AGROCHEMICALS PLANT EPR/FP3031CW<br>Process: INORGANIC CHEMICALS; SALTS EG AMMONIUM CHLORIDE<br>Permit Number: FP3031CW<br>Original Permit Number: FP3031CW | EPR Reference: -<br>Issue Date: 27/09/2013<br>Effective Date: 27/09/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| AD | 494m NE | Operator: J REID TRADING LIMITED<br>Installation Name: J REID TRADING LTD EA/EPR/MP3531MD/V002<br>Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D<br>Permit Number: MP3231GK<br>Original Permit Number: MP3531MD | EPR Reference: -<br>Issue Date: 06/10/2009<br>Effective Date: 06/10/2009<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| AD | 494m NE | Operator: J REID TRADING LIMITED<br>Installation Name: J REID TRADING LTD<br>Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D<br>Permit Number: MP3531MD<br>Original Permit Number: MP3531MD | EPR Reference: -<br>Issue Date: 19/04/2007<br>Effective Date: 19/04/2007<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| AD | 494m NE | Operator: J REID TRADING LIMITED<br>Installation Name: J REID TRADING LTD EA/EPR/MP3531MD/V002<br>Process: OTHER WASTE DISPOSAL; HAZARDOUS WASTE >10T/D<br>Permit Number: YP3837FR<br>Original Permit Number: MP3531MD | EPR Reference: -<br>Issue Date: 21/12/2011<br>Effective Date: 21/12/2011<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |

| ID | Location | Details | |
|---|---|---|---|
| AD | 494m NE | Operator: J REID TRADING LIMITED<br>Installation Name: REFRIGERANT TRANSFER OPERATION EPR/MP3531MD<br>Process: ASSOCIATED PROCESS<br>Permit Number: ZP3031ZC<br>Original Permit Number: MP3531MD | EPR Reference: -<br>Issue Date: 22/03/2013<br>Effective Date: 22/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: EFFECTIVE |
| AD | 494m NE | Operator: J REID TRADING LIMITED<br>Installation Name: REFRIGERANT TRANSFER OPERATION EPR/MP3531MD<br>Process: DISPOSAL OR RECOVERY OF HAZ WASTE WITH CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING REPACKAGING PRIOR TO SUBMISSION TO ANY OF THE OTHER ACTIVITIES LISTED IN THIS SECTION OR IN SECTION 5.1<br>Permit Number: ZP3031ZC<br>Original Permit Number: MP3531MD | EPR Reference: -<br>Issue Date: 22/03/2013<br>Effective Date: 22/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: EFFECTIVE |
| AD | 494m NE | Operator: J REID TRADING LIMITED<br>Installation Name: J REID TRADING LTD EPR/MP3531MD/V003<br>Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER ...<br>Permit Number: MP3531MD<br>Original Permit Number: ZP3031ZC | EPR Reference: -<br>Issue Date: 22/03/2013<br>Effective Date: 22/03/2013<br>Last date noted as effective: 26/10/2020<br>Status: EFFECTIVE |
| AD | 494m NE | Operator: J REID TRADING LIMITED<br>Installation Name: J REID TRADING LTD EPR/MP3531MD/V003<br>Process: -<br>Permit Number: MP3531MD<br>Original Permit Number: ZP3031ZC | EPR Reference: -<br>Issue Date: 12/01/2021<br>Effective Date: 12/01/2021<br>Last date noted as effective: 01/04/2021<br>Status: EFFECTIVE |
| AD | 494m NE | Operator: J REID TRADING LIMITED<br>Installation Name: J REID TRADING LTD EPR/MP3531MD/V003<br>Process: DISPOSAL OR RECOVERY OF HAZARDOUS WASTE WITH A CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING ONE OR MORE OF THE FOLLOWING ACTIVITIES - REPACKAGING PRIOR TO SUBMISSION TO ANY OTHER ACTIVITIES IN THIS SECTION OR IN SECTION 5.1<br>Permit Number: MP3531MD<br>Original Permit Number: ZP3031ZC | EPR Reference: -<br>Issue Date: 12/01/2021<br>Effective Date: 12/01/2021<br>Last date noted as effective: 01/04/2021<br>Status: EFFECTIVE |

| ID | Location | Details | |
|---|---|---|---|
| AD | 494m NE | Operator: J REID TRADING LIMITED<br>Installation Name: J REID TRADING LTD EPR/MP3531MD/V003<br>Process: DISPOSAL OR RECOVERY OF HAZ WASTE WITH CAPACITY EXCEEDING 10 TONNES PER DAY INVOLVING REPACKAGING PRIOR TO SUBMISSION TO ANY OF THE OTHER ACTIVITIES LISTED IN THIS SECTION OR IN SECTION 5.1<br>Permit Number: ZP3031ZC<br>Original Permit Number: MP3531MD | EPR Reference: -<br>Issue Date: 22/03/2013<br>Effective Date: 22/03/2013<br>Last date noted as effective: 01/07/2013<br>Status: EFFECTIVE |
| AD | 494m NE | Operator: J REID TRADING LIMITED<br>Installation Name: J REID TRADING LTD EPR/MP3531MD/V003<br>Process: -<br>Permit Number: MP3531MD<br>Original Permit Number: ZP3031ZC | EPR Reference: -<br>Issue Date: 22/03/2013<br>Effective Date: 22/03/2013<br>Last date noted as effective: 01/12/2016<br>Status: EFFECTIVE |
| AC | 499m NW | Operator: KNAUF INSTALLATION LIMITED<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: GLASS AND GLASS FIBRE; GLASS/ENAMEL FRIT MANUFACTURE >100T/12 MONTHS<br>Permit Number: GP3737XW<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 12/02/2009<br>Effective Date: 12/02/2009<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| AC | 499m NW | Operator: KNAUF INSTALLATION LIMITED<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: GLASS AND GLASS FIBRE; GLASS/ENAMEL FRIT MANUFACTURE >100T/12 MONTHS<br>Permit Number: NP3835SW<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 11/02/2005<br>Effective Date: 23/02/2005<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| AC | 499m NW | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS EPR/BR9383ID<br>Process: GLASS AND GLASS FIBRE; GLASS/ENAMEL FRIT MANUFACTURE >100T/12 MONTHS<br>Permit Number: GP3230RF<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 31/07/2015<br>Effective Date: 31/07/2015<br>Last date noted as effective: 17/11/2015<br>Status: EFFECTIVE |
| AC | 499m NW | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS EPR/BR9383ID<br>Process: OTHER MINERAL FIBRES; MELTING >20 T/D (UNLESS 3.3 A(1) OR (2))<br>Permit Number: GP3230RF<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 31/07/2015<br>Effective Date: 31/07/2015<br>Last date noted as effective: 17/11/2015<br>Status: EFFECTIVE |

| ID | Location | Details | |
|---|---|---|---|
| AC | 499m NW | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: GLASS AND GLASS FIBRE; GLASS/ENAMEL FRIT MANUFACTURE >100T/12 MONTHS<br>Permit Number: PP3335HJ<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 21/02/2011<br>Effective Date: 21/02/2011<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| AC | 499m NW | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: GLASS AND GLASS FIBRE; GLASS/ENAMEL FRIT MANUFACTURE >100T/12 MONTHS<br>Permit Number: PP3431ZH<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 04/03/2013<br>Effective Date: 04/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| AC | 499m NW | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: OTHER MINERAL FIBRES; MELTING >20 T/D (UNLESS 3.3 A(1) OR (2))<br>Permit Number: PP3431ZH<br>Original Permit Number: BR9383ID | EPR Reference: -<br>Issue Date: 04/03/2013<br>Effective Date: 04/03/2013<br>Last date noted as effective: 17/11/2015<br>Status: SUPERCEDED |
| AC | 499m NW | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: MELTING MINERAL SUBSTANCES INCLUDING THE PRODUCTION OF MINERAL FIBRES WITH A MEL...<br>Permit Number: BR9383ID<br>Original Permit Number: GP3230RF | EPR Reference: -<br>Issue Date: 08/08/2017<br>Effective Date: 08/08/2017<br>Last date noted as effective: 01/04/2018<br>Status: EFFECTIVE |
| AC | 499m NW | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: MELTING MINERAL SUBSTANCES INCLUDING THE PRODUCTION OF MINERAL FIBRES IN PLANTS WITH A MELTING CAPACITY EXCEEDING 20 TONNES PER DAY<br>Permit Number: BR9383ID<br>Original Permit Number: GP3230RF | EPR Reference: -<br>Issue Date: 29/01/2020<br>Effective Date: 29/01/2020<br>Last date noted as effective: 01/04/2021<br>Status: EFFECTIVE |
| AC | 499m NW | Operator: KNAUF INSULATION LTD<br>Installation Name: QUEENSFERRY MINERAL FIBRE WORKS<br>Process: -<br>Permit Number: BR9383ID<br>Original Permit Number: - | EPR Reference: -<br>Issue Date: -<br>Effective Date: -<br>Last date noted as effective: 01/04/2017<br>Status: DULY MADE |

*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**

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 56**

| ID | Location | Address | Details | |
|---|---|---|---|---|
| **1** | **On site** | **Sandycroft Textile Services Ltd, Chester Road, Sandycroft, Flintshire, CH5 2QW** | **Process: Dry Cleaning<br>Status: Historical Permit<br>Permit Type: Part B** | **Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified** |
| 31 | 298m S | Pasell Uk Ltd, Flint Road,Saltney Ferry, Flintshire, CH4 0GZ | Process: Use of Bulk Cement<br>Status: Historical Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| 33 | 375m NW | Hope Ready Mixed Concrete Ltd, Prince William Avenue, Sandycroft, Deeside, Flintshire, CH5 2QZ | Process: Use of Bulk Cement<br>Status: Current Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| AA | 425m NE | Mcalpine Business Services, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ | Process: Engineering Works<br>Status: Historical Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| AA | 425m NE | Waste Oil Burner, Carillion, Prospect House, CH5 2QJ | Process: Waste Oil Burner 0.4 MW<br>Status: New Legislation Applies<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| 40 | 461m NE | Spraytone Ltd, Factory Road, Sandycroft, Flintshire, CH5 2QJ | Process: Respraying of Road Vehicles<br>Status: Current Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |
| 42 | 490m NE | Trident Metals, Factory Road, Sandycroft, Deeside, Flintshire, CH5 2QJ | Process: Various Aluminium Processes<br>Status: Current Permit<br>Permit Type: Part B | Enforcement: No Enforcement Notified<br>Date of enforcement: No Enforcement Notified<br>Comment: No Enforcement Notified |

