Groundsure
LOCATION INTELLIGENCE

Enviro+Geo Insight

CONNAHS QUAY LOW CARBON POWER SITE

Order Details

Date: 03/08/2025

Your ref: UK1725256 / 844946

Our Ref: GS-PPI-KDK-7N3-QYR

Site Details

Location: 327171 371480

Area: 34.28 ha

Authority: Sir y Fflint - Flintshire County Council ↗

Contact us with any questions at:
info@groundsure.com ↗
01273 257 755

Certified B Corporation

Summary of findings

Page	Section	Past land use >	On site	0-50m	50-250m	250-500m	500-2000m
14 >	1.1 >	Historical industrial land uses >	12	19	24	35	-
18 >	1.2 >	Historical tanks >	4	2	5	16	-
19 >	1.3 >	Historical energy features >	3	0	1	5	-
20	1.4	Historical petrol stations	0	0	0	0	-
20 >	1.5 >	Historical garages >	0	0	3	0	-
21	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
22 >	2.1 >	Historical industrial land uses >	16	29	29	46	-
27 >	2.2 >	Historical tanks >	6	3	7	18	-
28 >	2.3 >	Historical energy features >	3	0	1	8	-
29	2.4	Historical petrol stations	0	0	0	0	-
29 >	2.5 >	Historical garages >	0	0	3	0	-
Page	Section	Waste and landfill >	On site	0-50m	50-250m	250-500m	500-2000m
31	3.1	Active or recent landfill	0	0	0	0	-
31 >	3.2 >	Historical landfill (BGS records) >	1	0	0	0	-
32	3.3	Historical landfill (LA/mapping records)	0	0	0	0	-
32 >	3.4 >	Historical landfill (EA/NRW records) >	2	0	0	0	-
33	3.5	Historical waste sites	0	0	0	0	-
33 >	3.6 >	Licensed waste sites >	0	2	0	0	-
33 >	3.7 >	Waste exemptions >	0	0	0	16	-
Page	Section	Current industrial land use >	On site	0-50m	50-250m	250-500m	500-2000m
36 >	4.1 >	Recent industrial land uses >	6	0	6	-	-
37 >	4.2 >	National Geographic Database (NGD) - Current or recent tanks >	6	8	6	-	-
38	4.3	Current or recent petrol stations	0	0	0	0	-
38	4.4	Electricity cables	0	0	0	0	-
39	4.5	Gas pipelines	0	0	0	0	-

39	4.6	Sites determined as Contaminated Land	0	0	0	0	-
39	4.7	Control of Major Accident Hazards (COMAH)	0	0	0	0	-
39	4.8	Regulated explosive sites	0	0	0	0	-
39 >	4.9 >	Hazardous substance storage/usage >	0	0	0	1	-
40 >	4.10 >	Historical licensed industrial activities (IPC) >	0	0	0	2	-
40 >	4.11 >	Licensed industrial activities (Part A(1)) >	0	0	0	23	-
44 >	4.12 >	Licensed pollutant release (Part A(2)/B) >	0	0	1	0	-
44	4.13	Radioactive Substance Authorisations	0	0	0	0	-
44 >	4.14 >	Licensed Discharges to controlled waters >	0	1	3	11	-
47	4.15	Pollutant release to surface waters (Red List)	0	0	0	0	-
47	4.16	Pollutant release to public sewer	0	0	0	0	-
47 >	4.17 >	List 1 Dangerous Substances >	0	0	0	1	-
47	4.18	List 2 Dangerous Substances	0	0	0	0	-
48 >	4.19 >	Pollution Incidents (EA/NRW) >	5	0	0	22	-
51	4.20	Pollution inventory substances	0	0	0	0	-
51	4.21	Pollution inventory waste transfers	0	0	0	0	-
51	4.22	Pollution inventory radioactive waste	0	0	0	0	-

Page	Section	Hydrogeology >	On site	0-50m	50-250m	250-500m	500-2000m
52 >	5.1 >	Superficial aquifer >	Identified (within 500m)				
54 >	5.2 >	Bedrock aquifer >	Identified (within 500m)				
56 >	5.3 >	Groundwater vulnerability >	Identified (within 50m)				
58	5.4	Groundwater vulnerability- soluble rock risk	None (within 0m)				
58	5.5	Groundwater vulnerability- local information	None (within 0m)				
59 >	5.6 >	Groundwater abstractions >	0	0	0	0	2
60 >	5.7 >	Surface water abstractions >	0	0	0	4	8
63	5.8	Potable abstractions	0	0	0	0	0
63	5.9	Source Protection Zones	0	0	0	0	-
63	5.10	Source Protection Zones (confined aquifer)	0	0	0	0	-

Page	Section	Hydrology >	On site	0-50m	50-250m	250-500m	500-2000m

64 >	6.1 >	Water Network (OS MasterMap) >	0	9	10	-	-
66 >	6.2 >	Surface water features >	0	3	12	-	-
66 >	6.3 >	WFD Surface water body catchments >	1	-	-	-	-
67 >	6.4 >	WFD Surface water bodies >	1	0	0	-	-
67 >	6.5 >	WFD Groundwater bodies >	1	-	-	-	-
Page	Section	River and coastal flooding >	On site	0-50m	50-250m	250-500m	500-2000m
68 >	7.1 >	Risk of flooding from rivers and the sea >	High (within 50m)				
69	7.2	Historical Flood Events	0	0	0	-	-
69 >	7.3 >	Flood Defences >	1	0	0	-	-
69 >	7.4 >	Areas Benefiting from Flood Defences >	0	4	4	-	-
70	7.5	Flood Storage Areas	0	0	0	-	-
71 >	7.6 >	Flood Zone 2 >	Identified (within 50m)				
72 >	7.7 >	Flood Zone 3 >	Identified (within 50m)				
Page	Section	Surface water flooding >					
73 >	8.1 >	Surface water flooding >	1 in 30 year, Greater than 1.0m (within 50m)				
Page	Section	Groundwater flooding >					
75 >	9.1 >	Groundwater flooding >	High (within 50m)				
Page	Section	Environmental designations >	On site	0-50m	50-250m	250-500m	500-2000m
76 >	10.1 >	Sites of Special Scientific Interest (SSSI) >	0	1	0	0	11
77 >	10.2 >	Conserved wetland sites (Ramsar sites) >	1	1	0	0	3
82 >	10.3 >	Special Areas of Conservation (SAC) >	0	1	0	0	2
83 >	10.4 >	Special Protection Areas (SPA) >	1	1	0	0	3
85	10.5	National Nature Reserves (NNR)	0	0	0	0	0
86	10.6	Local Nature Reserves (LNR)	0	0	0	0	0
86 >	10.7 >	Designated Ancient Woodland >	0	0	0	1	22
87	10.8	Biosphere Reserves	0	0	0	0	0
87	10.9	Forest Parks	0	0	0	0	0
87	10.10	Marine Conservation Zones	0	0	0	0	0
88	10.11	Green Belt	0	0	0	0	0

88	10.12	Proposed Ramsar sites	0	0	0	0	0
88	10.13	Possible Special Areas of Conservation (pSAC)	0	0	0	0	0
88	10.14	Potential Special Protection Areas (pSPA)	0	0	0	0	0
88	10.15	Nitrate Sensitive Areas	0	0	0	0	0
89	10.16	Nitrate Vulnerable Zones	0	0	0	0	0
90 >	**10.17 >**	**SSSI Impact Risk Zones >**	1	-	-	-	-
91	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
92	11.1	World Heritage Sites	0	0	0	-	-
92	11.2	Area of Outstanding Natural Beauty	0	0	0	-	-
92	11.3	National Parks	0	0	0	-	-
92	11.4	Listed Buildings	0	0	0	-	-
93	11.5	Conservation Areas	0	0	0	-	-
93	11.6	Scheduled Ancient Monuments	0	0	0	-	-
93	11.7	Registered Parks and Gardens	0	0	0	-	-
Page	Section	**Agricultural designations >**	On site	0-50m	50-250m	250-500m	500-2000m
94 >	**12.1 >**	**Agricultural Land Classification >**	Grade 2 (within 250m)				
95	12.2	Open Access Land	0	0	0	-	-
95	12.3	Tree Felling Licences	0	0	0	-	-
95	12.4	Environmental Stewardship Schemes	0	0	0	-	-
96	12.5	Countryside Stewardship Schemes	0	0	0	-	-
Page	Section	Habitat designations	On site	0-50m	50-250m	250-500m	500-2000m
97	13.1	Priority Habitat Inventory	0	0	0	-	-
97	13.2	Habitat Networks	0	0	0	-	-
97	13.3	Open Mosaic Habitat	0	0	0	-	-
97	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
98 >	**14.1 >**	**10k Availability >**	Identified (within 500m)				
99	14.2	Artificial and made ground (10k)	0	0	0	0	-

100	14.3	Superficial geology (10k)	0	0	0	0	-
100	14.4	Landslip (10k)	0	0	0	0	-
101	14.5	Bedrock geology (10k)	0	0	0	0	-
101	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
102 >	15.1 >	50k Availability >	Identified (within 500m)				
103 >	15.2 >	Artificial and made ground (50k) >	1	0	0	2	-
104 >	15.3 >	Artificial ground permeability (50k) >	1	0	-	-	-
105 >	15.4 >	Superficial geology (50k) >	2	0	0	2	-
106 >	15.5 >	Superficial permeability (50k) >	Identified (within 50m)				
106	15.6	Landslip (50k)	0	0	0	0	-
106	15.7	Landslip permeability (50k)	None (within 50m)				
107 >	15.8 >	Bedrock geology (50k) >	6	0	5	11	-
109 >	15.9 >	Bedrock permeability (50k) >	Identified (within 50m)				
109 >	15.10 >	Bedrock faults and other linear features (50k) >	6	0	3	6	-
Page	Section	**Boreholes >**	On site	0-50m	50-250m	250-500m	500-2000m
111 >	16.1 >	BGS Boreholes >	12	1	8	-	-
Page	Section	**Natural ground subsidence >**					
113 >	17.1 >	Shrink swell clays >	Very low (within 50m)				
114 >	17.2 >	Running sands >	Moderate (within 50m)				
116 >	17.3 >	Compressible deposits >	Moderate (within 50m)				
118 >	17.4 >	Collapsible deposits >	Very low (within 50m)				
119 >	17.5 >	Landslides >	Low (within 50m)				
121 >	17.6 >	Ground dissolution of soluble rocks >	Negligible (within 50m)				
Page	Section	**Mining and ground workings >**	On site	0-50m	50-250m	250-500m	500-2000m
123 >	18.1 >	BritPits >	0	0	1	0	-
124 >	18.2 >	Surface ground workings >	12	18	9	-	-
126 >	18.3 >	Underground workings >	1	6	9	0	0
126	18.4	Underground mining extents	0	0	0	0	-

127	18.5	Historical Mineral Planning Areas	0	0	0	0	-
127 >	18.6 >	Non-coal mining >	5	1	6	9	23
132	18.7	JPB mining areas	None (within 0m)				
132	18.8	The Coal Authority non-coal mining	0	0	0	0	-
132	18.9	Researched mining	0	0	0	0	-
133	18.10	Mining record office plans	0	0	0	0	-
133	18.11	BGS mine plans	0	0	0	0	-
133 >	18.12 >	Coal mining >	Identified (within 0m)				
133	18.13	Brine areas	None (within 0m)				
134	18.14	Gypsum areas	None (within 0m)				
134	18.15	Tin mining	None (within 0m)				
134	18.16	Clay mining	None (within 0m)				
Page	Section	Ground cavities and sinkholes	On site	0-50m	50-250m	250-500m	500-2000m
135	19.1	Natural cavities	0	0	0	0	-
135	19.2	Mining cavities	0	0	0	0	0
135	19.3	Reported recent incidents	0	0	0	0	-
135	19.4	Historical incidents	0	0	0	0	-
Page	Section	Radon >					
137 >	20.1 >	Radon >	Between 3% and 5% (within 0m)				
Page	Section	Soil chemistry >	On site	0-50m	50-250m	250-500m	500-2000m
139 >	21.1 >	BGS Estimated Background Soil Chemistry >	18	9	-	-	-
141	21.2	BGS Estimated Urban Soil Chemistry	0	0	-	-	-
141	21.3	BGS Measured Urban Soil Chemistry	0	0	-	-	-
Page	Section	Railway infrastructure and projects >	On site	0-50m	50-250m	250-500m	500-2000m
142	22.1	Underground railways (London)	0	0	0	-	-
142	22.2	Underground railways (Non-London)	0	0	0	-	-
143 >	22.3 >	Railway tunnels >	0	2	0	-	-
143 >	22.4 >	Historical railway and tunnel features >	1	21	0	-	-
144	22.5	Royal Mail tunnels	0	0	0	-	-

144	22.6	Historical railways	0	0	0	-	-
145 >	**22.7 >**	**Railways >**	0	12	0	-	-
145	22.8	Crossrail 2	0	0	0	0	-
145	22.9	HS2	0	0	0	0	-

Recent aerial photograph

Capture Date: 20/05/2023

Site Area: 34.28ha

Recent site history - 2020 aerial photograph

Capture Date: 10/04/2020

Site Area: 34.28ha

Recent site history - 2013 aerial photograph

Capture Date: 26/05/2013

Site Area: 34.28ha

Recent site history - 2001 aerial photograph

Capture Date: 28/07/2001

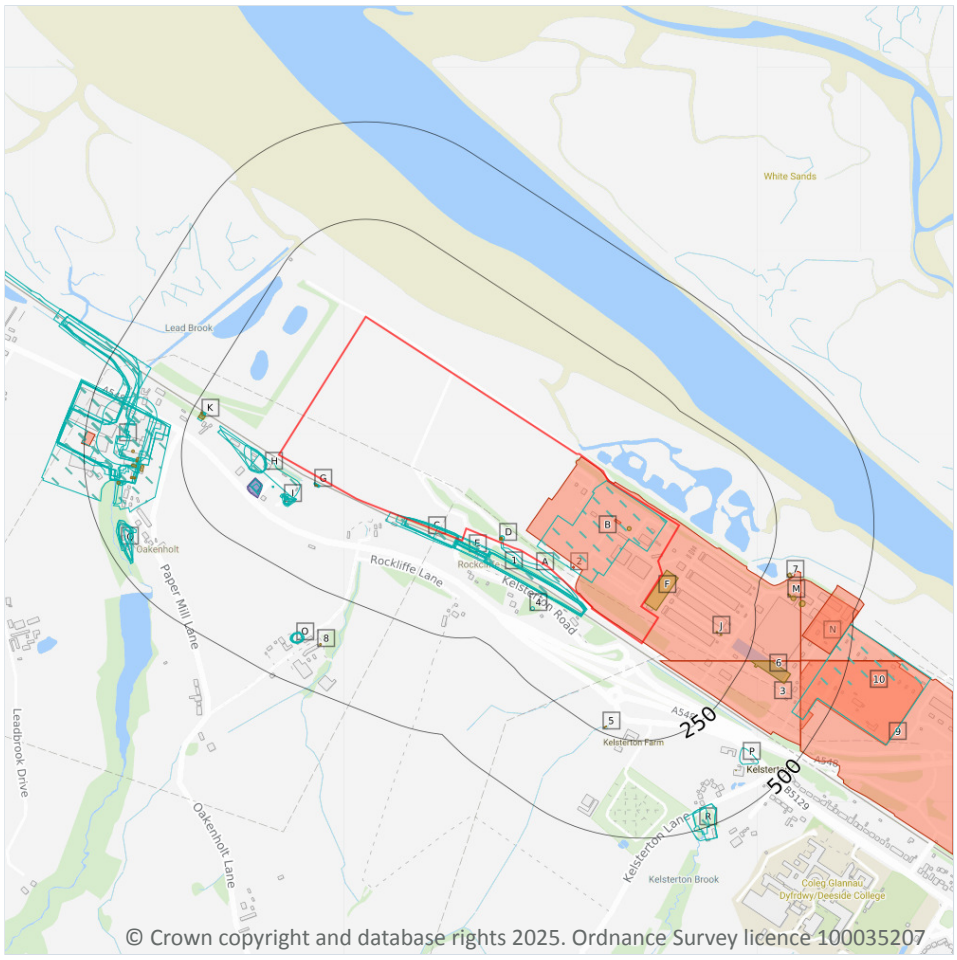
Site Area: 34.28ha

Recent site history - 2000 aerial photograph

Capture Date: 22/07/2000

Site Area: 34.28ha

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	90

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

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

ID	Location	Land use	Dates present	Group ID
1	**On site**	**Cuttings**	**1898**	**967031**

ID	Location	Land use	Dates present	Group ID
A	**On site**	**Unspecified Ground Workings**	**1909**	**814281**
B	**On site**	**Unspecified Works**	**1969 - 1981**	**873984**
C	**On site**	**Cuttings**	**1913**	**874302**
C	**On site**	**Cuttings**	**1898 - 1909**	**918255**
C	**On site**	**Cuttings**	**1869**	**927128**
C	**On site**	**Cuttings**	**1969 - 1981**	**957088**
C	**On site**	**Cuttings**	**1938 - 1954**	**977898**
C	**On site**	**Cuttings**	**1938**	**1003131**
D	**On site**	**Unspecified Tank**	**1898**	**929462**
D	**On site**	**Unspecified Tank**	**1938**	**972261**
E	**On site**	**Tunnel**	**1869**	**955779**
E	2m S	Tunnel	1938	935805
E	3m S	Tunnel	1938	900789
E	3m S	Tunnel	1898	1000694
E	5m S	Tunnel	1909	893327
E	6m S	Tunnel	1913	937019
E	6m S	Tunnel	1954 - 1981	897504
A	12m SW	Cuttings	1909 - 1913	889975
A	13m SW	Cuttings	1938	881189
A	15m SW	Cuttings	1954 - 1981	894593
G	17m SW	Unspecified Tank	1938 - 1954	949197
G	17m SW	Unspecified Tank	1938	1005093
A	17m SW	Cuttings	1938	861979
A	17m SW	Cuttings	1898	910212
A	17m SW	Cuttings	1869	980867
H	25m SW	Unspecified Heap	1969 - 1981	978028
H	37m W	Unspecified Heap	1909	917563
H	37m W	Unspecified Heap	1938	907504

ID	Location	Land use	Dates present	Group ID
H	39m W	Unspecified Heap	1938 - 1954	944352
H	41m W	Unspecified Heap	1913	864771
I	76m SW	Disused Coal Pit	1938	876150
I	77m SW	Disused Coal Pit	1938	918621
I	77m SW	Coal Shaft	1869	820194
I	77m SW	Disused Coal Pit	1909	952987
I	79m SW	Disused Coal Pit	1913	994544
I	81m SW	Disused Coal Pit	1954	915759
I	82m SW	Unspecified Tank	1909	1005313
I	82m SW	Unspecified Old Shaft	1909	1007533
I	83m SW	Unspecified Old Shaft	1938	893419
I	83m SW	Unspecified Old Shaft	1938	987491
I	84m SW	Unspecified Tank	1913	963784
I	84m SW	Unspecified Old Shaft	1938	935652
I	84m SW	Coal Pit	1898	960371
I	86m SW	Unspecified Old Shaft	1913	867795
I	86m SW	Unspecified Old Shaft	1913	943120
I	87m SW	Garage	1969 - 1981	986207
I	87m SW	Unspecified Old Shaft	1954	977465
I	93m SW	Garage	1938	905722
4	102m SW	Unspecified Tank	1898	849597
K	215m NW	Unspecified Tank	1909	882954
K	215m NW	Unspecified Tank	1938	917668
K	215m NW	Unspecified Tank	1969	849596
K	216m NW	Unspecified Tank	1954	869588
K	219m NW	Unspecified Tank	1913 - 1938	884394
L	287m W	Paper Mill	1938 - 1954	921961
L	289m W	Railway Sidings	1954 - 1969	862251

ID	Location	Land use	Dates present	Group ID
L	289m W	Unspecified Mill	1969	987543
L	299m W	Unspecified Mill	1981	878796
L	311m W	Unspecified Mill	1913 - 1938	970181
L	326m W	Flour Mill	1869	852755
L	334m W	Unspecified Mill	1898	973007
L	343m W	Unspecified Old Mill	1909	821757
L	357m W	Railway Sidings	1938	964171
L	358m W	Railway Sidings	1898	920929
L	360m W	Railway Sidings	1909	965459
L	361m W	Railway Sidings	1938	932281
L	364m W	Railway Sidings	1913	928360
O	370m SW	Unspecified Pit	1909	994172
P	372m SE	Unspecified Pit	1938 - 1954	903311
O	373m SW	Unspecified Pit	1938	894196
O	374m SW	Unspecified Pit	1954	921308
O	374m SW	Unspecified Pit	1938	879891
O	376m SW	Unspecified Pit	1913	912096
L	407m W	Gasometer	1938	869285
L	408m W	Gasometer	1909	917841
L	410m W	Unspecified Tank	1938	883875
L	410m W	Unspecified Tank	1898	925684
Q	413m SW	Unspecified Ground Workings	1938	863543
L	414m W	Gasometer	1913	992790
10	419m SE	Electricity Substation	1981	855670
Q	421m SW	Unspecified Heap	1909	961456
Q	424m SW	Unspecified Heap	1954	935391
Q	424m SW	Unspecified Heap	1913	900904
Q	426m SW	Unspecified Heap	1898	875230

ID	Location	Land use	Dates present	Group ID
Q	426m SW	Unspecified Heap	1938	912885
Q	426m SW	Unspecified Heap	1898	998031
R	449m S	Brewery	1869 - 1898	879960
R	449m S	Brewery	1938	952584
R	453m S	Brewery	1913	947477

This data is sourced from Ordnance Survey / Groundsure.

1.2 Historical tanks

Records within 500m **27**

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 14 >**

ID	Location	Land use	Dates present	Group ID
B	**On site**	**Unspecified Tank**	**1997**	**117265**
D	**On site**	**Unspecified Tank**	**1959**	**131213**
D	**On site**	**Unspecified Tank**	**1899 - 1912**	**135948**
D	**On site**	**Unspecified Tank**	**1964 - 1988**	**146527**
F	2m SE	Tanks	1997	109427
G	19m SW	Unspecified Tank	1899 - 1912	139073
J	153m E	Unspecified Tank	1997	117266
J	165m E	Unspecified Tank	1997	117262
K	213m NW	Tanks	1959 - 1964	140734
K	223m NW	Unspecified Tank	1899 - 1912	154785
5	231m SW	Tank or Trough	1870	113108
6	262m SE	Tanks	1997	109428
7	305m SE	Unspecified Tank	1959	117284

ID	Location	Land use	Dates present	Group ID
M	327m E	Tanks	1997	109426
M	336m E	Unspecified Tank	1997	117263
L	348m W	Tanks	1993	109431
L	360m W	Unspecified Tank	1988	117276
M	360m E	Unspecified Tank	1997	117264
M	362m E	Unspecified Tank	1997	117261
L	367m W	Tanks	1988	109429
L	371m W	Unspecified Tank	1899	117283
L	372m W	Tanks	1993	109430
L	373m W	Unspecified Tank	1988	117279
8	379m S	Unspecified Tank	1988 - 1993	133408
L	381m W	Unspecified Tank	1988	117278
P	405m SE	Tank or Trough	1870	113109
L	414m W	Gasometer	1899 - 1912	137588

This data is sourced from Ordnance Survey / Groundsure.

