Groundsure
LOCATION INTELLIGENCE

Enviro Insight

Address:	**HARROW STREET / OLDHAM ROAD, ROCHDALE, OL11 2AT**
Date:	**11 Oct 2018**
Reference:	**GS-5525334**
Client:	**Castledine & Co**

NW N NE



W E

SW S SE

Aerial Photograph Capture date:	02-May-2011
Grid Reference:	390683,410582
Site Size:	0.08ha

Report Reference: GS-5525334
Client Reference: 1336_Shockledge

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LOCATION INTELLIGENCE

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Overview of Findings

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

Section 1: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	0	6	10	17
1.2 Additional Information – Historical Tank Database	0	0	6	12
1.3 Additional Information – Historical Energy Features Database	0	2	2	10
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	1	6	0
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	6	11	20

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	5
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	1	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	4	2
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	0
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	0	3
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	0	0	0

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

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

Section 6: Hydrogeology and Hydrology	0-500m
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site	Identified
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site	Identified

	On-site	0-50m	51-250	251-500	501-1000	1000-2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	15
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	2
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

	On-site	0-50m	51-250	251-500	501-1000	1000-1500
			0-500m			
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	Yes	No	No	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	18	26	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 Enviroment Agency Zone 2 floodplains within 250m of the study site	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 below 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	0	0	0	5
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	5
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	0
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	0
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	0	0	5	0
8.14 Records of Green Belt land	0	0	2	0	5	4

Section 9: Natural Hazards

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

Section 10: Mining

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

Using this report

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

1. Historical Industrial Sites

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

2. Environmental Permits, Incidents and Registers

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

3. Landfills and Other Waste Sites

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

4. Current Land Uses

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

5. Geology

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

6. Hydrogeology and Hydrology

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

7. Flooding

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

8. Designated Environmentally Sensitive Sites

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

9. Natural Hazards

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

10. Mining

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

11. Contacts

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

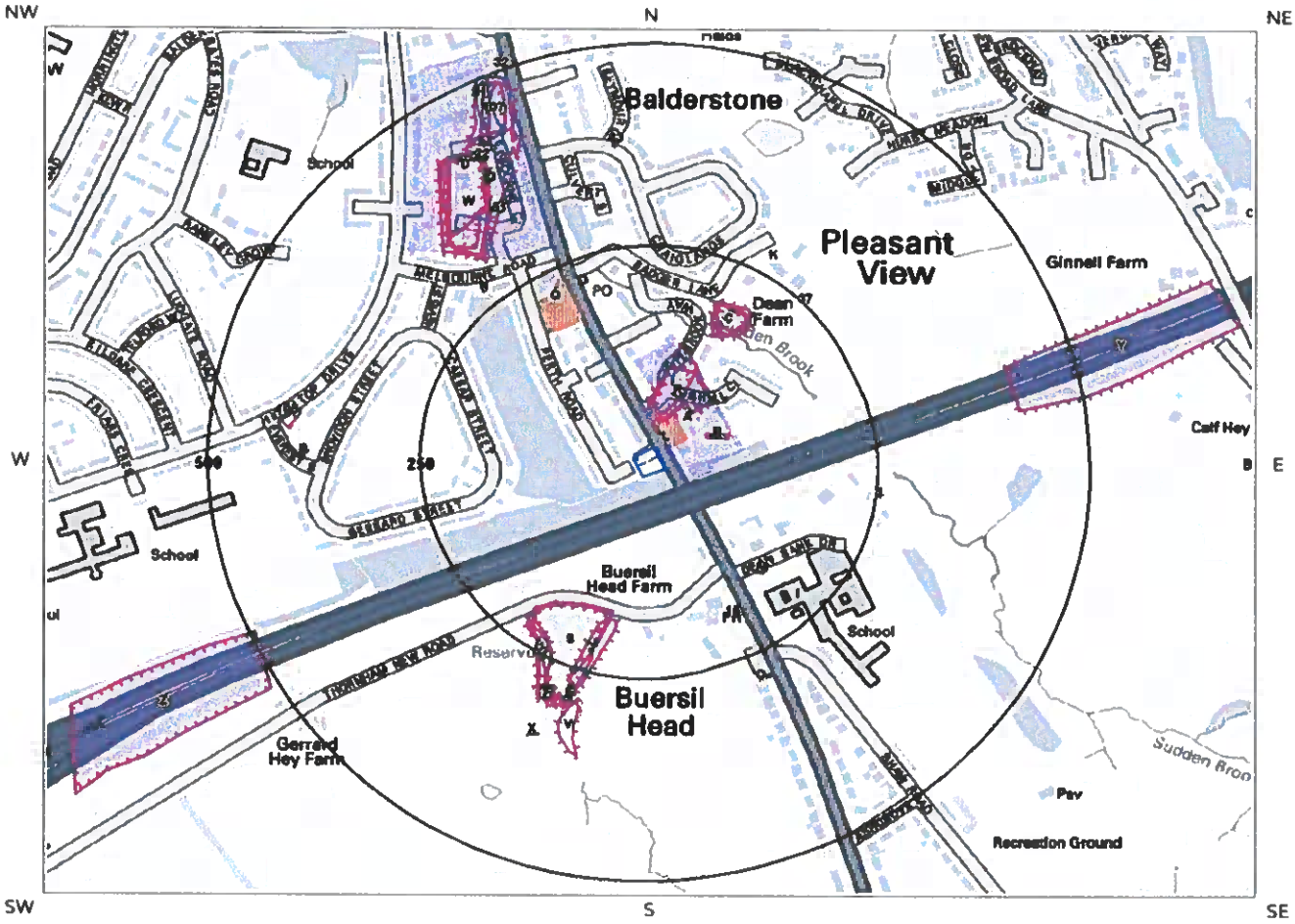
Note: Maps

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

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

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

1. Historical Land Use



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Site Outline

250
500
Search Buffers (m)

Historical 1:10,000 and 1:10,560 scale mapping

Industrial Land Use

Potentially Infilled Land

Historical 1:2,500, 1:1,250 and 1:500 scale mapping

Energy Features

Petrol Stations

Historical military sites

Tanks

Garages

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LOCATION INTELLIGENCE

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: 33

ID	Distance [m]	Direction	Use	Date
1A	10	NE	Unspecified Mill	1891
2A	10	NE	Unspecified Mill	1907
3A	10	NE	Unspecified Mill	1928
4A	10	NE	Unspecified Mill	1938
5A	14	NE	Unspecified Mill	1967
6A	14	NE	Unspecified Mill	1954
7B	61	NE	Unspecified Ground Workings	1938
8B	61	NE	Unspecified Ground Workings	1928
9C	159	NE	Refuse Heap	1928
10C	159	NE	Refuse Heap	1938
11C	163	NE	Refuse Heap	1954
12C	169	NE	Unspecified Heap	1967
13Q	179	NW	Garage	1967
14T	181	S	Refuse Heap	1938
15	193	SE	Pump	1851
16U	213	SW	Unspecified Ground Workings	1938
17E	274	S	Unspecified Ground Workings	1938
18D	276	NW	Unspecified Mill	1907
19D	276	NW	Unspecified Mill	1928
20D	276	NW	Unspecified Mill	1938
21G	277	NW	Unspecified Mill	1954
22	282	NW	Unspecified Mill	1967
23E	283	SW	Refuse Heap	1954
24F	286	SW	Refuse Heap	1928
25F	286	SW	Refuse Heap	1938
26F	286	SW	Refuse Heap	1907
27G	317	NW	Unspecified Mill	1891
28X	339	S	Coal Pit	1851
29Y	421	E	Cuttings	1976
30H	424	N	Unspecified Mill	1976
31H	428	NW	Unspecified Heap	1907
32	493	N	Woollen Mill	1851

33Z	494	SW	Cuttings	1976

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: 18

ID	Distance (m)	Direction	Use	Date
34A	62	NE	Unspecified Tank	1890
35I	220	SE	Unspecified Tank	1992
36I	220	SE	Unspecified Tank	1976
37	250	NE	Unspecified Tank	1996
38J	250	E	Unspecified Tank	1930
39J	250	E	Unspecified Tank	1937
40J	253	E	Unspecified Tank	1955
41J	253	E	Unspecified Tank	1966
42J	253	E	Unspecified Tank	1977
43J	253	E	Unspecified Tank	1955
44J	253	E	Unspecified Tank	1966
45J	253	E	Unspecified Tank	1996
46K	272	NE	Unspecified Tank	1955
47K	272	NE	Unspecified Tank	1966
48K	272	NE	Unspecified Tank	1977
49K	272	NE	Unspecified Tank	1955
50K	272	NE	Unspecified Tank	1966
51	341	NW	Unspecified Tank	1890

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: 14

ID	Distance (m)	Direction	Use	Date
52L	14	NE	Electricity Substation	1955
53L	14	NE	Electricity Substation	1955
54M	165	SE	Electricity Substation	1976
55M	165	SE	Electricity Substation	1992
56N	269	NW	Electricity Substation	1978

57N	269	NW	Electricity Substation	1988
58O	278	SE	Electricity Substation	1955
59O	278	SE	Electricity Substation	1976
60O	279	SE	Electricity Substation	1966
61O	279	SE	Electricity Substation	1955
62O	279	SE	Electricity Substation	1992
63	374	N	Electricity Substation	1996
64P	383	W	Electricity Substation	1978
65P	383	W	Electricity Substation	1988

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: 7

ID	Distance (m)	Direction	Use	Date
66L	14	NE	Garage	1977
67Q	179	NW	Garage	1996
68Q	180	NW	Garage	1955
69Q	180	NW	Garage	1966
70Q	180	NW	Garage	1977
71Q	180	NW	Garage	1955
72Q	180	NW	Garage	1966