*This data is sourced from Local Authority records.*

## 4.12 Radioactive Substance Authorisations

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

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

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

## 4.13 Licensed Discharges to controlled waters

| Records within 500m | 15 |
|---|---|

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 56**

| ID | Location | Address | Details | |
|---|---|---|---|---|
| 8 | 44m SE | SALTNEY CENTRAL TRADING ESTATE UNIT, SALTNEY CENTRAL TRADING ESTATE U, CENTRAL TRADING ESTATE UNIT 14, UNIT 14 | Effluent Type: UNSPECIFIED<br>Permit Number: CM0087501<br>Permit Version: 1<br>Receiving Water: PENTRE DRAIN NORTH | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 06/02/1980<br>Effective Date: 06/02/1980<br>Revocation Date: 26/04/1995 |
| E | 47m NE | HOUSING ESTATE OFF HAMILTON AVENUE, HOUSING ESTATE OFF HAMILTON AVEN, OFF HAMILTON AVENUE SANDYCROFT, SANDYCROFT | Effluent Type: UNSPECIFIED<br>Permit Number: CM0045901<br>Permit Version: 1<br>Receiving Water: PENTRE DRAIN NORTH | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 16/11/1967<br>Effective Date: 16/11/1967<br>Revocation Date: 05/04/1995 |
| K | 90m SW | SEPTIC TANK SERVING COURTYARD 1, COURTYARD 1 THE BOWERY, DEESIDE LANE, SEALAND, Chester, CH1 6BQ | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: TB3297TA<br>Permit Version: 1<br>Receiving Water: groundwater via infiltration system | Status: Effective<br>Issue date: 11/09/2013<br>Effective Date: 11/09/2013<br>Revocation Date: - |
| K | 90m SW | SEPTIC TANK SERVING COURTYARD 1, COURTYARD 1, THE BOWERY, DEESIDE LANE, SEALAND, CHESTER, CH1 6BQ | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: EPRTB3297TA<br>Permit Version: 1<br>Receiving Water: GROUNDWATER | Status: NEW ISSUED UNDER EPR 2010<br>Issue date: 11/09/2013<br>Effective Date: 11/09/2013<br>Revocation Date: - |
| K | 90m SW | SEPTIC TANK SERVING COURTYARD 1, COURTYARD 1, THE BOWERY, DEESIDE LANE, SEALAND, CHESTER, CH1 6BQ | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: EPRTB3297TA<br>Permit Version: 1<br>Receiving Water: GROUNDWATER | Status: NEW ISSUED UNDER EPR 2010<br>Issue date: 11/09/2013<br>Effective Date: 11/09/2013<br>Revocation Date: - |

| ID | Location | Address | Details | |
|---|---|---|---|---|
| 16 | 93m SE | CORNER HOLDING RAKE LANE HAWARDEN, CORNER HOLDING, RAKE LANE, HAWARDEN, FLINTSHIRE, CH5 3PN | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: CG0401901<br>Permit Version: 1<br>Receiving Water: UNNAMED WATERCOURSE | Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY<br>Issue date: 03/07/2002<br>Effective Date: 03/07/2002<br>Revocation Date: - |
| K | 110m W | SEPTIC TANK SERVING COURTYARD 2, COURTYARD 2 THE BOWERY, DEESIDE LANE, SEALAND, Chester, CH1 6BQ | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: TB3697TS<br>Permit Version: 1<br>Receiving Water: groundwater via infiltration system | Status: Effective<br>Issue date: 11/09/2013<br>Effective Date: 11/09/2013<br>Revocation Date: - |
| K | 110m W | SEPTIC TANK SERVING COURTYARD 2, COURTYARD 2, THE BOWERY, DEESIDE LANE, SEALAND, CHESTER, CH1 6BQ | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: EPRTB3697TS<br>Permit Version: 1<br>Receiving Water: GROUNDWATER | Status: NEW ISSUED UNDER EPR 2010<br>Issue date: 11/09/2013<br>Effective Date: 11/09/2013<br>Revocation Date: - |
| K | 110m W | SEPTIC TANK SERVING COURTYARD 2, COURTYARD 2, THE BOWERY, DEESIDE LANE, SEALAND, CHESTER, CH1 6BQ | Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY<br>Permit Number: EPRTB3697TS<br>Permit Version: 1<br>Receiving Water: GROUNDWATER | Status: NEW ISSUED UNDER EPR 2010<br>Issue date: 11/09/2013<br>Effective Date: 11/09/2013<br>Revocation Date: - |
| Q | 195m NE | Sandycroft Phoenix Street CSO, Phoenix St, SANDYCROFT, DEESIDE, CH5 2PE | Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY<br>Permit Number: CM0166201<br>Permit Version: 5<br>Receiving Water: BROUGHTON BROOK | Status: Effective<br>Issue date: 31/10/2019<br>Effective Date: 31/10/2019<br>Revocation Date: - |
| 37 | 416m NE | DEESIDE SANDYCROFT ENGINEER PARK IN, DEESIDE SANDYCROFT ENGINEER PARK, SANDYCROFT ENGINEER PARK INDUSTR, ENGINEER PARK INDUSTRIAL ESTAT | Effluent Type: UNSPECIFIED<br>Permit Number: CM0086001<br>Permit Version: 1<br>Receiving Water: TRIB.OF SANDYCROFT DRAIN | Status: CONSENT EXPIRED - TIME LIMIT<br>Issue date: 05/09/1979<br>Effective Date: 05/09/1979<br>Revocation Date: 17/06/1996 |
| 38 | 418m NW | MANCOT - COTTAGE LANE | Effluent Type: UNSPECIFIED<br>Permit Number: CM0117101<br>Permit Version: 1<br>Receiving Water: UNNAMED TRIB. OF QUEENSFERRY D | Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV<br>Issue date: 08/02/1967<br>Effective Date: 08/02/1967<br>Revocation Date: 04/03/2004 |

| ID | Location | Address | Details | |
|---|---|---|---|---|
| 39 | 439m NW | QUEENSFERRY PENTRE PUMPING STATION, MANCOT LANE, MANCOT, Flintshire, WALES, CH5 2AJ | Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY<br>Permit Number: CG0415201<br>Permit Version: 1<br>Receiving Water: QUEENSFERRY DITCH | Status: Effective<br>Issue date: 04/03/2004<br>Effective Date: 04/03/2004<br>Revocation Date: - |
| AB | 464m NE | SANDYCROFT PHOENIX STREET - SSO | Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY<br>Permit Number: CM0166201<br>Permit Version: 4<br>Receiving Water: BROUGHTON BROOK | Status: Effective<br>Issue date: 31/03/2007<br>Effective Date: 31/03/2007<br>Revocation Date: - |
| 41 | 468m NW | PRINCE WILLIAM AVENUE SANDYCROFT C, PRINCE WILLIAM AVENUE, SANDYCROFT, CHESTER, Flintshire | Effluent Type: TRADE DISCHARGES - SITE DRAINAGE<br>Permit Number: CG0320201<br>Permit Version: 1<br>Receiving Water: River Dee | Status: Effective<br>Issue date: 21/08/1991<br>Effective Date: 21/08/1991<br>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 | 0 |
|---|---|

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.