1.3 Historical energy features

Records within 500m	**9**

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 14 >**

ID	Location	Land use	Dates present	Group ID
2	**On site**	**Electricity Substation**	**1997**	**64657**
B	**On site**	**Electricity Substation**	**1988**	**64663**
F	**On site**	**Electric Generating Station**	**1997**	**68250**
3	65m SE	Power Station	1997	88932

ID	Location	Land use	Dates present	Group ID
N	342m SE	Power Station	1997	83146
N	373m E	Electricity Substation	1978	64667
9	381m E	Power Station	1982	71482
L	414m W	Gasometer	1899 - 1912	79531
L	474m W	Electricity Substation	1988 - 1993	89927

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 14 >**

ID	Location	Land use	Dates present	Group ID
I	84m SW	Garage	1988	28338
I	86m SW	Garage	1959	29451
I	87m SW	Garage	1964	26226

This data is sourced from Ordnance Survey / Groundsure.

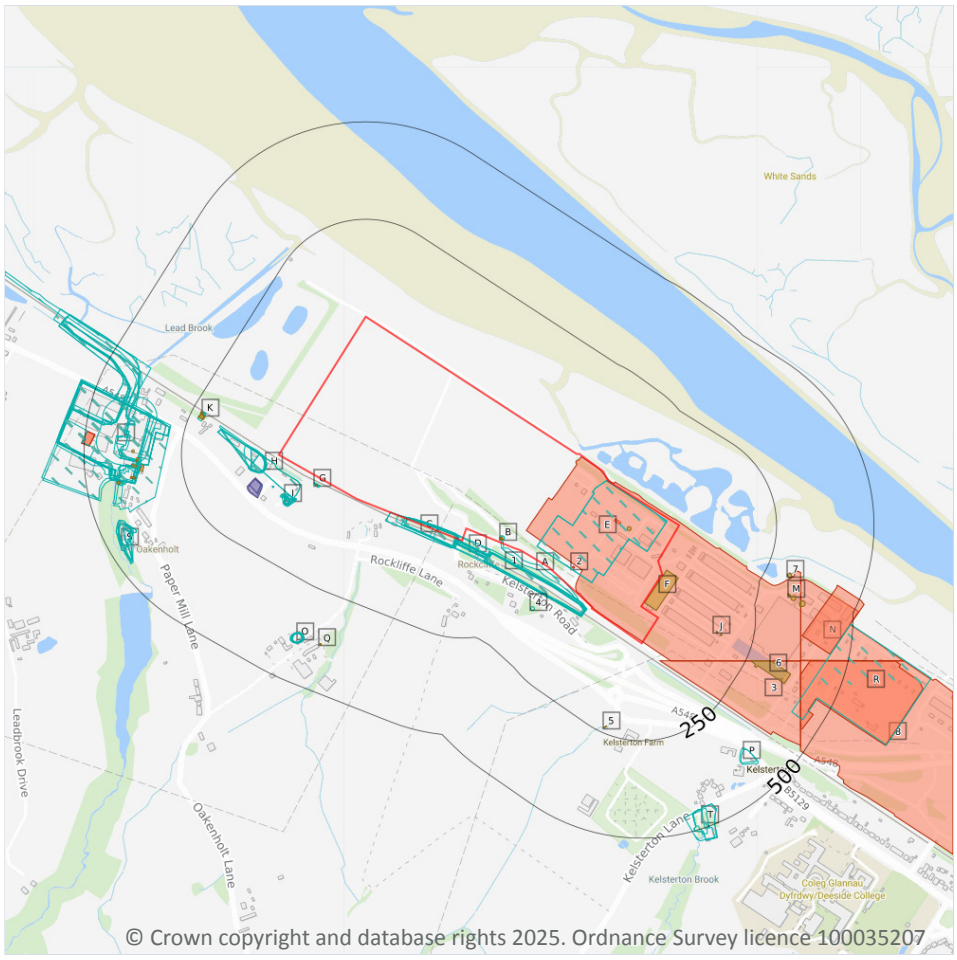
1.6 Historical military land

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



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	120

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

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

ID	Location	Land Use	Date	Group ID
1	**On site**	**Cuttings**	**1898**	**967031**
A	**On site**	**Unspecified Ground Workings**	**1909**	**814281**
B	**On site**	**Unspecified Tank**	**1938**	**972261**

ID	Location	Land Use	Date	Group ID
B	**On site**	**Unspecified Tank**	**1898**	**929462**
C	**On site**	**Cuttings**	**1981**	**957088**
C	**On site**	**Cuttings**	**1969**	**957088**
C	**On site**	**Cuttings**	**1869**	**927128**
C	**On site**	**Cuttings**	**1954**	**977898**
C	**On site**	**Cuttings**	**1909**	**918255**
C	**On site**	**Cuttings**	**1938**	**1003131**
C	**On site**	**Cuttings**	**1938**	**977898**
C	**On site**	**Cuttings**	**1898**	**918255**
C	**On site**	**Cuttings**	**1913**	**874302**
D	**On site**	**Tunnel**	**1869**	**955779**
E	**On site**	**Unspecified Works**	**1981**	**873984**
E	**On site**	**Unspecified Works**	**1969**	**873984**
D	2m S	Tunnel	1938	935805
D	3m S	Tunnel	1938	900789
D	3m S	Tunnel	1898	1000694
D	5m S	Tunnel	1909	893327
D	6m S	Tunnel	1913	937019
D	6m S	Tunnel	1981	897504
D	6m S	Tunnel	1969	897504
D	6m S	Tunnel	1954	897504
A	12m SW	Cuttings	1909	889975
A	13m SW	Cuttings	1938	881189
A	15m SW	Cuttings	1981	894593
A	15m SW	Cuttings	1969	894593
A	15m SW	Cuttings	1954	894593
A	16m SW	Cuttings	1913	889975
G	17m SW	Unspecified Tank	1938	949197

ID	Location	Land Use	Date	Group ID
G	17m SW	Unspecified Tank	1938	1005093
A	17m SW	Cuttings	1869	980867
A	17m SW	Cuttings	1938	861979
A	17m SW	Cuttings	1898	910212
G	20m SW	Unspecified Tank	1954	949197
H	25m SW	Unspecified Heap	1981	978028
H	25m SW	Unspecified Heap	1969	978028
H	37m W	Unspecified Heap	1909	917563
H	37m W	Unspecified Heap	1938	907504
H	37m W	Unspecified Heap	1938	907504
H	39m W	Unspecified Heap	1954	944352
H	40m W	Unspecified Heap	1938	944352
H	41m W	Unspecified Heap	1913	864771
H	41m W	Unspecified Heap	1913	864771
I	76m SW	Disused Coal Pit	1938	876150
I	76m SW	Disused Coal Pit	1938	876150
I	77m SW	Disused Coal Pit	1938	918621
I	77m SW	Coal Shaft	1869	820194
I	77m SW	Disused Coal Pit	1909	952987
I	79m SW	Disused Coal Pit	1913	994544
I	79m SW	Disused Coal Pit	1913	994544
I	81m SW	Disused Coal Pit	1954	915759
I	82m SW	Unspecified Tank	1909	1005313
I	82m SW	Unspecified Old Shaft	1909	1007533
I	83m SW	Unspecified Old Shaft	1938	893419
I	83m SW	Unspecified Old Shaft	1938	987491
I	84m SW	Unspecified Tank	1913	963784
I	84m SW	Unspecified Old Shaft	1938	935652

ID	Location	Land Use	Date	Group ID
I	84m SW	Coal Pit	1898	960371
I	84m SW	Coal Pit	1898	960371
I	86m SW	Unspecified Old Shaft	1913	943120
I	86m SW	Unspecified Old Shaft	1913	867795
I	87m SW	Garage	1981	986207
I	87m SW	Garage	1969	986207
I	87m SW	Unspecified Old Shaft	1954	977465
I	93m SW	Garage	1938	905722
4	102m SW	Unspecified Tank	1898	849597
K	215m NW	Unspecified Tank	1909	882954
K	215m NW	Unspecified Tank	1938	917668
K	215m NW	Unspecified Tank	1969	849596
K	216m NW	Unspecified Tank	1954	869588
K	219m NW	Unspecified Tank	1938	884394
K	219m NW	Unspecified Tank	1913	884394
L	287m W	Paper Mill	1938	921961
L	289m W	Railway Sidings	1969	862251
L	289m W	Unspecified Mill	1969	987543
L	289m W	Railway Sidings	1954	862251
L	289m W	Paper Mill	1954	921961
L	299m W	Unspecified Mill	1981	878796
L	311m W	Unspecified Mill	1938	970181
L	326m W	Flour Mill	1869	852755
L	334m W	Unspecified Mill	1898	973007
L	343m W	Unspecified Old Mill	1909	821757
L	344m W	Unspecified Mill	1898	973007
L	348m W	Unspecified Mill	1913	970181
L	357m W	Railway Sidings	1938	964171

ID	Location	Land Use	Date	Group ID
L	358m W	Railway Sidings	1898	920929
L	360m W	Railway Sidings	1909	965459
L	361m W	Railway Sidings	1938	932281
L	361m W	Railway Sidings	1898	920929
L	364m W	Railway Sidings	1913	928360
O	370m SW	Unspecified Pit	1909	994172
P	372m SE	Unspecified Pit	1938	903311
O	373m SW	Unspecified Pit	1938	894196
O	374m SW	Unspecified Pit	1954	921308
O	374m SW	Unspecified Pit	1938	879891
O	374m SW	Unspecified Pit	1938	879891
O	376m SW	Unspecified Pit	1913	912096
O	376m SW	Unspecified Pit	1913	912096
P	379m SE	Unspecified Pit	1954	903311
L	407m W	Gasometer	1938	869285
L	408m W	Gasometer	1909	917841
L	410m W	Unspecified Tank	1938	883875
L	410m W	Unspecified Tank	1898	925684
S	413m SW	Unspecified Ground Workings	1938	863543
S	413m SW	Unspecified Ground Workings	1938	863543
L	414m W	Gasometer	1913	992790
R	419m SE	Electricity Substation	1981	855670
S	421m SW	Unspecified Heap	1909	961456
S	424m SW	Unspecified Heap	1954	935391
S	424m SW	Unspecified Heap	1913	900904
S	424m SW	Unspecified Heap	1913	900904
S	426m SW	Unspecified Heap	1898	875230
S	426m SW	Unspecified Heap	1938	912885

ID	Location	Land Use	Date	Group ID
S	426m SW	Unspecified Heap	1898	998031
T	449m S	Brewery	1938	952584
T	449m S	Brewery	1898	879960
T	451m S	Brewery	1869	879960
T	453m S	Brewery	1913	947477

This data is sourced from Ordnance Survey / Groundsure.

2.2 Historical tanks

Records within 500m	**34**

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

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

ID	Location	Land Use	Date	Group ID
B	**On site**	**Unspecified Tank**	**1899**	**135948**
B	**On site**	**Unspecified Tank**	**1912**	**135948**
B	**On site**	**Unspecified Tank**	**1964**	**146527**
B	**On site**	**Unspecified Tank**	**1988**	**146527**
B	**On site**	**Unspecified Tank**	**1959**	**131213**
E	**On site**	**Unspecified Tank**	**1997**	**117265**
F	2m SE	Tanks	1997	109427
G	19m SW	Unspecified Tank	1899	139073
G	19m SW	Unspecified Tank	1912	139073
J	153m E	Unspecified Tank	1997	117266
J	165m E	Unspecified Tank	1997	117262
K	213m NW	Tanks	1959	140734
K	216m NW	Tanks	1964	140734
K	223m NW	Unspecified Tank	1899	154785
K	223m NW	Unspecified Tank	1912	154785

ID	Location	Land Use	Date	Group ID
5	231m SW	Tank or Trough	1870	113108
6	262m SE	Tanks	1997	109428
7	305m SE	Unspecified Tank	1959	117284
M	327m E	Tanks	1997	109426
M	336m E	Unspecified Tank	1997	117263
L	348m W	Tanks	1993	109431
L	360m W	Unspecified Tank	1988	117276
M	360m E	Unspecified Tank	1997	117264
M	362m E	Unspecified Tank	1997	117261
L	367m W	Tanks	1988	109429
L	371m W	Unspecified Tank	1899	117283
L	372m W	Tanks	1993	109430
L	373m W	Unspecified Tank	1988	117279
Q	379m S	Unspecified Tank	1988	133408
Q	380m S	Unspecified Tank	1993	133408
L	381m W	Unspecified Tank	1988	117278
P	405m SE	Tank or Trough	1870	113109
L	414m W	Gasometer	1899	137588
L	414m W	Gasometer	1912	137588

This data is sourced from Ordnance Survey / Groundsure.

2.3 Historical energy features

Records within 500m	**12**

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

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

ID	Location	Land Use	Date	Group ID
2	**On site**	**Electricity Substation**	**1997**	**64657**

ID	Location	Land Use	Date	Group ID
E	**On site**	**Electricity Substation**	**1988**	**64663**
F	**On site**	**Electric Generating Station**	**1997**	**68250**
3	65m SE	Power Station	1997	88932
N	342m SE	Power Station	1997	83146
N	373m E	Electricity Substation	1978	64667
8	381m E	Power Station	1982	71482
R	393m E	Power Station	1997	88932
L	414m W	Gasometer	1899	79531
L	414m W	Gasometer	1912	79531
L	474m W	Electricity Substation	1993	89927
L	476m W	Electricity Substation	1988	89927

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	**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'.

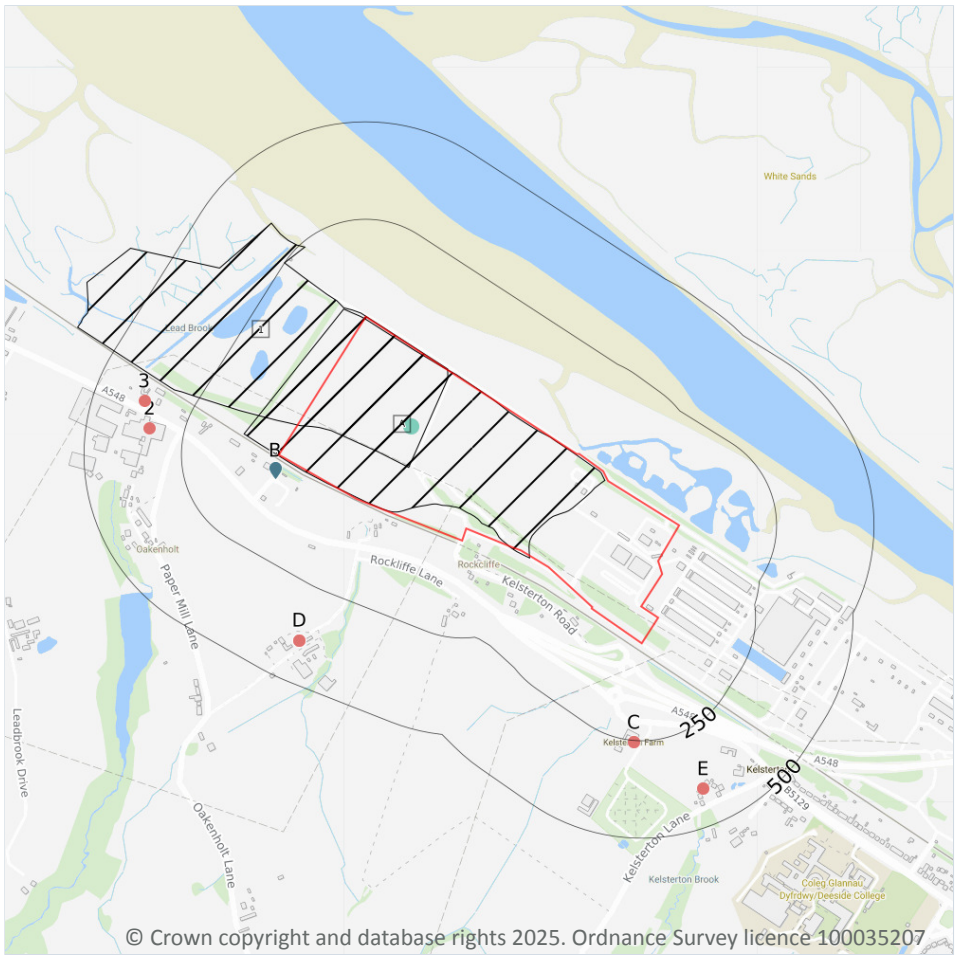
Features are displayed on the Past land use - un-grouped map on **page 22 >**

ID	Location	Land Use	Date	Group ID
I	84m SW	Garage	1988	28338
I	86m SW	Garage	1959	29451

ID	Location	Land Use	Date	Group ID
I	87m SW	Garage	1964	26226

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	1

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.

Features are displayed on the Waste and landfill map on **page 31 >**

ID	Location	Address	BGS Number	Risk	Waste Type
A	**On site**	**Connah's Quay Power Stn no 3, Ash Lagoon**	**2775**	**No risk to aquifer**	**N/A**

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	**2**

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 31 >**

ID	Location	Details		
1	**On site**	**Site Address: Connahs Quay Power Station, Connah's Quay, Flintshire** **Licence Holder Address: -**	**Waste Licence: Yes** **Site Reference: A/L/10/11, B/RD/7/10** **Waste Type: Inert, Industrial, Commercial** **Environmental Permitting Regulations (Waste) Reference: -** **Licence Issue: 23/05/1977** **Licence Surrender: 05/09/1991**	**Operator: -** **Licence Holder: Central Electricity Generating Board** **First Recorded 23/05/1977** **Last Recorded: 05/09/1991**
A	**On site**	**Site Address: Connah's Quay Power Station 3, Ash Lagoon, Clwyd** **Licence Holder Address: -**	**Waste Licence: -** **Site Reference: -** **Waste Type: Inert, Industrial** **Environmental Permitting Regulations (Waste) Reference: -** **Licence Issue: -** **Licence Surrender: -**	**Operator: Central Electricity Generating Board** **Licence Holder: -** **First Recorded 31/12/1962** **Last Recorded: -**

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	2

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

Features are displayed on the Waste and landfill map on **page 31 >**

ID	Location	Details		
B	41m SW	Site Name: - Site Address: Oakenholt Household Waste Recycling Centre, Chester Road, Oakenholt, Flint, Flintshire, CH6 5SF Correspondence Address: -	Type of Site: - Size: - Environmental Permitting Regulations (Waste) Licence Number: AB3997CD EPR reference: - Operator: Flintshire County Council Waste Management licence No: - Annual Tonnage: 25000	Issue Date: 19/09/2018 Effective Date: 19/09/2018 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective
B	41m SW	Site Name: - Site Address: Oakenholt Household Waste Recycling Centre, Chester Road, Oakenholt, Flint, Flintshire, CH6 5SF Correspondence Address: -	Type of Site: - Size: - Environmental Permitting Regulations (Waste) Licence Number: AB3997CD EPR reference: - Operator: Flintshire County Council Waste Management licence No: - Annual Tonnage: 25000	Issue Date: 19/09/2018 Effective Date: 19/09/2018 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective

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

3.7 Waste exemptions

Records within 500m	16

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.

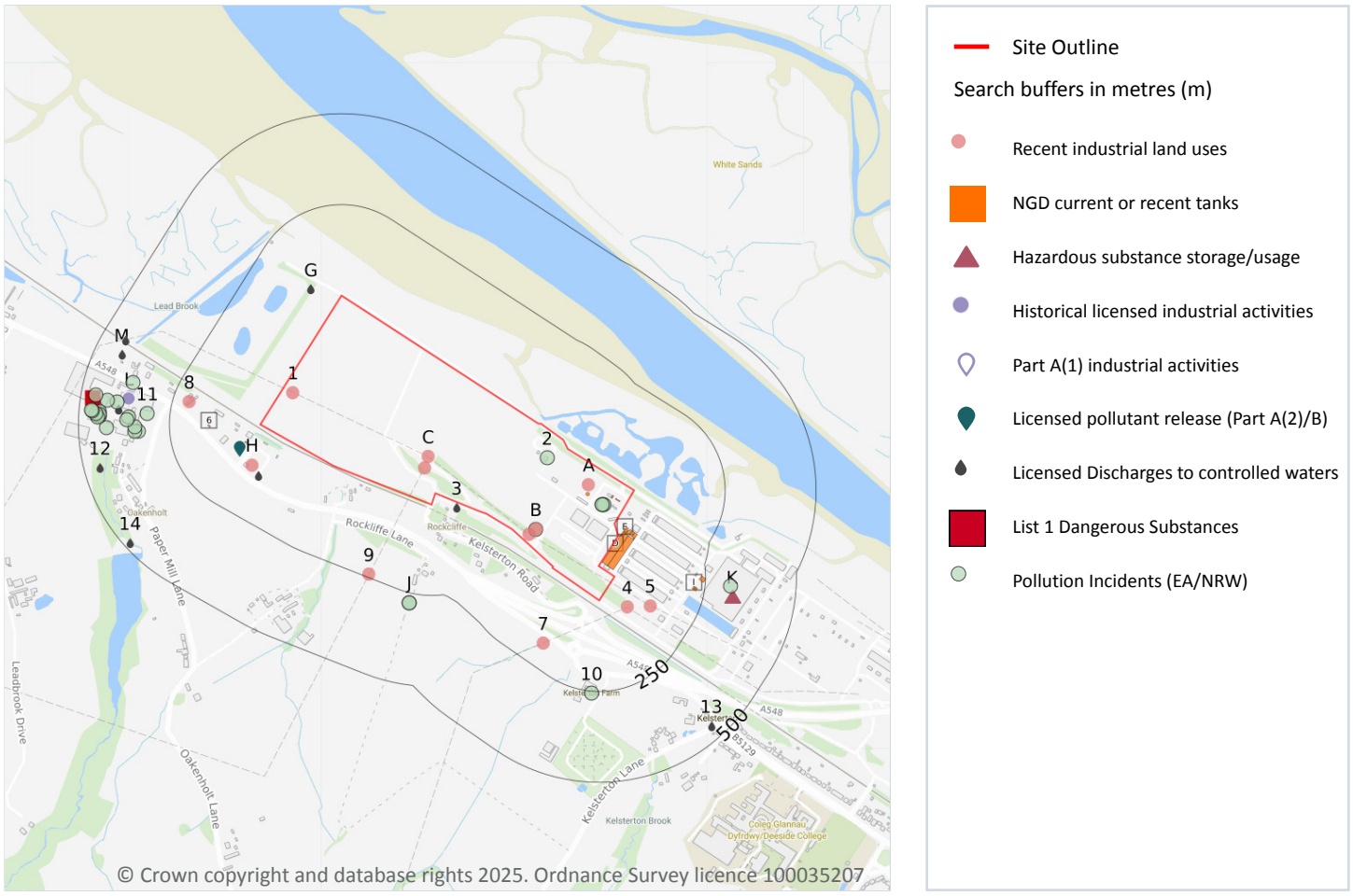
Features are displayed on the Waste and landfill map on **page 31 >**

ID	Location	Site	Reference	Category	Sub-Category	Description
C	256m S	Kelsterton Farm, Kelsterton, Deeside, Flint, Flintshire, Ch65th	NRW-WME027433	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
C	256m S	Kelsterton Farm, Kelsterton, Deeside, Flint, Flintshire, Ch65th	NRW-WME027433	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
2	339m W	Essity Uk Ltd Oakenholt Mill, Essity Uk Ltd., Oakenholt Papermill, Chester Road, Oakenholt, Flint, Flintshire, Ch65pu	NRW-WME034820	Using waste exemption	Not on a farm	Use of sludge for the purposes of re-seeding a waste water treatment plant
3	372m W	419a, Chester Road, Oakenholt, Flint, Ch6 5sf	WEX401694	Using waste exemption	On a farm	Use of waste in construction
D	393m SW	Jd Hughes & Son, Llwyn Derw Farm, Chester Road, Oakenholt, Flint, Flintshire, Ch65bf	NRW-WME027535	Disposing of waste exemption	On a farm	Deposit of waste from dredging of inland waters
D	393m SW	Jd Hughes & Son, Llwyn Derw Farm, Chester Road, Oakenholt, Flint, Flintshire, Ch65bf	NRW-WME027536	Using waste exemption	On a farm	Use of waste in construction
D	393m SW	Jd Hughes & Son, Llwyn Derw Farm, Chester Road, Oakenholt, Flint, Flintshire, Ch65bf	NRW-WME027536	Disposing of waste exemption	On a farm	Burning waste in the open
D	393m SW	Oakenholt Farm, Chester Road, Oakenholt, Flint, Flintshire, Ch65bf	NRW-WME013342	Disposing of waste exemption	On a farm	Burning waste in the open
D	393m SW	Oakenholt Farm, Chester Road, Oakenholt, Flint, Flintshire, Ch65bf	NRW-WME013342	Using waste exemption	On a farm	Spreading waste on agricultural land to confer benefit
D	393m SW	Oakenholt Farm, Chester Road, Oakenholt, Flint, Flintshire, Ch65bf	NRW-WME013342	Treating waste exemption	On a farm	Treatment of waste wood and waste plant matter by chipping, shredding, cutting or pulverising
D	393m SW	Oakenholt Farm, Chester Road, Oakenholt, Flint, Flintshire, Ch65bf	NRW-WME013342	Using waste exemption	On a farm	Spreading of plant matter to confer benefit
D	393m SW	Oakenholt Farm, Chester Road, Oakenholt, Flint, Flintshire, Ch65bf	NRW-WME013342	Treating waste exemption	On a farm	Aerobic composting and associated prior treatment

ID	Location	Site	Reference	Category	Sub-Category	Description
D	393m SW	Oakenholt Farm, Chester Road, Oakenholt, Flint, Flintshire, Ch65bf	NRW-WME013342	Storing waste exemption	On a farm	Storage of waste in secure containers
D	393m SW	Oakenholt Farm, Chester Road, Oakenholt, Flint, Flintshire, Ch65bf	NRW-WME013342	Using waste exemption	On a farm	Use of waste in construction
E	406m SE	Dwr Cymru Welsh Water, Bryn Mawr, Park Farm, Kelsterton, Connah's Quay, Flintshire, Ch65gx	NRW-WME005844	Storing waste exemption	Not on a farm	Storage of sludge
E	406m SE	Dwr Cymru Welsh Water, Bryn Mawr, Park Farm, Kelsterton, Connah's Quay, Flintshire, Ch65gx	NRW-WME005844	Using waste exemption	On a farm	Use of waste derived biodiesel as fuel

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	12

Current potentially contaminative industrial sites.

