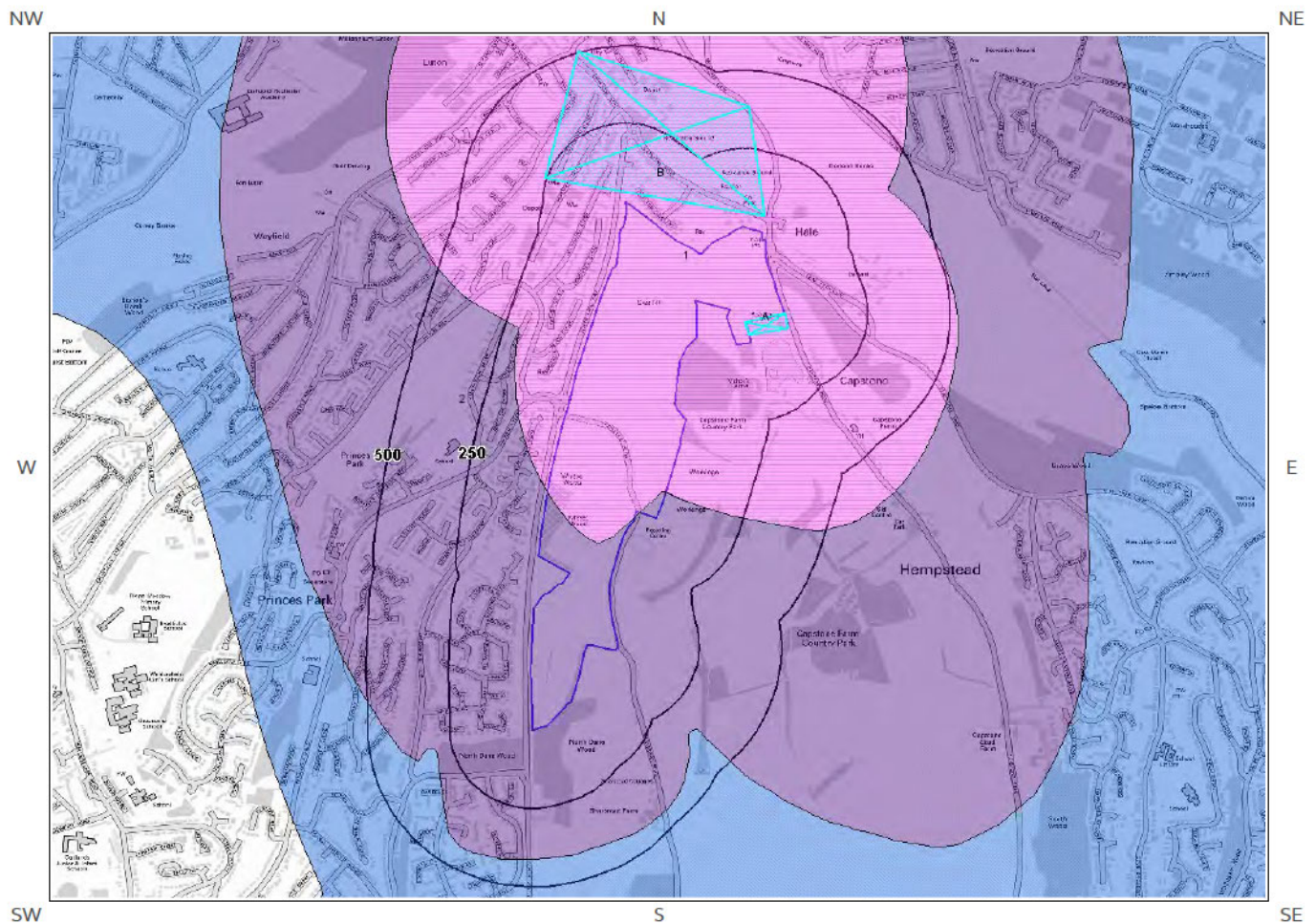
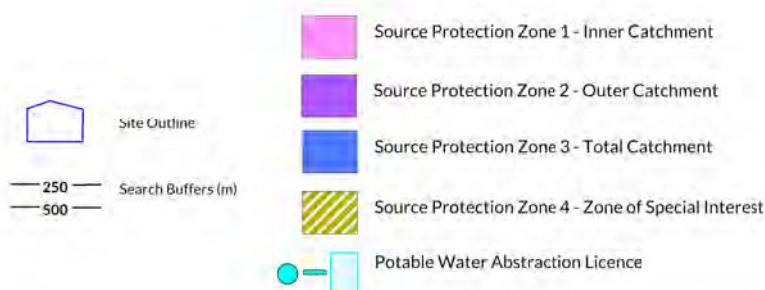


