



Sandiford Ploc, Pembridge

Phase 1 Geoenvironmental Report

on Behalf of

Mr V Hamer

Quality Management

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Contents

Quality Management.....	i
Contents	ii
1 Introduction	1
1.1 Introduction.....	1
1.2 Report Objectives	2
1.3 Scope of Works.....	3
1.4 Information sources	3
2 Site Geoenvironmental Setting	4
2.1 Site Location and Description	4
2.2 Historical Land Use	5
2.3 Site Geology.....	6
<i>Superficial Deposits</i>	<i>6</i>
<i>Bedrock Geology</i>	<i>6</i>
2.4 Hydrogeology	9
<i>Superficial Deposits</i>	<i>9</i>
<i>Bedrock Geology</i>	<i>9</i>
2.5 Hydrology and Drainage	9
2.6 Groundwater and Surface Water Abstractions.....	9
<i>Source protection zones</i>	<i>9</i>
<i>Licensed Groundwater Abstractions</i>	<i>9</i>
<i>Licensed Surface Water Abstractions</i>	<i>10</i>
2.7 Sensitive Land Uses.....	10
<i>Sites of Special Scientific Interest (SSSI)</i>	<i>10</i>
<i>Nitrate Vulnerable Zones</i>	<i>10</i>
<i>Ancient Woodlands</i>	<i>10</i>
2.8 Radon	11

2.9 Mining	11
2.10 Landfilling and Waste Sites	11
2.11 Ground Stability Hazards	12
2.12 Other Records in Relation to Potential Contamination	13
3 Site Walkover	14
3.1 Introduction	14
<i>Application Site</i>	<i>14</i>
<i>Leaders Lane Landfill</i>	<i>17</i>
4 Phase I Contaminated Land Assessment	20
4.1 Development of the Conceptual Model – Hazard Identification	20
4.2 Sources of Contamination	21
4.3 Potential Contamination Transport Pathways	21
4.4 Potential Human, Environmental and Other Receptors	21
<i>Human Health Receptors</i>	<i>21</i>
<i>Built Receptors</i>	<i>21</i>
<i>Environmental Receptors</i>	<i>21</i>
4.5 Conceptual Model	22
4.6 Risk Estimation and Risk Evaluation	24
5 Conclusion and Recommendations	27

Tables

Tables

<i>Table 2-1 - Historical Land Use</i>	<i>5</i>
<i>Table 2-2 - Ground Stability Hazards.....</i>	<i>12</i>
<i>Table 2-3 - Environmental Records</i>	<i>13</i>
<i>Table 3-1 - Application Site - Walkover Photographs.....</i>	<i>14</i>
<i>Table 3-2 - Leaders Lane Landfill - Site Walkover.....</i>	<i>17</i>
<i>Table 4-1 - Potential Contaminant Sources</i>	<i>21</i>
<i>Table 4-2 – Preliminary Conceptual Site Model.....</i>	<i>23</i>
<i>Table 4-3 - Risk Assessment Matrix</i>	<i>25</i>
<i>Table 4-4 – Preliminary Risk Assessment</i>	<i>26</i>

Figures

<i>Figure 1-1 - Aerial Image of development site.</i>	<i>1</i>
<i>Figure 1-2 –Development Block Plan</i>	<i>2</i>
<i>Figure 2-1 – Site Location, Crown copyright reserved, Licence No. 100047852.....</i>	<i>4</i>
<i>Figure 2-2 Geological Map of Local Area, BGS Sheet 198 – Hereford, Solid and Drift, British Geological Survey. Crown Copyright NERC. All rights reserved.....</i>	<i>8</i>

Appendices

<i>Appendix A</i>	<i>GroundSure EnviroInsight Report</i>
<i>Appendix B</i>	<i>GroundSure GeoInsight Report</i>
<i>Appendix C</i>	<i>GroundSure Historical Maps</i>
<i>Appendix D</i>	<i>Landfill Query Report</i>

1 Introduction

1.1 Introduction

Hydrogeo Limited (Hydrogeo) was commissioned by Mr V. Hamer (the client) to undertake a Phase I Geoenvironmental Report for a plot of land located to the north of Pinecroft in Pembridge, Herefordshire.

Pembridge is approximately 7 miles to the west of Leominster and 3 miles to the west of Eardisland, which is also on the River Arrow. The history of Pembridge is one of a market town, the village retains a lot of its striking timber framed buildings, a number of which are listed and front the main Highstreet through the village. Pembridge forms part of Herefordshire's historic Black & White Village Trail.

The proposed development site is currently open grassland with residential properties located to the east and immediate south of the site. The land to the immediate north of the site comprises open grassland and to the west appears to be garden and allotment areas. The site is accessed via Sandiford Ploc an existing un-adopted road to the east of the development plot.

Figure 1-1 - Aerial Image of development site.



Figure 1-2 –Development Block Plan



The report objectives are to review the site history, land-use, available pre-existing information, data and where available any existing reports of the site. Following a desk based review and a visual inspection of the current site condition a Phase 1 report has been prepared in order to identify any potential environmental constraints or risks associated with the development of the site.

The study will serve as a preliminary assessment of any potential geoenvironmental and contaminated land issues that will need to be considered in redeveloping the site.

1.3 Scope of Works

The scope of work for this study comprises:

- A review of available environmental and geological site reports, containing descriptions of past and current land use, with EnviroInsight data sourced from Groundsure™;
- A review of historical Ordnance Survey maps;
- A review of current Geological and Hydrogeological Maps;
- A site walkover;
- A preliminary site conceptual model and risk assessment;
- A final report summarising the above findings and providing recommendations for site development.

1.4 Information sources

The following sources of information have been used in the production of this report:

- British Geological Survey map sheet 198 – Hereford;
- British Geological Survey borehole logs;
- Groundsure EnviroInsight data report;
- Groundsure MapInsight Historical Maps;
- “What’s in my backyard?” map viewer, Environment Agency;
- P331: Risks of Contaminated Land to Buildings, Building Materials and Services, pg. 92 to 103, Environment Agency Technical Report.
- Environment Agency Landfill Query Report (provided by Herefordshire Council).

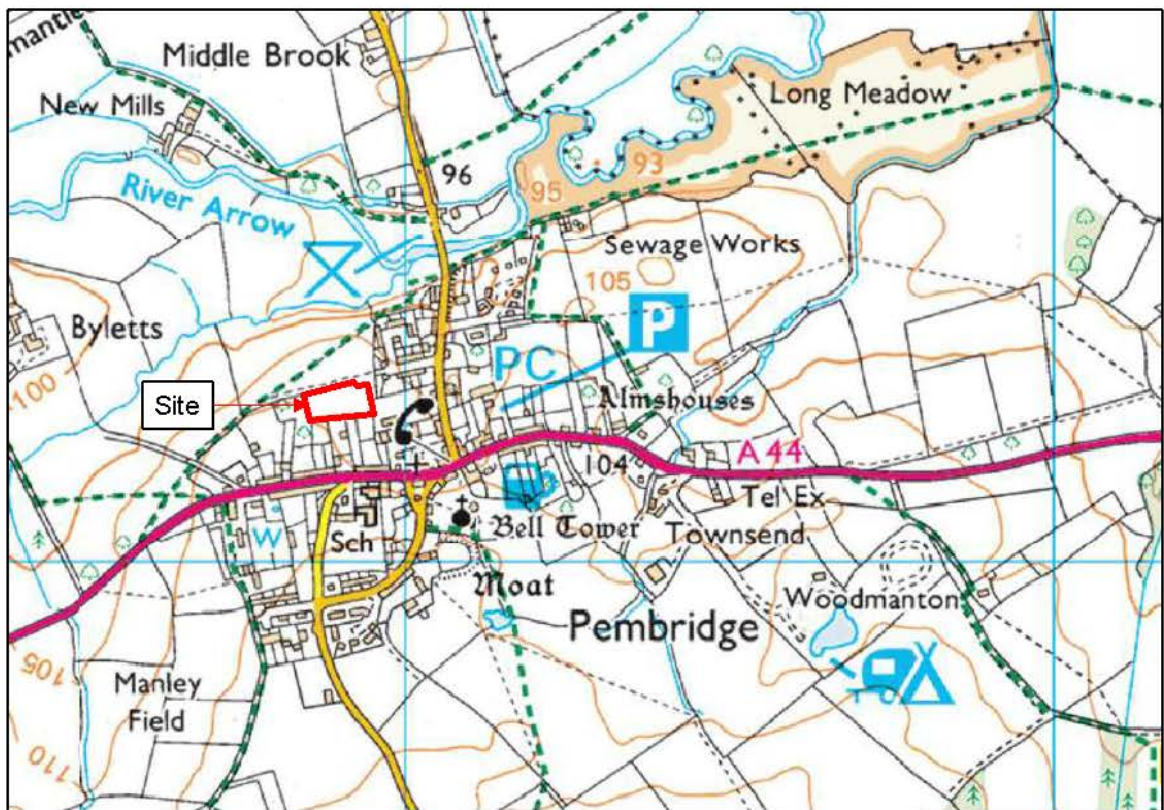
2 Site Geoenvironmental Setting

2.1 Site Location and Description

The site is a total of 0.44 hectare and is accessed off an estate road (Sandiford Ploc), leading onto Bridge Street to the north of the centre of Pembridge. The site currently comprises a paddock which is used for grazing.

The site boundary is defined by existing mature hedgerows interspersed with trees, which largely screen the site from views. The Design Access Statement confirms that it is proposed to enhance the northern boundary with additional planting.

Figure 2-1 – Site Location, Crown copyright reserved, Licence No. 100047852



Topographically, the site is at between 110 and 107 metres above ordnance datum (mAOD). A topographical and archaeological survey has been undertaken to support the proposed development. The archaeological assessment has shown that there is no evidence to support the proposition that topographical features observed on site are anthropogenic in origin.

2.2 Historical Land Use

A summary of previous land uses for the site has been determined using the historic Ordnance Survey maps, dated between 1885 and 2014, provided by Groundsure. The maps can be viewed in Appendix C of this report. The findings are summarised in Table 2-1.

Table 2-1 - Historical Land Use

Map Year (Scale)	Land Use on Site	Land Use in Vicinity of Site
1885 (1:10,560) 1886 (1:2,500)	Fields, tree lined	Footpath just beyond site northern boundary. Main road of Village with residential properties to the south along main High Street. Smithy noted to the South East, south side of the High Street. W – Well recorded to the south west of the site on the south side of the High Street.
1902 (1:10,560) 1903–1904 (1:2500)	No Change	
1949 (1:10,560)	No Change	Sewage Outfall Ground (Kington RD Council) observed north east of the site
1972-73 (1:2500)	No Change	Residential property just beyond central southern boundary "Emlyn" Further residential development to the north east of the site. Curl View and Curl View Crescent. Local garage filling station south east of the site.
1982 (1:10,000)	No Change	Smithy no longer identified.
1995 (1:10,000)	No Change	No Change
2002 (1:10,000)	No Change	Further residential development to the immediate east of the site, accessed off Bridge Street Well still identified south west of the site. Southern side of what is now labelled West Street
2010 (1:10,000)	No Change	No observable change from map
2014 (1:10,000)	No Change	No observable change from map

2.3 Site Geology

The 1:50,000 British Geological Survey (BGS) sheet map for the area (Hereford – Sheet 198) has been reviewed in order to gain insight into the geological conditions on the site. Additionally, a review of historic BGS borehole logs has been undertaken to prove the sub surface geology.

Superficial Deposits

Bedrock geology on site is overlain by Till, Devensian - Diamicton. Superficial Deposits formed up to 2 million years ago in the Quaternary Period.

Diamicton is a form of glacial deposit, created during ice age conditions. The rocks were formed in cold periods with Ice Age glaciers scouring the landscape and depositing moraines of till with outwash sand and gravel deposits from seasonal and post glacial meltwaters.

Bedrock Geology

BGS mapping indicates that the bedrock geology present at the site comprises the Raglan Mudstone Formation - Siltstone and Mudstone, Interbedded. Sedimentary Bedrock formed approximately 416 to 419 million years ago in the Silurian Period.

These rocks were formed from rivers depositing mainly sand and gravel detrital material in channels to form river terrace deposits, with fine silt and clay from overbank floods forming floodplain alluvium, and some bogs depositing peat; includes estuarine and coastal plain deposits mapped as alluvium. The Raglan Mudstone imparts the characteristic red tint to Herefords soils.

BGS data indicates that the Raglan Mudstone Formation ranges to 800m thick, and it is not thought that any other formation will be present at a shallow enough depth to affect or be impacted by the development.

Borehole records

Borehole records have been examined to give further data regarding the expected geology of the site.

The New Inn, Pembridge, SO35NE2 – 220m east of site. Advanced to a total depth of 120 ft (36 metres) in 1951. Records indicate that groundwater was struck at 50 ft (15m) and 86 ft (26m) during drilling. A rest level of 40ft (12m) was subsequently recorded.

Records indicate that "Red Marl & Shale", (interpreted to be the Raglan Mudstone Formation) was encountered at 20 feet.

Pembridge Service Station, SO35NE 19 – Recorded Concrete, 0.24 of Made Ground underlain by "Probable Glacial Deposits" to 3 metres below ground level. The glacial deposits were highly variable comprising of soft to firm red/brown/ pink silty, sandy clay

SO3SNE 24 – Recorded Made Ground to 0.4m underlain by Probable Glacial Deposits to 5 metres below ground level. Ground conditions were highly variable with soft – firm silt, clay sand and gravel described within the borehole records.

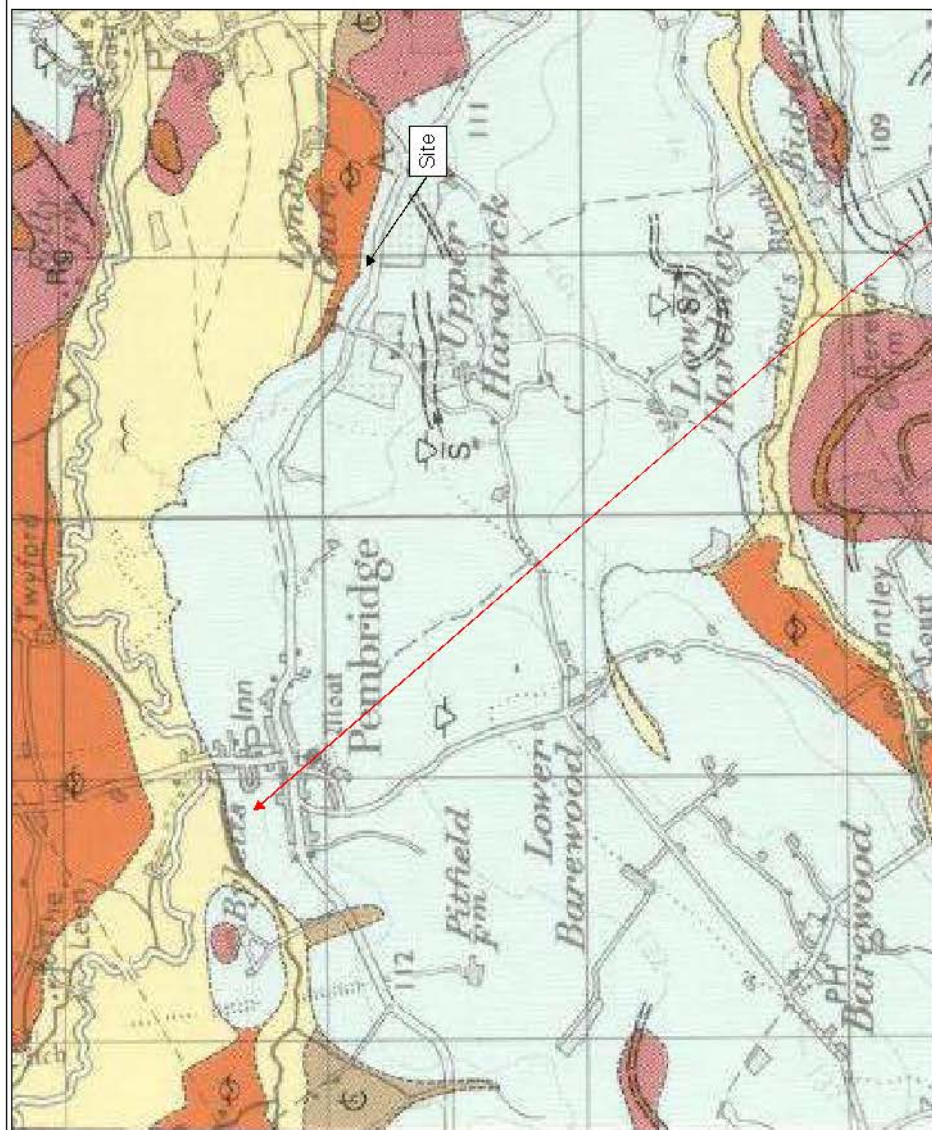
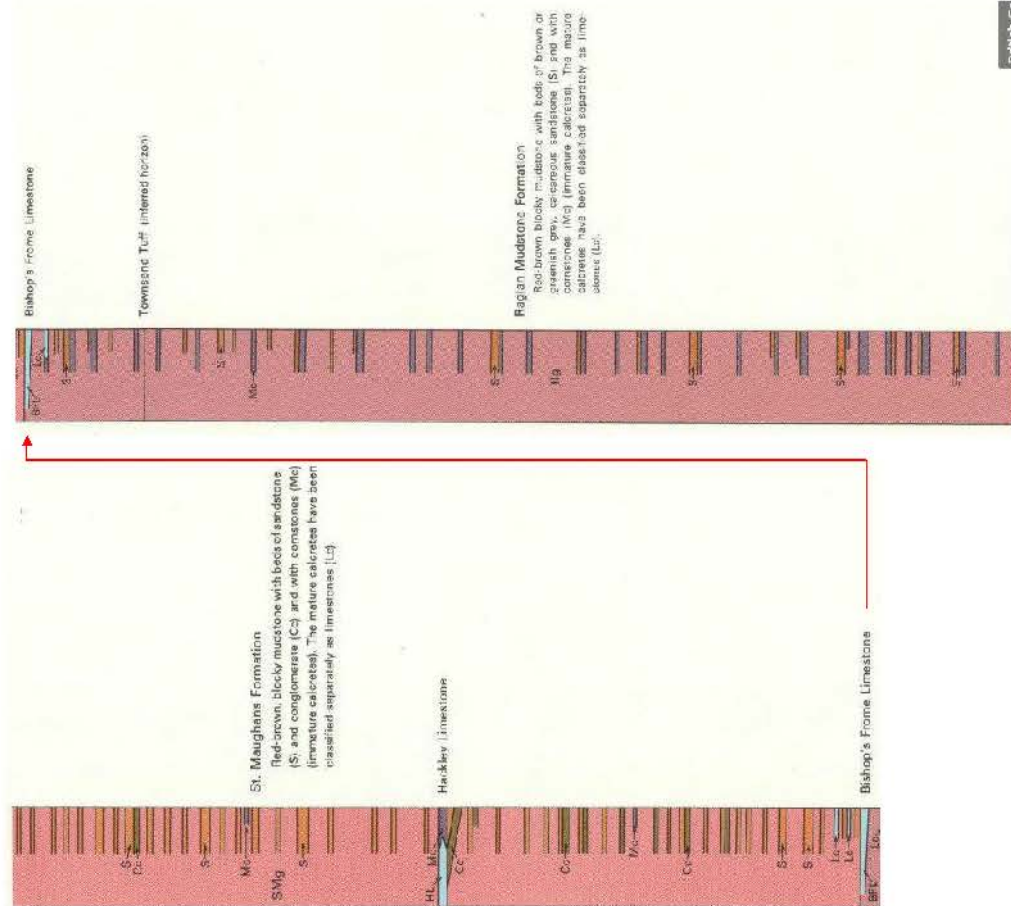


Figure 2-2 Geological Map of Local Area, BGS Sheet 198 – Hereford, Solid and Drift, British Geological Survey. Crown Copyright NERC. All rights reserved.



2.4 Hydrogeology

Superficial Deposits

The Diamicton deposits are classified by the Environment Agency as Secondary (undifferentiated). This classification being 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.

Bedrock Geology

The Raglan Mudstone Formation is classified by the Environment Agency as Secondary A Aquifers. These comprise 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.

2.5 Hydrology and Drainage

Curl Brook, a tributary of the River Arrow is located approximately 113m north of the site, and is designated as a Primary River.

The River Arrow, a primary river, is located 189m north of the site.

The site does not lie within a floodplain, and the site is not considered at risk of flooding from rivers or the sea due to the position of the site at least 10m above the Curl Brook.

2.6 Groundwater and Surface Water Abstractions

Source protection zones

The site does not lie within a source protection zone as defined by the Environment Agency.

Licensed Groundwater Abstractions

There are records of 14 licenced groundwater abstractions within 2km of the site. Of these 4 no. are currently identified as being active; the remainder of records are for historical abstraction licences.

The closest abstraction is located 580m north west of the site. This historical record was first licenced in March 1996 used for general farming and domestic supplies.

There is one further borehole within 1km of the site this is located 855m NE of the site at Twyford. This historical record was first licenced in March 1966 for farming and domestic supply.

The closest currently active groundwater abstraction is for two records which appear to relate to the same point source. The abstraction is located 1020m NW of the site and provides water for general farming, domestic and spray irrigation uses. The maximum daily abstraction allowed is 545.5m³/day.

Licensed Surface Water Abstractions

There are records of 11 licenced surface water abstractions within 2km of the site. Of these none are currently identified as being active.

2.7 Sensitive Land Uses

The following sensitive land uses and designated sites have been found within 2km of the site.

Sites of Special Scientific Interest (SSSI)

The site is located 814m west of the Moseley Common SSSI. The SSSI citation states the following:

“Moseley Common lies alongside the Curl Brook in West Herefordshire. It is one of the few areas of marshland in the county to have survived the effects of modern agricultural improvements and drainage. The botanical interest of the site has been known since the 19th Century. Over 120 plants have been found on the site, including a number of species now rare or uncommon in Herefordshire.”

Nitrate Vulnerable Zones

A Nitrate Vulnerable Zone (NVZ) is designated where land drains and contributes to the nitrate found in “polluted” waters. The site is located within a Nitrate Vulnerable Zone, as defined by DEFRA.

Ancient Woodlands

There are two records of ancient woodland, located 1419m SW and 1974m W of the site.

2.8 Radon

The Groundsure GeolInsight report states that the property is in a Radon Affected Area, as between 5% and 10% of properties are above the Action Level. This means that basic Radon protection measures are required for new developments.

Typically for buildings in the 5 - 10% action band it is recommended that a radon test be conducted, and that basic radon counter-measures be installed, as detailed in BR211 Radon - Guidance on Protective Measures for New Dwellings.

2.9 Mining

The Groundsure EnvirolInsight report indicates the site is not located within a coal mining area.

There are no other records of mining such as brine extraction or vein minerals within 2km of the site.

The chance for mining to have occurred on site is considered by the BGS to be highly unlikely.

2.10 Landfilling and Waste Sites

There is one record of a landfill site located approximately 200m west of the site.

A Landfill Query Report, provided by Herefordshire Council but originally issued by the Environment Agency is attached in Appendix D. The site was known as Leaders Lane, Pembridge and is listed as operational between 1936 and 1964. The site is known to have accepted household and commercial waste. The area of the site is stated as 0.08 hectares, and the max volume of permitted waste is given as 0.001 million m³ (1000m³). The site is stated as being formed in a natural depression, with a permeable soil cap and no engineered clay or geotextile liner. It is stated that there are no landfill gas control systems in place.

The site forms a linear feature, and is visible as a depression on historical mapping. The landfill is not labelled on historical mapping.

2.11 Ground Stability Hazards

Ground Stability data has been sourced from the Groundsure EnviroInsight Report. The report can be viewed in Appendix A. Ground Stability Hazard Data is compiled by the BGS and classifies six separate ground stability hazards.

The potential for ground stability hazards are detailed and discussed in Table 2-2.

Table 2-2 - Ground Stability Hazards

Hazard	Rating	Details	Interpretation
Shrink Swell Clay	Very Low	Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.	Primarily an issue with unconsolidated mudstones and clays, which are not present below the site.
Landslides	Very Low	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.	Landslides occur ultimately due to the effect of gravity, although other factors such as geology, topography, weathering, drainage and man-made construction can all contribute to the overall stability of a slope. Due to the lack of steep slopes on or overlooking the site the landslide hazard rating is very low.
Soluble Rocks	Negligible	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.	Bedrock geology of site is non soluble due to lack of limestones or evaporite (salt and gypsum) deposits.
Compressible Ground	Negligible	No indicators for compressible ground identified. No special actions required to avoid problems due to compressible ground. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible ground.	Glacial deposits, although unconsolidated (solidified), have been compressed by the weight of ice during the time of deposition. As such they do not exhibit large amounts of compressibility
Collapsible Rocks	Very Low	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.	Primarily an issue with loessic sands in the south-east of England.

Hazard	Rating	Details	Interpretation
Running Sand	Very Low	<p>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.</p> <p>No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.</p>	<p>Primarily an issue with unconsolidated fine sand deposits.</p> <p>River terrace deposits may contain fine sand layers or lenses which could cause stability issues with deep, saturated excavations.</p>

2.12 Other Records in Relation to Potential Contamination

The Groundsure EnviroInsight report was reviewed, and relevant details of potential contaminant sources are detailed below in **Table 2-3**. The Groundsure report can be viewed in Appendix A.

Table 2-3 - Environmental Records

Record / Source of Information	Details
Records of Part A(2) and Part B Activities and Enforcements	None Found.
Pollution Incidents	Two records relating to crude sewage release 245m NE of the site. Maximum impact classified as minor. No records of incidents on site.
Records of Category 3 or 4 Radioactive Substances	No records within 2km of site.
Authorisations:	
Records of Licensed Discharge Consents	Several records for sewage discharges to the E and NE of site. Closest is located 201m NE.
Petrol and Fuel Sites	1 Record, 168m SE relating to filling station.
Underground High Pressure Oil and Gas Pipelines and High Voltage Electric Cables	No records within 500m of study site.

3 Site Walkover

3.1 Introduction

A site walkover was undertaken on 4th February 2016. A Hydrogeo consultant attended site and conducted a walkover. A walkover of the Leaders Lane Landfill Site was also conducted.

Application Site




The site is an open, level field. A shed is present on site, but does not store any materials e.g. fertilizer, fuels or pesticides. A disused lawnmower is present within the shed. No areas of fly tipping or made ground were observed.




No significant contaminative features were observed during the site walkover.

Photographs of the Application Site walkover can be viewed in Table 3-1.

Table 3-1 - Application Site - Walkover Photographs

Reference	Description	Photograph
1	View of site entrance.	

Reference	Description	Photograph
2	View of site from south-east corner, facing west.	
3	Shed, located on southern boundary in western portion of site. Construction is timber with galvanized corrugated steel roof.	
4	Disused lawnmower, located in shed.	

Reference	Description	Photograph
5	Rear view of shed.	
6	Beehives, located in south-western corner of site.	
8	View of site from north western corner.	

Leaders Lane Landfill


Leaders Lane landfill is located approximately 200m west of the site. The landfill was accessed via a public footpath which ran across the intervening agricultural land. The landfill is located to the rear of several existing dwellings. Leaders Lane landfill was found to occupy the space between a row of mature trees. In the southern section the landfill was well capped with soils. Further towards the north and downslope the capping layer became thinner, and waste was visible exposed at surface, particularly at the edges of the landfill.

Waste observed included brick, tiles, metal sheeting, metal drums and dustbins, carpet, plastic sheeting, glass, fridges, car wheel hubs and rubber.



No signs of vegetation distress were observed at the landfill. No signs of vegetation distress were observed in the field to the north-east of the landfill (towards the Application Site). No surface evidence of leachate was observed at the site.

Photographs of the walkover of Leaders Lane landfill can be observed in Table 3-2.

Table 3-2 - Leaders Lane Landfill - Site Walkover

Reference	Description	Photograph
9	View of southern edge Leaders Lane Landfill. Landfill occupies area between the two rows of trees in centre of photo.	

Reference	Description	Photograph
10	Capping on top of leaders lane landfill. A slight bulge of soil capping the landfill was visible.	
11	Iron bedstead, mattress springs, plastic and tiles exposed at surface of Leaders Lane landfill.	
12	Metal sheeting, plastic drum and plastic fragments exposed at surface.	

Reference	Description	Photograph
13	Dustbins, carpet and plastic exposed at surface.	
	View towards Application Site across open agricultural land. <u>Application Site is located 200m distant in right side of picture.</u>	

4 Phase I Contaminated Land Assessment

4.1 Development of the Conceptual Model – Hazard Identification

The following section sets out a Conceptual Site Model, which qualitatively describes the potential contaminant sources present, receptors upon which contaminants could have an impact and also pathways that may exist to allow contaminants to impact upon the identified receptors. The model is based on the future site use of the proposed development area; that is additional warehousing and parking for the expanding haulage fleet and site warehousing operations.

A guide to contaminated land risk assessment is set out in CLR 552. The Conceptual Site Model has been developed using current UK guidelines including CLR 552 and CLR11, and developed using the information provided in available desk based information as described in the previous sections.

Following the procedures of CLR 11, to assess the potential impact of any contamination identified at the site on receptors a risk assessment approach has been used. In order for a risk to be present at the site three components must exist:

- Contaminant(s) must be present at concentrations capable of causing adverse effects on groundwater and human health (**Source**);
- A receptor must be present (**Receptor**); such a receptor could be environmental (e.g. a stream, groundwater), or the end user of the site.
- There must be exposure migration pathway by which the receptor comes into contact with the contaminant (**Pollutant Linkage**).

The source-pathway-receptor scenario is a useful means to generate a conceptual model, which can be used to identify critical pathways that a more detailed quantitative analysis may be undertaken if necessary. The first stage of the process is to determine the presence or absence of any contaminant(s) of concern (source) at the site, followed by the most likely pathways that these contaminants would take in the environment and finally the potential receptors of concern.

4.2 Sources of Contamination

Table 4-1 summarises the potential sources of contamination identified during the desk study and site walkover. No potential on-site contamination sources were identified during the site walkover. The only potential off-site source is the Leaders Lane landfill.

Table 4-1 - Potential Contaminant Sources

Land Use	Activities/Contamination Sources	Potential Contaminants
Off Site Landfill – Leaders Lane	Landfilling: decomposition of waste leading to generation of ground gases	Methane
		Carbon Dioxide
		Carbon Monoxide
		Hydrogen Sulphide
		Hydrogen

4.3 Potential Contamination Transport Pathways

Migration of ground gas generated from the off-site landfill through the unsaturated zone in permeable soils would be a potential mechanism for transport of potentially hazardous gases and vapours onto the site.

4.4 Potential Human, Environmental and Other Receptors

Human Health Receptors

Human health receptors include both construction workers, site end-users and future maintenance staff/groundskeepers.

Built Receptors

Harmful ground gas can be displaced into void spaces, posing an explosive risk or exposing the occupants to the inhalation of harmful gases.

Environmental Receptors

Environmental receptors include vegetation which may adversely affected by the displacement of oxygen from the root zone.

4.5 Conceptual Model

The following summarises the potential sources, pathways and receptors identified in the hazard assessment.

The potential contamination source is considered to be:

- **S1:** Landfill (off-site);

Potential transport pathways are summarised as follows:

- **P1:** Migration through permeable ground;

Potential receptors are as follows:

- **R1:** Built Receptors – Potential for explosion;
- **R2:** Future site residents. – Potential for asphyxiation or toxicity;
- **R3:** Vegetation and Planting;

Based upon the Sources, Pathways and Receptors defined in the previous sections, a conceptual model can be derived for the site.

The potential pollutant linkages at the sites are presented in Table 4-2.

Table 4-2 – Preliminary Conceptual Site Model

Source	Transport Pathway	Receptor
<p>S1: <u>Landfill (Off site)</u> –</p> <p>Toxic, asphyxiant or explosive gases including methane, carbon dioxide, carbon monoxide, hydrogen sulphide and hydrogen.</p>	<p>P1: Migration through permeable ground.</p>	<p>R1: Built Receptors – Potential for explosion.</p> <hr/> <p>R2: Future site residents. – Potential for asphyxiation or toxicity.</p> <hr/> <p>R3: Vegetation and Planting - Phytotoxicity</p>

4.6 Risk Estimation and Risk Evaluation

The term risk is widely used in different contexts and circumstances, often with differing definitions. In UK Government publications about the environment, the standard definition is that “Risk is a combination of the probability, or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence”.

Following the development of the conceptual model and the identification an assessment of potential pollutant linkages, a preliminary assessment can be made of risk estimation and risk evaluation, as discussed in CLR 11 and CIRIA C552, to determine whether an unacceptable contamination risk is likely to exist.

CLR 11 defines risk estimation as predicting the magnitude (or consequence) and probability of the risk occurring that may arise as a result of that hazard. This is also identified in CIRIA C552 in which the risk assessment methodology uses qualitative descriptors of consequence, probability and risk. These descriptors are adopted for the purposes of this risk assessment. The “hazard” or consequence of a risk occurring is classified into the following categories:

- Severe
- Medium
- Mild
- Minor

The probability or “likelihood” of a risk occurring is classified into the following categories:

- High Likelihood
- Likely
- Low Likelihood
- Unlikely

For each potential pollutant linkage identified in the conceptual model, the potential risk can be evaluated qualitatively, based on the following principle:

Overall contamination risk = Probability of event occurring x Consequence of event

This relationship can be represented in a matrix (Table 4-3), which is adapted from the CIRIA guidance.

Table 4-3 - Risk Assessment Matrix

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High Likelihood	Very High Risk	High Risk	Moderate Risk	Low Risk
	Likely	High Risk	Moderate Risk	Moderate Risk	Low Risk
	Low Likelihood	Moderate Risk	Moderate Risk	Low Risk	Very Low Risk
	Unlikely	Low Risk	Low Risk	Very Low Risk	Very Low Risk

The following preliminary qualitative risk evaluation can therefore be made for each significant pollutant linkage at this site, based upon the defined conceptual model and the risk estimation process discussed above.

Table 4-4 presents the preliminary risk evaluation with justifications.

Table 4.4 – Preliminary Risk Assessment

Source	Transport Pathway	Receptor	Hazard	Probability	Consequence	Justification/ Mitigation
1: Landfill – Toxic, asphyxiant or explosive gases including methane, carbon dioxide, carbon monoxide, hydrogen sulphide and hydrogen.	P1: Migration through preferential pathways including services; P2: Migration through permeable ground.	R1: Built Receptors – Potential for explosion;	Severe	Unlikely	Low Risk	The landfill closed in 1964 and is likely to be well past the point of peak gas generation. The landfill was limited in extent and mass. The landfill is capped with permeable soils. The majority of any ground gas generated will vent directly to the atmosphere.
		R2: Future site residents – Potential for asphyxiation or toxicity.	Severe	Unlikely	Low Risk	The landfill is located approximately 200m away from the site. <u>It is unlikely that there is a preferential pathway e.g. ducts or services across agricultural land.</u>
		R3: Vegetation and Planting - Phytotoxicity	Mild	Unlikely	Low Risk	Glacial Diamicton in the area is comprised of varying proportions of clay, silt sand, gravel and boulders. It is unlikely that there will be a sufficiently laterally and vertically continuous permeable pathway through the soils in the unsaturated zone to allow gas to migrate to the site.

5 Conclusion and Recommendations

A Phase I Desk Based Study and Site Walkover has been undertaken for a plot of land located to the north of Pinecroft in Pembridge, Herefordshire which is currently being considered for a future housing development. Following the findings of this study, we offer the following opinion.

The earliest available historical mapping dating to 1885 shows the site as greenfield land. Mapping in the intervening years shows that there has been no development on the site. A search of environmental data indicates that there have been no recorded uses of the site which could lead to contamination of soils; there is therefore no identified source of contamination on the Application Site.

The only potential source of off-site which could conceivably affect the site appears to be the nearby disused Leaders Lane landfill, located 200m to the west. A Landfill Query Report issued by the Environment Agency shows that the landfill is small in extent and mass, and capped with permeable soils. The landfill last accepted waste in 1964, and during its operational period accepted a mix of household and commercial waste.