Features are displayed on the Current industrial land use map on **page 36 >**

ID	Location	Company	Address	Activity	Category
1	**On site**	**Pylon**	**Clwyd, CH6**	**Electrical Features**	**Infrastructure and Facilities**
A	**On site**	**Chimneys**	**Clwyd, CH5**	**Chimneys**	**Industrial Features**
B	**On site**	**Electricity Sub Station**	**Clwyd, CH5**	**Electrical Features**	**Infrastructure and Facilities**

ID	Location	Company	Address	Activity	Category
B	**On site**	**Pylon**	**Clwyd, CH5**	**Electrical Features**	**Infrastructure and Facilities**
C	**On site**	**Pylon**	**Clwyd, CH5**	**Electrical Features**	**Infrastructure and Facilities**
C	**On site**	**Pylon**	**Clwyd, CH5**	**Electrical Features**	**Infrastructure and Facilities**
4	75m SE	Pylon	Clwyd, CH5	Electrical Features	Infrastructure and Facilities
H	108m SW	Recycling Facility	Clwyd, CH6	Recycling Centres	Infrastructure and Facilities
5	126m SE	Pylon	Clwyd, CH5	Electrical Features	Infrastructure and Facilities
7	185m SW	Pylon	Clwyd, CH6	Electrical Features	Infrastructure and Facilities
8	205m W	Bryn Thomas Holdings Ltd	421, Chester Road, Oakenholt, Clwyd, CH6 5SF	Construction and Tool Hire	Hire Services
9	242m S	Pylon	Clwyd, CH6	Electrical Features	Infrastructure and Facilities

This data is sourced from Ordnance Survey.

4.2 National Geographic Database (NGD) - Current or recent tanks

Records within 250m	**20**

Current or recent tanks identified from the Ordnance Survey NGD.

Features are displayed on the Current industrial land use map on **page 36 >**

ID	Location	Tank description	Activity	Date first identified
A	**On site**	**Roofed Storage Tank**	**Commercial Activity: Distribution Or Storage**	**20/06/2014**
A	**On site**	**Roofed Storage Tank**	**Commercial Activity: Distribution Or Storage**	**16/06/2022**
A	**On site**	**Roofed Storage Tank**	**Commercial Activity: Distribution Or Storage**	**16/06/2022**
A	**On site**	**Roofed Storage Tank**	**Commercial Activity: Distribution Or Storage**	**16/06/2022**
A	**On site**	**Roofed Storage Tank**	**Commercial Activity: Distribution Or Storage**	**16/06/2022**
A	**On site**	**Roofed Storage Tank**	**Commercial Activity: Distribution Or Storage**	**16/06/2022**

ID	Location	Tank description	Activity	Date first identified
D	2m SE	Open Storage Tank	Commercial Activity: Distribution Or Storage	19/05/2015
D	14m NE	Open Storage Tank	Commercial Activity: Distribution Or Storage	19/05/2015
E	15m E	Open Storage Tank	Commercial Activity: Distribution Or Storage	29/05/2016
E	18m E	Open Storage Tank	Commercial Activity: Distribution Or Storage	19/05/2015
E	25m E	Open Storage Tank	Commercial Activity: Distribution Or Storage	19/05/2015
E	31m E	Open Storage Tank	Commercial Activity: Distribution Or Storage	19/05/2015
E	39m E	Open Storage Tank	Commercial Activity: Distribution Or Storage	19/05/2015
E	41m E	Open Storage Tank	Commercial Activity: Distribution Or Storage	29/05/2016
F	62m SW	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	03/06/2016
6	137m W	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	19/07/2010
I	216m E	Open Storage Tank	Commercial Activity: Distribution Or Storage	10/04/2016
I	220m E	Open Storage Tank	Commercial Activity: Distribution Or Storage	10/04/2016
I	223m E	Open Storage Tank	Commercial Activity: Distribution Or Storage	10/04/2016
I	233m E	Roofed Storage Tank	Commercial Activity: Distribution Or Storage	10/04/2016

This data is sourced from Ordnance Survey.

4.3 Current or recent petrol stations

Records within 500m	0

Open, closed, under development and obsolete petrol stations.

This data is sourced from Experian.

4.4 Electricity cables

Records within 500m	0

High voltage underground electricity transmission cables.

This data is sourced from National Grid.

4.5 Gas pipelines

Records within 500m	0

High pressure underground gas transmission pipelines.

This data is sourced from National Grid.

4.6 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.

4.7 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.

4.8 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.

4.9 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 36 >**

ID	Location	Details	
K	328m E	Application reference number: HS/0004 Application status: Historical Consent Application date: 01/11/1994 Address: Connah's Quay Power Station, Kelsterton Road, Connah's Quay, Deeside, CH5 4BP	Details: Storage of up to 21 Tonnes of flammable gas Enforcement: No Enforcement Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

This data is sourced from Local Authority records.

4.10 Historical licensed industrial activities (IPC)

Records within 500m	**2**

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

Features are displayed on the Current industrial land use map on **page 36 >**

ID	Location	Details	
L	368m W	Operator: Billerud Beetham Ltd Address: Oakenholt Mill, Oakenholt, Flint, Clwyd, CH6 5PU Process: Paper And Pulp Manufacturing Processes Permit Number: AU7931	Original Permit Number: IPCAPP Date Approved: 24-7-1996 Effective Date: 29-7-1996 Status: Revoked
L	368m W	Operator: North Wales Tissue Ltd Address: Oakenholt Mill, Oakenholt, Flint, Clwyd, CH6 5PU Process: Paper And Pulp Manufacturing Processes Permit Number: BG2973	Original Permit Number: IPCAPP Date Approved: 30-11-1999 Effective Date: 3-12-1999 Status: Revoked - Now Ippc

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

4.11 Licensed industrial activities (Part A(1))

Records within 500m	**23**

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 36 >**

ID	Location	Details	
L	368m W	Operator: NORTH WALES TISSUE LIMITED Installation Name: OAKENHOLT MILL Process: PAPER, PULP AND BOARD; PRODUCING PAPER/BOARD >20T/D Permit Number: BJ9681IX Original Permit Number: BJ9681IX	EPR Reference: - Issue Date: 30/08/2002 Effective Date: 30/08/2002 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
L	467m W	Operator: SCA Hygiene Products UK Limited Installation Name: Oakenholt Mill EPR/BJ9681IX Process: - Permit Number: BJ9681IX Original Permit Number: -	EPR Reference: - Issue Date: 31/03/2016 Effective Date: 31/03/2016 Last date noted as effective: 28/04/2025 Status: Effective
L	467m W	Operator: SCA Hygiene Products UK Limited Installation Name: Oakenholt Mill EPR/BJ9681IX Process: - Permit Number: BJ9681IX Original Permit Number: -	EPR Reference: - Issue Date: 31/03/2016 Effective Date: 31/03/2016 Last date noted as effective: 28/04/2025 Status: Effective
L	467m W	Operator: SCA Hygiene Products UK Limited Installation Name: Oakenholt Mill EPR/BJ9681IX 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)—BIOLOGICAL TREATMENT Permit Number: BJ9681IX Original Permit Number: -	EPR Reference: - Issue Date: 31/03/2016 Effective Date: 31/03/2016 Last date noted as effective: 28/04/2025 Status: Effective
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LTD Installation Name: - Process: PAPER, PULP & BOARD; PRODUCING PAPER/BOARD >20T/D Permit Number: BV3715 Original Permit Number: BJ9681	EPR Reference: - Issue Date: 28/04/2004 Effective Date: 28/04/2004 Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL Process: CREATED BY IED - DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING BIOLOGICAL TREATMENT Permit Number: JP3636ZA Original Permit Number: BJ9681IX	EPR Reference: - Issue Date: 21/03/2013 Effective Date: 21/03/2013 Last date noted as effective: 01/07/2013 Status: EFFECTIVE
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LTD Installation Name: - Process: ASSOCIATED PROCESS Permit Number: BJ9681 Original Permit Number: BJ9681	EPR Reference: - Issue Date: - Effective Date: 30/08/2002 Last date noted as effective: 03/10/2005 Status: SUPERSEDED BY VARIATION

ID	Location	Details	
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LTD Installation Name: - Process: ASSOCIATED PROCESS Permit Number: BV3715 Original Permit Number: BJ9681	EPR Reference: - Issue Date: 28/04/2004 Effective Date: 28/04/2004 Last date noted as effective: 01/10/2004 Status: SUPERSEDED BY PAS
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL Process: ASSOCIATED PROCESS Permit Number: BV3715IL Original Permit Number: BJ9681IX	EPR Reference: - Issue Date: 28/04/2004 Effective Date: 28/04/2004 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL Process: PAPER, PULP AND BOARD; PRODUCING PAPER/BOARD >20T/D Permit Number: BV3715IL Original Permit Number: BJ9681IX	EPR Reference: - Issue Date: 28/04/2004 Effective Date: 28/04/2004 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL EPR/BJ9681IX Process: ASSOCIATED PROCESS Permit Number: NP3035ND Original Permit Number: BJ9681IX	EPR Reference: - Issue Date: 12/07/2013 Effective Date: 12/07/2013 Last date noted as effective: 17/11/2015 Status: EFFECTIVE
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL EPR/BJ9681IX Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING BIOLOGICAL TREATMENT Permit Number: NP3035ND Original Permit Number: BJ9681IX	EPR Reference: - Issue Date: 12/07/2013 Effective Date: 12/07/2013 Last date noted as effective: 17/11/2015 Status: EFFECTIVE
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL EPR/BJ9681IX Process: PAPER, PULP AND BOARD; PRODUCING PAPER/BOARD >20T/D Permit Number: NP3035ND Original Permit Number: BJ9681IX	EPR Reference: - Issue Date: 12/07/2013 Effective Date: 12/07/2013 Last date noted as effective: 17/11/2015 Status: EFFECTIVE
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL Process: ASSOCIATED PROCESS Permit Number: DP3230FD Original Permit Number: BJ9681IX	EPR Reference: - Issue Date: 29/11/2012 Effective Date: 29/11/2012 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL Process: PAPER, PULP AND BOARD; PRODUCING PAPER/BOARD >20T/D Permit Number: DP3230FD Original Permit Number: BJ9681IX	EPR Reference: - Issue Date: 29/11/2012 Effective Date: 29/11/2012 Last date noted as effective: 17/11/2015 Status: SUPERCEDED

ID	Location	Details	
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL Process: DISPOSAL OF > 50 T/D NON-HAZARDOUS WASTE (> 100 T/D IF ONLY AD) INVOLVING BIOLOGICAL TREATMENT Permit Number: JP3636ZA Original Permit Number: BJ9681IX	EPR Reference: - Issue Date: 21/03/2013 Effective Date: 21/03/2013 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL Process: PAPER, PULP AND BOARD; PRODUCING PAPER/BOARD >20T/D Permit Number: JP3636ZA Original Permit Number: BJ9681IX	EPR Reference: - Issue Date: 21/03/2013 Effective Date: 21/03/2013 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LTD Installation Name: - Process: PAPER, PULP & BOARD; PRODUCING PAPER/BOARD >20T/D Permit Number: BJ9681 Original Permit Number: BJ9681	EPR Reference: - Issue Date: - Effective Date: 30/08/2002 Last date noted as effective: 03/10/2005 Status: SUPERSEDED BY VARIATION
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL Process: ASSOCIATED PROCESS Permit Number: JP3636ZA Original Permit Number: BJ9681IX	EPR Reference: - Issue Date: 21/03/2013 Effective Date: 21/03/2013 Last date noted as effective: 17/11/2015 Status: SUPERCEDED
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL EPR/BJ9681IX Process: - Permit Number: BJ9681IX Original Permit Number: -	EPR Reference: - Issue Date: 05/02/2016 Effective Date: 05/02/2016 Last date noted as effective: 01/04/2017 Status: ISSUED
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL EPR/BJ9681IX Process: - Permit Number: BJ9681IX Original Permit Number: NP3035ND	EPR Reference: - Issue Date: 31/03/2016 Effective Date: 31/03/2016 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL EPR/BJ9681IX Process: - Permit Number: BJ9681IX Original Permit Number: NP3035ND	EPR Reference: - Issue Date: 31/03/2016 Effective Date: 31/03/2016 Last date noted as effective: 01/04/2018 Status: EFFECTIVE
L	467m W	Operator: SCA HYGIENE PRODUCTS UK LIMITED Installation Name: OAKENHOLT MILL EPR/BJ9681IX Process: - Permit Number: BJ9681IX Original Permit Number: NP3035ND	EPR Reference: - Issue Date: 31/03/2016 Effective Date: 31/03/2016 Last date noted as effective: 01/04/2018 Status: EFFECTIVE

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

4.12 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 36 >**

ID	Location	Address	Details	
F	88m SW	Dependable Concrete, 421 Chester Road, Oakenholt, Flint, CH6 5TD	Process: Use of Bulk Cement Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of enforcement: No Enforcement Notified Comment: No Enforcement Notified

This data is sourced from Local Authority records.

4.13 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.

4.14 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 36 >**

ID	Location	Address	Details	
3	15m S	CONNAHSQUAYROCKLIFFERESIDENTIAL,CONNAHSQUAYROCKLIFFERESIDENT,ROCKLIFFERESIDENTIALPROPERTIES,RESIDENTIALPROPERTIESSDW	Effluent Type: UNSPECIFIED Permit Number: CM0011201 Permit Version: 1 Receiving Water: DEE	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 09/12/1960 Effective Date: 09/12/1960 Revocation Date: 22/12/1992
G	80m NW	CONNAHSQUAYPOWERSTATION	Effluent Type: UNSPECIFIED Permit Number: CM0041301 Permit Version: 1 Receiving Water: DEE	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 21/04/1967 Effective Date: 21/04/1967 Revocation Date: 22/12/1992

ID	Location	Address	Details	
G	80m NW	CONNAHSQUAYPOWERSTATION	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0120101 Permit Version: 1 Receiving Water: DEE	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 20/06/1967 Effective Date: 20/06/1967 Revocation Date: 22/12/1992
H	126m SW	OakenholtHWRC,ChesterRoad,Oakenholt,Flint,CH65SF	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: BB3097HK Permit Version: 0 Receiving Water: River Dee Estuary	Status: Effective Issue date: 09/01/2019 Effective Date: 09/01/2019 Revocation Date: -
L	368m W	OAKENHOLTSTWFLINT	Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: CM0190401 Permit Version: 1 Receiving Water: UNNAMED DITCH	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 19/10/1989 Effective Date: 19/10/1989 Revocation Date: 12/03/1996
L	393m W	HENRYCOOKEMAKINOAKENHOLTMILLOA,HENRYCOOKEMAKINOAKENHOLTMILL,OAKENHOLTMILLOAKENHOLTFLINTC,OAKENHOLTFLINTCLWYD,FLINTCLWYD,CLWYD	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0155001 Permit Version: 2 Receiving Water: LEAD BROOK (CULVERTED SECTION)	Status: REVOKED - UNSPECIFIED Issue date: 14/10/1992 Effective Date: 14/01/1993 Revocation Date: 22/12/1993
L	393m W	HENRYCOOKEMAKINOAKENHOLTMILLOA,HENRYCOOKEMAKINOAKENHOLTMILL,OAKENHOLTMILLOAKENHOLTFLINTC,OAKENHOLTFLINTCLWYD,FLINTCLWYD,CLWYD	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0155001 Permit Version: 5 Receiving Water: LEAD BROOK (CULVERTED SECTION)	Status: REVOKED - UNSPECIFIED Issue date: 21/10/1994 Effective Date: 21/10/1994 Revocation Date: 12/03/1995
L	393m W	HENRYCOOKEMAKINOAKENHOLTMILLOA,HENRYCOOKEMAKINOAKENHOLTMILL,OAKENHOLTMILLOAKENHOLTFLINTC,OAKENHOLTFLINTCLWYD,FLINTCLWYD,CLWYD	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0155001 Permit Version: 6 Receiving Water: LEAD BROOK (CULVERTED SECTION)	Status: CONSENT EXPIRED - TIME LIMIT Issue date: 13/03/1995 Effective Date: 13/03/1995 Revocation Date: 24/09/1996
L	393m W	HENRYCOOKEMAKINOAKENHOLTMILLOA,HENRYCOOKEMAKINOAKENHOLTMILL,OAKENHOLTMILLOAKENHOLTFLINTC,OAKENHOLTFLINTCLWYD,FLINTCLWYD,CLWYD	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0155001 Permit Version: 4 Receiving Water: LEAD BROOK (CULVERTED SECTION)	Status: REVOKED - UNSPECIFIED Issue date: 20/07/1994 Effective Date: 20/07/1994 Revocation Date: 20/10/1994

ID	Location	Address	Details	
L	393m W	HENRYCOOKEMAKINOAKENHOLT MILLOA,HENRYCOOKEMAKINOAKE NHOLTMILL,OAKENHOLTMILLOAKE NHOLTFLINTC,OAKENHOLTFLINTCL WYD,FLINTCLWYD,CLWYD	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0155001 Permit Version: 3 Receiving Water: LEAD BROOK (CULVERTED SECTION)	Status: REVOKED - UNSPECIFIED Issue date: 23/12/1993 Effective Date: 23/12/1993 Revocation Date: 19/07/1994
M	426m NW	PAPERMILLLANEPS,PAPERMILLLAN EPS	Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: CM0183501 Permit Version: 0 Receiving Water: CULVERTED SECTION OF LEAD BROO	Status: Effective Issue date: 10/07/1990 Effective Date: 10/07/1990 Revocation Date: -
M	437m NW	HENRYCOOKEMAKINOAKENHOLT MILLOA,HENRYCOOKEMAKINOAKE NHOLTMILL,OAKENHOLTMILLOAKE NHOLTFLINTC,OAKENHOLTFLINTCL WYD,FLINTCLWYD,CLWYD	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: CM0155001 Permit Version: 1 Receiving Water: LEAD BROOK (CULVERTED SECTION)	Status: REVOKED - UNSPECIFIED Issue date: 22/10/1987 Effective Date: 22/10/1987 Revocation Date: 13/01/1993
12	457m W	LEADBROOKHALLSITEADJTOLEADB ROO,LEADBROOKHALLSITEADJTOL EADB,ADJTOLEADBROOKHALLOAK ENHOLT,OAKENHOLTFLINT,FLINT	Effluent Type: UNSPECIFIED Permit Number: CG0366601 Permit Version: 1 Receiving Water: LEAD BROOK	Status: REVOKED (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV Issue date: 07/03/1996 Effective Date: 07/03/1996 Revocation Date: 13/10/1998
13	463m SE	KELSTERTONPUMPSTN,KELSTERTO NPUMPSTN	Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: CG0322301 Permit Version: 0 Receiving Water: THE KELSTERTON BROOK	Status: Effective Issue date: 27/01/1992 Effective Date: 27/01/1992 Revocation Date: -
14	484m SW	OakenholtMill,ChesterRd,Flint,CH6 5PU	Effluent Type: TRADE DISCHARGES - UNSPECIFIED Permit Number: BB3696ZC Permit Version: 0 Receiving Water: Lead Brook	Status: Effective Issue date: 15/02/2022 Effective Date: 15/02/2022 Revocation Date: -

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

4.15 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.

4.16 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.

4.17 List 1 Dangerous Substances

Records within 500m	1

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.

Features are displayed on the Current industrial land use map on **page 36 >**

ID	Location	Name	Status	Receiving Water	Authorised Substances
L	467m W	Sca Hygiene Products Uk Ltd	Not Active	-	Mercury (other), Cadmium, Pentachlorophenol, Aldrin, Trichlorobenzene, Total DDT

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

4.18 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.