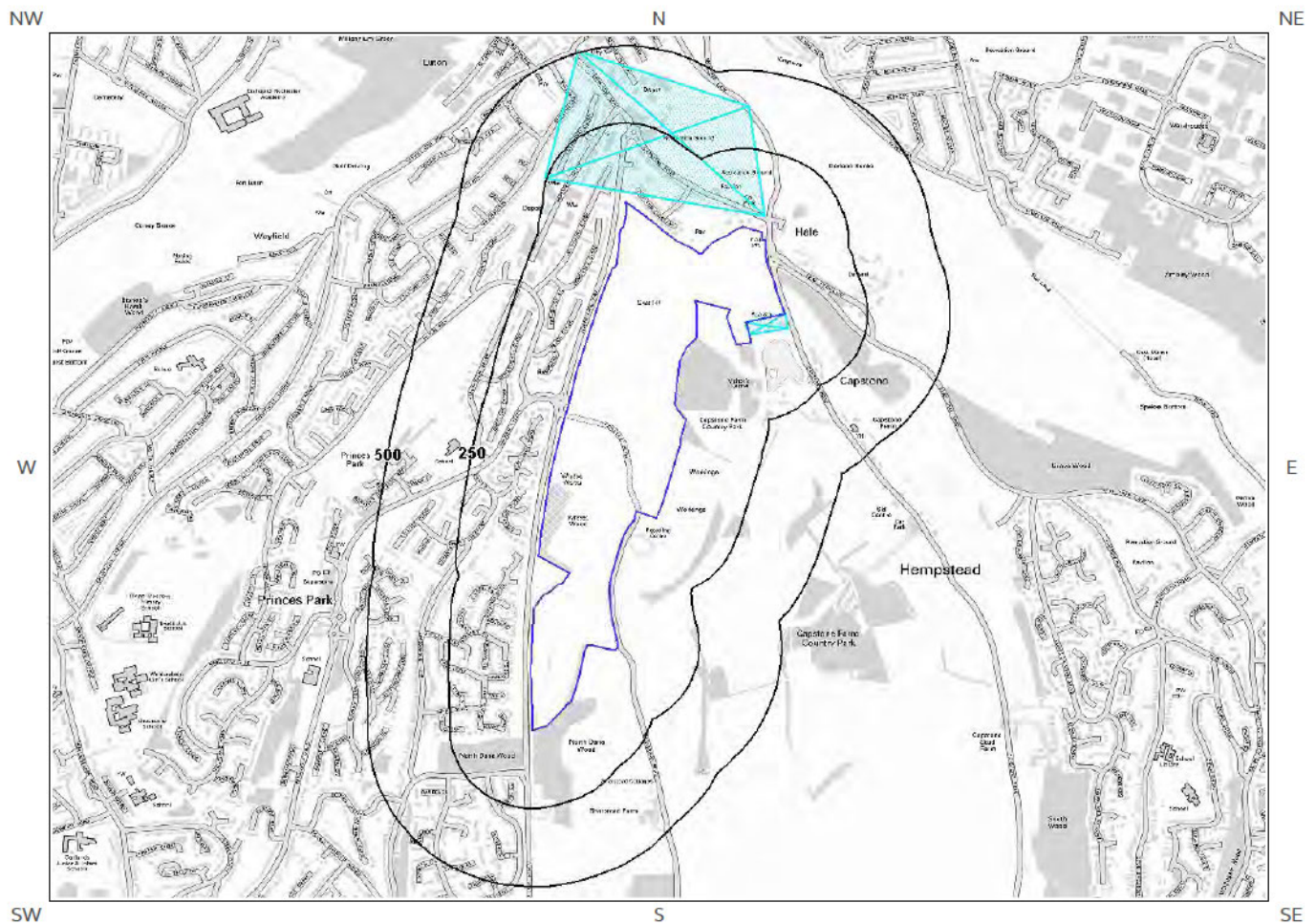
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



