



Martin Environmental Solutions
19, Ord Avenue,
Blackpool, FY4 4DW

Groundsure
Reference:

GS-5333494

Your Reference: Building_Design_Services

Report Date 16 Aug 2018

Report Delivery Method: Email - pdf

Enviro Insight

Address: 806-810, MANCHESTER ROAD, ROCHDALE, OL11 3AW

Dear Sir/ Madam,

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

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

Yours faithfully,

Managing Director
Groundsure Limited

Enc.
Groundsure Enviroinsight

Address: 806-810, MANCHESTER ROAD, ROCHDALE, OL11 3AW

Date: 16 Aug 2018

Reference: GS-5333494

Client: Martin Environmental Solutions

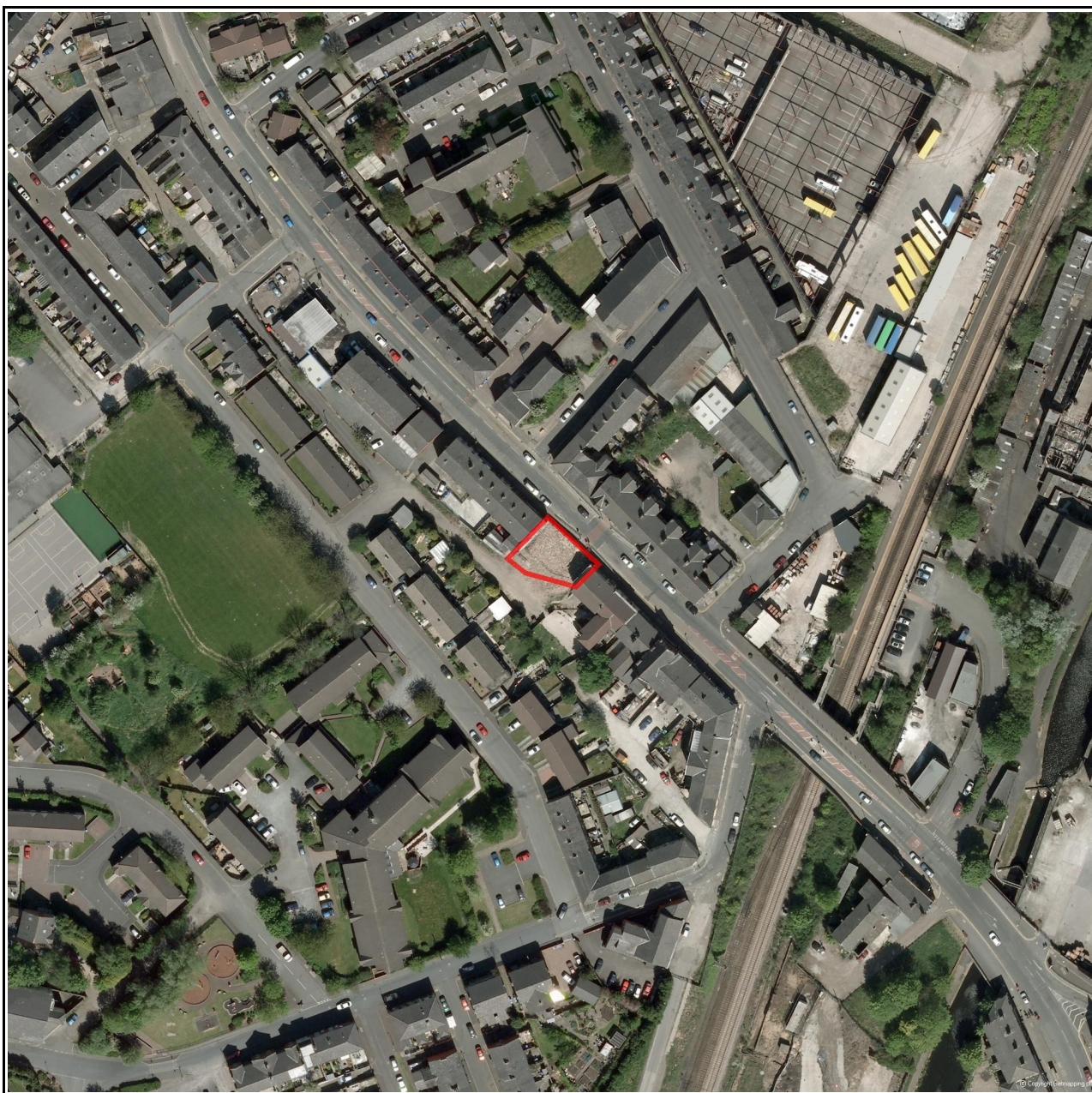
NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 02-May-2011

Grid Reference: 388204,410638

Site Size: 0.03ha

Report Reference: GS-5333494

Client Reference: Building_Design_Services

Contents Page

Contents Page	3
Overview of Findings	6
Using this report	10
1. Historical Land Use	11
1. Historical Industrial Sites	12
1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping	12
1.2 Additional Information – Historical Tank Database	16
1.3 Additional Information – Historical Energy Features Database	18
1.4 Additional Information – Historical Petrol and Fuel Site Database	20
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	20
1.6 Historical military sites	21
1.7 Potentially Infilled Land	21
2. Environmental Permits, Incidents and Registers Map	23
2. Environmental Permits, Incidents and Registers	24
2.1 Industrial Sites Holding Licences and/or Authorisations	24
2.1.1 Records of historic IPC Authorisations within 500m of the study site	24
2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site	24
2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site	24
2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site	24
2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site	24
2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site	25
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	25
2.1.8 Records of Licensed Discharge Consents within 500m of the study site	25
2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site	26
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	26
2.2 Dangerous or Hazardous Sites	27
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents	27
2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site	27
2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site	28
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	28
3. Landfill and Other Waste Sites Map	29
3. Landfill and Other Waste Sites	30
3.1 Landfill Sites	30
3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site	30
3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site	30
3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site	31
3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site	31
3.2 Other Waste Sites	31
3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site	31
3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site	32
4. Current Land Use Map	33
4. Current Land Uses	34
4.1 Current Industrial Data	34
4.2 Petrol and Fuel Sites	34
4.3 National Grid High Voltage Underground Electricity Transmission Cables	35
4.4 National Grid High Pressure Gas Transmission Pipelines	35

5. Geology	36
5.1 Artificial Ground and Made Ground.....	36
5.2 Superficial Ground and Drift Geology	36
5.3 Bedrock and Solid Geology	36
6 Hydrogeology and Hydrology	37
6a. Aquifer Within Superficial Geology	37
6b. Aquifer Within Bedrock Geology and Abstraction Licences	38
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences	39
6d. Hydrogeology – Source Protection Zones within confined aquifer	40
6e. Hydrology – Watercourse Network and River Quality	41
6.Hydrogeology and Hydrology	42
6.1 Aquifer within Superficial Deposits.....	42
6.2 Aquifer within Bedrock Deposits.....	42
6.3 Groundwater Abstraction Licences.....	43
6.4 Surface Water Abstraction Licences.....	44
6.5 Potable Water Abstraction Licences.....	45
6.6 Source Protection Zones.....	46
6.7 Source Protection Zones within Confined Aquifer.....	46
6.8 Groundwater Vulnerability and Soil Leaching Potential.....	46
6.9 River Quality.....	46
6.9.1 Biological Quality:.....	47
6.9.2 Chemical Quality:.....	47
6.10 Ordnance Survey MasterMap Water Network.....	47
6.11 Surface Water Features.....	49
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)	50
7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS)	51
Map	51
7 Flooding	52
7.1 River and Coastal Zone 2 Flooding.....	52
7.2 River and Coastal Zone 3 Flooding.....	52
7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating.....	52
7.4 Flood Defences.....	52
7.5 Areas benefiting from Flood Defences.....	52
7.6 Areas benefiting from Flood Storage.....	53
7.7 Groundwater Flooding Susceptibility Areas.....	53
7.8 Groundwater Flooding Confidence Areas.....	53
8. Designated Environmentally Sensitive Sites Map	54
8. Designated Environmentally Sensitive Sites	55
8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:.....	55
8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:.....	55
8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:.....	55
8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:.....	56
8.5 Records of Ramsar sites within 2000m of the study site:.....	56
8.6 Records of Ancient Woodland within 2000m of the study site:	56
8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:.....	56
8.8 Records of World Heritage Sites within 2000m of the study site:.....	57
8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:	57
8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:	57
8.11 Records of National Parks (NP) within 2000m of the study site:	57
8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:.....	57
8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:.....	57

8.14 Records of Green Belt land within 2000m of the study site:.....	58
9. Natural Hazards Findings.....	59
9.1 Detailed BGS GeoSure Data.....	59
9.1.1 Shrink Swell.....	59
9.1.2 Landslides.....	59
9.1.3 Soluble Rocks.....	59
9.1.4 Compressible Ground.....	60
9.1.5 Collapsible Rocks.....	60
9.1.6 Running Sand.....	60
9.2 Radon.....	61
9.2.1 Radon Affected Areas.....	61
9.2.2 Radon Protection.....	61
10. Mining.....	62
10.1 Coal Mining.....	62
10.2 Non-Coal Mining.....	62
10.3 Brine Affected Areas	62
Contact Details.....	63
Standard Terms and Conditions.....	65

Overview of Findings

For further details on each dataset, please refer to each individual section in the main report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	0	3	76	104
1.2 Additional Information – Historical Tank Database	0	0	18	63
1.3 Additional Information – Historical Energy Features Database	0	0	30	37
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	0	12
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	1	12	46
Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	0	0
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	1	0
2.1.9 Records of Water Industry Referrals	0	0	0	2
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	1
2.2 Records of COMAH and NIHHS sites	0	0	1	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	4	1
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0

Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000-1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	0	0	1	3
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	1
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	2	1	1
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	7	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	1	0	0	0

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	1	8	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	0	2
4.3 National Grid Underground Electricity Cables	0	0	0	0
4.4 National Grid Gas Transmission Pipelines	0	0	0	0

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

Section 6: Hydrogeology and Hydrology	0-500m					
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site	Identified					
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site	Identified					
	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	10
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	7
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	#250GWV #	#500GWV #	Not searched	Not searched

Section 6: Hydrogeology and Hydrology

0-500m

	On-site	0-50m	51-250	251-500	501-1000	1000-1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	Yes	Yes
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	6	18	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

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

Section 8: Designated Environmentally Sensitive Sites

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	2	0	2	3
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	2	0	2	3
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	2
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	1
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	0	0	1	0	1	2
8.14 Records of Green Belt land	0	0	0	1	1	4

Section 9: Natural Hazards	
9.1 Maximum risk of natural ground subsidence	Very Low
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Negligible
9.1.2 Maximum Landslides hazard rating identified on the study site	Very Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Very Low
9.2 Radon	
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	No radon protective measures are necessary.

Section 10: Mining	
10.1 Coal mining areas within 75m of the study site	Identified
10.2 Non-Coal Mining areas within 50m of the study site boundary	None identified
10.3 Brine affected areas within 75m of the study site	None identified

Using this report

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

1. Historical Industrial Sites

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

2. Environmental Permits, Incidents and Registers

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

3. Landfills and Other Waste Sites

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

4. Current Land Uses

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

5. Geology

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

6. Hydrogeology and Hydrology

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

7. Flooding

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

8. Designated Environmentally Sensitive Sites

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

9. Natural Hazards

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

10. Mining

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

11. Contacts

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

Note: Maps

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

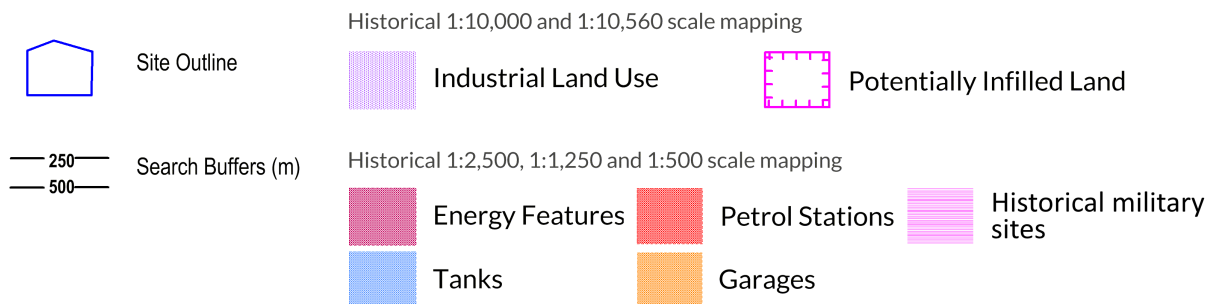
Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

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

1. Historical Land Use



© Crown copyright and database rights 2018.
Ordnance Survey licence 100035207.