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

## 4.18 Pollution Incidents (EA/NRW)

| Records within 500m | 156 |
|---|---|

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 56**

| ID | Location | Details | |
|---|---|---|---|
| **2** | **On site** | **Incident Date: 04/04/2013**<br>**Incident Identification: 1099472**<br>**Pollutant: Atmospheric Pollutants and Effects**<br>**Pollutant Description: Other Odour** | **Water Impact: -**<br>**Land Impact: Category 4 (No Impact)**<br>**Air Impact: Category 4 (No Impact)** |
| **A** | **On site** | **Incident Date: 10/07/2013**<br>**Incident Identification: 1131334**<br>**Pollutant: Atmospheric Pollutants and Effects**<br>**Pollutant Description: Other Odour** | **Water Impact: -**<br>**Land Impact: Category 4 (No Impact)**<br>**Air Impact: Category 4 (No Impact)** |
| **A** | **On site** | **Incident Date: 29/01/2014**<br>**Incident Identification: 1199274**<br>**Pollutant: Atmospheric Pollutants and Effects**<br>**Pollutant Description: Other Odour** | **Water Impact: -**<br>**Land Impact: Category 4 (No Impact)**<br>**Air Impact: Category 4 (No Impact)** |
| **A** | **On site** | **Incident Date: 08/07/2013**<br>**Incident Identification: 1130347**<br>**Pollutant: Atmospheric Pollutants and Effects**<br>**Pollutant Description: Other Odour** | **Water Impact: -**<br>**Land Impact: Category 4 (No Impact)**<br>**Air Impact: Category 4 (No Impact)** |
| **B** | **On site** | **Incident Date: 02/09/2015**<br>**Incident Identification: 1369849**<br>**Pollutant: -**<br>**Pollutant Description: -** | **Water Impact: -**<br>**Land Impact: -**<br>**Air Impact: -** |
| B | 12m NW | Incident Date: 08/04/2013<br>Incident Identification: 1100585<br>Pollutant: Multiple Pollutants<br>Pollutant Description: 2 Pollutants Including Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| 4 | 13m NW | Incident Date: 01/04/2003<br>Incident Identification: 147693<br>Pollutant: Contaminated Water<br>Pollutant Description: Minewater | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 13m NW | Incident Date: 25/08/2013<br>Incident Identification: 1151969<br>Pollutant: Other Pollutant<br>Pollutant Description: Noise | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 21m NW | Incident Date: 11/03/2014<br>Incident Identification: 1216739<br>Pollutant: Other Pollutant<br>Pollutant Description: Noise | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 6 | 22m SW | Incident Date: 11/09/2015<br>Incident Identification: 1372562<br>Pollutant: Other Pollutant<br>Pollutant Description: Other | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| B | 29m NE | Incident Date: 06/06/2013<br>Incident Identification: 1119746<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 36m NW | Incident Date: 24/07/2014<br>Incident Identification: 1260378<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 49m N | Incident Date: 05/06/2013<br>Incident Identification: 1119315<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 49m N | Incident Date: 06/08/2013<br>Incident Identification: 1144622<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 49m N | Incident Date: 29/09/2013<br>Incident Identification: 1163346<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 49m N | Incident Date: 16/07/2015<br>Incident Identification: 1355818<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| B | 49m N | Incident Date: 17/06/2013<br>Incident Identification: 1123338<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 49m N | Incident Date: 30/08/2015<br>Incident Identification: 1369241<br>Pollutant: General Biodegradable Materials and Wastes<br>Pollutant Description: Blood and Offal | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 49m N | Incident Date: 10/04/2013<br>Incident Identification: 1101506<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 49m N | Incident Date: 04/06/2013<br>Incident Identification: 1118938<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 49m N | Incident Date: 08/09/2013<br>Incident Identification: 1157507<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 49m N | Incident Date: 30/09/2013<br>Incident Identification: 1163509<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| B | 49m N | Incident Date: 11/06/2015<br>Incident Identification: 1344515<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 9 | 53m NW | Incident Date: 04/06/2013<br>Incident Identification: 1118721<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 57m NE | Incident Date: 22/09/2013<br>Incident Identification: 1161179<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 57m NE | Incident Date: 23/05/2013<br>Incident Identification: 1115621<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| E | 57m NE | Incident Date: 10/09/2013<br>Incident Identification: 1158203<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 57m NE | Incident Date: 23/08/2013<br>Incident Identification: 1151446<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 57m NE | Incident Date: 11/09/2013<br>Incident Identification: 1158641<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 61m NE | Incident Date: 01/05/2013<br>Incident Identification: 1108314<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| F | 62m NE | Incident Date: 04/08/2014<br>Incident Identification: 1264655<br>Pollutant: Oils and Fuel<br>Pollutant Description: Mixed/Waste Oils | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| F | 63m NE | Incident Date: 21/05/2013<br>Incident Identification: 1114949<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 11 | 66m SE | Incident Date: 11/10/2013<br>Incident Identification: 1166972<br>Pollutant: Multiple Pollutants<br>Pollutant Description: 2 Pollutants Including Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| H | 68m NE | Incident Date: 15/07/2013<br>Incident Identification: 1133129<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| H | 68m NE | Incident Date: 20/05/2013<br>Incident Identification: 1114503<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 12 | 69m NW | Incident Date: 18/06/2013<br>Incident Identification: 1123585<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| C | 74m NE | Incident Date: 01/09/2014<br>Incident Identification: 1273035<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| I | 77m NE | Incident Date: 11/11/2015<br>Incident Identification: 1387136<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 13 | 77m NW | Incident Date: 23/10/2015<br>Incident Identification: 1383044<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 78m NE | Incident Date: 16/07/2013<br>Incident Identification: 1134011<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 14 | 78m SW | Incident Date: 28/02/2003<br>Incident Identification: 140203<br>Pollutant: Oils and Fuel<br>Pollutant Description: Diesel | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| J | 82m NE | Incident Date: 15/07/2015<br>Incident Identification: 1355392<br>Pollutant: Pollutant Not Identified<br>Pollutant Description: Not Identified | Water Impact: -<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| J | 84m NE | Incident Date: 22/08/2015<br>Incident Identification: 1367134<br>Pollutant: General Biodegradable Materials and Wastes<br>Pollutant Description: Natural Organic Material | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| J | 86m NE | Incident Date: 16/01/2014<br>Incident Identification: 1194704<br>Pollutant: Oils and Fuel<br>Pollutant Description: Unidentified Oil | Water Impact: -<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| E | 89m NE | Incident Date: 04/07/2013<br>Incident Identification: 1128995<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 90m NE | Incident Date: 04/08/2014<br>Incident Identification: 1264741<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| E | 90m NE | Incident Date: 06/05/2013<br>Incident Identification: 1109977<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 97m NE | Incident Date: 24/06/2013<br>Incident Identification: 1125463<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 97m NE | Incident Date: 26/06/2013<br>Incident Identification: 1126180<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 97m NE | Incident Date: 19/06/2013<br>Incident Identification: 1124119<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| E | 97m NE | Incident Date: 07/08/2013<br>Incident Identification: 1145130<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| L | 114m E | Incident Date: 30/05/2013<br>Incident Identification: 1117391<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| L | 114m E | Incident Date: 09/09/2013<br>Incident Identification: 1157946<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| L | 114m E | Incident Date: 01/09/2013<br>Incident Identification: 1154550<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| L | 114m E | Incident Date: 13/09/2013<br>Incident Identification: 1159189<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 19 | 114m NE | Incident Date: 04/02/2002<br>Incident Identification: 56344<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Construction and Demolition Materials and Wastes | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| L | 119m E | Incident Date: 16/08/2013<br>Incident Identification: 1148455<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| L | 119m E | Incident Date: 17/10/2013<br>Incident Identification: 1168513<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| L | 119m E | Incident Date: 25/09/2013<br>Incident Identification: 1162324<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| L | 119m E | Incident Date: 01/07/2013<br>Incident Identification: 1127501<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| L | 119m E | Incident Date: 09/09/2015<br>Incident Identification: 1371899<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| L | 119m E | Incident Date: 19/09/2013<br>Incident Identification: 1160479<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| L | 119m E | Incident Date: 27/08/2013<br>Incident Identification: 1152771<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| L | 119m E | Incident Date: 24/09/2013<br>Incident Identification: 1161995<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| L | 119m E | Incident Date: 03/09/2013<br>Incident Identification: 1155510<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| C | 123m NE | Incident Date: 25/07/2014<br>Incident Identification: 1260658<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| C | 123m NE | Incident Date: 21/07/2014<br>Incident Identification: 1258455<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| C | 123m NE | Incident Date: 07/08/2014<br>Incident Identification: 1266009<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| C | 123m NE | Incident Date: 22/07/2014<br>Incident Identification: 1259118<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 22 | 140m SE | Incident Date: 31/01/2014<br>Incident Identification: 1200233<br>Pollutant: -<br>Pollutant Description: - | Water Impact: -<br>Land Impact: -<br>Air Impact: - |
| N | 149m NE | Incident Date: 04/08/2014<br>Incident Identification: 1264554<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| N | 149m NE | Incident Date: 23/07/2014<br>Incident Identification: 1259775<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| P | 175m NE | Incident Date: 02/06/2013<br>Incident Identification: 1118005<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| P | 178m NE | Incident Date: 15/07/2013<br>Incident Identification: 1133596<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 207m N | Incident Date: 05/11/2001<br>Incident Identification: 41162<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| Q | 223m NE | Incident Date: 29/03/2014<br>Incident Identification: 1222335<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| Q | 223m NE | Incident Date: 22/08/2013<br>Incident Identification: 1150589<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 227m N | Incident Date: 08/09/2014<br>Incident Identification: 1275157<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 235m N | Incident Date: 18/08/2015<br>Incident Identification: 1365778<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| S | 238m NE | Incident Date: 30/05/2013<br>Incident Identification: 1117276<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 244m N | Incident Date: 26/04/2002<br>Incident Identification: 75118<br>Pollutant: Other Pollutant<br>Pollutant Description: Other | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |
| R | 247m N | Incident Date: 31/05/2013<br>Incident Identification: 1117535<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 249m N | Incident Date: 19/09/2014<br>Incident Identification: 1279219<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 251m N | Incident Date: 23/06/2014<br>Incident Identification: 1248215<br>Pollutant: Multiple Pollutants<br>Pollutant Description: 2 Pollutants Including Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 257m N | Incident Date: 27/04/2013<br>Incident Identification: 1107176<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Soot/Smuts | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 261m N | Incident Date: 27/03/2015<br>Incident Identification: 1324077<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Droplets | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| R | 262m N | Incident Date: 25/07/2015<br>Incident Identification: 1358470<br>Pollutant: Other Pollutant<br>Pollutant Description: Noise | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 263m N | Incident Date: 25/06/2013<br>Incident Identification: 1125781<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Damage to Buildings, Vehicles and Vegetation | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Q | 265m NE | Incident Date: 02/08/2013<br>Incident Identification: 1143057<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Q | 265m NE | Incident Date: 25/07/2015<br>Incident Identification: 1358493<br>Pollutant: Pollutant Not Identified<br>Pollutant Description: Not Identified | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Q | 265m NE | Incident Date: 07/08/2015<br>Incident Identification: 1362347<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Q | 265m NE | Incident Date: 17/07/2013<br>Incident Identification: 1134730<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Q | 265m NE | Incident Date: 24/07/2015<br>Incident Identification: 1358384<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Q | 265m NE | Incident Date: 22/07/2013<br>Incident Identification: 1137270<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Q | 265m NE | Incident Date: 05/09/2013<br>Incident Identification: 1156601<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Q | 265m NE | Incident Date: 18/07/2013<br>Incident Identification: 1135391<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| Q | 265m NE | Incident Date: 10/06/2015<br>Incident Identification: 1344132<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 267m N | Incident Date: 10/08/2013<br>Incident Identification: 1146287<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 268m N | Incident Date: 18/04/2014<br>Incident Identification: 1228381<br>Pollutant: Other Pollutant<br>Pollutant Description: Noise | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 269m N | Incident Date: 15/10/2015<br>Incident Identification: 1380901<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 269m N | Incident Date: 17/02/2016<br>Incident Identification: 1411988<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| S | 270m E | Incident Date: 21/05/2013<br>Incident Identification: 1114867<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 271m N | Incident Date: 11/07/2014<br>Incident Identification: 1255038<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 273m N | Incident Date: 11/05/2002<br>Incident Identification: 78087<br>Pollutant: Inert Materials and Wastes<br>Pollutant Description: Mineral Materials and Wastes | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| Q | 274m NE | Incident Date: 28/08/2016<br>Incident Identification: 1604986<br>Pollutant: -<br>Pollutant Description: - | Water Impact: -<br>Land Impact: -<br>Air Impact: - |
| T | 276m NW | Incident Date: 09/06/2003<br>Incident Identification: 164486<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |

| ID | Location | Details | |
|---|---|---|---|
| R | 276m N | Incident Date: 23/01/2014<br>Incident Identification: 1197344<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Dust | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 277m N | Incident Date: 06/06/2002<br>Incident Identification: 83192<br>Pollutant: Pollutant Not Identified<br>Pollutant Description: Not Identified | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |
| R | 277m N | Incident Date: 26/04/2013<br>Incident Identification: 1106989<br>Pollutant: Multiple Pollutants<br>Pollutant Description: 2 Pollutants Including Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 277m N | Incident Date: 06/06/2002<br>Incident Identification: 83192<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |
| R | 277m N | Incident Date: 06/06/2002<br>Incident Identification: 83192<br>Pollutant: Atmospheric Pollutants and Effects:Pollutant Not Identified<br>Pollutant Description: Other Atmospheric Pollutant or Effect:Not Identified | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 3 (Minor) |
| U | 278m NE | Incident Date: 28/03/2017<br>Incident Identification: 1701594<br>Pollutant: -<br>Pollutant Description: - | Water Impact: Other<br>Land Impact: Other<br>Air Impact: Other |
| T | 280m N | Incident Date: 19/11/2015<br>Incident Identification: 1389206<br>Pollutant: Oils and Fuel<br>Pollutant Description: Cutting Oils | Water Impact: -<br>Land Impact: Category 3 (Minor)<br>Air Impact: Category 4 (No Impact) |
| U | 281m NE | Incident Date: 10/09/2013<br>Incident Identification: 1158070<br>Pollutant: -<br>Pollutant Description: - | Water Impact: -<br>Land Impact: -<br>Air Impact: - |
| U | 283m NE | Incident Date: 23/05/2001<br>Incident Identification: 6407<br>Pollutant: Pollutant Not Identified<br>Pollutant Description: Not Identified | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| S | 283m NE | Incident Date: 12/04/2013<br>Incident Identification: 1102150<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| R | 284m N | Incident Date: 23/06/2015<br>Incident Identification: 1347912<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 30 | 286m NE | Incident Date: 13/08/2013<br>Incident Identification: 1147277<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Q | 288m NE | Incident Date: 18/05/2013<br>Incident Identification: 1113859<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 291m N | Incident Date: 12/03/2014<br>Incident Identification: 1216947<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 293m N | Incident Date: 28/11/2013<br>Incident Identification: 1179568<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| T | 294m N | Incident Date: 09/06/2003<br>Incident Identification: 164502<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: Category 4 (No Impact)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| R | 295m N | Incident Date: 16/07/2013<br>Incident Identification: 1134275<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| S | 301m NE | Incident Date: 20/05/2013<br>Incident Identification: 1114597<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| V | 304m NE | Incident Date: 30/10/2002<br>Incident Identification: 117695<br>Pollutant: Agricultural Materials and Wastes<br>Pollutant Description: Other Agricultural Material or Waste | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 305m N | Incident Date: 27/09/2013<br>Incident Identification: 1162695<br>Pollutant: Multiple Pollutants<br>Pollutant Description: 2 Pollutants Including Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| V | 306m NE | Incident Date: 13/10/2016<br>Incident Identification: 1606230<br>Pollutant: Sewage Material<br>Pollutant Description: Other Sewage Material | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |
| V | 306m NE | Incident Date: 13/10/2016<br>Incident Identification: 1606230<br>Pollutant: -<br>Pollutant Description: - | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |
| R | 310m N | Incident Date: 26/04/2013<br>Incident Identification: 1106990<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| R | 329m N | Incident Date: 10/05/2013<br>Incident Identification: 1111462<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 32 | 349m NE | Incident Date: 27/08/2015<br>Incident Identification: 1368613<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| W | 360m NW | Incident Date: 16/03/2016<br>Incident Identification: 1600971<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: No Details<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |
| W | 360m NW | Incident Date: 16/03/2016<br>Incident Identification: 1600971<br>Pollutant: -<br>Pollutant Description: - | Water Impact: No Details<br>Land Impact: No Details<br>Air Impact: Category 3 (Minor) |
| X | 364m N | Incident Date: 02/09/2015<br>Incident Identification: 1370021<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 34 | 395m NE | Incident Date: 08/11/2013<br>Incident Identification: 1174920<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| X | 403m N | Incident Date: 13/03/2014<br>Incident Identification: 1217688<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Atmospheric Pollutant or Effect | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| 35 | 404m S | Incident Date: 24/02/2014<br>Incident Identification: 1211470<br>Pollutant: Multiple Pollutants<br>Pollutant Description: 5 Pollutants Including Tyres | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| 36 | 406m N | Incident Date: 28/09/2015<br>Incident Identification: 1376454<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 407m E | Incident Date: 29/04/2013<br>Incident Identification: 1107552<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 407m E | Incident Date: 11/09/2013<br>Incident Identification: 1158508<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Y | 407m E | Incident Date: 12/09/2013<br>Incident Identification: 1158894<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Z | 424m NE | Incident Date: 05/04/2013<br>Incident Identification: 1099840<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Z | 425m NE | Incident Date: 18/06/2015<br>Incident Identification: 1346544<br>Pollutant: Pollutant Not Identified<br>Pollutant Description: Not Identified | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Z | 425m NE | Incident Date: 12/08/2013<br>Incident Identification: 1147004<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Z | 425m NE | Incident Date: 09/06/2014<br>Incident Identification: 1243664<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Z | 425m NE | Incident Date: 28/02/2016<br>Incident Identification: 1414758<br>Pollutant: Pollutant Not Identified<br>Pollutant Description: Not Identified | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |