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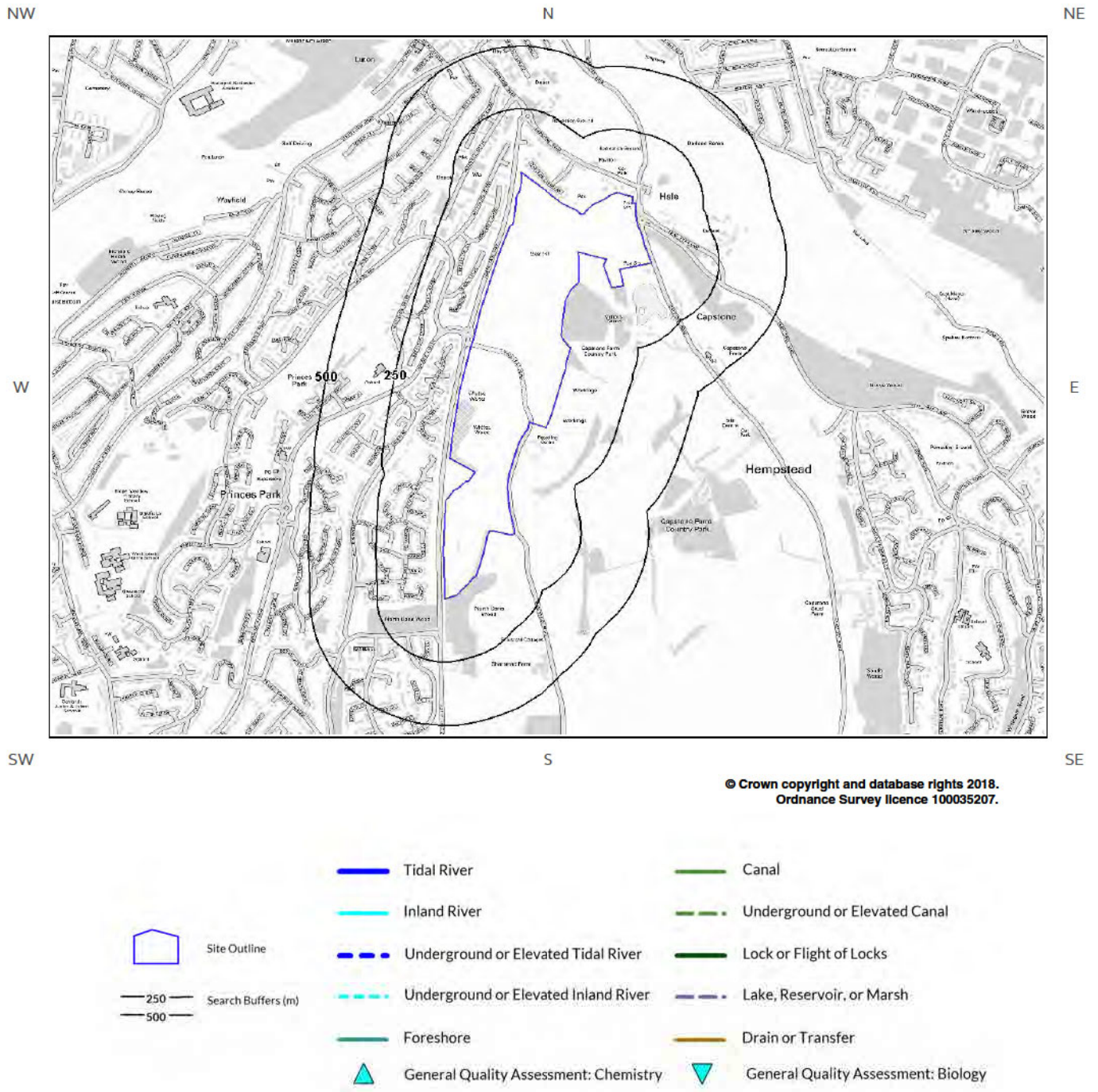
6d. Hydrogeology – Source Protection Zones within confined aquifer



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6e. Hydrology – Watercourse Network and River Quality



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 (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
2	0	On Site	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
11	0	On Site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
12	0	On Site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
13	62	NE	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
3	122	SE	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
4	326	NW	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
5	329	W	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
6	446	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
14	474	SE	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	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers
2	0	On Site	Principal	Geology of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale. Generally principal aquifers were previously major aquifers

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
3A	0	On Site	577880 165530	<p>Status: Historical Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Capstone Ps (chalk) Data Type: Region Name: Southern Water Services Plc</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 169/0639C Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 24/3/1986 Version End Date:</p>
4A	0	On Site	577880 165530	<p>Status: Historical Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Capstone Ps (lower Greensand) Data Type: Region Name: Southern Water Services Plc</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 169/0639C Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 24/3/1986 Version End Date:</p>
5A	0	On Site	577880 165530	<p>Status: Active Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Capstone Ps (chalk) Data Type: Region Name: Southern Water Services Ltd</p> <p>Annual Volume (m³): 9300000 Max Daily Volume (m³): 51000 Original Application No: 169/0639C Original Start Date: 24/3/1986 Expiry Date: - Issue No: 100 Version Start Date: 29/11/2006 Version End Date:</p>