1. Historical Industrial Sites

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

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

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 183

ID	Distance [m]	Direction	Use	Date
1A	20	NE	Textile Machinery Works	1928
2A	20	NE	Textile Machinery Works	1909
3CB	42	SE	Unspecified Pit	1909
4D	69	SE	Railway Sidings	1890
5H	70	NE	Railway Sidings	1909
6C	71	NE	Railway Sidings	1938
7	71	NE	Railway Sidings	1928
8	72	SE	Railway Sidings	1938
9B	72	SE	Railway Sidings	1968
10B	72	SE	Railway Sidings	1949
11CC	72	SE	Cuttings	1949
12E	74	NE	Textile Machinery Works	1949
13C	74	NE	Railway Sidings	1949
14D	74	SE	Railway Sidings	1909
15D	74	SE	Railway Sidings	1928
16B	74	SE	Railway Sidings	1975
17B	74	SE	Railway Sidings	1987
18B	74	SE	Railway Sidings	1992
19	80	NE	Unspecified Works	1968
20E	80	NE	Unspecified Warehouse	1975
21E	80	NE	Unspecified Warehouse	1987
22E	80	NE	Unspecified Warehouse	1992
23	80	E	Railway Sidings	1968
24F	80	E	Railway Station	1909
25F	80	E	Railway Station	1928
26	81	E	Railway Sidings	1975
27F	82	SE	Railway Station	1938
28F	82	SE	Railway Station	1890
29F	82	E	Railway Station	1949
30F	85	E	Railway Station	1992
31F	85	E	Railway Station	1975
32F	85	E	Railway Station	1987
33F	85	E	Railway Station	1968
34G	86	E	Railway Building	1975

35G	86	E	Railway Building	1968
36	92	NE	Textile Machinery Works	1938
37BM	111	E	Chemical Works	1851
38L	113	E	Tannery	1890
39BK	126	S	Railway Station	1851
40BL	131	SE	Cotton Mill	1851
41H	132	NE	Cuttings	1851
42I	139	E	Disused Canal	1992
43I	139	E	Disused Canal	1975
44I	139	E	Disused Canal	1987
45N	146	S	Leather Works	1938
46K	153	E	Unspecified Mills	1949
47J	153	E	Unspecified Mill	1975
48J	153	E	Unspecified Mill	1987
49J	153	E	Unspecified Mill	1992
50K	154	SE	Unspecified Mills	1938
51J	154	E	Unspecified Mill	1968
52	155	S	Railway Sidings	1851
53L	163	E	Unspecified Commercial/Industrial	1851
54	165	SE	Engine Shed	1851
55J	167	E	Unspecified Mills	1909
56J	167	E	Unspecified Mills	1928
57	167	E	Unspecified Mill	1890
58M	185	NE	Railway Building	1968
59M	185	NE	Railway Building	1975
60N	193	S	Leather Works	1949
61AC	197	SE	Unspecified Commercial/Industrial	1975
62N	198	S	Leather Works	1928
63BA	199	SE	Unspecified Works	1968
64O	201	E	Unspecified Works	1968
65O	201	E	Unspecified Works	1987
66O	201	E	Unspecified Works	1975
67O	201	E	Unspecified Works	1992
68	209	E	Gasometer	1851
69P	217	NE	Malthouses	1890
70P	222	NE	Railway Building	1949
71Q	223	S	Railway Building	1949
72Q	223	S	Railway Buildings	1890
73R	240	E	Chimney	1968
74R	240	E	Chimney	1975
75	244	E	Unspecified Manufactory	1890
76S	244	NE	Corporation Yard	1938
77S	245	NE	Corporation Yard	1949
78T	246	S	Railway Building	1949

79T	249	S	Railway Building	1890
80U	262	S	Railway Building	1987
81U	262	S	Railway Building	1992
82V	264	S	Unspecified Mill	1949
83V	267	S	Unspecified Mill	1938
84W	270	E	Iron Works	1938
85W	270	E	Iron Works	1909
86V	271	S	Unspecified Mill	1909
87V	271	S	Unspecified Mill	1928
88W	271	E	Iron Works	1928
89X	273	N	Unspecified Works	1992
90X	273	N	Unspecified Works	1987
91X	273	N	Unspecified Works	1975
92	273	E	Iron Works	1949
93CE	275	NW	Unspecified Pit	1992
94Y	279	E	Unspecified Works	1975
95Y	279	E	Unspecified Works	1987
96Y	279	E	Unspecified Works	1992
97Y	279	E	Unspecified Works	1968
98U	280	S	Railway Building	1968
99S	285	NE	Unspecified Works	1890
100CF	302	S	Unspecified Ground Workings	1909
101	302	S	Railway Building	1890
102Z	341	E	Leather Works	1890
103Z	341	E	Unspecified Works	1909
104AA	349	S	Unspecified Works	1987
105AA	349	S	Unspecified Works	1992
106AB	349	W	Unspecified Heap	1949
107AB	349	W	Unspecified Heap	1968
108AC	354	S	Cotton Mills	1890
109AB	357	W	Unspecified Pit	1938
110CH	358	S	Unspecified Ground Workings	1909
111AB	359	W	Refuse Heap	1928
112AD	361	S	Railway Building	1949
113AD	361	S	Railway Building	1968
114AC	366	S	Unspecified Mill	1949
115AD	368	S	Railway Building	1975
116AD	368	S	Railway Building	1987
117AD	368	S	Railway Building	1992
118AL	379	NE	Brick Works	1890
119CI	381	N	Refuse Heap	1938
120AE	382	S	Unspecified Commercial/Industrial	1968
121AE	385	S	Unspecified Mill	1938
122	387	NE	Corporation Yard	1928

123AF	389	NE	Unspecified Mill	1968
124AF	389	NE	Unspecified Mill	1975
125AF	389	NE	Unspecified Mill	1992
126AF	389	NE	Unspecified Mill	1987
127AE	390	S	Unspecified Mill	1909
128AE	390	S	Unspecified Mill	1928
129AG	394	NE	Cuttings	1949
130AG	395	NE	Cuttings	1909
131AG	396	NE	Cuttings	1938
132AG	403	NE	Cuttings	1851
133AG	411	NE	Cuttings	1928
134AH	416	NE	Unspecified Mill	1938
135AH	417	NE	Unspecified Mill	1909
136AH	417	NE	Unspecified Mill	1928
137AH	420	NE	Unspecified Mill	1968
138AH	420	NE	Unspecified Mill	1992
139AH	420	NE	Unspecified Mill	1975
140AH	420	NE	Unspecified Mill	1987
141AI	421	E	Unspecified Ground Workings	1928
142CJ	422	N	Unspecified Ground Workings	1949
143AI	426	E	Unspecified Ground Workings	1938
144AO	427	N	Unspecified Works	1975
145AI	430	E	Unspecified Ground Workings	1949
146AJ	434	S	Railway Building	1975
147AJ	434	S	Railway Building	1992
148AJ	434	S	Railway Building	1987
149AK	438	N	Unspecified Warehouse	1992
150AK	438	N	Unspecified Warehouse	1987
151AN	440	NE	Unspecified Mill	1949
152AL	441	NE	Unspecified Ground Workings	1890
153AM	442	NW	Unspecified Mill	1909
154AM	443	NW	Unspecified Mill	1938
155AM	444	NW	Unspecified Mill	1949
156AM	444	NW	Unspecified Mill	1928
157AM	446	NW	Unspecified Commercial/Industrial	1968
158AN	446	NE	Unspecified Mill	1938
159AF	447	NE	Unspecified Mill	1909
160AF	447	NE	Unspecified Mill	1928
161AP	450	NW	Unspecified Tank	1968
162AO	452	N	Unspecified Works	1992
163AO	452	N	Unspecified Works	1987
164AP	452	NW	Unspecified Tank	1909

165AQ	456	NE	Unspecified Heap	1928
166AQ	457	NE	Unspecified Heap	1938
167AQ	459	NE	Unspecified Heap	1949
168CL	477	N	Unspecified Pit	1968
169AR	477	NE	Unspecified Works	1987
170AR	477	NE	Unspecified Works	1992
171AS	484	N	Refuse Heap	1938
172AS	484	N	Refuse Heap	1928
173AT	494	SE	Unspecified Ground Workings	1975
174AT	494	SE	Unspecified Ground Workings	1992
175AT	494	SE	Unspecified Ground Workings	1987
176AN	497	NE	Unspecified Tanks	1938
177AS	498	N	Unspecified Heap	1949
178AN	499	NE	Unspecified Tanks	1949
179AU	499	NE	Unspecified Mill	1968
180AU	499	NE	Unspecified Commercial/Industrial	1992
181AU	499	NE	Unspecified Commercial/Industrial	1987
182AU	499	NE	Unspecified Mill	1975
183AN	500	NE	Unspecified Tanks	1928

1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary:

81

ID	Distance (m)	Direction	Use	Date
184AV	51	NE	Unspecified Tank	1988
185AV	51	NE	Unspecified Tank	1984
186AV	52	NE	Unspecified Tank	1984
187AV	52	NE	Unspecified Tank	1988
188AV	53	NE	Unspecified Tank	1977
189AV	59	NE	Unspecified Tank	1977
190AW	176	E	Unspecified Tank	1984
191AW	176	E	Unspecified Tank	1988
192AW	176	E	Unspecified Tank	1990
193AW	176	E	Unspecified Tank	1997
194AW	176	E	Unspecified Tank	1996
195AW	178	E	Unspecified Tank	1977

196AY	207	N	Unspecified Tank	1990
197AX	208	NE	Unspecified Tank	1937
198AX	208	NE	Unspecified Tank	1929
199AX	213	NE	Oil Tank	1910
200AY	218	N	Unspecified Tank	1990
201BO	248	N	Unspecified Tank	1977
202	257	SE	Unspecified Tank	1977
203	265	N	Tanks	1977
204AZ	273	NE	Unspecified Tank	1937
205AZ	273	NE	Unspecified Tank	1929
206BA	274	SE	Unspecified Tank	1890
207BB	281	S	Unspecified Tank	1990
208BB	282	S	Unspecified Tank	1977
209AZ	294	NE	Unspecified Tank	1990
210BC	295	NE	Unspecified Tank	1997
211BC	295	NE	Unspecified Tank	1996
212BA	299	SE	Unspecified Tank	1990
213BA	300	SE	Unspecified Tank	1977
214S	342	NE	Unspecified Tank	1929
215S	342	NE	Unspecified Tank	1937
216BD	350	S	Sewage Tank	1929
217BD	350	S	Sewage Tank	1937
218S	350	NE	Unspecified Tank	1929
219S	350	NE	Unspecified Tank	1937
220BE	353	N	Unspecified Tank	1990
221BE	353	N	Unspecified Tank	1984
222BE	353	N	Unspecified Tank	1988
223BE	353	N	Unspecified Tank	1997
224BE	353	N	Unspecified Tank	1996
225BE	354	N	Unspecified Tank	1977
226	354	NE	Tanks	1910
227BF	354	W	Unspecified Tank	1930
228BF	354	W	Unspecified Tank	1910
229BE	359	N	Unspecified Tank	1979
230BE	359	N	Unspecified Tank	1990
231CG	374	N	Unspecified Tank	1996
232	378	NE	Unspecified Tank	1929
233BG	398	NE	Tanks	1910
234BG	398	NE	Tanks	1929
235BG	398	NE	Tanks	1937
236BG	400	NE	Tanks	1929
237BG	400	NE	Tanks	1937
238BG	400	NE	Tanks	1910
239BG	403	NE	Unspecified Tank	1910
240BG	405	NE	Unspecified Tank	1937
241BG	405	NE	Unspecified Tank	1929

242BG	408	NE	Unspecified Tank	1929
243BG	408	NE	Unspecified Tank	1937
244BG	408	NE	Gasometer	1910
245	415	SW	Unspecified Tank	1930
246AE	426	S	Tanks	1977
247BH	432	S	Unspecified Tank	1990
248BH	433	S	Unspecified Tank	1977
249BI	443	NE	Unspecified Tank	1990
250AI	444	E	Tanks	1990
251BI	444	NE	Unspecified Tank	1992
252AI	445	E	Tanks	1992
253BI	450	NE	Unspecified Tank	1955
254BI	451	NE	Unspecified Tank	1955
255AP	456	NW	Unspecified Tank	1956
256BJ	462	NW	Tanks	1955
257BJ	462	NW	Tanks	1955
258BJ	462	NW	Tanks	1968
259BZ	465	NW	Unspecified Tank	1929
260AF	478	NE	Unspecified Tank	1937
261AF	478	NE	Unspecified Tank	1929
262AN	498	NE	Tanks	1929
263AN	498	NE	Tanks	1937
264	499	NE	Unspecified Tank	1891

1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary:

67

ID	Distance (m)	Direction	Use	Date
265BK	134	S	Electricity Substation	1963
266BK	134	S	Electricity Substation	1955
267BK	135	S	Electricity Substation	1955
268BL	136	SE	Electricity Substation	1988
269BL	136	SE	Electricity Substation	1990
270BL	136	SE	Electricity Substation	1984
271BL	137	SE	Electricity Substation	1955
272BL	137	SE	Electricity Substation	1963
273BL	137	SE	Electricity Substation	1996
274BL	137	SE	Electricity Substation	1997
275BL	138	SE	Electricity Substation	1977
276BL	138	SE	Electricity Substation	1955