| ID | Location | Details | |
|---|---|---|---|
| Z | 426m NE | Incident Date: 20/09/2013<br>Incident Identification: 1160888<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| Z | 428m NE | Incident Date: 12/08/2013<br>Incident Identification: 1146803<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Other Odour | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| AA | 438m NE | Incident Date: 22/07/2014<br>Incident Identification: 1259193<br>Pollutant: Sewage Materials<br>Pollutant Description: Crude Sewage | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 3 (Minor) |
| AB | 451m NE | Incident Date: 13/09/2001<br>Incident Identification: 30554<br>Pollutant: Sewage Materials<br>Pollutant Description: Storm Sewage | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| AB | 483m NE | Incident Date: 31/05/2001<br>Incident Identification: 7163<br>Pollutant: Sewage Materials<br>Pollutant Description: Crude Sewage | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| AC | 485m NW | Incident Date: 15/10/2013<br>Incident Identification: 1167691<br>Pollutant: Atmospheric Pollutants and Effects<br>Pollutant Description: Smoke | Water Impact: -<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| 43 | 495m S | Incident Date: 04/10/2001<br>Incident Identification: 34868<br>Pollutant: Contaminated Water<br>Pollutant Description: Suspended Solids | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| AB | 496m NE | Incident Date: 06/10/2001<br>Incident Identification: 35036<br>Pollutant: Sewage Materials<br>Pollutant Description: Crude Sewage | Water Impact: Category 3 (Minor)<br>Land Impact: Category 4 (No Impact)<br>Air Impact: Category 4 (No Impact) |
| AE | 497m NE | Incident Date: 17/02/2017<br>Incident Identification: 1700832<br>Pollutant: -<br>Pollutant Description: - | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: No Details |
| AE | 497m NE | Incident Date: 17/02/2017<br>Incident Identification: 1700832<br>Pollutant: Sewage Material<br>Pollutant Description: Grey Water | Water Impact: Category 3 (Minor)<br>Land Impact: No Details<br>Air Impact: No Details |

*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.*

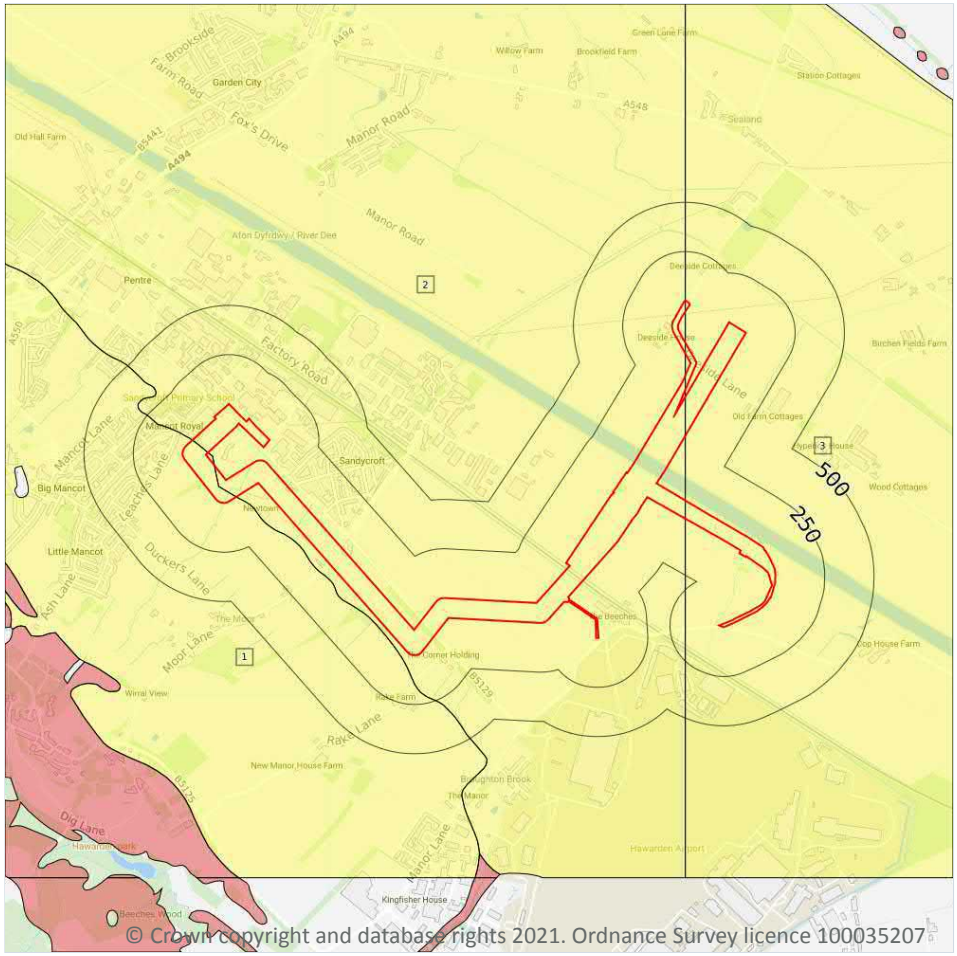
## 4.21 Pollution inventory radioactive waste

| 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.

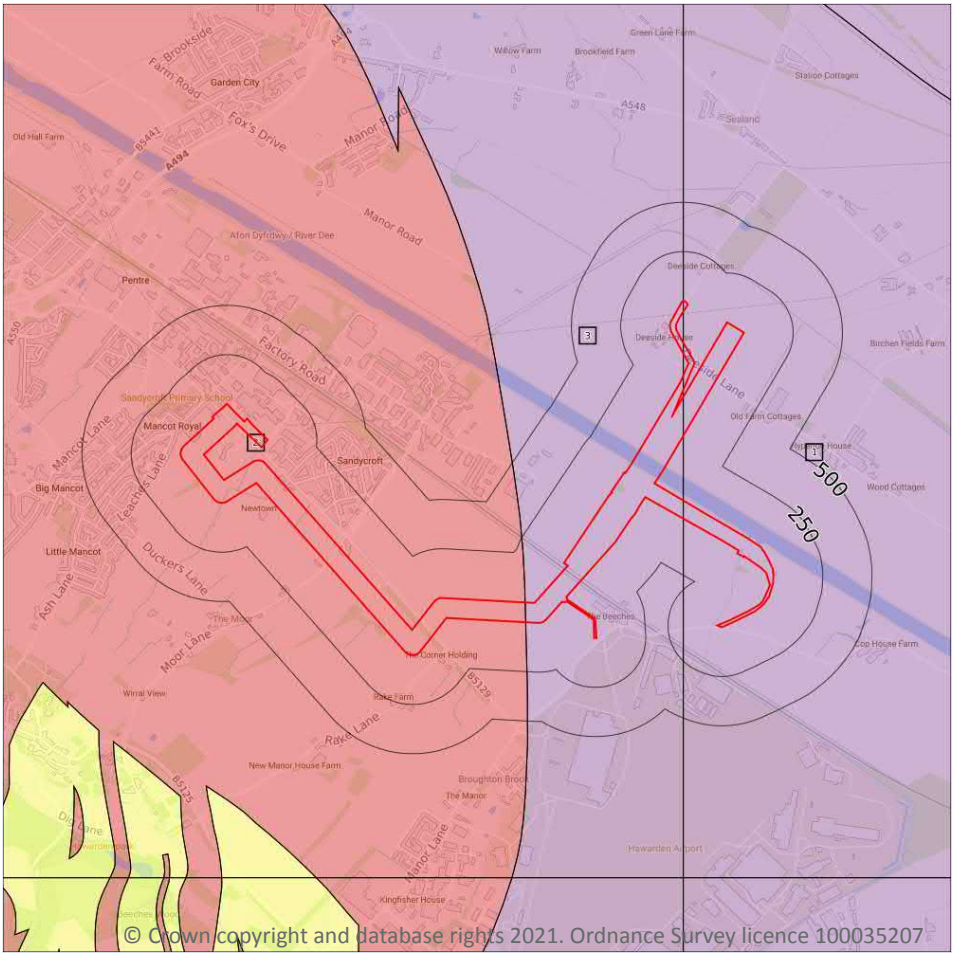
Features are displayed on the Hydrogeology map on **page 91**

| 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** | **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** |

*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

## 5.2 Bedrock aquifer

| Records within 500m | 3 |
|---|---|

Aquifer status of groundwater held within bedrock geology.

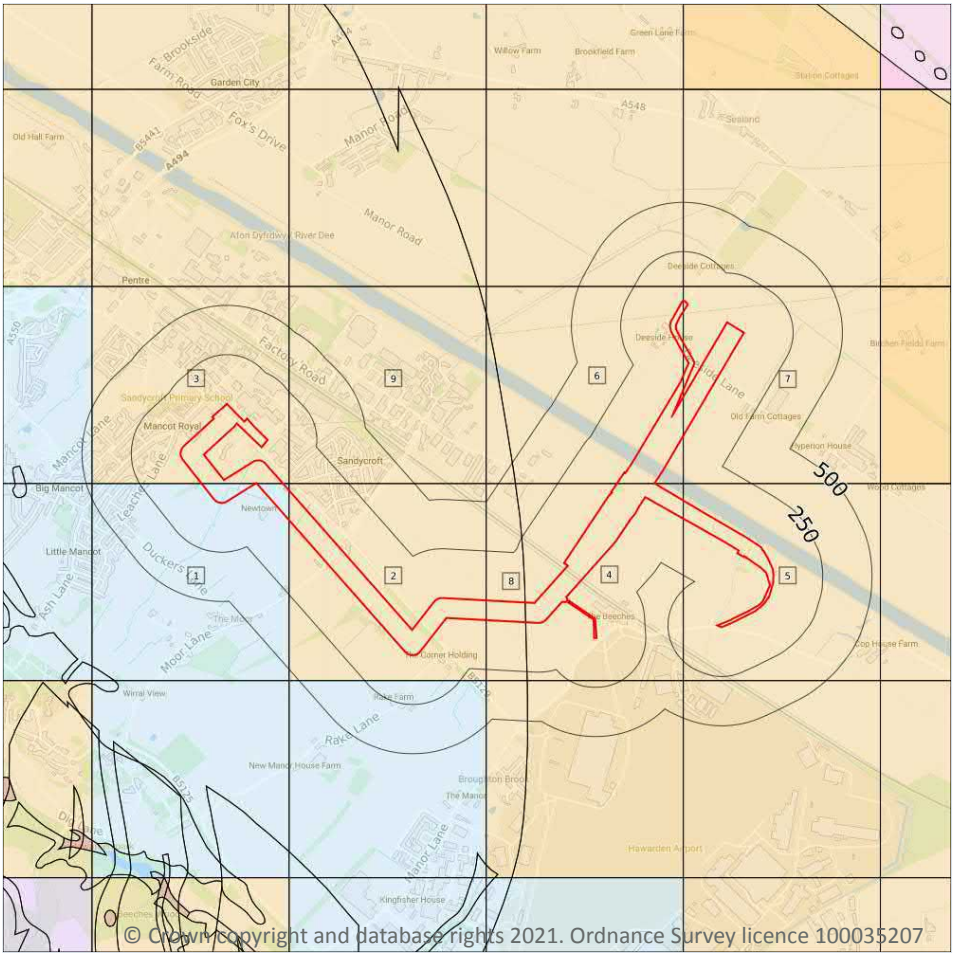
Features are displayed on the Bedrock aquifer map on **page 93**

| ID | Location | Designation | Description |
|---|---|---|---|
| 1 | On site | Principal | Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers |
| 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** | **On site** | **Principal** | **Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers** |