ID	Distance (m)	Direction	NGR	Details	
6A	0	On Site	577880 165530	Status: Active Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Capstone Ps (lower Greensand) Data Type: Region Name: Southern Water Services Ltd	Annual Volume (m³): 9300000 Max Daily Volume (m³): 51000 Original Application No: 169/0639C Original Start Date: 24/3/1986 Expiry Date: - Issue No: 100 Version Start Date: 29/11/2006 Version End Date:
7B	30	N	577370 166400	Status: Historical Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Luton Ps Data Type: Region Name: Southern Water Services Plc	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 169/0639C Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 24/3/1986 Version End Date:
8B	30	N	577370 166400	Status: Active Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Luton Ps Data Type: Region Name: Southern Water Services Ltd	Annual Volume (m³): 9300000 Max Daily Volume (m³): 51000 Original Application No: 169/0639C Original Start Date: 24/3/1986 Expiry Date: - Issue No: 100 Version Start Date: 29/11/2006 Version End Date:
Not shown	1533	W	575280 165270	Status: Historical Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Snodhurst Ps Data Type: Region Name: Southern Water Services Plc	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 169/0639C Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 24/3/1986 Version End Date:
Not shown	1533	W	575280 165270	Status: Active Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Snodhurst Ps Data Type: Region Name: Southern Water Services Ltd	Annual Volume (m³): 9300000 Max Daily Volume (m³): 51000 Original Application No: 169/0639C Original Start Date: 24/3/1986 Expiry Date: - Issue No: 100 Version Start Date: 29/11/2006 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

None identified

Database searched and no data found.

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
4A	0	On Site	577880 165530	Status: Historical Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Capstone Ps (chalk) Data Type: Region Name: Southern Water Services Plc Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 169/0639C Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
5A	0	On Site	577880 165530	Status: Historical Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Capstone Ps (lower Greensand) Data Type: Region Name: Southern Water Services Plc Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 169/0639C Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
6A	0	On Site	577880 165530	Status: Active Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Capstone Ps (chalk) Data Type: Region Name: Southern Water Services Ltd Annual Volume (m³): 9300000 Max Daily Volume (m³): 51000 Original Application No: 169/0639C Original Start Date: 24/3/1986 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
7A	0	On Site	577880 165530	Status: Active Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Capstone Ps (lower Greensand) Data Type: Region Name: Southern Water Services Ltd Annual Volume (m³): 9300000 Max Daily Volume (m³): 51000 Original Application No: 169/0639C Original Start Date: 24/3/1986 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
8B	30	N	577370 166400	Status: Historical Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Luton Ps Data Type: Region Name: Southern Water Services Plc Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 169/0639C Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
9B	30	N	577370 166400	Status: Active Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Luton Ps Data Type: Region Name: Southern Water Services Ltd Annual Volume (m³): 9300000 Max Daily Volume (m³): 51000 Original Application No: 169/0639C Original Start Date: 24/3/1986 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1533	W	575280 165270	Status: Historical Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Snodhurst Ps Data Type: Region Name: Southern Water Services Plc Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: 169/0639C Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1533	W	575280 165270	<div> <div> Status: Active Licence No: 9/40/02/0236/G Details: Potable Water Supply - Direct Direct Source: Southern Region Groundwater Point: Boreholes At Snodhurst Ps Data Type: Region Name: Southern Water Services Ltd </div> <div> Version End Date: Annual Volume (m³): 9300000 Max Daily Volume (m³): 51000 Original Application No: 169/0639C Original Start Date: 24/3/1986 Expiry Date: - Issue No: 100 Version Start Date: Version End Date: </div> </div>

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

Identified

The following Source Protection Zones records are represented on the SPZ and Potable Water Abstraction Map (6c):

ID	Distance (m)	Direction	Zone	Description
1	0	On Site	1	Inner catchment
2	0	On Site	2	Outer catchment
3	299	W	3	Total catchment

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	Major Aquifer/Intermediate Leaching Potential	I1	Soils which can possibly transmit a wide range of pollutants.
0	On Site	Major Aquifer/High Leaching Potential	H1	Soils which readily transmit liquid discharges because they are shallow or susceptible to rapid flow directly to rock, gravel or groundwater.
0	On Site	Major 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.
67	W	Major Aquifer/High Leaching Potential	H1	Soils which readily transmit liquid discharges because they are shallow or susceptible to rapid flow directly to rock, gravel or groundwater.
384	SE	Major Aquifer/Intermediate Leaching Potential	I1	Soils which can possibly transmit a wide range of pollutants.

6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site None identified

6.9.1 Biological Quality:

Database searched and no data found.

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

Database searched and no data found.