4.19 Pollution Incidents (EA/NRW)

Records within 500m	27

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 36 >**

ID	Location	Details	
2	**On site**	**Incident Date: 31/01/2003** **Incident Identification: 134383** **Pollutant: Oils and Fuel** **Pollutant Description: Insulating and Cable Oils**	**Water Impact: Category 4 (No Impact)** **Land Impact: Category 3 (Minor)** **Air Impact: Category 4 (No Impact)**
A	**On site**	**Incident Date: 05/04/2002** **Incident Identification: 69230** **Pollutant: Atmospheric Pollutants and Effects** **Pollutant Description: Chemical Odour**	**Water Impact: Category 4 (No Impact)** **Land Impact: Category 4 (No Impact)** **Air Impact: Category 3 (Minor)**
A	**On site**	**Incident Date: 11/04/2002** **Incident Identification: 70728** **Pollutant: Atmospheric Pollutants and Effects** **Pollutant Description: Chemical Odour**	**Water Impact: Category 4 (No Impact)** **Land Impact: Category 4 (No Impact)** **Air Impact: Category 3 (Minor)**
A	**On site**	**Incident Date: 05/04/2002** **Incident Identification: 69230** **Pollutant: Atmospheric Pollutants and Effects** **Pollutant Description: Chemical Odour**	**Water Impact: Category 4 (No Impact)** **Land Impact: Category 4 (No Impact)** **Air Impact: Category 3 (Minor)**
B	**On site**	**Incident Date: 11/07/2002** **Incident Identification: 90837** **Pollutant: Oils and Fuel** **Pollutant Description: Unidentified Oil**	**Water Impact: Category 4 (No Impact)** **Land Impact: Category 3 (Minor)** **Air Impact: Category 4 (No Impact)**
10	256m S	Incident Date: 13/02/2002 Incident Identification: 58155 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Sulphide Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
J	276m S	Incident Date: 23/05/2001 Incident Identification: 6454 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
J	276m S	Incident Date: 23/05/2001 Incident Identification: 6454 Pollutant: General Biodegradable Materials and Wastes Pollutant Description: Other General Biodegradable Material or Waste	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)

ID	Location	Details	
11	313m W	Incident Date: 03/01/2015 Incident Identification: 1303926 Pollutant: Other Pollutant Pollutant Description: Noise	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
K	321m E	Incident Date: 27/06/2013 Incident Identification: 1126609 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
L	337m W	Incident Date: 01/10/2014 Incident Identification: 1283219 Pollutant: Other Pollutant Pollutant Description: Noise	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
L	346m W	Incident Date: 05/12/2014 Incident Identification: 1299588 Pollutant: Other Pollutant Pollutant Description: Noise	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
L	346m W	Incident Date: 28/10/2014 Incident Identification: 1290215 Pollutant: Other Pollutant Pollutant Description: Noise	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
L	362m W	Incident Date: 08/04/2013 Incident Identification: 1100608 Pollutant: Other Pollutant Pollutant Description: Noise	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
L	367m W	Incident Date: 04/03/2008 Incident Identification: 568669 Pollutant: Other Pollutant Pollutant Description: Noise	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 2 (Significant)
L	368m W	Incident Date: 20/08/2003 Incident Identification: 183674 Pollutant: Oils and Fuel Pollutant Description: Diesel	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)
L	398m W	Incident Date: 29/07/2013 Incident Identification: 1140867 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
L	422m W	Incident Date: 20/05/2013 Incident Identification: 1114226 Pollutant: Other Pollutant Pollutant Description: Noise	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

ID	Location	Details	
L	425m W	Incident Date: 21/07/2013 Incident Identification: 1136557 Pollutant: Contaminated Water Pollutant Description: Firefighting Run-Off	Water Impact: - Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
L	444m W	Incident Date: 06/08/2003 Incident Identification: 179730 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
L	444m W	Incident Date: 06/08/2003 Incident Identification: 179708 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
L	444m W	Incident Date: 05/08/2003 Incident Identification: 179410 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
L	449m W	Incident Date: 23/07/2003 Incident Identification: 175994 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
L	453m W	Incident Date: 05/08/2003 Incident Identification: 179402 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
L	459m W	Incident Date: 27/02/2015 Incident Identification: 1316904 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Smoke	Water Impact: - Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
L	463m W	Incident Date: 28/07/2003 Incident Identification: 177321 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
L	466m W	Incident Date: 06/08/2003 Incident Identification: 179697 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

4.20 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.

4.21 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.

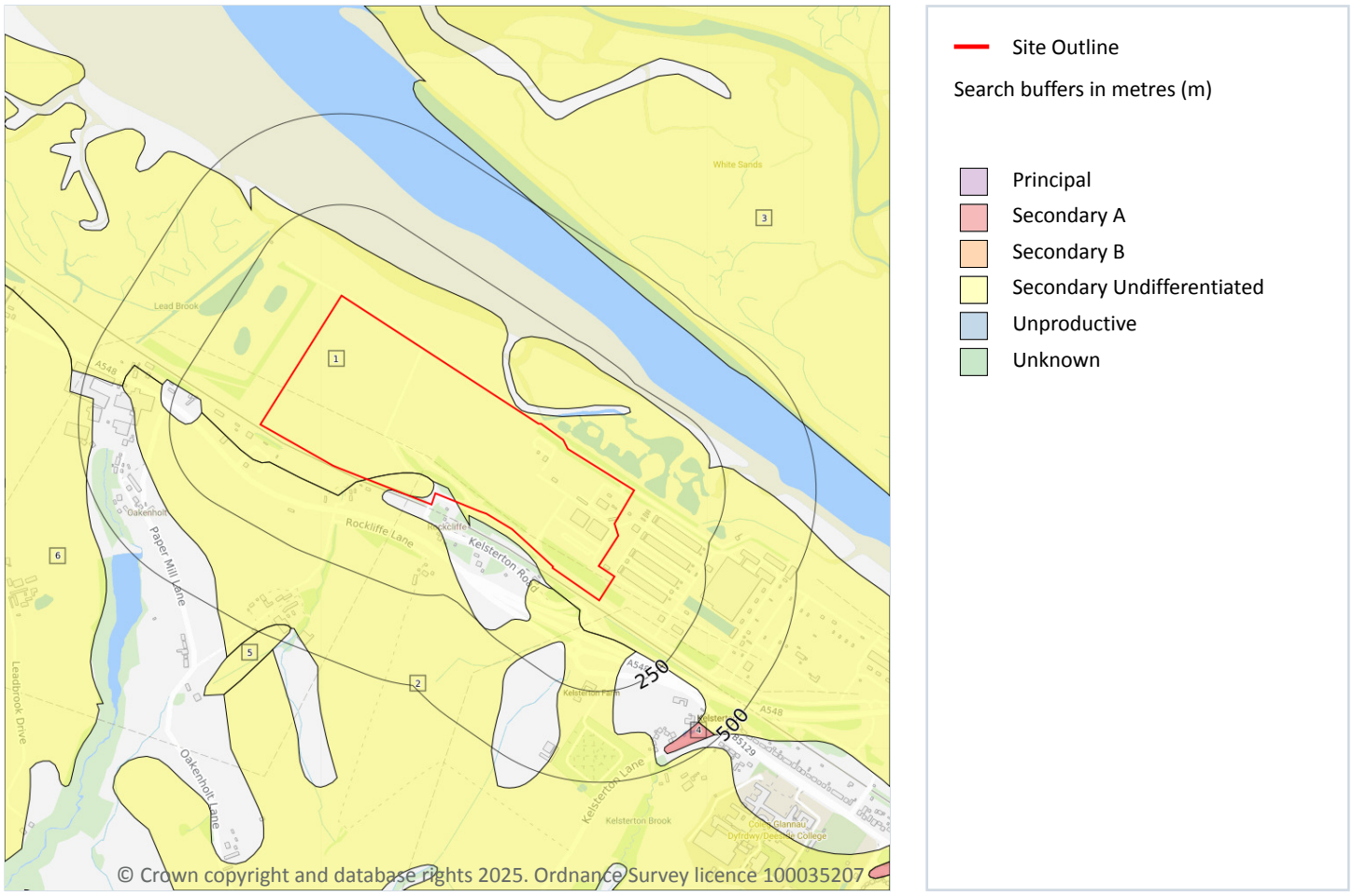
4.22 Pollution inventory radioactive waste

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



5.1 Superficial aquifer

Records within 500m	6

Aquifer status of groundwater held within superficial geology.

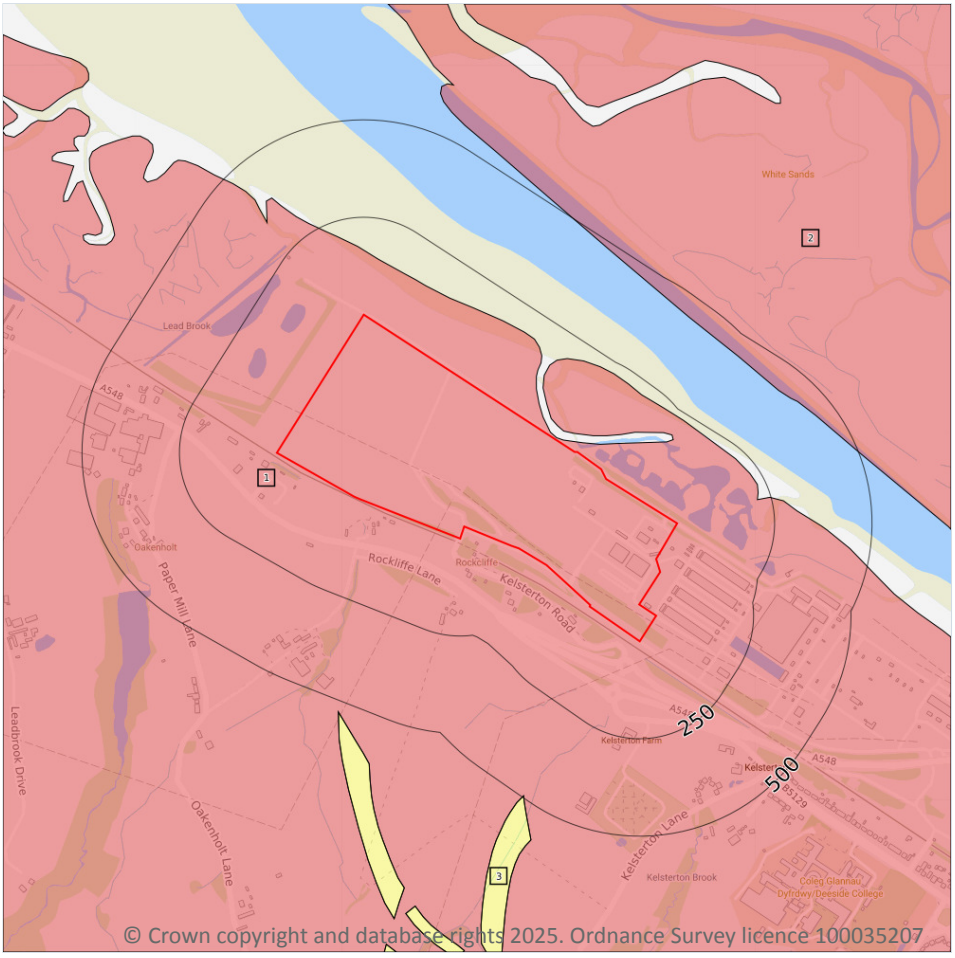
Features are displayed on the Hydrogeology map on **page 52 >**

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	429m 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
4	432m 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
5	454m 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
6	461m 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.

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.

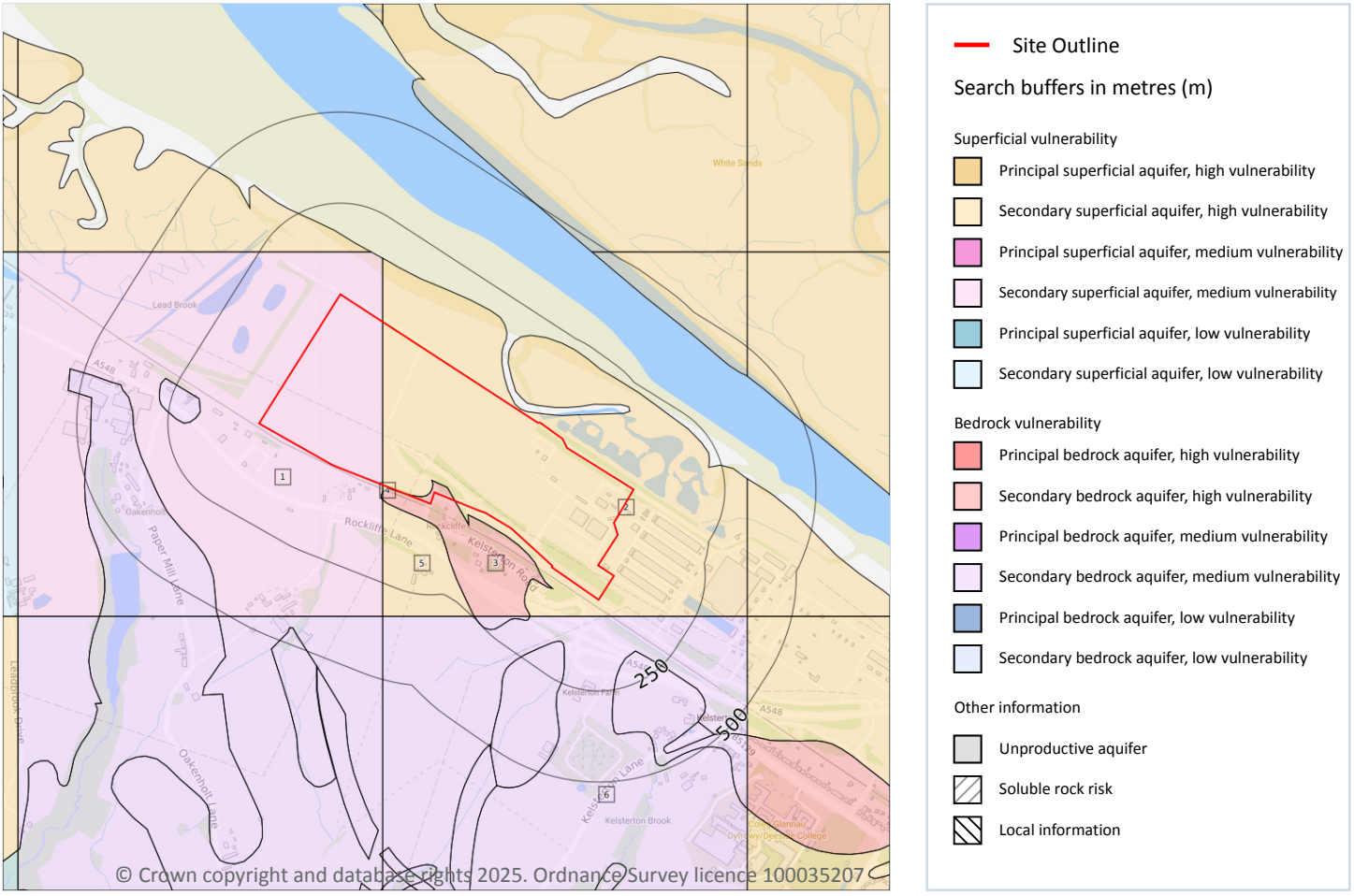
Features are displayed on the Bedrock aquifer map on **page 54 >**

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	429m 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

ID	Location	Designation	Description
3	496m 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



5.3 Groundwater vulnerability

Records within 50m	6

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 56 >**

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	**On site**	**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**
2	**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: 3-10m Patchiness value: <90% Recharge potential: High**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
3	**On site**	**Summary Classification: Secondary bedrock aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer**	**Leaching class: High Infiltration value: >70% Dilution value: 300-550mm/year**	**Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: High**	**Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures**
4	19m S	Summary Classification: Secondary bedrock aquifer - Medium Vulnerability Combined classification: Productive Bedrock Aquifer, No Superficial Aquifer	Leaching class: Low Infiltration value: >70% Dilution value: 300-550mm/year	Vulnerability: - Aquifer type: - Thickness: 3-10m Patchiness value: <90% Recharge potential: No Data	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
5	38m S	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: 3-10m Patchiness value: <90% Recharge potential: High	Vulnerability: High Aquifer type: Secondary Flow mechanism: Well connected fractures
6	46m S	Summary Classification: Secondary bedrock aquifer - Medium 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: <3m Patchiness value: <90% Recharge potential: Medium	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.

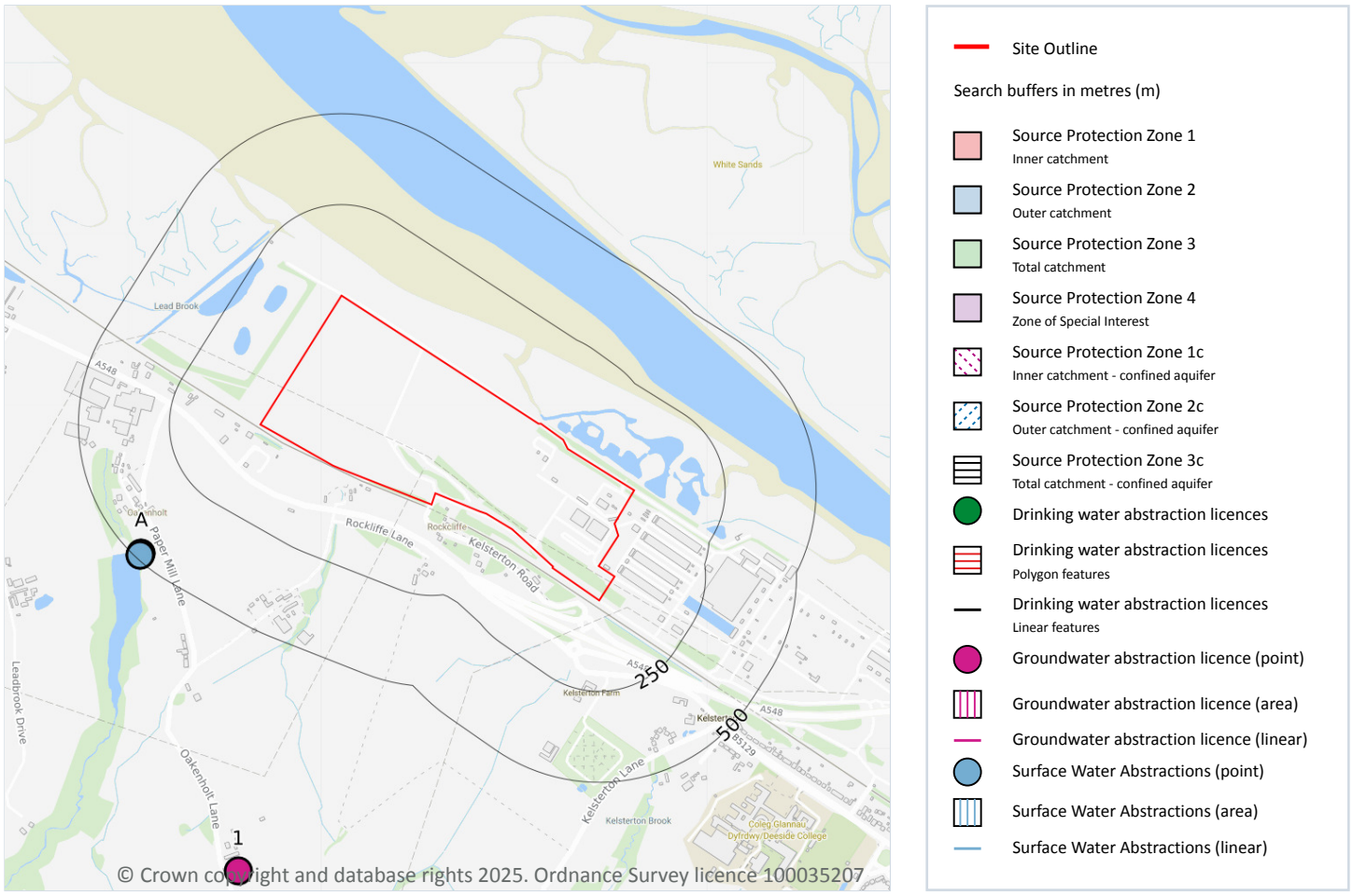
5.5 Groundwater vulnerability- local information

Records on site	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	2

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 59 >**

ID	Location	Details	
1	1133m S	Status: Historical Licence No: 24/67/10/0030 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: WELL A Data Type: Point Name: Dodd Easting: 326600 Northing: 370301	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 25/10/1966 Expiry Date: - Issue No: 101 Version Start Date: 04/02/2004 Version End Date: -
-	1318m S	Status: Historical Licence No: 24/67/10/0030 Details: General Farming & Domestic Direct Source: EAW Groundwater Point: WELL B Data Type: Point Name: Dodd Easting: 326630 Northing: 370090	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 25/10/1966 Expiry Date: - Issue No: 101 Version Start Date: 04/02/2004 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 59 >**

ID	Location	Details	
A	481m SW	Status: Historical Licence No: 24/67/10/0079 Details: Process Water - Medium Direct Source: Okenholt Reservoir Point: - Data Type: Point Name: - Easting: 326334 Northing: 371176	Annual Volume (m^3): 626211.5 Max Daily Volume (m^3): - Original Application No: - Original Start Date: 31/01/2018 Expiry Date: - Issue No: - Version Start Date: - Version End Date: -

ID	Location	Details	
A	481m SW	Status: Active Licence No: 24/67/10/0079 Details: Process Water - Medium Direct Source: Okenholt Reservoir Point: - Data Type: Point Name: - Easting: 326334 Northing: 371176	Annual Volume (m^3): 626211.5 Max Daily Volume (m^3): 6727.6 Original Application No: - Original Start Date: 31/01/2018 Expiry Date: - Issue No: - Version Start Date: - Version End Date: -
A	489m SW	Status: Historical Licence No: 24/67/10/0079 Details: Process Water Direct Source: EAW Surface Water Point: RESERVOIR Data Type: Point Name: SCA Hygiene Products UK Ltd Easting: 326330 Northing: 371170	Annual Volume (m^3): 626212 Max Daily Volume (m^3): 6727.6 Original Application No: - Original Start Date: 14/06/1968 Expiry Date: - Issue No: 102 Version Start Date: 01/04/2011 Version End Date: -
A	489m SW	Status: Historical Licence No: 24/67/10/0079 Details: Process Water - Medium Direct Source: - Point: - Data Type: Point Name: - Easting: 326330 Northing: 371170	Annual Volume (m^3): 626212 Max Daily Volume (m^3): - Original Application No: - Original Start Date: Apr 1 2011 12:00AM Expiry Date: - Issue No: - Version Start Date: - Version End Date: -
-	765m E	Status: Historical Licence No: 24/67/10/0124 Details: General Use relating to Secondary category - Medium Loss - Medium Direct Source: River Dee Point: - Data Type: Point Name: - Easting: 328430 Northing: 371160	Annual Volume (m^3): 24090000 Max Daily Volume (m^3): 264000 Original Application No: - Original Start Date: 05/01/2017 Expiry Date: 31/03/2027 Issue No: - Version Start Date: - Version End Date: -
-	765m E	Status: Active Licence No: 24/67/10/0124 Details: General Use relating to Secondary category - Medium Loss - Medium Direct Source: River Dee Point: - Data Type: Point Name: - Easting: 328430 Northing: 371160	Annual Volume (m^3): 24090000 Max Daily Volume (m^3): 66000 Original Application No: - Original Start Date: 05/01/2017 Expiry Date: - Issue No: - Version Start Date: - Version End Date: -

ID	Location	Details	
-	1256m NW	Status: Active Licence No: 24/67/10/0080 Details: Process Water - Medium Direct Source: Pandy Brook at Pentre Ffwrndan Point: - Data Type: Point Name: - Easting: 325525 Northing: 372065	Annual Volume (m^3): 123878.5 Max Daily Volume (m^3): 518.24 Original Application No: - Original Start Date: 31/01/2018 Expiry Date: - Issue No: - Version Start Date: - Version End Date: -
-	1256m NW	Status: Historical Licence No: 24/67/10/0080 Details: Process Water - Medium Direct Source: Pandy Brook at Pentre Ffwrndan Point: - Data Type: Point Name: - Easting: 325525 Northing: 372065	Annual Volume (m^3): 123878.5 Max Daily Volume (m^3): - Original Application No: - Original Start Date: 31/01/2018 Expiry Date: - Issue No: - Version Start Date: - Version End Date: -
-	1256m NW	Status: Active Licence No: 24/67/10/0099 Details: Unknown (Impounding) - Direct Source: - Point: - Data Type: Point Name: - Easting: 325750 Northing: 372440	Annual Volume (m^3): 0 Max Daily Volume (m^3): - Original Application No: - Original Start Date: 05/03/1979 Expiry Date: - Issue No: - Version Start Date: - Version End Date: -
-	1259m NW	Status: Historical Licence No: 24/67/10/0080 Details: Process Water Direct Source: EAW Surface Water Point: STREAM Data Type: Point Name: SCA Hygiene Products UK Ltd Easting: 325520 Northing: 372060	Annual Volume (m^3): 123879 Max Daily Volume (m^3): 518.244 Original Application No: - Original Start Date: 14/06/1968 Expiry Date: - Issue No: 101 Version Start Date: 01/04/2003 Version End Date: -
-	1259m NW	Status: Historical Licence No: 24/67/10/0080 Details: Process Water - Medium Direct Source: - Point: - Data Type: Point Name: Mike King Easting: 325520 Northing: 372060	Annual Volume (m^3): 123879 Max Daily Volume (m^3): - Original Application No: - Original Start Date: Apr 1 2003 12:00AM Expiry Date: - Issue No: - Version Start Date: - Version End Date: -

ID	Location	Details	
-	1462m E	Status: Historical Licence No: 24/67/10/0117 Details: General Use relating to Secondary category - Medium Loss - Medium Direct Source: Dee Point: - Data Type: Point Name: - Easting: 329036 Northing: 370697	Annual Volume (m^3): 8854272 Max Daily Volume (m^3): - Original Application No: - Original Start Date: Dec 19 2017 12:00AM Expiry Date: - Issue No: - Version Start Date: - 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.