A review of British Geological Survey data and nearby borehole logs suggest that the site is underlain by Glacial Diamicton consisting of clay, silt, sand, gravel and boulders in varying proportions, overlying the St. Maughans Formation, comprising interbedded sandstones and mudstones.

A site walkover revealed no evidence of contaminative features on site. The Leaders Lane landfill was also visited, confirming the findings of the desk based study: the landfill is small in extent, and capped or partially capped with permeable soils. Although the walkover was not conducted in a growing season, some vegetation was present. No evidence of vegetation stress from ground gas was observed at the Application Site, at the Leaders Lane landfill, or in the field between the sites. No instances of leachate were noted at the landfill site.

As there are no sources of contamination upon the Application Site, the Source-Pathway-Receptor model shows that the only potential pollutant linkage would be the migration of ground gas generated by the landfill through 200m of Glacial Diamicton to the site. It is unlikely that there are any preferential flow pathways provided by ducts or services across agricultural land.

A Preliminary Risk Assessment considers the risk associated with the migration of ground gas to be low. Considering the small size of the landfill, its distance from the site and its capping with permeable soils, it is considered highly likely that any ground gases generated by the landfill will escape through the capping soils and vent directly to the atmosphere, rather than migrate laterally through highly variable Glacial Diamicton towards the site.

Hydrogeo would consider that there is no plausible significant risk presented by the landfill to the site, and that no mitigation measures are necessary for the development to proceed.

Appendix A

Groundsure EnviroInsight Report



Hydrogeo Ltd
36c, Lion Street,
Abergavenny, NP7 5NT

Groundsure Reference: hyg1-2690386
Your Reference: Pinecroft_Sandiford_Ploc
Report Date: 18 Jan 2016
Report Delivery Method: Email - pdf

Groundsure Enviroinsight

Address: PINECROFT, WEST STREET, LEOMINSTER, HR6 9DU

Dear Sir/ Madam,

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

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

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Enviroinsight

Groundsure Enviroinsight

Address: PINECROFT, WEST STREET, LEOMINSTER, HR6 9DU
Date: 18 Jan 2016
Reference: hyg1-2690386
Client: Hydrogeo Ltd

NW

N

NE

W

E



SW

S

SE

Aerial Photograph Capture date: 12-Oct-2009
Grid Reference: 338902,258243
Site Size: 0.44ha

Report Reference: hyg1-2690386
Client Reference: Pinecroft_Sandiford_Ploc

Contents Page

Contents Page	3
Overview of Findings	6
Using this report	10
1. Historical Land Use	11
1. Historical Industrial Sites	12
1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping	12
1.2 Additional Information – Historical Tank Database	12
1.3 Additional Information – Historical Energy Features Database	13
1.4 Additional Information – Historical Petrol and Fuel Site Database	13
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	13
1.6 Potentially Infilled Land	13
2. Environmental Permits, Incidents and Registers Map	15
2. Environmental Permits, Incidents and Registers	16
2.1 Industrial Sites Holding Licences and/or Authorisations	16
2.1.1 Records of historic IPC Authorisations within 500m of the study site	16
2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site	16
2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site	16
2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site	16
2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site	16
2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site	17
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	17
2.1.8 Records of Licensed Discharge Consents within 500m of the study site	17
2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site	18
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	18
2.2 Dangerous or Hazardous Sites	19
2.3 Environment Agency Recorded Pollution Incidents	19
2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site	19
2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site	19
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	20
3. Landfill and Other Waste Sites Map	21
3. Landfill and Other Waste Sites	22
3.1 Landfill Sites	22
3.1.1 Records from Environment Agency landfill data within 1000m of the study site	22
3.1.2 Records of Environment Agency historic landfill sites within 1500m of the study site	22
3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site	22
3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site	22
3.2 Other Waste Sites	23
3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site	23
3.2.2 Records of Environment Agency licensed waste sites within 1500m of the study site	23
4. Current Land Use Map	24
4. Current Land Uses	25
4.1 Current Industrial Data	25
4.2 Petrol and Fuel Sites	25
4.3 National Grid High Voltage Underground Electricity Transmission Cables	25
4.4 National Grid High Pressure Gas Transmission Pipelines	26
5. Geology	27
5.1 Artificial Ground and Made Ground	27

5.2 Superficial Ground and Drift Geology	27
5.3 Bedrock and Solid Geology	27
6 Hydrogeology and Hydrology	28
6a. Aquifer Within Superficial Geology	28
6b. Aquifer Within Bedrock Geology and Abstraction Licenses	29
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses	30
6d. Hydrogeology – Source Protection Zones within confined aquifer	31
6e. Hydrology – Detailed River Network and River Quality	32
6.Hydrogeology and Hydrology	33
6.1 Aquifer within Superficial Deposits.....	33
6.2 Aquifer within Bedrock Deposits.....	33
6.3 Groundwater Abstraction Licences.....	34
6.4 Surface Water Abstraction Licences.....	36
6.5 Potable Water Abstraction Licences.....	38
6.6 Source Protection Zones.....	38
6.7 Source Protection Zones within Confined Aquifer.....	38
6.8 Groundwater Vulnerability and Soil Leaching Potential.....	39
6.9 River Quality.....	39
6.9.1 Biological Quality.....	39
6.9.2 Chemical Quality.....	40
6.10 Detailed River Network.....	40
6.11 Surface Water Features.....	41
7a. Environment Agency Flood Map for Planning (from rivers and the sea)	42
7b. Environment Agency Risk of Flooding from Rivers and the Sea (RoFRaS) Map	43
7 Flooding	44
7.1 River and Coastal Zone 2 Flooding.....	44
7.2 River and Coastal Zone 3 Flooding.....	44
7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating.....	45
7.4 Flood Defences.....	45
7.5 Areas benefiting from Flood Defences.....	45
7.6 Areas benefiting from Flood Storage.....	45
7.7 Groundwater Flooding Susceptibility Areas.....	45
7.7.1 Are there any British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site? Yes.....	45
7.7.2 What is the highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions?.....	46
7.8 Groundwater Flooding Confidence Areas.....	46
8. Designated Environmentally Sensitive Sites Map	47
8. Designated Environmentally Sensitive Sites	48
8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:.....	48
8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:.....	48
8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:.....	48
8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:.....	48
8.5 Records of Ramsar sites within 2000m of the study site:.....	49
8.6 Records of Ancient Woodland within 2000m of the study site:	49
8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:.....	49
8.8 Records of World Heritage Sites within 2000m of the study site:.....	49
8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:	49
8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:	49
8.11 Records of National Parks (NP) within 2000m of the study site:	50
8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:.....	50
8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:.....	50

8.14 Records of Green Belt land within 2000m of the study site:.....	50
9. Natural Hazards Findings	51
9.1 Detailed BGS GeoSure Data.....	51
9.1.1 Shrink Swell.....	51
9.1.2 Landslides.....	51
9.1.3 Soluble Rocks.....	51
9.1.4 Compressible Ground.....	52
9.1.5 Collapsible Rocks.....	52
9.1.6 Running Sand.....	52
9.2 Radon.....	52
9.2.1 Radon Affected Areas.....	52
9.2.2 Radon Protection.....	53
10. Mining	54
10.1 Coal Mining.....	54
10.2 Non-Coal Mining.....	54
10.3 Brine Affected Areas	54
Contact Details.....	55
Standard Terms and Conditions.....	57

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	0	3	15
1.2 Additional Information – Historical Tank Database	0	0	0	0
1.3 Additional Information – Historical Energy Features Database	0	0	0	0
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	1	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	2	0
1.6 Potentially Infilled Land	0	0	2	14
Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	0	0
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	2	7
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 Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	2	0
2.3.2 National Incidents Recording System, List 1	0	0	0	1
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 Registered Landfill Sites	0	0	0	0	0	Not searched
3.1.2 Environment Agency Historic Landfill Sites	0	0	1	0	0	0
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 Licensed Waste Sites	0	0	0	0	0	1

Section 4: Current Land Use	On-site	0-50m	51-250	251-500
4.1 Current Industrial Sites Data	0	0	2	Not searched
4.2 Records of Petrol and Fuel Sites	0	0	1	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 Are there any records of Artificial Ground and Made Ground present beneath the study site?	No
5.2 Are there any records of Superficial Ground and Drift Geology present beneath the study site?	Yes
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 Are there any records of Strata Classification in the Superficial Geology within 500m of the study site?	Yes					
6.2 Are there any records of Strata Classification in the Bedrock Geology within 500m of the study site?	Yes					
	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	2	14
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	2	9
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	1
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	1	0	Not searched	Not searched
	On-site	0-50m	51-250	251-500	501-1000	1000-1500

Section 6: Hydrogeology and Hydrology

0-500m

6.9 Is there any Environment Agency information on river quality within 1500m of the study site?	No	No	Yes	No	Yes	No
6.10 Detailed River Network entries within 500m of the site	0	0	3	19	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 Are there any Environment Agency Zone 2 floodplains within 250m of the study site?	Yes
7.2 Are there any Environment Agency Zone 3 floodplains within 250m of the study site	Yes
7.3 What is the Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site?	Very Low
7.4 Are there any Flood Defences within 250m of the study site?	No
7.5 Are there any areas benefiting from Flood Defences within 250m of the study site?	No
7.6 Are there any areas used for Flood Storage within 250m of the study site?	No
7.7 What is the maximum BGS Groundwater Flooding susceptibility within 50m of the study site?	Potential below Surface
7.8 What is the BGS confidence rating for the Groundwater Flooding susceptibility areas?	High

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	2	0
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	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	2
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	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
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	0

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000-2000
8.11 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	2	0	0	0	1	6
8.14 Records of Green Belt land	0	0	0	0	0	0

Section 9: Natural Hazards

9.1 What is the maximum risk of natural ground subsidence?	Very Low
9.1.1 What is the maximum Shrink-Swell hazard rating identified on the study site?	Very Low
9.1.2 What is the maximum Landslides hazard rating identified on the study site?	Very Low
9.1.3 What is the maximum Soluble Rocks hazard rating identified on the study site?	Negligible
9.1.4 What is the maximum Compressible Ground hazard rating identified on the study site?	Negligible
9.1.5 What is the maximum Collapsible Rocks hazard rating identified on the study site?	Very Low
9.1.6 What is the 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 property is in a Radon Affected Area, as between 5 and 10% 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?	Basic radon protective measures are necessary.

Section 10: Mining

10.1 Are there any coal mining areas within 75m of the study site?	No
10.2 Are there any Non-Coal Mining areas within 50m of the study site boundary?	Yes
10.3 Are there any brine affected areas within 75m of the study site?	No

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 licenses, 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.

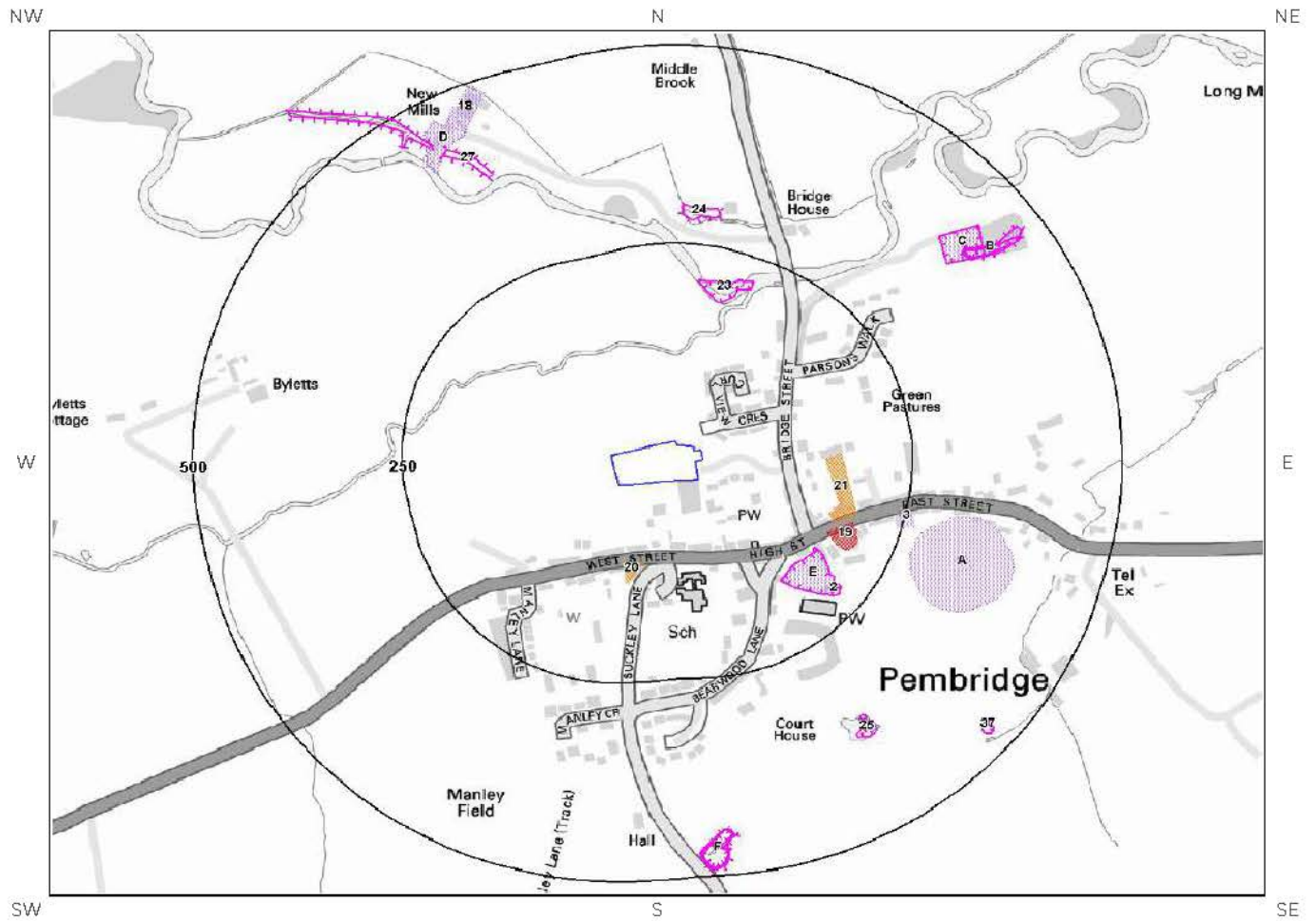
Note: Maps

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



Site Outline

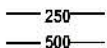


Industrial Land Use



Potentially Infilled Land

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



Search Buffers (m)



Energy Features



Petrol Stations



Tanks



Garages

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: 18

ID	Distance [m]	Direction	Use	Date
1E	157	SE	Grave Yard	1885
2	206	SE	Unspecified Tank	1949
3	241	E	Smithy	1885
4A	269	E	Smithy	1902
5A	318	E	Smithy	1949
6A	326	E	Smithy	1949
7C	377	NE	Sewage Works	1982
8B	398	NE	Unspecified Ground Workings	1949
9B	401	NE	Unspecified Ground Workings	1927
10B	401	NE	Unspecified Ground Workings	1949
11B	401	NE	Unspecified Ground Workings	1902
12C	406	NE	Unspecified Tanks	1982
13D	411	NW	Unspecified Mills	1949
14D	411	NW	Unspecified Mills	1902
15D	411	NW	Unspecified Mills	1927
16D	413	NW	Unspecified Mills	1949
17D	422	NW	Corn Mill	1885
18	443	NW	Unspecified Mills	1982

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: 0

Database searched and no data found.

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: 0

Database searched and no data found.

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: 1

ID	Distance (m)	Direction	Use	Date
19	168	SE	Filling Station	1972

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: 2

ID	Distance (m)	Direction	Use	Date
20	100	S	Garage	1972
21	146	E	Garage	1972

1.6 Potentially Infilled Land

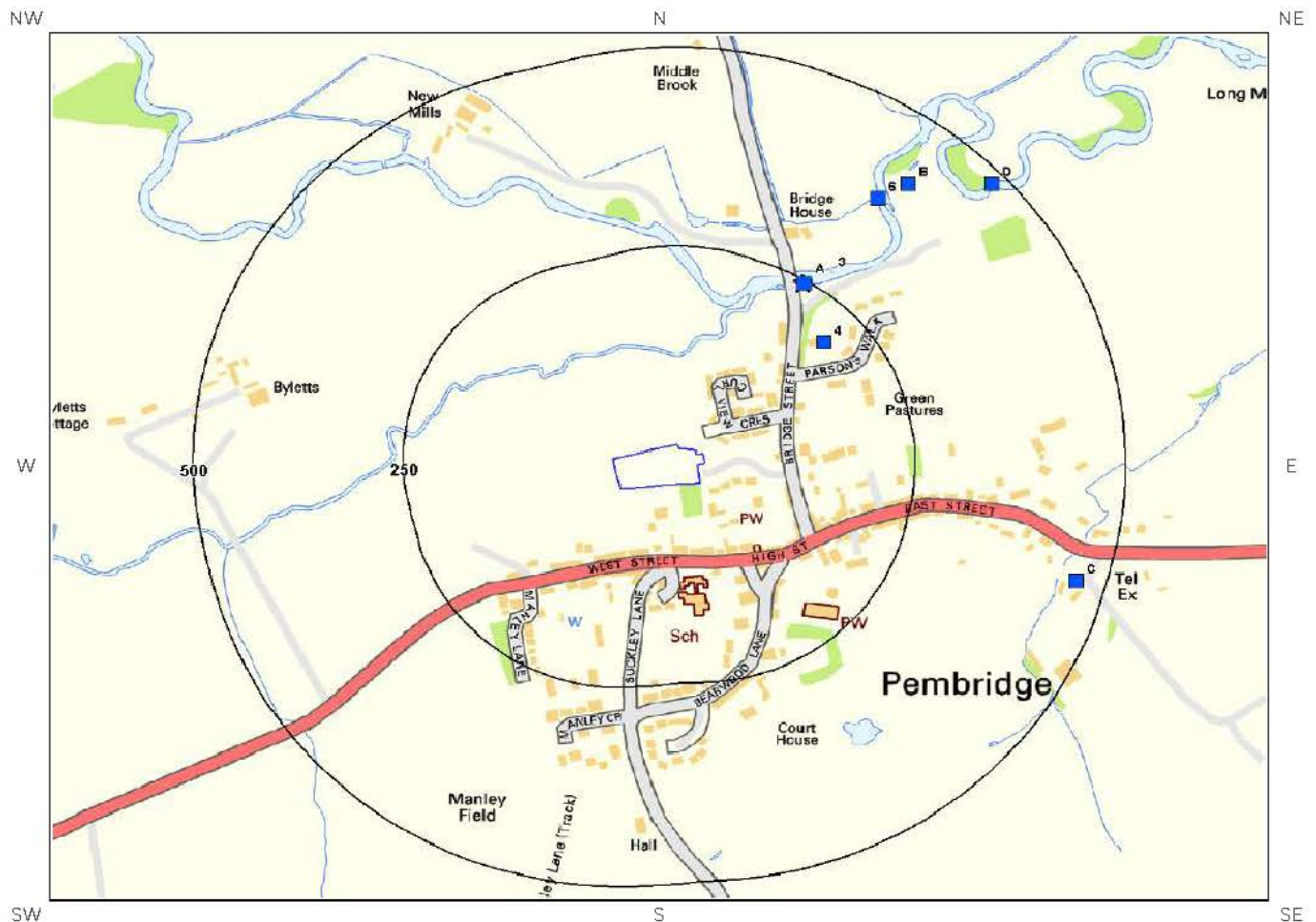
Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 16

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













ID	Distance(m)	Direction	Use	Date
22E	157	SE	Grave Yard	1885
23	182	N	Pond	1885
24	280	N	Pond	1982
25	356	SE	Ponds	1949
26C	377	NE	Sewage Works	1982
27	380	NW	Pond	1949

28B	398	NE	Unspecified Ground Workings	1949
29B	401	NE	Unspecified Ground Workings	1949
30B	401	NE	Unspecified Ground Workings	1927
31B	401	NE	Unspecified Ground Workings	1902
32F	441	S	Pond	1902
33F	441	S	Pond	1949
34F	442	S	Pond	1885
35F	443	S	Pond	1949
36	446	NW	Pond	1949
37	457	SE	Pond	1949

2. Environmental Permits, Incidents and Registers Map



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- | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
|  Site Outline |  Recorded Pollution Incident |  RAS 3 & 4 Authorisations |
|  250
 500 Search Buffers (m) |  Dangerous Substances (List 1) |  Part A(1) Authorised Processes and Historic IPC Authorisations |
| |  Dangerous Substances (List 2) |  Part A(2) and Part B Authorised Processes |
| |  Water Industry Referrals |  COMAH / NIHHS Sites |
| |  Licenced Discharge Consents |  Sites Determined as Contaminated Land |
| |  Red List Discharge Consents |  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 and Local Authorities reveal the following information:

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

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

9

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

ID	Distance (m)	Direction	NGR	Details
4	201	NE	339100 258400	<p>Address: 4 BRIDGE COTTAGES PEMBRIDGE, 4 BRIDGE COTTAGES, PEMBRIDGE, „ HR6 9EY</p> <p>Effluent Type: UNSPECIFIED</p> <p>Permit Number: AN0236401</p> <p>Permit Version: 1</p> <p>Receiving Water: Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88)</p> <p>Issue date: 25/08/1992</p> <p>Effective Date: 25-Aug-1992</p> <p>Revocation Date: -</p>
5A	246	NE	339076 258475	<p>Address: PEMBRIDGE CSO, PARSON WALK, HEREFORD, HEREFORDSHIRE, -, HR6 9EY</p> <p>Effluent Type: SEWAGE DISCHARGES-SEWER STORM OVERFLOW - WATER COMPANY</p> <p>Permit Number: EPRJP3525XF</p> <p>Permit Version: 1</p> <p>Receiving Water: Status: NEW ISSUED UNDER EPR 2010</p> <p>Issue date: 27/05/2011</p> <p>Effective Date: 27-May-2011</p> <p>Revocation Date: -</p>
6	382	NE	339164 258581	<p>Address: BRIDGE HOUSE PEMBRIDGE HEREFORDSHIRE, BRIDGE HOUSE, PEMBRIDGE, HEREFORDSHIRE, ENGLAND, HR6 9HL</p> <p>Effluent Type: SEWAGE DISCHARGES-FINAL/TREATED EFFLUENT - NOT WATER COMPANY</p> <p>Permit Number: AN0366001</p> <p>Permit Version: 1</p> <p>Receiving Water: Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995)</p> <p>Issue date: 02/06/2004</p> <p>Effective Date: 02-Jun-2004</p> <p>Revocation Date: -</p>
7B	418	NE	339200 258600	<p>Address: MIDDLEBROOK FARM PEMBRIDGE LEOMINS, MIDDLEBROOK FARM PEMBRIDGE LEOM, PEMBRIDGE LEOMINSTER „ LEOMINSTER „ LEOMINSTER „ HR6 9HL</p> <p>Effluent Type: UNSPECIFIED</p> <p>Permit Number: AL3002201</p> <p>Permit Version: 1</p> <p>Receiving Water: Status: REVOKED - UNSPECIFIED</p> <p>Issue date: 07/11/1968</p> <p>Effective Date: 07-Nov-1968</p> <p>Revocation Date: 09/05/1994</p>

ID	Distance (m)	Direction	NGR	Details
8B	418	NE	339200 258600	<p>Address: MIDDLEBROOK FARM PEMBRIDGE LEOMINS, MIDDLEBROOK FARM PEMBRIDGE LEOM, PEMBRIDGE LEOMINSTER ,, LEOMINSTER ,, LEOMINSTER ,, HR6 9HL Effluent Type: AGRICULTURE - UNSPECIFIED Permit Number: AL3002201 Permit Version: 2</p> <p>Receiving Water: Status: CONSENT EXPIRED - TIME LIMIT Issue date: 10/05/1994 Effective Date: 10-May-1994 Revocation Date: 12/08/1996</p>
9C	464	E	339400 258100	<p>Address: PEMBRIDGE - CLEARBROOK, PEMBRIDGE - CLEARBROOK, UNKNOWN, UNKNOWN, UNKNOWN, UNKNOWN Effluent Type: UNSPECIFIED Permit Number: AH3005646 Permit Version: 1</p> <p>Receiving Water: Status: CONSENT EXPIRED - TIME LIMIT Issue date: 28/02/1968 Effective Date: 28-Feb-1968 Revocation Date: 08/10/1992</p>
10C	464	E	339400 258100	<p>Address: PEMBRIDGE - CLEARBROOK, PEMBRIDGE - CLEARBROOK, UNKNOWN, UNKNOWN, UNKNOWN, UNKNOWN Effluent Type: UNSPECIFIED Permit Number: AH3005647 Permit Version: 1</p> <p>Receiving Water: Status: CONSENT EXPIRED - TIME LIMIT Issue date: 28/02/1968 Effective Date: 28-Feb-1968 Revocation Date: 19/11/1992</p>
11D	484	NE	339300 258600	<p>Address: PEMBRIDGE STW, PEMBRIDGE STW, UNKNOWN, UNKNOWN, UNKNOWN, UNKNOWN Effluent Type: SEWAGE DISCHARGES- FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: AL1002401 Permit Version: 2</p> <p>Receiving Water: Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88) Issue date: 24/09/2009 Effective Date: 01-Jan-2010 Revocation Date: -</p>
12D	484	NE	339300 258600	<p>Address: PEMBRIDGE STW, PEMBRIDGE STW, UNKNOWN, UNKNOWN, UNKNOWN, UNKNOWN Effluent Type: SEWAGE DISCHARGES- FINAL/TREATED EFFLUENT - WATER COMPANY Permit Number: AL1002401 Permit Version: 1</p> <p>Receiving Water: Status: NEW CONSENT, BY APPLICATION (WRA 91, SECTION 88) Issue date: 30/01/1985 Effective Date: 30-Jan-1985 Revocation Date: 31/12/2009</p>

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 Recorded Pollution Incidents

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

2

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

ID	Distance (m)	Direction	NGR	Details
1A	245	NE	339074 258475	Incident Date: 07-Dec-2002 Incident Identification: 125136 Pollutant: Sewage Materials Pollutant Description: Crude Sewage Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)
2A	245	NE	339074 258475	Incident Date: 07-Dec-2002 Incident Identification: 125136 Pollutant: Sewage Materials Pollutant Description: Crude Sewage Water Impact: Category 3 (Minor) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)

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

1

The following NIRS List 1 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details
3	277	NE		Incident Date: 04-Feb-2000 Incident Identification: 7205.0 Catchments Name: ARROW Water Description: RIVER STRETCH (FRESHWATER) Water Course: ARROW Incident Substantiated: Yes Priority Description: Immediate (2 Hours) Waste Description: Not Available Water Impact: Significant Impact Land Impact: No Impact Air Impact: No Impact Action Taken: Site Warning

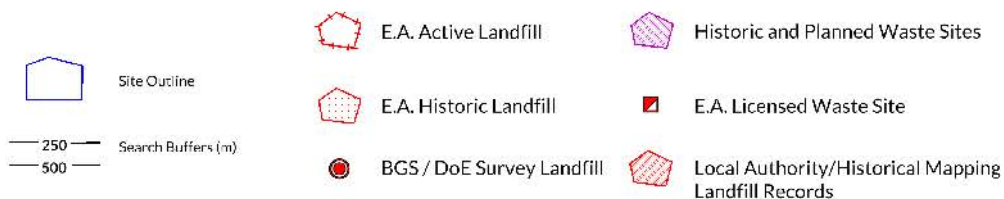
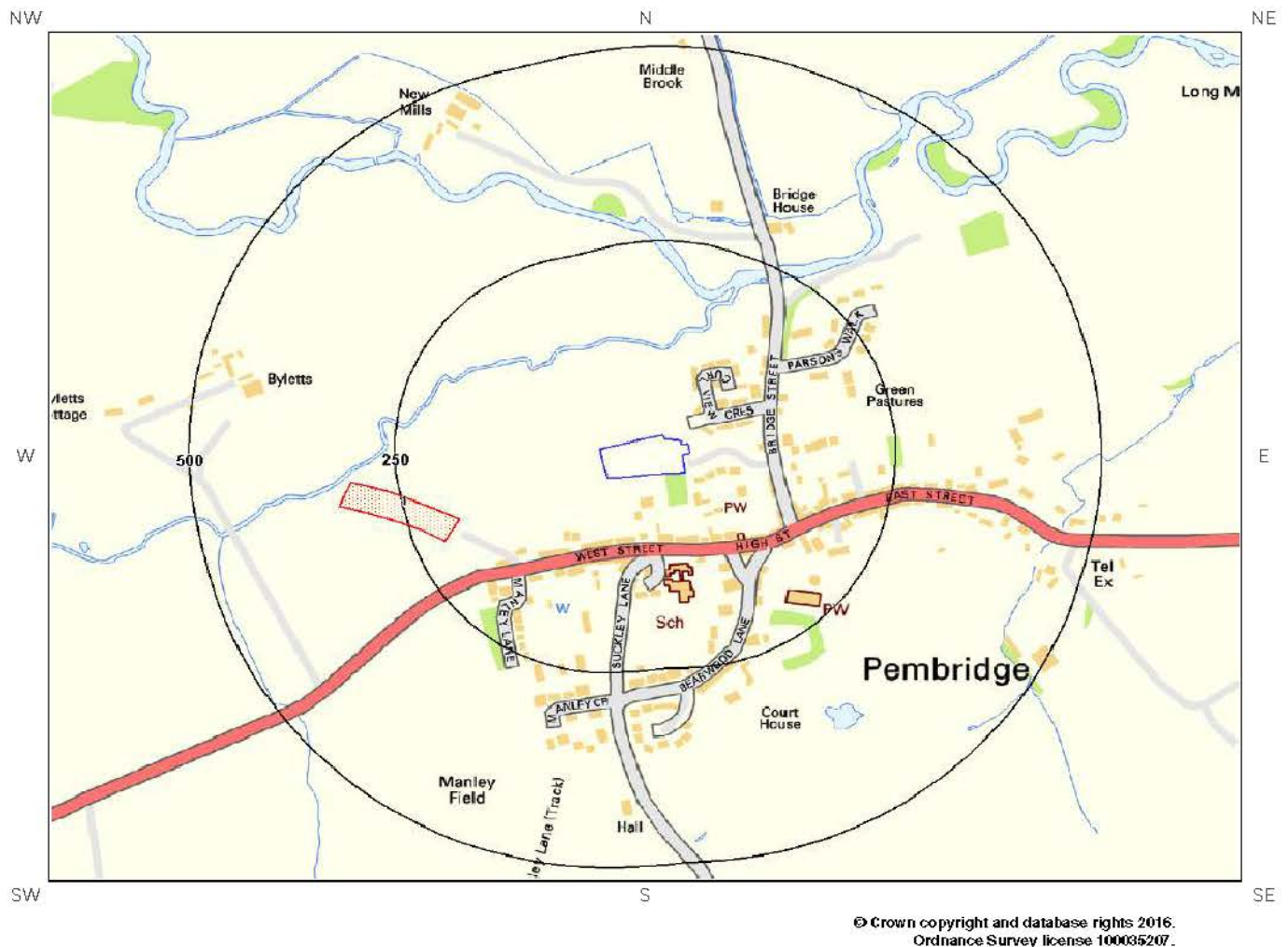
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

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

0

Database searched and no data found.

3. Landfill and Other Waste Sites Map



3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency landfill data within 1000m of the study site:

0

Database searched and no data found.

3.1.2 Records of Environment Agency historic landfill sites within 1500m of the study site:

1

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
1	188	W	338600 258100	Site Address: Leaders Lane, Pembridge, Leominster, Herefordshire Waste Licence: - Site Reference: 1.019.3.09 Waste Type: Commercial, Household Environmental Permitting Regulations (Waste) Reference: - Licence Issue: Licence Surrendered: Licence Hold Address: - Operator: - First Recorded: 31-Dec-1936 Last Recorded: 31-Dec-1964

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.