277BM	141	E	Electricity Substation	1955
278BM	142	E	Electricity Substation	1963
279BM	142	E	Electricity Substation	1955
280BL	155	SE	Electricity Substation	1996
281BL	155	SE	Electricity Substation	1997
282BN	155	E	Electricity Substation	1988
283BN	155	E	Electricity Substation	1984
284BN	155	E	Electricity Substation	1990
285BN	157	E	Electricity Substation	1977
286BN	164	SE	Electricity Substations	1963
287BN	164	SE	Electricity Substations	1955
288BN	165	SE	Electricity Substation	1955
289BO	245	N	Electricity Substation	1997
290BO	245	N	Electricity Substation	1996
291BO	247	N	Electricity Substation	1977
292BO	247	N	Electricity Substation	1984
293BO	247	N	Electricity Substation	1988
294BO	247	N	Electricity Substation	1990
295BO	260	N	Electricity Substation	1997
296BO	260	N	Electricity Substation	1996
297BO	261	N	Electricity Substation	1977
298BO	261	N	Electricity Substation	1988
299BO	261	N	Electricity Substation	1984
300BO	261	N	Electricity Substation	1990
301BP	312	W	Electricity Substation	1990
302BP	312	W	Electricity Substation	1990
303BP	312	W	Electricity Substation	1980
304BP	312	W	Electricity Substation	1971
305BP	313	W	Electricity Substation	1992
306BQ	329	E	Electricity Substation	1990
307BQ	329	E	Electricity Substation	1992
308BR	333	NW	Electricity Substation	1971
309BR	334	NW	Electricity Substation	1990
310BR	334	NW	Electricity Substation	1980
311BR	334	NW	Electricity Substation	1990
312BR	335	NW	Electricity Substation	1992
313BG	408	NE	Gasometer	1910
314BS	419	NE	Electricity Substation	1992
315BS	420	NE	Electricity Substation	1990
316BT	437	SE	Electricity Substation	1988
317BT	437	SE	Electricity Substation	1990
318BT	437	SE	Electricity Substation	1981
319BU	475	NW	Electricity Substation	1992
320BU	476	NW	Electricity Substation	1992
321BU	484	NW	Electricity Substation	1956
322BV	485	NW	Electricity Substation	1968

323BV	485	NW	Electricity Substation	1956
324BW	485	SW	Electricity Transformer	1973
325BW	486	SW	Electricity Substation	1990
326BW	486	SW	Electricity Substation	1990
327BW	486	SW	Electricity Substation	1990
328BW	494	SW	Electricity Transformer	1990
329BW	494	SW	Electricity Transformer	1990
330BW	494	SW	Electricity Transformer	1990
331	500	N	Electricity Substation	1996

1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary: 0

Database searched and no data found.

1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 12

ID	Distance (m)	Direction	Use	Date
332BX	309	E	Garage	1990
333BX	309	E	Garage	1992
334BY	421	N	Garage	1996
335BY	421	N	Garage	1990
336BY	421	N	Garage	1979
337BZ	433	NW	Garage	1956
338	442	N	Garage	1979
339BZ	458	NW	Garage	1956
340CA	458	NW	Garage	1956
341CA	458	NW	Garage	1968
342BZ	459	NW	Garage	1979
343BZ	459	NW	Garage	1956

1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary: 0

Database searched and no data found.

1.7 Potentially Infilled Land

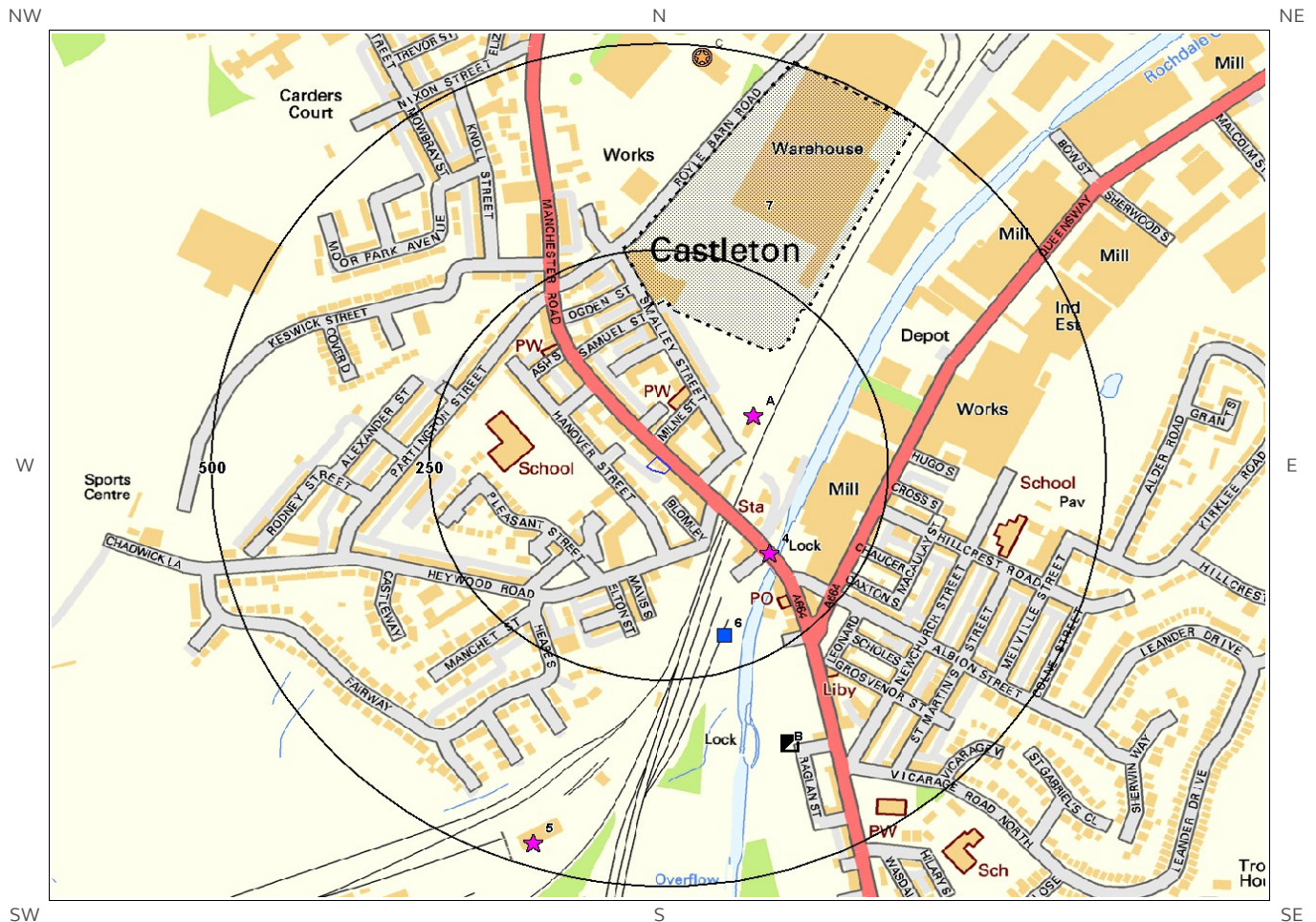
Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 59

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

ID	Distance(m)	Direction	Use	Date
344CB	42	SE	Unspecified Pit	1909
345CC	72	SE	Cuttings	1949
346H	132	NE	Cuttings	1851
347	135	E	Canal	1938
348	137	E	Canal	1890
349I	139	E	Disused Canal	1992
350I	139	E	Disused Canal	1987
351I	139	E	Canal	1949
352I	139	E	Disused Canal	1975
353	139	E	Canal	1851
354CD	141	SE	Canal	1928
355CD	141	SE	Canal	1909
356	145	E	Canal	1968
357CE	275	NW	Unspecified Pit	1992
358CF	302	S	Unspecified Ground Workings	1909
359BE	333	N	Reservoir	1938
360BE	336	N	Reservoir	1909
361BE	336	N	Reservoir	1928
362BE	342	N	Reservoir	1949
363CG	343	N	Pond	1968
364AB	349	W	Unspecified Heap	1968
365AB	349	W	Unspecified Heap	1949
366AB	357	W	Unspecified Pit	1938
367CH	358	S	Unspecified Ground Workings	1909
368AB	359	W	Refuse Heap	1928

369AL	379	NE	Brick Works	1890
370CI	381	N	Refuse Heap	1938
371AG	394	NE	Cuttings	1949
372AG	395	NE	Cuttings	1909
373AG	396	NE	Cuttings	1938
374AG	403	NE	Cuttings	1851
375AG	411	NE	Cuttings	1928
376AI	421	E	Unspecified Ground Workings	1928
377CJ	422	N	Unspecified Ground Workings	1949
378AI	426	E	Unspecified Ground Workings	1938
379AI	430	E	Unspecified Ground Workings	1949
380AL	441	NE	Unspecified Ground Workings	1890
381AQ	456	NE	Unspecified Heap	1928
382AQ	457	NE	Unspecified Heap	1938
383	459	NW	Reservoirs	1909
384AQ	459	NE	Unspecified Heap	1949
385AM	460	NW	Reservoirs	1968
386AM	460	NW	Reservoirs	1949
387CK	460	NW	Reservoirs	1938
388CK	462	NW	Reservoirs	1928
389CL	477	N	Unspecified Pit	1968
390AS	484	N	Refuse Heap	1928
391AS	484	N	Refuse Heap	1938
392CM	487	E	Reservoir	1938
393CM	491	E	Reservoir	1909
394CM	491	E	Reservoir	1928
395CM	493	E	Reservoir	1890
396CM	494	E	Pond	1968
397CM	494	E	Reservoir	1949
398CM	494	E	Pond	1975
399AT	494	SE	Unspecified Ground Workings	1987
400AT	494	SE	Unspecified Ground Workings	1975
401AT	494	SE	Unspecified Ground Workings	1992
402AS	498	N	Unspecified Heap	1949

2. Environmental Permits, Incidents and Registers Map



© Crown copyright and database rights 2018.
Ordnance Survey licence 100035207.

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

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

0

Database searched and no data found.

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

0

Database searched and no data found.

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

0

Database searched and no data found.

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

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

1

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

ID	Distance (m)	Direction	NGR	Details
6	207	S	388280 410431	Address: ROCHDALE WEST SIGNAL BOX, RAILWAY BROW, CASTLETON, GREATER MANCHESTER, OL11 2SP Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: EPRLP3021GS Permit Version: 1 Receiving Water: GROUNDWATER VIA INFILT SYSTEM Status: NEW ISSUED UNDER EPR 2010 Issue date: 01/08/2011 Effective Date: 01-Aug-2011 Revocation Date: -

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

2

The following Water Industry Referral records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	Address	Permission reference	Local Authority	First Date Received	Last Date Received	Status
11B	356	SE	WHIPP AND BOURNE LTD, SWITCHGEAR WORKS, MANCHESTER ROAD, CASTLETON, ROCHDALE, LANCASHIRE, OL11 2SS	BB4588	ROCHDALE METROPOLITAN BOROUGH COUNCIL	01-Jun-2001	01-Jan-2018	RECEIVED
12B	356	SE	WHIPP AND BOURNE LTD, SWITCHGEAR WORKS, MANCHESTER ROAD, CASTLETON, ROCHDALE, LANCASHIRE, OL11 2SS	BB5193	ROCHDALE METROPOLITAN BOROUGH COUNCIL	01-Jun-2001	01-Jan-2018	RECEIVED

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

1

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

ID	Distance (m)	Direction	Application Reference Number	NGR	Application Status	Application Date	Address	Details	Details of Enforcement Action
13C	486	N	No Details	388254 411131	Approved	No Details	Tetrosyl Limited Royle Barn Road, Castleton, Rochdale, England, OL11 3DT	No Details	Enforcement: No Details Date of Enforcement: No Details Comment: No Details

2.2 Dangerous or Hazardous Sites

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

1

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

ID	Distance (m)	Direction	Company	Address	Operational Status	Tier
7	169	NE	Tetrosyl Limited	Tetrosyl Limited, Rochdale - Royal Barn Road, Royle Barn Road, Castleton, Rochdale, Greater Manchester, OL11 3DT	Current COMAH Site	COMAH Upper Tier Operator

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

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

5

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

ID	Distance (m)	Direction	NGR	Details
1A	114	NE	388313 410697	Incident Date: 10-Sep-2002 Incident Identification: 106871 Pollutant: Organic Chemicals/Products Pollutant Description: Other Organic Chemical or Product Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
2A	114	NE	388313 410697	Incident Date: 10-Sep-2002 Incident Identification: 106871 Pollutant: Specific Waste Materials: Organic Chemicals/Products Pollutant Description: Other Composites: Other Organic Chemical or Product Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
3A	114	NE	388313 410697	Incident Date: 10-Sep-2002 Incident Identification: 106871 Pollutant: Specific Waste Materials Pollutant Description: Other Composites Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)
4	152	SE	388331 410531	Incident Date: 21-Aug-2001 Incident Identification: 25758 Pollutant: Oils and Fuel Pollutant Description: Unidentified Oil Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
5	471	S	388060 410180	Incident Date: 18-Apr-2001 Incident Identification: 2680 Pollutant: Oils and Fuel Pollutant Description: Gas and Fuel Oils Water Impact: Category 4 (No Impact) Land Impact: Category 3 (Minor) Air Impact: Category 4 (No Impact)

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

0

Database searched and no data found.