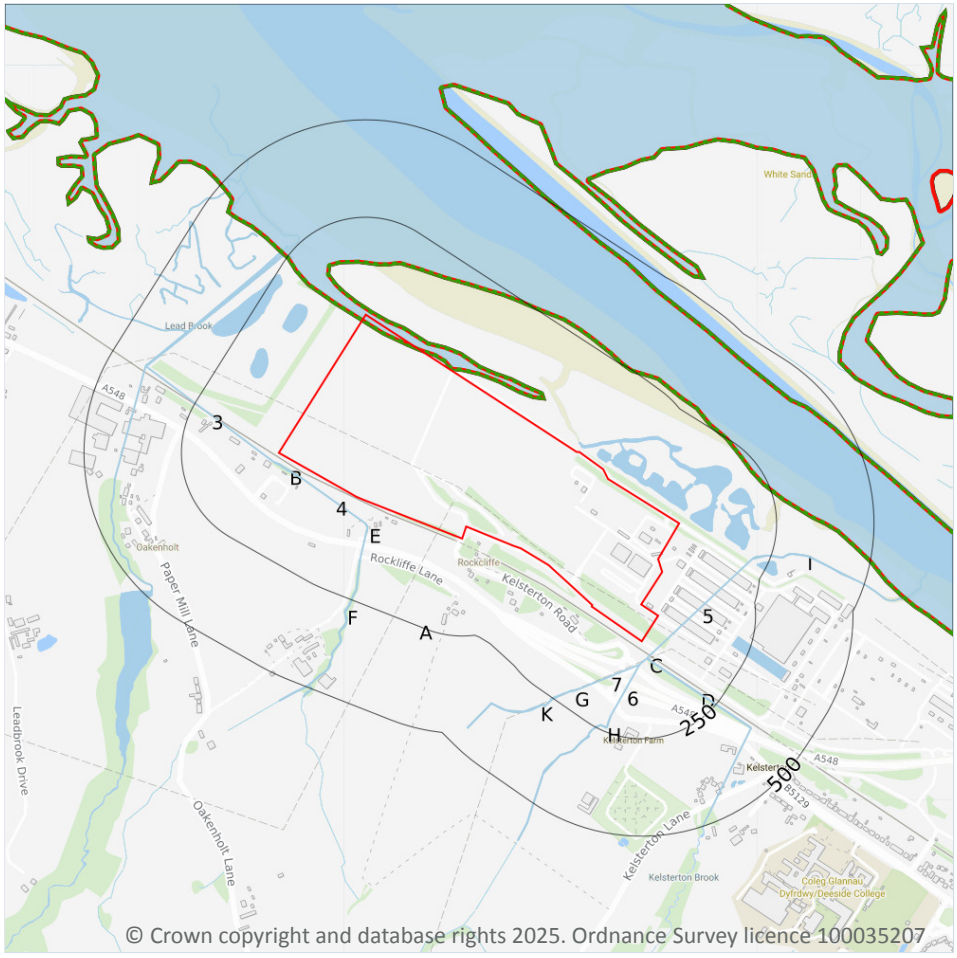
5.10 Source Protection Zones (confined aquifer)

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



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	19

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 64 >**

ID	Location	Type of water feature	Ground level	Permanence	Name
B	25m 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
3	27m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
4	28m SW	Inland river not influenced by normal tidal action.	Not provided	Watercourse contains water year round (in normal circumstances)	-
5	41m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Kelsterton Brook
C	43m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Kelsterton Brook
C	46m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
D	46m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Kelsterton Brook
C	47m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
C	49m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
E	54m S	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
6	60m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
7	60m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
E	79m S	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
F	147m 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
G	194m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
H	208m SW	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	-
I	208m SE	Inland river not influenced by normal tidal action.	On ground surface	Watercourse contains water year round (in normal circumstances)	Kelsterton Brook
G	214m SW	Inland river not influenced by normal tidal action.	Underground	Watercourse contains water year round (in normal circumstances)	-
K	220m SW	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	**15**

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 64 >**

This data is sourced from the Ordnance Survey.

6.3 WFD Surface water body catchments

Records on site	**1**

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 64 >**

ID	Location	Type	Water body catchment	Water body ID	Operational catchment	Management catchment
A	**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	**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 64 >**

ID	Location	Type	Name	Water body ID	Overall rating	Chemical rating	Ecological rating	Year
1	**On site**	**Transitional**	**DEE (N. WALES)**	**GB531106708200**	**Moderate**	**Fail**	**Moderate**	**2019**

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

6.5 WFD Groundwater bodies

Records on site	**1**

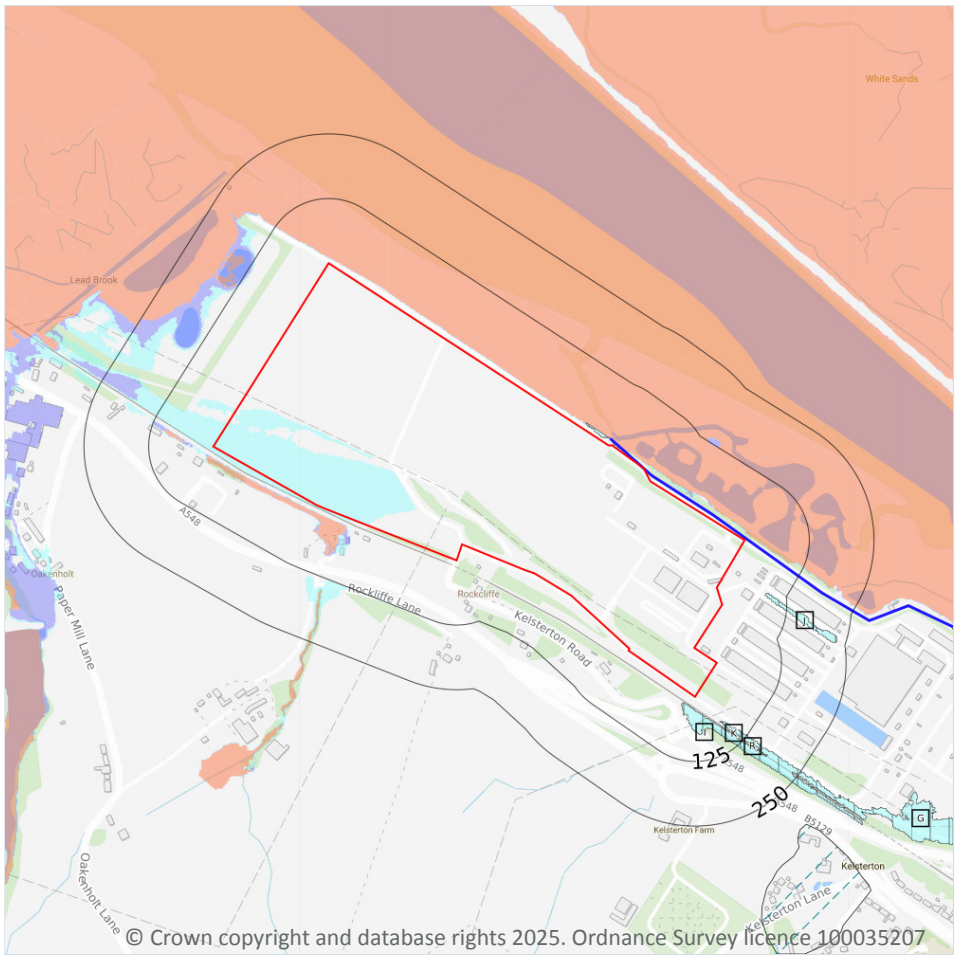
Groundwater bodies are also covered by the Directive and the same regime of objectives and reporting detailed in the previous section is in place.

Features are displayed on the Hydrology map on **page 64 >**

ID	Location	Name	Water body ID	Overall rating	Chemical rating	Quantitative	Year
A	**On site**	**Dee Carboniferous Coal Measures**	**GB41102G204800**	**Poor**	**Poor**	**Good**	**2017**

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

7 River and coastal flooding



Site Outline

Search buffers in metres (m)

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 the sea

Records within 50m	698

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

Features are displayed on the River and coastal flooding map on **page 68 >**

Distance	Flood risk category
On site	**Low**
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	**1**

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 68 >**

ID	Location	Update
B	**On site**	**08/11/2022**

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

7.4 Areas Benefiting from Flood Defences

Records within 250m	**8**

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 68 >**

ID	Location	
B	3m NE	Area benefiting from flood defences

ID	Location	
B	3m NE	Area benefiting from flood defences
C	6m NE	Area benefiting from flood defences
G	20m SW	Area benefiting from flood defences
I	70m S	Area benefiting from flood defences
J	85m E	Area benefiting from flood defences
K	101m SE	Area benefiting from flood defences
R	144m SE	Area benefiting from flood defences

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

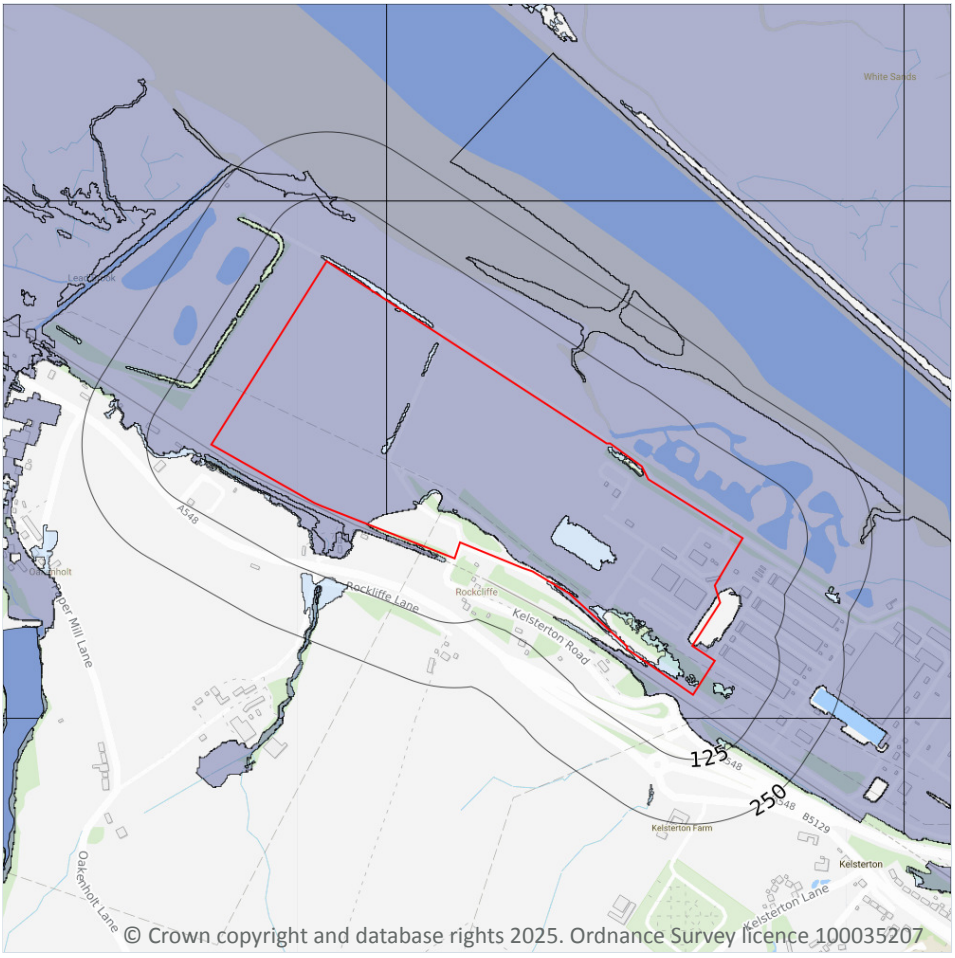
7.5 Flood Storage Areas

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



Site Outline

Search buffers in metres (m)

Flood zone 2

Flood zone 3

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 68 >**

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 68 >**

Location	Type
On site	**Zone 3 - (Fluvial /Tidal 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, 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 73 >**

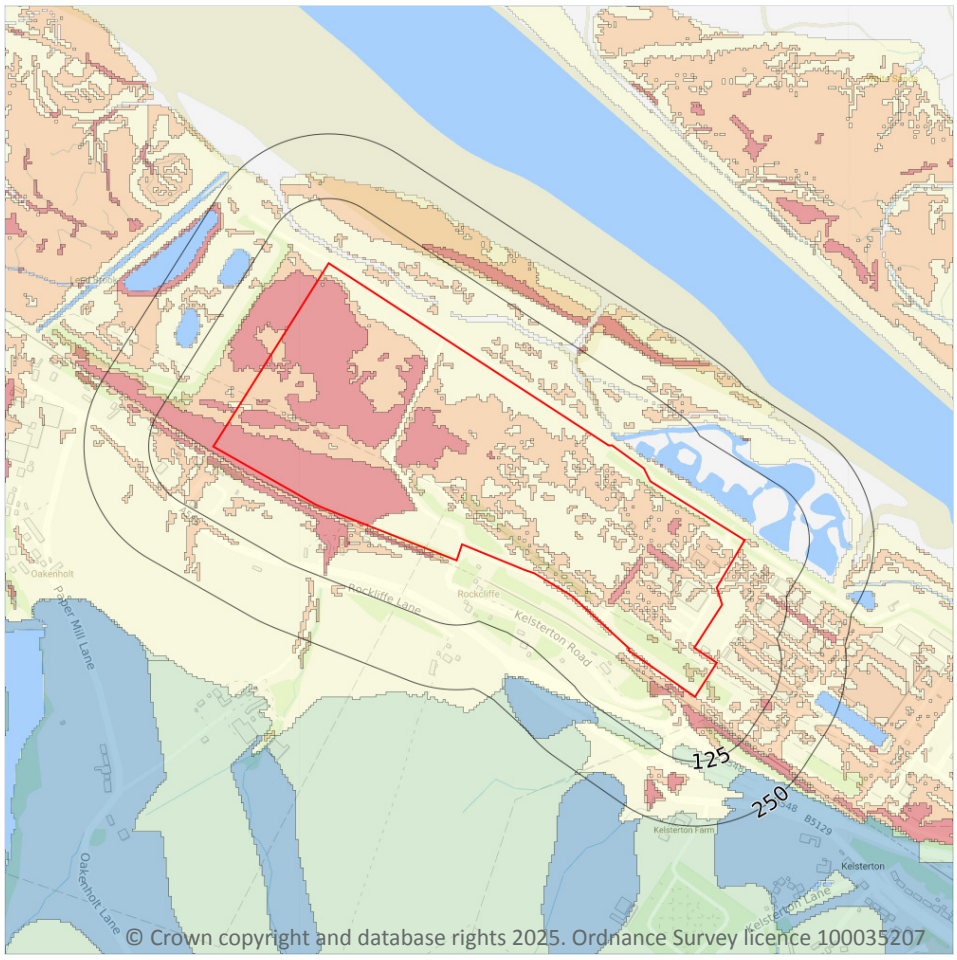
The data shown on the map and in the table above shows the highest likelihood of flood events happening at the site. Lower likelihood events may have greater flood depths and hence a greater potential impact on a site.

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

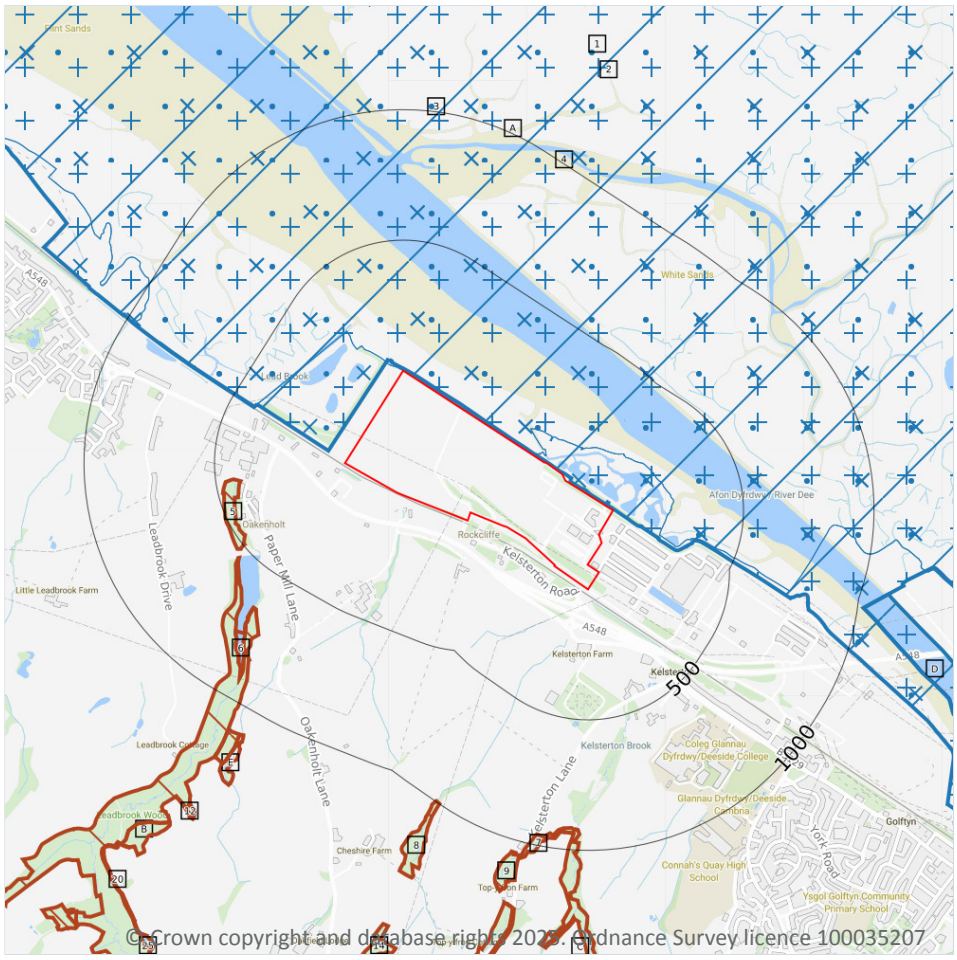
Highest risk on site	**High**
Highest risk within 50m	**High**

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 75 >**

This data is sourced from Ambiental Risk Analytics.

10 Environmental designations



10.1 Sites of Special Scientific Interest (SSSI)

Records within 2000m	12

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 76 >**

ID	Location	Name	Data source
3	3m NE	Dee Estuary / Aber Afon Dyfrdwy	Natural Resources Wales

ID	Location	Name	Data source
D	1023m E	Afon Dyfrdwy (River Dee)	Natural Resources Wales
-	1478m E	Dee Estuary / Aber Afon Dyfrdwy	Natural Resources Wales
-	1509m E	Dee Estuary / Aber Afon Dyfrdwy	Natural Resources Wales
-	1663m SE	Afon Dyfrdwy (River Dee)	Natural Resources Wales
-	1672m SE	Dee Estuary / Aber Afon Dyfrdwy	Natural Resources Wales
-	1753m W	Mynydd Y Fflint / Flint Mountain	Natural Resources Wales
-	1817m NE	Dee Estuary / Aber Afon Dyfrdwy	Natural Resources Wales
-	1822m E	Shotton Lagoons and Reedbeds	Natural Resources Wales
-	1898m E	Shotton Lagoons and Reedbeds	Natural Resources Wales
-	1922m E	Shotton Lagoons and Reedbeds	Natural Resources Wales
-	1931m SE	Afon Dyfrdwy (River Dee)	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	**5**

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 76 >**

ID	Location	Site	Details
1	On site	Name: The Dee Estuary Site status: Listed 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. 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
A	3m NE	Name: The Dee Estuary (Wales) Site status: - 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. 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
-	1822m E	Name: The Dee Estuary (Wales) Site status: - 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. 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
-	1898m E	Name: The Dee Estuary (Wales) Site status: - 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. 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
-	1922m E	Name: The Dee Estuary (Wales) Site status: - 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. 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	**3**

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 76 >**

ID	Location	Name	Features of interest	Habitat description	Data source
A	3m 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
D	1023m E	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
-	1931m SE	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

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

10.4 Special Protection Areas (SPA)

Records within 2000m	**5**

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 76 >**

ID	Location	Name	Species of interest	Habitat description	Data source
2	**On site**	**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 places, Mines, Industrial sites); Improved grassland; Other arable land; Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Marine areas, Sea inlets**	**Natural England**
4	3m 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 places, Mines, Industrial sites); Improved grassland; Other arable land; Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Marine areas, Sea inlets	Natural Resources Wales
-	1822m E	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 places, Mines, Industrial sites); Improved grassland; Other arable land; Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Marine areas, Sea inlets	Natural Resources Wales

ID	Location	Name	Species of interest	Habitat description	Data source
-	1898m E	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 places, Mines, Industrial sites); Improved grassland; Other arable land; Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Marine areas, Sea inlets	Natural Resources Wales
-	1922m E	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 places, Mines, Industrial sites); Improved grassland; Other arable land; Salt marshes, Salt pastures, Salt steppes; Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins); Humid grassland, Mesophile grassland; Bogs, Marshes, Water fringed vegetation, Fens; Marine areas, Sea inlets	Natural Resources Wales

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	23

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 76 >**

ID	Location	Name	Woodland Type
5	406m W	Unknown	Restored Ancient Woodland Site
B	543m SW	Unknown	Restored Ancient Woodland Site
6	655m SW	Unknown	Restored Ancient Woodland Site
C	916m S	Unknown	Ancient Semi Natural Woodland
7	922m S	Unknown	Restored Ancient Woodland Site
8	997m SW	Unknown	Restored Ancient Woodland Site
9	1046m S	Unknown	Restored Ancient Woodland Site
E	1099m SW	Unknown	Ancient Semi Natural Woodland
E	1104m SW	Unknown	Restored Ancient Woodland Site
10	1242m S	Unknown	Restored Ancient Woodland Site
11	1255m S	Unknown	Restored Ancient Woodland Site
C	1260m S	Unknown	Ancient Semi Natural Woodland
12	1423m SW	Unknown	Restored Ancient Woodland Site
14	1500m SW	Unknown	Ancient Semi Natural Woodland
B	1525m SW	Unknown	Ancient Semi Natural Woodland
-	1589m S	Unknown	Ancient Semi Natural Woodland

ID	Location	Name	Woodland Type
-	1617m SW	Unknown	Ancient Semi Natural Woodland
20	1676m SW	Unknown	Ancient Semi Natural Woodland
-	1795m S	Unknown	Restored Ancient Woodland Site
-	1942m SW	Unknown	Restored Ancient Woodland Site
25	1951m SW	Unknown	Restored Ancient Woodland Site
-	1995m S	Unknown	Restored Ancient Woodland Site
-	1999m 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.