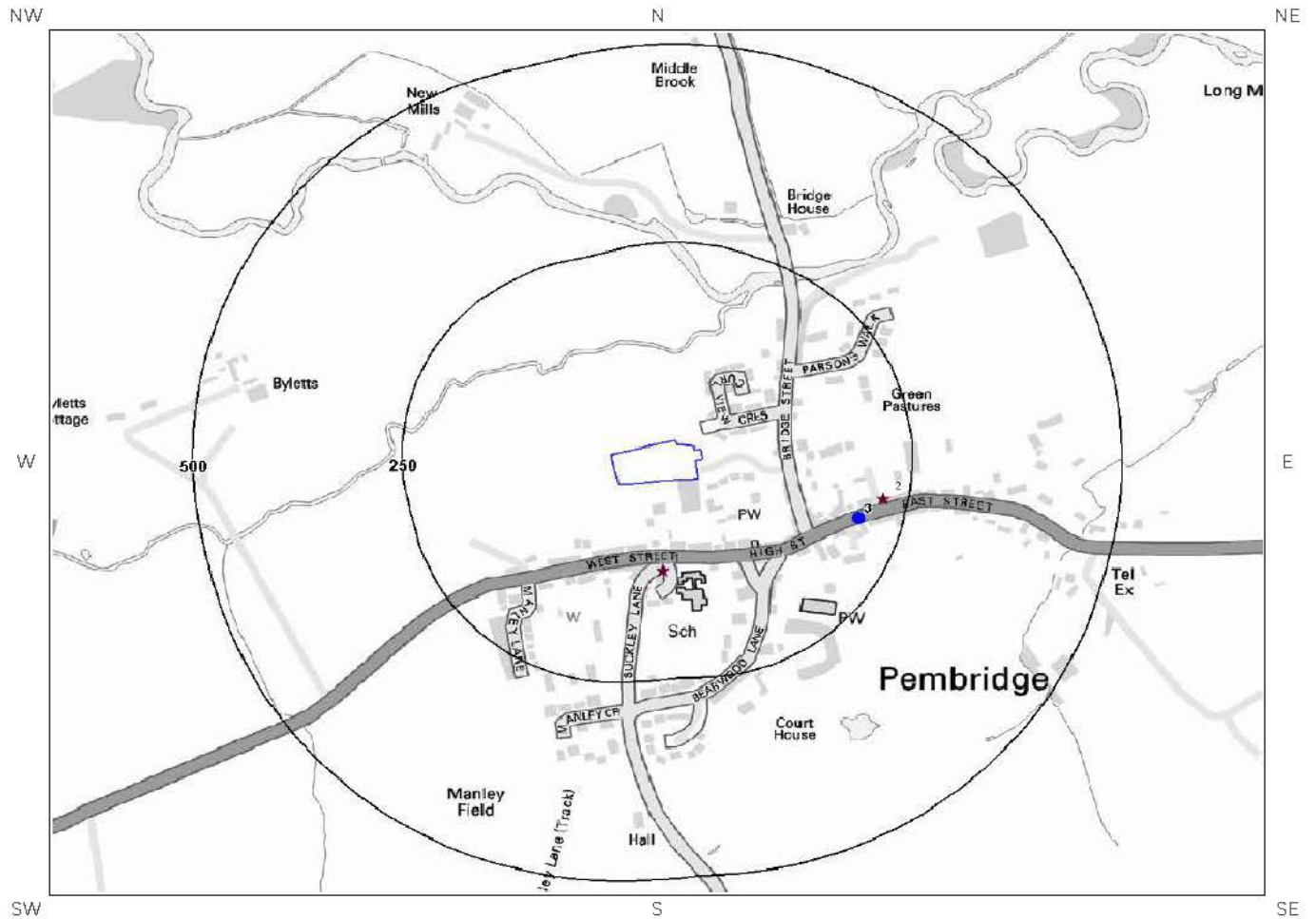
3.2.2 Records of Environment Agency licensed waste sites within 1500m of the study site:

1

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

ID	Distance (m)	Direction	NGR	Details
Not shown	1221	NW	338353 259370	<p>Site Address: Leen Farm, Pembridge, Leominster, Herefordshire, HR6 9HN</p> <p>Type: On-farm anaerobic digestion using farm wastes only</p> <p>Size: < 25000 tonnes</p> <p>Environmental Permitting Regulations (Waste) Licence Number: NOR474</p> <p>EPR reference: EA/EPR/CB3303CW/A001</p> <p>Operator: Shed Field Growers Limited</p> <p>Waste Management licence No: 401958</p> <p>Annual Tonnage: 36500.0</p> <p>Issue Date: 09/01/2015</p> <p>Effective Date: -</p> <p>Modified: -</p> <p>Surrendered Date: -</p> <p>Expiry Date: -</p> <p>Cancelled Date: -</p> <p>Status: Issued</p> <p>Site Name: The Leen Digester</p> <p>Correspondence Address: -, -</p>

4. Current Land Use Map



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4. Current Land Uses

4.1 Current Industrial Data

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

2

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

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	112	S	Pumping House	338911 258108	HR6	Water Pumping Stations	Industrial Features
2	220	E	Liquitech	339173 258198	The Old Post Office, East Street, Pembridge, Leominster, HR6 9HA	General Construction Supplies	Industrial Products

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
3	197	E	339144 258174	Unbranded	Pembridge Service Station, East Street, East Street, Pembridge, Leominster, Herefordshire, HR6 9HB	Not Applicable	Obsolete

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
TILLD	TILL, DEVENSIAN	DIAMICTON

5.3 Bedrock and Solid Geology

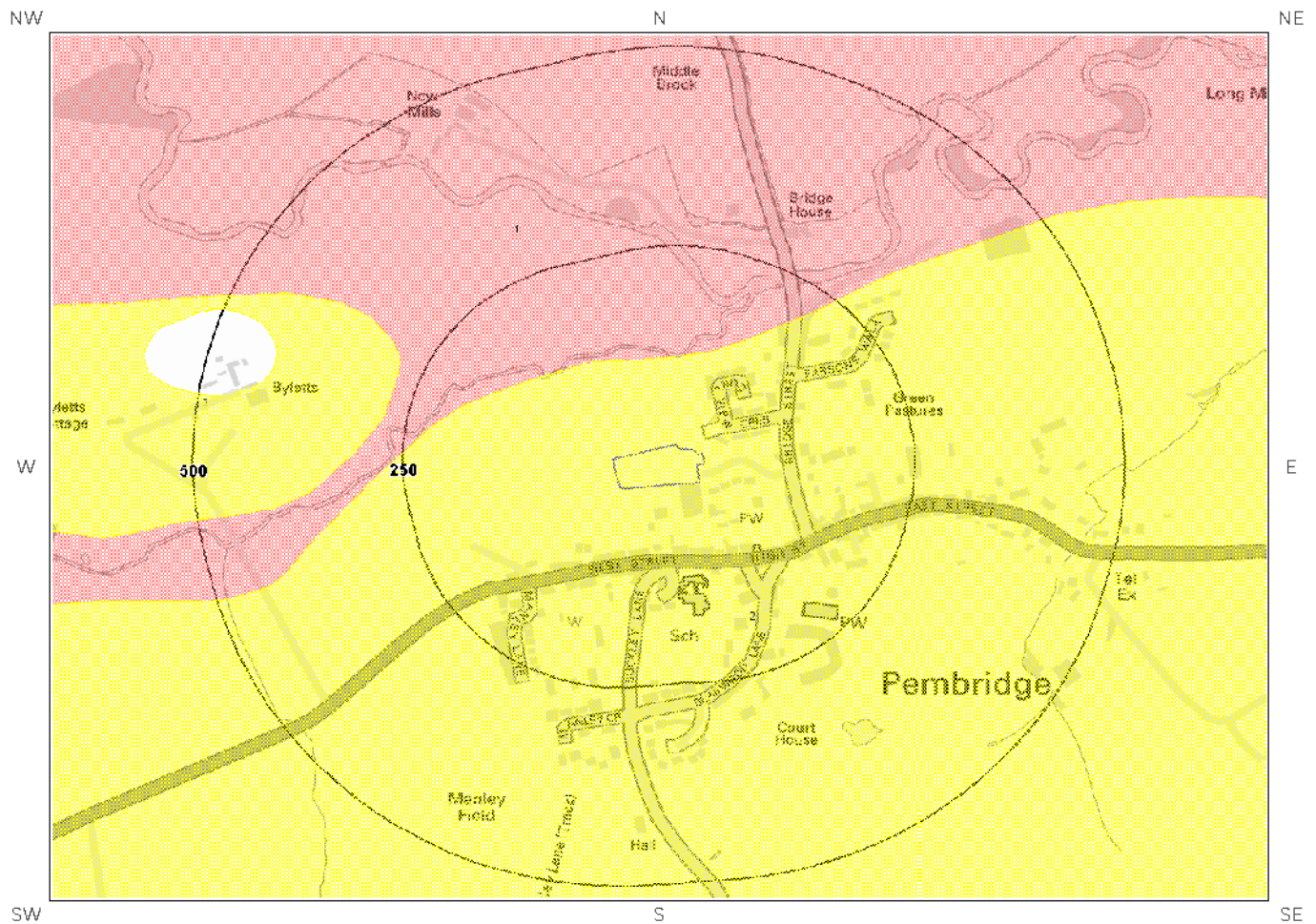
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
RG-SIMD	RAGLAN MUDSTONE FORMATION	SILTSTONE AND MUDSTONE, INTERBEDDED

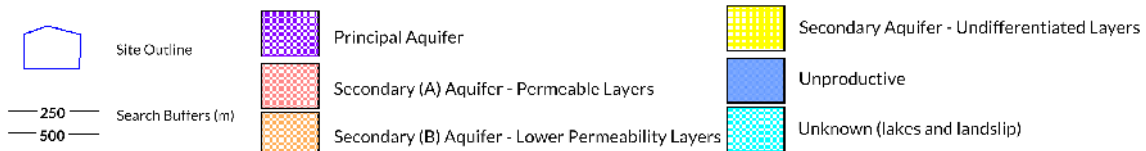
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

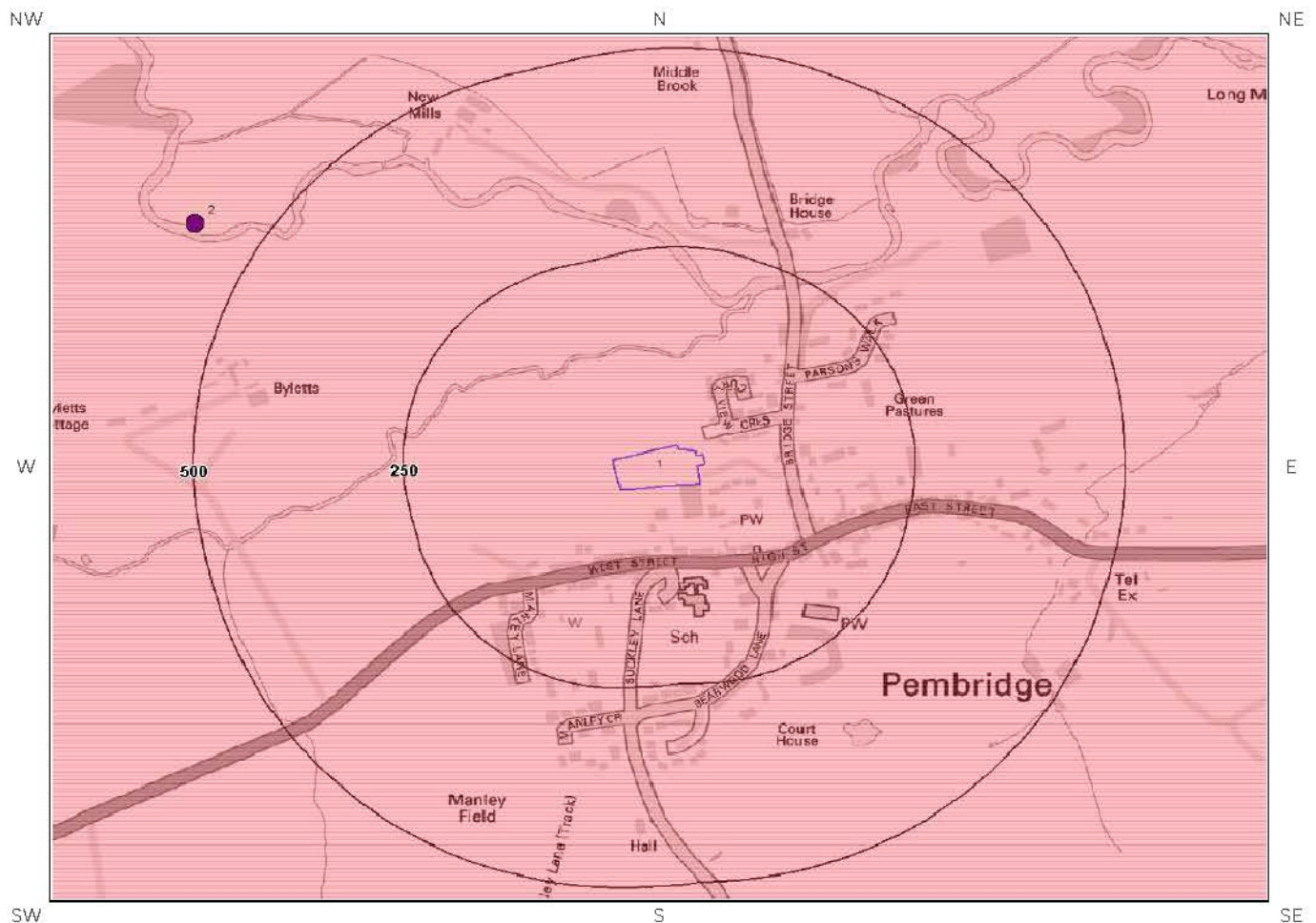
6a. Aquifer Within Superficial Geology



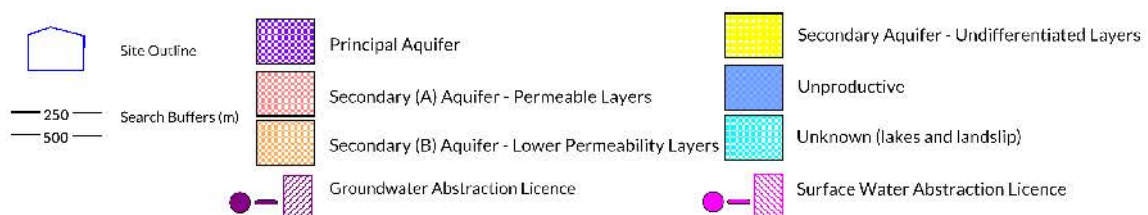
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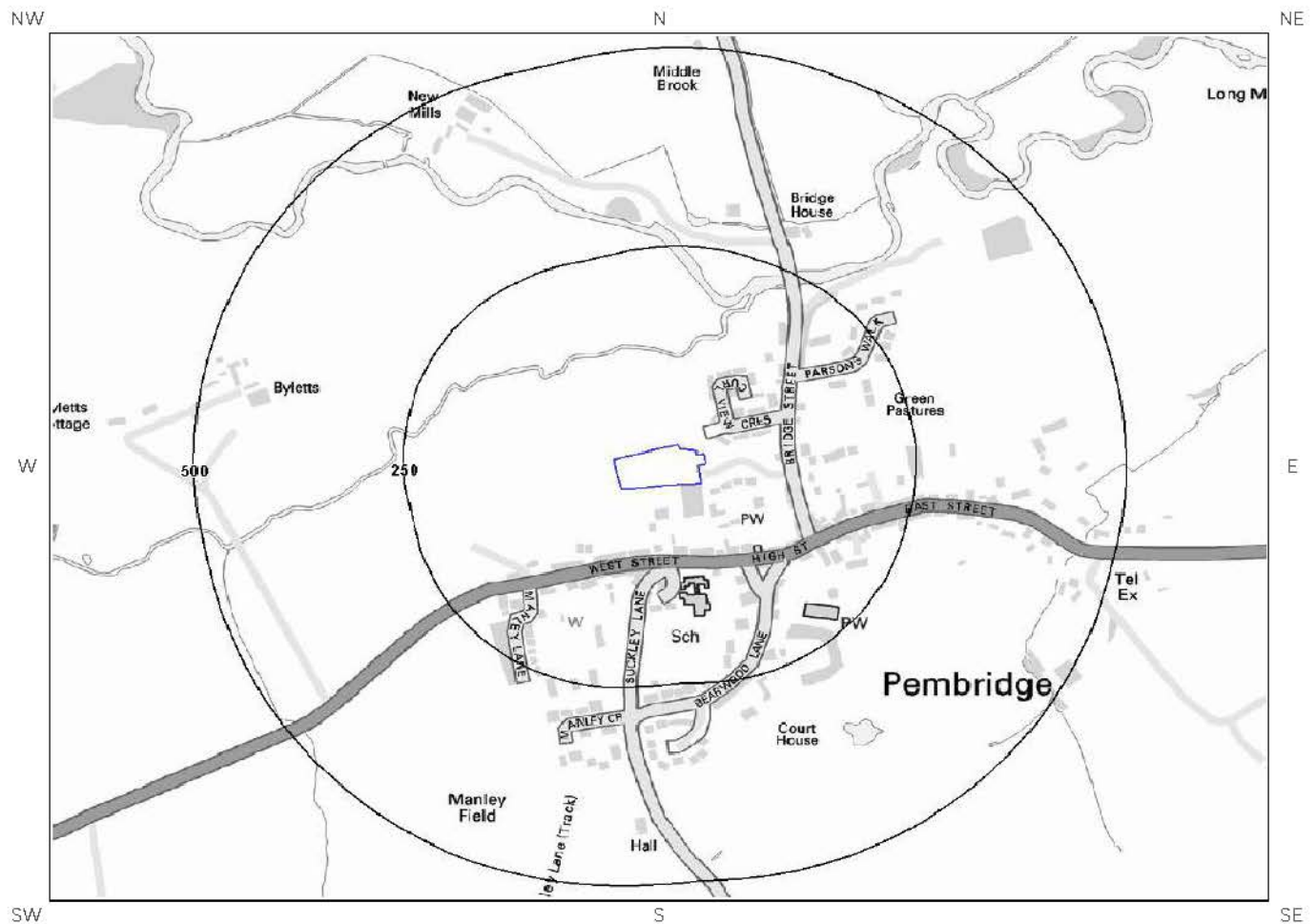
6b. Aquifer Within Bedrock Geology and Abstraction Licenses



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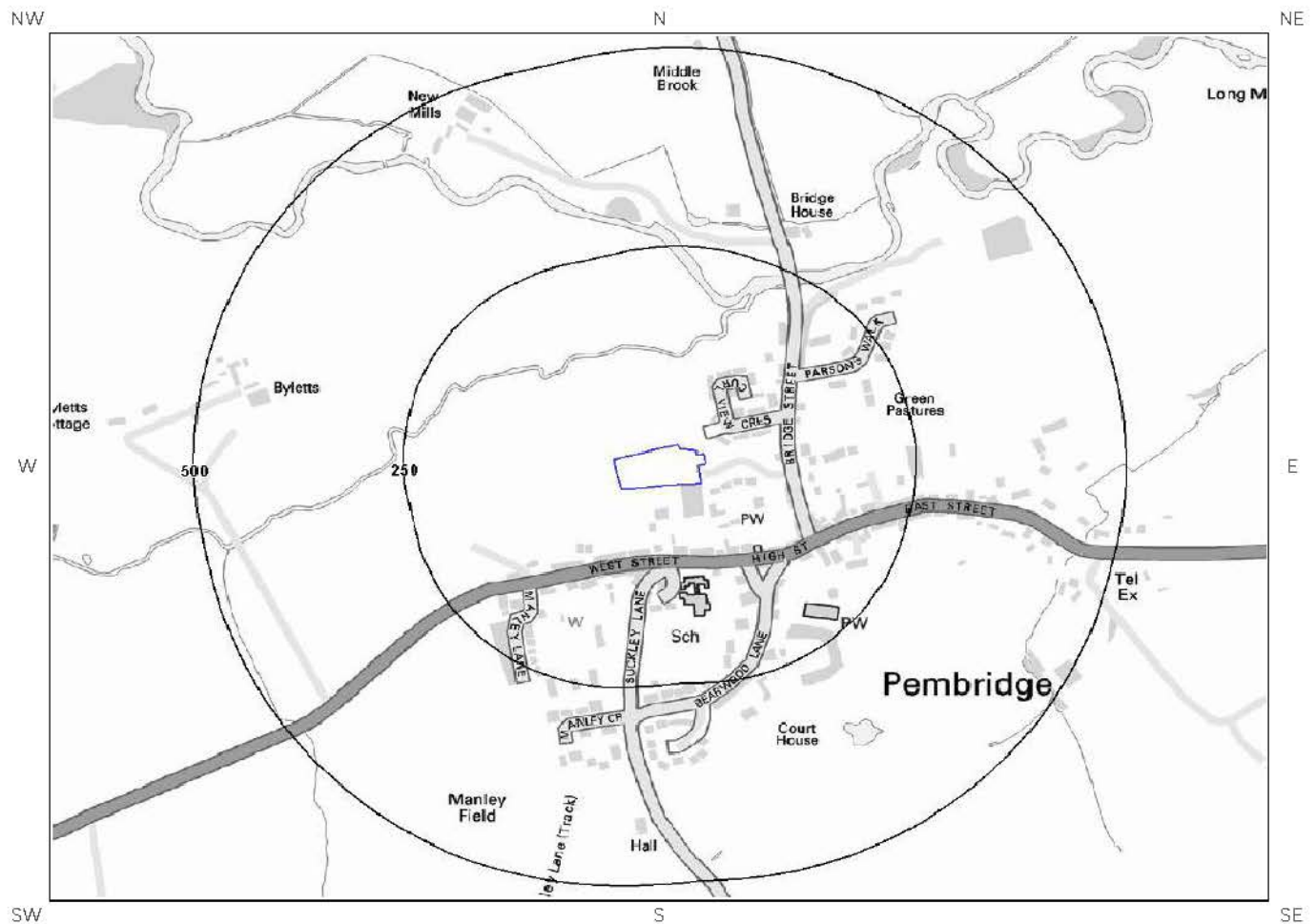
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licenses



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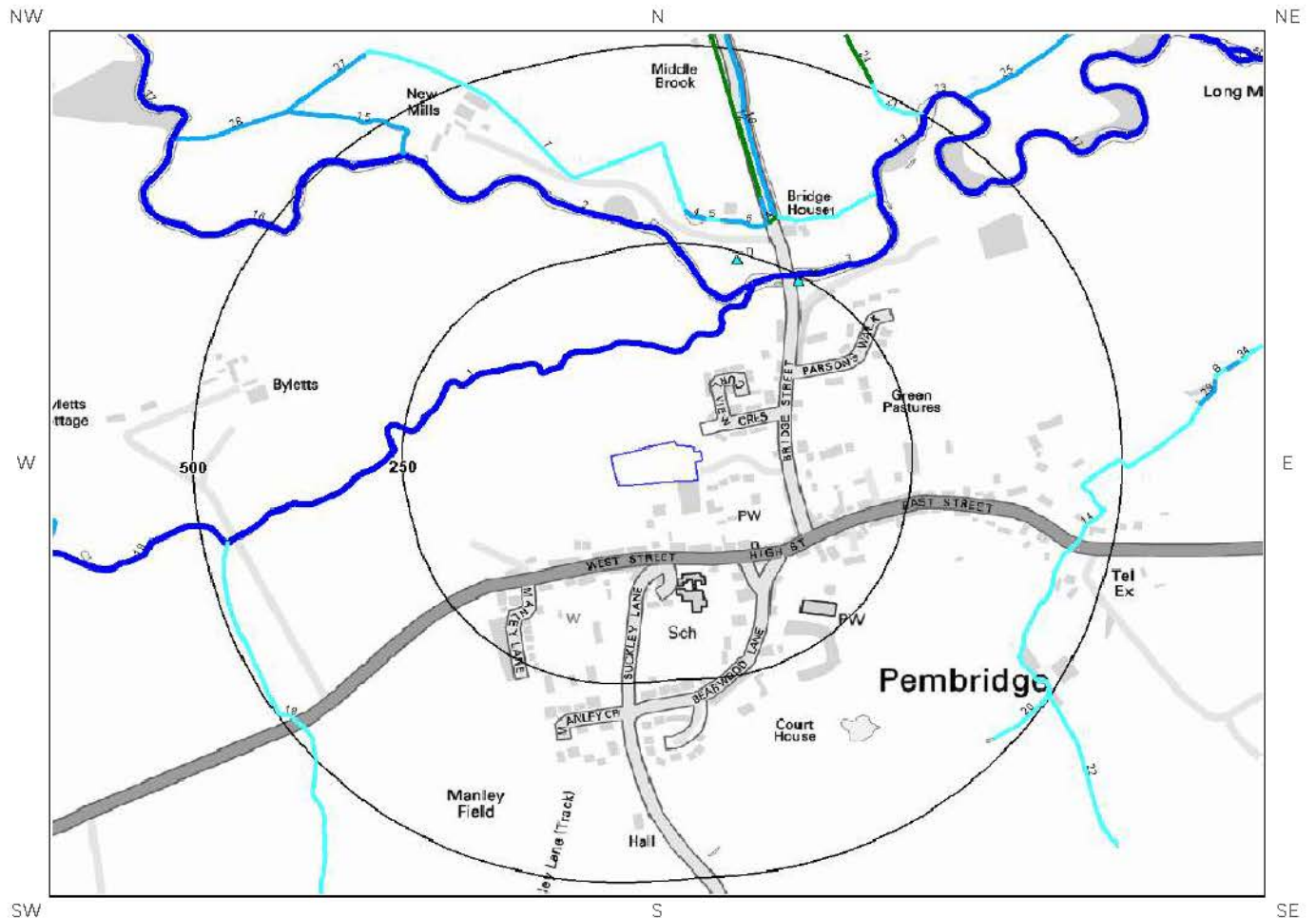
6d. Hydrogeology – Source Protection Zones within confined aquifer



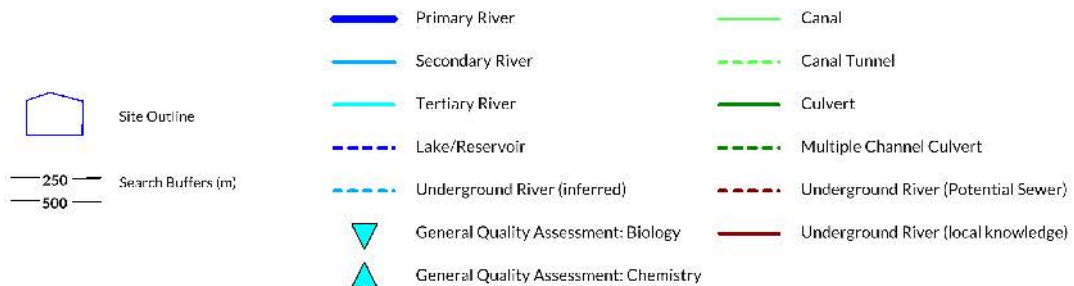
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6e. Hydrology – Detailed River Network and River Quality



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6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Are there records of strata classification within the superficial geology at or in proximity to the property? **Yes**

From 1 April 2010, the Environment Agency'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 Enviroinsight User Guide.

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

ID	Distance (m)	Direction	Designation	Description
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
1	110	N	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
3	275	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

6.2 Aquifer within Bedrock Deposits

Are there records of strata classification within the bedrock geology at or in proximity to the property? **Yes**

From 1 April 2010, the Environment Agency'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 Enviroinsight 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

Are there any Groundwater Abstraction Licences within 2000m of the study site?

Yes

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
2	580	NW	338350 258550	Status: Historical Licence No: 19/55/9/0126 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well Near Pump House Data Type: Point Name: Pudge Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 31/3/1966 Version End Date:
Not shown	855	NE	339500 258920	Status: Historical Licence No: 19/55/9/0074 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Borehole At Twyford Data Type: Point Name: Evans Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 31/3/1966 Version End Date:
Not shown	1020	NW	338280 259100	Status: Active Licence No: 19/55/9/0332 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Borehole At Leen Farm Data Type: Point Name: Norman Partnership Annual Volume (m ³): 72736 Max Daily Volume (m ³): 545.5 Original Application No: NPS/WR/017407 Original Start Date: 1/8/1985 Expiry Date: - Issue No: 102 Version Start Date: 14/10/2014 Version End Date:
Not shown	1020	NW	338280 259100	Status: Active Licence No: 19/55/9/0332 Details: Spray Irrigation - Direct Direct Source: Eaw Groundwater Point: Borehole At Leen Farm Data Type: Point Name: Norman Partnership Annual Volume (m ³): 72736 Max Daily Volume (m ³): 545.5 Original Application No: NPS/WR/017407 Original Start Date: 1/8/1985 Expiry Date: - Issue No: 102 Version Start Date: 14/10/2014 Version End Date:
Not shown	1020	NW	338280 259100	Status: Active Licence No: 19/55/9/0332 Details: Spray Irrigation - Storage Direct Source: Eaw Groundwater Point: Borehole At Leen Farm Data Type: Point Name: Norman Partnership Annual Volume (m ³): 72736 Max Daily Volume (m ³): 545.5 Original Application No: NPS/WR/017407 Original Start Date: 1/8/1985 Expiry Date: - Issue No: 102 Version Start Date: 14/10/2014 Version End Date:
Not shown	1062	NE	339550 259140	Status: Historical Licence No: 19/55/9/0349 Details: Spray Irrigation - Direct Direct Source: Eaw Groundwater Point: Borehole At Carwardine Farm Data Type: Point Name: Johnson & Son Annual Volume (m ³): 4400 Max Daily Volume (m ³): 95 Original Application No: - Original Start Date: 1/4/1994 Expiry Date: - Issue No: 100 Version Start Date: 1/4/2008 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	1123	NW	338350 259260	<p>Status: Active Licence No: 19/55/9/0347 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Borehole Near The Leen Data Type: Point Name: Norman Partnership</p> <p>Annual Volume (m³): 13176 Max Daily Volume (m³): 36 Original Application No: - Original Start Date: 1/2/1994 Expiry Date: - Issue No: 101 Version Start Date: 13/10/2008 Version End Date:</p>
Not shown	1239	S	339380 257060	<p>Status: Historical Licence No: 19/55/9/0034 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At Lower Bearwood Data Type: Point Name: Johnson</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 31/3/1966 Version End Date:</p>
Not shown	1306	W	337610 257830	<p>Status: Historical Licence No: 19/55/9/0109 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At Moseley Farm Data Type: Point Name: Perkins</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 31/3/1966 Version End Date:</p>
Not shown	1411	S	338650 256820	<p>Status: Historical Licence No: 19/55/9/0353 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Borehole At Barewood Farm Data Type: Point Name: Collins</p> <p>Annual Volume (m³): 7300 Max Daily Volume (m³): 20 Original Application No: - Original Start Date: 18/9/1996 Expiry Date: - Issue No: 100 Version Start Date: 1/4/2006 Version End Date:</p>
Not shown	1411	S	338650 256820	<p>Status: Historical Licence No: 19/55/9/0353 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Eaw Groundwater Point: Borehole At Barewood Farm Data Type: Point Name: Collins</p> <p>Annual Volume (m³): 7300 Max Daily Volume (m³): 20 Original Application No: - Original Start Date: 18/9/1996 Expiry Date: - Issue No: 100 Version Start Date: 1/4/2006 Version End Date:</p>
Not shown	1757	S	338810 256460	<p>Status: Historical Licence No: 19/55/9/0108 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At The Leys Data Type: Point Name: Lowe</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 31/3/1966 Version End Date:</p>
Not shown	1817	NE	340150 259630	<p>Status: Historical Licence No: 19/55/9/0260 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At Broom Data Type: Point Name: Connop</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 31/3/1966 Version End Date:</p>
Not shown	1829	E	340730 257790	<p>Status: Historical Licence No: 19/55/9/0003 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Borehole At Hardwick Farm Data Type: Point Name: Sanger</p> <p>Annual Volume (m³): 5576 Max Daily Volume (m³): 30.47 Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 1/4/2006 Version End Date:</p>

ID	Distance (m)	Direction	NGR	Details
Not shown	1856	NE	340250 259590	Status: Historical Licence No: 19/55/9/0243 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At Little Broome Farm Data Type: Point Name: Connop Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 31/3/1966 Version End Date:
Not shown	1916	S	338660 256310	Status: Historical Licence No: 19/55/9/0142 Details: General Farming & Domestic Direct Source: Eaw Groundwater Point: Well At The Leas Data Type: Point Name: Das Neves Pedros Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: - Expiry Date: - Issue No: 101 Version Start Date: 16/12/1996 Version End Date:

6.4 Surface Water Abstraction Licences

Are there any Surface Water Abstraction Licences within 2000m of the study site? Yes

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	825	NW	338100 258600	Status: Historical Licence No: 19/55/9/0099 Details: Spray Irrigation - Direct Direct Source: Eaw Surface Water Point: Ditch Near The Leen (point F) Data Type: Point Name: Norman Partnership Annual Volume (m³): 4546 Max Daily Volume (m³): 227.3 Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 1/9/2008 Version End Date:
Not shown	988	NW	338110 258910	Status: Historical Licence No: 19/55/9/0099 Details: Spray Irrigation - Direct Direct Source: Eaw Surface Water Point: River Arrow At Pembridge (point C) Data Type: Point Name: Norman Partnership Annual Volume (m³): 4546 Max Daily Volume (m³): 227.3 Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 1/9/2008 Version End Date:
Not shown	1098	NW	337850 258710	Status: Historical Licence No: 19/55/9/0099 Details: Spray Irrigation - Direct Direct Source: Eaw Surface Water Point: Ditch Near The Leen (point E) Data Type: Point Name: Norman Partnership Annual Volume (m³): 4546 Max Daily Volume (m³): 227.3 Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 1/9/2008 Version End Date:
Not shown	1131	N	338500 259330	Status: Historical Licence No: 19/55/9/0099 Details: Spray Irrigation - Direct Direct Source: Eaw Surface Water Point: Ditch Near The Leen (point I) Data Type: Point Name: Norman Partnership Annual Volume (m³): 4546 Max Daily Volume (m³): 227.3 Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 1/9/2008 Version End Date:

ID	Distance (m)	Direction	NGR	Details
Not shown	11/1	NW	338120 259170	<p>Status: Historical Licence No: 19/55/9/0099 Details: Spray Irrigation - Direct Direct Source: Eaw Surface Water Point: Stream Near The Leen (point G) Data Type: Point Name: Norman Partnership</p> <p>Annual Volume (m³): 4546 Max Daily Volume (m³): 227.3 Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 1/9/2008 Version End Date:</p>
Not shown	1251	NW	337830 258980	<p>Status: Historical Licence No: 19/55/9/0099 Details: Spray Irrigation - Direct Direct Source: Eaw Surface Water Point: River Arrow At Pembridge (point B) Data Type: Point Name: Norman Partnership</p> <p>Annual Volume (m³): 4546 Max Daily Volume (m³): 227.3 Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 1/9/2008 Version End Date:</p>
Not shown	1297	NW	338140 259340	<p>Status: Historical Licence No: 19/55/9/0099 Details: Spray Irrigation - Direct Direct Source: Eaw Surface Water Point: Stream Near The Leen (point H) Data Type: Point Name: Norman Partnership</p> <p>Annual Volume (m³): 4546 Max Daily Volume (m³): 227.3 Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 1/9/2008 Version End Date:</p>
Not shown	1299	S	339080 256930	<p>Status: Historical Licence No: 19/55/9/0331 Details: General Farming & Domestic Direct Source: Eaw Surface Water Point: Spring At Yew Tree Farm Data Type: Point Name: Batchelor</p> <p>Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: - Expiry Date: - Issue No: 100 Version Start Date: 30/3/1983 Version End Date:</p>
Not shown	1411	W	337540 258780	<p>Status: Historical Licence No: 19/55/9/0099 Details: Spray Irrigation - Direct Direct Source: Eaw Surface Water Point: Ditch Near The Leen (point D) Data Type: Point Name: Norman Partnership</p> <p>Annual Volume (m³): 4546 Max Daily Volume (m³): 227.3 Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 1/9/2008 Version End Date:</p>
Not shown	1622	NW	337810 259500	<p>Status: Historical Licence No: 19/55/9/0099 Details: Spray Irrigation - Direct Direct Source: Eaw Surface Water Point: Ditch Near The Leen (point J) Data Type: Point Name: Norman Partnership</p> <p>Annual Volume (m³): 4546 Max Daily Volume (m³): 227.3 Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 1/9/2008 Version End Date:</p>
Not shown	1994	N	338120 260110	<p>Status: Historical Licence No: 19/55/9/0099 Details: Spray Irrigation - Direct Direct Source: Eaw Surface Water Point: Ditch Near The Leen (point L) Data Type: Point Name: Norman Partnership</p> <p>Annual Volume (m³): 4546 Max Daily Volume (m³): 227.3 Application No: - Original Start Date: 31/3/1966 Expiry Date: - Issue No: 101 Version Start Date: 1/9/2008 Version End Date:</p>

6.5 Potable Water Abstraction Licences

Are there any Potable Water Abstraction Licences within 2000m of the study site?

Yes

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	1411	S	338650 256820	<p>Status: Historical Licence No: 19/55/9/0353 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Household Direct Source: Eaw Groundwater Point: Borehole At Barewood Farm Data Type: Point Name: Collins</p> <p>Annual Volume (m³): 7300 Max Daily Volume (m³): 20 Original Application No: - Original Start Date: 18/9/1996 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:</p>

6.6 Source Protection Zones

Are there any Source Protection Zones within 500m of the study site?

No

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Are there any Source Protection Zones within the Confined Aquifer within 500m of the study site?

No

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

Is there any Environment Agency information on groundwater vulnerability and soil leaching potential within 500m of the study site?

Yes

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/Intermediate Leaching Potential	I1	Soils which can possibly transmit a wide range of pollutants.
62	NW	Minor 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.

6.9 River Quality

Is there any Environment Agency information on river quality within 1500m of the study site?