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

# Groundwater vulnerability




Site Outline

Search buffers in metres (m)

Superficial vulnerability

- Principal superficial aquifer, high vulnerability
- Secondary superficial aquifer, high vulnerability
- Principal superficial aquifer, medium vulnerability
- Secondary superficial aquifer, medium vulnerability
- Principal superficial aquifer, low vulnerability
- Secondary superficial aquifer, low vulnerability

Bedrock vulnerability

- Principal bedrock aquifer, high vulnerability
- Secondary bedrock aquifer, high vulnerability
- Principal bedrock aquifer, medium vulnerability
- Secondary bedrock aquifer, medium vulnerability
- Principal bedrock aquifer, low vulnerability
- Secondary bedrock aquifer, low vulnerability

Other information

- Unproductive aquifer
- Soluble rock risk
- Local information

## 5.3 Groundwater vulnerability

| Records within 50m | 9 |
|---|---|

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 95**

| ID | Location | Summary | Soil / surface | Superficial geology | Bedrock geology |
|---|---|---|---|---|---|
| 1 | On site | Summary Classification: Secondary superficial aquifer - Low Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: Low<br>Infiltration value: <40%<br>Dilution value: 300-550mm/year | Vulnerability: Low<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 2 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 3 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Secondary<br>Flow mechanism: Well connected fractures |
| 4 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: 300-550mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: High | Vulnerability: Low<br>Aquifer type: Principal<br>Flow mechanism: Well connected fractures |
| 5 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: <300mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: Low | Vulnerability: Low<br>Aquifer type: Principal<br>Flow mechanism: Intergranular |
| 6 | On site | Summary Classification: Secondary superficial aquifer - High Vulnerability<br>Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High<br>Infiltration value: >70%<br>Dilution value: <300mm/year | Vulnerability: High<br>Aquifer type: Secondary<br>Thickness: >10m<br>Patchiness value: >90%<br>Recharge potential: High | Vulnerability: Medium<br>Aquifer type: Principal<br>Flow mechanism: Well connected fractures |

| ID | Location | Summary | Soil / surface | Superficial geology | Bedrock geology |
|---|---|---|---|---|---|
| **7** | **On site** | **Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer** | **Leaching class: High Infiltration value: >70% Dilution value: <300mm/year** | **Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low** | **Vulnerability: Low Aquifer type: Principal Flow mechanism: Intergranular** |
| **8** | **On site** | **Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer** | **Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year** | **Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: High** | **Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures** |
| 9 | 23m NE | Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer | Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year | Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: High | 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.*

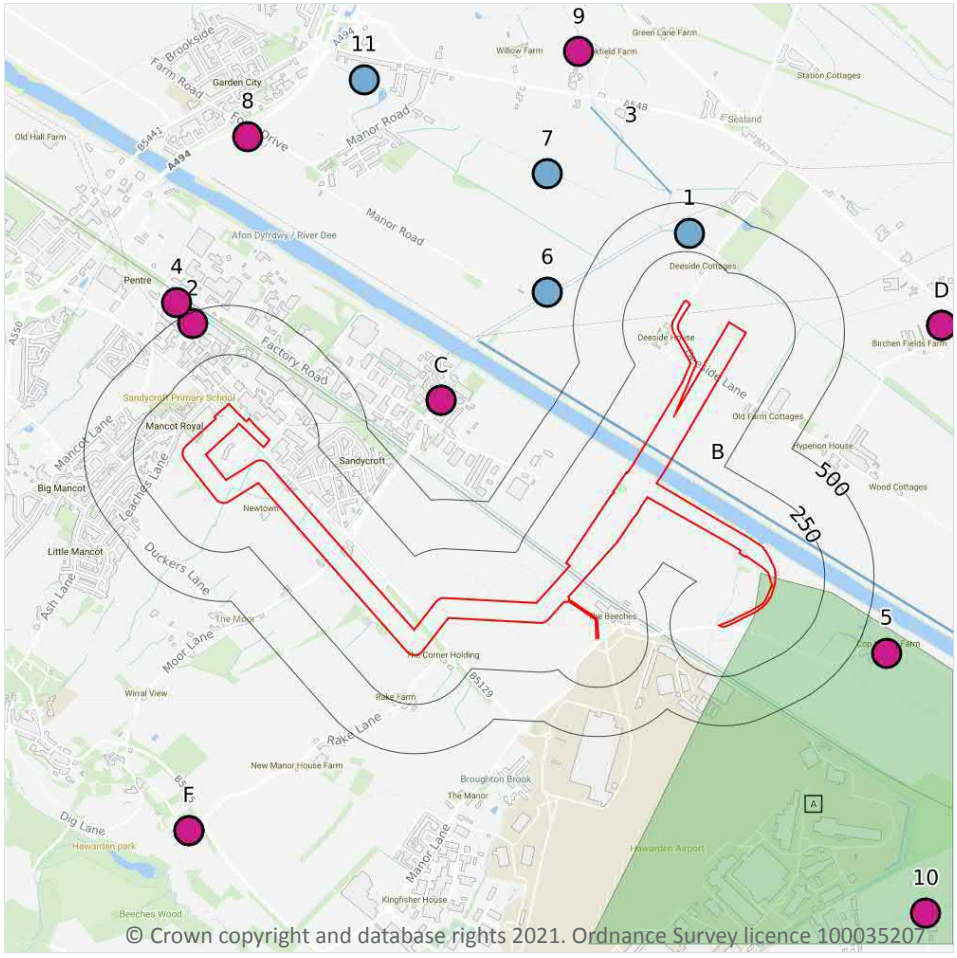
## 5.5 Groundwater vulnerability- local information

| **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




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- 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
- 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 | 14 |
|---|---|

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 98**

| ID | Location | Details | |
|---|---|---|---|
| **B** | **On site** | **Status: Historical**<br>**Licence No: 24/67/10/0141**<br>**Details: Spray Irrigation - Direct**<br>**Direct Source: EAW Groundwater**<br>**Point: REACH A - A ON THE SEALAND MAIN DRAIN**<br>**Data Type: Line**<br>**Name: WT Banks & Co. (Farming) Ltd.**<br>**Easting: 333960**<br>**Northing: 367720** | **Annual Volume ($m^3$): -**<br>**Max Daily Volume ($m^3$): -**<br>**Original Application No: -**<br>**Original Start Date: 01/08/2003**<br>**Expiry Date: 31/03/2014**<br>**Issue No: 1**<br>**Version Start Date: 01/08/2003**<br>**Version End Date: -** |
| 2 | 446m NW | Status: Historical<br>Licence No: 24/67/10/0106<br>Details: Process water<br>Direct Source: EAW Groundwater<br>Point: WELL B<br>Data Type: Point<br>Name: Knauf Insulation Ltd<br>Easting: 332500<br>Northing: 367810 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 15/12/1983<br>Expiry Date: -<br>Issue No: 103<br>Version Start Date: 01/01/2003<br>Version End Date: - |
| 4 | 580m NW | Status: Historical<br>Licence No: 24/67/10/0106<br>Details: Process water<br>Direct Source: EAW Groundwater<br>Point: WELL A<br>Data Type: Point<br>Name: Knauf Insulation Ltd<br>Easting: 332420<br>Northing: 367920 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 15/12/1983<br>Expiry Date: -<br>Issue No: 103<br>Version Start Date: 01/01/2003<br>Version End Date: - |
| 5 | 650m SE | Status: Historical<br>Licence No: 24/67/10/0009<br>Details: General Farming & Domestic<br>Direct Source: EAW Groundwater<br>Point: WELL<br>Data Type: Point<br>Name: Edge<br>Easting: 336020<br>Northing: 366140 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 05/07/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 12/04/1968<br>Version End Date: - |
| C | 871m NE | Status: Historical<br>Licence No: 24/67/10/0112<br>Details: General Use Relating To Secondary Category (Medium Loss)<br>Direct Source: EAW Groundwater<br>Point: BOREHOLE<br>Data Type: Point<br>Name: Archimica Limited<br>Easting: 333760<br>Northing: 367420 | Annual Volume ($m^3$): 119814<br>Max Daily Volume ($m^3$): 327.36<br>Original Application No: -<br>Original Start Date: 16/08/1988<br>Expiry Date: 31/03/2008<br>Issue No: 106<br>Version Start Date: 01/07/2006<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| C | 871m NE | Status: Historical<br>Licence No: 24/67/10/0154<br>Details: General Use Relating To Secondary Category (Medium Loss)<br>Direct Source: EAW Groundwater<br>Point: BOREHOLE<br>Data Type: Point<br>Name: Archimica Limited<br>Easting: 333760<br>Northing: 367420 | Annual Volume ($m^3$): 119814<br>Max Daily Volume ($m^3$): 327.36<br>Original Application No: -<br>Original Start Date: 01/04/2008<br>Expiry Date: 31/03/2015<br>Issue No: 1<br>Version Start Date: 01/04/2008<br>Version End Date: - |
| D | 993m E | Status: Historical<br>Licence No: 24/67/10/0105<br>Details: General Farming & Domestic<br>Direct Source: EAW Groundwater<br>Point: BOREHOLE<br>Data Type: Point<br>Name: Church Farm Dairies Ltd<br>Easting: 336300<br>Northing: 367800 | Annual Volume ($m^3$): 14368<br>Max Daily Volume ($m^3$): 1991<br>Original Application No: -<br>Original Start Date: 16/11/1983<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 01/04/2003<br>Version End Date: - |
| D | 993m E | Status: Historical<br>Licence No: 24/67/10/0105<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Groundwater<br>Point: BOREHOLE<br>Data Type: Point<br>Name: Church Farm Dairies Ltd<br>Easting: 336300<br>Northing: 367800 | Annual Volume ($m^3$): 14368<br>Max Daily Volume ($m^3$): 1991<br>Original Application No: -<br>Original Start Date: 16/11/1983<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 01/04/2003<br>Version End Date: - |
| 8 | 1359m N | Status: Historical<br>Licence No: 24/67/10/0046<br>Details: General Farming & Domestic<br>Direct Source: EAW Groundwater<br>Point: BOREHOLE<br>Data Type: Point<br>Name: Jones Balers Ltd<br>Easting: 332780<br>Northing: 368760 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 24/02/1967<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 06/06/1967<br>Version End Date: - |
| 9 | 1373m NW | Status: Historical<br>Licence No: 24/67/10/0022<br>Details: General Farming & Domestic<br>Direct Source: EAW Groundwater<br>Point: BOREHOLE<br>Data Type: Point<br>Name: H T Howe And Sons<br>Easting: 334460<br>Northing: 369190 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 25/10/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 01/04/1975<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| - | 1409m E | Status: Historical<br>Licence No: 24/67/10/0141<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Groundwater<br>Point: REACH B - B ON THE SEALAND MAIN DRAIN<br>Data Type: Line<br>Name: WT Banks & Co. (Farming) Ltd.<br>Easting: 336830<br>Northing: 366870 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 01/08/2003<br>Expiry Date: 31/03/2014<br>Issue No: 1<br>Version Start Date: 01/08/2003<br>Version End Date: - |
| F | 1430m SW | Status: Historical<br>Licence No: 24/67/10/140<br>Details: Horticultural Watering<br>Direct Source: EAW Groundwater<br>Point: BOREHOLE AT HAWARDEN CASTLE FRUIT FARM<br>Data Type: Point<br>Name: Hawarden Castle Fruit Farm<br>Easting: 332480<br>Northing: 365240 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 08/07/2003<br>Expiry Date: 31/03/2008<br>Issue No: 1<br>Version Start Date: 08/07/2003<br>Version End Date: - |
| F | 1430m SW | Status: Historical<br>Licence No: 24/67/10/0140<br>Details: Horticultural Watering<br>Direct Source: EAW Groundwater<br>Point: BOREHOLE AT HAWARDEN CASTLE FRUIT FARM<br>Data Type: Point<br>Name: Hawarden Castle Fruit Farm<br>Easting: 332480<br>Northing: 365240 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 08/07/2003<br>Expiry Date: 31/03/2008<br>Issue No: 1<br>Version Start Date: 08/07/2003<br>Version End Date: - |
| 10 | 1754m SE | Status: Historical<br>Licence No: 24/67/10/0006<br>Details: General Farming & Domestic<br>Direct Source: EAW Groundwater<br>Point: BOREHOLE<br>Data Type: Point<br>Name: Well House Estates Ltd<br>Easting: 336220<br>Northing: 364820 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 05/07/1966<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 05/07/1966<br>Version End Date: - |