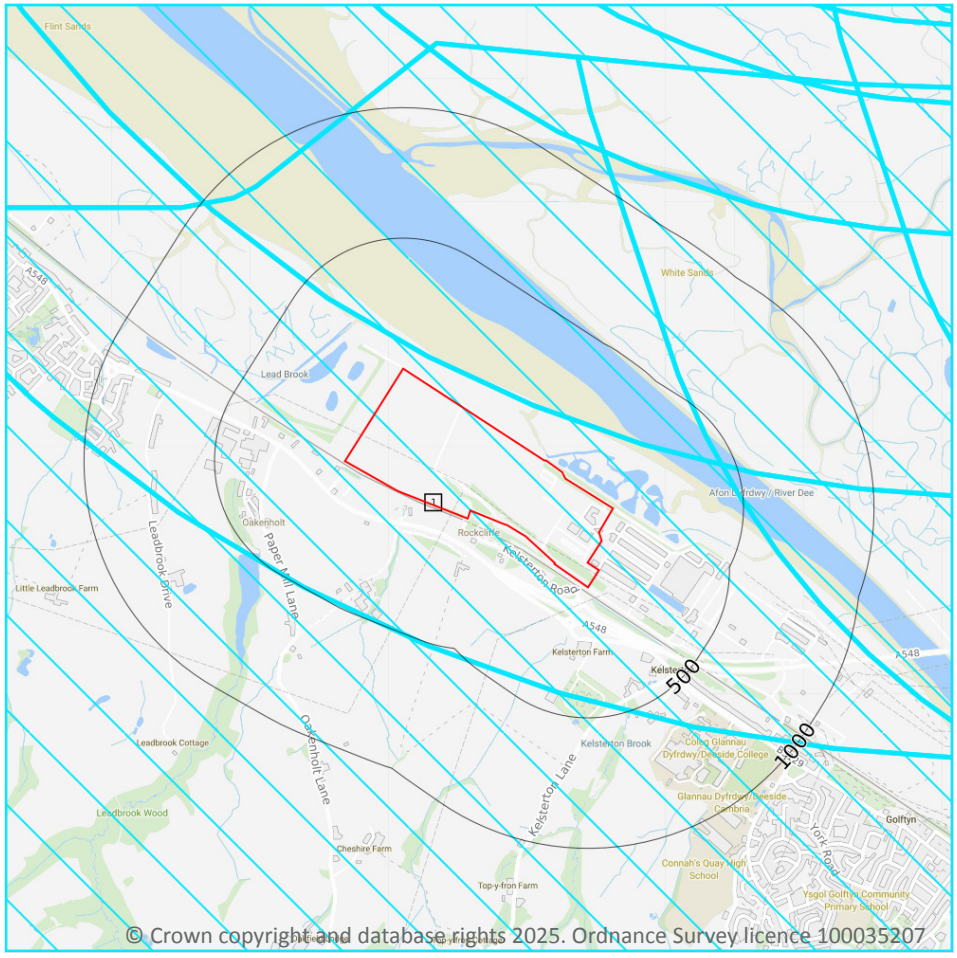
10.16 Nitrate Vulnerable Zones

Records within 2000m	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 90 >**

ID	Location	Type of developments requiring consultation
1	**On site**	**https://irz.geodata.org.uk/IRZ/step2.html?irzcode=0320000432000&notes=&location=327009,371446%20(IRZ%20polygon%20centre)**

This data is sourced from Natural England.

10.18 SSSI Units

Records within 2000m	0

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

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

11 Visual and cultural designations

11.1 World Heritage Sites

Records within 250m	0

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

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

11.2 Area of Outstanding Natural Beauty

Records within 250m	0

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

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

11.3 National Parks

Records within 250m	0

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

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

11.4 Listed Buildings

Records within 250m	0

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

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

11.5 Conservation Areas

Records within 250m	0

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

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

11.6 Scheduled Ancient Monuments

Records within 250m	0

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

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

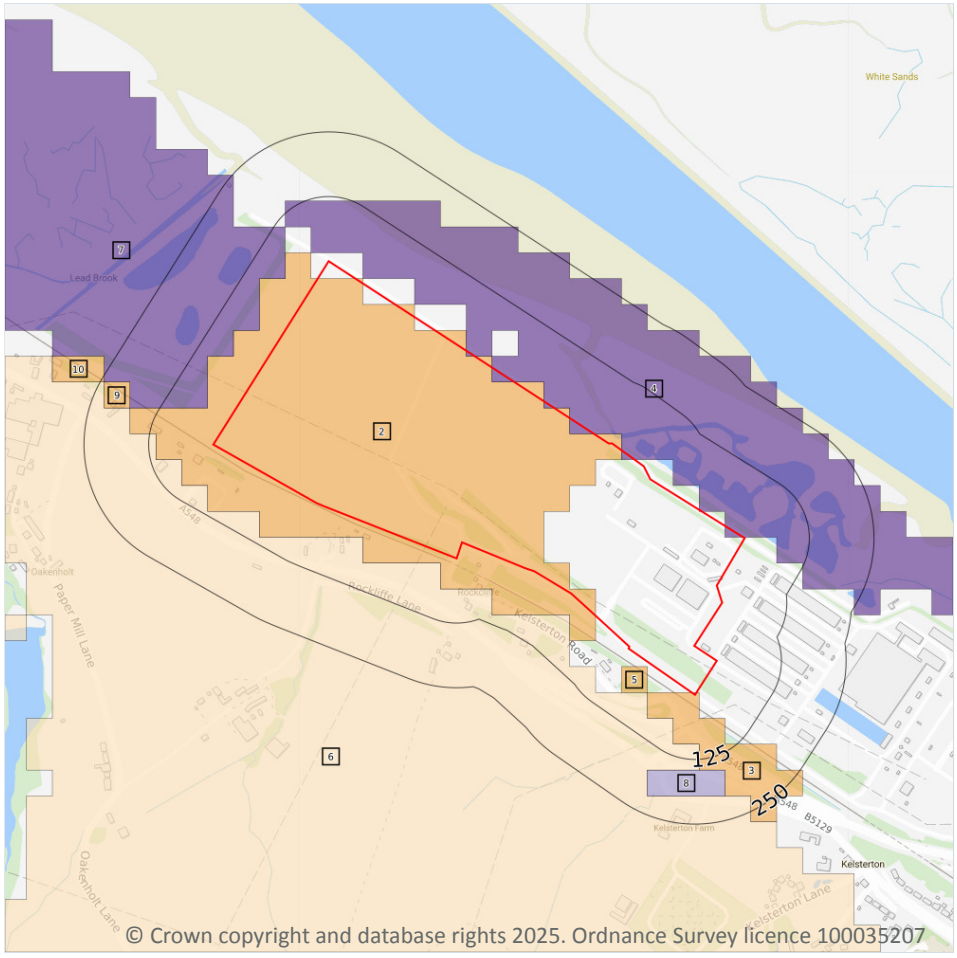
11.7 Registered Parks and Gardens

Records within 250m	0

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

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

12 Agricultural designations



Site Outline

Search buffers in metres (m)

- Grade 1 - excellent quality
- Grade 2 - very good quality
- Grade 3a - good quality
- Grade 3b - moderate quality
- Grade 4 - poor quality
- Grade 5 - very poor quality
- Timber felling licences
- Open Access land

12.1 Agricultural Land Classification

Records within 250m	9

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 94 >**

ID	Location	Classification	Description
2	**On site**	**Grade 2**	**Good quality agricultural land**
3	**On site**	**Grade 2**	**Good quality agricultural land**
4	**On site**	**Grade 5**	**Very poor quality agricultural land**

ID	Location	Classification	Description
5	8m SW	Grade 2	Good quality agricultural land
6	20m S	Grade 3a	Good to moderate quality agricultural land
7	42m NW	Grade 5	Very poor quality agricultural land
8	146m S	Grade 4	Poor quality agricultural land
9	176m NW	Grade 2	Good quality agricultural land
10	243m NW	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.

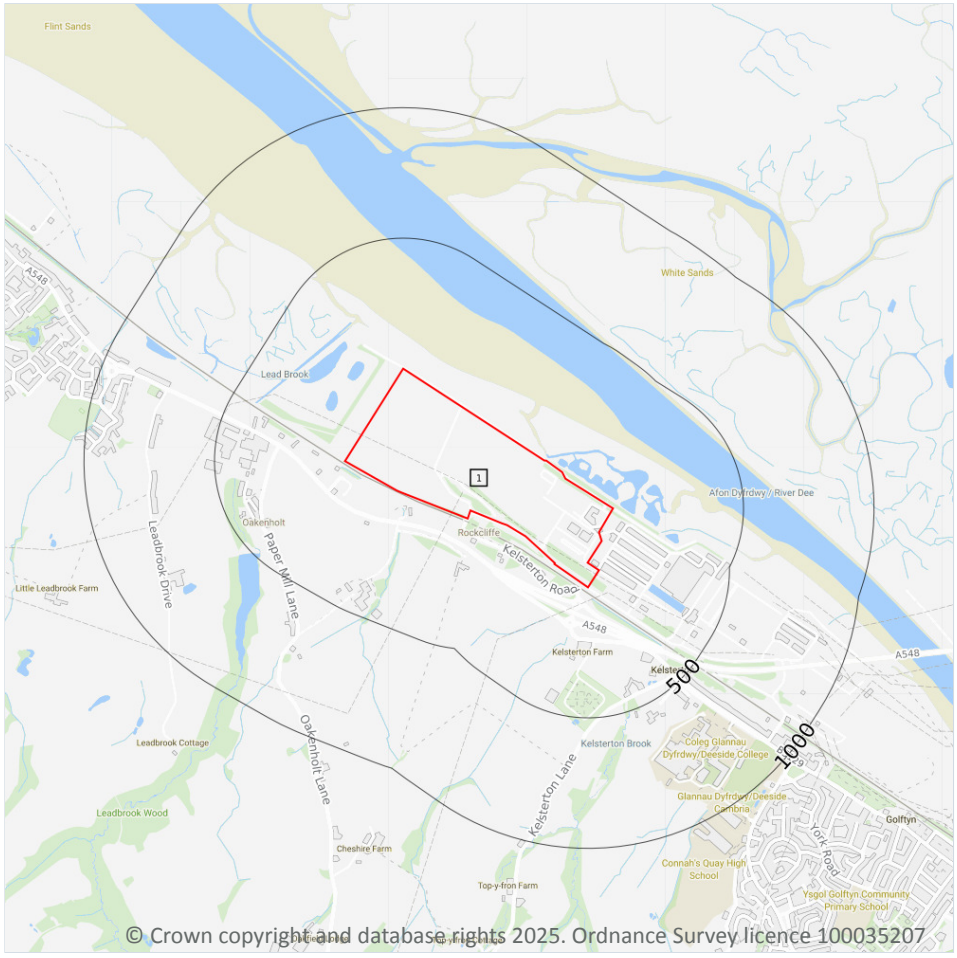
13.4 Limestone Pavement Orders

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



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 98 >**

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.

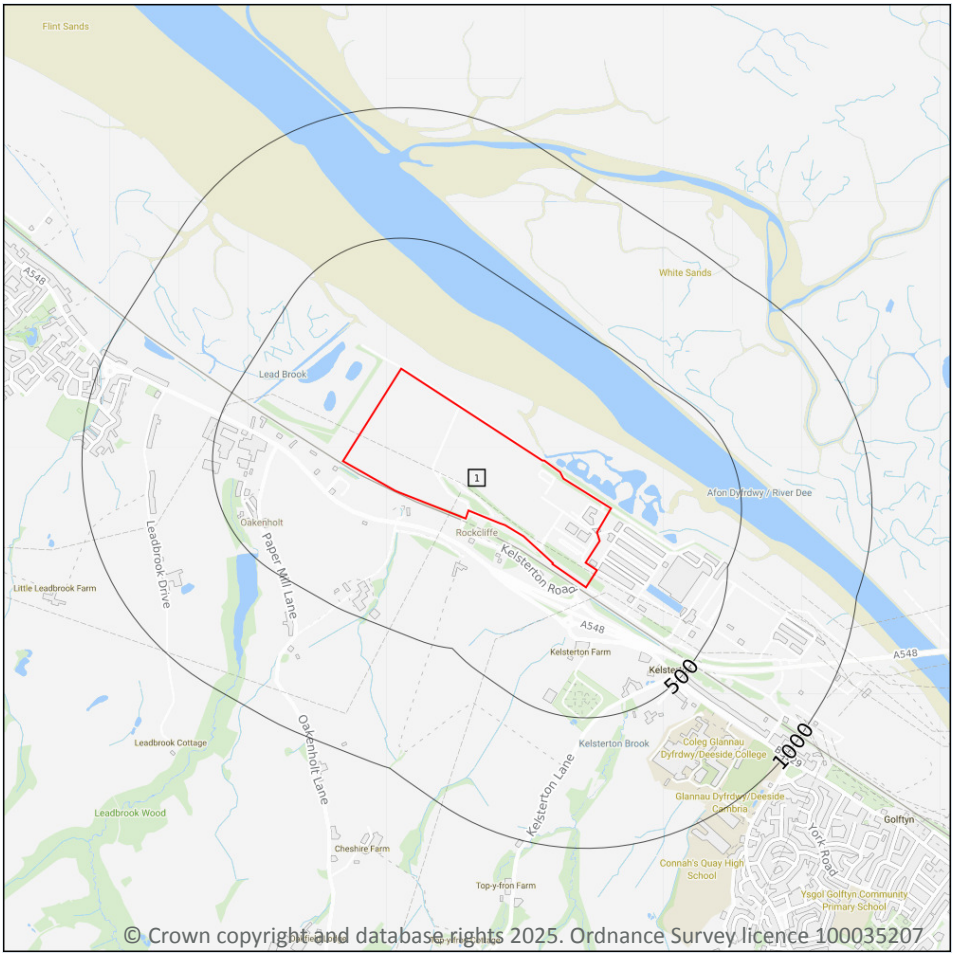
14.6 Bedrock faults and other linear features (10k)

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

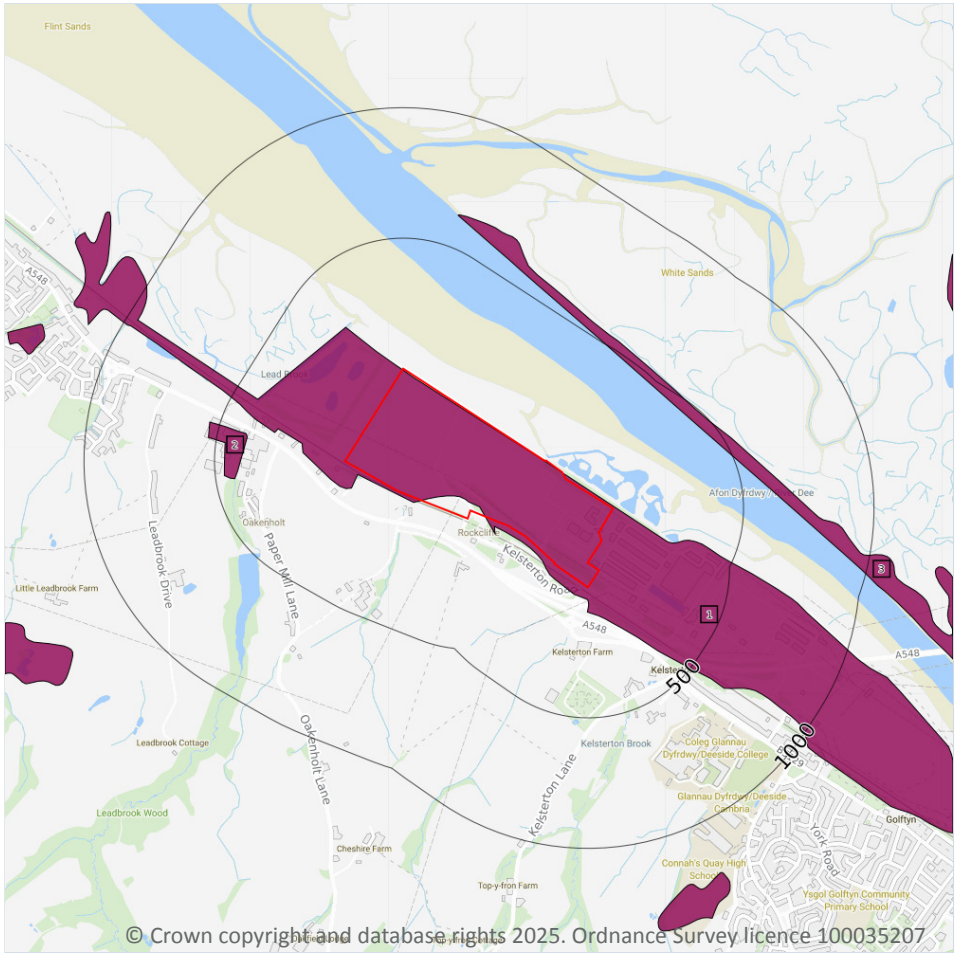
An indication on the coverage of 1:50,000 scale geology data for the site. Either 'Full' or 'No coverage' for each geological theme. Where 50k data is not available, this area has been filled in with 625k scale data.

Features are displayed on the Geology 1:50,000 scale - Availability map on **page 102 >**

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	3

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 103 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**MGR-ARTDP**	**MADE GROUND (UNDIVIDED)**	**ARTIFICIAL DEPOSIT**
2	385m W	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT
3	453m NE	MGR-ARTDP	MADE GROUND (UNDIVIDED)	ARTIFICIAL DEPOSIT

This data is sourced from the British Geological Survey.

15.3 Artificial ground permeability (50k)

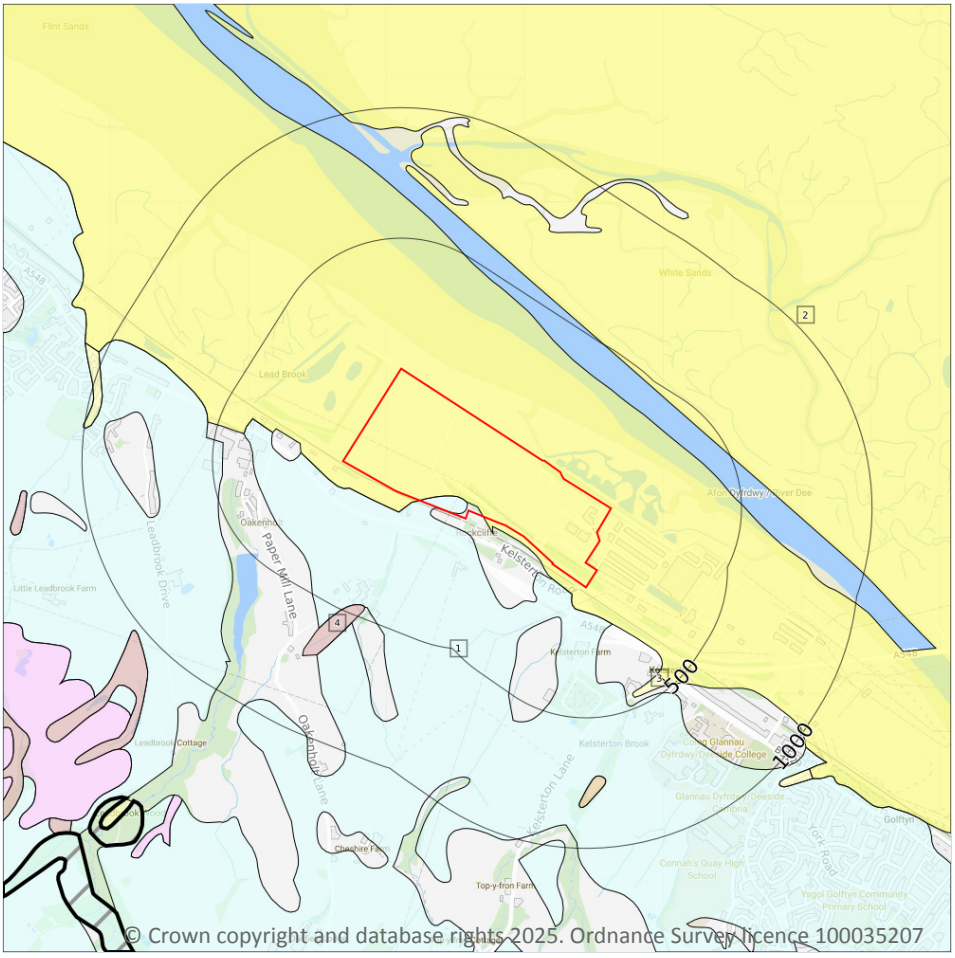
Records within 50m	1

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	4

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 105 >**

ID	Location	LEX Code	Description	Rock description
1	**On site**	**TILLD-DMTN**	**TILL, DEVENSIAN**	**DIAMICTON**
2	**On site**	**TFD-XCZS**	**TIDAL FLAT DEPOSITS**	**CLAY, SILT AND SAND**
3	432m SE	ALV-XCZSV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL

ID	Location	LEX Code	Description	Rock description
4	454m S	HEAD-XCZSV	HEAD	CLAY, SILT, SAND AND GRAVEL

This data is sourced from the British Geological Survey.

15.5 Superficial permeability (50k)

Records within 50m	**2**

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

Location	Flow type	Maximum permeability	Minimum permeability
On site	**Intergranular**	**Moderate**	**Very Low**
On site	**Mixed**	**High**	**Low**

This data is sourced from the British Geological Survey.

15.6 Landslip (50k)

Records within 500m	**0**

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

This data is sourced from the British Geological Survey.