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

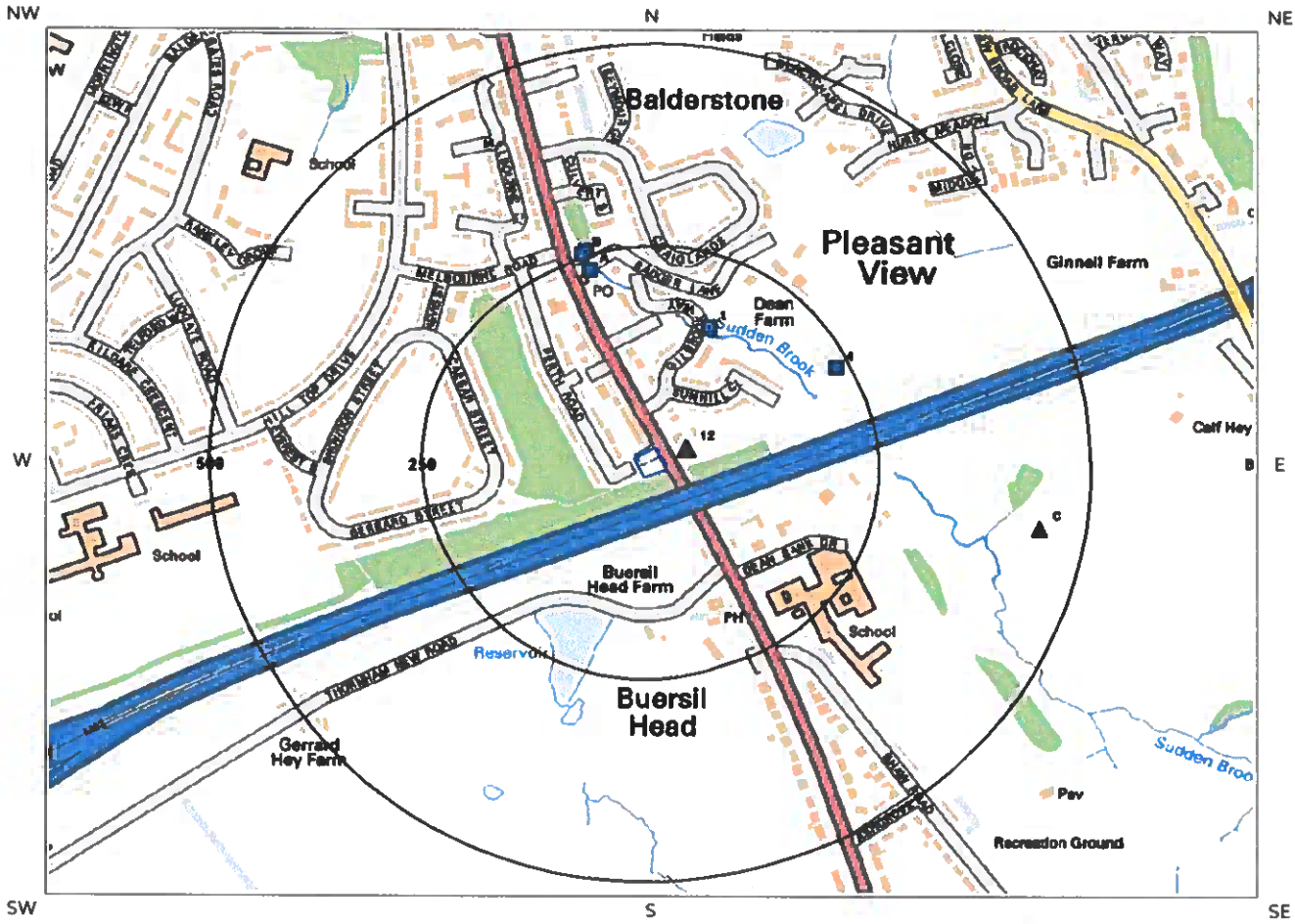
Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 37

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

ID	Distance(m)	Direction	Use	Date
73R	32	N	Reservoirs	1891
74R	32	N	Reservoirs	1938
75R	32	N	Reservoirs	1907
76R	32	N	Reservoirs	1928
77R	36	N	Reservoirs	1954
78R	40	N	Reservoirs	1967
79B	61	NE	Unspecified Ground Workings	1938
80B	61	NE	Unspecified Ground Workings	1928
81C	159	NE	Refuse Heap	1928
82C	159	NE	Refuse Heap	1938
83C	163	NE	Refuse Heap	1954
84C	169	NE	Unspecified Heap	1967
85S	170	S	Reservoir	1976
86S	170	S	Reservoir	1967
87S	173	S	Pond	1954
88T	181	S	Refuse Heap	1938
89U	213	SW	Unspecified Ground Workings	1938
90E	274	S	Unspecified Ground Workings	1938
91F	283	SW	Refuse Heap	1954
92F	286	SW	Refuse Heap	1907
93F	286	SW	Refuse Heap	1928
94F	286	SW	Refuse Heap	1938
95V	288	S	Pond	1967
96V	288	S	Pond	1976
97W	303	NW	Reservoirs	1954
98G	306	NW	Ponds	1851
99W	307	NW	Reservoirs	1928
100W	307	NW	Reservoirs	1938
101W	307	NW	Reservoirs	1907
102W	319	NW	Reservoirs	1891
103X	339	S	Coal Pit	1851
104W	346	NW	Ponds	1967
105	395	W	Pond	1891

106Y	421	E	Cuttings	1976
107	427	NW	Reservoir	1891
108H	428	NW	Unspecified Heap	1907
109Z	494	SW	Cuttings	1976

2. Environmental Permits, Incidents and Registers Map



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- Site Outline
- Search Buffers (m) — 250 — 500
- Recorded Pollution Incident
- Dangerous Substances (List 1)
- Dangerous Substances (List 2)
- Water Industry Referrals
- Licenced Discharge Consents
- Red List Discharge Consents
- RAS 3 & 4 Authorisations
- Part A(1) Authorised Processes and Historic IPC Authorisations
- Part A(2) and Part B Authorised Processes
- COMAH / NIHHS Sites
- Sites Determined as Contaminated Land
- Hazardous Substance Consents and Enforcements

2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

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

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

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:

5

The following Part A(1) and IPPC Authorised Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details	
13C	445	E	391140 410500	Operator: Diodes Zetex Semiconductors Ltd Installation Name: Zetex Technology Park (landowne Rd Building) Process: SOLVENT EMISSIONS DIRECTVE; ACTIVITIES EXCEEDING SOLVENT THRESHOLD	Permit Number: EP3230JB Original Permit Number: YP3730BQ EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 2018-03-01 Status: Determination
14C	445	E	391140 410500	Operator: Diodes Zetex Semiconductors Ltd Installation Name: Zetex Technology Park (landowne Rd Building) Process: INORGANIC CHEMICALS; USING HALOGENS ETC IF RELEASE TO AIR/WATER (UNLESS OTHERWISE PRESCRIBED) (UNLESS CHLORINATION OF WATER)	Permit Number: EP3230JB Original Permit Number: YP3730BQ EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 2018-03-01 Status: Determination
15C	445	E	391140 410500	Operator: Diodes Zetex Semiconductors Ltd Installation Name: Zetex Technology Park (landowne Rd Building) Process: INORGANIC CHEMICALS; USING ETC OF ANTIMONY ETC (UNLESS OTHERRWISE PRESCRINED) (UNLESS GLAZING ETC)	Permit Number: EP3230JB Original Permit Number: YP3730BQ EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 2018-03-01 Status: Determination
16C	445	E	391140 410500	Operator: Diodes Zetex Semiconductors Ltd Installation Name: Zetex Technology Park (landowne Rd Building) Process: INORGANIC CHEMICALS;	Permit Number: EP3230JB Original Permit Number: YP3730BQ EPR Reference: - Issue Date: - Effective Date: -

ID	Distance (m)	Direction	NGR	Details	
				USING HYDROGEN FLUORIDE/CHLORIDE ETC IF RELEASE TO AIR (OTHER THAN CHEMICALS MANUFACTURE ETC)	Last date noted as effective: 2018-03-01 Status: Determination
17C	445	E	391140 410500	Operator: Diodes Zetex Semiconductors Ltd Installation Name: Zetex Technology Park (landowne Rd Building) Process: OTHER WASTE DISPOSAL; NON-HAZARDOUS WASTE >50T/D BY PHYSICO-CHEMICAL TREATMENT	Permit Number: EP3230JB Original Permit Number: YP3730BQ EPR Reference: - Issue Date: - Effective Date: - Last date noted as effective: 2018-03-01 Status: Determination

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:

1

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

ID	Distance (m)	Direction	NGR	Details	
12	32	NE	390725 410599	Address: Dean Service Station, Oldham Road, Rochdale, Lancashire, OL16 4RH Process: Unloading of Petrol into Storage at Service Stations Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