Yes

6.9.1 Biological Quality:

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

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

ID	Distance (m)	Direction	NGR	River Quality Grade	Biological Quality Grade				
					2005	2006	2007	2008	2009
Not shown	995	SE	339800 257700	River Name: Itchen Reach: Conf Pipers Brook To Harbury Stw End/Start of Stretch: Start of Stretch NGR	C	B	B	B	A
Not shown	995	SE	339800 257700	River Name: Itchen Reach: Road Br Lower Radbourne To Conf Pipers Brook End/Start of Stretch: End of Stretch NGR	C	B	B	B	A

6.9.2 Chemical Quality:

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

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

ID	Distance (m)	Direction	NGR	River Quality Grade	Chemical Quality Grade				
					2005	2006	2007	2008	2009
68D	240	N	339000 258500	River Name: Arrow Reach: Conf.stretford Bk.-conf.curl Bk. End/Start of Stretch: Start of Stretch NGR	A	A	A	A	A
69D	240	N	339000 258500	River Name: Arrow Reach: Conf.curl Bk.-conf.hunton Bk. End/Start of Stretch: End of Stretch NGR	A	A	A	A	A
70	243	NE	339073 258473	River Name: Arrow Reach: Conf.curl Bk.-conf.hunton Bk. End/Start of Stretch: Sample Point NGR	A	A	A	A	A

6.10 Detailed River Network

Are there any Detailed River Network entries within 500m of the study site? Yes

The following Detailed River Network records are represented on the Hydrology Map (6e):

ID	Distance (m)	Direction	Details	
1	113	N	River Name: Curl Brook Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
2	189	N	River Name: River Arrow Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
3	218	N	River Name: River Arrow Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
4	282	N	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
5	282	N	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
6	284	N	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
7	293	N	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
8A	297	N	River Name: - Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined

ID	Distance (m)	Direction	Details	
9A	297	N	River Name: Drain Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
10	306	N	River Name: Drain Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
11	306	N	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
12	324	N	River Name: Drain Welsh River Name: - Alternative Name: -	River Type: Culvert Main River Status: Currently Undefined
13	389	NE	River Name: River Arrow Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
14	435	SE	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
15	452	NW	River Name: - Welsh River Name: - Alternative Name: -	River Type: Secondary River Main River Status: Currently Undefined
16	452	NW	River Name: River Arrow Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
17	455	NE	River Name: River Arrow Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
18	469	W	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
19	469	W	River Name: Curl Brook Welsh River Name: - Alternative Name: -	River Type: Primary River Main River Status: Currently Undefined
20	480	SE	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
21	488	NE	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined
22	495	SE	River Name: - Welsh River Name: - Alternative Name: -	River Type: Tertiary River Main River Status: Currently Undefined

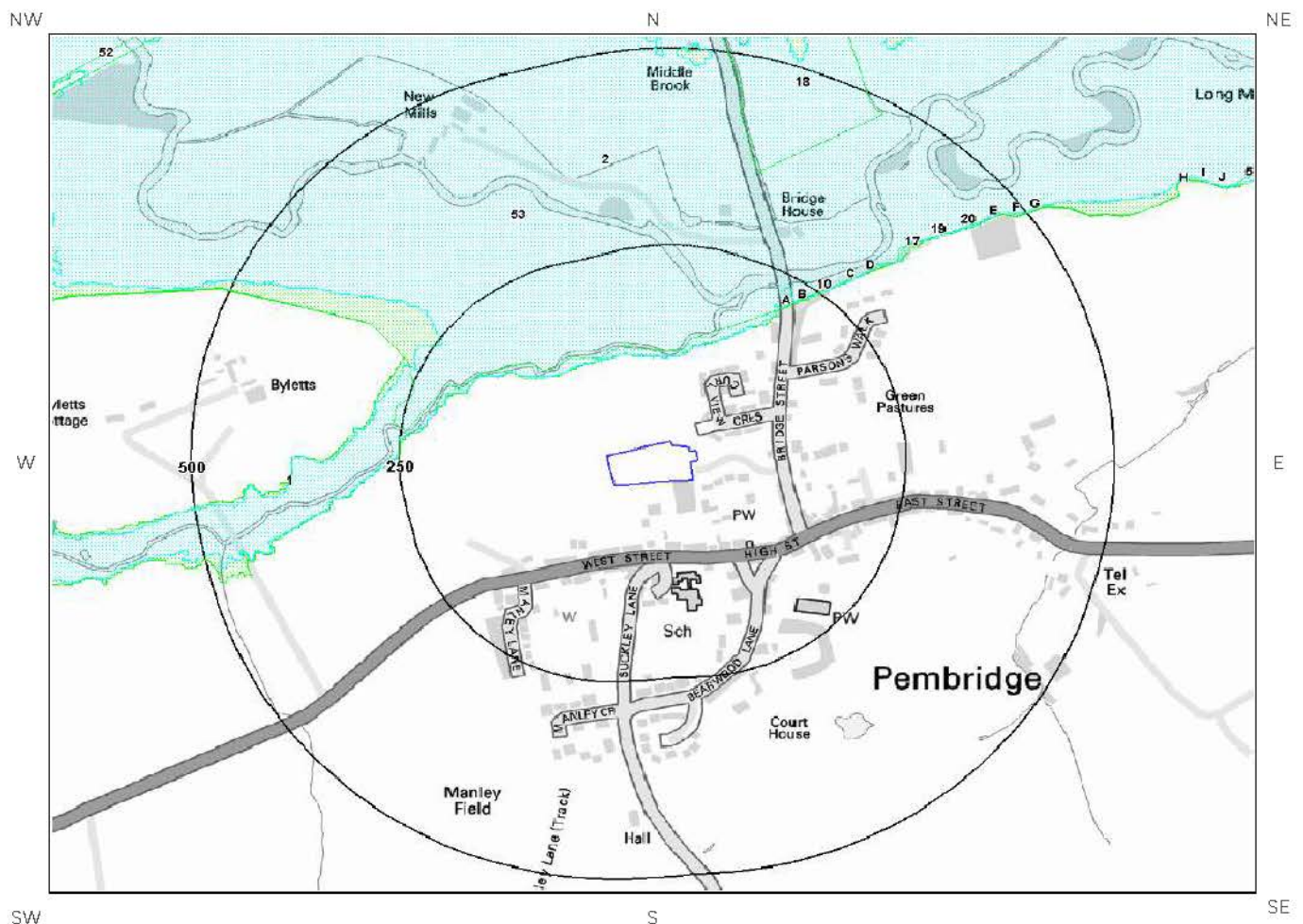
6.11 Surface Water Features

Are there any surface water features within 250m of the study site? Yes

The following surface water records are not represented on mapping:

Distance (m)	Direction
111	N
236	NE

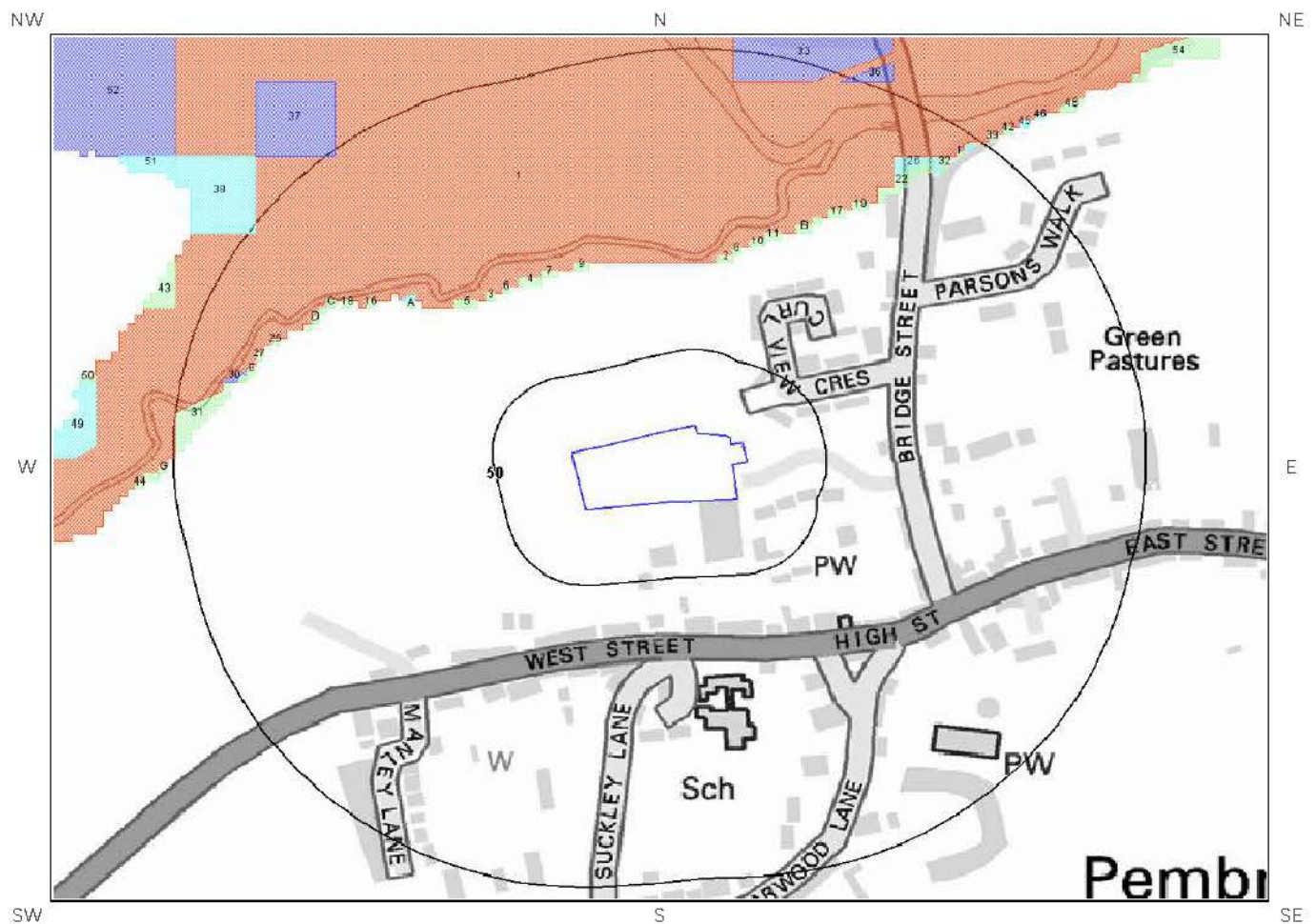
7a. Environment Agency Flood Map for Planning (from rivers and the sea)



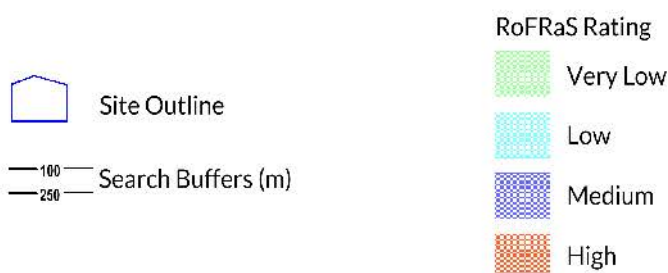
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7b. Environment Agency Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Is the site within 250m of an Environment Agency Zone 2 floodplain? Yes

Environment Agency 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	106	N	18-Nov-2015	Zone 2 - (Fluvial/Tidal Models)
2	115	N	18-Nov-2015	Zone 2 - (Fluvial/Tidal Models)
3A	203	NE	18-Nov-2015	Zone 2 - (Fluvial/Tidal Models)
4A	211	NE	18-Nov-2015	Zone 2 - (Fluvial/Tidal Models)
5A	212	NE	18-Nov-2015	Zone 2 - (Fluvial/Tidal Models)
6B	221	NE	18-Nov-2015	Zone 2 - (Fluvial/Tidal Models)
7B	225	NE	18-Nov-2015	Zone 2 - (Fluvial/Tidal Models)
8B	226	NE	18-Nov-2015	Zone 2 - (Fluvial/Tidal Models)
9B	227	NE	18-Nov-2015	Zone 2 - (Fluvial/Tidal Models)
10	230	NE	18-Nov-2015	Zone 2 - (Fluvial/Tidal Models)

7.2 River and Coastal Zone 3 Flooding

Is the site within 250m of an Environment Agency Zone 3 floodplain? Yes

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
1	106	N	18-Nov-2015	Zone 3 - (Fluvial Models)

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

What is the highest risk of flooding onsite?

Very Low

The Environment Agency 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

Are there any Flood Defences within 250m of the study site?

No

Database searched and no data found.

7.5 Areas benefiting from Flood Defences

Are there any areas benefiting from Flood Defences within 250m of the study site?

No

7.6 Areas benefiting from Flood Storage

Are there any areas used for Flood Storage within 250m of the study site?

No

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 Are there any British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site? Yes

Does this relate to 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 What is the 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

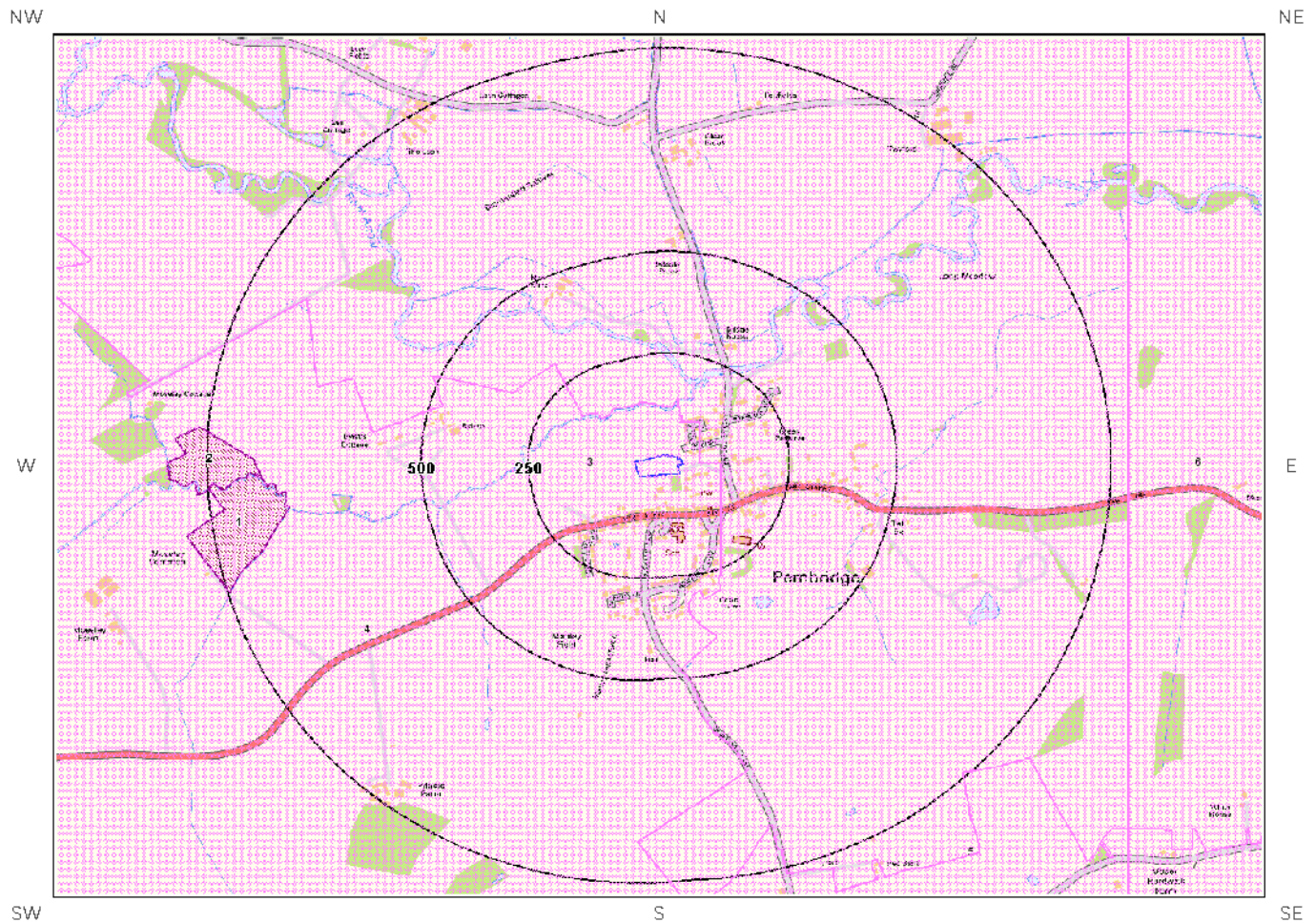
What is the British Geological Survey confidence rating in this result?

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

Presence of Designated Environmentally Sensitive Sites within 2000m of the study site?

Yes

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

2

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
1	814	W	Moseley Common, Pembridge	Natural England
2	872	W	Moseley Common, Pembridge	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:

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:

2

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

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
Not shown	1419	SW	UNKNOWN	Ancient Replanted Woodland
Not shown	1974	W	UNKNOWN	Ancient and Semi-Natural Woodland

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:

9

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
3	0	On Site	Existing	DEFRA
4	0	On Site	Existing	DEFRA
5	889	S	Existing	DEFRA
6	1041	E	Existing	DEFRA
7	1363	SE	Existing	DEFRA
Not shown	1625	NE	Existing	DEFRA
Not shown	1728	N	Existing	DEFRA
Not shown	1728	N	Existing	DEFRA
Not shown	1906	NE	Existing	DEFRA

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 GeoInsight, available from our [website](#). The following information has been found:

9.1.1 Shrink Swell

What is the maximum Shrink-Swell* 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
Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

9.1.2 Landslides

What is the 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

What is the 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

What is the 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

What is the 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

What is the 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.

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 property is in a Radon Affected Area, as between 5 and 10% of properties are above the Action Level.

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

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? Basic radon protective measures are necessary.

10. Mining

10.1 Coal Mining

Are there any coal mining areas within 75m of the study site? No

Database searched and no data found.

10.2 Non-Coal Mining

Are there any Non-Coal Mining areas within 50m of the study site boundary? Yes

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

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Berwyn Hills	Vein Mineral	Rare and localised small scale mining may have occurred.

Past underground mine workings may occur. The rock types present in these areas are such that small mineral veins may be present on which it is possible that small scale mining has been undertaken and/or it is possible that limited underground extraction of other materials may have occurred. All such occurrences are likely to be of minor localised extent 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

Are there any brine affected areas within 75m of the study site? No

Guidance: No Guidance Required.

Contact Details

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info@groundsure.com

British Geological Survey Enquiries

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

Environment Agency

National Customer Contact Centre, PO Box 544
Rotherham, S60 1BY
Tel: 08708 506 506

Web: www.environment-agency.gov.uk

Email: enquiries@environment-agency.gov.uk

Public Health England

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

The Coal Authority

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

Ordnance Survey

Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505

Local Authority

Authority: Herefordshire Council
Phone: 01432 260 000

Web: <https://www.herefordshire.gov.uk/>

Address: 35 Hafod Road, Brockington, Herefordshire, HR1 1SH

Gemapping PLC

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



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

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(ii) any information which is in the public domain (other than by virtue of a breach of this Contract).

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“Mapping” means a map, map data or a combination of historical maps of various ages, time periods and scales.

“Order” means an electronic, written or other order form submitted by the Client requesting Services from Groundsure in respect of a specified Site.

“Ordnance Survey” means the Secretary of State for Business, Innovation and Skills, acting through Ordnance Survey, Adanac Drive, Southampton, SO16 0AS, UK.

“Order Website” means the online platform through which Orders may be placed by the Client and accepted by Groundsure.

“Report” means a Risk Screening Report or Data Report for Commercial or Residential property.

“Residential” means any building or property used as or intended to be used as a single dwelling.

“Risk Screening Report” means a risk screening report comprising factual data with an accompanying interpretation by Groundsure.

“Services” means any Report, Mapping and/or Support Services which Groundsure has agreed to provide by accepting an Order pursuant to clause 2.6.

“Site” means the area of land in respect of which the Client has requested Groundsure to provide the Services.

“Third Party Content” means data, database information or other information which is provided to Groundsure by a Third Party Data Provider.

“User Guide” means the user guide, as amended from time to time, available upon request from Groundsure and on the website (www.Groundsure.com) and forming part of this Contract.

2 Scope of Services, terms and conditions, requests for insurance and quotations

2.1 Groundsure agrees to provide the Services in accordance with the Contract.

2.2 Groundsure shall exercise reasonable skill and care in the provision of the Services.

2.3 Subject to clause 7.3 the Client acknowledges that it has not relied on any statement or representation made by or on behalf of Groundsure which is not set out and expressly agreed in writing in the Contract and all such statements and representations are hereby excluded to the fullest extent permitted by law.

2.4 The Client acknowledges that terms and conditions appearing on a Client's order form, printed stationery or other communication, or any terms or conditions implied by custom, practice or course of dealing shall be of no effect, and that this Contract shall prevail over all others in relation to the Order.

2.5 If the Client or Beneficiary requests insurance in conjunction with or as a result of the Services, Groundsure shall use reasonable endeavours to recommend such insurance, but makes no warranty that such insurance shall be available from insurers or that it will be offered on reasonable terms. Any insurance purchased by the Client or Beneficiary shall be subject solely to the terms of the policy issued by insurers and Groundsure will have no liability therefor. In addition you acknowledge and agree that Groundsure does not act as an agent or broker for any insurance providers. The Client should take (and ensure that the Beneficiary takes) independent advice to ensure that the insurance policy requested or offered is suitable for its requirements.

2.6 Groundsure's quotations or proposals are valid for a period of 30 days only unless an alternative period of time is explicitly stipulated by Groundsure. Groundsure reserves the right to withdraw any quotation or proposal at any time before an Order is accepted by Groundsure. Groundsure's acceptance of an Order shall be binding only when made in writing and signed by Groundsure's authorised representative or when accepted through the Order Website.

3 The Client's obligations

3.1 The Client shall comply with the terms of this Contract and

(i) procure that the Beneficiary or any third party relying on the Services complies with and acts as if it is bound by the Contract and

(ii) be liable to Groundsure for the acts and omissions of the Beneficiary or any third party relying on the Services as if such acts and omissions were those of the Client.

3.2 The Client shall be solely responsible for ensuring that the Services are appropriate and suitable for its and/or the Beneficiary's needs.

3.3 The Client shall supply to Groundsure as soon as practicable and without charge all requisite information (and the Client warrants that such information is accurate, complete and appropriate), including without limitation any environmental information relating to the Site and shall give such assistance as Groundsure shall reasonably require in the provision of the Services including, without limitation, access to the Site, facilities and equipment.

3.4 Where the Client's approval or decision is required to enable Groundsure to carry out work in order to provide the Services, such approval or decision shall be given or procured in reasonable time and so as not to delay or disrupt the performance of the Services.

3.5 Save as expressly permitted by this Contract the Client shall not, and shall procure that the Beneficiary shall not, re-sell, alter, add to, or amend the Groundsure Materials, or use the Groundsure Materials in a manner for which they were not intended. The Client may make the Groundsure Materials available to a third party who is considering acquiring some or all of, or providing funding in relation to, the Site, but such third party cannot rely on the same unless expressly permitted under clause 4.

3.6 The Client is responsible for maintaining the confidentiality of its user name and password if using the Order Website and the Client acknowledges that Groundsure accepts no liability of any kind for any loss or damage suffered by the Client as a consequence of using the Order Website.

4 Reliance

4.1 The Client acknowledges that the Services provided by Groundsure consist of the presentation and analysis of Third Party Content and other content and that information obtained from a Third Party Data Provider cannot be guaranteed or warranted by Groundsure to be reliable.

4.2 In respect of Data Reports, Mapping and Risk Screening Reports, the following classes of person and no other are entitled to rely on their contents;

- (i) the Beneficiary,
- (ii) the Beneficiary's professional advisers, (iii) any person providing funding to the Beneficiary in relation to the Site (whether directly or as part of a lending syndicate),
- (iv) the first purchaser or first tenant of the Site, and
- (v) the professional advisers and lenders of the first purchaser or tenant of the Site.

4.3 In respect of Support Services, only the Client, Beneficiary and parties expressly named in a Report and no other parties are entitled to rely on its contents.

4.4 Save as set out in clauses 4.2 and 4.3 and unless otherwise expressly agreed in writing, no other person or entity of any kind is entitled to rely on any Services or Report issued or provided by Groundsure. Any party considering such Reports and Services does so at their own risk.

5 Fees and Disbursements

5.1 Groundsure shall charge and the Client shall pay fees at the rate and

frequency specified in the written proposal, Order Website or Order acknowledgement form, plus (in the case of Support Services) all proper disbursements incurred by Groundsure. The Client shall in addition pay all value added tax or other tax payable on such fees and disbursements in relation to the provision of the Services (together "Fees").

5.2 The Client shall pay all outstanding Fees to Groundsure in full without deduction, counterclaim or set off within 30 days of the date of Groundsure's invoice or such other period as may be agreed in writing between Groundsure and the Client ("Payment Date"). Interest on late payments will accrue on a daily basis from the Payment Date until the date of payment (whether before or after judgment) at the rate of 8% per annum.

5.3 The Client shall be deemed to have agreed the amount of any invoice unless an objection is made in writing within 28 days of the date of the invoice. As soon as reasonably practicable after being notified of an objection, without prejudice to clause 5.2 a member of Groundsure's management team will contact the Client and the parties shall then use all reasonable endeavours to resolve the dispute within 15 days.

6 Intellectual Property and Confidentiality

6.1 Subject to

(i) full payment of all relevant Fees and

(ii) compliance with this Contract, the Client is granted (and is permitted to sub-licence to the Beneficiary) a royalty-free, worldwide, non-assignable and (save to the extent set out in this Contract) non-transferable licence to make use of the Groundsure Materials.

6.2 All Intellectual Property in the Groundsure Materials are and shall remain owned by Groundsure or Groundsure's licensors (including without limitation the Third Party Data Providers) the Client acknowledges, and shall procure acknowledgement by the Beneficiary of, such ownership. Nothing in this Contract purports to transfer or assign any rights to the Client or the Beneficiary in respect of such Intellectual Property.

6.3 Third Party Data Providers may enforce any breach of clauses 6.1 and 6.2 against the Client or Beneficiary.

6.4 The Client shall, and shall procure that any recipients of the Groundsure Materials shall:

(i) not remove, suppress or modify any trade mark, copyright or other proprietary marking belonging to Groundsure or any third party from the Services;

(ii) use the information obtained as part of the Services in respect of the subject Site only, and shall not store or reuse any information obtained as part of the Services provided in respect of adjacent or nearby sites;

(iii) not create any product or report which is derived directly or indirectly from the Services (save that those acting in a professional capacity to the Beneficiary may provide advice based upon the Services);

(iv) not combine the Services with or incorporate such Services into any other information data or service;

(v) not reformat or otherwise change (whether by modification, addition or enhancement), the Services (save that those acting for the Beneficiary in a professional capacity shall not be in breach of this clause 6.4(v) where such reformatting is in the normal course of providing advice based upon the Services);

(vi) where a Report and/or Mapping contains material belonging to Ordnance Survey, acknowledge and agree that such content is protected by Crown Copyright and shall not use such content for any purpose outside of receiving the Services; and

(vii) not copy in whole or in part by any means any map prints or run-on copies containing content belonging to Ordnance Survey (other than that contained within Ordnance Survey's OS Street Map) without first being in possession of a valid Paper Map Copying Licence from Ordnance Survey,

6.5 Notwithstanding clause 6.4, the Client may make reasonable use of the Groundsure Materials in order to advise the Beneficiary in a professional capacity. However, Groundsure shall have no liability in respect of any advice, opinion or report given or provided to Beneficiaries by the Client.

6.6 The Client shall procure that any person to whom the Services are made available shall notify Groundsure of any request or requirement to disclose, publish or disseminate any information contained in the Services in accordance with the Freedom of Information Act 2000, the Environmental Information Regulations 2004 or any associated legislation or regulations in force from time to time.

7.Liability: Particular Attention Should Be Paid To This Clause

7.1 This Clause 7 sets out the entire liability of Groundsure, including any liability for the acts or omissions of its employees, agents, consultants, subcontractors and Third Party Content, in respect of:

(i) any breach of contract, including any deliberate breach of the Contract by Groundsure or its employees, agents or

subcontractors;

(ii) any use made of the Reports, Services, Materials or any part of them; and

(iii) any representation, statement or tortious act or omission (including negligence) arising under or in connection with the Contract.

7.2 All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from the Contract.

7.3 Nothing in the Contract limits or excludes the liability of the Supplier for death or personal injury resulting from negligence, or for any damage or liability incurred by the Client or Beneficiary as a result of fraud or fraudulent misrepresentation.

7.4 Groundsure shall not be liable for

(i) loss of profits;

(ii) loss of business;

(iii) depletion of goodwill and/or similar losses;

(iv) loss of anticipated savings;

(v) loss of goods;

(vi) loss of contract;

(vii) loss of use;

(viii) loss or corruption of data or information;

(ix) business interruption;

(x) any kind of special, indirect, consequential or pure economic loss, costs, damages, charges or expenses;

(xi) loss or damage that arise as a result of the use of all or part of the Groundsure Materials in breach of the Contract;

(xii) loss or damage arising as a result of any error, omission or inaccuracy in any part of the Groundsure Materials where such error, omission or inaccuracy is caused by any Third Party Content or any reasonable interpretation of Third Party Content;

(xiii) loss or damage to a computer, software, modem, telephone or other property; and

(xiv) loss or damage caused by a delay or loss of use of Groundsure's internet ordering service.

7.5 Groundsure's total liability in relation to or under the Contract shall be limited to £10 million for any claim or claims.

7.6 Groundsure shall procure that the Beneficiary shall be bound by limitations and exclusions of liability in favour of Groundsure which accord with those detailed in clauses 7.4 and 7.5 (subject to clause 7.3) in respect of all claims which the Beneficiary may bring against Groundsure in relation to the Services or other matters arising pursuant to the Contract.

8 Groundsure's right to suspend or terminate

8.1 If Groundsure reasonably believes that the Client or Beneficiary has not provided the information or assistance required to enable the proper provision of the Services, Groundsure shall be entitled to suspend all further performance of the Services until such time as any such deficiency has been made good.

8.2 Groundsure shall be entitled to terminate the Contract immediately on written notice in the event that:

(i) the Client fails to pay any sum due to Groundsure within 30 days of the Payment Date; or

(ii) the Client (being an individual) has a bankruptcy order made against him or (being a company) shall enter into liquidation whether compulsory or voluntary or have an administration order made against it or if a receiver shall be appointed over the whole or any part of its property assets or undertaking or if the Client is struck off the Register of Companies or dissolved; or

(iii) the Client being a company is unable to pay its debts within the meaning of Section 123 of the Insolvency Act 1986 or being an individual appears unable to pay his debts within the meaning of Section 268 of the Insolvency Act 1986 or if the Client shall enter into a composition or arrangement with the Client's creditors or shall suffer distress or execution to be levied on his goods; or

(iv) the Client or the Beneficiary breaches any term of the Contract (including, but not limited to, the obligations in clause 4) which is incapable of remedy or if remediable, is not remedied within five days of notice of the breach.

9. Client's Right to Terminate and Suspend

9.1 Subject to clause 10.1, the Client may at any time upon written notice terminate or suspend the provision of all or any of the Services.

9.2 In any event, where the Client is a consumer (and not a business) he/she hereby expressly acknowledges and agrees that:

(i) the supply of Services under this Contract (and therefore the performance of this Contract) commences immediately upon Groundsure's acceptance of the Order; and

(ii) the Reports and/or Mapping provided under this Contract are

- (a) supplied to the Client's specification(s) and in any event
- (b) by their nature cannot be returned.

10 Consequences of Withdrawal, Termination or Suspension

10.1 Upon termination of the Contract:

(i) Groundsure shall take steps to bring to an end the Services in an orderly manner, vacate any Site with all reasonable speed and shall deliver to the Client and/or Beneficiary any property of the Client and/or Beneficiary in Groundsure's possession or control; and

(ii) the Client shall pay to Groundsure all and any Fees payable in respect of the performance of the Services up to the date of termination or suspension. In respect of any Support Services provided, the Client shall also pay Groundsure any additional costs incurred in relation to the termination or suspension of the Contract.

11 Anti-Bribery

11.1 The Client warrants that it shall:

(i) comply with all applicable laws, statutes and regulations relating to anti-bribery and anti-corruption including but not limited to the Bribery Act 2010;

(ii) comply with such of Groundsure's anti-bribery and anti-corruption policies as are notified to the Client from time to time; and

(iii) promptly report to Groundsure any request or demand for any undue financial or other advantage of any kind received by or on behalf of the Client in connection with the performance of this Contract.

11.2 Breach of this Clause 11 shall be deemed a material breach of this Contract.

12 General

12.1 The Mapping contained in the Services is protected by Crown copyright and must not be used for any purpose other than as part of the Services or as specifically provided in the Contract.

12.2 The Client shall be permitted to make one copy only of each Report or Mapping Order. Thereafter the Client shall be entitled to make unlimited copies of the Report or Mapping Order only in accordance with an Ordnance Survey paper map copy license available through Groundsure.

12.3 Groundsure reserves the right to amend or vary this Contract. No amendment or variation to this Contract shall be valid unless signed by an authorised representative of Groundsure.

12.4 No failure on the part of Groundsure to exercise, and no delay in exercising, any right, power or provision under this Contract shall operate as a waiver thereof.

12.5 Save as expressly provided in this Contract, no person other than the persons set out therein shall have any right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of the Contract.

12.6 The Secretary of State for Business, Innovation and Skills ("BIS") or BIS' successor body, as the case may be, acting through Ordnance Survey may enforce a breach of clause 6.4(vi) and clause 6.4(vii) of these terms and conditions against the Client in accordance with the provisions of the Contracts (Rights of Third Parties) Act 1999.

12.7 Groundsure shall not be liable to the Client if the provision of the Services is delayed or prevented by one or more of the following circumstances:

- (i) the Client or Beneficiary's failure to provide facilities, access or information;
- (ii) fire, storm, flood, tempest or epidemic;
- (iii) Acts of God or the public enemy;
- (iv) riot, civil commotion or war;
- (v) strikes, labour disputes or industrial action;
- (vi) acts or regulations of any governmental or other agency;
- (vii) suspension or delay of services at public registries by Third Party Data Providers;
- (viii) changes in law; or
- (ix) any other reason beyond Groundsure's reasonable control.

In the event that Groundsure is prevented from performing the Services (or any part thereof) in accordance with this clause 12.6 for a period of not less than 30 days then Groundsure shall be entitled to terminate this Contract immediately on written notice to the Client.

12.8 Any notice provided shall be in writing and shall be deemed to be properly given if delivered by hand or sent by first class post, facsimile or by email to the address, facsimile number or email address of the relevant party as may have been notified by each party to the other for such purpose or in the absence of such notification the last known address.

12.9 Such notice shall be deemed to have been received on the day of delivery if delivered by hand, facsimile or email (save to the extent such day is not a working day where it shall be deemed to have been delivered on the next working day) and on the second working day after the day of posting if sent by first class post.

12.10 The Contract constitutes the entire agreement between the parties and shall supersede all previous arrangements between the parties relating to the subject matter hereof.

12.11 Each of the provisions of the Contract is severable and distinct from the others and if one or more provisions is or should become invalid, illegal or unenforceable, the validity and enforceability of the remaining provisions shall not in any way be tainted or impaired.

12.12 This Contract shall be governed by and construed in accordance with English law and any proceedings arising out of or connected with this Contract shall be subject to the exclusive jurisdiction of the English courts.

12.13 Groundsure is an executive member of the Council of Property Search Organisation (CoPSO) and has signed up to the Search Code administered by the Property Codes Compliance Board (PCCB). All Risk Screening Reports shall be supplied in accordance with the provisions of the Search Code.

12.14 If the Client or Beneficiary has a complaint about the Services, written notice should be given to the Compliance Officer at Groundsure who will respond in a timely manner. In the event you are not satisfied with Groundsure's complaints handling process or you are unable to resolve the complaint, at your discretion you may refer the complaint to The Property Ombudsman Scheme at the following URL/email: website www.tpos.co.uk or email: admin@tpos.co.uk

12.15 The Client agrees that it shall, and shall procure that each Beneficiary shall, treat in confidence all Confidential Information and shall not, and shall procure that each Beneficiary shall not (i) disclose any Confidential Information to any third party other than in accordance with the terms of this Contract; and (ii) use Confidential Information for a purpose other than the exercise of its rights and obligations under this Contract. Subject to clause 6.6, nothing shall prevent the Client or any Beneficiary from disclosing Confidential Information to the extent required by law. © Groundsure Limited June 2013

Appendix B

Groundsure GeoInsight Report



Hydrogeo Ltd
36c, Lion Street,
Abergavenny, NP7 5NT

Groundsure Reference: hyg1-2690387
Your Reference: Pinecroft_Sandiford_Ploc
Report Date: 18 Jan 2016
Report Delivery Method: Email - pdf

Groundsure Geoinsight

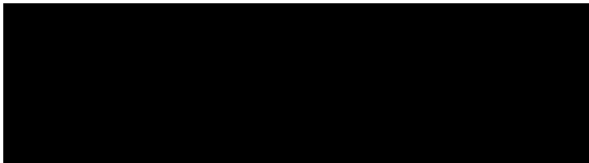
Address: PINECROFT, WEST STREET, LEOMINSTER, HR6 9DU

Dear Sir/ Madam,

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

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

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Geoinsight

Groundsure Geoinsight

Address: PINECROFT, WEST STREET, LEOMINSTER, HR6 9DU
Date: 18 Jan 2016
Reference: hyg1-2690387
Client: Hydrogeo Ltd



Aerial Photograph Capture date: 12-Oct-2009
Grid Reference: 338902,258243
Site Size: 0.44ha

Contents Page

Overview of Findings.....	5
1 Geology.....	8
1.1 Artificial Ground Map.....	8
1 Geology.....	9
1.1 Artificial Ground.....	9
1.1.1 Artificial/ Made Ground.....	9
1.1.2 Permeability of Artificial Ground.....	9
1.2 Superficial Deposits and Landslips Map.....	10
1.2 Superficial Deposits and Landslips.....	11
1.2.1 Superficial Deposits/ Drift Geology.....	11
1.2.2 Permeability of Superficial Ground.....	11
1.2.3 Landslip.....	11
1.2.4 Landslip Permeability.....	12
1.3 Bedrock and Faults Map.....	13
1.3 Bedrock, Solid Geology & Faults.....	14
1.3.1 Bedrock/ Solid Geology.....	14
1.3.2 Permeability of Bedrock Ground.....	14
1.3.3 Faults.....	14
1.4 Radon Data.....	15
1.4.1 Radon Affected Areas.....	15
1.4.2 Radon Protection.....	15
2 Ground Workings Map.....	16
2 Ground Workings.....	17
2.1 Historical Surface Ground Working Features derived from Historical Mapping.....	17
2.2 Historical Underground Working Features derived from Historical Mapping.....	17
2.3 Current Ground Workings.....	17
3 Mining, Extraction & Natural Cavities Map.....	18
3 Mining, Extraction & Natural Cavities.....	19
3.1 Historical Mining.....	19
3.2 Coal Mining.....	19
3.3 Johnson Poole and Bloomer.....	19
3.4 Non-Coal Mining.....	19
3.5 Non-Coal Mining Cavities.....	20
3.6 Natural Cavities.....	20
3.7 Brine Extraction.....	20
3.8 Gypsum Extraction.....	20
3.9 Tin Mining.....	20
3.10 Clay Mining.....	21
4 Natural Ground Subsidence.....	22
4.1 Shrink-Swell Clay Map.....	22
4.2 Landslides Map.....	23
4.3 Ground Dissolution Soluble Rocks Map.....	24
4.4 Compressible Deposits Map.....	25
4.5 Collapsible Deposits Map.....	26
4.6 Running Sand Map.....	27
4 Natural Ground Subsidence.....	28
4.1 Shrink-Swell Clays.....	28
4.2 Landslides.....	28
4.3 Ground Dissolution of Soluble Rocks.....	28

4.4 Compressible Deposits.....	29
4.5 Collapsible Deposits.....	29
4.6 Running Sands.....	29
5 Borehole Records Map.....	30
5 Borehole Records.....	31
6 Estimated Background Soil Chemistry.....	33
7 Railways and Tunnels Map.....	34
7 Railways and Tunnels.....	35
7.1 Tunnels	35
7.2 Historical Railway and Tunnel Features	35
7.3 Historical Railways.....	36
7.4 Active Railways.....	36
7.5 Railway Projects.....	36

Overview of Findings

The Groundsure Geosight provides high quality geo-environmental information that allows geo-environmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Shallow Mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and Groundsure's unique database including historical surface ground and underground workings.