6.11 Surface Water Features

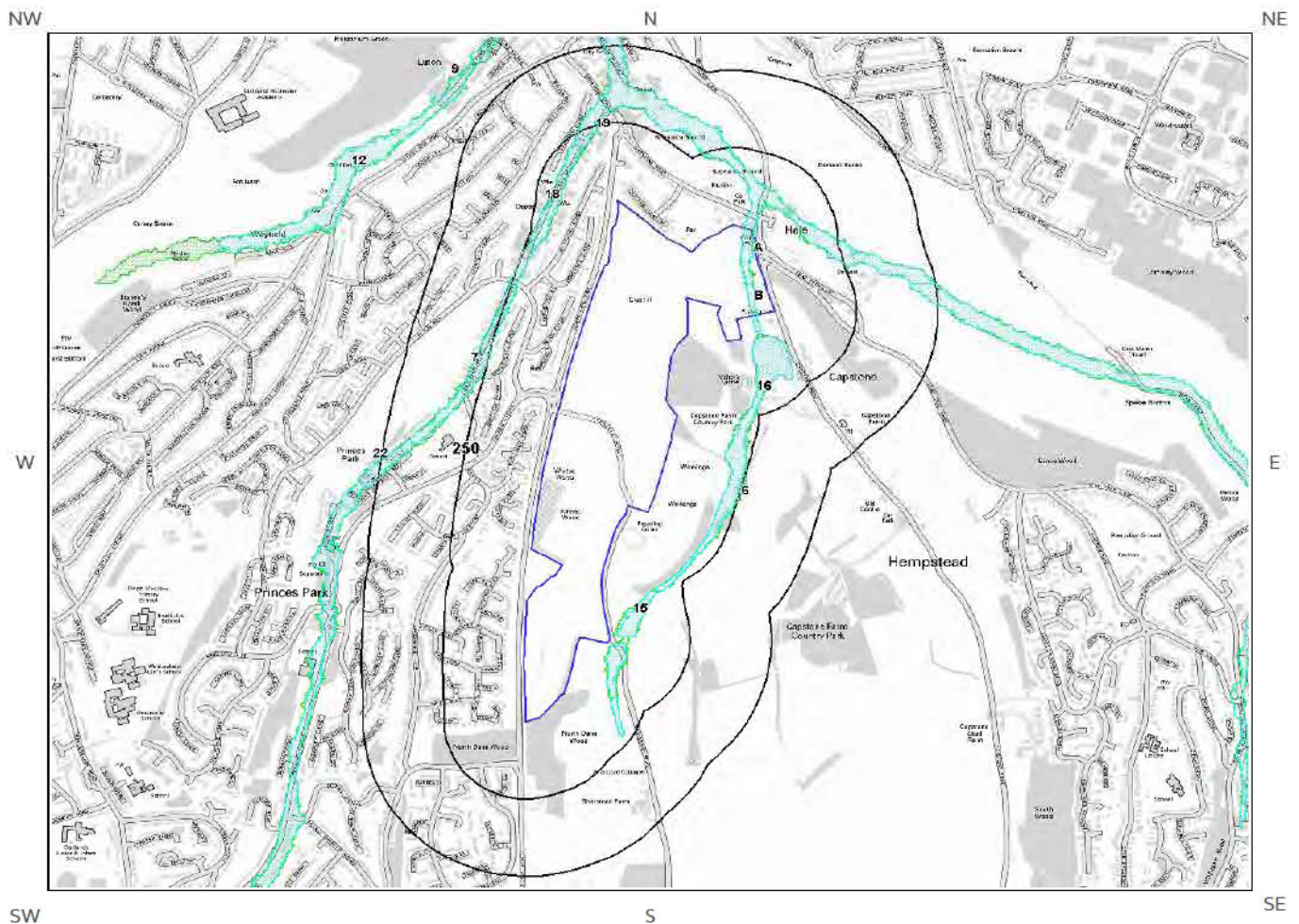
Surface water features within 250m of the study site

Identified

The following surface water records are not represented on mapping:

Distance (m)	Direction
39	SE
198	SE
209	SE

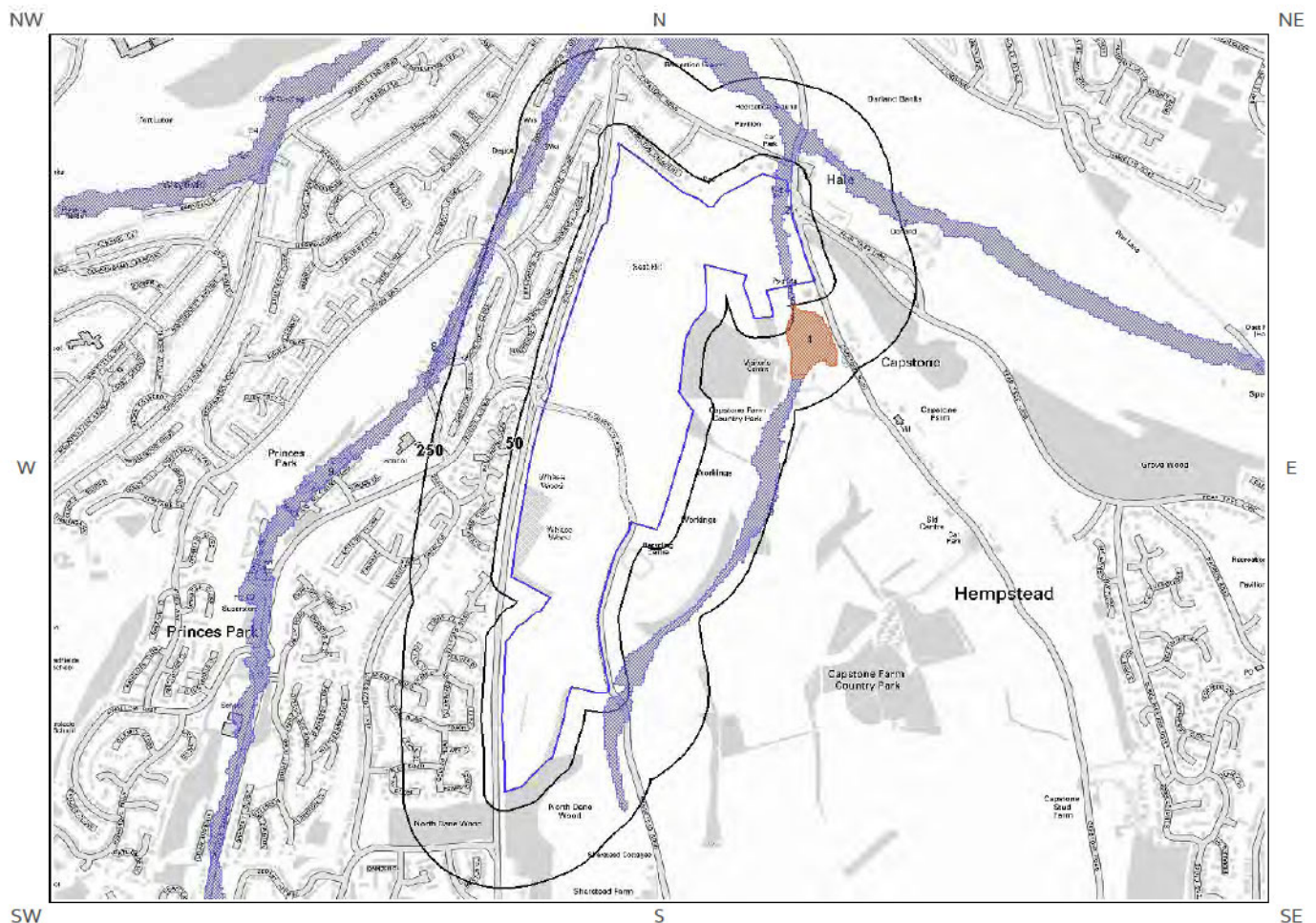
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



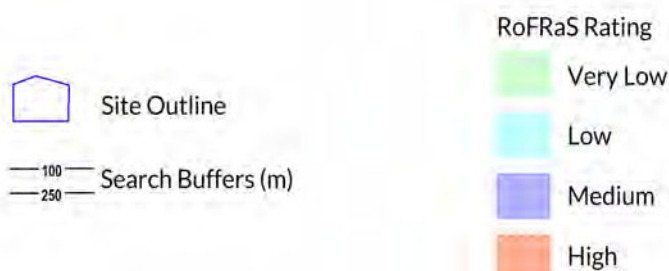
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7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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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
1A	0	On Site	29-May-2018	Zone 2 - (Fluvial /Tidal Models)
2	0	On Site	29-May-2018	Zone 2 - (Fluvial /Tidal Models)
3B	0	On Site	29-May-2018	Zone 2 - (Fluvial /Tidal Models)
4	12	SE	29-May-2018	Zone 2 - (Fluvial /Tidal Models)
5C	228	W	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

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.

ID	Distance (m)	Direction	Update	Type
1A	0	On Site	30-May-2018	Zone 3 - (Fluvial Models)
2	0	On Site	30-May-2018	Zone 3 - (Fluvial Models)
3B	0	On Site	30-May-2018	Zone 3 - (Fluvial Models)
4	12	SE	30-May-2018	Zone 3 - (Fluvial Models)
5C	26	E	30-May-2018	Zone 3 - (Fluvial Models)
	38	E	30-May-2018	Zone 3 - (Fluvial Models)
	168	E	30-May-2018	Zone 3 - (Fluvial Models)
	214	W	30-May-2018	Zone 3 - (Fluvial Models)

227	N	30-May-2018	Zone 3 - (Fluvial Models)
230	W	30-May-2018	Zone 3 - (Fluvial Models)

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

Highest risk of flooding onsite

Medium

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 Medium (greater than 1 in 100 but less than 1 in 30) chance of flooding in any given year.

Any relevant data within 250m is represented on the RoFRaS Flood map. Data to 50m is reported in the table below.