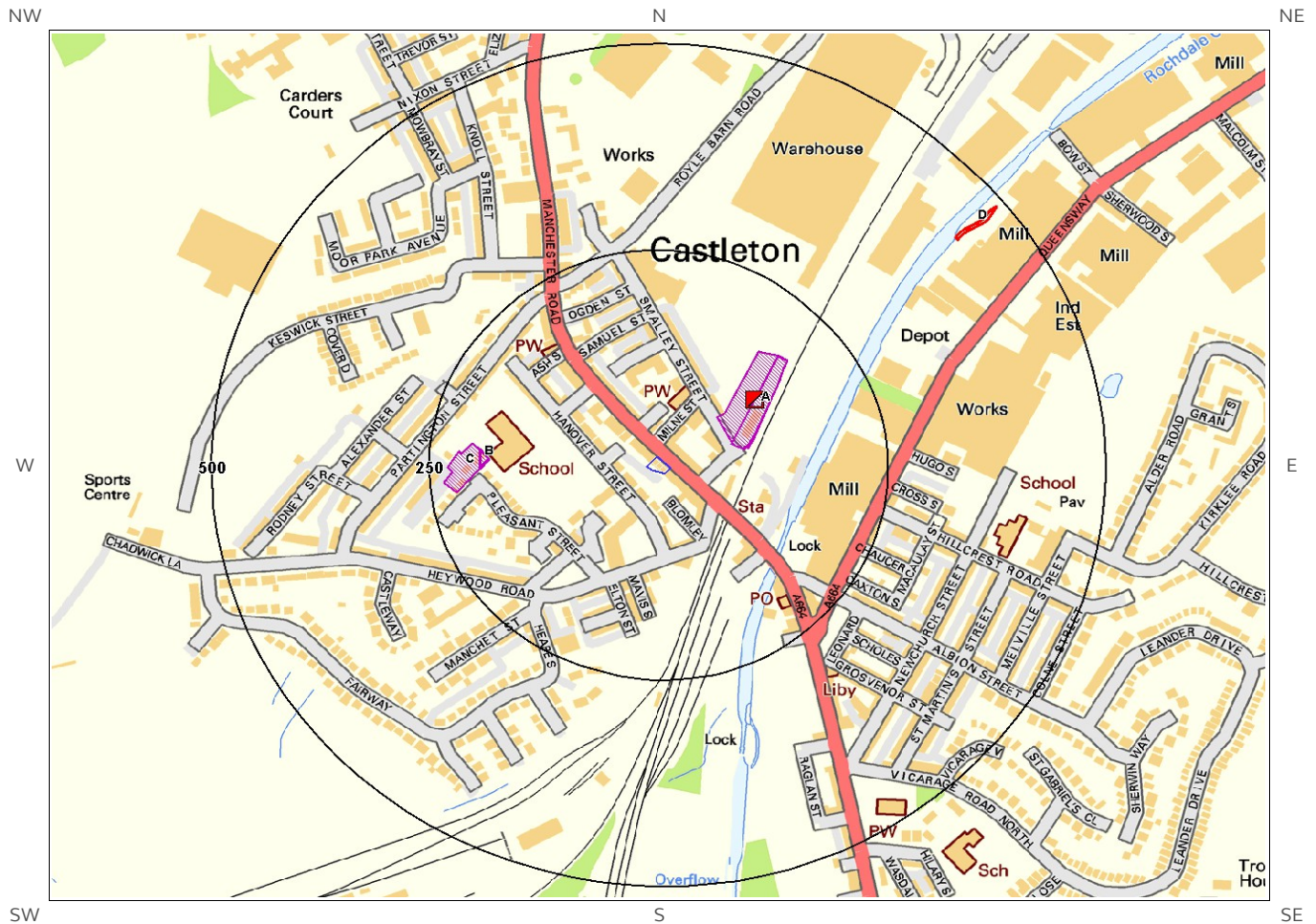
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

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

0

Database searched and no data found.

3. Landfill and Other Waste Sites Map



- | | | | | | |
|---|---------------------------|---|---|---|----------------------------------|
|  | Site Outline |  | EA/NRW Active Landfill |  | Historic and Planned Waste Sites |
|  | EA/NRW Historic Landfill |  | EA/NRW Licensed Waste Site | | |
|  | BGS / DoE Survey Landfill |  | Local Authority/Historical Mapping Landfill Records | | |
|  | Search Buffers (m) | | | | |
| — 250 — | | | | | |
| — 500 — | | | | | |

3. Landfill and Other Waste Sites

3.1 Landfill Sites

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

0

Database searched and no data found.

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

4

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

ID	Distance (m)	Direction	NGR	Details
Not shown	938	W	Site Address: Land South of Chadwick Lane, Heywood, Rochdale Waste Licence: Yes Site Reference: RD/LIC/350/84, D009, RD/LIC/265/83, 4200/9007 Waste Type: Inert, Industrial, Commercial, Household, Special Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 28-Sep-1984 Licence Surrendered: 28-Apr-1994 Licence Holder Address: Victoria House, Higher Bury Street, Stockport Operator: - Licence Holder: Wilderness Quarries Limited First Recorded: 31-Dec-1984 Last Recorded: 31-Dec-1986
Not shown	1270	NE	Site Address: Edinburgh Way, Rochdale, Greater Manchester Waste Licence: - Site Reference: - Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: - Licence Surrendered: - Licence Holder Address: - Operator: Rochdale County Borough Council Licence Holder: - First Recorded: 30-Sep-1972 Last Recorded: -
Not shown	1378	W	Site Address: Brook Bank, Green Lane, Heywood, Bury, Greater Manchester Waste Licence: Yes Site Reference: D043, D15461, RD/LIC/193/80 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 01-Oct-1980 Licence Surrendered: - Licence Holder Address: Brook Bank, Green Lane, Heywood Operator: - Licence Holder: Gort Bank Sand Pits Limited First Recorded: - Last Recorded: -
Not shown	1402	NE	Site Address: Hailwood Street, Deeplish, Rochdale, Greater Manchester Waste Licence: - Site Reference: D083 Waste Type: -	Licence Issue: - Licence Surrendered: - Licence Holder Address: - Operator: - Licence Holder: -

ID	Distance (m)	Direction	NGR	Details
				Environmental Permitting Regulations (Waste) Reference: -
				First Recorded: - Last Recorded: -

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

1

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

ID	Distance (m)	Direction	NGR	Details
Not shown	1346	NE	388900.0 411800.0	Address: Edinburgh Way, Rochdale, Gt Manchester BGS Number: 1852.0 Risk: No risk to aquifer Waste Type: N/A

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

4

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

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
14D	430	NE	388573 410930	Refuse Tip	1963 mapping	Polygon
15D	431	NE	388569 410931	Refuse Tip	1963 mapping	Polygon
Not shown	889	N	388105 411542	Refuse Tip	1962 mapping	Polygon
Not shown	1252	N	388375 411908	Refuse Tip	1962 mapping	Polygon

3.2 Other Waste Sites

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

7

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

ID	Distance (m)	Direction	NGR	Details
2A	76	NE	388320 410712	Type of Site: Scrap Yard Site Address: N/A Planning Application Reference: N/A Date: 1990 Further Details: N/A Data Source: Historic Mapping Data Type: Polygon

ID	Distance (m)	Direction	NGR	Details		
3A	77	NE	388312 410716	Type of Site: Scrap Yard Site Address: N/A	Planning Application Reference: N/A Date: 1997	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
4A	77	NE	388312 410716	Type of Site: Scrap Yard Site Address: N/A	Planning Application Reference: N/A Date: 1996	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
5B	181	W	388004 410643	Type of Site: Scrap Yard Site Address: N/A	Planning Application Reference: N/A Date: 1990	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
6B	182	W	388004 410645	Type of Site: Scrap Yard Site Address: N/A	Planning Application Reference: N/A Date: 1996	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
7C	191	W	387978 410634	Type of Site: Scrap Yard Site Address: N/A	Planning Application Reference: N/A Date: 1990	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon
8C	191	W	387978 410634	Type of Site: Scrap Yard Site Address: N/A	Planning Application Reference: N/A Date: 1990	Further Details: N/A Data Source: Historic Mapping Data Type: Polygon

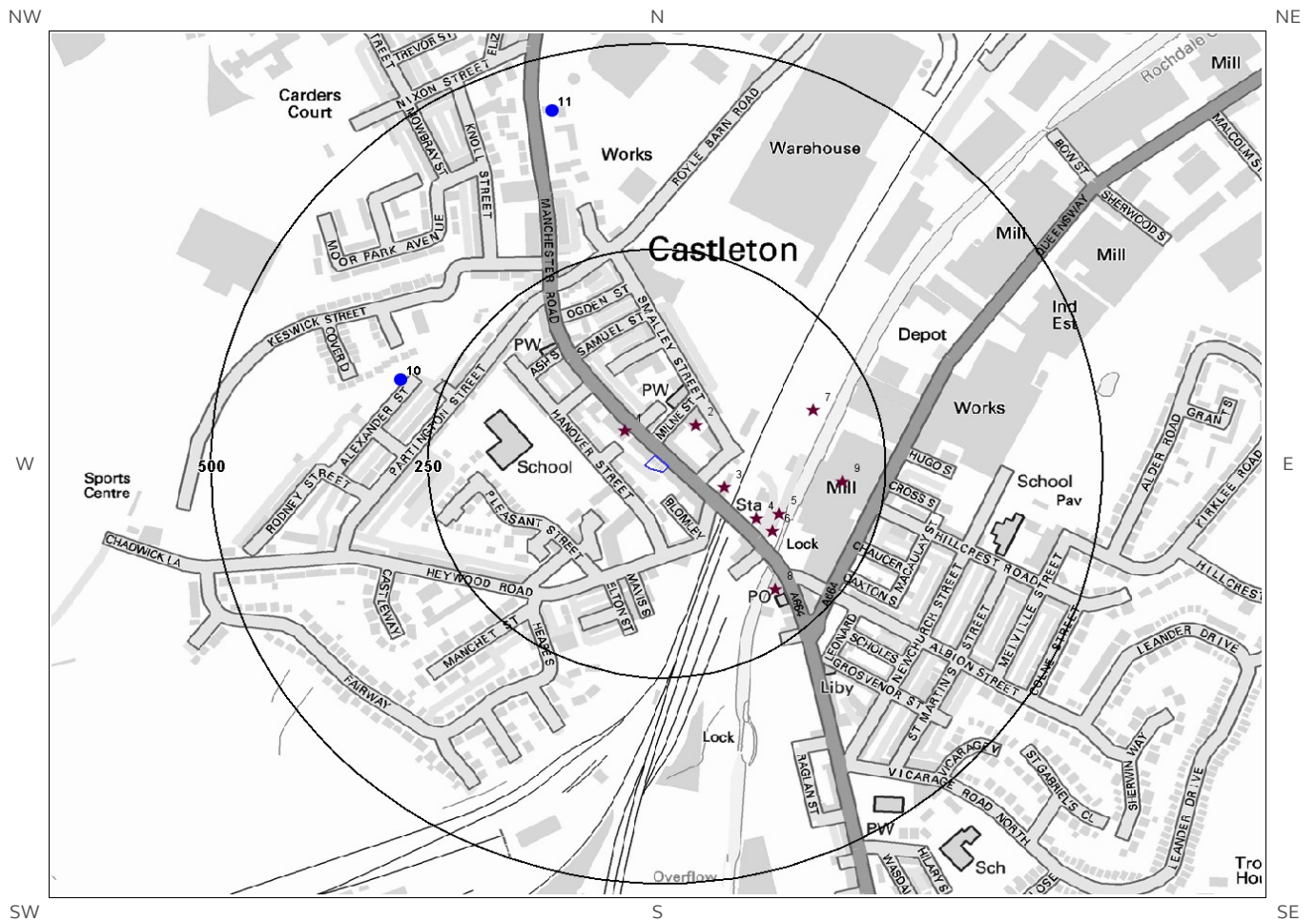
3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

1

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

ID	Distance (m)	Direction	NGR	Details	
13A	128	NE	388315 410717	Site Address: Land At, Railway Approach, Castleton, Rochdale, Lancashire, OL11 3EE Type: Metal Recycling Site (mixed MRS's) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: BIE022 EPR reference: EA/EPR/JP3998CF/A001 Operator: Britannia Import Export Ltd Waste Management licence No: 50145 Annual Tonnage: 4999.0	Issue Date: 10/03/2003 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Expired Site Name: Britannia Import Export Ltd Correspondence Address: -

4. Current Land Use Map



© Crown copyright and database rights 2018.
Ordnance Survey licence 100035207.