For further details on each dataset, please refer to each individual section in the 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:Geology

1.1 Artificial Ground	1.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	No
	1.1.2 Are there any records relating to permeability of artificial ground within the study site* boundary?	No
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?	Yes
	1.2.2 Are there any records relating to permeability of superficial geology within the study site boundary?	Yes
	1.2.3 Are there any records of landslip within 500m of the study site boundary?	No
	1.2.4 Are there any records relating to permeability of landslips within the study site boundary?	No
1.3 Bedrock, Solid Geology & Faults	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	1.3.2 Are there any records relating to permeability of bedrock within the study site boundary?	Yes
	1.3.3 Are there any records of faults within 500m of the study site boundary?	No
1.4 Radon data	1.4.1 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 property is in a Radon Affected Area, as between 5 and 10% of properties are above the Action Level
	1.4.2 Is the property in an area where Radon Protection Measures are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	Basic radon protective measures are necessary

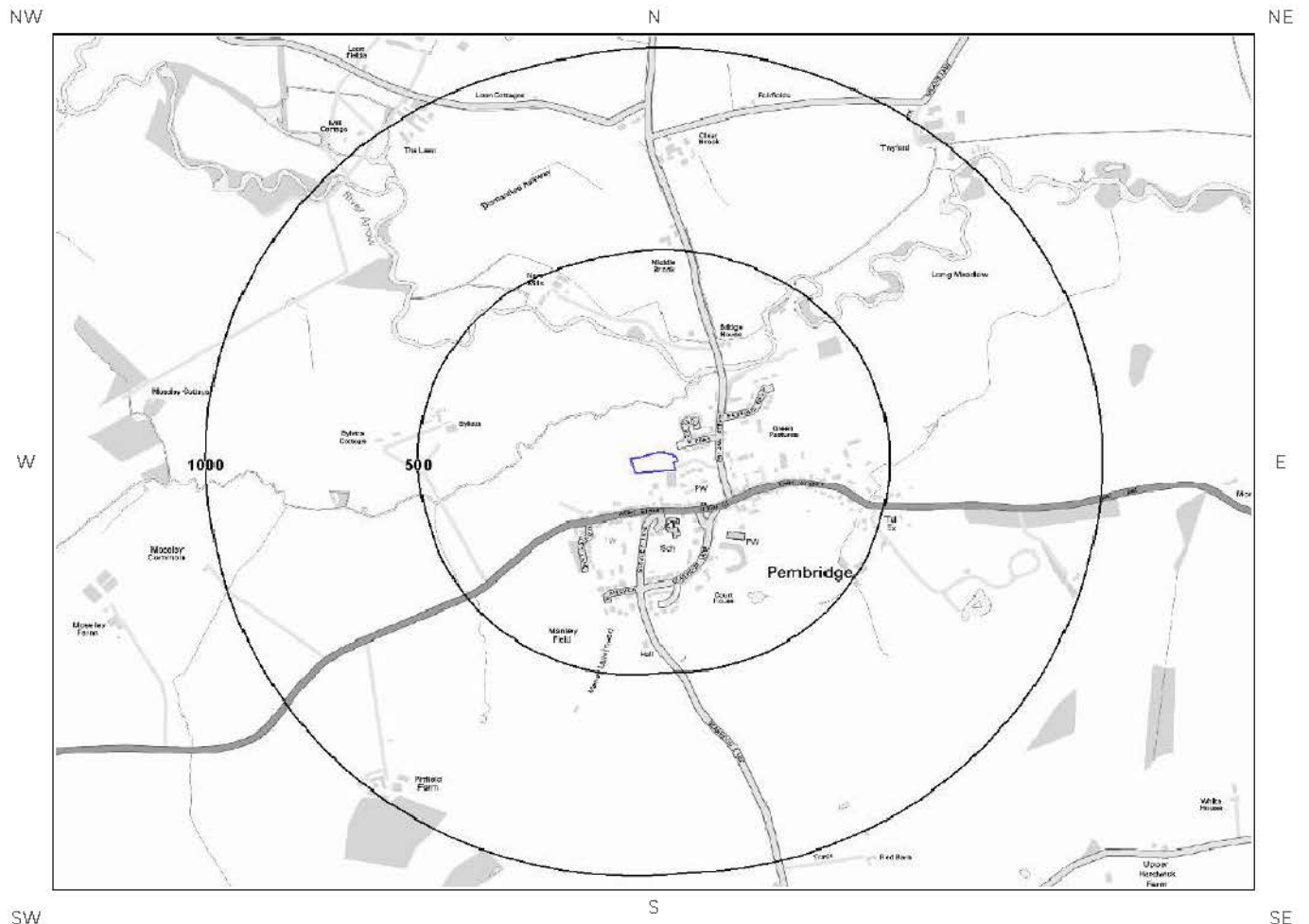
Section 2:Ground Workings	On-site	0-50m	51-250	251-500	501-1000
2.1 Historical Surface Ground Working Features from Small Scale Mapping	0	0	0	Not Searched	Not Searched
2.2 Historical Underground Workings from Small Scale Mapping	0	0	0	0	0
2.3 Current Ground Workings	0	0	0	0	0

Section 3: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
3.1 Historical Mining	0	0	0	0	0
3.2 Coal Mining	0	0	0	0	0
3.3 Johnson Poole and Bloomer Mining Area	0	0	0	0	0
3.4 Non-Coal Mining	1	0	0	0	0
3.5 Non-Coal Mining Cavities	0	0	0	0	0
3.6 Natural Cavities	0	0	0	0	0
3.7 Brine Extraction	0	0	0	0	0
3.8 Gypsum Extraction	0	0	0	0	0
3.9 Tin Mining	0	0	0	0	0
3.10 Clay Mining	0	0	0	0	0
Section 4: Natural Ground Subsidence	On-site				
4.1 Shrink Swell Clay	Very Low				
4.2 Landslides	Very Low				
4.3 Ground Dissolution of Soluble Rocks	Negligible				
4.4 Compressible Deposits	Negligible				
4.5 Collapsible Deposits	Very Low				
4.6 Running Sand	Very Low				
Section 5: Borehole Records	On-site	0-50m	51-250		
5 BGS Recorded Boreholes	0	0	16		
Section 6: Estimated Background Soil Chemistry	On-site	0-50m	51-250		
6 Records of Background Soil Chemistry	1	1	6		
Section 7: Railways and Tunnels	On-site	0-50m	51-250	251-500	
7.1 Tunnels	0	0	0	Not Searched	
7.2 Historical Railway and Tunnel Features	0	0	0	Not Searched	
7.3 Historical Railways	0	0	0	Not Searched	
7.4 Active Railways	0	0	0	Not Searched	

Section 7:Railways and Tunnels	On-site	0-50m	51-250	251-500
7.5 Railway Projects	0	0	0	0

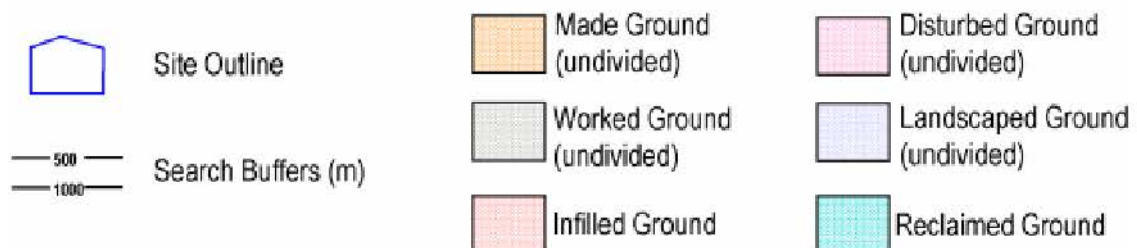
1 Geology

1.1 Artificial Ground Map



Artificial Ground Legend

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1 Geology

1.1 Artificial Ground

1.1.1 Artificial/ Made Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:198

Are there any records of Artificial/Made Ground within 500m of the study site boundary? No

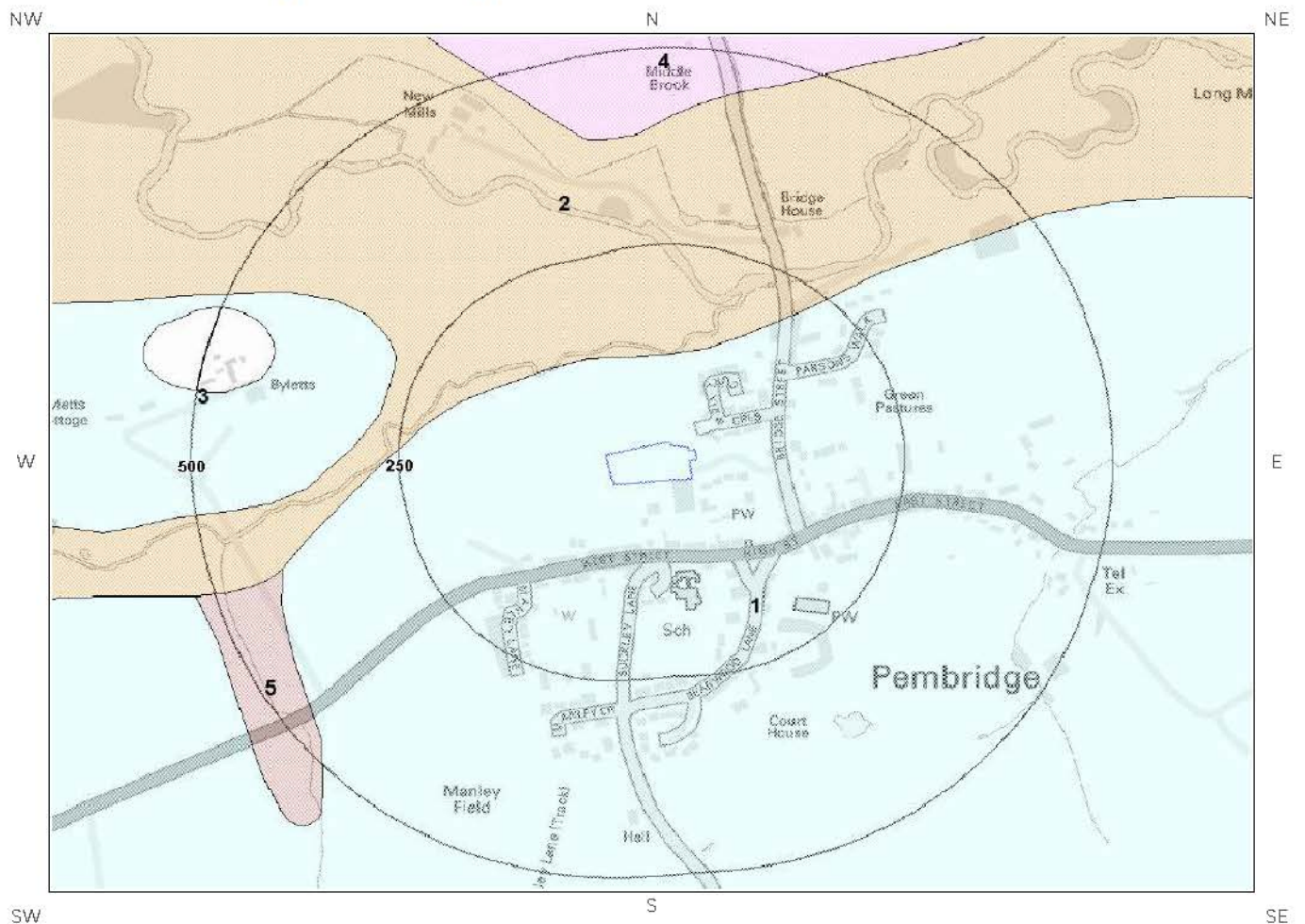
Database searched and no data found.

1.1.2 Permeability of Artificial Ground

Are there any records relating to permeability of artificial ground within the study site boundary? No

Database searched and no data found.

1.2 Superficial Deposits and Landslips Map

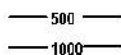


**Superficial Deposits and Landslips
Legend**

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Site Outline



Search Buffers (m)

1.2 Superficial Deposits and Landslips

1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	TILLD	TILL, DEVENSIAN	DIAMICTON
2	110.0	N	ALV	ALLUVIUM	CLAY, SILT, SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
3	275.0	W	TILLD	TILL, DEVENSIAN	DIAMICTON
4	390.0	N	GFSD	GLACIOFLUVIAL SHEET DEPOSITS, DEVENSIAN	SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]
5	413.0	W	HEAD	HEAD	CLAY, SILT, SAND AND GRAVEL [UNLITHIFIED DEPOSITS CODING SCHEME]

1.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Mixed	High	Low

1.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary? No

Database searched and no data found.

This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

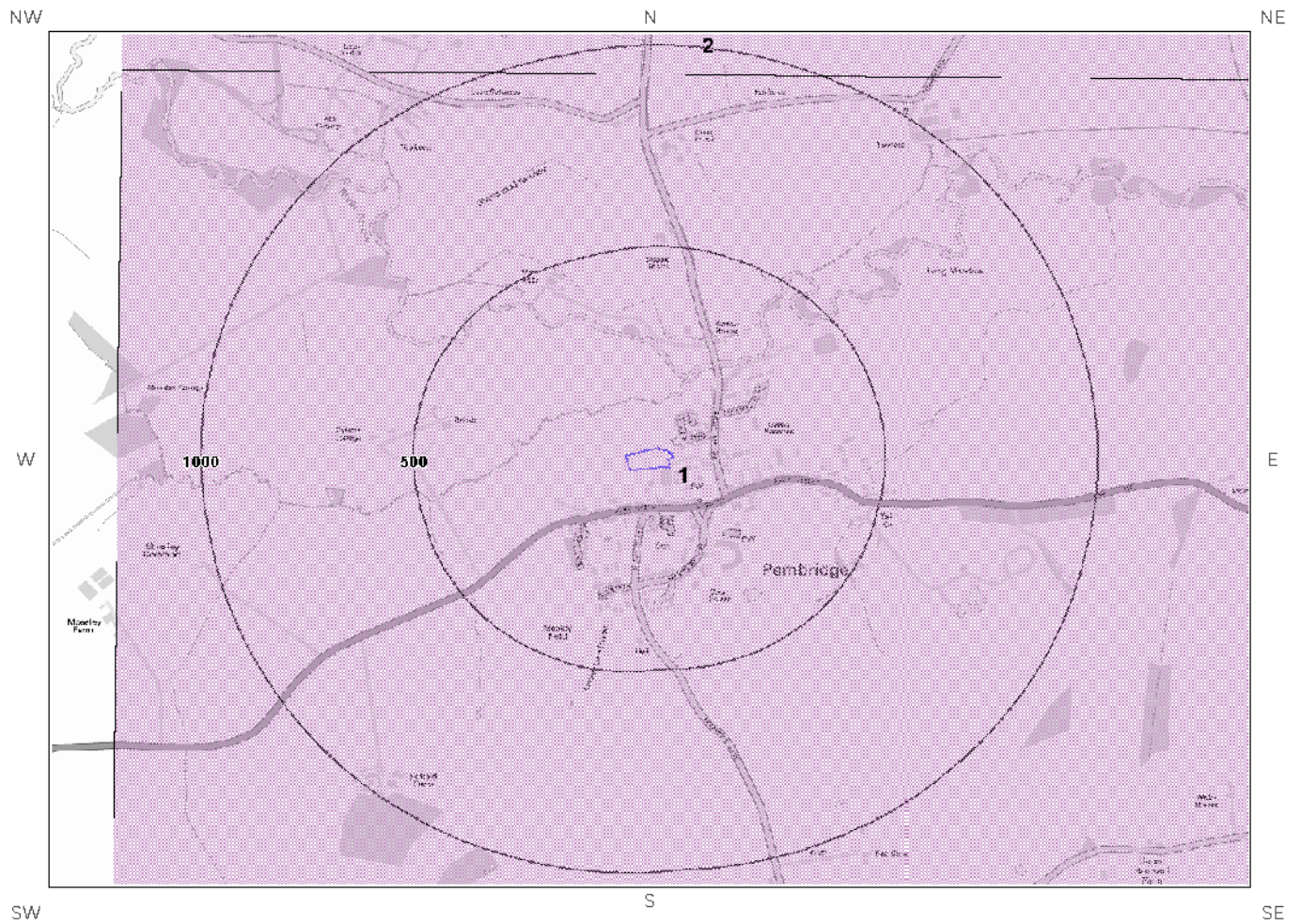
1.2.4 Landslip Permeability

Are there any records relating to permeability of landslips within the study site** boundary? No

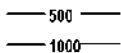
Database searched and no data found.

* This includes an automatically generated 50m buffer zone around the site

1.3 Bedrock and Faults Map



Site Outline



Search Buffers (m)

1.3 Bedrock, Solid Geology & Faults

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No:198

1.3.1 Bedrock/ Solid Geology

Records of Bedrock/ Solid Geology within 500m of the study site boundary:

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
1	0.0	On Site	RG-SIMD	Raglan Mudstone Formation - Siltstone And Mudstone, Interbedded	No Details

1.3.2 Permeability of Bedrock Ground

Are there any records relating to permeability of bedrock ground within the study site* boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Fracture	Moderate	Low

1.3.3 Faults

Are there any records of Faults within 500m of the study site boundary? No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as Faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

* This includes an automatically generated 50m buffer zone around the site

1.4 Radon Data

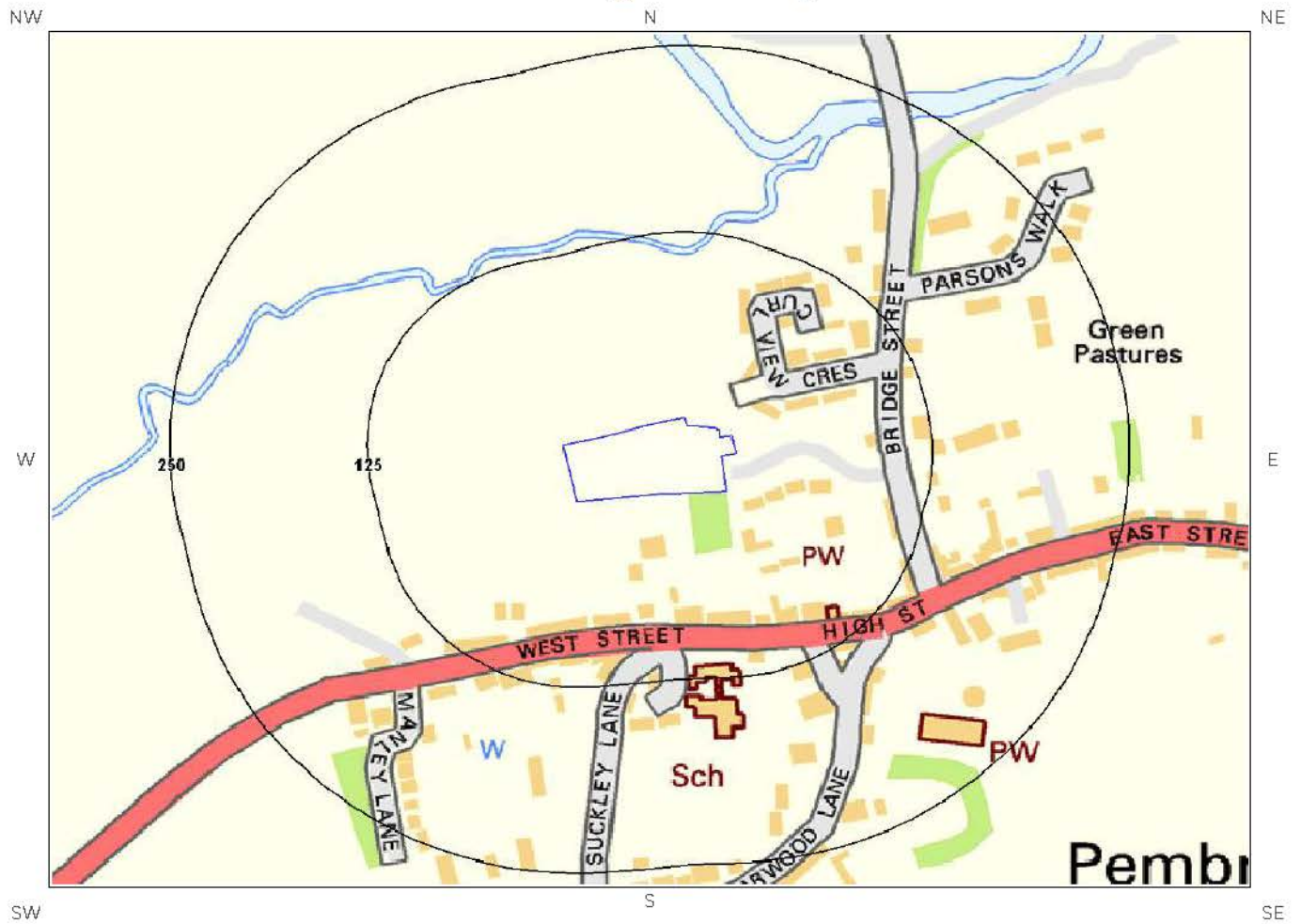
1.4.1 Radon Affected Areas

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 property is in a Radon Affected Area, as between 5 and 10% of properties are above the Action Level

1.4.2 Radon Protection



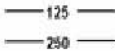


Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? Basic radon protective measures are necessary

2 Ground Workings Map



Ground Workings Legend

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- | | | | |
|-------------------------------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------|----------------------------------|
|  | Site Outline |  | Historic Surface Ground Workings |
|  | Search Buffers (m) |  | Historic Underground Workings |
| | |  | Current Ground Workings |

2 Ground Workings

2.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on Groundsure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping.

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? No

Database searched and no data found.

2.2 Historical Underground Working Features derived from Historical Mapping

This data is derived from the Groundsure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary? No

Database searched and no data found.

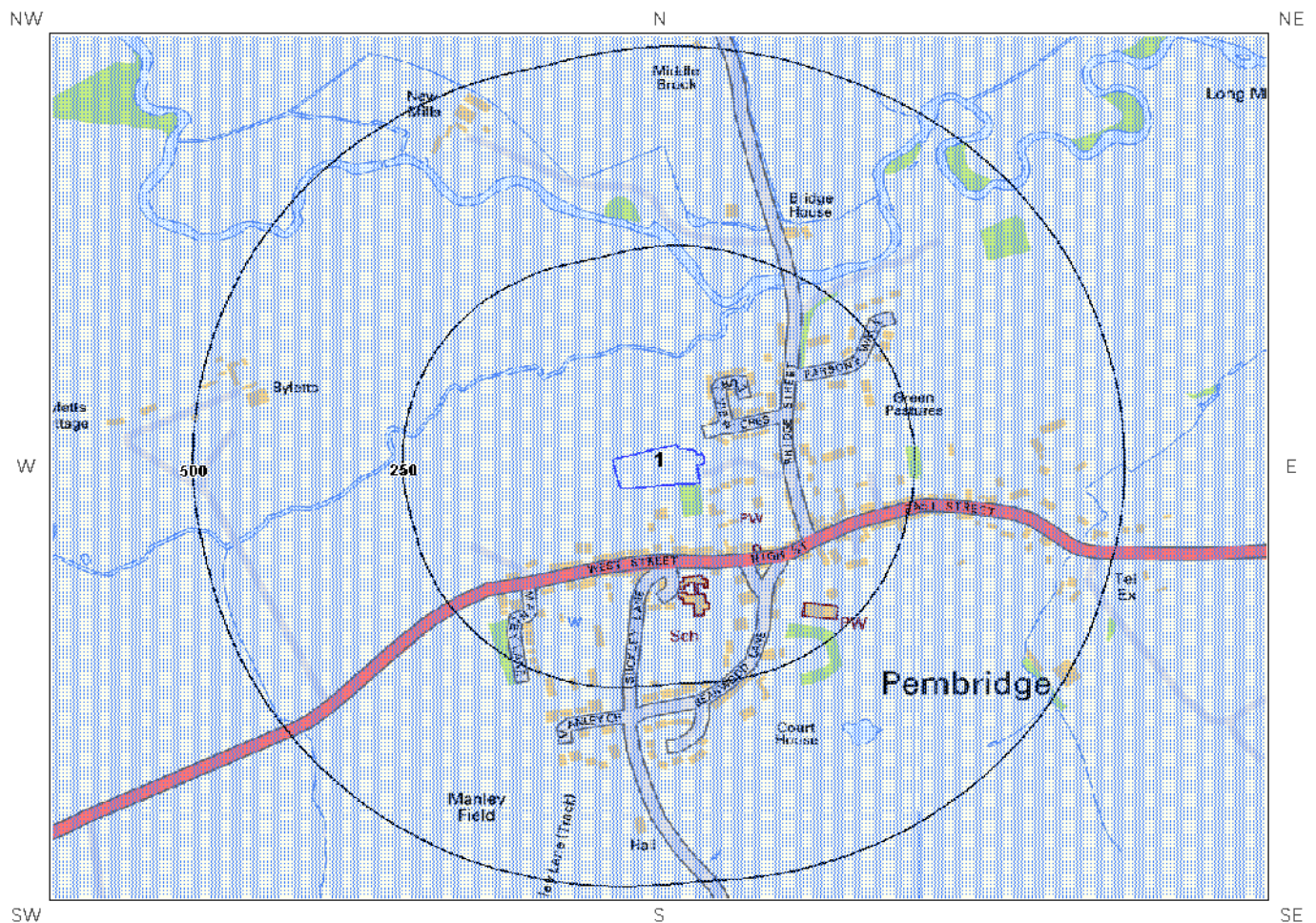
2.3 Current Ground Workings

This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

Are there any BGS Current Ground Workings within 1000m of the study site boundary? No

Database searched and no data found.

3 Mining, Extraction & Natural Cavities Map



Mining, Extraction and Natural Cavities Legend

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3 Mining, Extraction & Natural Cavities

3.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

3.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

3.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary? No

The following information provided by JPB is not represented on mapping: Database searched and no data found.

3.4 Non-Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary? Yes

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

ID	Distance (m)	Direction	Name	Commodity	Assessment of likelihood
1	0.0	On Site	Berwyn Hills	Vein Mineral	Rare and localised small scale mining may have occurred.

3.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled “Review of mining instability in Great Britain, 1990” PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary? No

Database searched and no data found.

3.6 Natural Cavities

This dataset provides information based on Peter Brett Associates natural cavities database.

Are there any Natural Cavities within 1000m of the study site boundary? No

Database searched and no data found.

3.7 Brine Extraction

This data provides information from the Coal Authority issued on behalf of the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

3.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

3.9 Tin Mining

This dataset provides information on tin mining areas and is derived from tin mining records. This search is based upon postcode information to a sector level.

Are there any Tin Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

3.10 Clay Mining

This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

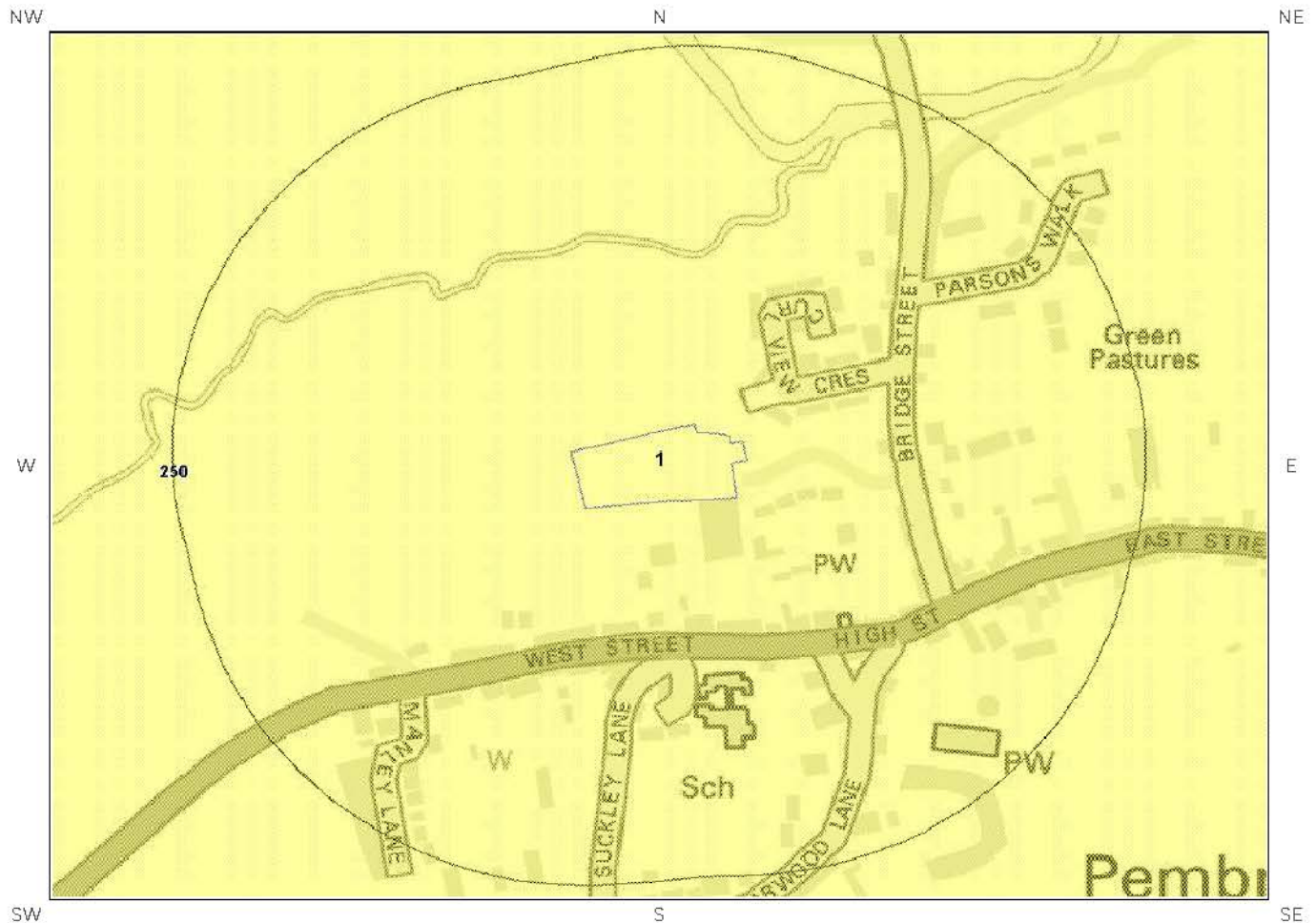
Are there any Clay Mining areas within 1000m of the study site boundary?

No

Database searched and no data found.