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

## 5.7 Surface water abstractions

| **Records within 2000m** | **12** |
|---|---|

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 98**

| ID | Location | Details | |
|---|---|---|---|
| **B** | **On site** | **Status: Historical**<br>**Licence No: 24/67/10/0129**<br>**Details: Spray Irrigation - Direct**<br>**Direct Source: EAW Surface Water**<br>**Point: REACH A TO A AT SEALAND MAIN DRAIN**<br>**Data Type: Line**<br>**Name: Banks**<br>**Easting: 333960**<br>**Northing: 367720** | **Annual Volume ($m^3$): -**<br>**Max Daily Volume ($m^3$): -**<br>**Original Application No: -**<br>**Original Start Date: 31/07/1998**<br>**Expiry Date: 31/07/2003**<br>**Issue No: 100**<br>**Version Start Date: 01/04/2001**<br>**Version End Date: -** |
| **B** | **On site** | **Status: Historical**<br>**Licence No: 24/67/10/0141**<br>**Details: Spray Irrigation - Direct**<br>**Direct Source: EAW Surface Water**<br>**Point: REACH A-A ON THE SEALAND MAIN DRAIN**<br>**Data Type: Line**<br>**Name: WT Banks & Co (Farming) Ltd**<br>**Easting: 333960**<br>**Northing: 367720** | **Annual Volume ($m^3$): 104558**<br>**Max Daily Volume ($m^3$): 1227.42**<br>**Original Application No: -**<br>**Original Start Date: 01/08/2003**<br>**Expiry Date: 31/03/2014**<br>**Issue No: 2**<br>**Version Start Date: 19/07/2010**<br>**Version End Date: -** |
| **B** | **On site** | **Status: Historical**<br>**Licence No: WA/067/0010/011**<br>**Details: Spray Irrigation - Direct**<br>**Direct Source: EAW Surface Water**<br>**Point: SEALAND MAIN DRAIN**<br>**Data Type: Line**<br>**Name: WT Banks & Co (Farming) Ltd**<br>**Easting: 333955**<br>**Northing: 367720** | **Annual Volume ($m^3$): 67962.7**<br>**Max Daily Volume ($m^3$): 1227.42**<br>**Original Application No: -**<br>**Original Start Date: 30/07/2014**<br>**Expiry Date: 31/03/2027**<br>**Issue No: 2**<br>**Version Start Date: 26/11/2014**<br>**Version End Date: -** |
| **B** | **On site** | **Status: Active**<br>**Licence No: WA/067/0010/011**<br>**Details: Spray Irrigation - Direct - High**<br>**Direct Source: -**<br>**Point: -**<br>**Data Type: Line**<br>**Name: -**<br>**Easting: 333955**<br>**Northing: 367720** | **Annual Volume ($m^3$): 67,962.70**<br>**Max Daily Volume ($m^3$): 2,727.60**<br>**Original Application No: -**<br>**Original Start Date: 2014-11-26 00:00:00.0000000**<br>**Expiry Date: 2027-03-31 00:00:00.0000000**<br>**Issue No: -**<br>**Version Start Date: -**<br>**Version End Date: -** |
| 1 | 344m N | Status: Historical<br>Licence No: 24/67/10/0103<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: SEALAND MAIN DRAIN POINT C.<br>Data Type: Point<br>Name: Jones Balers Ltd<br>Easting: 335020<br>Northing: 368270 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 17/11/1987<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 27/04/1989<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| 3 | 547m N | Status: Historical<br>Licence No: 24/67/10/0102<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: WATERLOO DRAIN<br>Data Type: Line<br>Name: Williams<br>Easting: 334930<br>Northing: 368470 | Annual Volume ($m^3$): 12274<br>Max Daily Volume ($m^3$): 355<br>Original Application No: -<br>Original Start Date: 17/09/1980<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 01/04/2007<br>Version End Date: - |
| 6 | 653m W | Status: Historical<br>Licence No: 24/67/10/0103<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: SEALAND MAIN DRAIN POINT C<br>Data Type: Point<br>Name: Jones Balers Ltd<br>Easting: 334300<br>Northing: 367970 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 17/11/1987<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 27/04/1989<br>Version End Date: - |
| 7 | 949m NW | Status: Historical<br>Licence No: 24/67/10/0103<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: MANOR DRAIN POINT B<br>Data Type: Point<br>Name: Jones Balers Ltd<br>Easting: 334300<br>Northing: 368570 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 17/11/1987<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 27/04/1989<br>Version End Date: - |
| - | 1405m E | Status: Historical<br>Licence No: WA/067/0010/011<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: SEALAND MAIN DRAIN<br>Data Type: Line<br>Name: WT Banks & Co (Farming) Ltd<br>Easting: 336826<br>Northing: 366870 | Annual Volume ($m^3$): 67962.7<br>Max Daily Volume ($m^3$): 1227.42<br>Original Application No: -<br>Original Start Date: 30/07/2014<br>Expiry Date: 31/03/2027<br>Issue No: 2<br>Version Start Date: 26/11/2014<br>Version End Date: - |
| - | 1409m E | Status: Historical<br>Licence No: 24/67/10/0129<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: REACH B TO B AT SEALAND MAIN DRAIN<br>Data Type: Line<br>Name: Banks<br>Easting: 336830<br>Northing: 366870 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 31/07/1998<br>Expiry Date: 31/07/2003<br>Issue No: 100<br>Version Start Date: 01/04/2001<br>Version End Date: - |

| ID | Location | Details | |
|---|---|---|---|
| - | 1409m E | Status: Historical<br>Licence No: 24/67/10/0141<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: REACH B-B ON THE SEALAND MAIN DRAIN<br>Data Type: Line<br>Name: WT Banks & Co (Farming) Ltd<br>Easting: 336830<br>Northing: 366870 | Annual Volume ($m^3$): 104558<br>Max Daily Volume ($m^3$): 1227.42<br>Original Application No: -<br>Original Start Date: 01/08/2003<br>Expiry Date: 31/03/2014<br>Issue No: 2<br>Version Start Date: 19/07/2010<br>Version End Date: - |
| 11 | 1782m N | Status: Historical<br>Licence No: 24/67/10/0103<br>Details: Spray Irrigation - Direct<br>Direct Source: EAW Surface Water<br>Point: MANOR DRAIN POINT B<br>Data Type: Point<br>Name: Jones Balers Ltd<br>Easting: 333370<br>Northing: 369050 | Annual Volume ($m^3$): -<br>Max Daily Volume ($m^3$): -<br>Original Application No: -<br>Original Start Date: 17/11/1987<br>Expiry Date: -<br>Issue No: 100<br>Version Start Date: 27/04/1989<br>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 98**

| ID | Location | Type | Description |
|---|---|---|---|
| **A** | **On site** | **3** | **Total catchment** |
| **A** | **On site** | **3** | **Total catchment** |

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

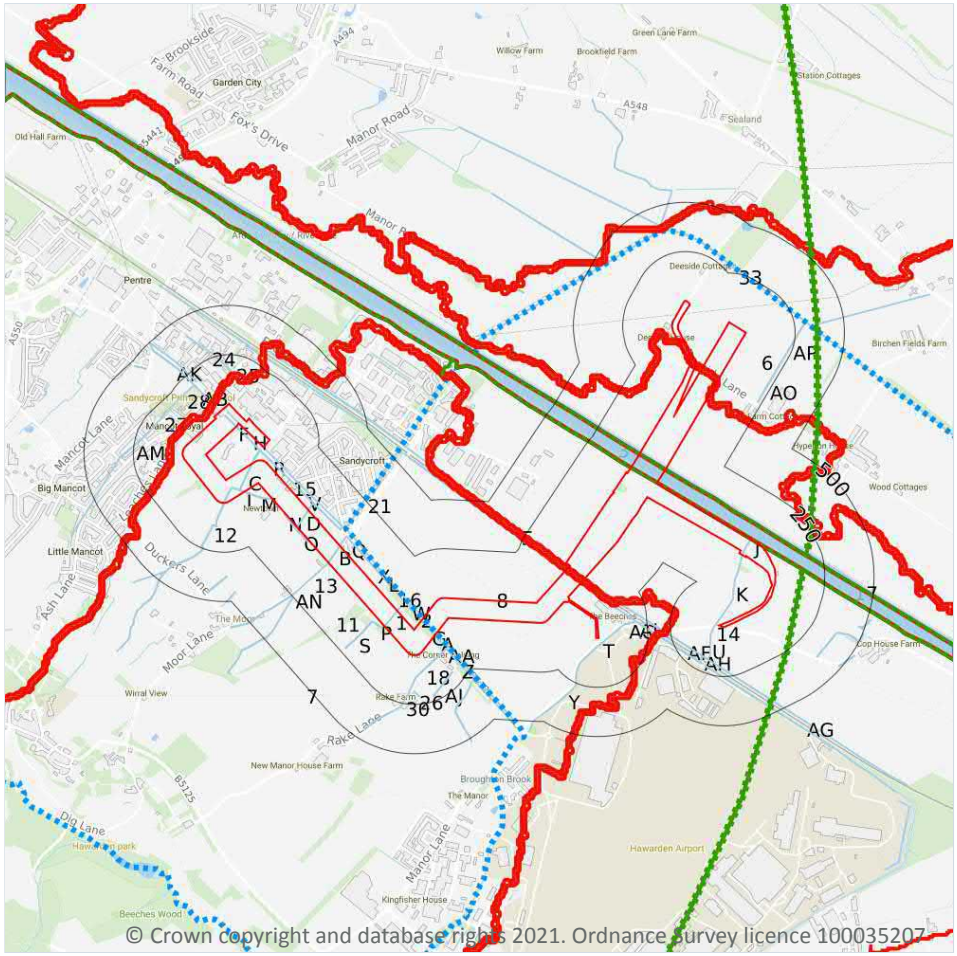
## 5.10 Source Protection Zones (confined aquifer)

| 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




## 6.1 Water Network (OS MasterMap)

| Records within 250m | 101 |
|---|---|

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 106**

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| 1 | **On site** | **Inland river not influenced by normal tidal action.** | **Not provided** | **Watercourse contains water year round (in normal circumstances)** | - |