4. Current Land Uses

4.1 Current Industrial Data

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

9

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	47	NW	CCTV Empire	388167 410678	786, Manchester Road, Rochdale, OL11 3AW	Electronic Equipment	Industrial Products
2	59	NE	Works	388250 410685	OL11	Unspecified Works Or Factories	Industrial Features
3	68	E	Castleton (Manchester) Rail Station	388282 410609	OL11	Railway Stations, Junctions and Halts	Public Transport, Stations and Infrastructure
4	118	SE	Works	388319 410571	OL11	Unspecified Works Or Factories	Industrial Features
5	139	SE	Electricity Sub Station	388345 410577	OL11	Electrical Features	Infrastructure and Facilities
6	143	SE	Gas Governor Station	388338 410556	OL11	Gas Features	Infrastructure and Facilities
7	180	NE	Tank	388385 410703	OL11	Tanks (Generic)	Industrial Features
8	191	SE	P C Comms	388340 410485	858a, Manchester Road, Rochdale, OL11 2SP	Electrical Equipment Repair and Servicing	Repair and Servicing
9	201	E	Linden Paper & Board	388418 410616	Linden Mill, Queensway, Rochdale, OL11 2PQ	Wood Products Including Charcoal, Paper, Card and Board	Industrial Products

4.2 Petrol and Fuel Sites

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

2

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

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
10	300	W	387909 410739	Obsolete	Carcraft, Nixon Street, Nixon Street, Castleton Moor, Rochdale, Greater Manchester, OL11 3JE	Not Applicable	Obsolete
11	435	N	388084 411066	Obsolete	Dale Car Centre, Manchester Road, Manchester Road, Rochdale, Greater	Not Applicable	Obsolete

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
Manchester, OL11 3AD							

4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site: 0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site: 0

Database searched and no data found.

5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

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

5.2 Superficial Ground and Drift Geology

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

Lex Code	Description	Rock Type
GFDUD-XSV	GLACIOFLUVIAL DEPOSITS, DEVENSIAN	SAND AND GRAVEL

5.3 Bedrock and Solid Geology

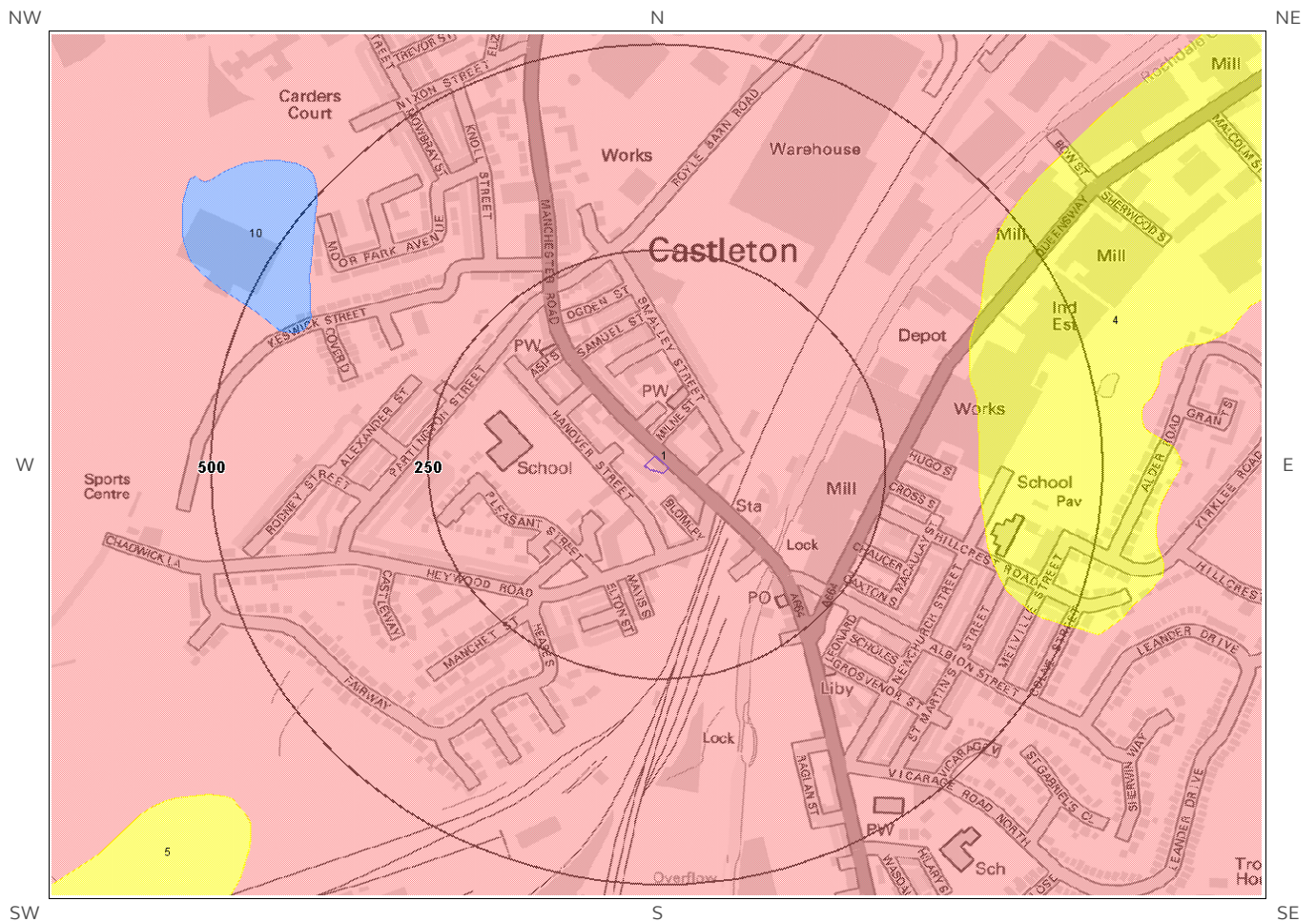
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
PLCM-MDSS	PENNINE LOWER COAL MEASURES FORMATION	MUDSTONE, SILTSTONE AND SANDSTONE

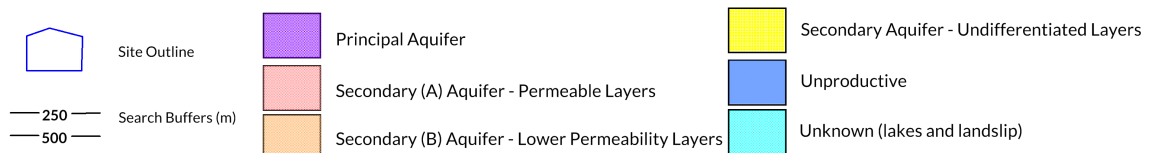
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

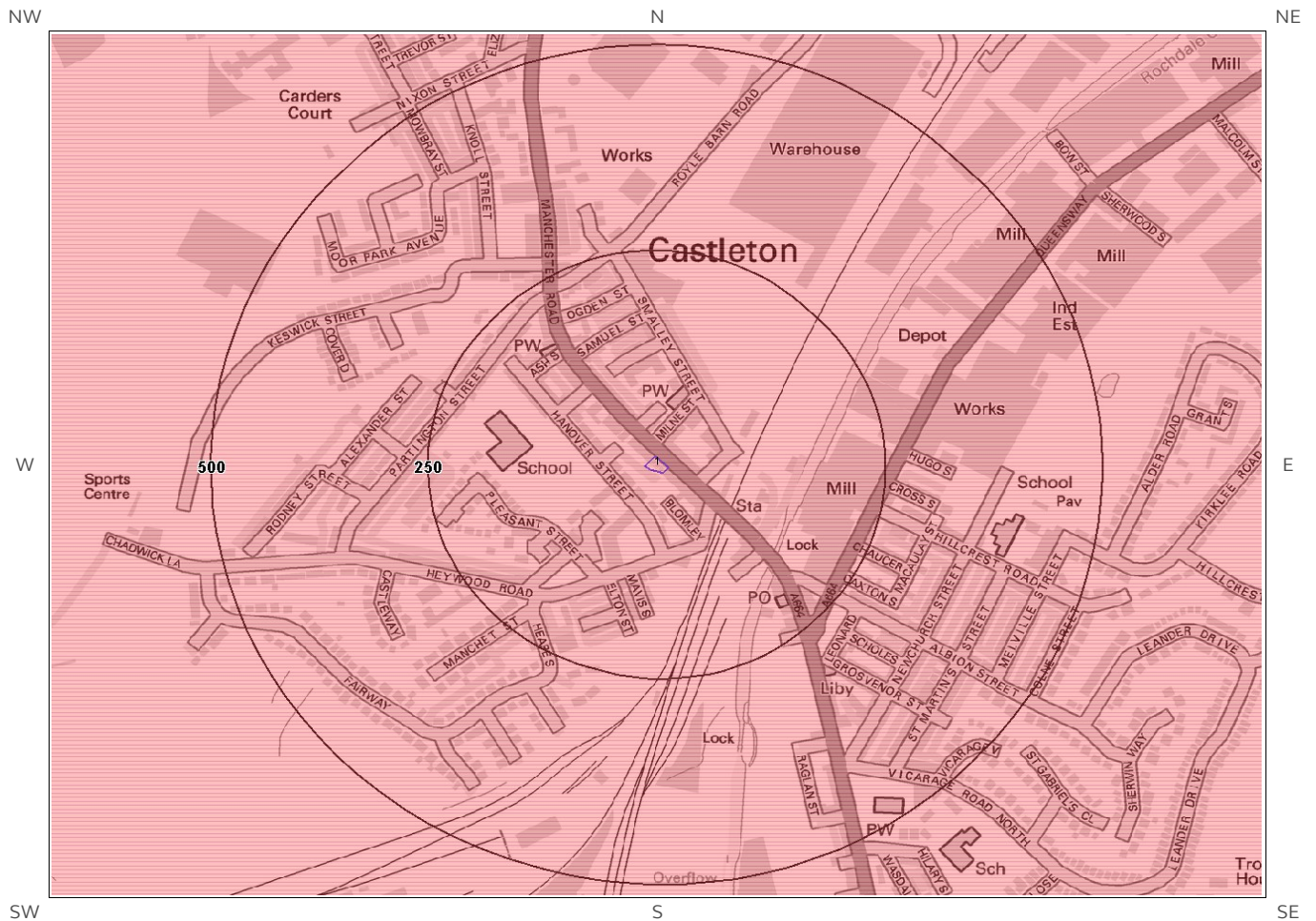
6a. Aquifer Within Superficial Geology



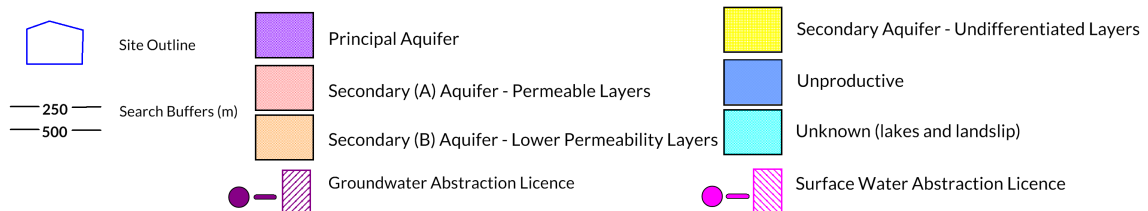
© Crown copyright and database rights 2018
Ordnance Survey licence 100035207.