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

6

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

ID	Distance (m)	Direction	NGR	Details	
1	162	NE	390750 410750	Address: OLDHAM ROAD PS, OFF OLDHAM RD, ROCHDALE, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - PUMPING STATION - WATER COMPANY Permit Number: 016993132 Permit Version: 1	Receiving Water: SUDDEN BROOK Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: Effective Date: 17-Jul-1996 Revocation Date:
2A	233	N	390610 410820	Address: OLDHAM ROAD CSO 35027, 705 OLDHAM ROAD, ., ROCHDALE, GREATER MANCHESTER, OL16 4RH Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01ROC0093 Permit Version: 2	Receiving Water: SUDDEN BROOK Status: CONSENT REVOKED OR REVISED - NEW CONSENT ISSUED (37(1)) Issue date: Effective Date: 01-Jan-1995 Revocation Date: 22/06/2004
3A	233	N	390610 410820	Address: OLDHAM ROAD CSO 35027, 705 OLDHAM ROAD, ., ROCHDALE, GREATER MANCHESTER, OL16 4RH Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01ROC0093 Permit Version: 1	Receiving Water: - Status: REVOKED - UNSPECIFIED Issue date: Effective Date: 01-Apr-1991 Revocation Date: 31/12/1994
4	235	NE	390900 410700	Address: FAIRVIEW INN, BURNEDGE, ROCHDALE, GREATER MANCHESTER Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: 016992272 Permit Version: 1	Receiving Water: SUDDEN BROOK Status: POST NRA LEGISLATION WHERE ISSUE DATE > 31-AUG-89 (HISTORIC ONLY) Issue date: Effective Date: 10-Jun-1991 Revocation Date:
5B	255	N	390600 410840	Address: OLDHAM ROAD CSO 35027, 705 OLDHAM ROAD, ., ROCHDALE, GREATER MANCHESTER, OL16 4RH Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01ROC0093 Permit Version: 3	Receiving Water: CULVERTED SECTION OF SUDDEN BR Status: MODIFIED - (WRA 91 SCHED 10 - AS AMENDED BY ENV ACT 1995) Issue date: 23/06/2004 Effective Date: 23-Jun-2004 Revocation Date: 28/05/2018
6B	257	N	390605 410844	Address: OLDHAM ROAD CSO 35027, 705 OLDHAM ROAD, ., ROCHDALE, GREATER MANCHESTER, OL16 4RH Effluent Type: SEWAGE DISCHARGES - SEWER STORM OVERFLOW - WATER COMPANY Permit Number: 01ROC0093 Permit Version: 4	Receiving Water: CLVRT SEC OF SUDDEN BROOK Status: VARIED UNDER EPR 2010 Issue date: 29/05/2018 Effective Date: 29-May-2018 Revocation Date:

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

0

Database searched and no data found.

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

0

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site: 0

Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

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

0

Database searched and no data found.

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

0

Database searched and no data found.

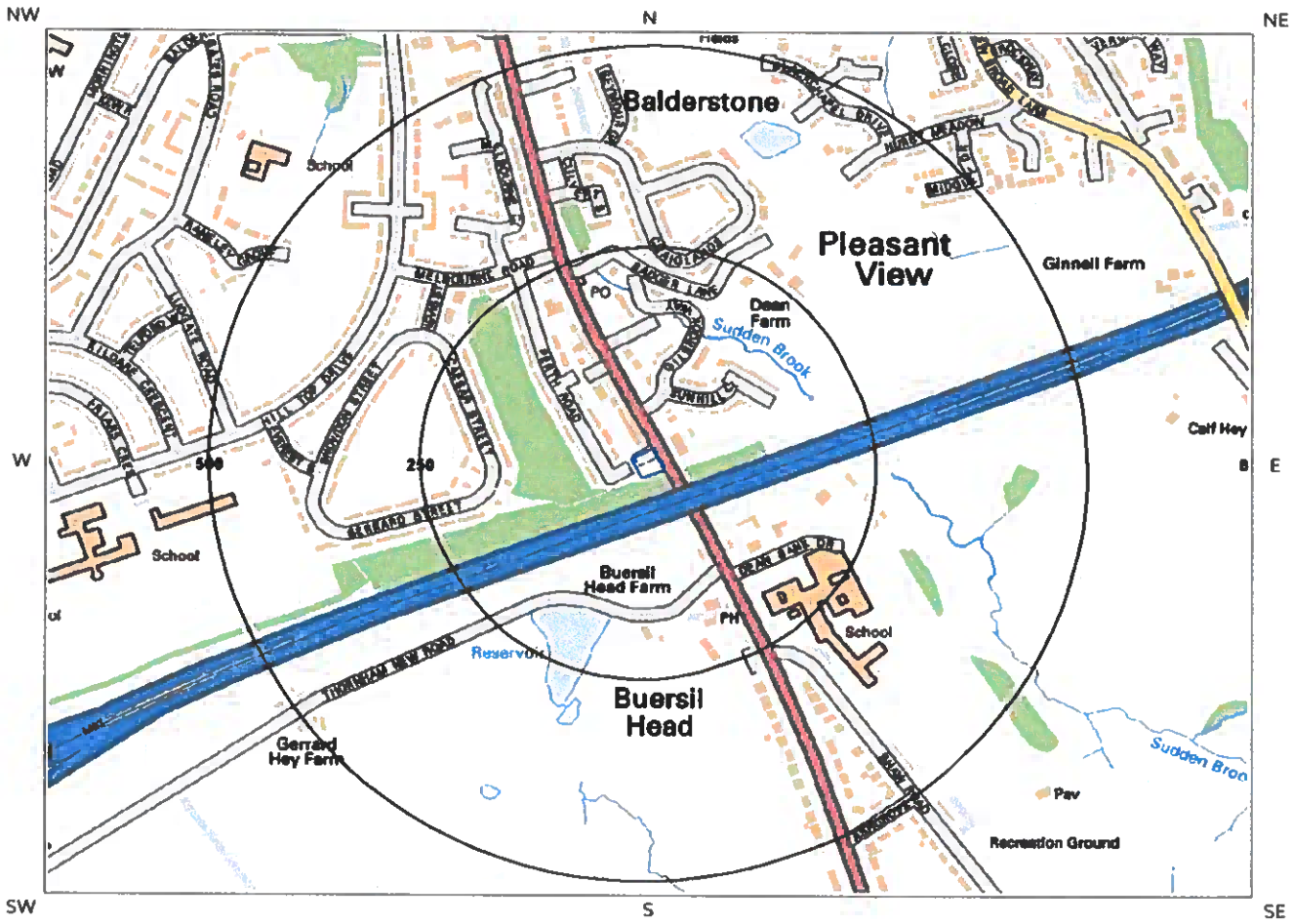
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

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.

Groundsure
LOCATION INTELLIGENCE

3. Landfill and Other Waste Sites Map



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Site Outline

250 / 500 Search Buffers (m)

EA/NRW Active Landfill

EA/NRW Historic Landfill

BGS / DoE Survey Landfill

Historic and Planned Waste Sites

EA/NRW Licensed Waste Site

Local Authority/Historical Mapping Landfill Records

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:

3

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	1085	E		Site Address: Burnedge Mill, Rochdale Waste Licence: Yes Site Reference: D050, RD/LIC/303/83 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 05-Apr-1984 Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: Richardson and Carroll First Recorded: 01-May-1984 Last Recorded: 31-Dec-1986
Not shown	1338	S		Site Address: Land at Thornham Old Road, Royton, Oldham, Greater Manchester Waste Licence: - Site Reference: G397 Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -
Not shown	1498	SE		Site Address: Land at Hanging Chadder Farm, Hanging Chadder Lane, Royton, Oldham, Greater Manchester Waste Licence: - Site Reference: G145 Waste Type: - Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -

---

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

0

Database searched and no data found.

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

0

Database searched and no data found.

3.2 Other Waste Sites

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

0

Database searched and no data found.

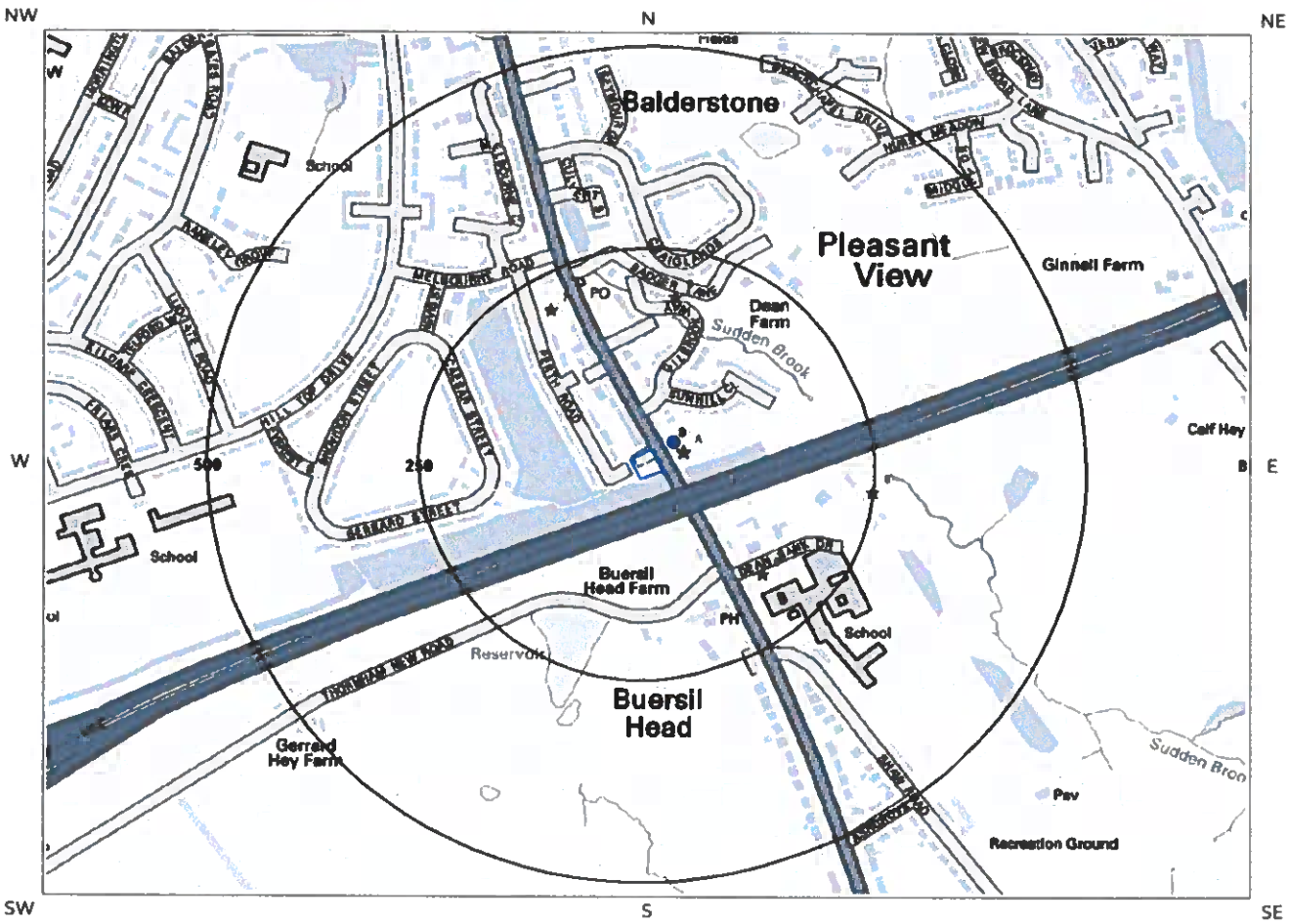
3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

0

Database searched and no data found.