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| 2 | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Broughton Brook |
| 3 | On site | Tidal river or stream. | On ground surface | Watercourse contains water year round (in normal circumstances) | Afon Dyfrdwy |
| 12 | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| A | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Broughton Brook |
| B | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| C | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| D | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| E | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| E | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| F | On site | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| G | On site | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| G | On site | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | Broughton Brook |
| H | On site | 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 |
|---|---|---|---|---|---|
| **I** | **On site** | **Inland river not influenced by normal tidal action.** | **Underground** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **I** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **J** | **On site** | **Tidal river or stream.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **J** | **On site** | **Inland river not influenced by normal tidal action.** | **Underground** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **K** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| **M** | **On site** | **Inland river not influenced by normal tidal action.** | **On ground surface** | **Watercourse contains water year round (in normal circumstances)** | **-** |
| 13 | 3m SW | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| N | 5m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| N | 7m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| N | 7m SW | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| O | 9m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| H | 11m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| P | 14m SW | 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 |
|---|---|---|---|---|---|
| 14 | 19m W | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| H | 21m SW | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| R | 21m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| H | 22m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| P | 26m SW | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| P | 26m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 15 | 28m NE | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| T | 29m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| U | 33m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| T | 34m SE | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| V | 36m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| V | 40m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| V | 42m NE | 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 |
|---|---|---|---|---|---|
| T | 42m S | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| V | 45m NE | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| Q | 47m NE | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| Q | 56m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| W | 57m NE | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| W | 57m NE | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| 16 | 57m NE | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| Q | 57m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| Q | 57m NE | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| X | 57m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| S | 59m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 17 | 60m NE | Tidal river or stream. | On ground surface | Watercourse contains water year round (in normal circumstances) | Afon Dyfrdwy |
| T | 61m E | 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 |
|---|---|---|---|---|---|
| Y | 61m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| L | 72m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Broughton Brook |
| 18 | 72m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| Q | 74m NE | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| Q | 77m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Broughton Brook |
| Q | 80m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Broughton Brook |
| Q | 80m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Broughton Brook |
| Q | 80m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 21 | 81m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Broughton Brook |
| Z | 87m SE | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| AA | 87m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AA | 88m SE | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| AA | 89m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Broughton Brook |

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| AB | 99m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AA | 103m SE | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | Broughton Brook |
| AC | 108m E | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| Z | 111m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | Broughton Brook |
| AC | 112m NE | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| 24 | 168m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AF | 176m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AG | 177m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AH | 177m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AH | 178m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 25 | 179m N | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 26 | 181m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AH | 184m SW | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |

| ID | Location | Type of water feature | Ground level | Permanence | Name |
|---|---|---|---|---|---|
| AJ | 184m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 27 | 186m NW | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| 28 | 187m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AB | 188m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AK | 188m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AK | 191m NW | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| AL | 195m E | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AM | 197m NW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| 30 | 200m S | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| AH | 205m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AL | 206m E | Inland river not influenced by normal tidal action. | Not provided | Watercourse contains water year round (in normal circumstances) | - |
| AF | 210m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AH | 210m SW | 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 |
|---|---|---|---|---|---|
| AH | 212m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AL | 212m E | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AL | 212m E | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AG | 216m S | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AN | 221m SW | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AL | 223m E | Inland river not influenced by normal tidal action. | Underground | Watercourse contains water year round (in normal circumstances) | - |
| 33 | 227m NE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AO | 229m SE | Inland river not influenced by normal tidal action. | On ground surface | Watercourse contains water year round (in normal circumstances) | - |
| AP | 230m SE | Inland river not influenced by normal tidal action. | 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** | **39** |
|---|---|

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 106**

*This data is sourced from the Ordnance Survey.*

## 6.3 WFD Surface water body catchments

| Records on site | 3 |
|---|---|

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 106**

| ID | Location | Type | Water body catchment | Water body ID | Operational catchment | Management catchment |
|---|---|---|---|---|---|---|
| **6** | **On site** | **River WB catchment** | **Finchetts Gutter** | **GB111067056930** | **Dee Estuary** | **Dee** |
| **7** | **On site** | **River WB catchment** | **Sandycroft Drain** | **GB111067052160** | **Dee Estuary** | **Dee** |
| **8** | **On site** | **Coastal catchment** | **Not part of a river WB catchment** | **166** | **Dee Estuary** | **Dee** |

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

## 6.4 WFD Surface water bodies

| Records identified | 3 |
|---|---|

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 106**

| ID | Location | Type | Name | Water body ID | Overall rating | Chemical rating | Ecological rating | Year |
|---|---|---|---|---|---|---|---|---|
| **9** | **On site** | **River** | **Sandycroft Drain** | **GB111067052160** | **Moderate** | **Good** | **Moderate** | **2016** |
| **10** | **On site** | **Transitional** | **DEE (N. WALES)** | **GB531106708200** | **Moderate** | **Fail** | **Moderate** | **2016** |
| 32 | 228m NE | River | Finchetts Gutter | GB111067056930 | Poor | Good | Poor | 2016 |

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

## 6.5 WFD Groundwater bodies

| Records on site | 1 |
|---|---|

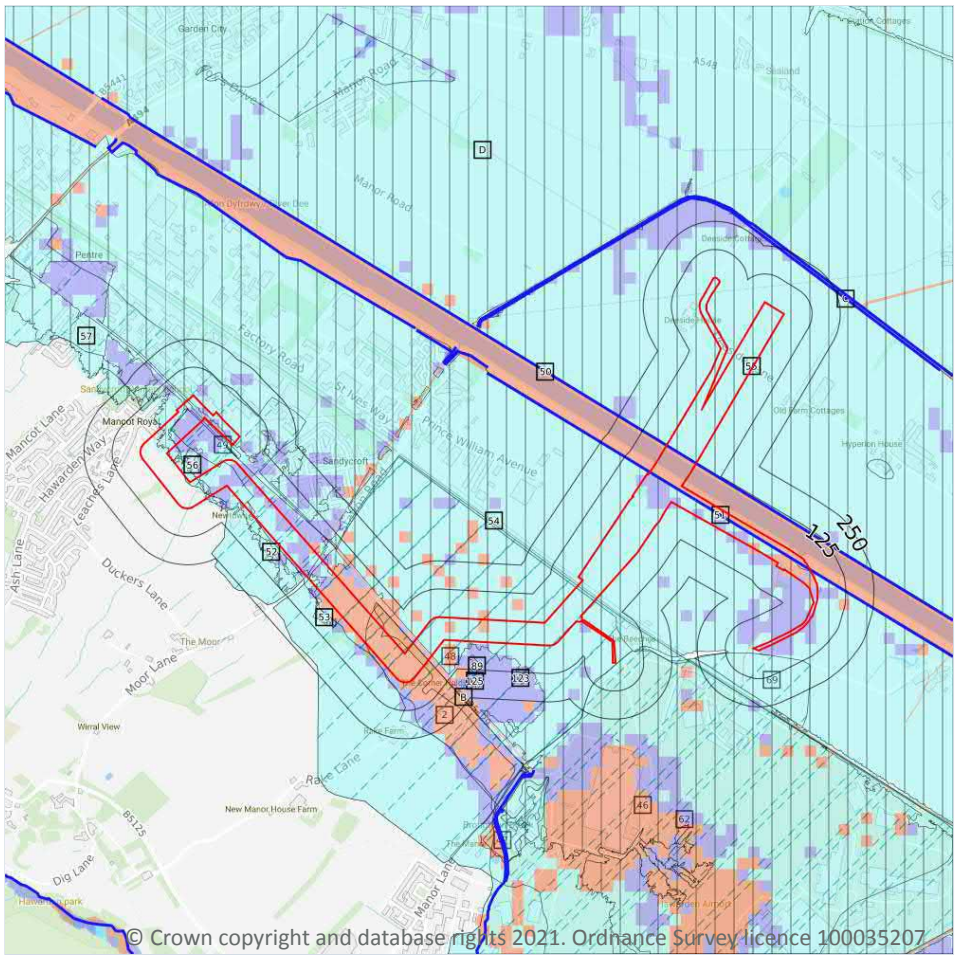
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place.

Features are displayed on the Hydrology map on **page 106**

| ID | Location | Name | Water body ID | Overall rating | Chemical rating | Quantitative | Year |
|---|---|---|---|---|---|---|---|
| **11** | **On site** | **Dee Carboniferous Coal Measures** | **GB41102G204800** | **Poor** | **Poor** | **Good** | **2016** |

*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 Sea (RoFRaS)

| **Records within 50m** | **69** |
|---|---|

The chance of flooding from rivers and/or the sea in any given year, based on cells of 50m. Each cell is allocated one of four flood risk categories, taking into account flood defences and their condition; 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).

Features are displayed on the River and coastal flooding map on **page 117**

| Distance | RoFRaS flood risk |
|---|---|
| **On site** | **High** |
| 0 - 50m | High |

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

## 7.2 Historical Flood Events

| Records within 250m | 7 |
|---|---|

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.

Features are displayed on the River and coastal flooding map on **page 117**

| ID | Location | Event name | Date of flood | Flood source | Flood cause | Type of flood |
|---|---|---|---|---|---|---|
| **2** | **On site** | **Broughton Brook 25th June 2007 01** | **2007-06-25 2007-06-25** | **Main river** | **Channel capacity exceeded (no raised defences)** | **Fluvial** |
| **46** | **On site** | **Sandycroft / Hawarden Airport 1964 01** | **1964-01-01 1964-01-01** | **Main river** | **Channel capacity exceeded (no raised defences)** | **Fluvial** |
| **47** | **On site** | **Broughton Brook 15th June 2007 01** | **2007-06-15 2007-06-15** | **Main river** | **Channel capacity exceeded (no raised defences)** | **Fluvial** |
| **48** | **On site** | **Sandycroft Drain September 1976** | **1976-09-26 1976-09-27** | **Main river** | **Channel capacity exceeded (no raised defences)** | **Fluvial** |
| **49** | **On site** | **Queensferry Drain September 1976** | **1976-09-26 1976-09-27** | **Main river** | **Channel capacity exceeded (no raised defences)** | **Fluvial** |
| 62 | 6m SE | Broughton Brook September 1976 | 1976-09-26 1976-09-27 | Main river | Channel capacity exceeded (no raised defences) | Fluvial |
| 69 | 15m S | Beeches Drain September 1976 001 | 1976-09-26 1976-09-27 | Main river | Channel capacity exceeded (no raised defences) | Fluvial |

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

## 7.3 Flood Defences

| Records within 250m | 4 |
|---|---|

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.

Features are displayed on the River and coastal flooding map on **page 117**

| ID | Location | Update |
|---|---|---|
| **50** | **On site** | **25/05/2021** |
| **51** | **On site** | **25/05/2021** |
| C | 220m NE | 25/05/2021 |
| C | 235m NE | 25/05/2021 |

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

## 7.4 Areas Benefiting from Flood Defences

| **Records within 250m** | **12** |
|---|---|

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.