ID	Distance (m)	Direction	RoFRaS flood Risk
1	0.0	On Site	Medium
2	0.0	On Site	Medium
3	12.0	SE	Medium
4	38.0	E	High
5	43.0	S	High

7.4 Flood Defences

Flood Defences within 250m of the study site

Database searched and no data found.

None identified

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 Clearwater 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

Limited potential

Where limited potential for groundwater flooding to occur is indicated, this means that although given the geological conditions there may be a groundwater flooding hazard, 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.

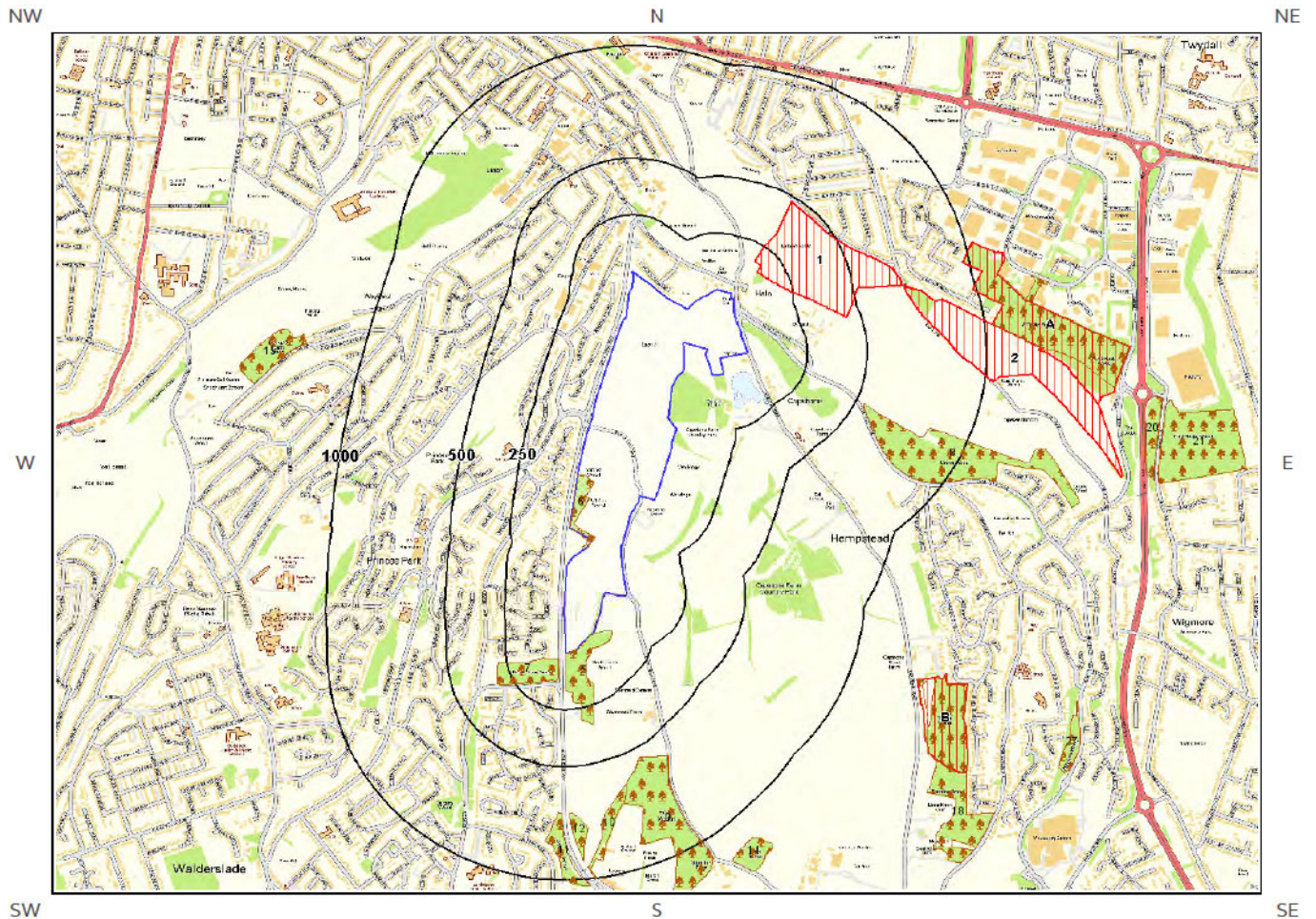
7.8 Groundwater Flooding Confidence Areas