---

4. Current Land Use Map



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Site Outline

Search Buffers (m)
250
500

Current Industrial Sites

Petrol & Fuel Sites

Electricity Transmission Cables

Gas Transmission Pipelines

4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site: 8

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1A	33	NE	Dean Service Station	390725 410598	Oldham Road, Rochdale, OL16 4RH	Petrol and Fuel Stations	Road and Rail
2A	33	NE	B A Motors Ltd	390725 410598	Buersil Service Station, Oldham Road, Rochdale, OL11 2AT	Secondhand Vehicles	Motoring
3A	33	NE	Dean Service Station Ltd	390724 410598	Oldham Road, Rochdale, OL16 4RH	Petrol and Fuel Stations	Road and Rail
4A	33	NE	V W Auto	390724 410598	Oldham Road, Rochdale, OL11 2AT	Vehicle Repair, Testing and Servicing	Repair and Servicing
5	173	SE	Electricity Sub Station	390818 410447	OL16	Electrical Features	Infrastructure and Facilities
6	192	N	Revive	390715 410790	30, Gilbrook Way, Rochdale, OL16 4RT	Vehicle Repair, Testing and Servicing	Repair and Servicing
7	209	NW	D A Wash	390568 410773	Texaco Garage, Oldham Road, Rochdale, OL16 4RH	Vehicle Cleaning Services	Personal, Consumer and Other Services
8	249	E	Tank	390948 410549	OL16	Tanks (Generic)	Industrial Features

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site: 1

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

ID	Distance (m)	Direction	NGR	Company	Address	LPG	Status
9	27	NE	390713 410610	ESSO	Oldham Road, Balderstone, Rochdale, Greater Manchester, OL16 4RH	No	Open

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
HMGDD-DMTN	HUMMOCKY (MOUNDY) GLACIAL DEPOSITS, DEVENSIAN	DIAMICTON

5.3 Bedrock and Solid Geology

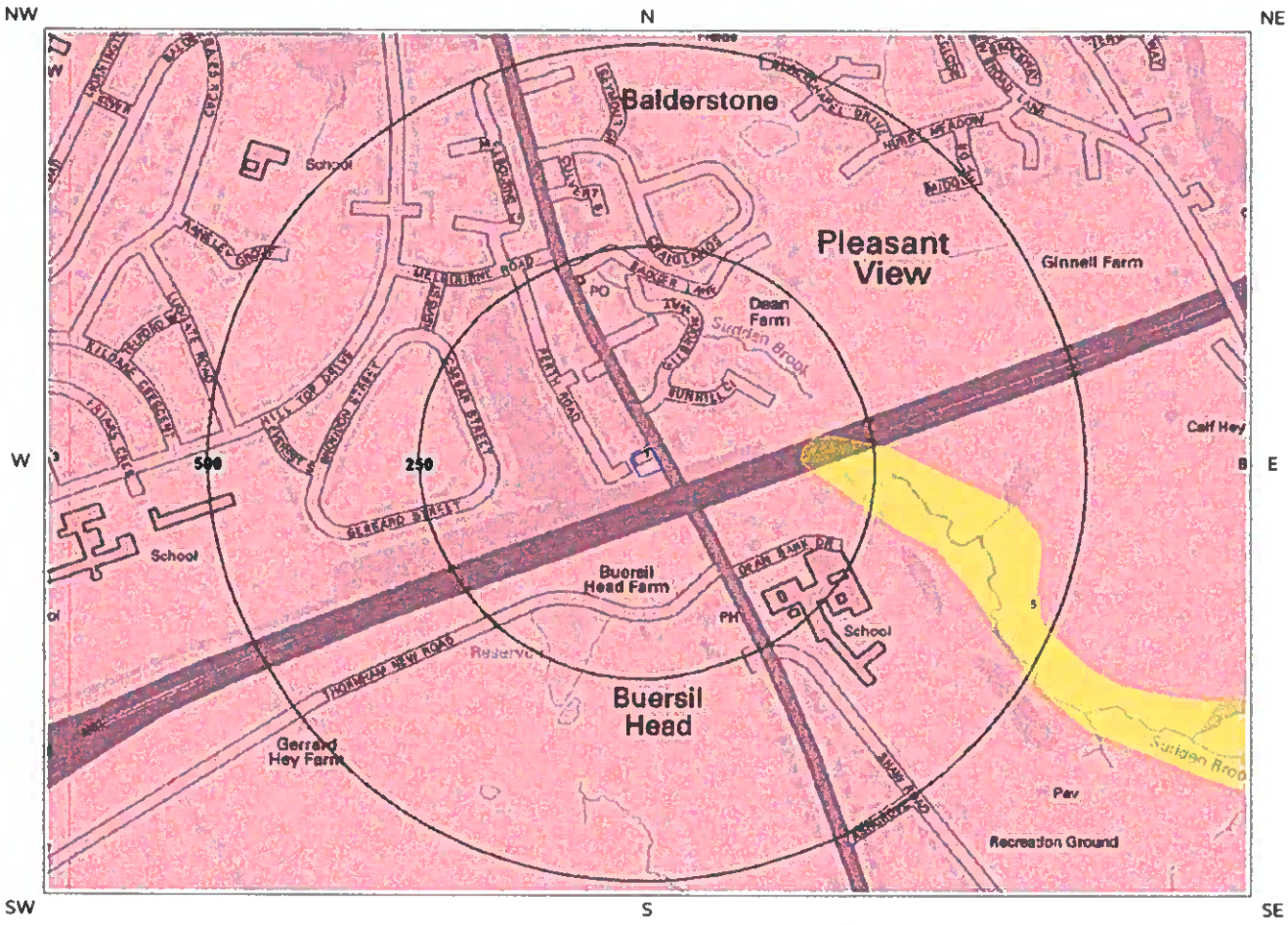
The database has been searched on site, including a 50m buffer.

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



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Site Outline

250 Search Buffers (m)
500

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

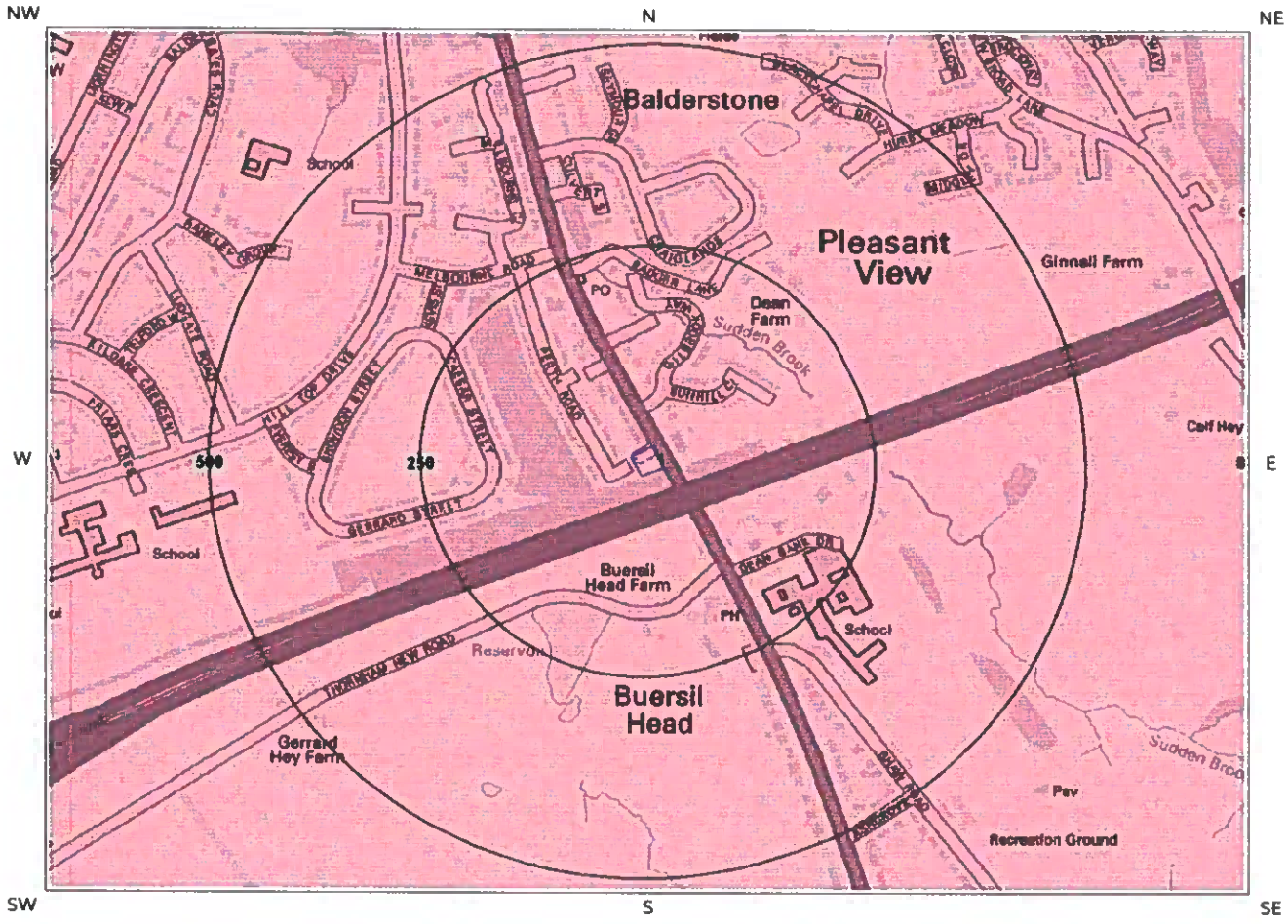
Secondary (B) Aquifer - Lower Permeability Layers