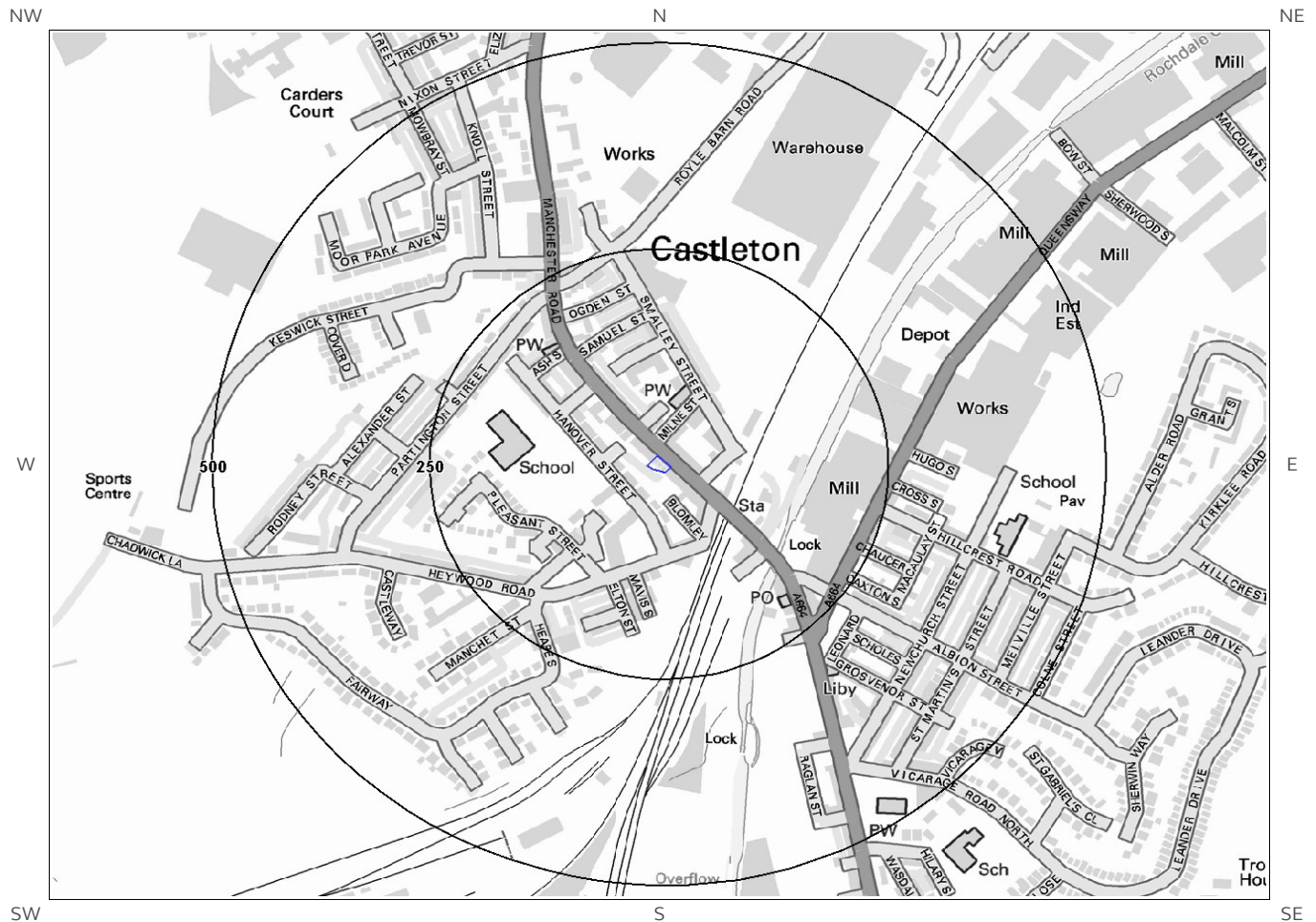
6b. Aquifer Within Bedrock Geology and Abstraction Licences



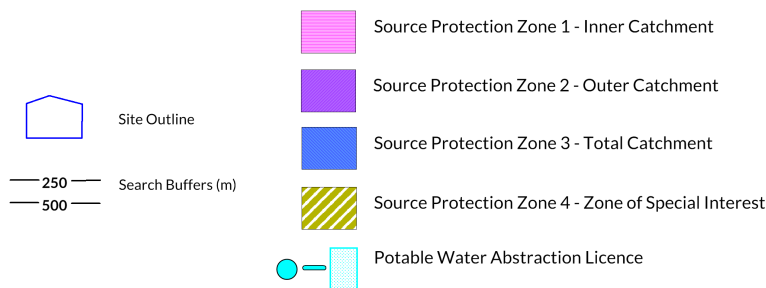
© Crown copyright and database rights 2018
Ordnance Survey licence 100035207.



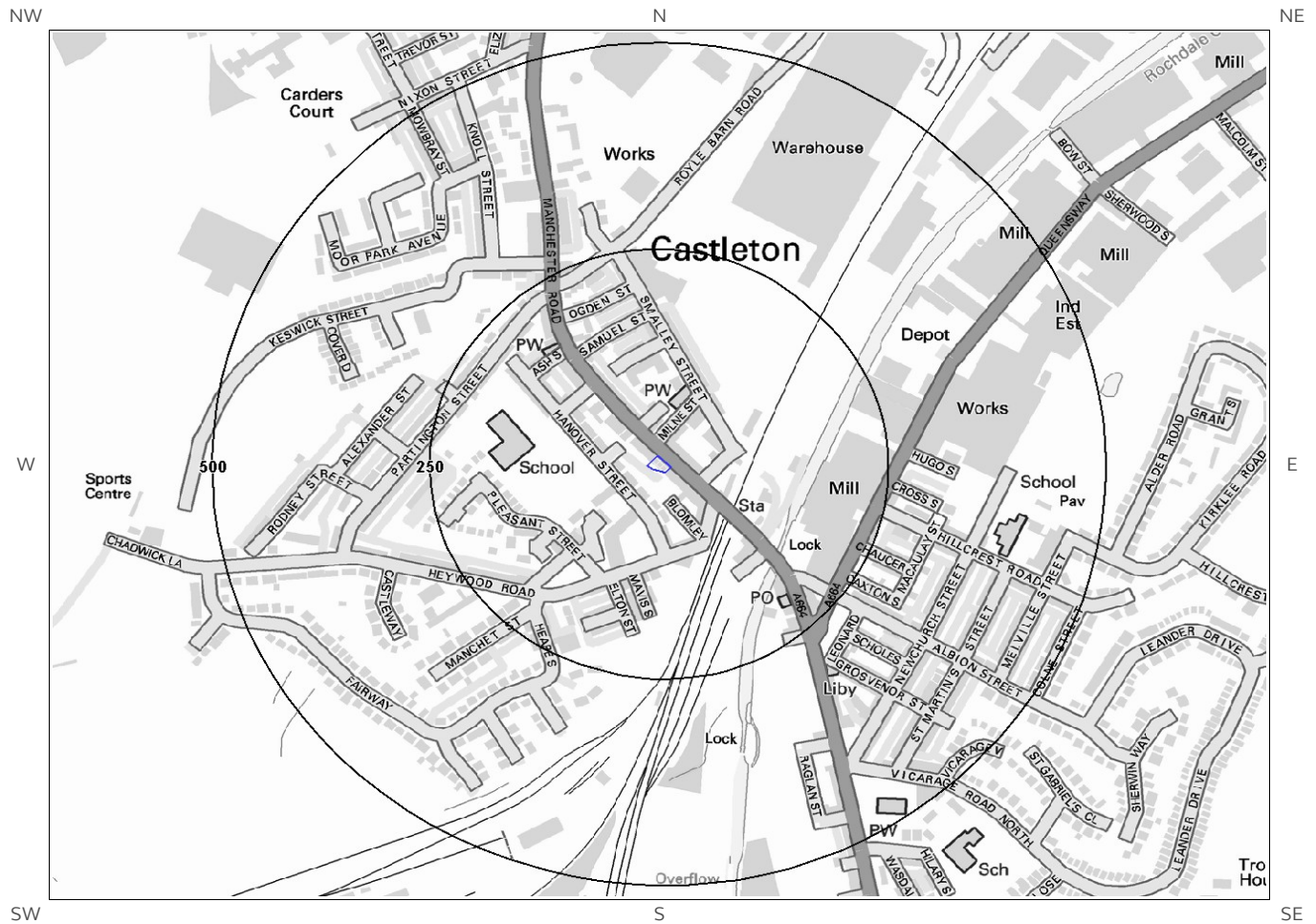
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



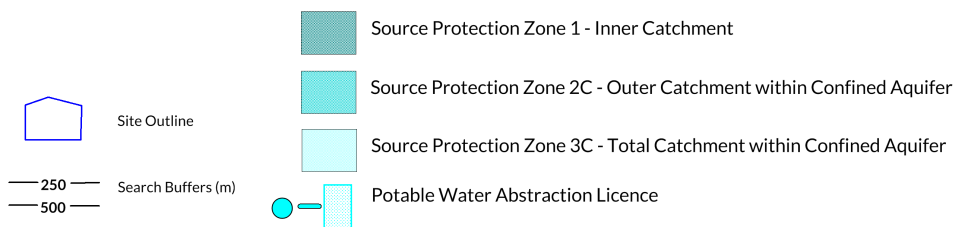
© Crown copyright and database rights 2018
Ordnance Survey licence 100035207.



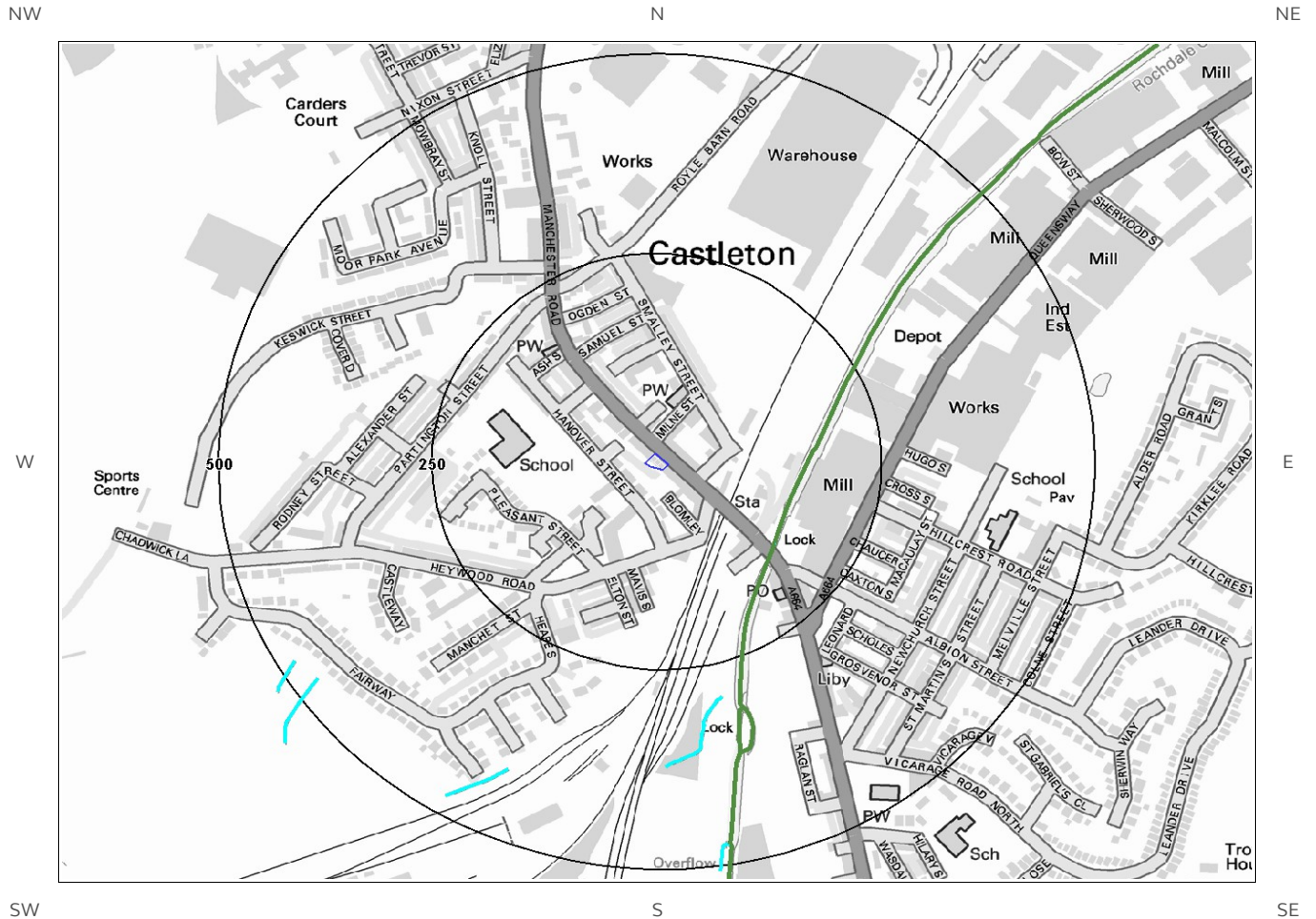
6d. Hydrogeology – Source Protection Zones within confined aquifer



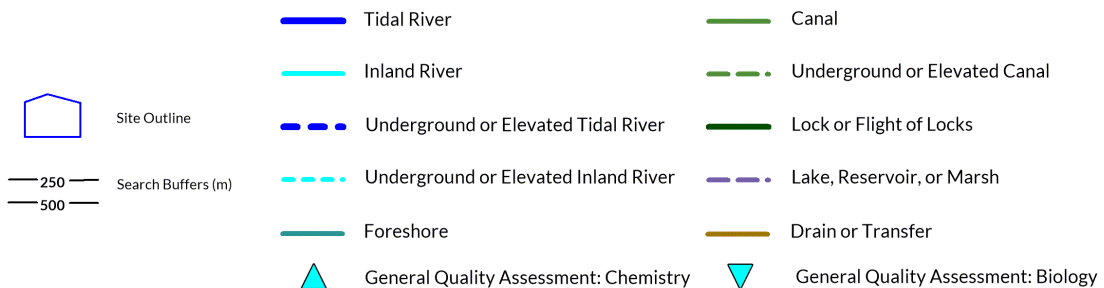
© Crown copyright and database rights 2018
Ordnance Survey licence 100035207.