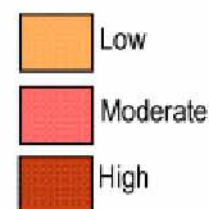
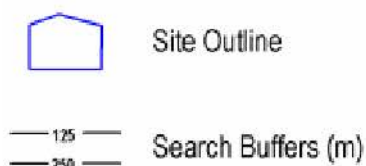
4 Natural Ground Subsidence

4.1 Shrink-Swell Clay Map

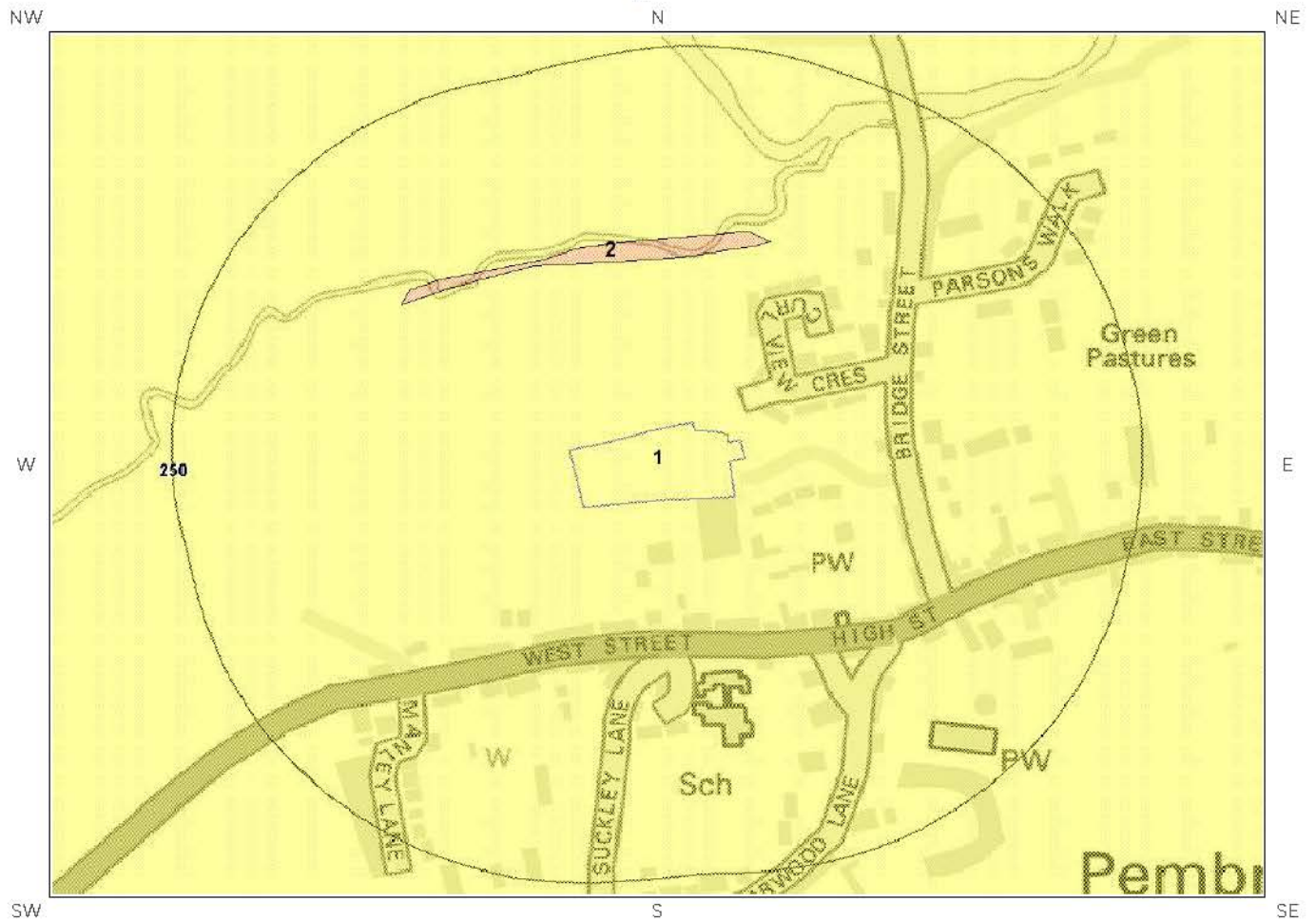


Shrink Swell Clay Legend

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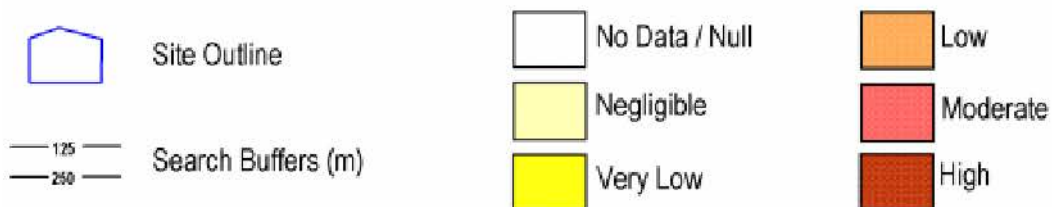


4.2 Landslides Map

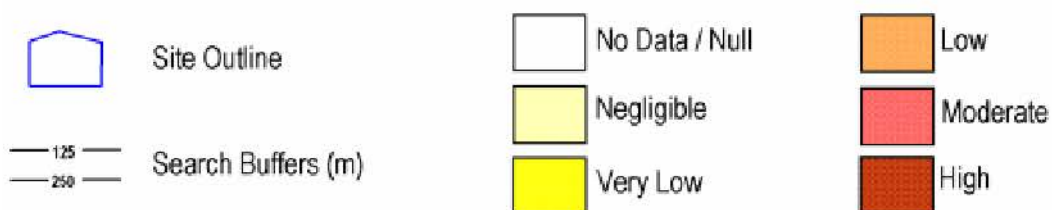
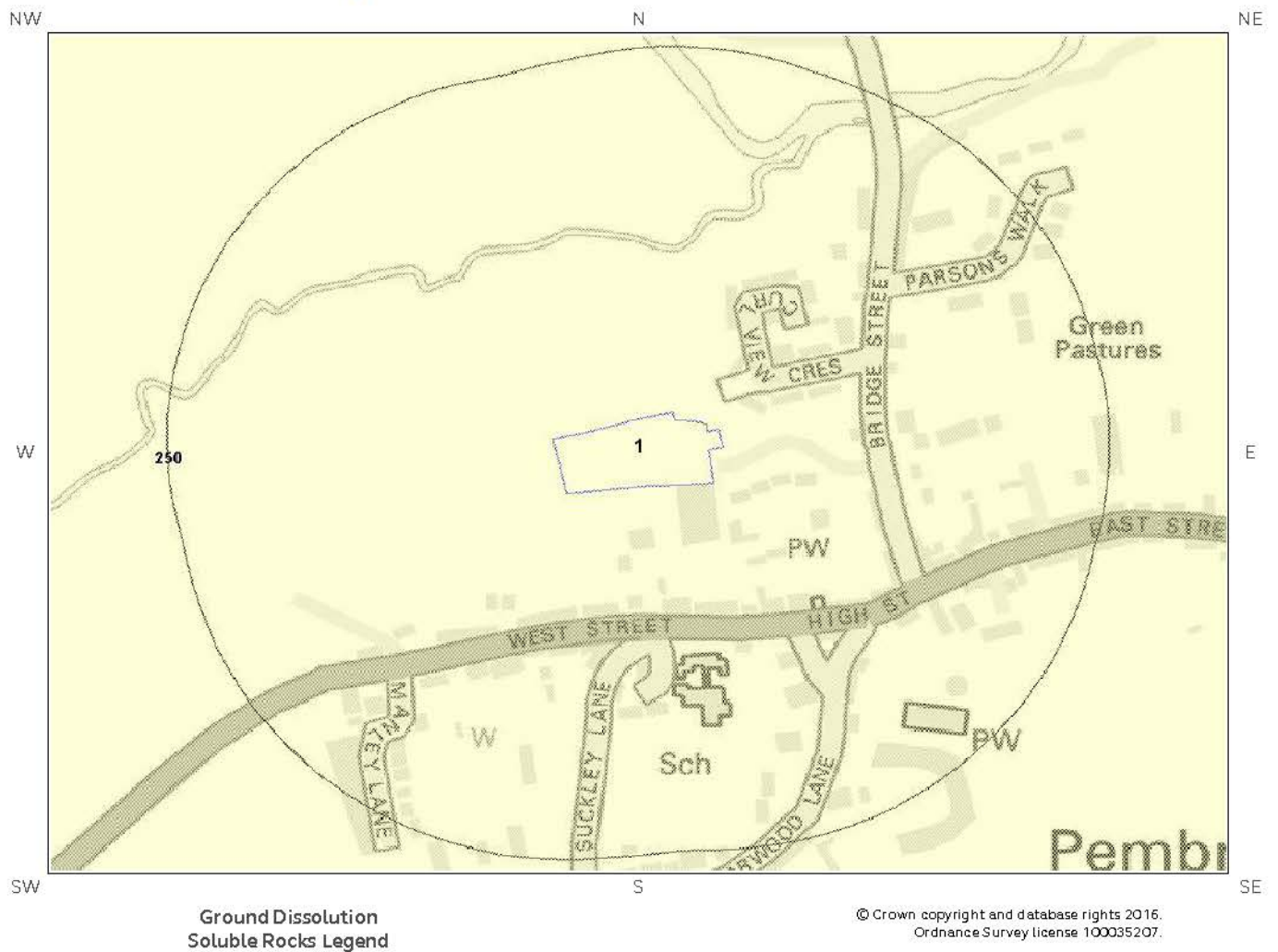


Landslides Legend

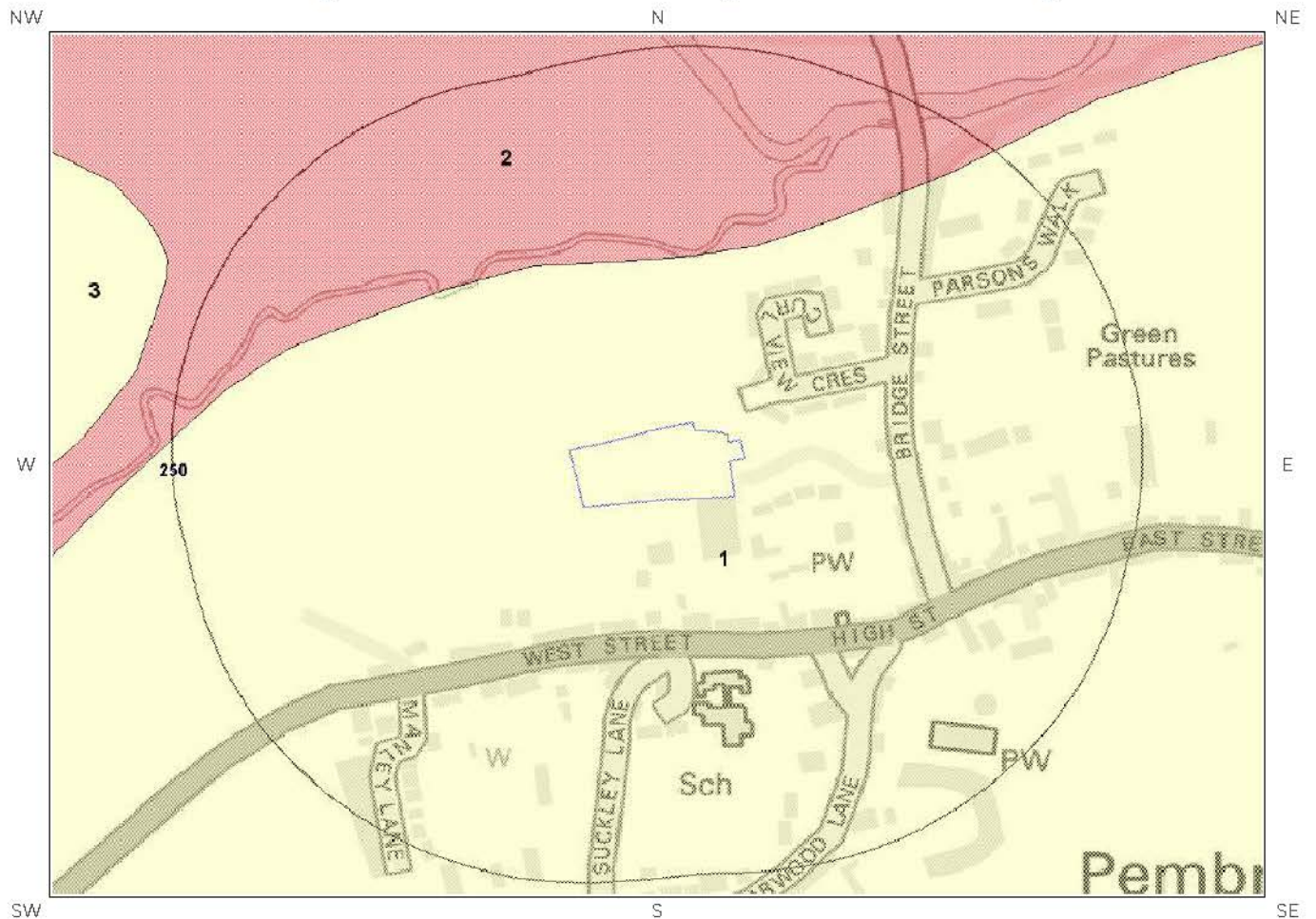
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4.3 Ground Dissolution Soluble Rocks Map

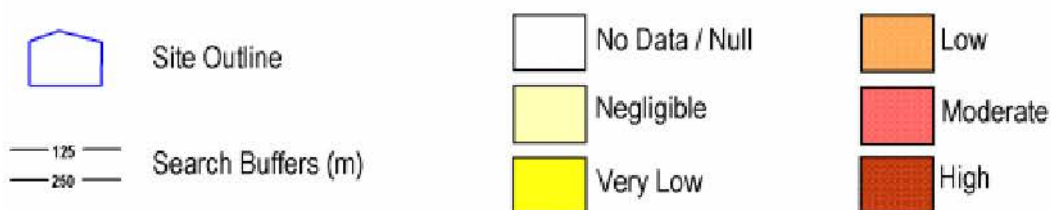


4.4 Compressible Deposits Map

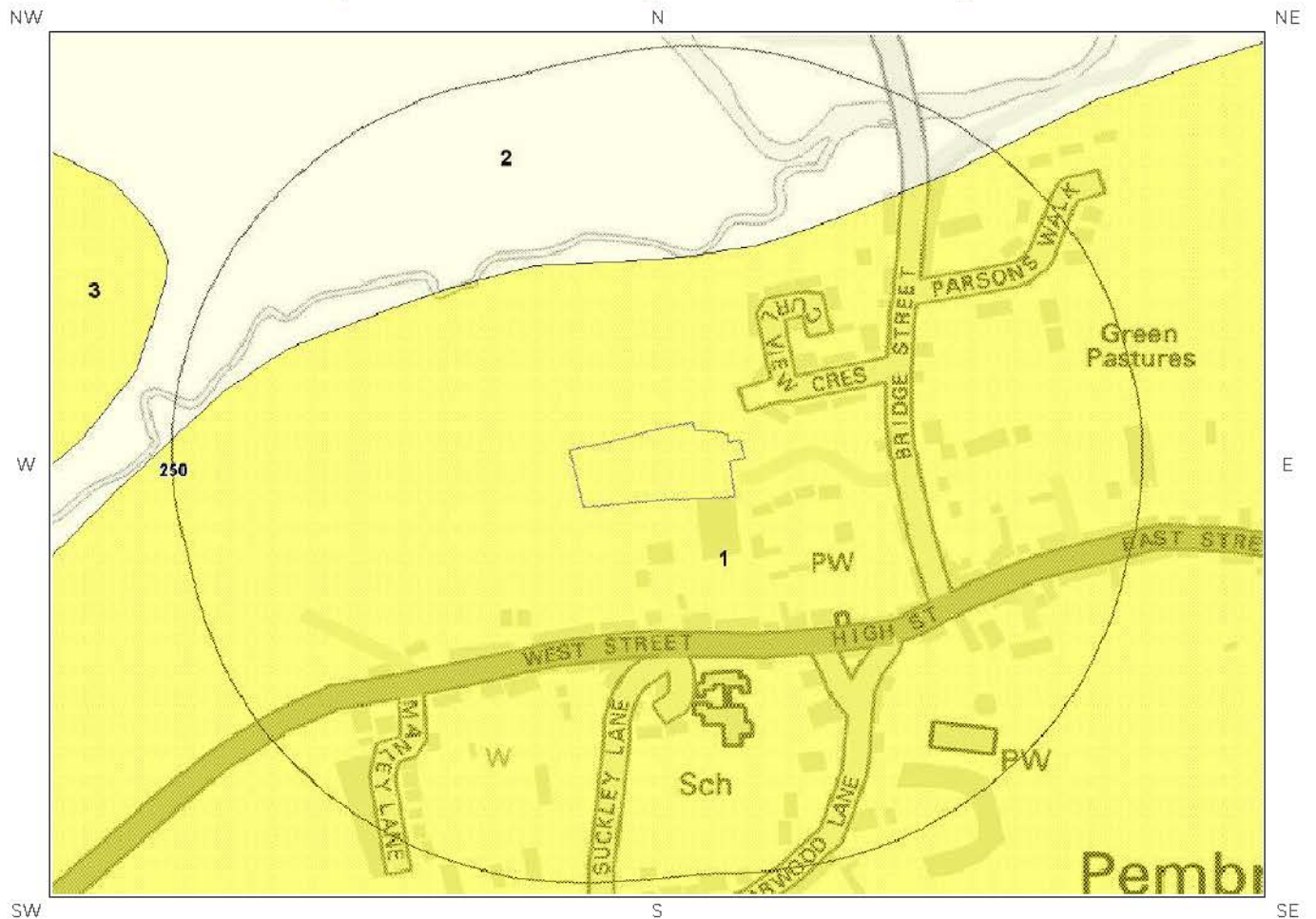


Compressible Deposits Legend

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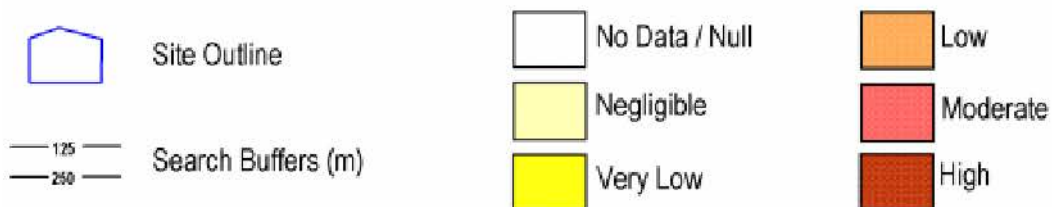


4.5 Collapsible Deposits Map

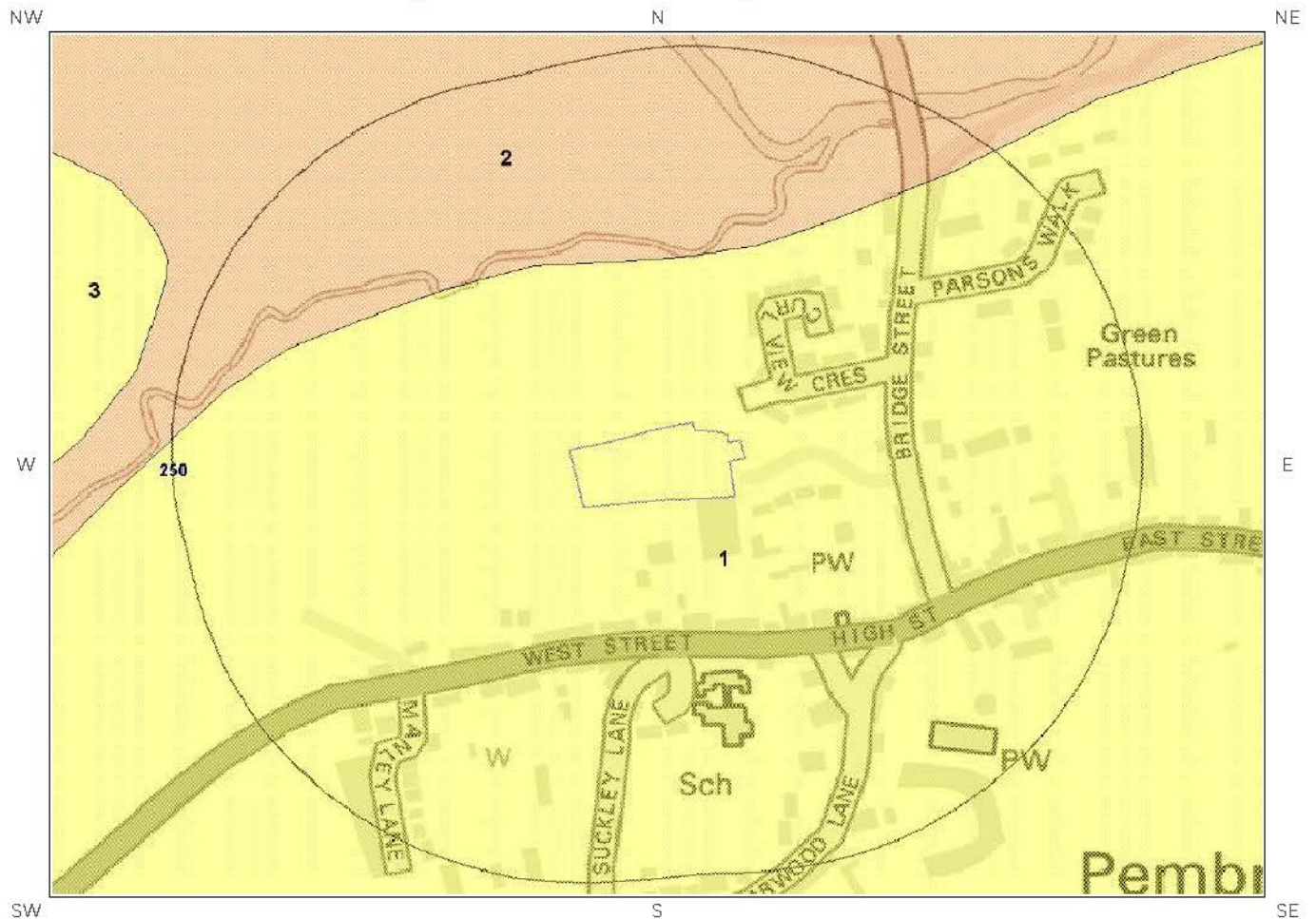


Collapsible Deposits Legend

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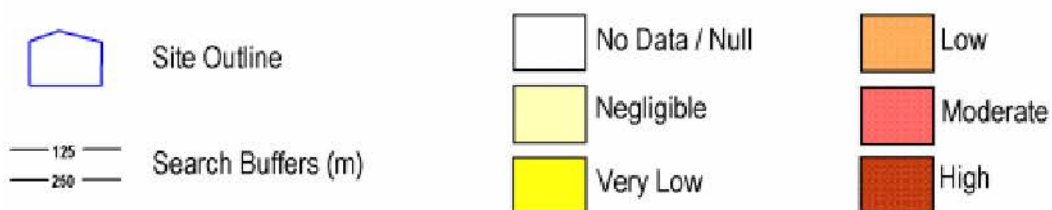


4.6 Running Sand Map



Running Sand Legend

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4 Natural Ground Subsidence

The National Ground Subsidence rating is obtained through the 6 natural ground stability hazard datasets, which are supplied by the British Geological Survey (BGS).

The following GeoSure data represented on the mapping is derived from the BGS Digital Geological map of Great Britain at 1:50,000 scale.

What is the maximum hazard rating of natural subsidence within the study site** boundary? **Very Low**

4.1 Shrink-Swell Clays

The following Shrink Swell information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

4.2 Landslides

The following Landslides information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	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.

4.3 Ground Dissolution of Soluble Rocks

The following Ground Dissolution information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	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 includes an automatically generated 50m buffer zone around the site

4.4 Compressible Deposits

The following Compressible Deposits information provided by the British Geological Survey:

ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Negligible	No indicators for compressible ground identified. No special actions required to avoid problems due to compressible ground. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible ground.

4.5 Collapsible Deposits

The following Collapsible Rocks information provided by the British Geological Survey:

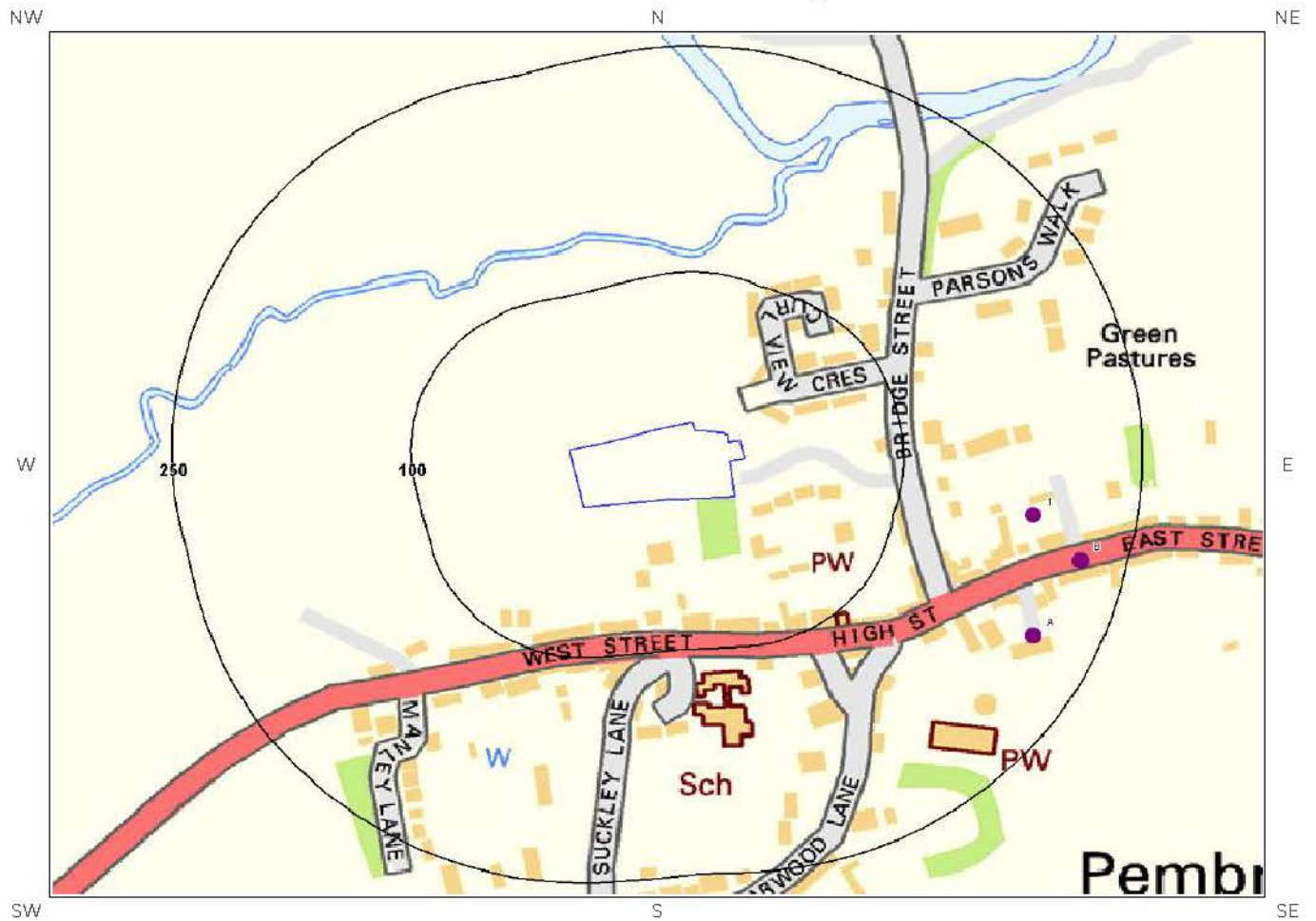
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

4.6 Running Sands

The following Running Sands information provided by the British Geological Survey:

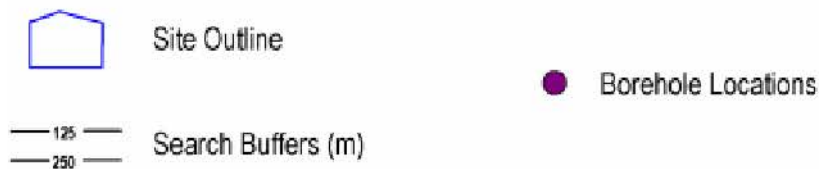
ID	Distance (m)	Direction	Hazard Rating	Details
1	0.0	On Site	Very Low	Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

5 Borehole Records Map



Borehole Records Legend

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5 Borehole Records

The systematic analysis of data extracted from the BGS Borehole Records database provides the following information.

Records of boreholes within 250m of the study site boundary:

16

ID	Distance (m)	Direction	NGR	BGS Reference	Drilled Length	Borehole Name
1	185.0	E	339140 258210	SO35NE2	36.57	THE NEW INN, PEMBRIDGE
2A	209.0	SE	339140 258130	SO35NE14	3.1	EAST STREET PEMBRIDGE TP8
3A	209.0	SE	339140 258130	SO35NE10	1.6	EAST STREET PEMBRIDGE TP4
4A	209.0	SE	339140 258130	SO35NE13	3.0	EAST STREET PEMBRIDGE TP7
5A	209.0	SE	339140 258130	SO35NE7	3.1	EAST STREET PEMBRIDGE TP1
6A	209.0	SE	339140 258130	SO35NE12	3.2	EAST STREET PEMBRIDGE TP6
7A	209.0	SE	339140 258130	SO35NE11	1.1	EAST STREET PEMBRIDGE TP5
8A	209.0	SE	339140 258130	SO35NE9	3.1	EAST STREET PEMBRIDGE TP3
9A	209.0	SE	339140 258130	SO35NE8	3.0	EAST STREET PEMBRIDGE TP2
10B	221.0	E	339170 258180	SO35NE22	4.0	PEMBRIDGE SERVICE STATION PEMBRIDGE C
11B	221.0	E	339170 258180	SO35NE18	0.34	PEMBRIDGE SERVICE STATION PEMBRIDGE A
12B	221.0	E	339170 258180	SO35NE19	3.0	PEMBRIDGE SERVICE STATION PEMBRIDGE A1
13B	221.0	E	339170 258180	SO35NE24	5.0	PEMBRIDGE SERVICE STATION PEMBRIDGE E
14B	221.0	E	339170 258180	SO35NE21	0.4	PEMBRIDGE SERVICE STATION PEMBRIDGE B1
15B	221.0	E	339170 258180	SO35NE20	0.4	PEMBRIDGE SERVICE STATION PEMBRIDGE B
16B	221.0	E	339170 258180	SO35NE23	3.4	PEMBRIDGE SERVICE STATION PEMBRIDGE D

The borehole records are available using the hyperlinks below: Please note that if the donor of the borehole record has requested the information be held as commercial-in-confidence, the additional data will be held separately by the BGS and a formal request must be made for its release.

#1: scans.bgs.ac.uk/sobi_scans/boreholes/265694
 #2A: scans.bgs.ac.uk/sobi_scans/boreholes/265706
 #3A: scans.bgs.ac.uk/sobi_scans/boreholes/265702
 #4A: scans.bgs.ac.uk/sobi_scans/boreholes/265705
 #5A: scans.bgs.ac.uk/sobi_scans/boreholes/265699
 #6A: scans.bgs.ac.uk/sobi_scans/boreholes/265704

#7A: scans.bgs.ac.uk/sobi_scans/boreholes/265703
#8A: scans.bgs.ac.uk/sobi_scans/boreholes/265701
#9A: scans.bgs.ac.uk/sobi_scans/boreholes/265700
#10B: scans.bgs.ac.uk/sobi_scans/boreholes/265714
#11B: scans.bgs.ac.uk/sobi_scans/boreholes/265710
#12B: scans.bgs.ac.uk/sobi_scans/boreholes/265711
#13B: scans.bgs.ac.uk/sobi_scans/boreholes/265716
#14B: scans.bgs.ac.uk/sobi_scans/boreholes/265713
#15B: scans.bgs.ac.uk/sobi_scans/boreholes/265712
#16B: scans.bgs.ac.uk/sobi_scans/boreholes/265715

6 Estimated Background Soil Chemistry

Records of background estimated soil chemistry within 250m of the study site boundary:

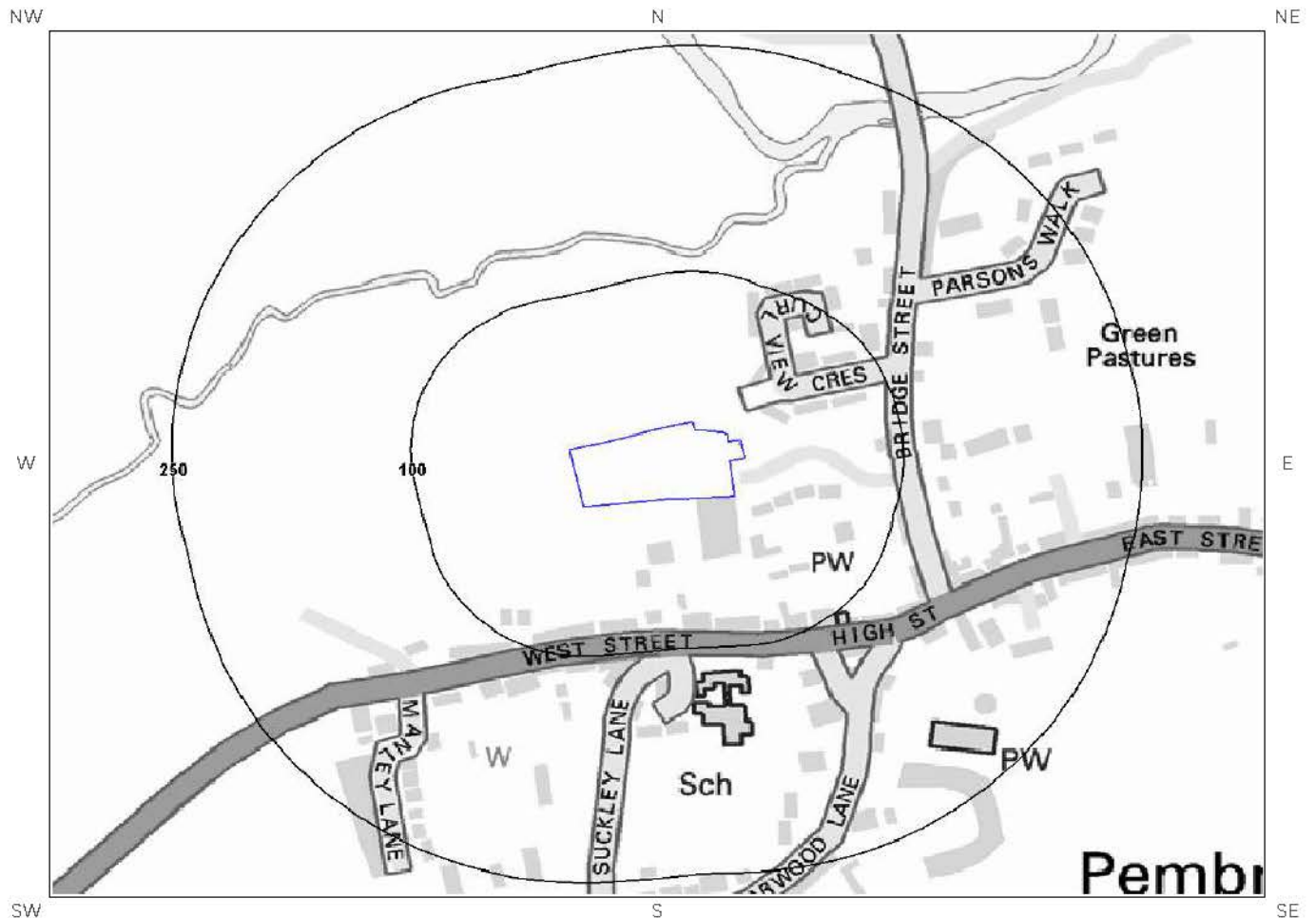
8

For further information on how this data is calculated and limitations upon its use, please see the Groundsure Geosight User Guide, available on request.

Distance (m)	Direction	Sample Type	Arsenic (As)	Cadmium (Cd)	Chromium (Cr)	Nickel (Ni)	Lead (Pb)
0.0	On Site	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
41.0	E	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
110.0	N	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
147.0	N	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
216.0	S	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
228.0	S	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
228.0	N	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg
240.0	N	Sediment	<15 mg/kg	<1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg	<100 mg/kg











*As this data is based upon underlying 1:50,000 scale geological information, a 50m buffer has been added to the search radius.

7 Railways and Tunnels Map



Railways and Tunnels Legend

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	Site Outline		Underground or Partially Underground Railway / Subway System		Railway Track (OpenStreetMap)
	Search Buffers (m)		Railway Tunnel (OS Mapping)		High Speed 2
			Abandoned or Dismantled Railway (OpenStreetMap)		Crossrail 1
			Railway Track (OS Mapping)		Railway and/or Tunnel Feature from Historical Mapping

7 Railways and Tunnels

7.1 Tunnels

This data is derived from OpenStreetMap and provides information on the possible locations of underground railway systems in the UK - the London Underground, the Tyne & Wear Metro and the Glasgow Subway.

Have any underground railway lines been identified within the study site boundary? No

Have any underground railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels Map.

This data is derived from Ordnance Survey mapping and provides information on the possible locations of railway tunnels forming part of the UK overground railway network.

Have any other railway tunnels been identified within the site boundary? No

Have any other railway tunnels been identified within 250m of the site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels Map.

7.2 Historical Railway and Tunnel Features

This data is derived from Groundsure's unique Historical Land-use Database and contains features relating to tunnels, railway tracks or associated works that have been identified from historical Ordnance Survey mapping.

Have any historical railway or tunnel features been identified within the study site boundary? No

Have any historical railway or tunnel features been identified within 250m of the study site boundary? No

Database searched and no data found.

Any records that have been identified are represented on the Railways and Tunnels Map.

7.3 Historical Railways

This data is derived from OpenStreetMap and provides information on the possible alignments of abandoned or dismantled railway lines in proximity to the study site.

Have any historical railway lines been identified within the study site boundary? No

Have any historical railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Note: multiple sections of the same track may be listed in the detail above

Any records that have been identified are represented on the Railways and Tunnels Map.

7.4 Active Railways

These datasets are derived from Ordnance Survey mapping and OpenStreetMap and provide information on the possible locations of active railway lines in proximity to the study site.

Have any active railway lines been identified within the study site boundary? No

Have any active railway lines been identified within 250m of the study site boundary? No

Database searched and no data found.

Note: multiple sections of the same track may be listed in the detail above

Any records that have been identified are represented on the Railways and Tunnels Map.

7.5 Railway Projects

These datasets provide information on the location of large scale railway projects High Speed 2 and Crossrail 1 .

Is the study site within 5km of the route of the High Speed 2 rail project? No

Is the study site within 500m of the route of the Crossrail 1 rail project? No

Further information on proximity to these routes, the project construction status and associated works can be obtained through the purchase of a Groundsure HS2 and Crossrail 1 Report.

The route data has been digitised from publicly available maps by Groundsure. The route as provided relates to the Crossrail 1 project only, and does not include any details of the Crossrail 2 project, as final details of the route for Crossrail 2 are still under consultation.