Secondary Aquifer - Undifferentiated Layers

Unproductive

Unknown (lakes and landslip)

6b. Aquifer Within Bedrock Geology and Abstraction Licences



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Site Outline

250 / 500 Search Buffers (m)

Principal Aquifer

Secondary (A) Aquifer - Permeable Layers

Secondary (B) Aquifer - Lower Permeability Layers

Groundwater Abstraction Licence

Secondary Aquifer - Undifferentiated Layers

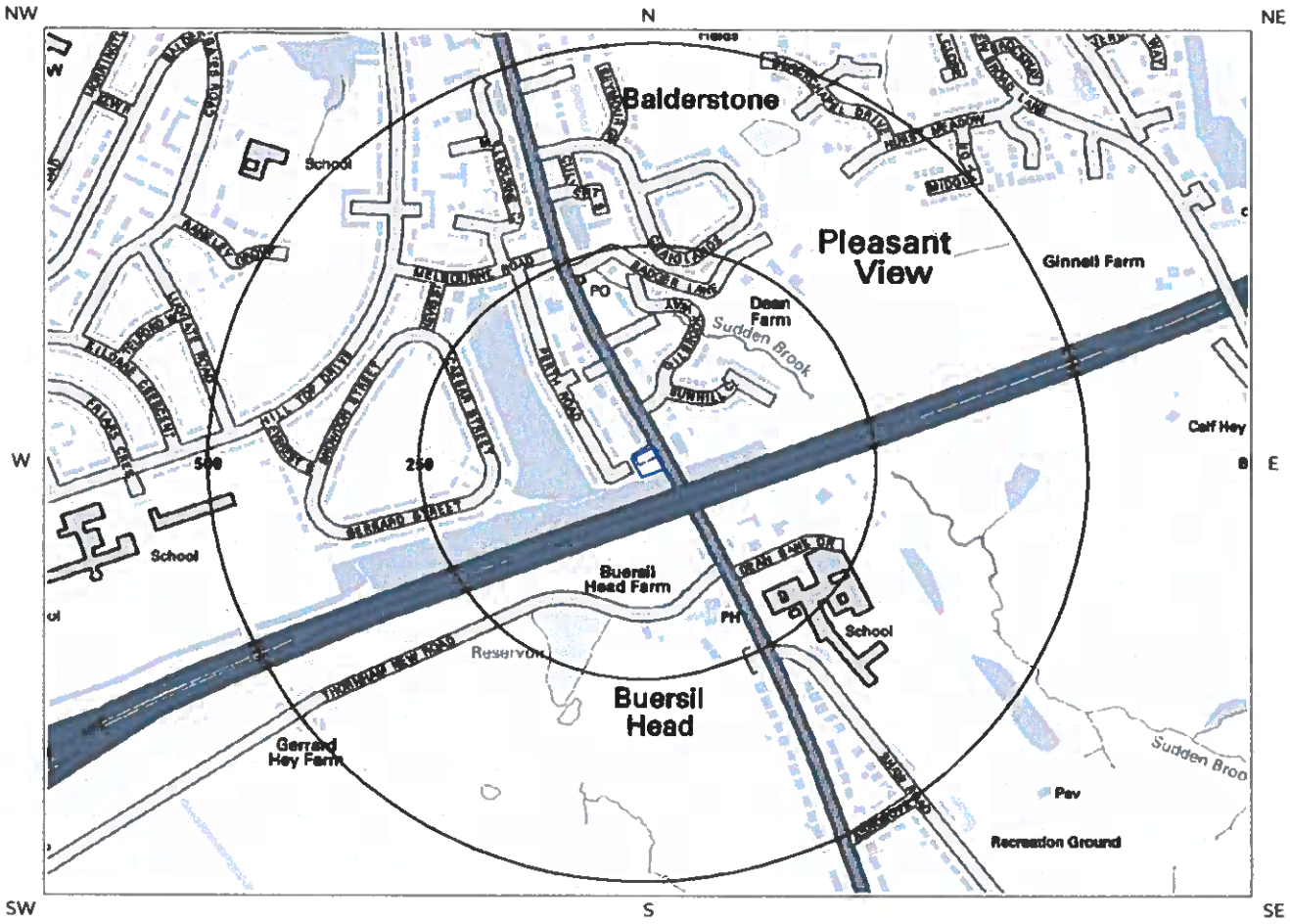
Unproductive

Unknown (lakes and landslip)

Surface Water Abstraction Licence

Groundsure
LOCATION INTELLIGENCE

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



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Site Outline

250 500 Search Buffers (m)

Source Protection Zone 1 - Inner Catchment

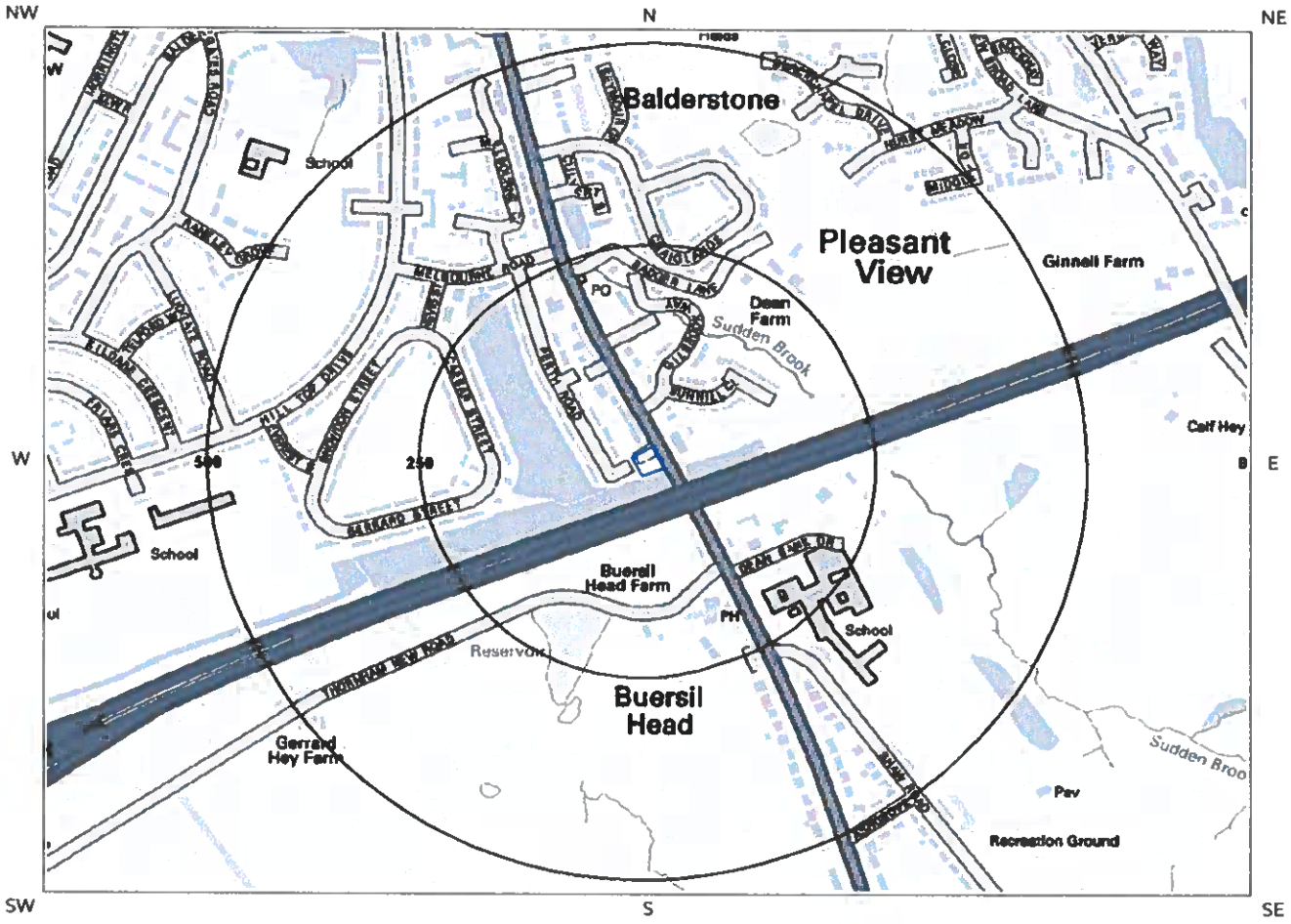
Source Protection Zone 2 - Outer Catchment

Source Protection Zone 3 - Total Catchment

Source Protection Zone 4 - Zone of Special Interest

Potable Water Abstraction Licence

6d. Hydrogeology – Source Protection Zones within confined aquifer



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Site Outline

250 / 500 Search Buffers (m)