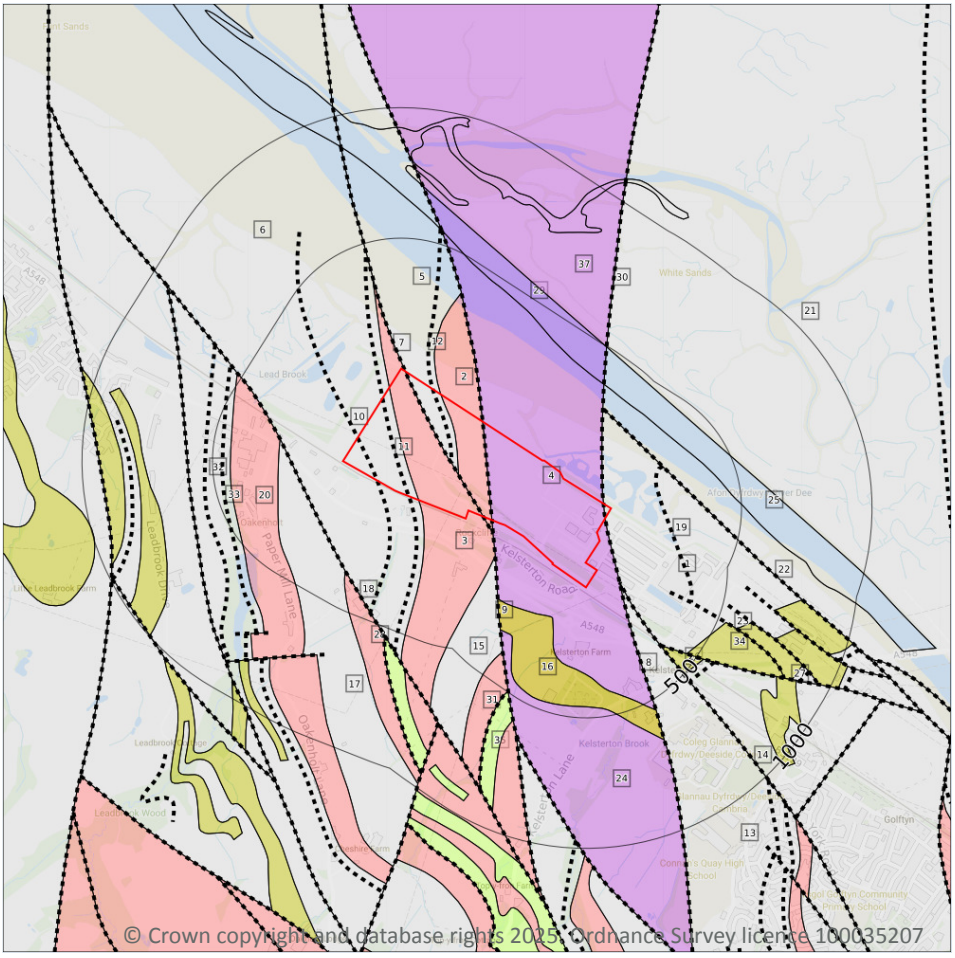
15.7 Landslip permeability (50k)

Records within 50m	**0**

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

This data is sourced from the British Geological Survey.

Geology 1:50,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (50k)

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

15.8 Bedrock geology (50k)

Records within 500m	22

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 107 >**

ID	Location	LEX Code	Description	Rock age
1	On site	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
2	On site	GS-SDAR	GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	NAMURIAN

ID	Location	LEX Code	Description	Rock age
3	**On site**	**GS-SDAR**	**GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED**	**NAMURIAN**
4	**On site**	**ETM-MDSC**	**ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE**	**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**
13	98m SE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
15	119m SW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
16	169m SW	ETM-SDST	ETRURIA FORMATION - SANDSTONE	WESTPHALIAN
17	181m SW	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
20	247m W	GS-SDAR	GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	NAMURIAN
21	253m NE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
24	314m SW	ETM-MDSC	ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE	WESTPHALIAN
25	356m NE	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN
26	362m SE	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
28	362m SW	GS-SDAR	GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	NAMURIAN
29	371m NE	ETM-MDSC	ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE	WESTPHALIAN
31	385m SW	GS-SDAR	GWESPYR SANDSTONE - SANDSTONE AND [SUBEQUAL/SUBORDINATE] ARGILLACEOUS ROCKS, INTERBEDDED	NAMURIAN
32	431m W	PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION - MUDSTONE, SILTSTONE AND SANDSTONE	WESTPHALIAN

ID	Location	LEX Code	Description	Rock age
34	462m SE	PLCM-SDST	PENNINE LOWER COAL MEASURES FORMATION - SANDSTONE	WESTPHALIAN
35	496m SW	BSG-MDST	BOWLAND SHALE FORMATION - MUDSTONE	VISEAN
37	497m NE	ETM-MDSC	ETRURIA FORMATION - MUDSTONE, SANDSTONE AND CONGLOMERATE	WESTPHALIAN

This data is sourced from the British Geological Survey.

15.9 Bedrock permeability (50k)

Records within 50m **4**

A qualitative classification of estimated rates of vertical movement of water from the ground surface through the unsaturated zone of 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**	**Moderate**	**Low**
On site	**Fracture**	**Moderate**	**Low**

This data is sourced from the British Geological Survey.

15.10 Bedrock faults and other linear features (50k)

Records within 500m **15**

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.

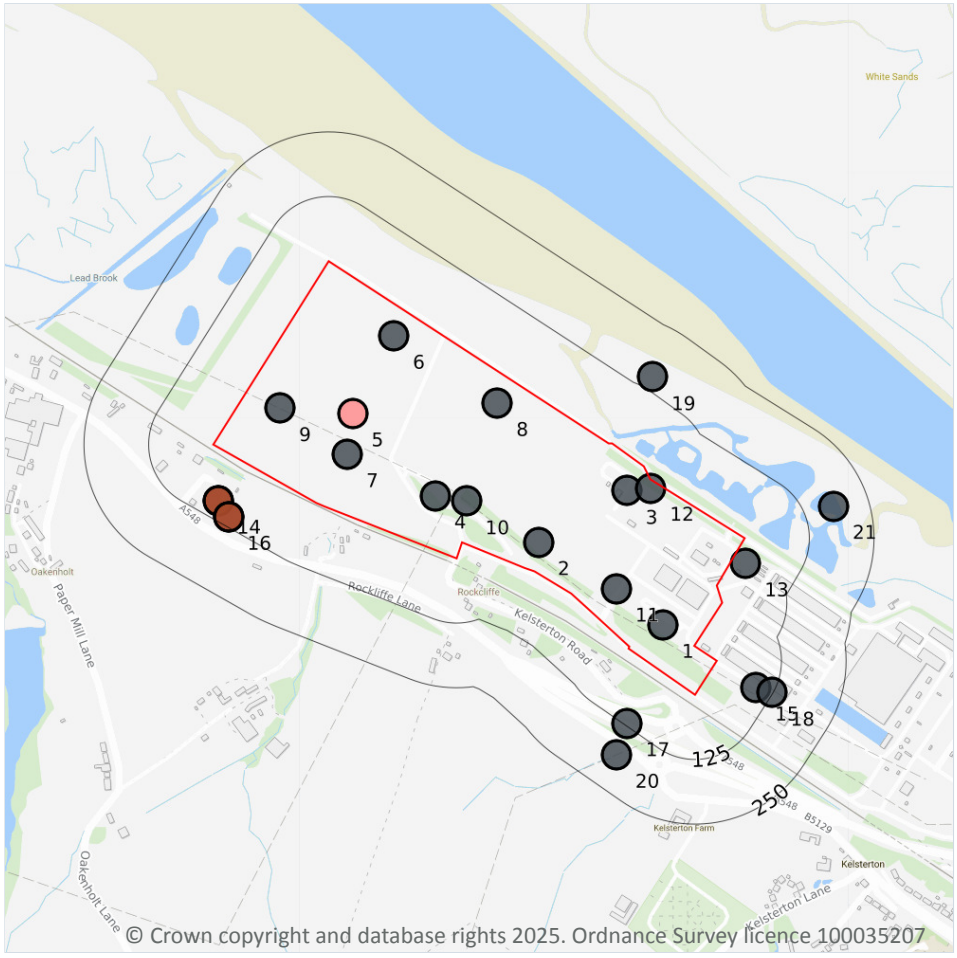
Features are displayed on the Geology 1:50,000 scale - Bedrock map on **page 107 >**

ID	Location	Category	Description
7	**On site**	**FAULT**	**Fault, inferred**
8	**On site**	**FAULT**	**Fault, inferred**
9	**On site**	**FAULT**	**Fault, inferred, displacement unknown**
10	**On site**	**ROCK**	**Coal seam, inferred**

ID	Location	Category	Description
11	**On site**	**ROCK**	**Coal seam, inferred**
12	**On site**	**ROCK**	**Coal seam, inferred**
14	98m SE	FAULT	Fault, inferred, displacement unknown
18	181m SW	FAULT	Fault, inferred, displacement unknown
19	190m E	ROCK	Coal seam, inferred
22	253m NE	FAULT	Fault, inferred, displacement unknown
23	292m E	FAULT	Fault, inferred, displacement unknown
27	362m SE	FAULT	Fault, inferred, displacement unknown
30	371m NE	FAULT	Fault, inferred
33	461m W	ROCK	Coal seam, inferred
36	496m SW	FOSSIL_HORIZON	Marine band

This data is sourced from the British Geological Survey.

16 Boreholes



16.1 BGS Boreholes

Records within 250m	21

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.

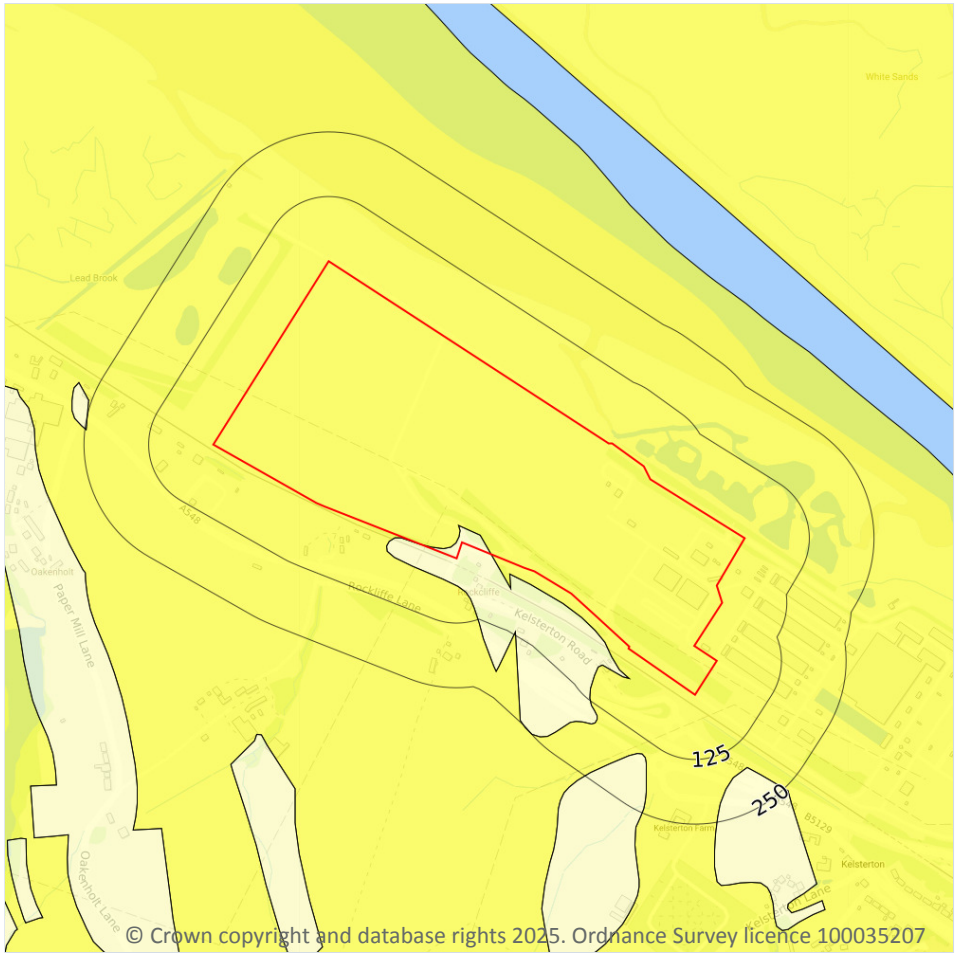
Features are displayed on the Boreholes map on **page 111 >**

ID	Location	Grid reference	Name	Length	Confidential	Web link
1	On site	327530 371180	CONNAH'S QUAY 4	-	Y	N/A
2	On site	327290 371340	CONNAH'S QUAY 5	-	Y	N/A
3	On site	327460 371440	CONNAH'S QUAY 6	-	Y	N/A

ID	Location	Grid reference	Name	Length	Confidential	Web link
4	**On site**	**327090 371430**	**CONNAH'S QUAY 7**	**-**	**Y**	**N/A**
5	**On site**	**326930 371590**	**CONNAH'S QUAY 8**	**71.32**	**N**	**150759**
6	**On site**	**327010 371740**	**CONNAH'S QUAY 10**	**-**	**Y**	**N/A**
7	**On site**	**326920 371510**	**CONNAH'S QUAY 11**	**-**	**Y**	**N/A**
8	**On site**	**327210 371610**	**CONNAH'S QUAY 13**	**-**	**Y**	**N/A**
9	**On site**	**326790 371600**	**CONNAH'S QUAY-BANGOR, 400KV TOWER NO.250**	**-**	**Y**	**N/A**
10	**On site**	**327150 371420**	**CONNAH'S QUAY-BANGOR, 400KV TOWER NO.251**	**-**	**Y**	**N/A**
11	**On site**	**327440 371250**	**CONNAH'S QUAY-BANGOR, 400KV TOWER NO.252**	**-**	**Y**	**N/A**
12	**On site**	**327507 371445**	**RIVER DEE CROSSING STUDY 3**	**-**	**Y**	**N/A**
13	26m SE	327690 371300	CONNAH'S QUAY 12	-	Y	N/A
14	91m SW	326670 371420	OLD SHAFT	-1.0	N	150916
15	91m SE	327710 371060	CONNAH'S QUAY 2	-	Y	N/A
16	107m SW	326690 371390	OLD SHAFT	-1.0	N	150929
17	121m SW	327460 370990	DEESIDE ROAD LINK RIVER CROSSING 8	-	Y	N/A
18	122m SE	327740 371050	CONNAH'S QUAY-BANGOR, 400KV TOWER NO.253	-	Y	N/A
19	151m NE	327510 371660	CONNAH'S QUAY 14	-	Y	N/A
20	182m SW	327440 370930	PROPOSED TOWER ZK3A	-	Y	N/A
21	183m E	327860 371410	CONNAH'S QUAY 15	-	Y	N/A

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	2

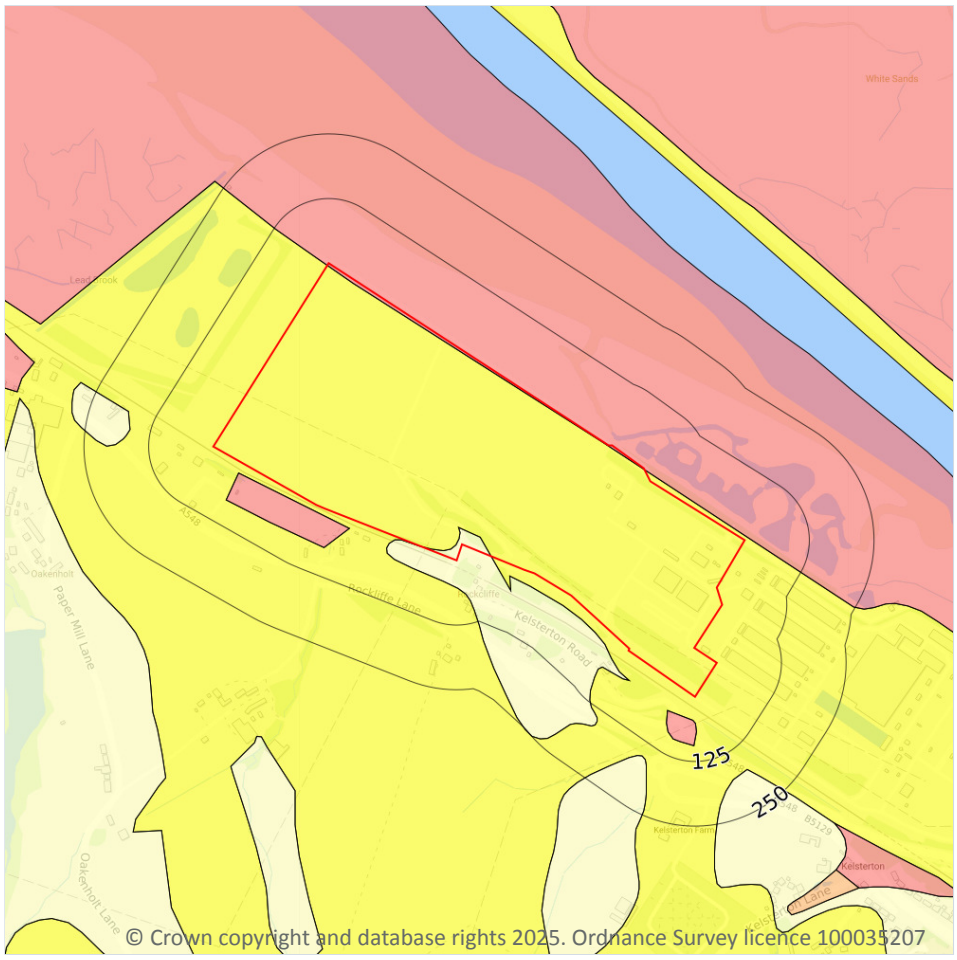
The potential hazard presented by soils that absorb water when wet (making them swell), and lose water as they dry (making them shrink). This shrink-swell behaviour is controlled by the type and amount of clay in the soil, and by seasonal changes in the soil moisture content (related to rainfall and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

Features are displayed on the Natural ground subsidence - Shrink swell clays map on **page 113 >**

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

This data is sourced from the British Geological Survey.

Natural ground subsidence - Running sands



Site Outline

Search buffers in metres (m)

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

17.2 Running sands

Records within 50m	5

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.

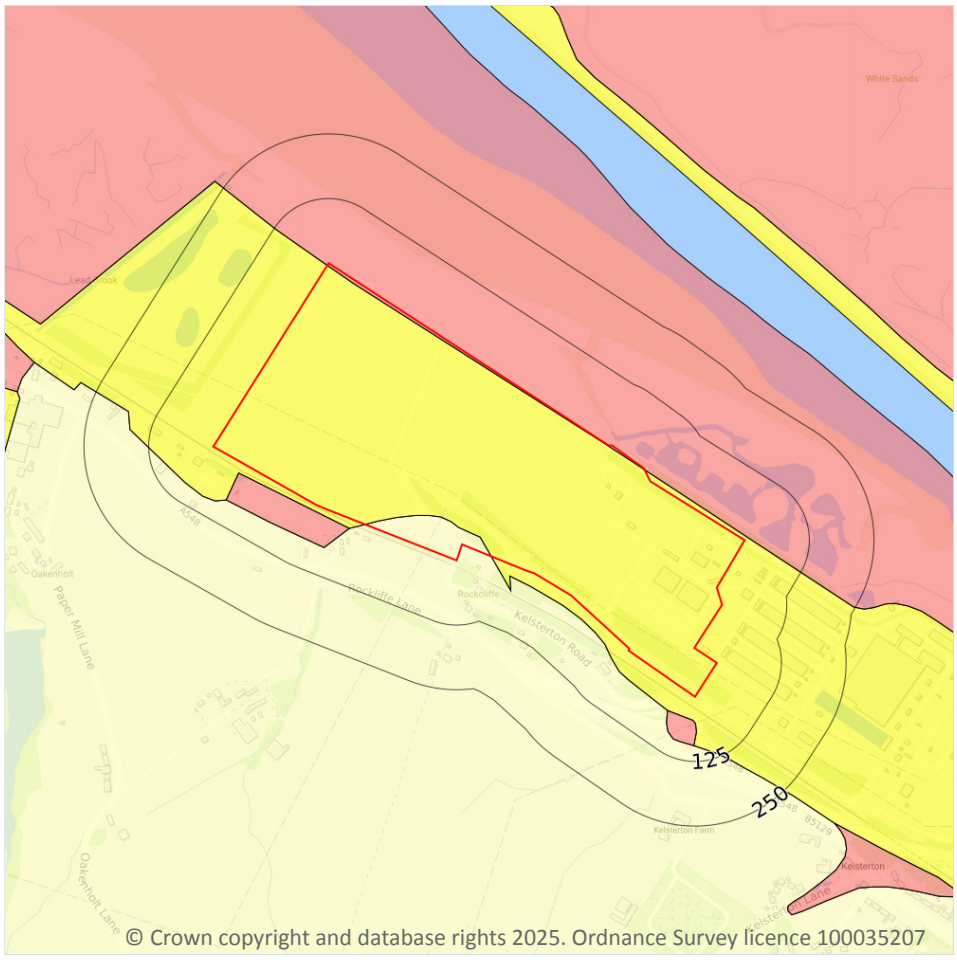
Features are displayed on the Natural ground subsidence - Running sands map on **page 114 >**

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	**Moderate**	**Running sand conditions are probably present. Constraints may apply to land uses involving excavation or the addition or removal of water.**
12m SW	Moderate	Running sand conditions are probably present. Constraints may apply to land uses involving excavation or the addition or removal of water.
44m S	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.