Contact Details

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



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Tel: 0115 936 3143
Fax: 0115 936 3276
Email: enquiries@bgs.ac.uk
Web: www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries



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Leicestershire
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The Coal Authority

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Mansfield
Notts NG18 4RG
Tel: 0345 7626 848
DX 716176 Mansfield 5
www.coal.gov.uk



Public Health England

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



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SO16 0AS
Tel: 08456 050505
Website: <http://www.ordnancesurvey.co.uk/>



Getmapping PLC

Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444
Website: <http://www1.getmapping.com/>



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Standard Terms and Conditions

1 Definitions

In these terms and conditions unless the context otherwise requires:

"Beneficiary" means the person or entity for whose benefit the Client has obtained the Services.

"Client" means the party or parties entering into a Contract with Groundsure.

"Commercial" means any building or property which is not Residential.

"Confidential Information" means the contents of this Contract and all information received from the Client as a result of, or in connection with, this Contract other than

(i) information which the Client can prove was rightfully in its possession prior to disclosure by Groundsure and

(ii) any information which is in the public domain (other than by virtue of a breach of this Contract).

"Support Services" means Support Services provided by Groundsure including, without limitation, interpreting third party and in-house environmental data, providing environmental support advice, undertaking environmental audits and assessments, Site investigation, Site monitoring and related items.

"Contract" means the contract between Groundsure and the Client for the provision of the Services, and which shall incorporate these terms and conditions, the Order, and the relevant User Guide.

"Third Party Data Provider" means any third party providing Third Party Content to Groundsure.

"Data Reports" means reports comprising factual data with no accompanying interpretation.

"Fees" has the meaning set out in clause 5.1.

"Groundsure" means Groundsure Limited, a company registered in England and Wales under number 03421028.

"Groundsure Materials" means all materials prepared by Groundsure and provided as part of the Services, including but not limited to Third Party Content, Data Reports, Mapping, and Risk Screening Reports.

"Intellectual Property" means any patent, copyright, design rights, trade or service mark, moral rights, data protection rights, know-how or trade mark in each case whether registered or not and including applications for the same or any other rights of a similar nature anywhere in the world.

"Mapping" means a map, map data or a combination of historical maps of various ages, time periods and scales.

"Order" means an electronic, written or other order form submitted by the Client requesting Services from Groundsure in respect of a specified Site.

"Ordnance Survey" means the Secretary of State for Business, Innovation and Skills, acting through Ordnance Survey, Adanac Drive, Southampton, SO16 0AS, UK.

"Order Website" means the online platform through which Orders may be placed by the Client and accepted by Groundsure.

"Report" means a Risk Screening Report or Data Report for Commercial or Residential property.

"Residential" means any building or property used as or intended to be used as a single dwelling.

"Risk Screening Report" means a risk screening report comprising factual data with an accompanying interpretation by Groundsure.

"Services" means any Report, Mapping and/or Support Services which Groundsure has agreed to provide by accepting an Order pursuant to clause 2.6.

"Site" means the area of land in respect of which the Client has requested Groundsure to provide the Services.

"Third Party Content" means data, database information or other information which is provided to Groundsure by a Third Party Data Provider.

"User Guide" means the user guide, as amended from time to time, available upon request from Groundsure and on the website (www.Groundsure.com) and forming part of this Contract.

2 Scope of Services, terms and conditions, requests for insurance and quotations

2.1 Groundsure agrees to provide the Services in accordance with the Contract.

2.2 Groundsure shall exercise reasonable skill and care in the provision of the Services.

2.3 Subject to clause 7.3 the Client acknowledges that it has not relied on any statement or representation made by or on behalf of Groundsure which is not set out and expressly agreed in writing in the Contract and all such statements and representations are hereby excluded to the fullest extent permitted by law.

2.4 The Client acknowledges that terms and conditions appearing on a Client's order form, printed stationery or other communication, or any terms or conditions implied by custom, practice or course of dealing shall be of no effect, and that this Contract shall prevail over all others in relation to the Order.

2.5 If the Client or Beneficiary requests insurance in conjunction with or as a result of the Services, Groundsure shall use reasonable endeavours to recommend such insurance, but makes no warranty that such insurance shall be available from insurers or that it will be offered on reasonable terms. Any insurance purchased by the Client or Beneficiary shall be subject solely to the terms of the policy issued by insurers and Groundsure will have no liability therefor. In addition you acknowledge and agree that Groundsure does not act as an agent or broker for any insurance providers. The Client should take (and ensure that the Beneficiary takes) independent advice to ensure that the insurance policy requested or offered is suitable for its requirements.

2.6 Groundsure's quotations or proposals are valid for a period of 30 days only unless an alternative period of time is explicitly stipulated by Groundsure.

Groundsure reserves the right to withdraw any quotation or proposal at any time before an Order is accepted by Groundsure. Groundsure's acceptance of an Order shall be binding only when made in writing and signed by Groundsure's authorised representative or when accepted through the Order Website.

3 The Client's obligations

3.1 The Client shall comply with the terms of this Contract and

(i) procure that the Beneficiary or any third party relying on the Services complies with and acts as if it is bound by the Contract and

(ii) be liable to Groundsure for the acts and omissions of the Beneficiary or any third party relying on the Services as if such acts and omissions were those of the Client.

3.2 The Client shall be solely responsible for ensuring that the Services are appropriate and suitable for its and/or the Beneficiary's needs.

3.3 The Client shall supply to Groundsure as soon as practicable and without charge all requisite information (and the Client warrants that such information is accurate, complete and appropriate), including without limitation any environmental information relating to the Site and shall give such assistance as Groundsure shall reasonably require in the provision of the Services including, without limitation, access to the Site, facilities and equipment.

3.4 Where the Client's approval or decision is required to enable Groundsure to carry out work in order to provide the Services, such approval or decision shall be given or procured in reasonable time and so as not to delay or disrupt the performance of the Services.

3.5 Save as expressly permitted by this Contract the Client shall not, and shall procure that the Beneficiary shall not, re-sell, alter, add to, or amend the Groundsure Materials, or use the Groundsure Materials in a manner for which they were not intended. The Client may make the Groundsure Materials available to a third party who is considering acquiring some or all of, or providing funding in relation to, the Site, but such third party cannot rely on the same unless expressly permitted under clause 4.

3.6 The Client is responsible for maintaining the confidentiality of its user name and password if using the Order Website and the Client acknowledges that Groundsure accepts no liability of any kind for any loss or damage suffered by the Client as a consequence of using the Order Website.

4 Reliance

4.1 The Client acknowledges that the Services provided by Groundsure consist of the presentation and analysis of Third Party Content and other content and that information obtained from a Third Party Data Provider cannot be guaranteed or warranted by Groundsure to be reliable.

4.2 In respect of Data Reports, Mapping and Risk Screening Reports, the following classes of person and no other are entitled to rely on their contents;

(i) the Beneficiary,
(ii) the Beneficiary's professional advisers, (iii) any person providing funding to the Beneficiary in relation to the Site (whether directly or as part of a lending syndicate),
(iv) the first purchaser or first tenant of the Site, and
(v) the professional advisers and lenders of the first purchaser or tenant of the Site.

4.3 In respect of Support Services, only the Client, Beneficiary and parties expressly named in a Report and no other parties are entitled to rely on its contents.

4.4 Save as set out in clauses 4.2 and 4.3 and unless otherwise expressly agreed in writing, no other person or entity of any kind is entitled to rely on any Services or Report issued or provided by Groundsure. Any party considering such Reports and Services does so at their own risk.

5 Fees and Disbursements

5.1 Groundsure shall charge and the Client shall pay fees at the rate and frequency specified in the written proposal, Order Website or Order acknowledgement form, plus (in the case of Support Services) all proper disbursements incurred by Groundsure. The Client shall in addition pay all value added tax or other tax payable on such fees and disbursements in relation to the provision of the Services (together "Fees").

5.2 The Client shall pay all outstanding Fees to Groundsure in full without deduction, counterclaim or set off within 30 days of the date of Groundsure's invoice or such other period as may be agreed in writing between Groundsure and the Client ("Payment Date"). Interest on late payments will accrue on a daily basis from the Payment Date until the date of payment (whether before or after judgment) at the rate of 8% per annum.

5.3 The Client shall be deemed to have agreed the amount of any invoice unless an objection is made in writing within 28 days of the date of the invoice. As soon as reasonably practicable after being notified of an objection, without prejudice to clause 5.2 a member of Groundsure's management team will contact the Client and the parties shall then use all reasonable endeavours to resolve the dispute within 15 days.

6 Intellectual Property and Confidentiality

6.1 Subject to

(i) full payment of all relevant Fees and
(ii) compliance with this Contract, the Client is granted (and is permitted to sub-licence to the Beneficiary) a royalty-free, worldwide, non-assignable and (save to the extent set out in this Contract) non-transferable licence to make use of the Groundsure Materials.

6.2 All Intellectual Property in the Groundsure Materials are and shall remain owned by Groundsure or Groundsure's licensors (including without limitation the Third Party Data Providers) the Client acknowledges, and shall procure

acknowledgement by the Beneficiary of, such ownership. Nothing in this Contract purports to transfer or assign any rights to the Client or the Beneficiary in respect of such Intellectual Property.

6.3 Third Party Data Providers may enforce any breach of clauses 6.1 and 6.2 against the Client or Beneficiary.

6.4 The Client shall, and shall procure that any recipients of the Groundsure Materials shall:

(i) not remove, suppress or modify any trade mark, copyright or other proprietary marking belonging to Groundsure or any third party from the Services;

(ii) use the information obtained as part of the Services in respect of the subject Site only, and shall not store or reuse any information obtained as part of the Services provided in respect of adjacent or nearby sites;

(iii) not create any product or report which is derived directly or indirectly from the Services (save that those acting in a professional capacity to the Beneficiary may provide advice based upon the Services);

(iv) not combine the Services with or incorporate such Services into any other information data or service;

(v) not reformat or otherwise change (whether by modification, addition or enhancement), the Services (save that those acting for the Beneficiary in a professional capacity shall not be in breach of this clause 6.4(v) where such reformatting is in the normal course of providing advice based upon the Services);

(vi) where a Report and/or Mapping contains material belonging to Ordnance Survey, acknowledge and agree that such content is protected by Crown Copyright and shall not use such content for any purpose outside of receiving the Services; and

(vii) not copy in whole or in part by any means any map prints or run-on copies containing content belonging to Ordnance Survey (other than that contained within Ordnance Survey's OS Street Map) without first being in possession of a valid Paper Map Copying Licence from Ordnance Survey,

6.5 Notwithstanding clause 6.4, the Client may make reasonable use of the Groundsure Materials in order to advise the Beneficiary in a professional capacity. However, Groundsure shall have no liability in respect of any advice, opinion or report given or provided to Beneficiaries by the Client.

6.6 The Client shall procure that any person to whom the Services are made available shall notify Groundsure of any request or requirement to disclose, publish or disseminate any information contained in the Services in accordance with the Freedom of Information Act 2000, the Environmental Information Regulations 2004 or any associated legislation or regulations in force from time to time.

7. Liability: Particular Attention Should Be Paid To This Clause

7.1 This Clause 7 sets out the entire liability of Groundsure, including any liability for the acts or omissions of its employees, agents, consultants, subcontractors and Third Party Content, in respect of:

(i) any breach of contract, including any deliberate breach of the Contract by Groundsure or its employees, agents or subcontractors;

(ii) any use made of the Reports, Services, Materials or any part of them; and

(iii) any representation, statement or tortious act or omission (including negligence) arising under or in connection with the Contract.

7.2 All warranties, conditions and other terms implied by statute or common law are, to the fullest extent permitted by law, excluded from the Contract.

7.3 Nothing in the Contract limits or excludes the liability of the Supplier for death or personal injury resulting from negligence, or for any damage or liability incurred by the Client or Beneficiary as a result of fraud or fraudulent misrepresentation.

7.4 Groundsure shall not be liable for

(i) loss of profits;

(ii) loss of business;

(iii) depletion of goodwill and/or similar losses;

(iv) loss of anticipated savings;

(v) loss of goods;

(vi) loss of contract;

(vii) loss of use;

(viii) loss or corruption of data or information;

(ix) business interruption;

(x) any kind of special, indirect, consequential or pure economic loss, costs, damages, charges or expenses;

(xi) loss or damage that arise as a result of the use of all or part of the Groundsure Materials in breach of the Contract;

(xii) loss or damage arising as a result of any error, omission or inaccuracy in any part of the Groundsure Materials where such error, omission or inaccuracy is caused by any Third Party Content or any reasonable interpretation of Third Party Content;

(xiii) loss or damage to a computer, software, modem, telephone or other property; and

(xiv) loss or damage caused by a delay or loss of use of Groundsure's internet ordering service.

7.5 Groundsure's total liability in relation to or under the Contract shall be limited to £10 million for any claim or claims.

7.6 Groundsure shall procure that the Beneficiary shall be bound by limitations and exclusions of liability in favour of Groundsure which accord with those detailed in clauses 7.4 and 7.5 (subject to clause 7.3) in respect of all claims which the Beneficiary may bring against Groundsure in relation to the Services or other matters arising pursuant to the Contract.

8 Groundsure's right to suspend or terminate

8.1 If Groundsure reasonably believes that the Client or Beneficiary has not provided the information or assistance required to enable the proper provision of the Services, Groundsure shall be entitled to suspend all further performance of the Services until such time as any such deficiency has been made good.

8.2 Groundsure shall be entitled to terminate the Contract immediately on written notice in the event that:

(i) the Client fails to pay any sum due to Groundsure within 30 days of the Payment Date; or

(ii) the Client (being an individual) has a bankruptcy order made against him or (being a company) shall enter into liquidation whether compulsory or voluntary or have an administration order made against it or if a receiver shall be appointed over the whole or any part of its property assets or undertaking or if the Client is struck off the Register of Companies or dissolved; or

(iii) the Client being a company is unable to pay its debts within the meaning of Section 123 of the Insolvency Act 1986 or being an individual appears unable to pay his debts within the meaning of Section 268 of the Insolvency Act 1986 or if the Client shall enter into a composition or arrangement with the Client's creditors or shall suffer distress or execution to be levied on his goods; or

(iv) the Client or the Beneficiary breaches any term of the Contract (including, but not limited to, the obligations in clause 4) which is incapable of remedy or if remediable, is not remedied within five days of notice of the breach.

9. Client's Right to Terminate and Suspend

9.1 Subject to clause 10.1, the Client may at any time upon written notice terminate or suspend the provision of all or any of the Services.

9.2 In any event, where the Client is a consumer (and not a business) he/she hereby expressly acknowledges and agrees that:

(i) the supply of Services under this Contract (and therefore the performance of this Contract) commences immediately upon Groundsure's acceptance of the Order; and

(ii) the Reports and/or Mapping provided under this Contract are

(a) supplied to the Client's specification(s) and in any event
(b) by their nature cannot be returned.

10 Consequences of Withdrawal, Termination or Suspension

10.1 Upon termination of the Contract:

(i) Groundsure shall take steps to bring to an end the Services in an orderly manner, vacate any Site with all reasonable speed and shall deliver to the Client and/or Beneficiary any property of the Client and/or Beneficiary in Groundsure's possession or control; and

(ii) the Client shall pay to Groundsure all and any Fees payable in respect of the performance of the Services up to the date of termination or suspension. In respect of any Support Services provided, the Client shall also pay Groundsure any additional costs incurred in relation to the termination or suspension of the Contract.

11 Anti-Bribery

11.1 The Client warrants that it shall:

(i) comply with all applicable laws, statutes and regulations relating to anti-bribery and anti-corruption including but not limited to the Bribery Act 2010;

(ii) comply with such of Groundsure's anti-bribery and anti-corruption policies as are notified to the Client from time to time; and

(iii) promptly report to Groundsure any request or demand for any undue financial or other advantage of any kind received by or on behalf of the Client in connection with the performance of this Contract.

11.2 Breach of this Clause 11 shall be deemed a material breach of this Contract.

12 General

12.1 The Mapping contained in the Services is protected by Crown copyright and must not be used for any purpose other than as part of the Services or as specifically provided in the Contract.

12.2 The Client shall be permitted to make one copy only of each Report or Mapping Order. Thereafter the Client shall be entitled to make unlimited copies of the Report or Mapping Order only in accordance with an Ordnance Survey paper map copy license available through Groundsure.

12.3 Groundsure reserves the right to amend or vary this Contract. No amendment or variation to this Contract shall be valid unless signed by an authorised representative of Groundsure.

12.4 No failure on the part of Groundsure to exercise, and no delay in exercising, any right, power or provision under this Contract shall operate as a waiver thereof.

12.5 Save as expressly provided in this Contract, no person other than the persons set out therein shall have any right under the Contract (Rights of Third Parties) Act 1999 to enforce any terms of the Contract.

12.6 The Secretary of State for Business, Innovation and Skills ("BIS") or BIS' successor body, as the case may be, acting through Ordnance Survey may enforce a breach of clause 6.4(vi) and clause 6.4(vii) of these terms and conditions against the Client in accordance with the provisions of the Contracts (Rights of Third Parties) Act 1999.

12.7 Groundsure shall not be liable to the Client if the provision of the Services is delayed or prevented by one or more of the following circumstances:

- (i) the Client or Beneficiary's failure to provide facilities, access or information;
- (ii) fire, storm, flood, tempest or epidemic;
- (iii) Acts of God or the public enemy;
- (iv) riot, civil commotion or war;
- (v) strikes, labour disputes or industrial action;
- (vi) acts or regulations of any governmental or other agency;
- (vii) suspension or delay of services at public registries by Third Party Data Providers;
- (viii) changes in law; or
- (ix) any other reason beyond Groundsure's reasonable control.

In the event that Groundsure is prevented from performing the Services (or any part thereof) in accordance with this clause 12.6 for a period of not less than 30 days then Groundsure shall be entitled to terminate this Contract immediately on written notice to the Client.

12.8 Any notice provided shall be in writing and shall be deemed to be properly given if delivered by hand or sent by first class post, facsimile or by email to the address, facsimile number or email address of the relevant party as may have been notified by each party to the other for such purpose or in the absence of such notification the last known address.

12.9 Such notice shall be deemed to have been received on the day of delivery if delivered by hand, facsimile or email (save to the extent such day is not a working day where it shall be deemed to have been delivered on the next working day) and on the second working day after the day of posting if sent by first class post.

12.10 The Contract constitutes the entire agreement between the parties and shall supersede all previous arrangements between the parties relating to the subject matter hereof.

12.11 Each of the provisions of the Contract is severable and distinct from the others and if one or more provisions is or should become invalid, illegal or unenforceable, the validity and enforceability of the remaining provisions shall not in any way be tainted or impaired.

12.12 This Contract shall be governed by and construed in accordance with English law and any proceedings arising out of or connected with this Contract shall be subject to the exclusive jurisdiction of the English courts.

12.13 Groundsure is an executive member of the Council of Property Search Organisation (CoPSO) and has signed up to the Search Code administered by the Property Codes Compliance Board (PCCB). All Risk Screening Reports shall be supplied in accordance with the provisions of the Search Code.

12.14 If the Client or Beneficiary has a complaint about the Services, written notice should be given to the Compliance Officer at Groundsure who will respond in a timely manner. In the event you are not satisfied with Groundsure's complaints handling process or you are unable to resolve the complaint, at your discretion you may refer the complaint to The Property Ombudsman Scheme at the following URL/email: website www.tpos.co.uk or email: admin@tpos.co.uk

12.15 The Client agrees that it shall, and shall procure that each Beneficiary shall, treat in confidence all Confidential Information and shall not, and shall procure that each Beneficiary shall not (i) disclose any Confidential Information to any third party other than in accordance with the terms of this Contract; and (ii) use Confidential Information for a purpose other than the exercise of its rights and obligations under this Contract. Subject to clause 6.6, nothing shall prevent the Client or any Beneficiary from disclosing Confidential Information to the extent required by law

Appendix C

Groundsure Historical Maps

Site Details

PINECROFT, WEST STREET,
LEOMINSTER, HR6 9DU

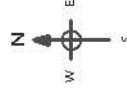
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Grid Ref: 338904, 258244

Map Names: County Series

Map date: 1886

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1888
Revised 1886
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1888
Revised 1886
Edition N/A
Copyright N/A
Levelled N/A

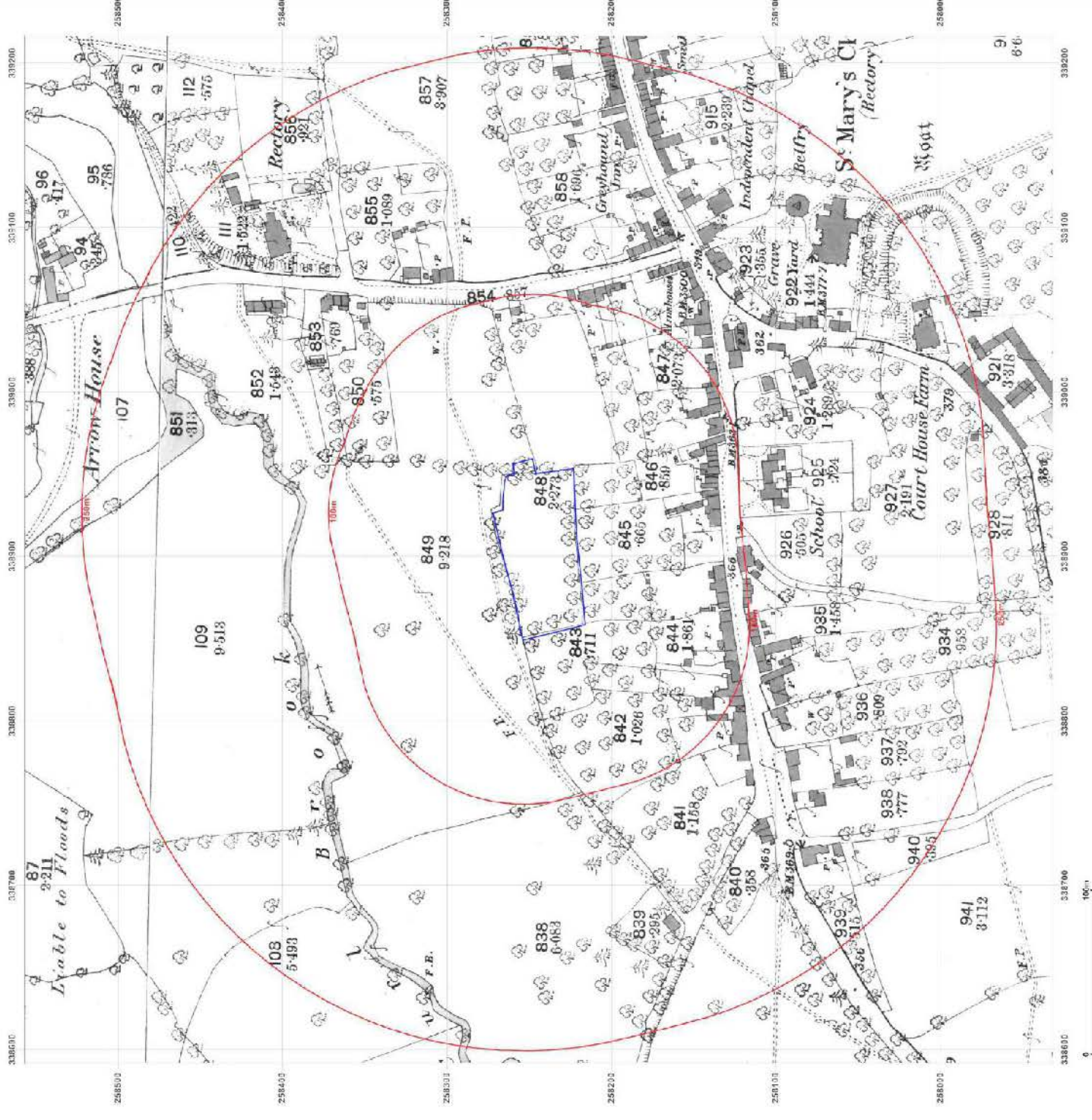


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To view map legend click here [Legend](#)



Site Details

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LEOMINSTER, HR6 9DU

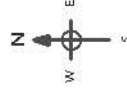
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Map Name: County Series

Map date: 1903-1904

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1903
Revised 1903
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1904
Revised 1904
Edition N/A
Copyright N/A
Levelled N/A

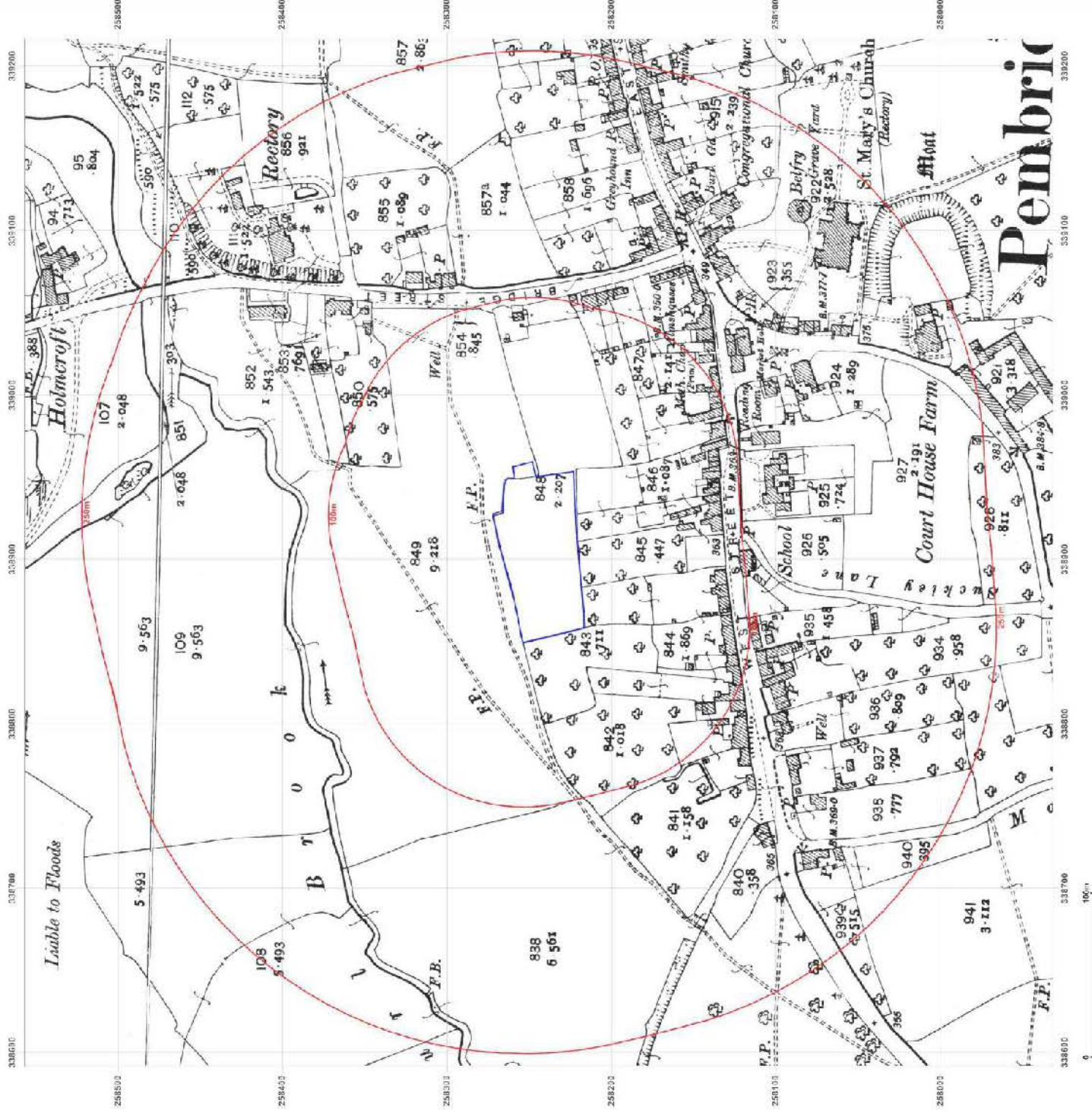


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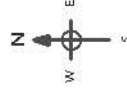
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Map Names: National Grid

Map dates: 1972-1973

Scale: 1:2,500

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Revised 1972
Edition N/A
Copyright 1974
Levelled 1962

Surveyed 1973
Revised 1973
Edition N/A
Copyright 1974
Levelled 1962

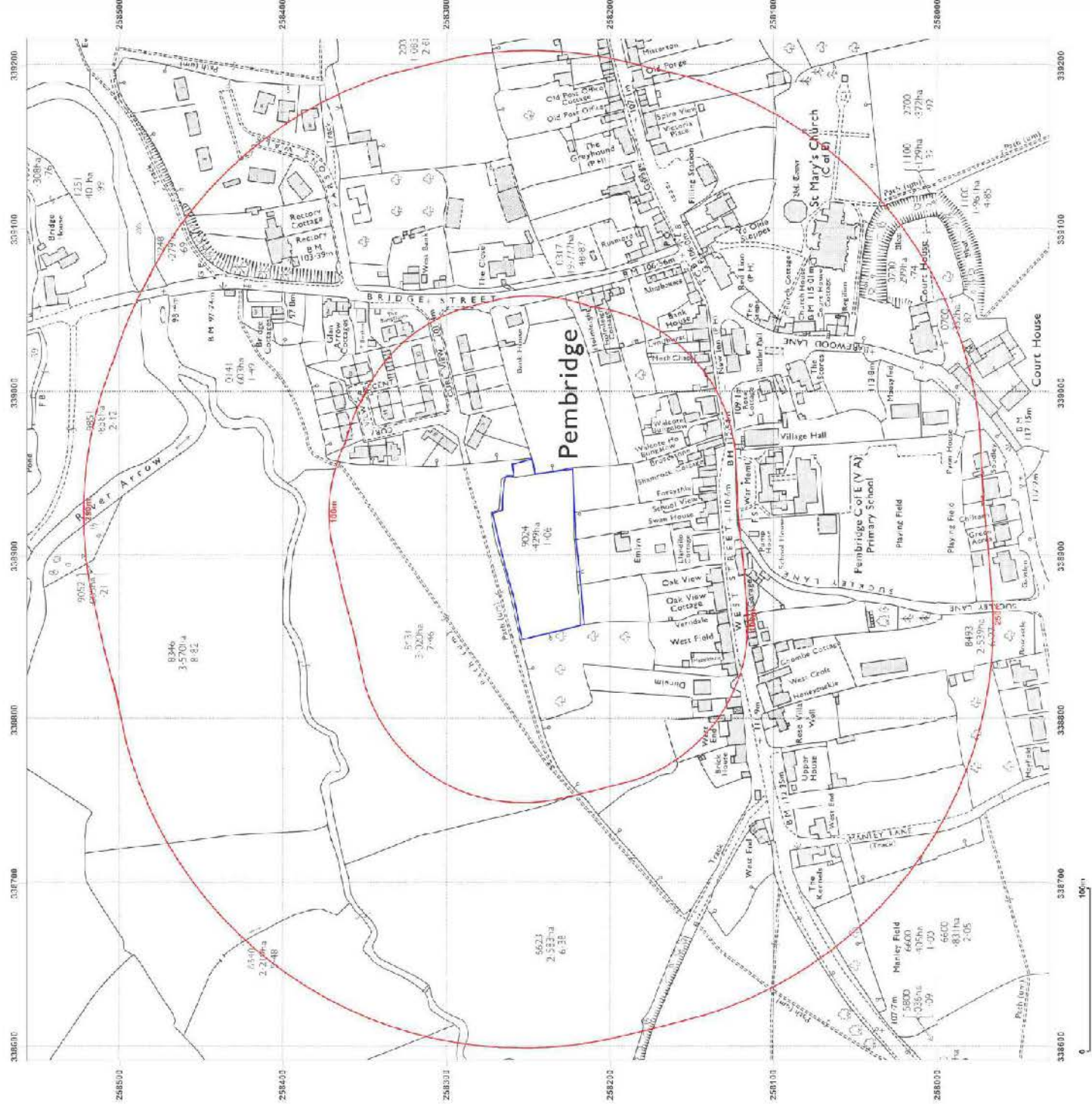


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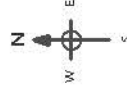
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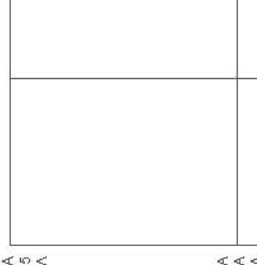
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Surveyed N/A
Revised N/A
Edition N/A
Copyright 1995
Levelled N/A



Surveyed N/A
Revised N/A
Edition N/A
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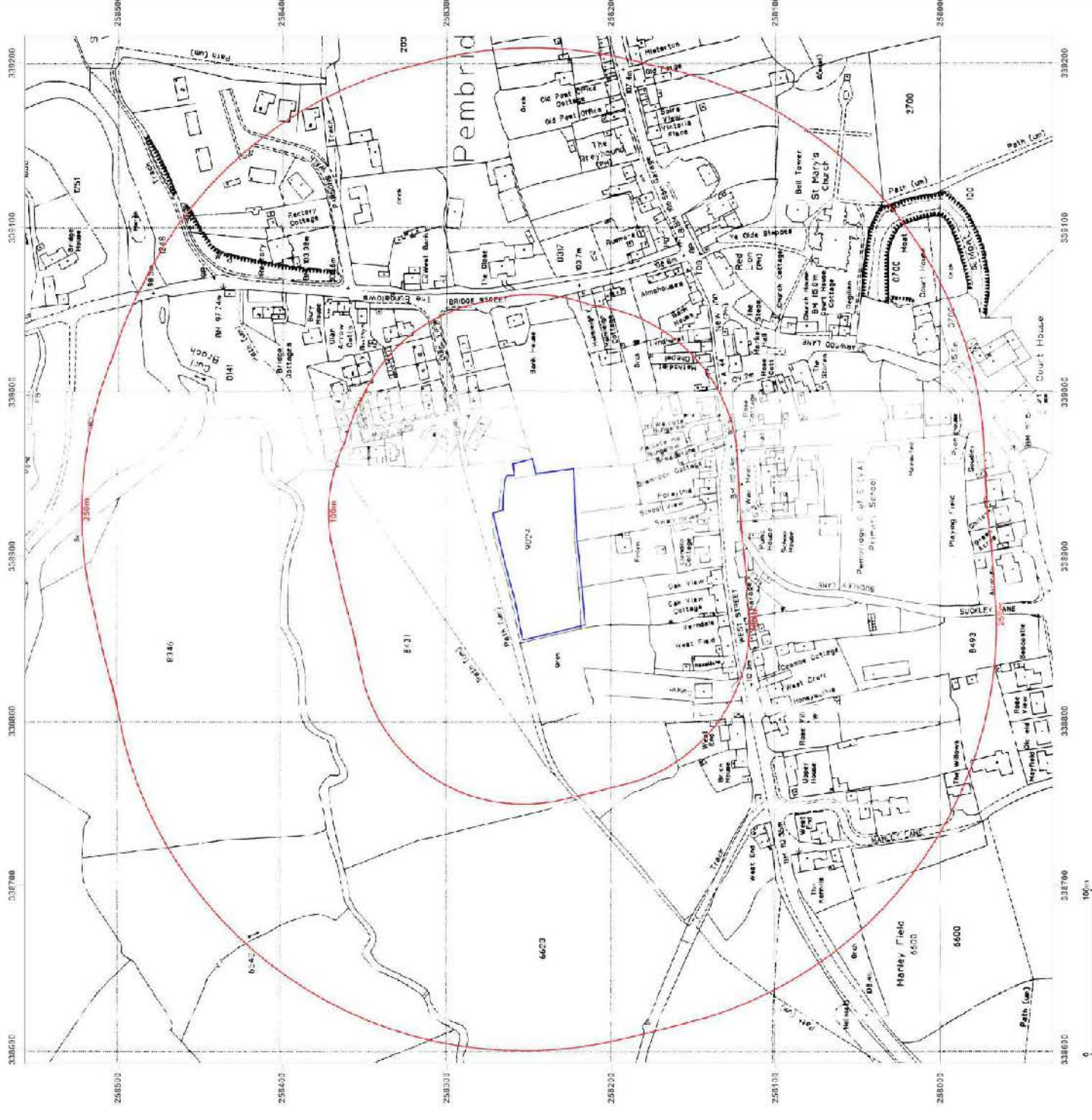