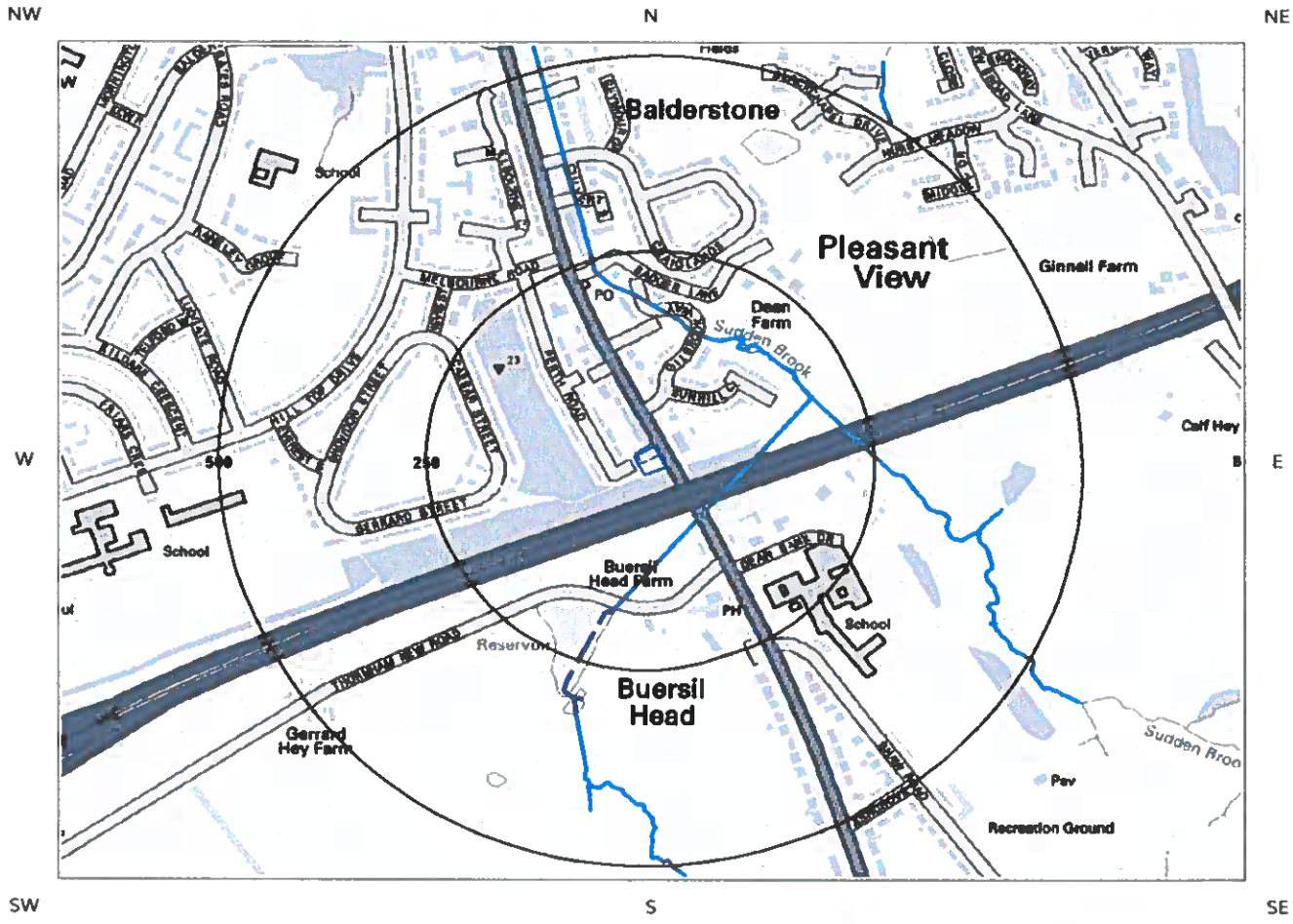
Source Protection Zone 1 - Inner Catchment

Source Protection Zone 2C - Outer Catchment within Confined Aquifer

Source Protection Zone 3C - Total Catchment within Confined Aquifer

Potable Water Abstraction Licence

6e. Hydrology – Watercourse Network and River Quality



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Site Outline

250 Search Buffers (m)
500

Tidal River
Inland River
Underground or Elevated Tidal River
Underground or Elevated Inland River
Foreshore
General Quality Assessment: Chemistry

Canal
Underground or Elevated Canal
Lock or Flight of Locks
Lake, Reservoir, or Marsh
Drain or Transfer
General Quality Assessment: Biology

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
5	164	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

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	1148	NE	391400 411500	Status: Historical Licence No: 2569002060 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "WELL AT CASTLE FARM, LOWER LANE, MILNROW" Data Type: Point Name: SANDERSON	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 11/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/02/1966 Version End Date:
Not shown	1148	NE	391400 411500	Status: Historical Licence No: 2569002060 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: WELL AT CASTLE FARM, LOWER LANE, MILNROW Data Type: Point Name: SANDERSON	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 11/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 11/02/1966 Version End Date:
Not shown	1219	NE	391800 411100	Status: Historical Licence No: 2569002086 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: WELL AT BROADSHAW FARM, MILNROW, ROCHDALE Data Type: Point Name: CROSTON	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 02/02/1966 Version End Date:
Not shown	1219	NE	391800 411100	Status: Historical Licence No: 2569002086 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "WELL AT BROADSHAW FARM, MILNROW, ROCHDALE" Data Type: Point Name: CROSTON	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 02/02/1966 Version End Date:
Not shown	1228	NE	391400 411600	Status: Historical Licence No: 2569002159 Details: General Farming & Domestic Direct Source: Ground Water - North West Region Point: "WELL AT FARM, LOWER LANE, MILNROW, ROCHDALE" Data Type: Point Name: HARTLE	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/02/1966 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1228	NE	391400 411600	Status: Historical Licence No: 2569002159 Details: General Farming & Domestic Direct Source: Ground Water - North West Region Point: WELL AT FARM, LOWER LANE, MILNROW, ROCHDALE Data Type: Point Name: HARTLE	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 01/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/02/1966 Version End Date:
Not shown	1228	NE	391400 411600	Status: Historical Licence No: 2569002159 Details: General Farming & Domestic Direct Source: Ground Water - North West Region Point: WELL AT FARM LOWER LANE MILNROW ROCHDALE Data Type: Point Name: HARTLE	Annual Volume (m^3): 5123.34 Max Daily Volume (m^3): 31.822 Original Application No: - Original Start Date: 01/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2007 Version End Date:
Not shown	1500	E	392200 410600	Status: Historical Licence No: 2569002204 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "BOREHOLE AT PREMISES, OLD BARN FARM,BURNEDGE, ROCHDALE" Data Type: Point Name: CRYER	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 24/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 24/04/1969 Version End Date:
Not shown	1500	E	392200 410600	Status: Historical Licence No: 2569002204 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT PREMISES, OLD BARN FARM,BURNEDGE, ROCHDALE Data Type: Point Name: CRYER	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 24/04/1969 Expiry Date: - Issue No: 100 Version Start Date: 24/04/1969 Version End Date:
Not shown	1706	SW	389800 409100	Status: Historical Licence No: 2569005028 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "SPRING FED WELL AT CINDER HILL FARM, SLATTOCKS, MIDDLETON, M" Data Type: Point Name: H DH MD AND MW TETLOW	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 20/01/1966 Version End Date:
Not shown	1706	SW	389800 409100	Status: Historical Licence No: 2569005021 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - North West Region Point: "SPRING FED WELL AT TANDLE HILL TAVERN, THORNHAM FOLD, N" Data Type: Point Name: J W LEES & CO BREWERS LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 16/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/02/1966 Version End Date:

ID	Distance (m)	Direction	NGR	Details	
Not shown	1706	SW	389800 409100	Status: Historical Licence No: 2569005021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: SPRING FED WELL AT TANDLE HILL TAVERN, THORNHAM FOLD, N Data Type: Point Name: J W LEES & CO BREWERS LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 16/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/02/1966 Version End Date:
Not shown	1706	SW	389800 409100	Status: Historical Licence No: 2569005028 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: SPRING FED WELL AT CINDER HILL FARM, SLATTOCKS, MIDDLETON, M Data Type: Point Name: H DH MD AND MW TETLOW	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 20/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 20/01/1966 Version End Date:
Not shown	1759	SW	389700 409100	Status: Historical Licence No: 2569005017 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: SPRING FED WELL AT THORNHAM FOLD FARM, SLATTOCKS, MIDDLET Data Type: Point Name: GREENWOOD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 16/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/02/1966 Version End Date:
Not shown	1759	SW	389700 409100	Status: Historical Licence No: 2569005017 Details: General use relating to Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: "SPRING FED WELL AT THORNHAM FOLD FARM, SLATTOCKS, MIDDLET" Data Type: Point Name: GREENWOOD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 16/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 16/02/1966 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site — Identified

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

ID	Distance (m)	Direction	NGR	Details	
Not shown	1295	N	390200 411800	Status: Historical Licence No: 2569002178 Details: Boiler Feed Direct Source: "Surface, Non-Tidal - North West Region" Point: "CATCHPIT FED BY SURFACE DRAINAGE AT PREMISES, ROCHDALE" Data Type: Point Name: DUNPHY COMBUSTION LTD.	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 12/02/1991 Version End Date:
Not	1295	N	390200	Status: Active	Annual Volume (m^3): 2318.46