Features are displayed on the River and coastal flooding map on **page 117**

| ID | Location | |
|---|---|---|
| **52** | **On site** | **Area benefiting from flood defences** |
| **53** | **On site** | **Area benefiting from flood defences** |
| **54** | **On site** | **Area benefiting from flood defences** |
| **55** | **On site** | **Area benefiting from flood defences** |
| **56** | **On site** | **Area benefiting from flood defences** |
| **57** | **On site** | **Area benefiting from flood defences** |
| **A** | **On site** | **Area benefiting from flood defences** |
| 89 | 60m S | Area benefiting from flood defences |
| 123 | 129m S | Area benefiting from flood defences |
| 125 | 133m S | Area benefiting from flood defences |
| B | 148m SE | Area benefiting from flood defences |
| D | 234m NE | Area benefiting from flood defences |

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

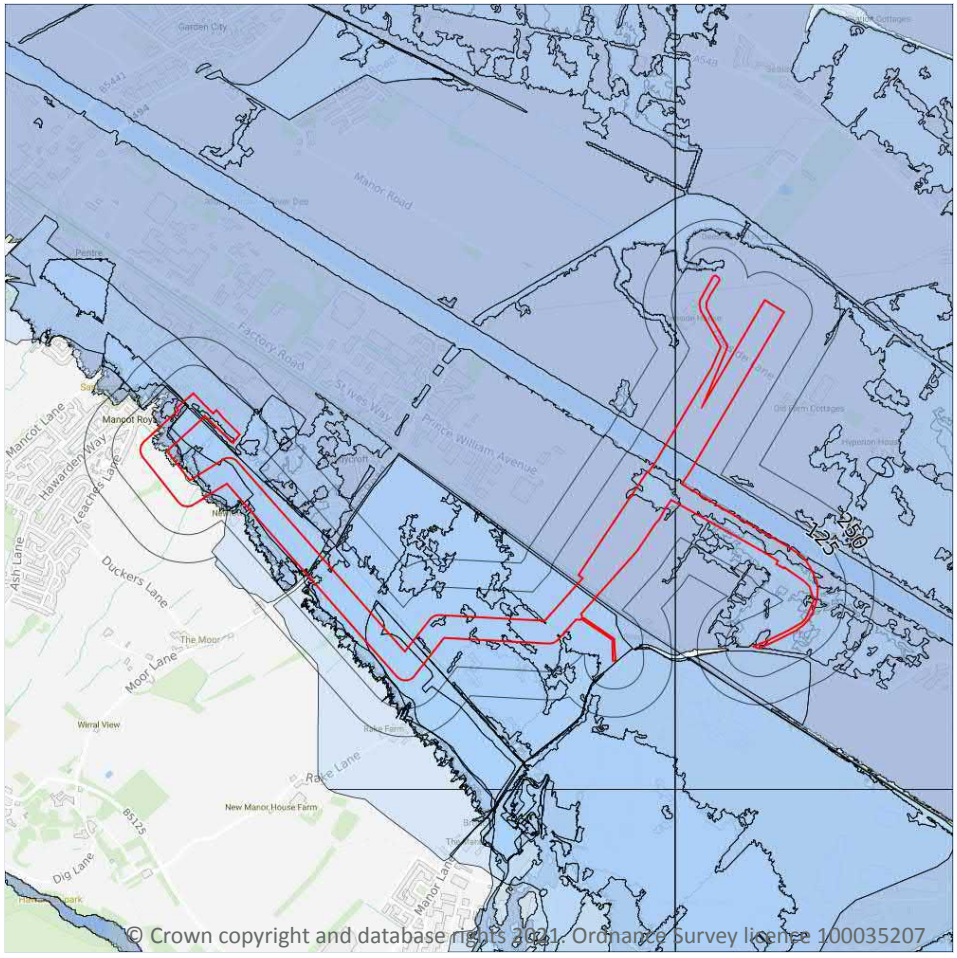
## 7.5 Flood Storage Areas

| 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 | 1 |
|---|---|

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.

Features are displayed on the River and coastal flooding map on **page 117**

| Location | Type |
|---|---|
| **On site** | **Zone 2 - (Fluvial /Tidal Models)** |

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

## 7.7 Flood Zone 3

| Records within 50m | 1 |
|---|---|

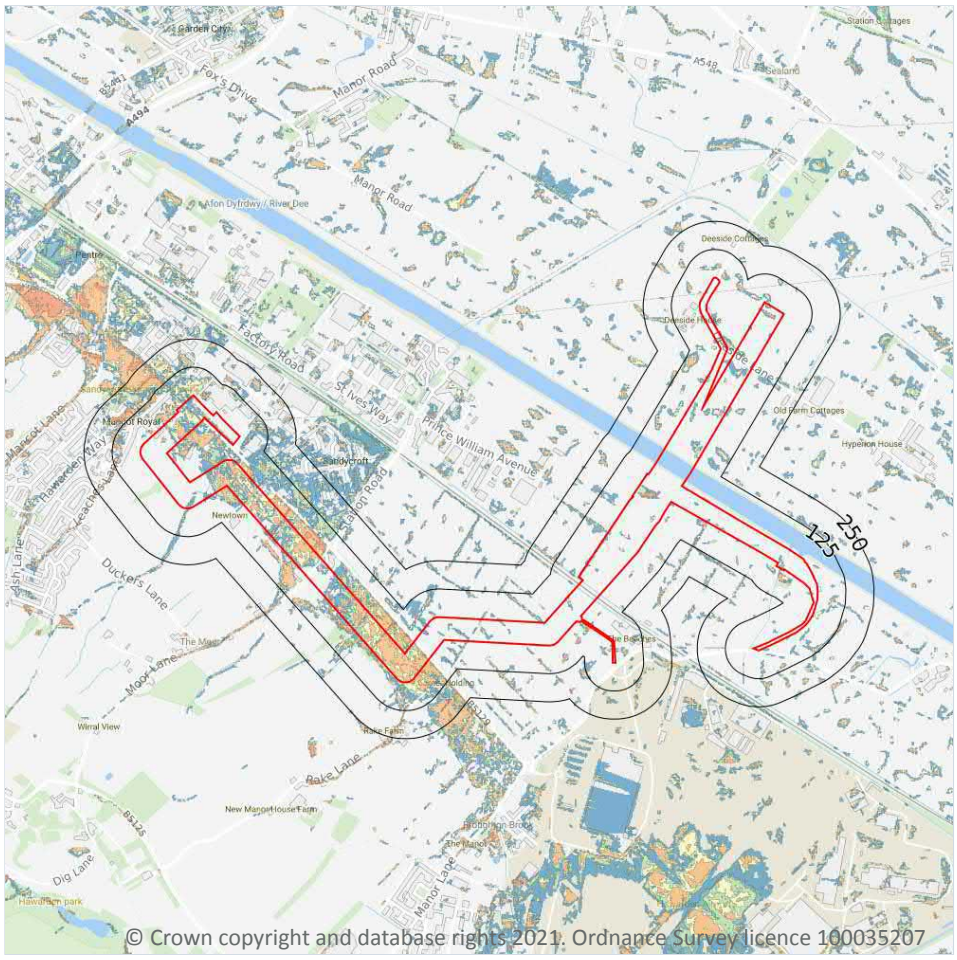
Areas of land at risk of flooding, when the presence of flood defences are ignored. Covering land with a 1 in 100 (1%) or greater chance of flooding each year from rivers or a 1 in 200 (0.5%) or greater chance of flooding each year from the sea.

Features are displayed on the River and coastal flooding map on **page 117**

| Location | Type |
|---|---|
| **On site** | **Zone 3 - (Fluvial Models)** |

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

# 8 Surface water flooding




Site Outline

Search buffers in metres (m)

1 in 1000 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 250 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 100 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

1 in 30 return period
- Depth between 0.1m - 0.3m
- Depth between 0.3m - 1.0m
- Depth greater than 1.0m

## 8.1 Surface water flooding

| | |
|---|---|
| **Highest risk on site** | **1 in 30 year, 0.3m - 1.0m** |
| **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 123**

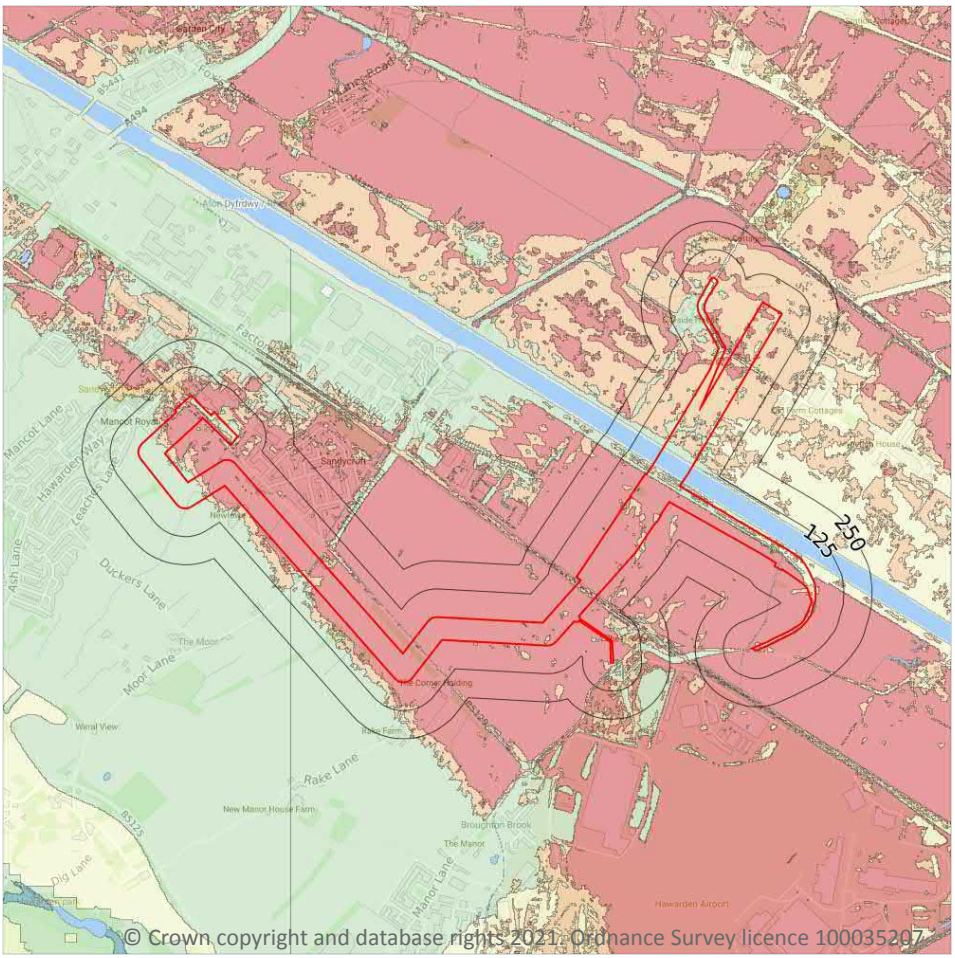
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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 | Greater than 1.0m |
| 1 in 250 year | Greater than 1.0m |
| 1 in 100 year | Between 0.3m and 1.0m |
| 1 in 30 year | Between 0.3m and 1.0m |

*This data is sourced from Ambiental 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** | **High** |
| **Highest risk within 50m** | **High** |

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 125**

*This data is sourced from Ambiental Risk Analytics.*