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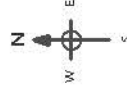
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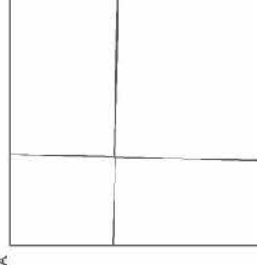
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Printed at: 1:10,560



Surveyed 1885
Revised 1885
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1885
Revised 1885
Edition N/A
Copyright N/A
Levelled N/A

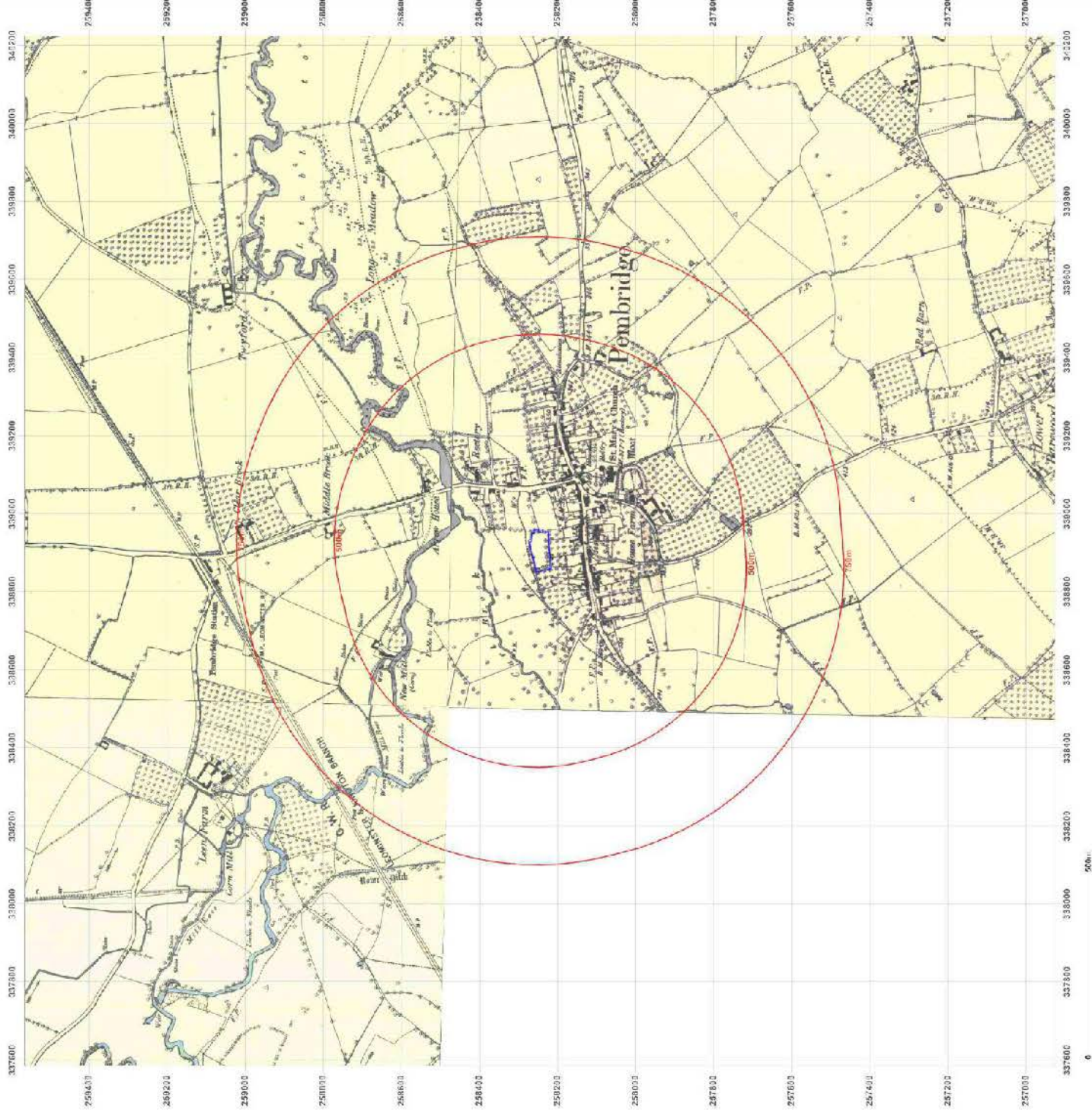


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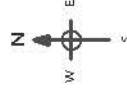
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Map Name: County Series

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Surveyed 1885
Revised 1885
Edition N/A
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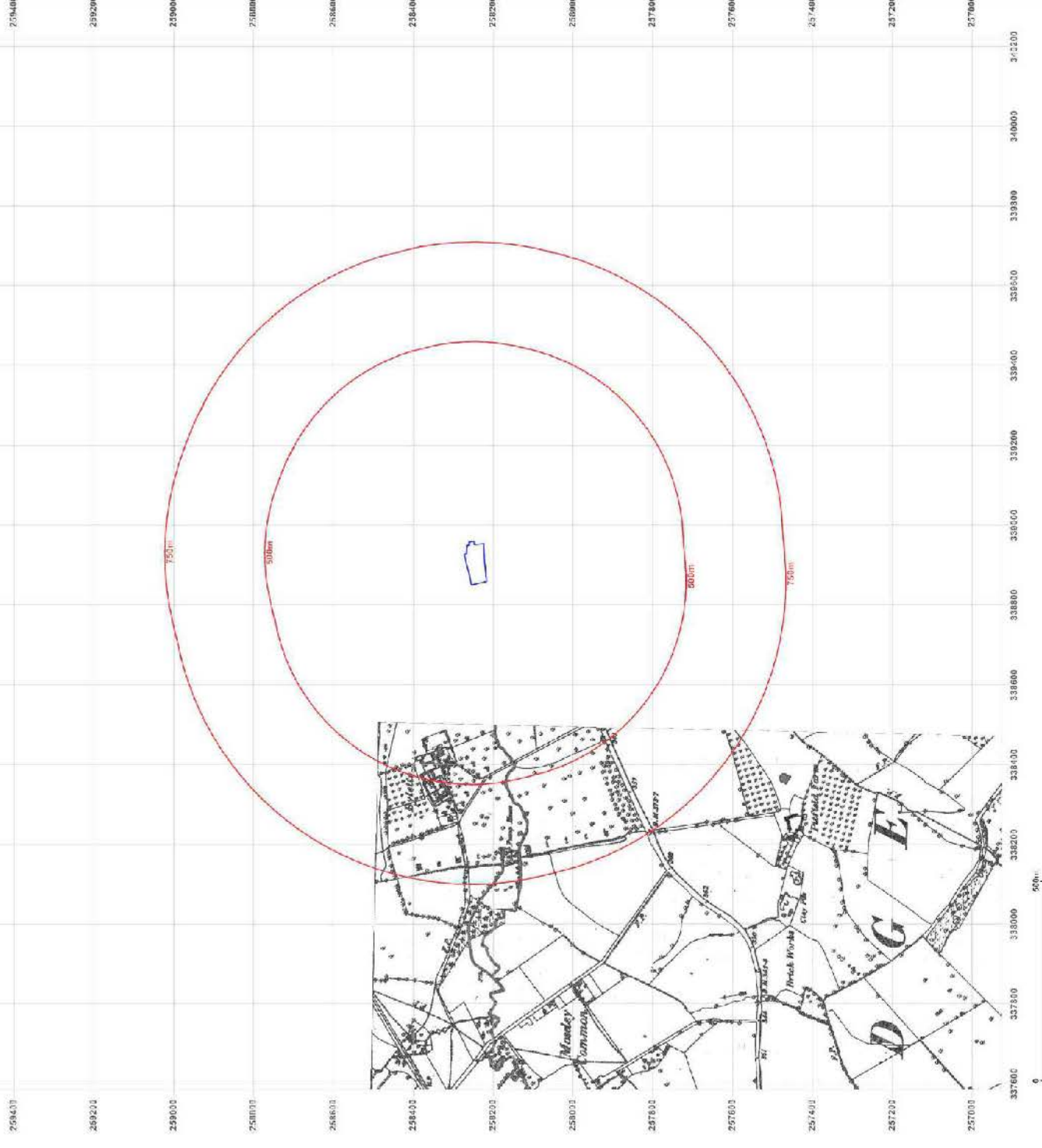


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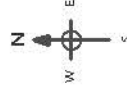
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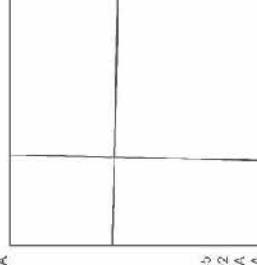
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Surveyed 1885
Revised 1902
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1885
Revised 1902
Edition N/A
Copyright N/A
Levelled N/A

Surveyed 1885
Revised 1902
Edition N/A
Copyright N/A
Levelled N/A

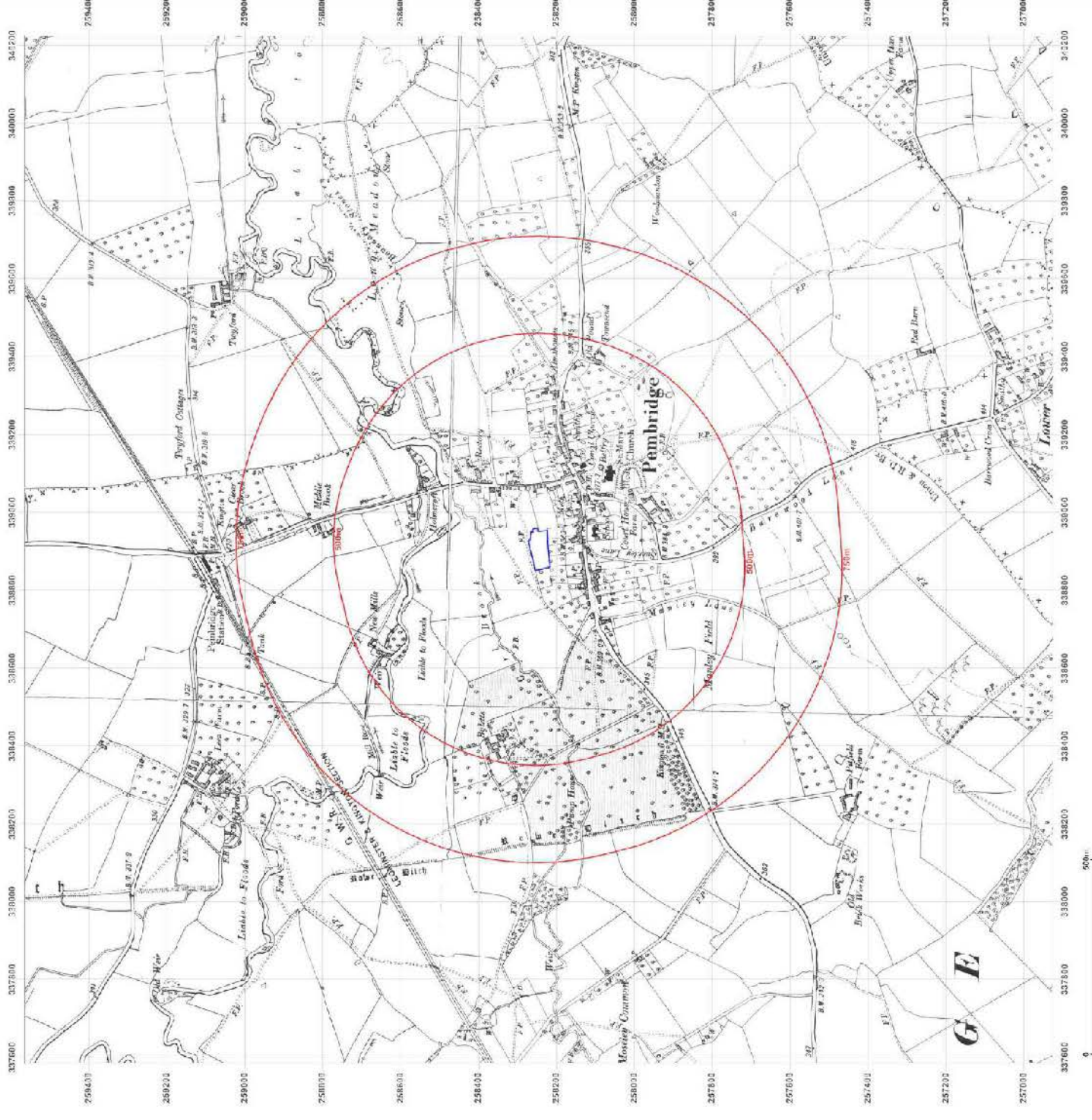


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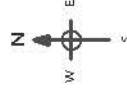
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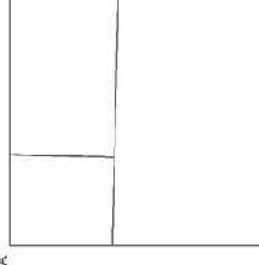
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Surveyed 1885
Revised 1927
Edition N/A
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Revised 1927
Edition N/A
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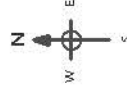
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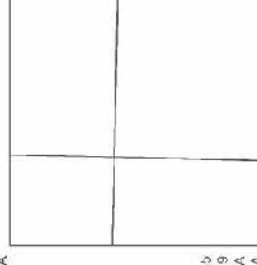
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Printed at: 1:10,560



Surveyed 1885
Revised 1949
Edition N/A
Copyright N/A
Levelled N/A



Surveyed 1885
Revised 1949
Edition N/A
Copyright N/A
Levelled N/A

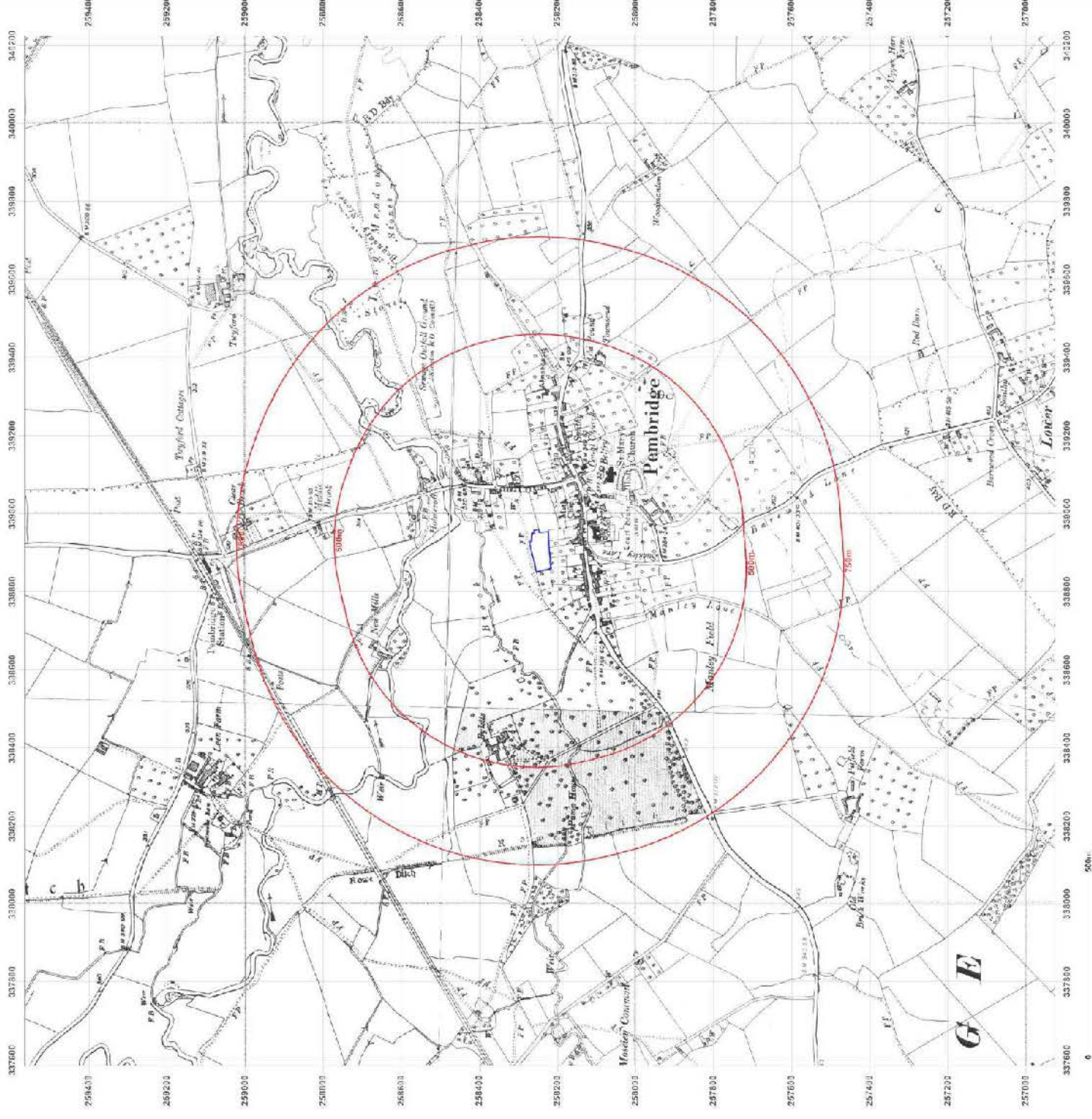


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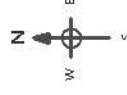
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Grid Ref: 338904, 258244

Map Name: National Grid

Map date: 1982

Scale: 1:10,000

Printed at: 1:10,000



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Revised 1982
Edition N/A
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Surveyed 1972
Revised 1982
Edition N/A
Copyright N/A
Levelled N/A

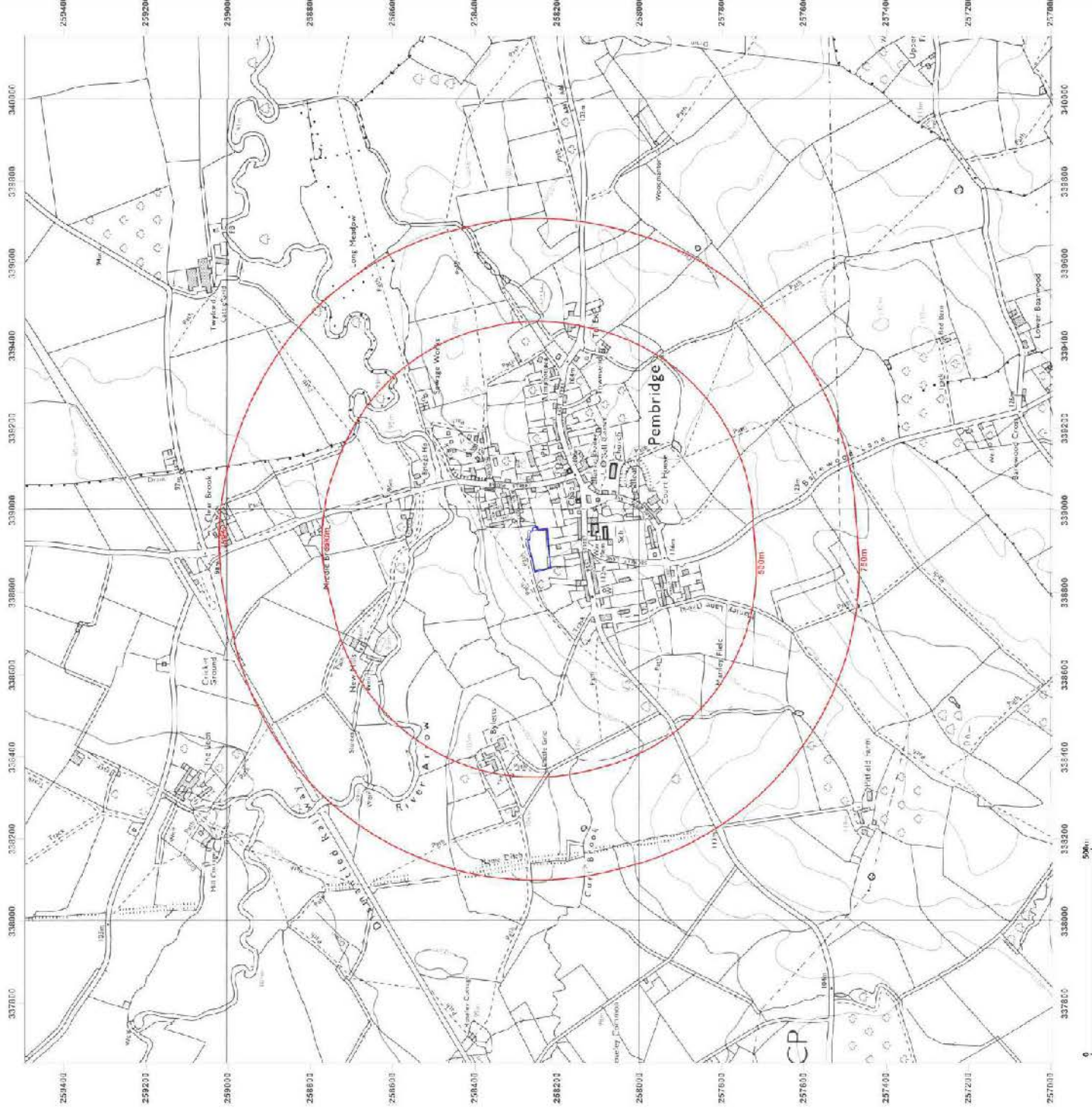


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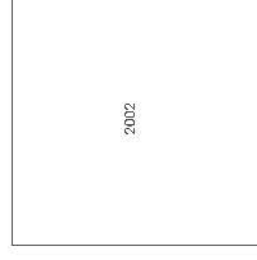
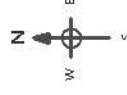
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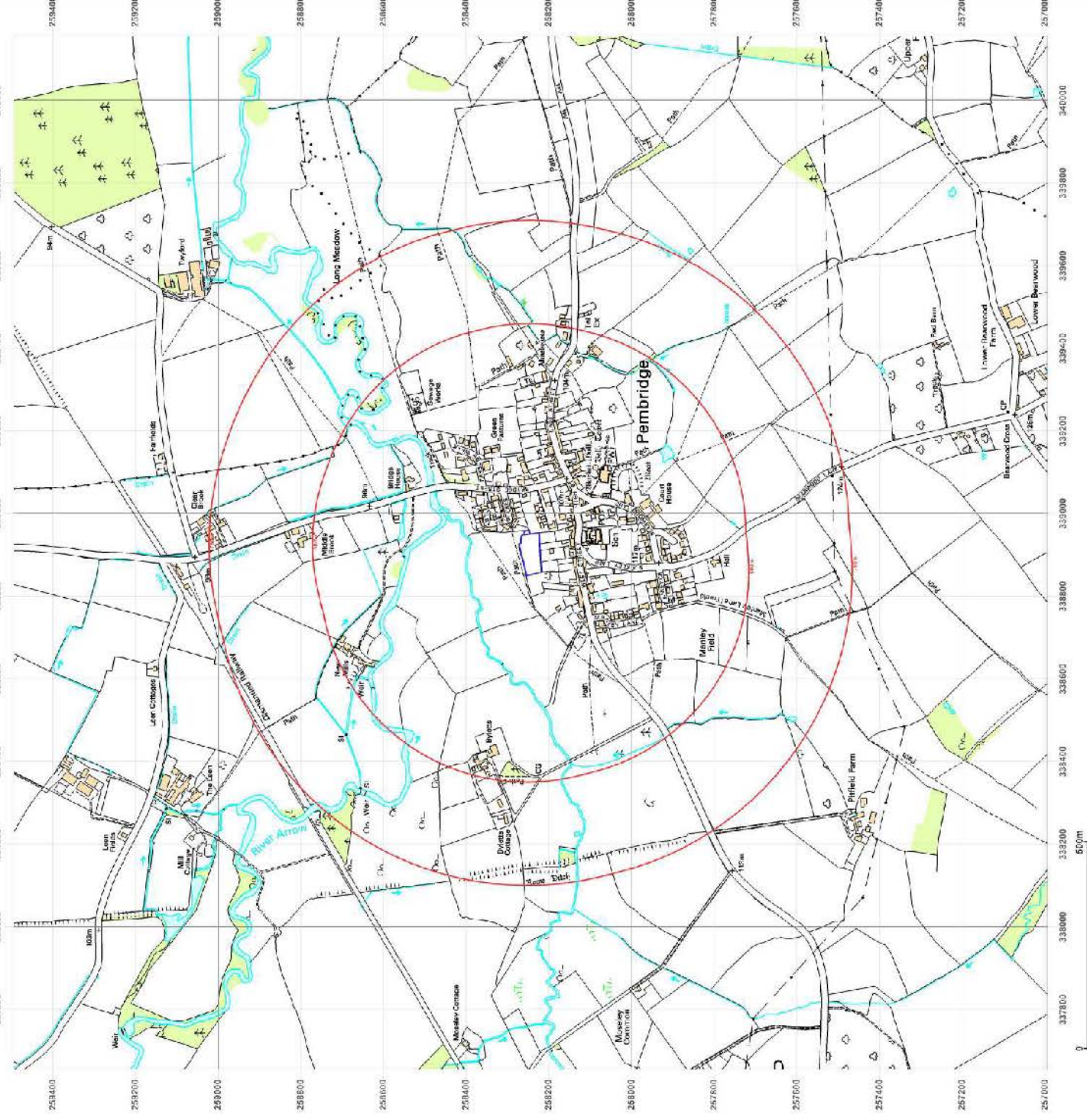


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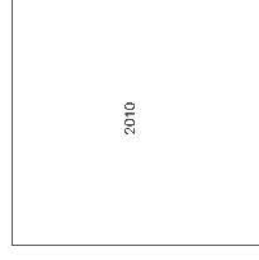
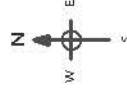
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Map Name: National Grid

Map date: 2010

Scale: 1:10,000

Printed at: 1:10,000

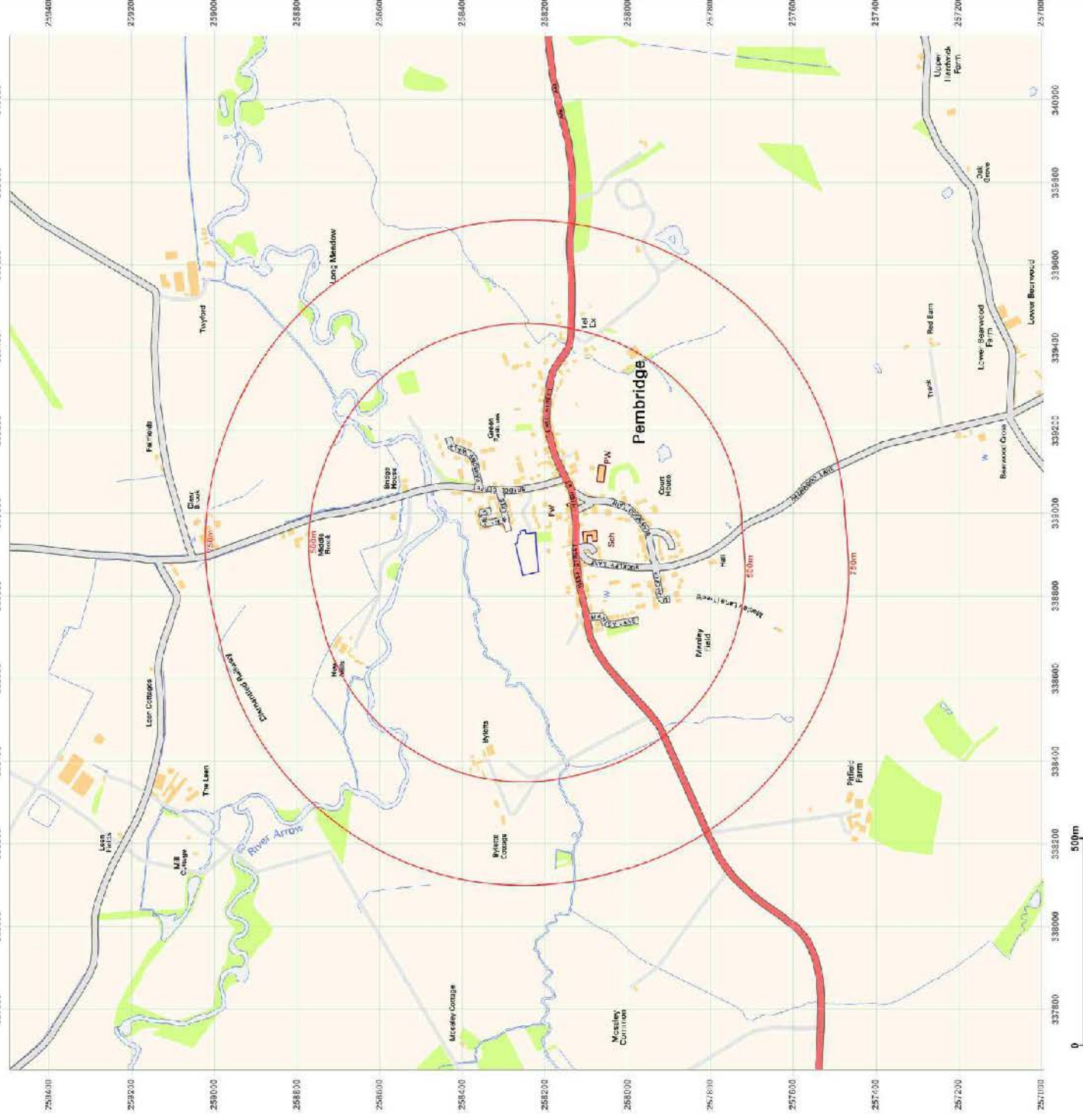


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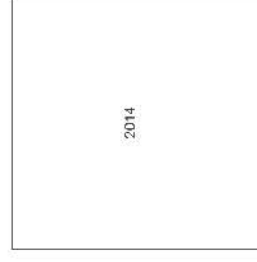
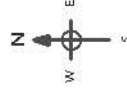
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Map Name: National Grid

Map date: 2014

Scale: 1:10,000

Printed at: 1:10,000

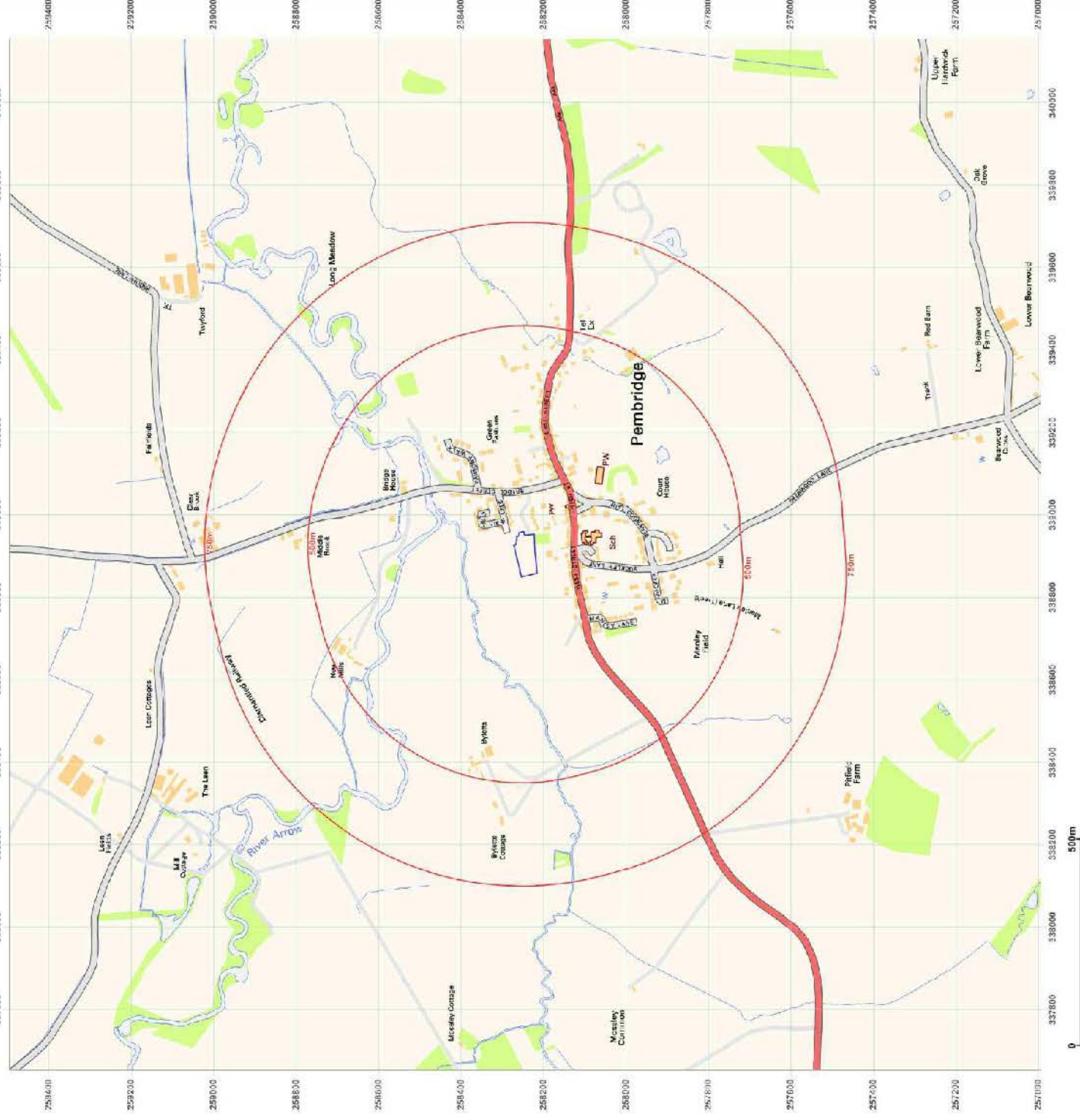


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Appendix D

Landfill Query Report

Engineered Cap

Low permeability (Clay) ☐

Permeable soils ☐

Y ☐

Synthetic membrane ☐

Type of cap unknown ☐

Engineered Containment

Clay Liner ☐

Synthetic membrane ☐

Other Liner ☐

Type of liner unknown ☐

Landfill Gas

Is gas monitoring conducted at the site? ☐

Are there landfill gas control systems in place? ☐

N

Is a perimeter passive migration control system used? ☐

Is a perimeter active migration control system used? ☐

Is a passive gas venting system used in the body of the site? ☐

Is an active gas extraction system used in the body of the site? ☐

GDPO Validated ☐

Validation date

Comments

Notice to quit 2/10/16, File small.

It must be understood that the information provided above is based on records and files from various sources and of varying reliability. Consequently the Environment Agency is not able to offer any warranty as to the accuracy or completeness of the information provided, nor can

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05 April 2006

Page 2 of 2

Landfill Query Report

05/04/00 11:40:10



ENVIRONMENT
AGENCY

Site History

Site Reference Number	1800/0146	OS Grid reference	SO	3867	5821
Site Name	Leaders Lane, Pembridge-				
Property					
Street					
Locality	Pembridge				
Town	Leominster				
County	Herefordshire				
STD Code					

WM Licence Reference	1.019.3.09	Alternative Ref 1	
Local Authority		Alternative Ref 2	
Most Recent Licence Holder	Leominster District Council.		
Date Licence issued		Date Licence Surrendered	

Date of first waste input (K)nown or (E)stimated or (U)known	31/12/1936	K
Date of last waste input (K)nown or (E)stimated or (U)known	31/12/1964	K

Site Details

Max volume of waste permitted (Million m ³)	0.001
Total Site Area (ha)	0.08

Percentage permitted wastes

Inert	<input type="checkbox"/>		0	Household	<input checked="" type="checkbox"/>		
Industrial	<input type="checkbox"/>		0	Special	<input type="checkbox"/>		0
Commercial	<input type="checkbox"/>			Liquid and Sludge	<input type="checkbox"/>		0
				Waste type in site Unknown	<input type="checkbox"/>		

Type of Site

Land Raise	<input type="checkbox"/> N	Natural depression?	<input type="checkbox"/> Y	Man-made depression?	<input type="checkbox"/>
				Type Unknown	<input type="checkbox"/>

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05 April 2000