ID	Distance (m)	Direction	NGR	Details	
shown			411800	Licence No: 2569002178 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: CATCHPIT FED BY SURFACE DRAINAGE AT PREMISES, ROCHDALE Data Type: Point Name: DUNPHY COMBUSTION LTD	Max Daily Volume (m^3): 34.095 Application No: - Original Start Date: 18/02/1966 Expiry Date: - Issue No: 101 Version Start Date: 12/02/1991 Version End Date:
Not shown	1493	NW	390070 411960	Status: Historical Licence No: 2569002107 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: ROCHDALE CANAL AT QUEENSWAY,ROCHDALE Data Type: Point Name: SEALOCRETE PLA LTD	Annual Volume (m^3): 10455.8 Max Daily Volume (m^3): 45.46 Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date:
Not shown	1493	NW	390070 411960	Status: Historical Licence No: 2569002107 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: ROCHDALE CANAL AT QUEENSWAY,ROCHDALE Data Type: Point Name: SEALOCRETE PLA LTD	Annual Volume (m^3): 10455.8 Max Daily Volume (m^3): 45.46 Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/2008 Version End Date:
Not shown	1493	NW	390070 411960	Status: Historical Licence No: 2569002107 Details: Boiler Feed Direct Source: "Surface, Non-Tidal - North West Region" Point: "ROCHDALE CANAL AT QUEENSWAY,ROCHDALE" Data Type: Point Name: SEALOCRETE PLA LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 20/12/1993 Version End Date:
Not shown	1493	NW	390070 411960	Status: Historical Licence No: 2569002107 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "ROCHDALE CANAL AT QUEENSWAY,ROCHDALE" Data Type: Point Name: SEALOCRETE PLA LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 02/02/1966 Expiry Date: - Issue No: 100 Version Start Date: 20/12/1993 Version End Date:
Not shown	1743	N	390300 412300	Status: Historical Licence No: 2569002076 Details: Boiler Feed Direct Source: Surface, Non-Tidal - North West Region Point: ROCHDALE CANAL AT ROCHDALE, LANCS Data Type: Point Name: J & J MAKIN CONVERTORS LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Application No: - Original Start Date: 18/01/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/04/1993 Version End Date:

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site — Identified

The following Potable Water Abstraction Licences records are represented as points, lines and regions on the SPZ and Potable Water Abstraction Licences Map (6c):

ID	Distance (m)	Direction	NGR	Details	
Not shown	1706	SW	389800 409100	Status: Historical Licence No: 2569005021 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - North West Region Point: SPRING FED WELL AT TANDLE HILL TAVERN, THORNHAM FOLD, N Data Type: Point Name: J W LEES & CO BREWERS LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 16/02/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1706	SW	389800 409100	Status: Historical Licence No: 2569005021 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - North West Region Point: "SPRING FED WELL AT TANDLE HILL TAVERN, THORNHAM FOLD, N" Data Type: Point Name: J W LEES & CO BREWERS LTD	Annual Volume (m^3): - Max Daily Volume (m^3): - Original Application No: - Original Start Date: 16/02/1966 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:

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.
228	SW	Minor Aquifer/High Leaching Potential	H2	Deep, permeable, coarse textured soils which readily transmit a wide range of pollutants because of their rapid drainage and low attenuation potential.
246	NE	Minor Aquifer/High Leaching Potential	H2	Deep, permeable, coarse textured soils which readily transmit a wide range of pollutants because of their rapid drainage and low attenuation potential.

6.9 River Quality

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

6.9.1 Biological Quality:

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

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

ID	Distance (m)	Direction	NGR	River Quality Grade	Biological Quality Grade				
					2005	2006	2007	2008	2009
23	198	NW	390500 410700	River Name: Sudden Bk Reach: Qsl At Balderstone To Roch End/Start of Stretch: Start of Stretch NGR	E	E	E	D	D

6.9.2 Chemical Quality:

Database searched and no data found.

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	72 SE	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
5	72 SE	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
2	153 NE	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.5
3	153 N	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	153 NE	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.5
7	153 N	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	156 N	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
8	156 N	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
5	167 N	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
9	167 N	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	175 S	Not specified	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 30.0
10	175 S	Not specified	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 30.0
7	195 NE	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
11	195 NE	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	199 N	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
12	199 N	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
9	235 N	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
13	235 N	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
10	268 E	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
14	268 E	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
11	296 S	Not specified	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 13.1
Not shown	296	Not specified	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	S			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 13.1
12	298 S	Not specified	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 10.2
Not shown	298 S	Not specified	Lake, loch or reservoir.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 10.2
13	316 S	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	316 S	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
14	383 S	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	383 S	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
15	384 E	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	384 E	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
16	385 E	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
Not shown	385 E	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
17	396 S	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	396 S	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): Not Provided
18	402 S	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	402 S	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
19	408 E	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	408 E	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
20	435 SE	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	435 SE	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
21	442 SE	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	442 SE	Sudden Brook	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
22	499 NE	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	499 NE	Not specified	Inland river not influenced by normal tidal action.	Catchment Area: Mersey Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

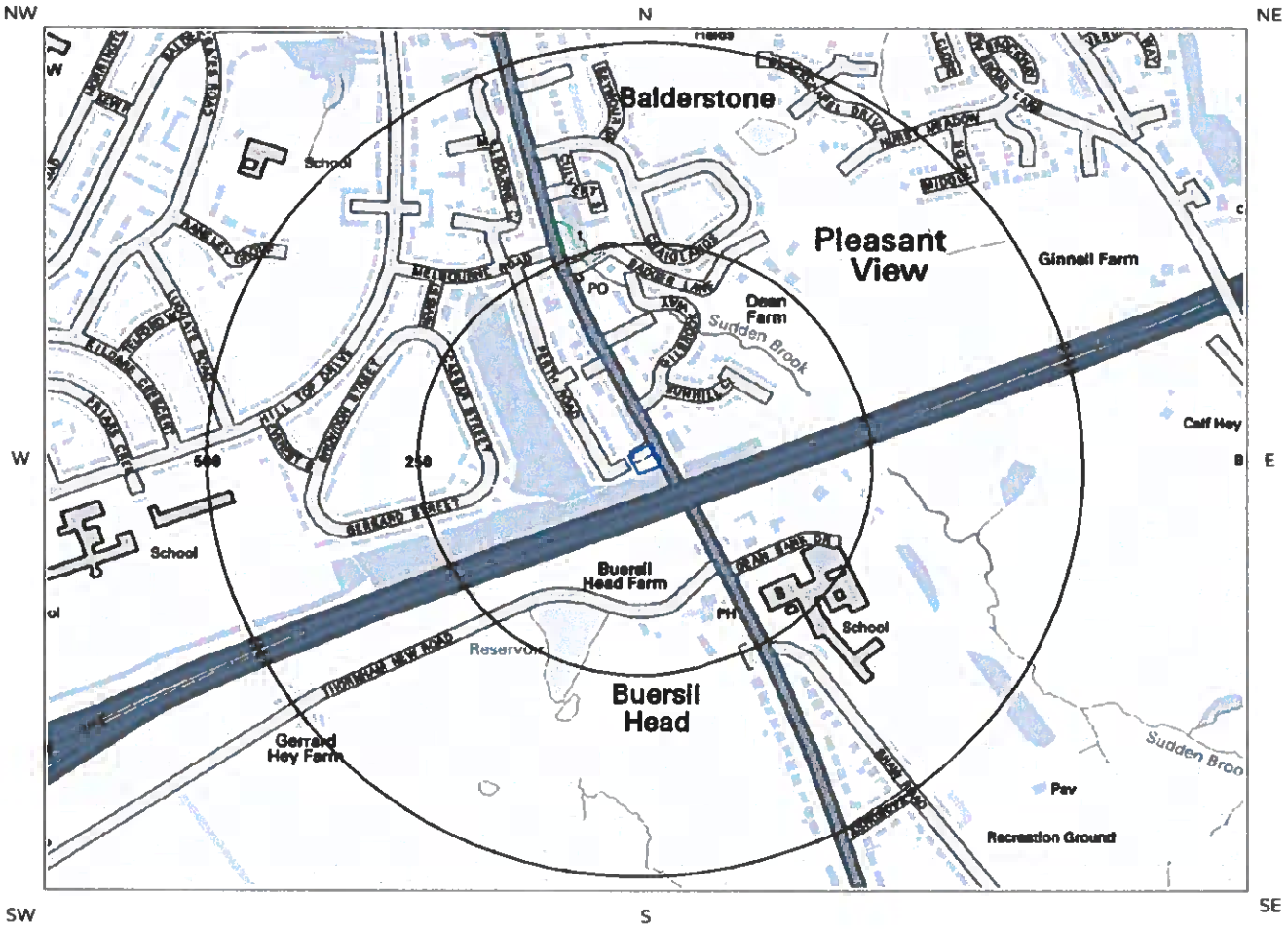
6.11 Surface Water Features

Surface water features within 250m of the study site | Identified

The following surface water records are not represented on mapping:

Distance (m)	Direction
172	S

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



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Site Outline

Search Buffers (m)