6e. Hydrology – Watercourse Network and River Quality



© Crown copyright and database rights 2018.
Ordnance Survey licence 100035207.



6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
4	358	E	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
10	425	NW	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers

6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site

Identified

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

ID	Distance (m)	Direction	NGR	Details
Not shown	1553	W	386700 410200	Status: Historical Licence No: 2569002257 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: Borehole At Green Lane,heywood Data Type: Point Name: TARMAC TOPMIX LTD Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 7229 Original Start Date: 28/6/1993 Expiry Date: - Issue No: 100 Version Start Date: 28/6/1993 Version End Date:
Not shown	1774	W	386500 410100	Status: Historical Licence No: 2569002029 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: "borehole At Premises, Green Lane, Heywood" Data Type: Point Name: OAK BREWING COMPANY LTD Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 203 Original Start Date: 16/2/1966 Expiry Date: - Issue No: 100 Version Start Date: 15/11/1990 Version End Date:
Not shown	1774	W	386500 410100	Status: Historical Licence No: 2569002029 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: Borehole At Premises, Green Lane, Heywood Data Type: Point Name: OAK BREWING COMPANY LTD Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 0203 Original Start Date: 16/2/1966 Expiry Date: - Issue No: 100 Version Start Date: 15/11/1990 Version End Date:
Not shown	1774	W	386500 410100	Status: Active Licence No: 2569002029 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Ground Water - North West Region Point: Borehole At Premises, Green Lane, Heywood Data Type: Point Name: OAK BREWING COMPANY LTD Annual Volume (m³): 79645.92 Max Daily Volume (m³): 218.2 Original Application No: 0203 Original Start Date: 16/2/1966 Expiry Date: - Issue No: 100 Version Start Date: 15/11/1990 Version End Date:
Not shown	1947	NW	386500 411600	Status: Historical Licence No: 2569002037 Details: Boiler Feed Direct Source: Ground Water - North West Region Point: "borehole At Premises, Crimble Mills,heywood" Data Type: Point Name: ROE ACRE DYEING & FELTING CO LTD Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 247 Original Start Date: 20/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 21/5/1993 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1947	NW	386500 411600	Status: Historical Licence No: 2569002037 Details: Process water Direct Source: Ground Water - North West Region Point: "borehole At Premises, Crimble Mills,heywood" Data Type: Point Name: ROE ACRE DYEING & FELTING CO LTD	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 247 Original Start Date: 20/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 21/5/1993 Version End Date:
Not shown	1947	NW	386500 411600	Status: Historical Licence No: 2569002037 Details: Process water Direct Source: Ground Water - North West Region Point: Borehole At Premises, Crimble Mills,heywood Data Type: Point Name: K.SHAW & COMPANY LTD.	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 0247 Original Start Date: 20/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 1/10/2002 Version End Date:
Not shown	1947	NW	386500 411600	Status: Historical Licence No: 2569002037 Details: Boiler Feed Direct Source: Ground Water - North West Region Point: Borehole At Premises, Crimble Mills,heywood Data Type: Point Name: K.SHAW & COMPANY LTD.	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 0247 Original Start Date: 20/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 1/10/2002 Version End Date:
Not shown	1991	W	386200 410600	Status: Historical Licence No: 2569002082 Details: Process water Direct Source: Ground Water - North West Region Point: Boreholes (2) At Premises, Roeacre Tannery, Heywood, L\$97 Data Type: Point Name: G. S. COLD STORAGE AND WAREHOUSING LTD.	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: CW 0067 Original Start Date: 18/1/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/12/2000 Version End Date:
Not shown	1992	W	386200 410700	Status: Historical Licence No: 2569002082 Details: Process water Direct Source: Ground Water - North West Region Point: Boreholes (2) At Premises, Roeacre Tannery, Heywood Data Type: Point Name: G. S. COLD STORAGE AND WAREHOUSING LTD.	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: CW 0067 Original Start Date: 18/1/1966 Expiry Date: - Issue No: 102 Version Start Date: 22/12/2000 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

Identified

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

ID	Distance (m)	Direction	NGR	Details	
Not shown	1198	S	387800 409500	Status: Active Licence No: 2569005053 Details: Spray Irrigation - Direct Direct Source: Surface, Non-tidal - North West	Annual Volume (m³): 1473 Max Daily Volume (m³): 26.2 Application No: 1704 Original Start Date: 18/1/1966

ID	Distance (m)	Direction	NGR	Details	
Not shown	1643	S	387600 409100	Region Point: Trub Brk At Rochdale Data Type: Point Name: THE MANCHESTER GOLF CLUB LTD	Expiry Date: - Issue No: 100 Version Start Date: 1/4/2008 Version End Date:
				Status: Historical Licence No: 2569005053 Details: Spray Irrigation - Direct Direct Source: Surface, Non-tidal - North West Region Point: Trub Brk At Rochdale \$122 Data Type: Point Name: THE MANCHESTER GOLF CLUB LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: 1704 Original Start Date: 18/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 21/3/1997 Version End Date:
Not shown	1643	S	387600 409100	Status: Active Licence No: 2569005053 Details: Spray Irrigation - Direct Direct Source: Surface, Non-tidal - North West Region Point: Trub Brk At Rochdale Data Type: Point Name: THE MANCHESTER GOLF CLUB LTD	Annual Volume (m³): 1473 Max Daily Volume (m³): 26.2 Application No: 1704 Original Start Date: 18/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 1/4/2008 Version End Date:
				Status: Historical Licence No: 2569002270 Details: Boiler Feed Direct Source: Surface, Non-tidal - North West Region Point: River Roch At Heywood Data Type: Line Name: ROE ACRE DYEING & FELTING CO LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: 7450 Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 17/6/1999 Version End Date:
Not shown	1793	NW	386620 411500	Status: Historical Licence No: 2569002270 Details: Process water Direct Source: Surface, Non-tidal - North West Region Point: River Roch At Heywood Data Type: Line Name: ROE ACRE DYEING & FELTING CO LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: 7450 Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 17/6/1999 Version End Date:
				Status: Active Licence No: 2569005053 Details: Spray Irrigation - Direct Direct Source: Surface, Non-tidal - North West Region Point: Trub Brk At Rochdale Data Type: Point Name: THE MANCHESTER GOLF CLUB LTD	Annual Volume (m³): 1473 Max Daily Volume (m³): 26.2 Application No: 1704 Original Start Date: 18/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 1/4/2008 Version End Date:
Not shown	1831	S	387600 408900	Status: Historical Licence No: 2569005053 Details: Spray Irrigation - Direct Direct Source: Surface, Non-tidal - North West Region Point: Trub Brk At Rochdale *34 Data Type: Point Name: THE MANCHESTER GOLF CLUB LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: 1704 Original Start Date: 18/1/1966 Expiry Date: - Issue No: 100 Version Start Date: 21/3/1997 Version End Date:

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

None identified

Database searched and no data found.

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

None identified

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

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

None identified

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

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

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

Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.

6.9 River Quality

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

Identified

6.9.1 Biological Quality:

Biological Quality data describes water quality in terms of 83 groups of macroinvertebrates, some of which are pollution sensitive. The results are graded from A ('Very Good') to F ('Bad').

The following Biological Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Biological Quality Grade				
					2005	2006	2007	2008	2009
Not shown	858	N	388100 411500	River Name: Roch Reach: Stanney Bk. To Rochdale Stw End/Start of Stretch: End of Stretch NGR	D	D	D	D	D
Not shown	858	N	388100 411500	River Name: Roch Reach: Rochdale Stw To Irwell End/Start of Stretch: Start of Stretch NGR	D	D	D	E	E
Not shown	1048	S	388000 409600	River Name: Wince Bk Reach: Qsl At Castleton Stw To Irk End/Start of Stretch: Start of Stretch NGR	E	E	E	E	E

6.9.2 Chemical Quality:

Chemical quality data is based on the General Quality Assessment Headline Indicators scheme (GQAHI). In England, each chemical sample is measured for ammonia and dissolved oxygen. In Wales, the samples are measured for biological oxygen demand (BOD), ammonia and dissolved oxygen. The results are graded from A ('Very Good') to F ('Bad').

The following Chemical Quality records are shown on the Hydrology Map (6e):

ID	Distance (m)	Direction	NGR	River Quality Grade	Chemical Quality Grade				
					2005	2006	2007	2008	2009
Not shown	858	N	388100 411500	River Name: Roch Reach: Rochdale Stw To Irwell End/Start of Stretch: Start of Stretch NGR	B	B	B	B	C

6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	149 E	Rochdale Canal Alternative Name: -	Canal. A manmade watercourse for inland navigation.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 13.2
5	149 E	Rochdale Canal Alternative Name: -	Canal. A manmade watercourse for inland navigation.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 13.2
2	159 SE	Rochdale Canal Alternative Name: -	Canal. A manmade watercourse for inland navigation.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 12.1
3	159 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 1.9
6	159 SE	Rochdale Canal Alternative Name: -	Canal. A manmade watercourse for inland navigation.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 12.1
7	159 SE	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 1.9
4	291 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
Not shown	291 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
5	311 S	Rochdale Canal Alternative Name: -	Canal. A manmade watercourse for inland navigation.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 11.2
6	311 S	Rochdale Canal Alternative Name: -	Canal. A manmade watercourse for inland navigation.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 2.9
Not shown	311 S	Rochdale Canal Alternative Name: -	Canal. A manmade watercourse for inland navigation.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 11.2
Not shown	311 S	Rochdale Canal Alternative Name: -	Canal. A manmade watercourse for inland navigation.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 2.9
7	366 S	Rochdale Canal Alternative Name: -	Canal. A manmade watercourse for inland navigation.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 11.0
Not shown	366 S	Rochdale Canal Alternative Name: -	Canal. A manmade watercourse for inland navigation.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 11.0
8	413	-	Inland river not influenced	Catchment Area: Mersey

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	SW	Alternative Name: -	by normal tidal action.	Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
Not shown	413 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
9	469 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
Not shown	469 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
10	474 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 3.3
Not shown	474 S	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 3.3
11	475 S	Rochdale Canal Alternative Name: -	Canal. A manmade watercourse for inland navigation.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 11.0
Not shown	475 S	Rochdale Canal Alternative Name: -	Canal. A manmade watercourse for inland navigation.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): 11.0
12	479 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided
Not shown	479 SW	- Alternative Name: -	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Unclassified. Average Width in Watercourse Section (m): Not Provided