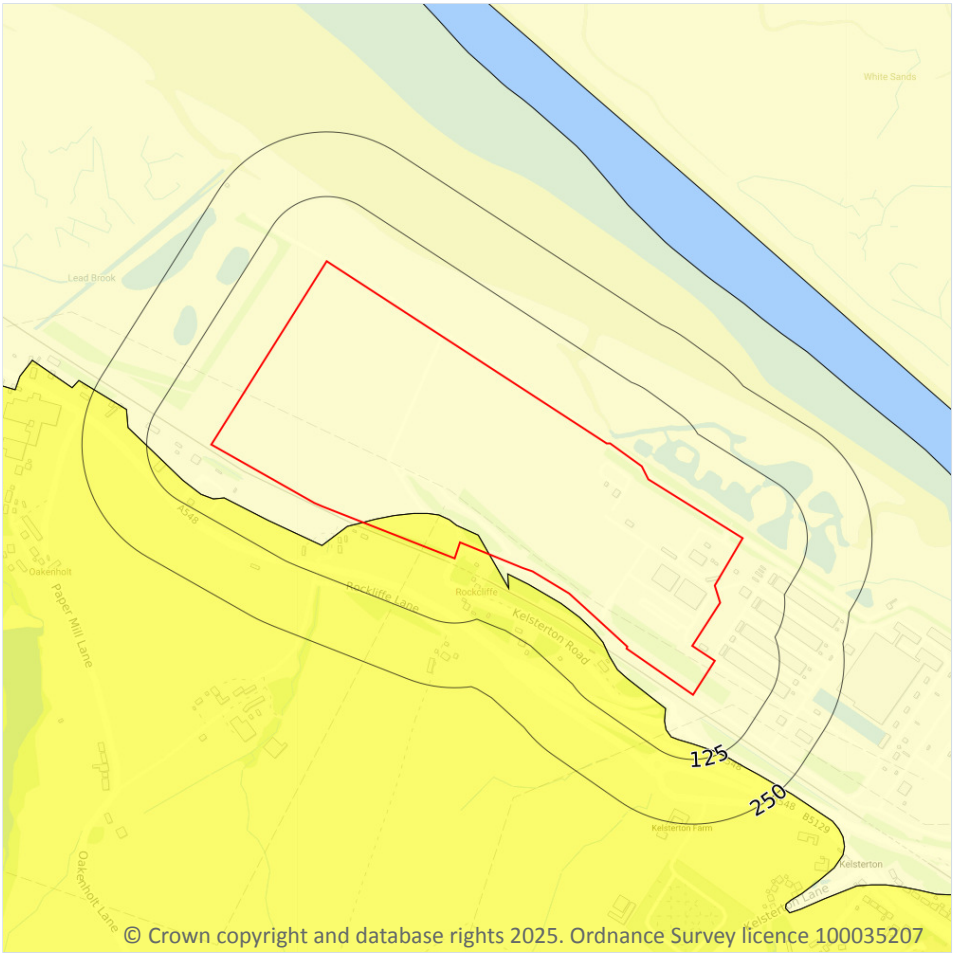
Features are displayed on the Natural ground subsidence - Compressible deposits map on **page 116 >**

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.**
12m SW	Moderate	Compressibility and uneven settlement hazards are probably present. Land use should consider specifically the compressibility and variability of the site.
44m S	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



17.4 Collapsible deposits

Records within 50m	2

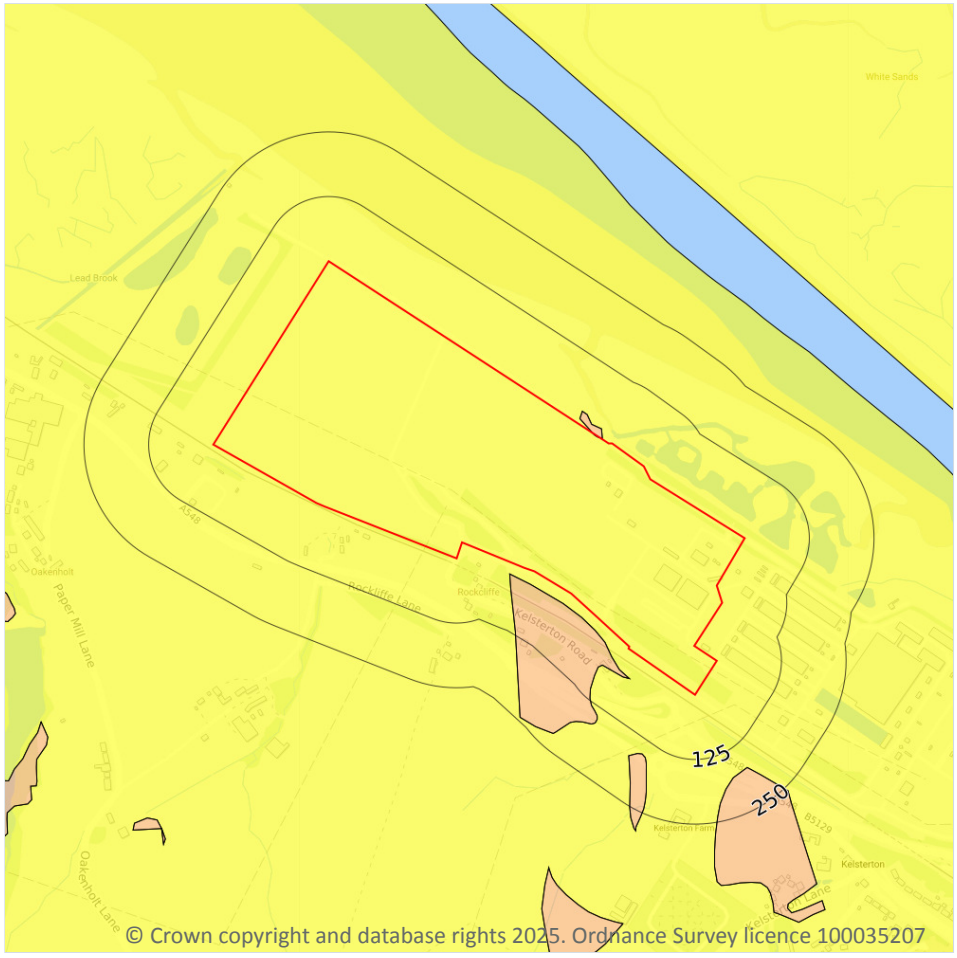
The potential hazard presented by natural deposits that could collapse when a load (such as a building) is placed on them or they become saturated with water.

Features are displayed on the Natural ground subsidence - Collapsible deposits map on **page 118 >**

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



Site Outline

Search buffers in metres (m)

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

17.5 Landslides

Records within 50m	3

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 119 >**

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.**
21m SW	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

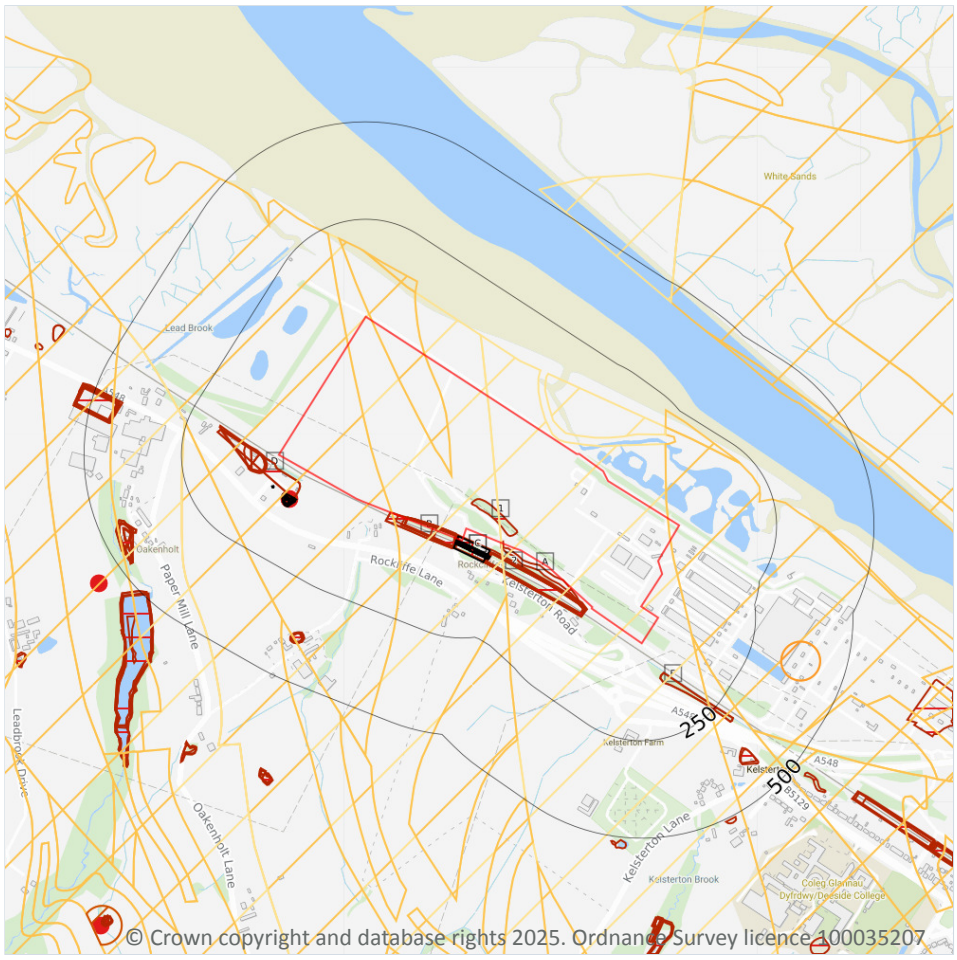
The potential hazard presented by ground dissolution, which occurs when water passing through soluble rocks produces underground cavities and cave systems. These cavities reduce support to the ground above and can cause localised collapse of the overlying rocks and deposits.

Features are displayed on the Natural ground subsidence - Ground dissolution of soluble rocks map on **page 121 >**

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 and ground workings



Site Outline

Search buffers in metres (m)

BritPits

Surface ground workings

Underground workings

Underground mining extents

Historical mineral planning areas

TCA non-coal mining

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 BritPits

Records within 500m	1

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 and ground workings map on **page 123 >**

ID	Location	Details	Description
E	86m SW	Name: Oakenholt Mill Coal Pit Address: A548, Oakenholt Mill, FLINT, Flintshire Commodity: Coal, Deep Status: Ceased	Type: Working is wholly underground, access by shaft, adit, drift or incline. Working may be termed Colliery, Mine, Drift Mine, Slant, Level, Adit or Ingoing Eye (Ingaun' Ee' - Scots). May also be locally termed `Quarry' or `Underground Quarry' when referring to sites extracting building stone (e.g. in Dorset and Wiltshire). The location given is that of the mine entrance and may be approximate for older sites shown on contemporaneous mapping by the Geological Survey used as the source document. Status description: Site which has ceased to extract minerals. May be considered as 'Closed' by operator. May be considered to have 'Active', 'Dormant' or 'Expired' planning permissions by the Mineral Planning Authority.

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m	**39**

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 and ground workings map on **page 123 >**

ID	Location	Land Use	Year of mapping	Mapping scale
1	**On site**	**Pond**	**1969**	**1:10560**
2	**On site**	**Cuttings**	**1898**	**1:10560**
A	**On site**	**Unspecified Ground Workings**	**1909**	**1:10560**
B	**On site**	**Cuttings**	**1981**	**1:10000**
B	**On site**	**Cuttings**	**1969**	**1:10560**
B	**On site**	**Cuttings**	**1909**	**1:10560**
B	**On site**	**Cuttings**	**1938**	**1:10560**
B	**On site**	**Cuttings**	**1898**	**1:10560**
B	**On site**	**Cuttings**	**1869**	**1:10560**
B	**On site**	**Cuttings**	**1938**	**1:10560**
B	**On site**	**Cuttings**	**1913**	**1:10560**
B	**On site**	**Cuttings**	**1954**	**1:10560**

ID	Location	Land Use	Year of mapping	Mapping scale
A	12m SW	Cuttings	1909	1:10560
A	13m SW	Cuttings	1938	1:10560
A	15m SW	Cuttings	1981	1:10000
A	15m SW	Cuttings	1969	1:10560
A	15m SW	Cuttings	1954	1:10560
A	16m SW	Cuttings	1913	1:10560
A	17m SW	Cuttings	1938	1:10560
A	17m SW	Cuttings	1898	1:10560
A	17m SW	Cuttings	1869	1:10560
D	25m SW	Unspecified Heap	1981	1:10000
D	25m SW	Unspecified Heap	1969	1:10560
D	37m W	Unspecified Heap	1909	1:10560
D	37m W	Unspecified Heap	1938	1:10560
D	37m W	Unspecified Heap	1938	1:10560
D	39m W	Unspecified Heap	1954	1:10560
D	40m W	Unspecified Heap	1938	1:10560
D	41m W	Unspecified Heap	1913	1:10560
D	41m W	Unspecified Heap	1913	1:10560
E	76m SW	Disused Coal Pit	1938	1:10560
E	76m SW	Disused Coal Pit	1938	1:10560
E	77m SW	Disused Coal Pit	1938	1:10560
E	77m SW	Disused Coal Pit	1909	1:10560
E	79m SW	Disused Coal Pit	1913	1:10560
E	79m SW	Disused Coal Pit	1913	1:10560
E	81m SW	Disused Coal Pit	1954	1:10560
F	95m SE	Pond	1981	1:10000
F	95m SE	Pond	1969	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m	16

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 and ground workings map on **page 123 >**

ID	Location	Land Use	Year of mapping	Mapping scale
C	**On site**	**Tunnel**	**1869**	**1:10560**
C	3m S	Tunnel	1938	1:10560
C	3m S	Tunnel	1898	1:10560
C	5m S	Tunnel	1909	1:10560
C	6m S	Tunnel	1981	1:10000
C	6m S	Tunnel	1969	1:10560
C	6m S	Tunnel	1954	1:10560
E	77m SW	Disused Coal Pit	1938	1:10560
E	77m SW	Coal Shaft	1869	1:10560
E	77m SW	Disused Coal Pit	1909	1:10560
E	81m SW	Disused Coal Pit	1954	1:10560
E	82m SW	Unspecified Old Shaft	1909	1:10560
E	84m SW	Unspecified Old Shaft	1938	1:10560
E	84m SW	Coal Pit	1898	1:10560
E	84m SW	Coal Pit	1898	1:10560
E	87m SW	Unspecified Old Shaft	1954	1:10560

This is data is sourced from Ordnance Survey/Groundsure.

18.4 Underground mining extents

Records within 500m	0

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from 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	44

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 and ground workings map on **page 123 >**

ID	Location	Name	Commodity	Class	Likelihood
3	On site	Not available	Vein Mineral	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
4	On site	Not available	Vein Mineral	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
5	On site	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
6	On site	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
7	On site	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

ID	Location	Name	Commodity	Class	Likelihood
8	30m NE	Not available	Vein Mineral	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
9	98m SE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
10	119m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
11	122m NE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
G	181m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
12	195m NE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
13	247m W	Not available	Vein Mineral	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
14	332m E	East Wotherton	Baryte	C	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
15	361m SE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

ID	Location	Name	Commodity	Class	Likelihood
16	371m E	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
17	429m NE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
18	431m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
19	446m NE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
20	455m NE	Not available	Vein Mineral	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
21	462m SE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
22	496m SW	Not available	Vein Mineral	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
M	503m SE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
25	529m S	Not available	Vein Mineral	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

ID	Location	Name	Commodity	Class	Likelihood
28	581m SE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
29	594m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
30	626m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
31	655m NE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
34	696m E	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
35	727m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
36	732m E	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
M	781m SE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
38	794m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

ID	Location	Name	Commodity	Class	Likelihood
39	842m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	843m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
41	857m SE	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
43	887m SW	Not available	Vein Mineral	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	889m N	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	921m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
45	936m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
46	942m NE	Not available	Vein Mineral	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	947m E	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

ID	Location	Name	Commodity	Class	Likelihood
48	962m NE	Not available	Vein Mineral	A	Underground mine workings are uncommon, although the geology is similar to that worked elsewhere. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
49	986m SW	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	997m W	Not available	Iron Ore (Bedded)	B	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site	**0**

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

This data is sourced from Johnson Poole and Bloomer.

18.8 The Coal Authority non-coal mining

Records within 500m	**0**

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m	**0**

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is

approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m	0

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.11 BGS mine plans

Records within 500m	0

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

This data is sourced from Groundsure.

18.12 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.

18.13 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.

18.14 Gypsum areas

Records on site	0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site	0

Generalised areas that may be affected by historical tin mining.

This data is sourced from Groundsure.

18.16 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 Ground cavities and sinkholes

19.1 Natural cavities

Records within 500m	0

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

This data is sourced from Stantec UK Ltd.

19.2 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.

19.3 Reported recent incidents

Records within 500m	0

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.

19.4 Historical incidents

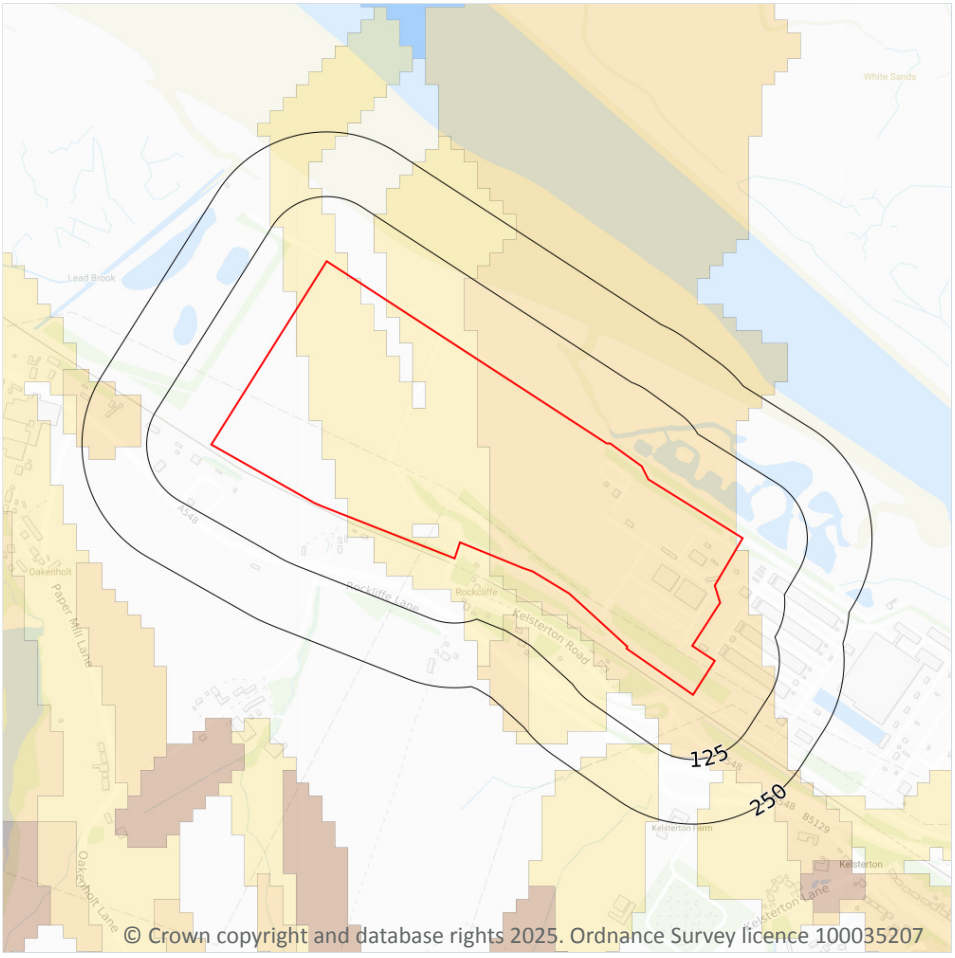
Records within 500m	0

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

This data is sourced from Groundsure.

20 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%

20.1 Radon

Records on site	3

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on **page 137 >**

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

Location	Estimated properties affected	Radon Protection Measures required
On site	**Between 3% and 5%**	**Basic**
On site	**Less than 1%**	**None**

This data is sourced from the British Geological Survey and UK Health Security Agency.

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m	27

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 - 200 mg/kg**	**60 - 120 mg/kg**	**1.8 mg/kg**	**40 - 60 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 - 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 mg/kg**
On site	**15 mg/kg**	**No data**	**200 - 300 mg/kg**	**120 - 240 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 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 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**	**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**	**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**	**40 - 60 mg/kg**	**15 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 mg/kg**
On site	**15 mg/kg**	**No data**	**200 - 300 mg/kg**	**120 - 240 mg/kg**	**1.8 mg/kg**	**40 - 60 mg/kg**	**15 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**	**40 - 60 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**	**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 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 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**
2m S	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
14m NE	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
19m S	15 mg/kg	No data	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
21m SW	15 mg/kg	No data	100 - 200 mg/kg	60 - 120 mg/kg	1.8 mg/kg	40 - 60 mg/kg	15 mg/kg
30m NE	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
38m 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
46m S	15 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
47m 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
49m 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

This data is sourced from the British Geological Survey.

21.2 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.

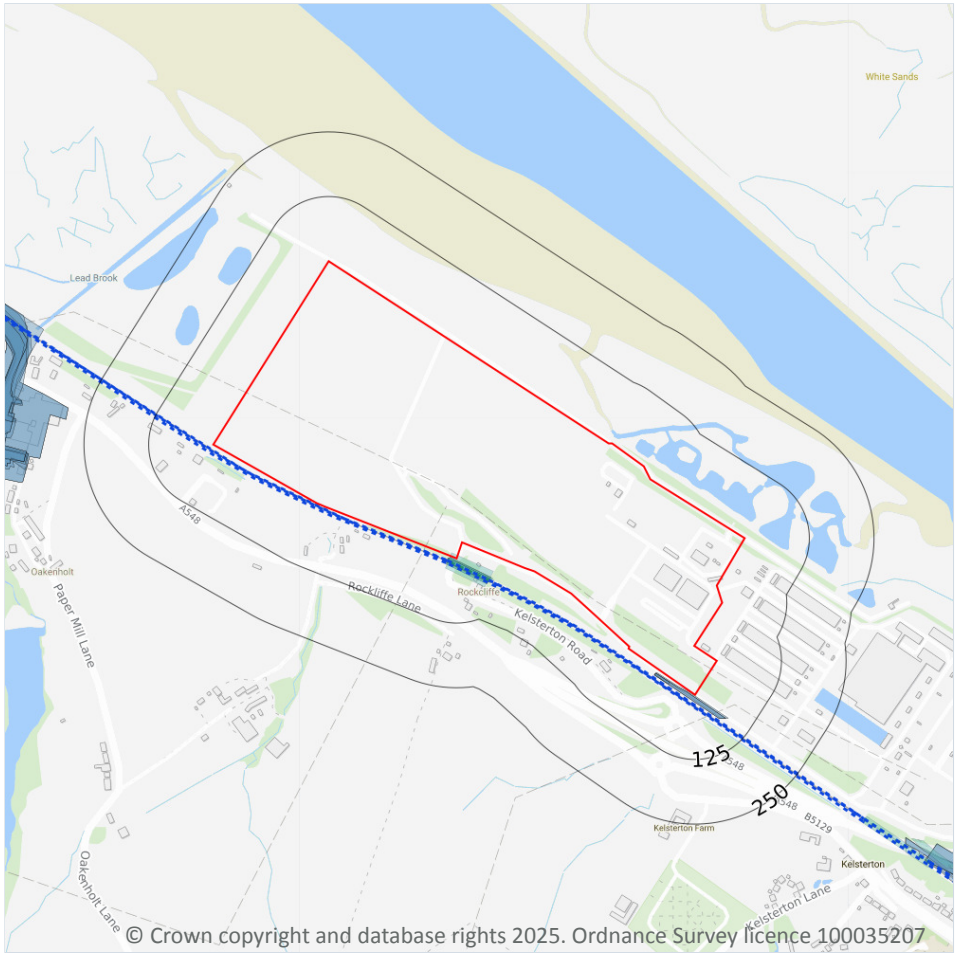
21.3 BGS Measured Urban Soil Chemistry

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.

22 Railway infrastructure and projects



Site Outline

Search buffers in metres (m)

- Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

22.1 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.

22.2 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.

22.3 Railway tunnels

Records within 250m	2

Railway tunnels taken from contemporary Ordnance Survey mapping.

Features are displayed on the Railway infrastructure and projects map on **page 142 >**

Location	Type
11m S	Railway Tunnel
12m S	Railway Tunnel

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	22

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 142 >**

Location	Land Use	Year of mapping	Mapping scale
On site	**Tunnel**	**1869**	**10560**
2m SW	Railway Sidings	1959	2500
2m S	Tunnel	1938	10560
3m S	Tunnel	1898	10560
3m S	Tunnel	1938	10560
4m S	Tunnel	1959	2500
4m SW	Railway Sidings	1988	2500
4m SW	Railway Sidings	1964	2500
5m S	Tunnel	1979	-
5m S	Tunnel	1993	2500
5m S	Tunnel	1997	2500
5m S	Tunnel	1909	10560

Location	Land Use	Year of mapping	Mapping scale
6m S	Tunnel	1913	10560
6m S	Tunnel	1969	10560
6m S	Tunnel	1954	10560
6m S	Tunnel	1981	10000
6m S	Tunnel	1899	2500
6m S	Tunnel	1870	2500
6m S	Tunnel	1912	2500
6m S	Tunnel	1988	2500
6m S	Tunnel	1964	2500
8m SW	Railway Sidings	1979	-

This data is sourced from Ordnance Survey/Groundsure.

22.5 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.

22.6 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.

22.7 Railways

Records within 250m	12

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 142 >**

Location	Name	Type
4m SW	Not given	Multi Track
6m SW	North Wales Coast Line	rail
10m SW	North Wales Coast Line	rail
10m S	Not given	Multi Track
10m S	Rockcliffe Hall Tunnel	rail
15m S	Rockcliffe Hall Tunnel	rail
17m SW	North Wales Coast Line	rail
19m SW	Not given	Multi Track
19m SW	Not given	Multi Track
20m SW	Not given	Multi Track
21m SW	North Wales Coast Line	rail
21m SW	Not given	Multi Track

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 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.

22.9 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 ↗.

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