Zone 2 Floodplain

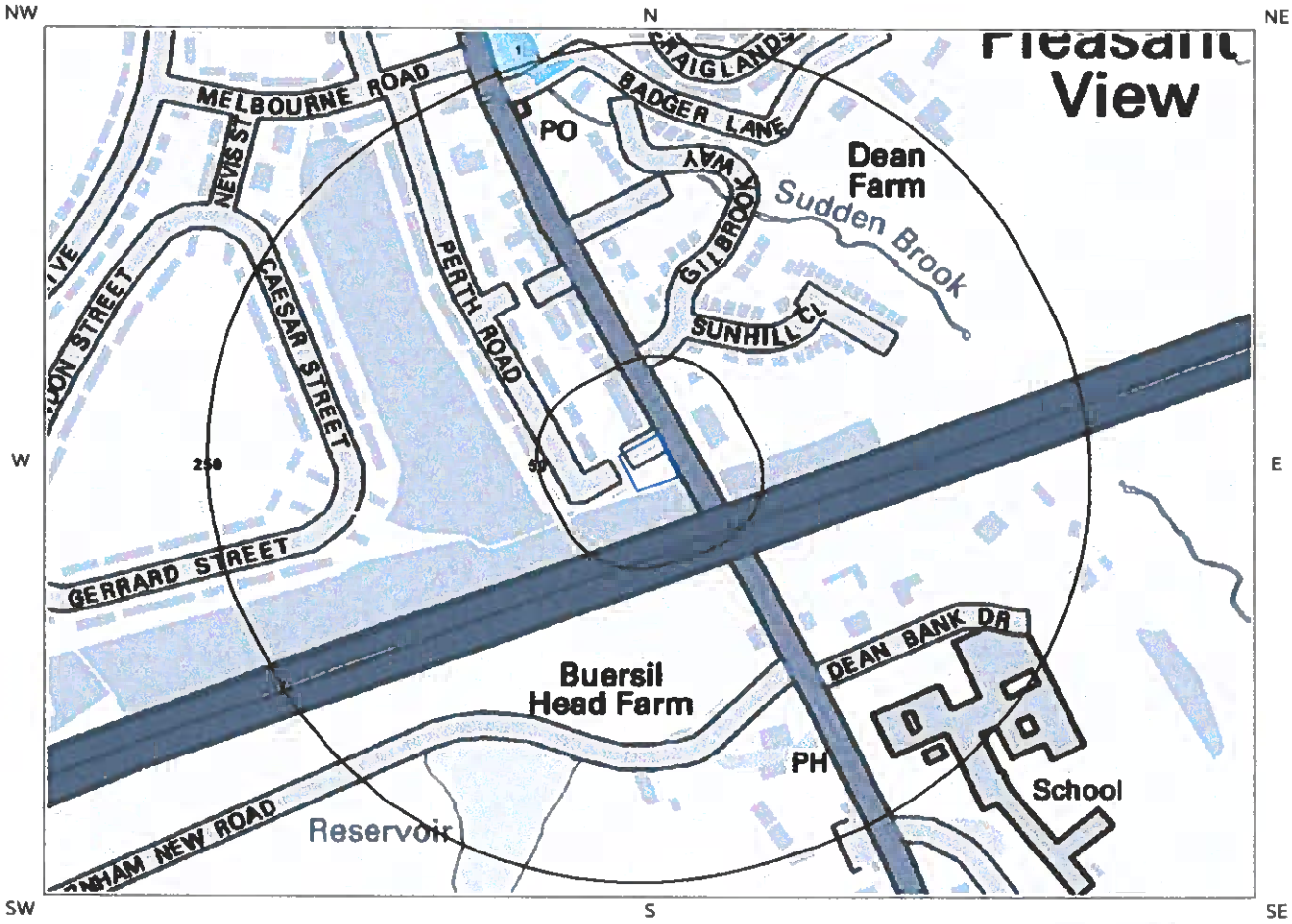
Zone 3 Floodplain

Flood Defences

Area used for Flood Storage

Area Benefiting from Flood Defences

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



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Site Outline

100 / 250 Search Buffers (m)

RoFRaS Rating

- Very Low
- Low
- Medium
- High

Report Reference: GS-5525334
Client Reference: 1336_Shockledge

7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m — 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:

ID	Distance (m)	Direction	Update	Type
1	235	N	29-May-2018	Zone 2 - (Fluvial /Tidal Models)

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.

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 below Surface

Where potential for groundwater flooding of property situated below ground level is indicated, this means that given the geological conditions there may be a groundwater flooding hazard to basements and other below surface infrastructure. Unless other relevant information, e.g. records of previous flooding, suggests groundwater flooding has occurred before in this area you need take no further action in relation to groundwater flooding hazard. If there are records of previous incidences of groundwater flooding, then is recommended that other information e.g. rainfall history, property type, and land drainage information in addition to previous records of flooding be investigated in order to establish relative, but not absolute, risk of groundwater flooding.

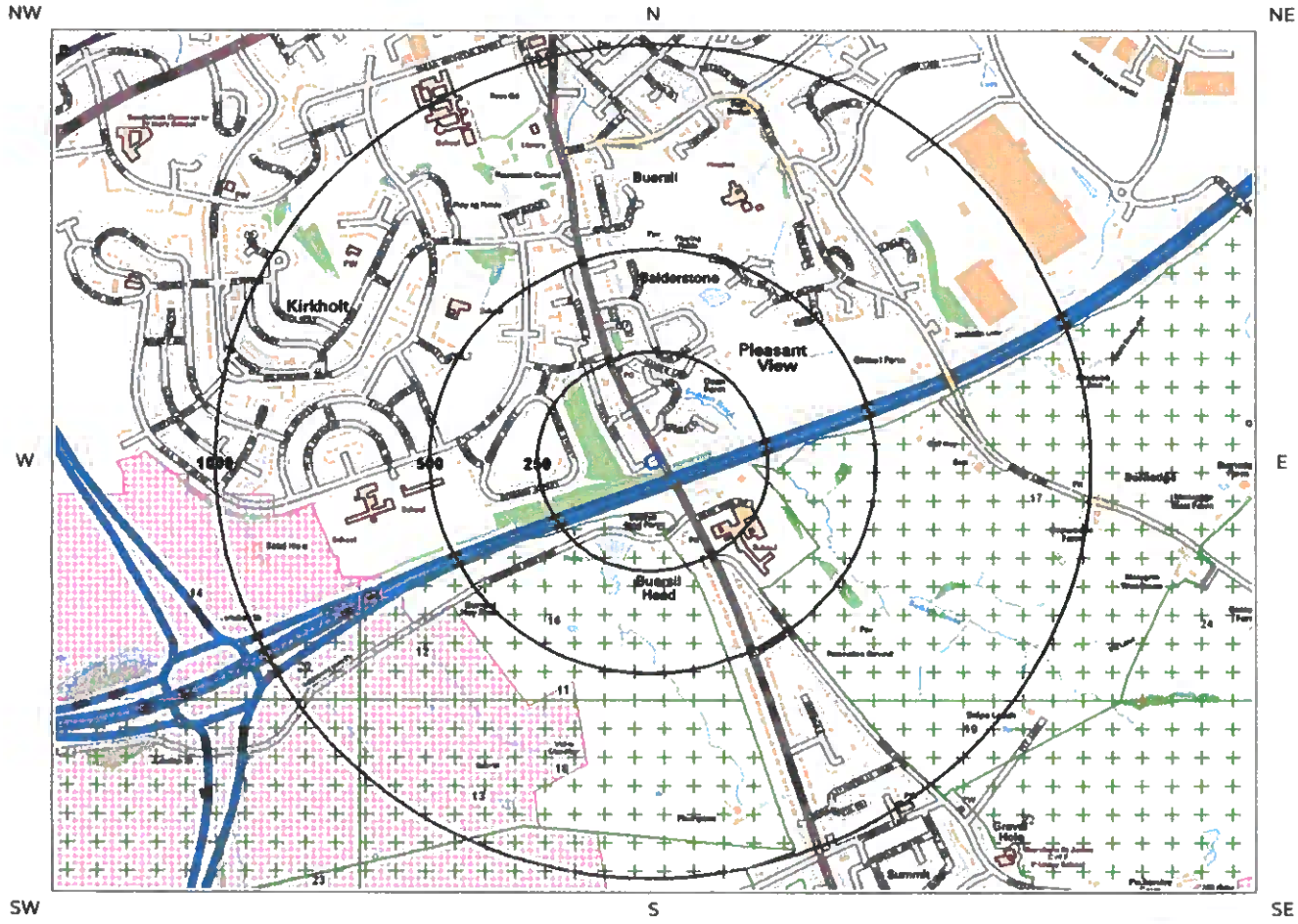
7.8 Groundwater Flooding Confidence Areas

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



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Site Outline

100 250 Search Buffers (m)

- AONB
- National Park
- SSSI
- Special Protection Areas
- Nitrate Vulnerable Zones
- Green Belt
- Environmentally Sensitive Areas
- Special Areas of Conservation
- World Heritage Sites
- Nitrate Sensitive Areas
- Ancient Woodland
- National Nature Reserve
- Local Nature Reserves
- Ramsar Sites

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:

5

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
Not shown	1488	NW	Rochdale Canal	Natural England
Not shown	1499	NW	Rochdale Canal	Natural England
8A	1546	NW	Rochdale Canal	Natural England
9B	1652	NW	Rochdale Canal	Natural England
Not shown	1810	NW	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:

5

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
Not shown	1488	NW	Rochdale Canal	Natural England
Not shown	1499	NW	Rochdale Canal	Natural England
3A	1546	NW	Rochdale Canal	Natural England

ID	Distance (m)	Direction	SAC Name	Data Source
48	1652	NW	Rochdale Canal	Natural England
Not shown	1810	NW	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:

0

Database searched and no data found.

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

0

Database searched and no data found.

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:

5

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
11	549	S	Existing	DEFRA
12	569	SW	Existing	DEFRA
13	590	S	Existing	DEFRA
14	722	SW	Existing	DEFRA
15	880	SW	Existing	DEFRA

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

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

ID	Distance	Direction	Green Belt Name	Local Authority Name
16	107	S	Liverpool, Manchester and West Yorks Greenbelt	Rochdale
17	213	E	Liverpool, Manchester and West Yorks Greenbelt	Rochdale
18	565	S	Liverpool, Manchester and West Yorks	Rochdale

			Greenbelt	
19	723	SE	Liverpool, Manchester and West Yorks Greenbelt	Rochdale
20	759	SW	Liverpool, Manchester and West Yorks Greenbelt	Rochdale
21	880	SW	Liverpool, Manchester and West Yorks Greenbelt	Rochdale
22	895	S	Liverpool, Manchester and West Yorks Greenbelt	Oldham District (B)
23	1178	SW	Liverpool, Manchester and West Yorks Greenbelt	Oldham District (B)
24	1201	SE	Liverpool, Manchester and West Yorks Greenbelt	Oldham District (B)
Not shown	1549	SW	Liverpool, Manchester and West Yorks Greenbelt	Rochdale
Not shown	1858	S	Liverpool, Manchester and West Yorks Greenbelt	Oldham District (B)

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 — Low

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

Hazard
Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.

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

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