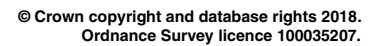
6.11 Surface Water Features

Surface water features within 250m of the study site

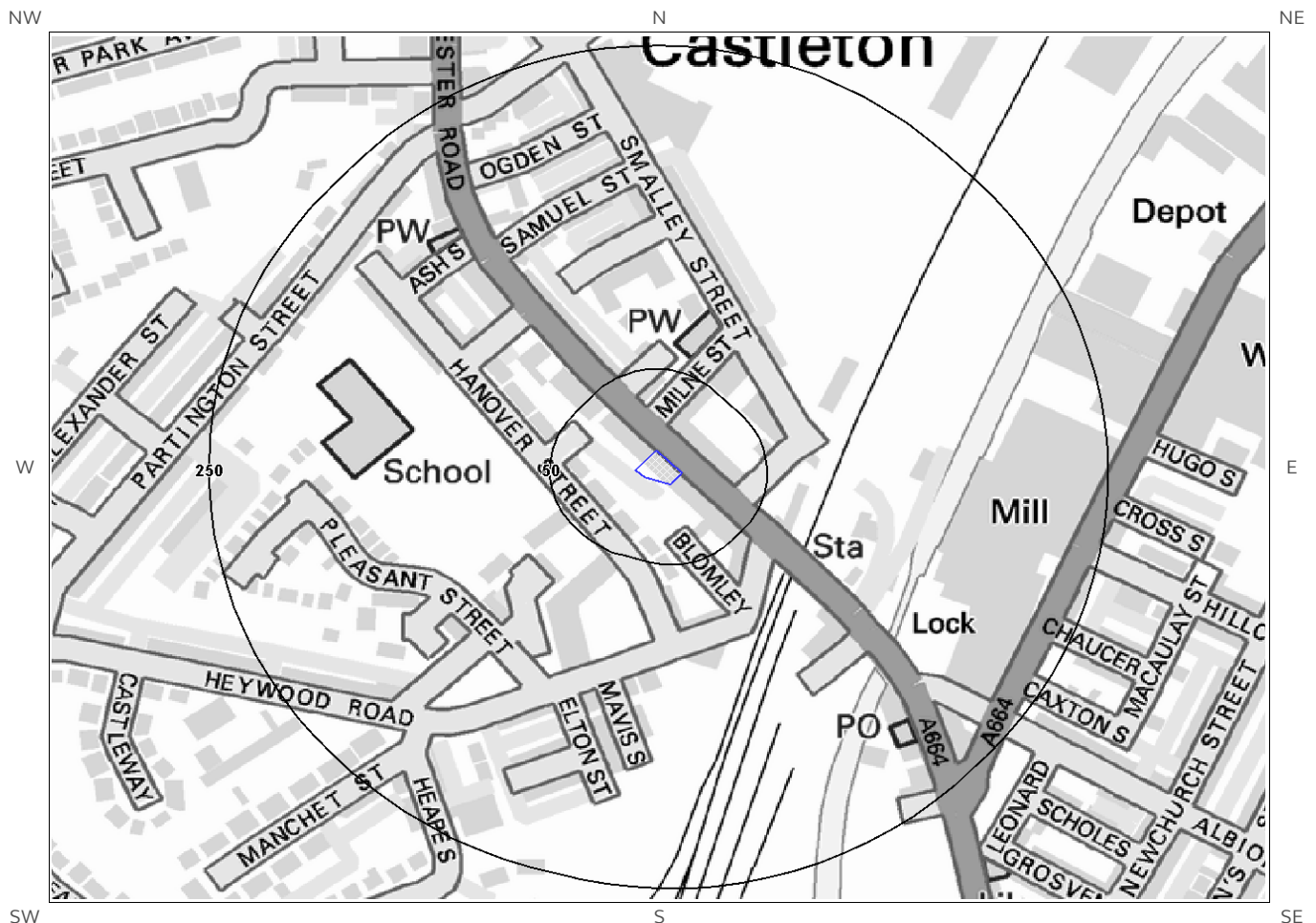
Identified

The following surface water records are not represented on mapping:

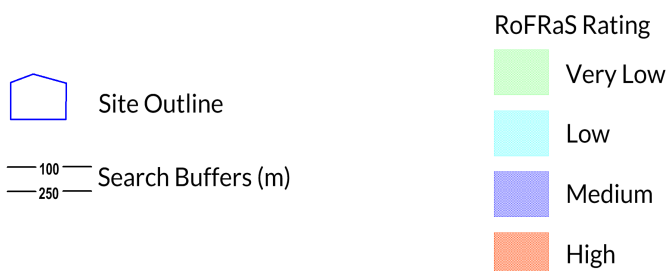
Distance (m)	Direction
143	E
165	SE



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



© Crown copyright and database rights 2018.
Ordnance Survey licence 100035207.



7 Flooding

7.1 River and Coastal Zone 2 Flooding

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

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

Database searched and no data found.

7.2 River and Coastal Zone 3 Flooding

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

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

Database searched and no data found.

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

Highest risk of flooding onsite Very Low

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

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

7.4 Flood Defences

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

7.5 Areas benefiting from Flood Defences

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

7.6 Areas benefiting from Flood Storage

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

None identified

7.7 Groundwater Flooding Susceptibility Areas

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

Identified

Clearwater Flooding or Superficial Deposits Flooding

Superficial Deposits Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Potential at Surface

Where potential for groundwater flooding to occur at surface is indicated, this means that given the geological conditions in the area groundwater flooding hazard should be considered in all land-use planning decisions. It is recommended that other relevant information e.g. records of previous incidence of groundwater flooding, rainfall, property type, and land drainage information be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

7.8 Groundwater Flooding Confidence Areas

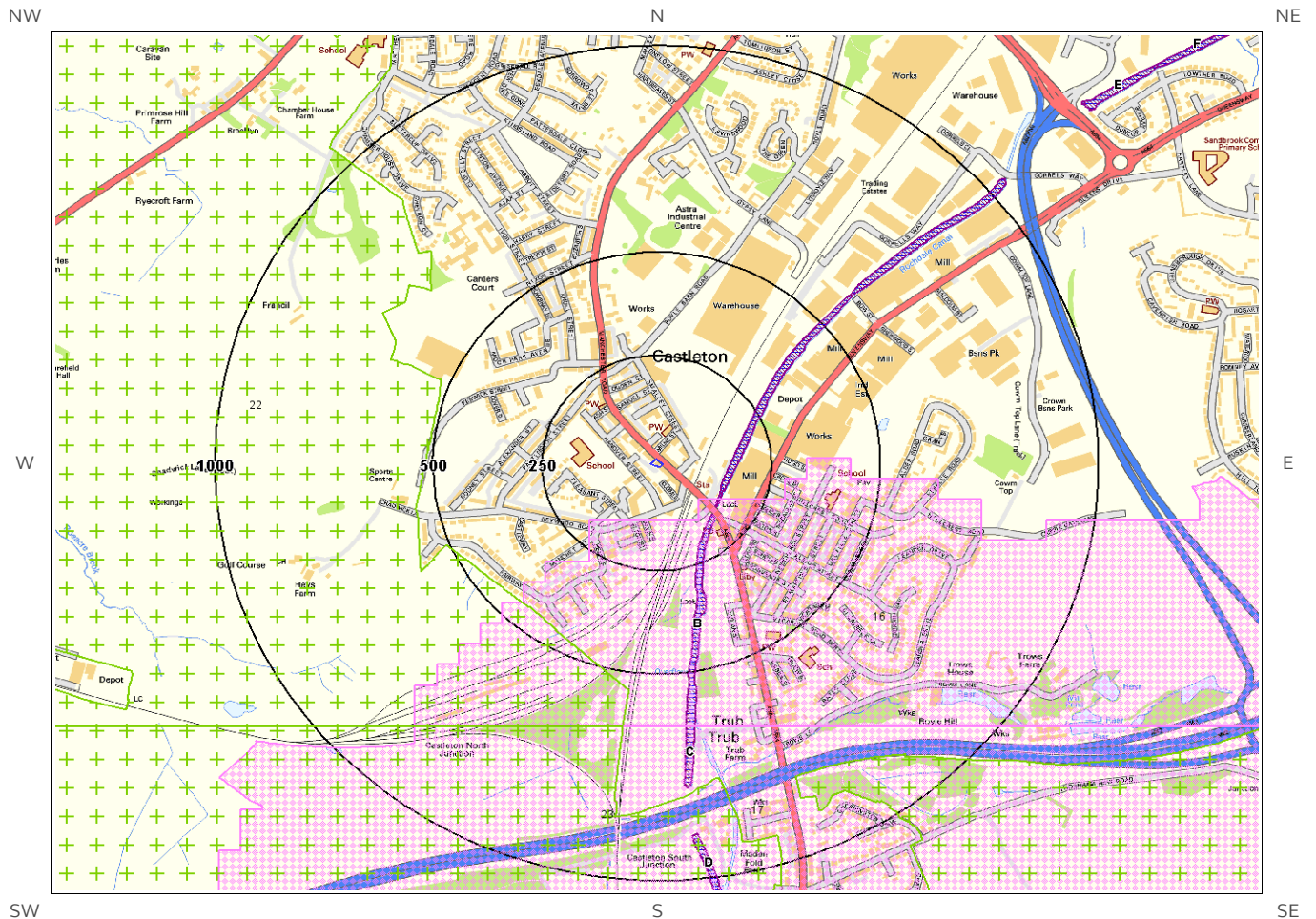
British Geological Survey confidence rating in this result

Low

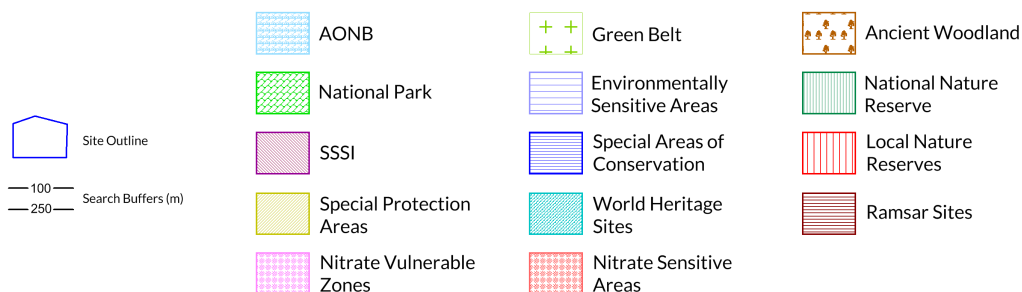
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

8. Designated Environmentally Sensitive Sites Map



© Crown copyright and database rights 2018.
Ordnance Survey licence 100035207.



8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site

Identified

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

7

The following Site of Special Scientific Interest (SSSI) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SSSI Name	Data Source
8A	143	E	Rochdale Canal	Natural England
9B	165	SE	Rochdale Canal	Natural England
10C	630	S	Rochdale Canal	Natural England
11D	890	S	Rochdale Canal	Natural England
12E	1300	NE	Rochdale Canal	Natural England
13F	1490	NE	Rochdale Canal	Natural England
Not shown	1810	NE	Rochdale Canal	Natural England

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

0

Database searched and no data found.

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

7

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

ID	Distance (m)	Direction	SAC Name	Data Source
1A	143	E	Rochdale Canal	Natural England
2B	165	SE	Rochdale Canal	Natural England
3C	630	S	Rochdale Canal	Natural England
4D	890	S	Rochdale Canal	Natural England

ID	Distance (m)	Direction	SAC Name	Data Source
5E	1300	NE	Rochdale Canal	Natural England
6F	1490	NE	Rochdale Canal	Natural England
Not shown	1810	NE	Rochdale Canal	Natural England

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

2

The following records of Designated Ancient Woodland provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
Not shown	1890	NW	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1978	NW	UNKNOWN	Ancient and Semi-Natural Woodland

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

1

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

ID	Distance (m)	Direction	LNR Name	Data Source
Not shown	1866	S	Hopwood Woodlands	Natural England

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

4

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

ID	Distance (m)	Direction	NVZ Name	Data Source
16	117	SE	Existing	DEFRA
17	627	S	Existing	DEFRA
Not shown	1813	E	Existing	DEFRA
Not shown	1891	E	Existing	DEFRA

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

6

Green Belt data contains Ordnance Survey data © Crown copyright and database right [2015].

ID	Distance	Direction	Green Belt Name	Local Authority Name
22	443	SW	Liverpool, Manchester and West Yorks Greenbelt	Rochdale
23	632	S	Liverpool, Manchester and West Yorks Greenbelt	Rochdale
Not shown	1523	SE	Liverpool, Manchester and West Yorks Greenbelt	Rochdale
Not shown	1830	E	Liverpool, Manchester and West Yorks Greenbelt	Rochdale
Not shown	1872	SE	Liverpool, Manchester and West Yorks Greenbelt	Oldham District (B)
Not shown	1891	E	Liverpool, Manchester and West Yorks Greenbelt	Rochdale

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

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

9.1.1 Shrink Swell

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

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

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

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site Very Low

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

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

9.1.3 Soluble Rocks

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

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

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

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

9.1.4 Compressible Ground

Maximum Compressible Ground* hazard rating identified on the study site

Negligible

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

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

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site

Very Low

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

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

9.1.6 Running Sand

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

Very Low

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

Hazard
Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

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

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

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

9.2.2 Radon Protection

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

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

Identified

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

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

10.2 Non-Coal Mining

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

None identified

Database searched and no data found.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site

None identified

Guidance: No Guidance Required.

Contact Details

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



British Geological Survey Enquiries
Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:
Web: www.bgs.ac.uk



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

Environment Agency
National Customer Contact Centre, PO Box 544
Rotherham, S60 1BY
Tel: 03708 506 506
Web: www.environment-agency.gov.uk
Email: enquiries@environment-agency.gov.uk



Public Health England
Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
www.gov.uk/phe
Email: enquiries@phe.gov.uk
Main switchboard: 020 7654 8000



The Coal Authority
200 Lichfield Lane
Mansfield
Notts NG18 4RG
Tel: 0345 7626 848
DX 716176 Mansfield 5
www.coal.gov.uk



Ordnance Survey
Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505



Local Authority
Authority: Rochdale Metropolitan Borough Council
Phone: 01706 647 474
Web: <http://www.rochdale.gov.uk/>
Address: Number One Riverside, Smith Street, Rochdale, Lancashire,

Gemapping PLC
Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444



Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England/Natural Resources Wales who retain the Copyright and Intellectual Property Rights for the data.

PointX © Database Right/Copyright, Thomson Directories Limited © Copyright Link Interchange Network Limited © Database Right/Copyright and Ordnance Survey © Crown Copyright and/or Database Right. All Rights Reserved. Licence Number [03421028].

This report has been prepared in accordance with the Groundsure Ltd standard Terms and Conditions of business for work of this nature.

Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:

<https://www.groundsure.com/terms-and-conditions-may25-2018>