British Geological Survey confidence rating in this result High

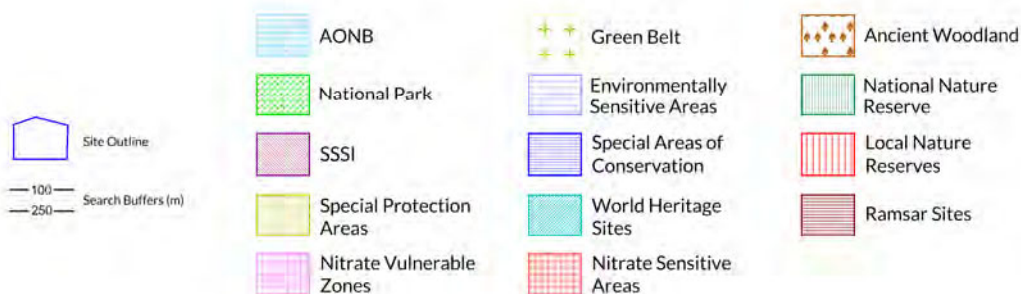
Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

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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8. Designated Environmentally Sensitive Sites

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

0

Database searched and no data found.

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:

0

Database searched and no data found.

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:

24

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
5	0	On Site	UNKNOWN	Ancient and Semi-Natural Woodland
6	0	On Site	UNKNOWN	Ancient and Semi-Natural Woodland
7	40	SW	UNKNOWN	Ancient Replanted Woodland
8	537	SE	UNKNOWN	Ancient and Semi-Natural Woodland
9	544	SE	UNKNOWN	Ancient and Semi-Natural Woodland
10	623	S	UNKNOWN	Ancient and Semi-Natural Woodland
11	703	S	UNKNOWN	Ancient and Semi-Natural Woodland
12	704	S	UNKNOWN	Ancient and Semi-Natural Woodland
13A	1025	E	UNKNOWN	Ancient and Semi-Natural Woodland
14	1113	SE	UNKNOWN	Ancient and Semi-Natural Woodland
15	1241	W	UNKNOWN	Ancient and Semi-Natural Woodland
16B	1281	E	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1378	SW	UNKNOWN	Ancient and Semi-Natural Woodland
18	1485	SE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1575	SW	UNKNOWN	Ancient and Semi-Natural Woodland
20	1678	E	UNKNOWN	Ancient and Semi-Natural Woodland
21	1764	E	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1838	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1843	S	UNKNOWN	Ancient Replanted Woodland
Not shown	1886	S	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1891	SE	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1903	SW	UNKNOWN	Ancient and Semi-Natural Woodland
27	1946	E	UNKNOWN	Ancient and Semi-Natural Woodland
Not shown	1983	S	UNKNOWN	Ancient and Semi-Natural Woodland

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

4

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
1	143	NE	Darland Banks	Natural England
2	715	E	Darland Banks	Natural England
3A	970	E	Ambley Wood	Natural England
4B	1281	E	South Wood	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:

0

Database searched and no data found.

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

0

Database searched and no data found.

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 Moderate

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

Hazard
Significant potential for slope instability with relatively small changes in ground conditions. Avoid large amounts of water entering the ground through pipe leakage or soak-aways. Do not undercut or place large amounts of material on slopes without technical advice. For new build consider the potential and consequences of ground movement during excavations, or consequence of changes to loading or drainage. For existing property probable increase in insurance risk is likely due to potential natural slope instability after changes to ground conditions such as a very long, excessively wet winter.

9.1.3 Soluble Rocks

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

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

Hazard
Very significant soluble rocks are present, with a high possibility of localised subsidence occurring naturally or in adverse conditions such as high surface or subsurface water flow. Obtain specialist advice to advise on need for stabilisation work and/or land management plan to maintain stability. Do not dispose of drainage into the ground. For new build a specialist land stability assessment is necessary.

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

Hazard

Investigation, remediation and/or mitigation works may be necessary to stabilise the area. Construction work may cause subsidence. Surface drainage must not affect the karst system or groundwater. Increased construction costs are likely. For existing property increase in insurance risk due to potential soluble rocks hazards. Potential of groundwater pollution.

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 in a Radon Affected Area, as between 1 and 3% 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

None identified

Database searched and no data found.

10.2 Non-Coal Mining

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

Identified

The following non-coal mining information is provided by the BGS:

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Not available	Chalk	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered
0.0	On Site	Not available	Chalk	Sporadic underground mining of restricted extent may have occurred. Potential for difficult ground conditions are unlikely and localised and are at a level where they need not be considered

Past underground mine workings are uncommon, localised and of limited area. The rock types present in this area are such that minor mineral veins may be present within them on which it is possible that there have been attempts to work these by underground methods and/or it is possible that small scale underground extraction of other materials may have occurred. All such occurrences are likely to be restricted in size and infrequent. It should be noted, however, that there is always the possibility of the existence of other sub-surface excavations, such as wells, cess pits, follies, air raid shelters/bunkers and other military structures etc. that could affect surface ground stability but which are outside the scope of this dataset. However, if in a coalfield area you should still consider a Coal Authority mining search for the area of interest.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site

None identified

Guidance: No Guidance Required.